NOURISHING LAND: HEALTH EXPERIENCES OF FOOD SOVEREIGNTY

by

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B. Arts. Sc. McMaster University, 2020

THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN INTERDISCIPLINARY STUDIES

UNIVERSITY OF NORTHERN BRITISH COLUMBIA

May 2022

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Abstract

Indigenous food sovereignty- a living reality prior to colonization, which violently disrupted Indigenous food systems—is characterized by Indigenous peoples' self-determination in controlling their food systems and culturally informed foods practices. Directly related to ongoing coloniality, food insecurity is central to the disproportionately high burdens of poor health affecting Indigenous peoples. By exploring the health-related experiences of food sovereignty and Indigenous food sovereignty leaders living in northern BC, this project asks both: How does engaging in food sovereign practices affect peoples' health? What are the factors that foster (or limit) food sovereignty practices? Being sensitive to past and ongoing colonial and paternalistic research approaches, this research enacts a community-informed ethos, anchored in community-based participatory research (CBPR) processes, wherein research is conducted with and for those involved. This research draws on qualitative methods, including semi-structured (virtual) interviews with community members and knowledge holders, including diverse food sovereignty and Indigenous food sovereignty champions. Champions are involved in various capacities, including direction of research design, engaging in interviews, and informing research outputs. Addressing gaps in the literature, this research documents *holistic* health experiences of food sovereignty and Indigenous food sovereignty leaders in northern BC. By highlighting experiences faced by those enacting food sovereignty practices, this research offers a counterview to existing bodies of food and health-related research and literature that rely predominantly on quantitative food security metrics. This project's findings contribute to a growing body of scholarship documenting food sovereignty praxis: the work thus has the potential to inform policy that helps to support the resilience and self-determination of those doing food sovereignty and Indigenous food sovereignty.

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Acknowledgements

First and foremost, thank you to my Mum for being my role model, for all of the meals made with love, and for instilling in me a value for good food from a young age. I couldn't have done this project without your unwavering support and guidance. Thank you to my brother, Finn, for helping me with edits, technical issues, for being a soundboard and for providing me with comedic relief in times that I needed it most. Thank you to my maternal grandparents, Sonia and Bob Korol for caring for me through food and showing me its healing power through example. Thanks to my dog, Sasha, who is the perfect antidote to the stresses of academia and who reminds me of how simple life can be.

Thank you to my inspiring and brilliant committee members— to Jessie King for teaching me to be a humble learner and the importance of fostering authentic relationships. I hope to someday embody the patience, compassion, and reflexivity that you teach with. Thank you to Zoe Meletis, for encouraging me from the beginning to think critically about questions around food, justice, ecology and health, for the extra time you dedicated to me during our class together and for connecting me with food-related events and fellow graduate students.

I'd like to extend a special thanks to my supervisors, to Sarah de Leeuw for showing me the art of balancing humility and confidence, for encouraging me to stay grounded even when faced with the academic 'trap,' and for your invaluable and consistent support professionally and personally. Thank you very much also to Margot Parkes for inspiring me to grapple with complexity, for challenging me to make time to reflect and adapt, for providing me with innumerable learning opportunities and for reminding me of the unique and special opportunities that come with being a graduate student.

Thank you to my good friends in the HARC and ECHO research teams, for being inspiring, passionate and kind-hearted individuals. Your insights, perspectives and support has been a highlight of this project. I'm especially thankful to Monika Krzywania and Christine Anonuevo for sharing your food sovereignty experiences and wisdom with me, for your mentorship and mostly for your friendship.

Last but certainly not least, I'd like to extend an enormous thanks to all of the involved food sovereignty champions for generously sharing your stories, thoughts, and reflections with me and for dedicating your precious time to support and contribute to this project. Thank you for bringing this project to life and for your courage and dedication to pursuing food sovereignty in the name of justice, sustainability, health and collective well-being.

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CHAPTER 1: Introduction

This master's thesis explores and reflects upon the stories of peoples pursuing food sovereignty in so-called¹ northern British Columbia (BC). I embarked on this study with the intention of better understanding connections between health and food sovereignty practices. I also wanted to understand factors that influence people's ability to pursue food sovereignty in this place I now call home. Growing out of a deep-seated interest in food and health, this master's project represents one point in my life-long commitment to learning about food and health. I hope this project will inform the work of future researchers and practitioners in northern BC and that it might contribute to fostering a collective awareness of the complex conditions affecting the health and food sovereign pursuits of people living in these geographies. This chapter outlines the relevance and significance of this research as well as the academic, sociopolitical and geographic context in which this project took place.

1.1 Research Context

Food insecurity is a pressing issue in Canada (Statistics Canada, 2020), projected to worsen due to the COVID-19 pandemic and its associated financial burdens (Pérez-Escamilla et al., 2020). Compared to urban and settler populations, northern and Indigenous communities experience the highest rates of food insecurity in the country (Canadian Academies, 2014). A BC First Nations regional health survey conducted between the years 2008-2010 classified 43.5% of

¹ I use the term 'so-called' when referring to colonial territory names in an effort to challenge power asymmetries embedded in language. I use 'so-called' for reasons that are similar to those for acknowledging traditional territory— I do so in effort to show respect and gratitude to be working in this place and with the intention to engage in 'good relations' (Auger, 2021). With these recognitions and intentions withstanding, in order to be repetitive, I have not written 'so-called' throughout the rest of this document.

First Nations households as food secure, 37.7% as moderately food insecure, and 18.8% as severely food insecure (First Nations Health Authority, 2012). Further, scholars predict that rates of food insecurity among Indigenous communities are underestimated given the tendency for national food surveys to exclude on-reserve populations (Delormier & Marquis, 2019). Food insecurity can be understood simply: not having access to adequate food quality or quantity (Government of Canada, 2020). According to the First Nations Food, Nutrition and Environment Study (2019), 77% of First Nations people felt that they did not have access to traditional and culturally relevant foods. As such, it can be seen that Indigenous communities experience higher rates of food insecurity as measured by Western indices, but also face additional food insecurities from barriers to participate in Indigenous food systems through privileging ancient knowledge systems that have been transmitted intergenerationally (Delormias & Marquis, 2018). It is worth noting that the capitalization of Lands acknowledges them as sovereign entities in the context of Indigenous governance and self-determination (Gilpin & Hayes, 2020). In an effort to resist colonial logic regarding Land as private property, I have capitalized 'Land' throughout this thesis when referring Land as an animate being, as it has been positioned ontologically by many non-settler scholars and activists (Coté, 2016; Daigle, 2019; Whyte, 2015).

Food insecurity data highlight the ways in which the current food system is unequally serving certain people, while failing to meet the needs of some. Prior to colonization, which violently disrupted (and continues to disrupt) Indigenous food systems (Redvers et al., 2020; Russell & Parkes, 2018), Indigenous food sovereignty— encompassing Indigenous peoples' *selfdetermination* in controlling their food systems and engaging in culturally appropriate foods practices (Working Group on Indigenous Food Sovereignty, n.d.)— was a 'living reality' (Cidro et al., 2015). Historical accounts document many Indigenous communities as sufficiently food secure, thriving from diets which were healthy and sustainable (Delormier & Marquis, 2019; McLaughlin et al., 2020). Directly related to coloniality, food insecurity is central to the one of the burdens of poor health that Indigenous peoples face (Castleden et al., 2012; Greenwood et al., 2015; Richmond et al., 2021). Indeed, Indigenous-informed scholarship and political ecology highlight the inseparability of food, culture, health and the larger systemic contexts in which these are enacted, barred and enlivened (Agyemen et al., 2014; Cidro et al., 2015).

The intrinsic and intricate connections between food and health is concretely illustrated through the superior health experienced by Indigenous communities reliant on traditional diets with higher nutrient density (simply meaning food with more nutrients per calorie). Further, given that food is a product of the Land and Watersheds with which humans coexist, there is a direct connection between human health and the health of the planet. This connection can be understood through the "microbial microcosm" (Redvers et al., 2020, p.6) concept wherein the human microbiome (micro) is seen as one which inherently contributes to a larger (macro) biome of the planet. The microbial microcosm concept sees microbial communities on the micro and macro scale as inherently interdependent, that is without the other, one cannot be resilient and healthy (Redvers et al., 2020).

Despite facing numerous health-threatening challenges associated with violent colonization and ongoing colonial policies, Indigenous peoples from all over the world embody and demonstrate resilience and strength through championing food sovereignty and advocating for food systems change, specifically for self-determined food systems (La Via Campesina, 2017; Working Group on Indigenous Food Sovereignty, n.d.). The fundamental right to Indigenous Food Sovereignty is recognized by the United Nations Declaration on the Rights of Indigenous Peoples through articles 20, 24, 25, 26, and 29 (United Nations Declaration on the

Rights of Indigenous Peoples, 2008), which BC implemented as Bill-41 in 2019. In spite of this localized and international recognition, Indigenous people across Canada continue to face incredible systemic barriers to exercising their right to Indigenous food sovereignty.

One contemporary example of Indigenous food sovereignty (as it is recognized by the aforementioned UNDRIP articles) being disrespected and disrupted comes in the form of recent violent and racist protests against the moderate livelihood fishery. The moderate livelihood fishery, as launched by Sipekne'katik First Nation on unceded Mi'kmaq territory (Editorial Board, 2020), is an expression of Indigenous food sovereignty. Despite being violently attacked by settler (mostly white) fishermen (it was mostly men), and despite not being supported or protected by colonial law enforcement (McKinley & McKeen, 2020), Mi'kmaq fishers exemplify their resilience and strength through continuing to fish and defending their cultural foodways and self-determined food practices. Unfortunately, dynamics such as this where Canadian law enforcement disrespects and fails to recognize Indigenous rights to moderate livelihoods are not new. As was the case with the *Marshal* decision, lawmakers have perpetually subject Indigenous people to settler-imposed regulations that attempt to restrict Indigenous food practices and undermine community management and food sovereignty (McMillan & Prosper, 2016). Given that we all need incomes, Indigenous rights to moderate livelihoods must be respected as part of efforts to work towards reconciliation and so as to not perpetuate racist ways of thinking where Indigenous cultures are 'frozen' in time. It is for this reason that Samoan scholar, Mallon (2010) provides a critique on 'tradition' given that the term "pre-supposes that culture and society can be defined a whole, as a functioning well-ordered system which remains constant over time." (p.365).

Scholars identify food sovereignty as a valuable focus of health-related research and

practice (Richmond et al., 2021; Russell & Parkes, 2018). Canada-specific research on food sovereignty, however, has predominantly occurred in Manitoba (Cidro et al., 2015 & Kamal et al., 2015), Ontario (Daigle, 2019 & Levkoe et al., 2019) or southern BC contexts (Mundel & Chapman, 2010). To provide a counterbalance to the existing body of research, which mostly focuses on food sovereignty in urban and southern geographies, my research project focused on the health experiences of settler and Indigenous food sovereignty leaders in northern BC. By focussing on health, or by using 'health' as the primary lens around which my research is focused, this project aims to bring attention to the health-barriers that Indigenous and northern communities face, barriers that extend into inequitable access to health care services, including barriers to self-determined food practices. This research is based on the premise that highlighting barriers and health-impacts experienced by those practicing food sovereignty in northern BC contributes a unique and much needed area of focus to the growing body of food sovereignty literature.

1.2 Research Questions and Aims

With this in mind, my research explores the holistic health accounts of aiming for food sovereignty, and contributions of Indigenous food sovereignty leaders² in northern BC. Specifically, this research explored the health-related experiences of food sovereignty leaders

² Food sovereignty and Indigenous food sovereignty leaders/champions were identified through snowball sampling, a process effective at locating 'key informants' by speaking with 'well-situated people' (Patton, 2015). Leaders were suggested by community members who are knowledgeable about food sovereignty and Indigenous food sovereignty initiatives happening in northern BC.

and advocates living in northern British Columbia. The two research questions that guided this research are:

1) How does engaging in food sovereignty processes affect peoples' health in northern British Columbia? and

2) What are the sociopolitical, environmental and cultural factors that foster (or limit) peoples' food sovereignty practices?

Rather than attending to neoliberal framings of health (please see Chapter 2, p.13 for a historical overview of neoliberalism), which I explore below, this research sought to privilege the holistic health experiences of those engaging with food sovereignty. To do this, 'health' was understood not only in the context of 'social determinants' but also in reference to access and ability to nurture relationships with Land, community, and non-human kin. In line with this thinking, this research understands neoliberal capitalism and settler colonialism as determinants of Indigenous peoples' health (Greenwood et al., 2018; Ray et al., 2019). Given health's context-dependent and holistic nature, my understandings of health were informed and defined by the diverse and unique health-related experiences, perceptions and knowledge held by involved knowledge holders'³. Thus, in addition to the overall guiding questions (see again above), my specific research aims were to:

³ For anonymized examples of community experts that I reached out to and their interests in the research please see Table 1 (p. 20).

a). Explore food sovereignty leaders' experiences of health in relation to food sovereignty in northern BC,

b) Highlight challenges that community members face when engaging with food sovereignty in this place,

c) Examine ways that northern and Indigenous BC communities can be better supported in pursuing food sovereignty.

Indigenous scholars and activists have suggested the term 'food sovereignty' needs to be 'Indigenized' to move beyond a rights-based discourse (Coté, 2016; Working Group on Indigenous Food Sovereignty, n.d.). These scholars differentiate between food sovereignty and Indigenous food sovereignty, suggesting that the latter emphasizes self-determination and the revitalization of ancestral food practices. For two reasons, however, my research does not focus exclusively on Indigenous food sovereignty leaders. Firstly, I believe that hearing settler experiences can highlight shared and varied barriers faced by settlers and Indigenous people doing food sovereignty work in northern BC. Secondly, I believe including settlers in this research will allow for exchange opportunities that will highlight ways in which settlers can best be supportive to Indigenous communities in self-determined ways. I thus use the term 'food sovereignty' when referring to all involved knowledge holders, Indigenous or settler, but I will use 'Indigenous food sovereignty' when referring specifically to an Indigenous food sovereignty champion. This research aspired to operationalize action research (Patton, 2014). I sought to understand and address the specific barriers to food sovereignty in northern and Indigenous communities. I was attentive to theories of power, oppression and space in this research, which

scholar-activists identify as a necessary focus for action-oriented food scholarship (Hammelman, 2020). This included recognizing that research itself is a political process, and that researchers (particularly those in privileged positions like myself) must work to dismantle inequitable relationships, including those between the academy and community partners.

Scholars and activists advocate not only for a move beyond settler-defined 'food security' in favour of Indigenous food sovereignty (Cidro et al., 2015), but also for a deeper analysis of discourses of 'sovereignty' in food sovereignty movements (Coté, 2016 & Kepkiewicz, L., & Dale, B., 2019). These critiques stem from growing recognitions that colonialism and neoliberal capitalism promote differing ontologies of health, Land, and relationships to place. Colonialism refers to "the government of a place...that is at a distance from the... colonial power and to the associated movement and settlement of people from the colonial power...through the process of colonisation (McDowell & Sharp, 2014). Related to but distinct from colonialism, neoliberal capitalism refers to governments deregulating capital and promoting the 'free market,' dismantling government-funded social supports and is often associated with workplace cultures of hyper-competitiveness (Kotz, 2009).

These ontological divergences can limit the ability of non-Indigenous scholars, activists and policymakers to effectively support Indigenous food sovereignty and ultimately threatens the relationality inherent in Indigenous food sovereignty practice. Scholars such as Daigle (2019) and Agyeman & McEntee (2014) argue that, in order to effectively promote social justice and protect Indigenous Land-based relationships, food sovereignty movements must *overtly challenge oppressive settler colonial and neoliberal capitalist structures*. Thus, it was crucial in my research to foreground the experiences of those pursuing food sovereignty and Indigenous food sovereignty and to focus on *their* narratives in an effort to challenge the discourses put forth

by dominant oppressive structures, such as academic institutions, which have historically erased and obfuscated Indigenous knowledges (de Leeuw & Hunt, 2018; Hunt, 2014; Todd, 2016). My research seeks to contribute to ongoing efforts to dismantle existing knowledge hierarchies. Building on the work of others (Cidro et al., 2018; Daigle, 2019; Kamel et al., 2015), the results and analyses I present here aim to understand and further validate lived experiences of food sovereignty as valuable knowledges worthy of space and respect in academic and policy discussions.

1.3 Positionality

This work is inspired by personal experiences, including a family member using food as part of his healing process in the face of a chronic disease diagnosis and my own therapeutic experience working on organic farms (WOOFing) and food sovereignty during time spent in Aotearoa, New Zealand. These experiences led me to food-related research questions in my undergraduate and graduate studies. In both cases, I became aware of the vast sociocultural economic inequities that facilitate food sovereignty endeavours of privileged, white settler folks (like myself and my family) while at the same time limiting the food sovereignty pursuits of others. I realized this disparity is particularly apparent in the context of land dispossession and other oppressive colonial pursuits that continually assault Indigenous peoples' rights, culture, well-being and self-determination (Daigle, 2019).

I write this research as non-Indigenous woman with mixed settler ancestry seeking to do research with and for Indigenous communities. Being a newcomer to the diverse territories of northern BC, where I now live, play and seek to do this research, I often question my own legitimacy in doing this work. Engaging with spoken and written Indigenous voices has been,

and will continue to be, crucial in helping me navigate these complicated and necessary questions. Given that a more inclusive citational practice *alone* is not enough to combat colonial, hetero-patriarchal, racist structures, engaging in a reflective practice is another tangible way in which this research is influenced by de-colonial methodology. Scholars such as Kovach (2010) stress the importance that researchers situate themselves within worldview or paradigm. Having actively positioned myself and my worldview (particularly with respect to food, justice, sustainability and health) in all facets of this research (in conversations with knowledge holders, in written work associated with this project, in personal journal reflections), has been part of my effort to engage in a reflective praxis. Further than naming one's positionality though, Hunt (2014) explains that non-Indigenous researchers interested in engaging with Indigenous ontologies may step away from the position as 'expert' and rather step into discomfort that comes with bearing witness as a listener. For this reason, I use words like 'champion' and 'leader' when referring to the knowledge holders and informants who contributed to this study. Rather than referring to these people as 'participants,' I felt compelled to speak about them in a way that credits their position as knowledgeable experts in food sovereignty practices in northern BC and my position as a humble learner in these spaces. It is worth noting that knowledge holders became involved in this project to varying degrees given personal circumstances and their desired level of engagement in the project. While some simply participated in the community-engagement phase, others participated in conversational interviews and were more involved in shaping the project's direction. The language around such knowledge holders thus evolved such that some were referred to simply as 'informants,' while others are considered knowledge holders and partners due to their increased involvement.

A reflective praxis not only necessitates an inward reflection (towards oneself) but also

outward (toward the Lands and territories on which we work, live and play) (Simpson, 2014). This is especially necessary when exploring questions around food, health and well-being. According to Simpson (2014), responsible relationships with Land carried out in a Nishnaabeg way—wherein Land and other entities are seen as 'teacher,'— are inextricably connected to love, compassion, nourishment and sustainability (well-being) through hunt and harvest. Simpson writes:

We cannot just think, write or imagine our way to a decolonized future. Answers on how to re-build and how to resurge are therefore derived from a web of consensual relationships that is infused with movement (kinetic) through lived experience and embodiment. Intellectual knowledge is not enough on its own. Neither is spiritual knowledge or emotional knowledge. All kinds of knowledge are important and necessary in a communal and emergent balance. (Simpson, 2014, p.16).

In other words, without reflecting on my own accountability to the Land on which I live and work and play, I am limited in my ability to engage with de-colonial research with people involved with Land-based food sovereignty work. Therefore, part of my effort to operationalize a holistic reflective practice has been to listen to those who have lived responsibly with human and non-human kin on this Land. This listening has helped me to engage in ongoing negotiations with myself and with my community about how I am grounded in this place.

Part of this process has included a conscious *unlearning* of destructive colonial conceptualizations of land as 'property' or 'resource' (Kepkiewicz & Dale, 2019) while reckoning with my own complicity and entanglement with structures that can perpetuate such narratives (ie. universities, governments, corporations). Critical self-reflection has also included me coming to terms with the 'messiness' of anti-colonial work (Dzemua, 2021): messiness stands against a universalization about supremacies of logic, linearity, objectivity, and 'clean'

evidence, all of which risk perpetuating colonial harms through re-entrenching colonial ways of knowing in the academy (writing, publishing). Engaging with an interdisciplinary methodological lens, leveraging a community engaged research design and conversational style interviews, and attempting to position myself as a humble learner rather than 'expert' throughout this research project were all part of my effort to not shy away from the 'messiness' of anticolonial work.

Through reflection, I have realized this work alone is not *doing* much in terms of dismantling colonial structures or ways of being with Land and non-human kin. However, through my journey with this aspiring de-colonial project, I have become more aware of the inequitable and existential challenges facing life on earth today and, in the process of doing so, I have become inspired and motivated to continue to learn and work with others in the pursuit of a more healthy, just and sustainable world. To explore these questions, this research is inspired by a community-based participatory research design, which I expand on in the following section. Community-based participatory research fits within a de-colonial and anti-oppressive framework by directly challenging traditional, extractive research relationships and by dismantling power hierarchies between researcher and researched. It does this through working with community members in self-determined ways who are seen as equally knowledgeable partners and cocreators in research.

Given how important it is for especially anti-colonial researchers to define their ontology and epistemology (Kovach, 2010), I will do a little work locating myself. I am from mixed settler ancestry. I grew up learning in a colonial education system, which promoted Eurocentric and positivist understandings of health and the environment. Despite this, I often struggled to accept depictions of humans as separate from nature. Wilson (2008) notes that one does not have to be

Indigenous to engage with an Indigenous research paradigm but suggests that this engagement necessitates a privileging of Indigenous knowledge rather than academic literature written by non-Indigenous folks (Snow, 2018). In light of these suggestions (and those of many others), my work herein was centred around and guided by Indigenous stories. Having learned (and continuing to learn) about ways that coloniality underpins food-related inequities that Indigenous people face, I felt compelled to do this research as part of my ongoing reconciliation journey. I see this work as particularly important due to my position as a settler and entanglement with colonial structures (including the university) and in light of scholar-activist calls for those with more privilege to actively dismantle oppressive food structures (Hammelman, 2020). In their study on engaging accountable relations in resource extraction and intersectoral research, Sloan Morgan, Hoogeveen, Farreles et al (2020) express that being in positions of privilege comes with responsibility. As is further discussed in Chapter 3 (p. 41), while this master's project in itself will likely not do much to facilitate holistic health and socio-ecological change, I see it as my life-long responsibility to use my unearned privilege to work towards weakening oppressive systems that bear unequally on people's well-being. My research journal was crucial in helping me strive to create impactful research and foster authentic relationships with knowledge holders by allowing for continual self-reflection throughout this research journey.

This thesis is organized into four chapters. This introductory chapter is followed by Chapter 2, which engages with written and spoken voices that provided background for the research project. The background information in Chapter 2 includes a brief historical context of food sovereignty in northern and Indigenous communities, an exploration of changing food discourse, and a review of research that examines cases of food sovereignty practice in Canada. The written and spoken voices in Chapter 2 informed Chapter 3, which describes the

methodologies, research design, and methods that influenced and facilitated this research. The methodologies that influenced this research, detailed in Chapter 3 along with my methods and design, were 1) an interdisciplinary lens, 2) a strength-based orientation, and 3) de-colonial and anti-oppressive theories. With these in mind, Chapter 4 highlights research findings supported by the words of knowledge holders involved in this project through interviews. These findings are discussed in relation to literature in Chapter 2 and elsewhere. Finally, Chapter 5 provides concluding remarks and situates the research findings from Chapter 4 in relation to my initial research questions and aims. Furthermore, Chapter 5 suggests avenues for future research and offers my final reflections sparked as a result of this learning journey.

CHAPTER 2:

Background, Review of Written Literatures, Spoken Voices, and Oral Knowledges

A large part of this research journey revolved around engaging with existing work in the fields of Indigenous studies, political ecology, community health, and radical food geographyall of which house information pertaining to food sovereignty and Indigenous food sovereignty. This literature and knowledge review took place between September 2020 and December 2021. I titled this chapter Background, Review of Written Literatures, Spoken Voices and Oral *Knowledges* because I reviewed written *and* spoken voices. This approach is different than the traditional western academic literature review in that I chose to honour orality as well as written, academic work. Reviews of written and spoken voices have been favoured in the work of Indigenous scholars, including Thompson (2012) and King (2020). My decision to include written and spoken voices was also part of a community-engaged research process wherein involved informants and knowledge holders influenced certain parts of the research, including the research question and methods. The contents in this chapter draw from diverse sources including scholarly literature, spoken conversations from speakers at events that I attended as well as personal communications, movies, books and lectures: in this way, this chapter offers an overview of key pieces of information from which I learned and that helped inform this master's project.

2.1 Historical Context

Last summer, a friend and colleague gifted me a new book entitled *Indigenous Food Systems: Concepts, Cases and Conversations* (Settee & Shukla, 2020). The book is a collection of lessons in the revitalization of Indigenous food systems in diverse communities across Canada, and, given its relevance to my master's thesis, I was eager to read it. In Chapter 6, Dr. Leslie Dawson, a medical and nutritional anthropologist, provides a definition of a 'foodway': "the intersection of food, culture, tradition, and history" (p.94). When I read those words, I was reflected on what was missing in my thesis proposal. I realized that *historical context*, both on globalized and localized scales, is something that I had failed to include in my initial literature scan. When I started thinking about histories and historical contexts, I recalled something that Dawn Morrison said at a screening of *Gather*, a film about the growing Indigenous food sovereignty movement in what is now the United States: the institutionalization of agriculture in terms of the domestication of plants and animals for the building of the 'colonial empire,' is a point in time that is closely associated with a decline in human and ecological health (Morrison, 2021). Indeed, this is something that I have seen well documented elsewhere in the literature (Alders et al., 2018; Hathaway, 2016; Sherwood et al, 2000).

According to archeological evidence, the Neolithic agricultural revolution (approximately 12000 BCE)— considered the 'birth of civilization' within Euro-colonial constructs —led to micronutrient deficiencies. Grains became less abundant in nutrients when compared to the staple foods of hunter-gatherer diets (primarily meat and vegetables) that had prevailed for 95% of human existence (Ludwig, 2011). Further, the industrial revolution in the beginning of the 19th century gave way to technologies that allowed for the mass production of highly processed foods. Researchers have since found strong associations between consumption of processed foods and a variety of chronic diseases (Ludwig, 2011). The desire to address global food insecurity (Pingali, 2012), coupled with a variety of other social, political and environmental factors, facilitated the 'green revolution'— the orchestrated promotion of productivity-enhancing

chemical and biological technologies in agriculture by agribusinesses agencies and others (Briney, 2020; Sebby, 2010) —and eventually the approval of GMO (genetically modified organism) and herbicide resistant crops later in the 20th century (Briney, 2020). Green revolution practices, such as the use of monoculture crops (Alders et al., 2018; Brown, 2018), chemical fertilizers (Rhodes, 2012) and homogenous seed varieties (Frison, 2016), are associated with topsoil depletion, decreasing biodiversity, polluted air and waterways (Horrigan et al., 2002; Kremen et al., 2012), disease outbreaks (Alders et al., 2018), harmful chemical pesticide exposure (Brevik et al., 2019), worsening micronutrient deficiencies and, ironically, global hunger (Horrigan et al., 2002).

It is also well documented that northern and Indigenous communities have, to the largest extent as compared with non-Indigenous peoples, experienced this decline in health. This is something that Dawn Morrison writes about in Chapter 2 of *Indigenous Food Systems* where she explains the concept of 'Fourth-World realities.' Initially proposed by the late Secwepme chief George Manual, 'Fourth-World' realities refer to Indigenous people living in the so-called 'First World' but experiencing 'Third World' conditions. Looking back through history, these 'Fourth World' realities are contextualized by colonial violence and often intentional disruption of Indigenous foodways. As these colonial histories continue, northern and Indigenous communities face the highest rates of food insecurity in Canada (Council of Canadian Academies, 2014). Food insecurity and corresponding poor health is directly related to coloniality (Castleden et al., 2012; Greenwood et al., 2015). In what is now known as Canada and the United States, the past centuries brought violent colonization of Indigenous peoples. Settlers perpetuated food-related harms through destroying animal populations, such as fish in the Fraser River (Dashcuck, 2013) and used food to control Indigenous people by forcing relocation by depleting resources as was the case with the mass murder of buffalo in the Great Plains (Oatman, 2020). Colonial tactics further included employing Indigenous people as slave labour on farming operations (Ostroff, 2019), separating communities from culturally appropriate foods and foodways in the residential school system (Owen, 2019).

While colonial violence continued, given that post-war social welfarism presented a strain on the economy for the capitalist class, neoliberalism in the 1970s, as an economic theory, as well as an ideology, was embraced. The adoption of neoliberalism was largely driven by the Thatcher and Reagan administrations in the United Kingdom and United States respectively, leading to its uptake by many states around the world, sometimes voluntarily and sometimes due to coercive measures from other states (Harvey, 2007). As an ideology, neoliberalism served to liberate *individuals* from government regulation in order to promote 'entrepreneurial freedom' (Cohen, 2016) with the ultimate goal being to achieve 'happiness' in the most efficient manner and for the greatest number (Cohen, 2016). Paradoxically, by distancing individuals from centralized government supports, many of the social supports that came in the form of centralized, often federal, government intervention at the individual scale needed to be absorbed by smaller scale structures: communities, local organizations, families, and, in the end, the individuals themselves. A key feature of neoliberal policies is that they serve to increase profits by devolution of state responsibilities. This included dismantling social programs, de-regulating local markets and allocating resources from public to private sectors.

As an economic theory and social paradigm, neoliberalism served to liberate *capital* from the constraints of the government (Cohen, 2016). While the 1944 Bretton Woods Agreement that established the International Monetary Fund lay the groundwork for free trade, constraints still existed that limited the movement of capital between nations. It was not until the late 1970s, due

to a combination of technological changes and the aforementioned economic and political pressures, that neoliberal political platforms gave rise to a new free-market regime that spread around most of the world (Nugent & Vincent, 2008).

Through structural changes (like those that weakened farming sector protections and national trade barriers), a specific manifestation of neoliberalism in modern agriculture has been agri-food liberation and the growth of transnational agribusinesses (Ioris, 2016). Indeed, "most of today's agriculture activities can be described as the encroachment of neoliberal capitalism upon rural areas and production, processing and distribution of agri-food goods and related services" (Ioris, 2015, p.1). As such, the concept of agribusiness does not only include large-scale farms reliant on advanced technology, but also corporate management of rural landscapes and "the mobilization of resources and the financing and commercialization of production." (Ioris, 2018, p.2). Often referred to as the 'Big 5,' the most powerful transnational agriculture corporations include Bayer, BASF, Corteva, Syngenta, and FMC (Kahn, 2021). Intimately tied to agribusinesses, the top five countries contributing to agricultural exports (also sometimes referred to as the 'Big 5') include the United States, Netherlands, Germany, France, and Brazil (FAO, n.d.).

Since the green revolution and the wide adoption neoliberal capitalism around the world, scholars and activists have observed a swath of justice, sustainability and health impacts associated with the commercialization of agriculture. For instance, farmers needing to interact now almost exclusively with banks and large agribusinesses led to weakened social relations in small agricultural communities in some villages in India (Sebby, 2010). Further, some agricultural companies, financed by Public Development Banks, have been involved in land grabbing, human rights violations, environmental destruction, corruption and violence (La Via

Campesina, 2021). These agricultural companies have prioritized the interests of the financial elite when implementing laws and policies and have often failed to consult Indigenous Land stewards and small-sale farmers who have been heavily impacted by various policy changes (La Via Campesina, 2021). The emergence of neoliberal capitalism has enabled a select few, transnational corporations to control most of the world's food market through exercising instrumental, structural and discursive power (i.e., lobbying governments, influencing food policy and shaping public food discourse) (Ioris, 2018).

Learning more about the historical context in which I am asking these questions around food and health has helped me contextualize the current food scape in Canada and in parts of northern BC, as well as the current health inequities faced by Indigenous communities. Historical examples specific to colonial violence around food have helped me understand complex ways in which coloniality has impacted and continues to bear on Indigenous health.

2.2 Changing Food Discourse

Food norms and discourses are being constantly re-negotiated in changing socio-cultural environments. Foucault (1972) describes discourse as a manifestation of power and dominance. Escobar (1998) reiterates the power of discourse in writing that "the act of naming...is never innocent" (p.55). Deepening my understanding of the historical context of food has helped me to think more critically about the origins and nuances of dominant food discourses. For instance, in the 1940s, a primary concern of policy makers and scholars worldwide was the issue of starvation in the Global South (Perkins, 1997). During this time in Canada, recognizing the issue of food insecurity and malnutrition, leading scientists carried out a number of highly unethical nutritional experiments with known risks, including nutritional deficiencies (Johnson, 2021), on

Indigenous communities (particularly children in residential schools). The scientists who carried out experimentation in residential schools did so under the auspice of advancing nutritional science and food policy. Scholars such as Mosby (2013) expose human rights violations and the racist colonial logic behind these nutritional research experiments in Canada, arguing the inherent racism and colonial underpinnings of the work and that the experiments were highly unethical and did nothing to address food insecurity in Canada.

2.2.1. Food Security

Food security has been defined by the Food and Agricultural Association (FAO) as being "... when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (2002, np). While concerns around food access persist across Canada and globally, scholars and activists recognize the need to unpack food security discourse and to examine the exact natures of food access issues. Wakefield et al. (2015) describe the ways in which 'geographic imaginaries' contribute to food inequities in that "national discourses…tell a story of food security being more of an important problem overseas" (p.90), while simultaneously omitting certain groups, including Indigenous communities in Canada, who are often not 'food secure.'

Further, Agyemen and McEntee (2014) discuss the ways in which food security discourses facilitate 'the state' to define "what is or is not an area of inadequate food access, thereby legitimizing the claims of some and discounting those of others who do not meet the state's criteria" (p.215). The authors highlight that white, middle-class and corporate interests are largely overrepresented in discussions about food. On this point, Power (2008) considers the food security conceptualizations in Canada and internationally that privilege the market food

system as inadequate because these definitions exclude the diverse, traditional food systems and practices central to Indigenous health, identity and survival.

Given these power asymmetries, Agyeman and McEntee articulate the importance of scholar-activists not only engaging with struggles for food access, but also with struggles to legitimize food knowledges and practices. The importance of legitimizing diverse food practices is exemplified by Dawson (2020) who notes how the Canada Food Guide conveys Eurocentric food values of appropriate foods *and* ways of eating. For instance, the food guide promotes values of individualism (through images of eating from a single plate) and encourages portion control and eating at certain mealtimes (structured around the capitalist workday). Dawson explains that these food norms are not aligned with ways of eating for some Inuit communities in Nunavut, for example, where sharing food, intuitive portions and unstructured mealtimes are cultural practices. Learning more about the shortcomings of food security language has helped me to reflect on my own biases to certain food norms and it has prompted me to think of ways that I can avoid perpetuating colonial understandings of healthy food and eating habits in this master's work.

2.2.2. Alternative Consumption Narratives

Considering health, equity, and sustainability concerns seen in association with the dominant industrial food system, alternative consumption narratives emerged in an effort to address some of these issues. Phrases such as 'support organic farming,' and 'buy from local farmers' gained popularity over the past decade (Myers and Sbicca, 2015). Similar to food security discourses, Agyeman and McEntee (2014) describe how alternative consumption discourses have been compromised by being 'neoliberalized' in that they falsely perpetuate the notion that food injustice can be solved by consumerism and, in doing so, they shift the

responsibility of equitable food access from governments to markets (markets that many do not have ready or equitable access to). For Chris Newman, a US-based small-scale farmer, most 'alternative' food growers are *already* working within the confines of neoliberalism, making them ineffective in competing against large-scale agricultural corporations and thus largely ineffective in making a difference for health, justice and sustainability. Newman (2019) suggests an alternative approach could be a co-op model resembling traditional Indigenous Land stewardship in which "soil was seen as a commons and Land was worked cooperatively." (para 9).

Bryant & Goodman (2004) also critique the commodification of resistance, arguing that both ecocentric (conservation-seeking) and anthropocentric (solidarity-seeking) cultures uncritically embrace consumerism as a political strategy. These strategies, they argue, can perpetuate simplified understandings of the causes they seek to address, including social justice and conservation. Their article provides a critical framework with which to conceptualize alternative consumption narratives and ultimately exposes the market limitations of alternative consumerism as a form of resistance.

Further, these alternative food movements perpetuate false dichotomies. They naturalize colonial constructions of urban and rural (Agyeman & McEntee, 2014; Diagle, 2019), and promote reductionist distinctions between fields of study such as food sovereignty, Indigenous studies (Daigle, 2019) and environmental justice (Whyte, 2016). Indigenous food systems (Daigle, 2019), radical food geography (Hammelman et al., 2020) and ecohealth scholarship (Parkes, 2015), actively reject binary understandings of health, justice and sustainability, seeing questions around food and health as holistic, interdisciplinary and enhanced by being engaged with "both people and place" (Parkes, 2015, p.186). Lastly, by neglecting Indigenous voices,

alternative consumption narratives fail to respect or legitimize Indigenous food knowledge. These narratives also typically fail to address food that is bartered or gifted, which are common practices in many places. The erasure of Indigenous voices in the academy is well documented (de Leeuw & Hunt, 2018; Hunt, 2014; Todd, 2016) and particularly in ecological narratives (Robbins, 2012). In line with these critiques, alternative consumption proponents have been criticized for appropriating the 'regenerative paradigm' given its rootedness in Indigenous worldviews (Gather, 2020; Morrison, 2021).

2.2.3 Food Sovereignty

The term 'food sovereignty' was first taken up publicly and broadly after being written about in 1996 by the transnational peasant movement, *La Via Campesina* (Martens, 2015). The movement understood food sovereignty as the peoples' right to access healthy, sustainable and culturally appropriate food, and to have increasing control over their food systems (La Via Campesina, 2017). Scholars note that the appropriateness of food sovereignty over food security lies in its emphasis on peoples' control over their own food needs and food systems. Food sovereignty has necessary political undertones that seek to push back against the inequitable systems underpinning large scale food production (Martens, 2015) that unequally favour corporate interests and control within the food system (Agyeman et al., 2014). The language of food sovereignty also creates space for valuing and upholding traditional knowledges, practices, and strengths, including those held in and among Indigenous communities.

For Martens (2015), food sovereignty is an intentionally broad and non-specific term that can address local food-related problems with localized solutions. Since its inception, and

especially since its six pillars were conceived of at the Nyeleni conference⁴ in 2007, food sovereignty has turned into an international movement fighting for sustainable, equitable and just food systems determined by those who produce, distribute and consume food (Nyeleni, 2007). Since then, the language of food sovereignty has offered a more empowering and justice-oriented alternative to previous food discourses and this language has been taken up by activists and academics around the world. Food sovereignty is a rapidly growing discourse, gaining popularity and is being conceptualized and promoted by various national and international organizations (Cohen, 2006; United Nations Declaration on the Rights of Indigenous Peoples, 2008; McLaughlin et al., 2020). Food sovereignty goes hand in hand with agroecology, a movement that is defined as 'a way of redesigning food systems with a goal of achieving ecological, economic, and social sustainability.' The etymology of food sovereignty is slippery and has undergone multiple and sometimes contradictory revisions (Patel. 2009). Despite this variation, definitions of food sovereignty tend to emphasize peoples' rights and lean toward anti-capitalist, anti-oppressive and democratic food systems (Patel, 2009). As such, agroecology and food sovereignty have been likened by scholars to Paulo Friere's concept of critical pedagogy in that they promote non-hierarchical, horizontal knowledge sharing. As such, these approaches have been described as a 'viable response' to addressing global food insecurity and ecological crises (Mann 2018).

While food sovereignty is often seen as a promising approach, scholars like Clenningden et al. (2015) note that it too can be compromised by neoliberal contexts in which 'radical food movements' can be reduced to 'individualized consumption' (Guthman, 2008). Another

⁴ The Nyeleni 2007 Forum for Food Sovereignty in Mali was a 6-day conference for community members and policymakers designed to foster international solidarity and bring awareness to worldwide food insecurity and the potential of food sovereignty (Janchitfah, 2007).

shortcoming of food sovereignty is that it fails to resonate with all food movements. For instance, Clenningden and colleagues note that food justice language was more readily taken up by the urban food movements they studied in Oakland and New Orleans due to its better alignment with socio-political histories and particularly racial justice movements (2015). Further, Indigenous scholars have noted that the rights-based food sovereignty discourses can be agriculture and state centric and fail to fully capture the relational responsibilities that are central to Indigenous food sovereignty (Cote, 2016; Daigle, 2019, Martens et al., 2016, Whyte, 2016). Due to these shortcomings of food sovereignty narratives, Indigenous food sovereignty emerged as a related but also distinct movement from food sovereignty.

2.2.4. Indigenous Food Sovereignty

The Working Group on Indigenous Food Sovereignty (WGIFS) sees Indigenous food sovereignty as based on four principles: "the necessity of maintaining Indigenous relationships with Land; the ongoing work of Indigenous peoples in shaping healthy and culturally appropriate food systems; the daily maintenance of Indigenous food systems by Indigenous peoples; and the need for Indigenous influence over [colonial] policies at all jurisdictional levels" (Morrison 2008, 2011 in Kepkeiwetz & Dale, 2019). The WGIFS defines Indigenous food sovereignty as "a specific policy approach to addressing the underlying issues impacting Indigenous peoples and [their] ability to respond to [their] own needs for healthy, culturally adapted Indigenous foods" (Working Group on Indigenous Food Sovereignty, n.d.). In this way, the movement sees Indigenous food sovereignty as a *process* that necessitates dismantling underlying colonial and capitalist structures and attitudes that hinder Indigenous peoples' self-determined food practices. In line with this definition of Indigenous food sovereignty, scholar-activists are calling for more critical and anti-colonial perspectives in food sovereignty discourses that centre the role of

Indigenous women, youth, elders, queer, and two-spirited people in discussions around the regeneration of Indigenous food ways and that actively reckon with power and oppressive structures (Daigle, 2019; Hammelman et al., 2020).

"Indigenous people need to be living [food sovereignty] to keep it alive" said Dawn Morrison at a recent virtual conference facilitated by McLaughlin et al. (2020) and hosted by Food Secure Canada called *Cultivating Change: A just transition to a regenerative food system*. Dawn Morrison is the Founder, Chair and Coordinator of the Working Group on Indigenous Food Sovereignty that is a part of the Indigenous Food Systems Network. During this conference, the moderator asked the panelists—all of whom were Indigenous food sovereignty experts— how they think that humans should move forward in the face of the current existential climate and health crises. The speakers unanimously agreed that we need to (re)activate ancestral knowledge and knowing. As such, in addition to addressing food insecurity and social inequities due to ongoing coloniality, activists identify Indigenous food sovereignty as necessary to address existential crises facing all of humanity and non-human beings.

Despite its widely recognized benefits, there are many barriers (material and discursive) to Indigenous food sovereignty. For instance, settler colonial domination of Land serves as a barrier to Indigenous food sovereignty (Kepkiewicz & Dale, 2019; Rotz, 2017). Through industrialization and neoliberalism, settler colonialism shaped the current agrifood system model wherein settler domination of Land is perpetuated through colonial understandings of Land as private property (Kepkiewicz & Dale, 2019) and racist constructions of the Indigenous 'other.' (Rotz, 2017). These understandings fail to complicate the concept of 'food sovereignty,' seeing it largely in the context of land ownership and exclusively agriculture-based food sourcing (Kepkiewicz & Dale, 2019). By failing to acknowledge that 'property' refers to stolen

Indigenous Land, settler food sovereignty conversations often disregard the context in which they take place—namely within the 'Canadian colonial project'— limiting their ability to effectively support Indigenous food sovereignty initiatives and conversations. Cultural and material domination (monopolization of land), predominantly by white men, is thus a key barrier to diversifying the food system and, ultimately, to Indigenous food sovereignty. Corporate and governmental "resource development" can be understood as another major physical barrier to Indigenous food sovereignty (Delormier & Marquis, 2018). For instance, Jonasson et al., (2019) explain that the Canadian government-supported Trans Mountain oil pipeline poses serious threat to Indigenous food sovereignty through the potential contamination of traditional foods, destruction of landscapes and waterways, and by contributing to climate change that increasingly renders traditional foods inaccessible through species decline and the like (Schmid, 2020). As an example, in 2018, in Wilp Wii'Litsxw territory of the Gitanyow Nation, droughts due to climate change precluded sockeye salmon from being able to spawn in Tintina creek, having a major impact on the salmon population in the Meziadin watershed at large. Further, through BC's "free entry" system⁵, with no consultation nor consent of Indigenous nations, companies can place mineral claims on their unceded territory, further threatening the health of the Land, referred to among the Gitanyow specifically as Ha Nii Tokxw: "Our Food Table" (Vovo Productions, 2021).

For this reason, Dr. Tabitha Robin Martens argues that groups like the 'Tiny House Warriors' are examples of Indigenous food sovereignty champions (Johnson, 2020). The Tiny House Warriors define themselves as a movement asserting their authority over their unceded

⁵ Created over 150 years ago, colonial legislation known as BC's 'free entry' system gives mineral rights to those who simply 'stake a claim' to most land in the province. Still-existing mineral claims today continue to prioritize mining over most other land uses including Indigenous stewardship (Clogg, 2013).

territories and re-establishing village sites by building ten tiny houses to occupy this Land to protest the Trans Mountain pipeline from crossing unceded Secwepemc territory (Tiny House Warriors, 2020). Though they are not protecting food directly, Martens (in Johnson (2020)) argues that by protecting unceded Lands and territories they are inherently engaging with food sovereignty work because struggles for food sovereignty cannot be separated from struggles for Land (Johnson, 2020). Unfortunately, as I write this in the winter of 2021, cabins, similarly to those inhabited by the Tiny House Warriors, housing Gidimt'en Land defenders were violently raided by militarized RCMP (Yintah Access, 2021). These unwarranted raids were followed by the arrests of two Land defenders. One those arrested, Sleydo, stated before their arrest:

The Wet'suwet'en people, under the governance of their hereditary Chiefs, are standing in the way of the largest fracking project in Canadian history. Our medicines, our berries, our food, the animals, our water, our culture, our homes are all here since time immemorial. We will never abandon our children to live in a world with no clean water. We uphold our ancestral responsibilities. There will be no pipelines on Wet'suwet'en territory. (Yintah Access, 2021, para 4).

In light of these events, Indigenous food sovereignty can undoubtedly be seen as perpetually under attack by the ongoing Canadian colonial project. Indigenous food sovereignty advocate and chef to the Quw'utsun Sul-hween, Jared Qwustenuxun Williams, describes how food gentrification is an additional barrier to food sovereignty. Using the example of salmon, Williams explains that the depletion of salmon stores by commercial fishing and its high market price render it cost prohibitive for some communities who have traditionally relied on it as a staple food (Williams, 2021). Nikopoulos and colleagues (2020) found that government policies that restrict communities from hunting and fishing to be a barrier to food sovereignty in Alexander First Nation. Another recent example of these governmental barriers can be seen in the violent and racist protest of the moderate livelihood fishery launched by Sipekne'katik First Nation on unceded Mi'kmaq territory (Editorial Board, 2020). On the colonial and unjustified grounds that this livelihood fishery was operating 'out of season,' (as defined by the colonial government's Department of Fisheries and Oceans) Mi'kmaq fishers were attacked by settler fishermen, and were not afforded support or protection from colonial law enforcement (McKinley & McKeen, 2020).

In addition to these material and ontological barriers to food sovereignty, discursive (or epistemic) domination is a very significant barrier to Indigenous food sovereignty (Coté, 2016; Desmarais & Whittman, 2014). Scholars argue that colonial discourses, put forth in Canada and regarding land as it relates to food sovereignty, lack contextual nuance and fail to encompass Land-based, relational responsibilities that are central to Indigenous food sovereignty. For instance, Desmarais & Whittman (2014) are critical of food sovereignty definitions put forth by some Canadian food organizations for being 'agriculture and state- centric.' These definitions often portray localized food sourcing as the end goal of food sovereignty, while Indigenous food sovereignty requires going beyond this and seeking to *respect* and *protect* ancient food practices in the face of ongoing colonial barriers. Thus, Indigenous food sovereignty responds to the unique barriers faced by Indigenous peoples due to colonization and ongoing colonial dynamics in ways that settler food sovereignty discourses often fail to capture. Further, Indigenous food sovereignty avoids a universal definition of food sovereignty in order to emphasize the important differences between nations and their unique cultural and food needs and practices. In other words, Indigenous food sovereignty will look different in different places.

Coté (2016), an associate professor and a member of Tseshaht/Nuu-chah-nulth First

Nation, notes that Eurocentric and Cartesian understandings about and discursive constructions of the environment (that see humans as dominant over Land and other non-human entities), are in stark contrast to Indigenous 'eco-philosophy,' which emphasizes Indigenous peoples' responsibility to manage their *relationship* with Land in a dignified and respectful manner. As such, in addition to being agriculture and state-focussed, Coté highlights criticisms of the term 'sovereignty' in the context of Indigenous food sovereignty that may falsely imply a struggle for power over land rather than the need to respond to the cultural responsibility of fostering dignified relationships with Land. On this point, Desmarais & Whitman (2014) comment that "the use of food sovereignty discourse requires detaching the word 'sovereignty' from its historical and legal meanings and reconstructing elements of popular control, autonomy and interdependence" (p.1167). As these examples demonstrate, it is important to consider the multitude of ways in which coloniality creates complex barriers for Indigenous people to engage in self-determined food practices. Interrogating these barriers will provide important contextual information. It is crucial to note that in spite of these barriers, Indigenous peoples across Canada continue to champion food sovereignty work.

2.3. Cases and Reflections

Given my interest in learning about and highlighting examples of food sovereignty practice in northern BC, I began engaging with literature that explored Indigenous food sovereignty initiatives in other parts of Canada. The following sections discuss the themes that emerged from the literature that I reviewed. Engaging with research on food sovereignty initiatives similar to that which I was preparing to conduct was instrumental in informing my research, including its methodological influences, research design and methods.

2.3.1. Revitalization, Resurgence and Self-Determination

Several studies looking at cases of Indigenous food sovereignty highlighted its importance in the revitalization and resurgence of culture and self-determination. For instance, Kamal et al., (2015) explored O-Pipon-Na-Piwin Cree Nation's development of a communitybased food program called Ithinto Mechisowin. The authors emphasize the ways in which this particular food program promoted the revitalization of cultural food practices through youth engagement and through Elder involvement. They argue that the implementation of similar food programs can provide social and cultural benefits to other Indigenous communities.

Further, through interviewing Anishinaabe knowledge holders and highlighting Anishinaabe laws (particularly laws of *mino bimaadiziwin* or 'living the good life'), Cree scholar, Daigle (2019), explored food sovereignty in the context of everyday acts of resurgence and resistance against settler colonialism and neocolonial capitalism. Through this work, Daigle highlights the ways in which Indigenous people are working every day to enact their cultural responsibilities to the Land and other kin. The author concludes by questioning the ways in which food sovereignty discourse can be more accountable to Indigenous laws, decolonization and self-determination. The above examples describe Indigenous food sovereignty as more than simply a way to improve 'health,' but rather as a vehicle for cultural revitalization, resurgence and self-determination. Given my intention to enact a strength-based approach in this work, paying particular attention to these kinds of asset-based framings of Indigenous food sovereignty were crucial throughout my research moving forward.

2.3.2. Land and Community

According to Ratima et al., 2019 "Ancestral Land has special significance for Indigenous Health Promotion as a point of connection between past, present, and future generations; a

source of identity and spiritual sustenance; and a place that fosters community participation and cohesion" (p.4). The theme of connection to Land and community appears to be central to people's experiences with food. For instance, from discussions with inner-city Indigenous residents of Winnipeg, Manitoba, Cidro et al., (2015) identified that "cultural food [is] a part of connection to Land through reciprocity" (p.33). Further, through interviews and a 'circle metaphor' methodology, Martens et al. (2016) and Robin (2019) highlight key Indigenous food sovereignty themes that emerged through the research, concluding that common Indigenous food sovereignty tenets included history, connection to identity, relationships and the Land. Indeed, Gilpin & Hayes (2020) describe relationships to Land and Waters as informing "cultural protocols of good relationship, governance and wellness traditions for Indigenous communities around the world" (p.103). Martens & Cidro (2020) describe food as a "relationship builder" (p.144). Further, in the film *Food Is Connection*, food was described as both being constituted by Land and community (Risheq, 2020) and in online videos of food sovereignty at Tea Creek Farm, several youth trainees were asked what they liked about the farm and they answered by describing their experiences connecting with the earth and with other people at the farm (Beaton, 2021). This was also conveyed in a study by Pawlowska-Mainville (2020) where Anishinaabe Elders from the Poplar River First Nation defined Aki Miijim, a word that means 'Land food' and describes their territory as the "Land that gives life" (p.60). Learning about these examples has deepened my understanding of the inherent connection between food, Land and people. This is a theme I will be attentive to throughout my research in order to portray the richness of these relationships that are at the core of food, health and well-being.

2.3.3. Health and Well-being

As previously mentioned, not only is land central to food, but "Relationships to Land and to Waters constitute the backbone of community wellness" (Gilpin & Hayes, 2020, p.102), as has been specifically demonstrated by communities in 'British Columbia' (Stelkia et al., 2021). Given this project's focus on health, and the interconnectedness of food and holistic health (Cidro et al., 2015), while reading the aforementioned food sovereignty literature, I realized that it was equally important that I expand my understanding of health. Unsurprisingly, I learned that, like food, health discourses tend to portray Eurocentric understandings of the subject. These narratives often solely focus on human, biophysical manifestations of health while overlooking its emotional, mental and spiritual dimensions (Dawson, 2020). Such understandings are often in stark contrast to those held in many Indigenous communities who have collected health observations or 'indicators' over thousands of years that are transmitted through storytelling and Indigenous laws. For instance, Daigle (2019) reflects on the Anishinaabe law of mino bimaadiziwin which translates to 'living the good life' that guides Indigenous self-determination in living and acting relational responsibilities. Daigle explains that this is just one of the many laws that govern Indigenous relations with each other and non-human kin and that give life to the Land and Waters that many depend on (Daigle, 2019). These health observations often draw no division between the health of humans and that of non-human entities in the community and the environment with which the community lives (Crowshoe, 2018). As such, scholars such as Dawson (2020) suggest that Indigenous perspectives of health might better be encompassed with a language of 'well-being,' which speaks to less reductionistic and more holistic understandings of what it means to be well.

I also gained some helpful understanding about the field of 'ecohealth' or 'ecosystem

approaches to health' as strategies to address upstream social and ecological determinants of health (Buse et al., 2018; Parkes, 2015; Ratima et al., 2019; Redvers et al., 2020). Ecohealth approaches bridge and seek connections among sustainability, equity and health. In doing so, these approaches push back against dominant health narratives through integrative, participatory and collaborative knowledge sharing and action (Parkes, 2015). Ratima et al. (2019) suggest an extension of the field of planetary health that similarly critiques the original 'social determinants' of health' given their human-centredness and failure to encompass determinants specific to Indigenous heath such as colonisation. Indigenous-informed planetary health narratives proposed by Ratima et al., (2019) suggest instead positioning the planet as the focus for health intervention. This framing of health in terms of *planetary* determinants encourages prioritization of factors that protect planetary health, such as Indigenous Land defense, as key health promotion strategies. It is important to note that such ecocentric approaches to health are in no way new. Rather relational and integrative perspectives have been deeply embedded in the worldviews of Indigenous communities for thousands of years. In fact, scholars such as Moewaka Barnes see such approaches as directly related to Indigenous survival (McIntosh et al, 2021; Moewaka Barnes and McCreanor, 2019). They are attributable to none other than Indigenous science. These ecocentric perspectives have tended to be ignored or delegitimized in favour of reductionist anthropocentric understandings of health (Ratima et al., 2019; Redvers, 2021).

Given current socio-ecological crises, scholars now see Indigenous wisdom as a necessary guide in the field of planetary health (Ratima et al., 2019). Proponents argue that developing an orientation to determinants of planetary health is not only crucial as a means of decolonizing health narratives, but also as a means of moving forward in the face of climate and

(interconnected) public health emergencies (Ratima et al., 2019; Redvers, 2021). As Kimmerer (2013) eloquently puts it "...we make a grave error if we try to separate individual well-being from the health of the whole" (p.16).

Deepening my learning about the shortcomings of dominant health discourse and alternative health framings has helped me to gain insight into ways that I could operationalize these approaches in my own work. Most importantly, these concepts have encouraged me to think about who is involved in this work, in what capacities and how the knowledge sharing done throughout this work could in some small way contribute to collaborative action. In addition to thinking critically about health discourse, in this master's research, I was interested in attending to the concrete ways in which northern and Indigenous food sovereignty endeavours bear on health. One potential pathway I identified in the literature was that food sovereignty practices can facilitate expression of identity and in turn foster wellness. Several scholars have described food sovereignty as a vehicle for cultural identity revitalization (Gilpin & Hayes, 2020; Levi, 2020; Martens & Cidro, 2020) and identity has been associated with well-being. According to Martens (2015) "understanding cultural practices, norms, ideologies and perspectives is crucial to supporting cultural identity" (p. 53). For instance, Martens expresses the importance that women be included in food procurement given their historical role in cultivating plant foods. In this way, engaging in cultural protocols can foster cultural identity. According to Dawson, 2020, "the Kahnawa:ke idea of well-being involves interconnectedness, relationships, responsibilities and roles, as well as knowing oneself as whole in spirit" (p.89). Attending to the ways in which people speak about identity in relation to food sovereignty and wellness was important for me in this work in order to identify multifaceted ways in which food sovereignty practices might facilitate health and well-being.

2.4 Community Engagement

In addition to reviewing and delving deep into written and visual literatures, I <u>spoke</u> with community experts involved with food sovereignty projects across northern BC before beginning the formal research process. This was a preliminary stage of the project which did not involve research ethics because it was not part of data collection. According to the Tri-Council Policy Statement, Article 6.11, "REB review is not required for the initial exploratory phase, which is intended to establish research partnerships or to inform the design of a research proposal and may involve contact with individuals or communities." This stage involved outreach to community experts to gather their existing expert knowledge on the project and drew on community members' existing expertise to inform further steps in the research project that were covered by ethics. In the following section I surface and give recognition to these preliminary conversations while anonymizing the people who informed the project

Engaging with community experts involved with food sovereignty initiatives in northern BC communities, as well as reviewing non-written work such as podcasts, YouTube videos and live webinars, comprises the 'spoken voices' component of this review. I spoke with these people in an effort to ensure that members of communities across northern BC had the opportunity to inform various stages of the research, including guiding its research focus and methods. While I did not adhere to a community-based participatory research design fully, as is discussed in Chapter 3, this community engagement effort was informed by principles of community-based participatory research.

For the purpose of this research, I do not understand community exclusively as a geographical location, although geographical place and environmental context are necessarily

related to questions around food sovereignty that I seek to ask in this research. My understanding of community is influenced by the field of human geography which studies "[i]nteractions and social habits of humans *within* and *across* all spaces..." (Mayhew, 2009) in (de Leeuw, 2018, p.190). According to Young in Farrelly (2003) "there is no universal concept of community, but only particular orientations that overlap, complement or sit at acute angles to one another" (p.195). In other words, community can mean "all things to all people" (McDowell & Sharp, 2014, p.35). Community in the way that I use it in this thesis aligns with feminist geography arguments suggesting that community can never be exclusive and that rendering community as exclusive is deeply problematic because it fails to recognize inherent slippage between place, space, cultural identity, kinship, shared values, histories and practices (McDowell & Sharp, 2014). Instead, in this project, I am interested in relationalities between communities, some of whom are specifically located in a place (i.e., northern BC) but many of whom cross outside of geographic boundaries insofar as they have relational engagements with broader sociocultural communities in their orientation to rurality and to food sovereignty.

Despite the limited time students face to pursue community engagement, scholars such as Kirby et al (2017) note the importance of understanding and aspiring to engage communities involved in research as much as possible in order to avoid perpetuating extractive research (wherein researchers conduct research *on* participants without much consultation, relationship or partnership-building). Community engagement can take the form of a wide range of approaches and can be employed to serve a variety of research goals (Kirby et al., 2017). Shortly after moving to Prince George, and when I began my master's thesis in September 2020, I started talking with community experts about food sovereignty. These informal conversations took place

over zoom and over the phone from September 2020 until April 2021. During this community engagement phase I connected with close to fifty people.

My goals in having these conversations were to 1) better understand whether the research questions I was interested in asking would be helpful to these people and their communities, and 2) to get a sense of which methodological tools (methods) would be most appropriate to leverage as a means of asking these questions. In speaking with community experts about my research interests and seeking their input on my ideas and my objectives, I tried to be authentic in my communication by being transparent about my background, worldview and intentions. I asked community experts with whom I spoke about whether my research ideas would be helpful for them and their communities. I asked community experts with whom I spoke if and how they might like to be involved in the research and I have asked how they would like to be compensated for their involvement. Often, I asked for, or community experts voluntarily offered, further connections of more people they believed to be knowledgeable about northern BC food sovereignty.

As I embarked on this learning journey, I became aware of the diversity of food sovereignty contexts within northern BC and I wanted to avoid generalizing across vast and varied geographies. I spoke with people from a variety of northern BC communities during the community engagement phase, including community experts from the Peace, Haida Gwaii, Terrace, Bella Bella and Quesnel to name a few. When I sent out invitations to engage in conversational interviews, overall, those who accepted came from the central interior (Prince George, Quesnel and Valemount), the northern coast (Prince Rupert and Bella Bella) and the Skeena-Bulkley (Terrace, Smithers, Kitwanga, and the Hazeltons) regions. Table 1 provides

examples of the community experts I engaged with, and their range of interests in the research,

which also shaped subsequent research design.

Community Experts	Key Interests
Central interior farmers	Involvement through interviews in this research which
	could shed light on barriers faced by northern BC
	farmers (given limited governmental support and
	educational opportunities for northern BC farmers and
	limited research on food growing in northern BC).
Central interior food markets	Involvement through interviews in this research which
	could help illuminate barriers to northern BC food
	hubs (i.e., weather and land access issues, financial
	barriers/ limited governmental support/ precarious
	local food market) and inform unique models for local
	norther BC food networks.
Peace River, Island, Northern Coastal and	Potential involvement in reciprocal, non-extractive
Skeena-Bulkley food harvesters and Land-	research partnerships through interviews or focus
based educators	groups (i.e., having me provide research assistance
	through community focus group analysis in exchange
	for involvement in my project) given traditionally
	extractive settler-led academic research and having
	already-stretched capacity.

Northern coastal and Skeena-Bulkley	Interested in collaborative research projects (ex. where
related organization employees	I provide research assistance in exchange for
	participation through surveys or interviews), interested
	in sharing resources (i.e., northern BC food
	sovereignty reports and literature), interested in
	helping to connect me with other northern BC food
	sovereignty experts.
Central interior government sector	Interested in connecting me with additional northern
employees	BC food sovereignty resources (i.e., inviting me to an
	Indigenous food sovereignty townhall session, sharing
	local food reports, and putting me in contact with other
	northern BC food sovereignty experts).

Speaking and building relationships with almost fifty people, from very diverse organizations and places across northern BC, was a deeply instructional process. Importantly, my conversations with each of these people helped me make decisions about this research, gave me ideas about how to conduct the research and in many ways has reinforced that I'm not 'out to lunch' with regard to what I decided to study. The enthusiasm demonstrated during the generous connections suggest an authentic interest in the themes that run through this research, namely food sovereignty and holistic health in northern BC. In addition, the frequent requests for me to work on concrete components of food sovereignty work gave me great confidence that I, as should be the case with community-engaged work, was doing meaningful work at the behest of whomever I ended up working with.

Despite many of the aforementioned people expressing interest in being involved with this project, when it was time to engage in conversational interviews, many did not end up continuing to be involved due to a number of reasons that are discussed in Chapter 5, such as having limited energy to engage in research while actively resisting colonial processes, facing barriers associated with the COVID-19 Pandemic, and being occupied with Land-based commitments. Even some people with whom I had several conversations with during the community engagement phase were not able to engage in conversational interviews when the time came. Nonetheless, I'm grateful to everyone who contributed to this project including those that were only involved in the community engagement. Having these conversations early on gave me valuable context about diverse foodscapes across northern BC and validated the relevance of this research project.

2.5 Reflections and summaries to Background, Review of Written Literatures, Spoken Voices and Oral Knowledges

The conversations I had with people as part of my community engagement effort both reinforced things that I learned in the literature and gave me new insights that were communityspecific and place-based. In many ways, the background literature was in line with the spoken voices with whom I engaged—informants largely preferred the term food sovereignty as is supported by literature on the ways in which food discourse is changing. I asked their preferred method of participating and I offered options such as email surveys, formal interviews and semistructured, conversational interviews. When presented these options, informants and involved knowledge holders largely preferred conversational interview methods. The use of these methods is supported in other research exploring other cases of food sovereignty practice in Canada

(Cidro et al., 2015; Daigle, 2019; Kamal et al., 2015). Conversational interview methods are further discussed in Chapter 3. Lastly, these conversations re-affirmed the gap that I saw in reviewing the literature and supported the notion that more research is needed to explore health experiences of food sovereignty in northern BC. In many other ways, these conversations gave me insights that I could not have gotten from the literature *alone* given the ways in which food sovereignty practice is shaped by people and place (Risheq, 2020). For instance, learning about unique administrative, social, cultural and place-based barriers experienced by people living in these conceptual and geographic communities made me aware of the need to explore food sovereignty and holistic health on a local scale.

Having been informed by the background that I gained from written and spoken voices discussed in Chapter 2, the following chapter will outline the methodological influences, research design and concrete methodological tools (methods) that informed and facilitated this research to take place. Given the ways in which colonialism has impacted and continues to impact Indigenous health and food sovereign practices (as explored in Chapter 2), Chapter 3 highlights the important influence of interdisciplinary, strength-based and de-colonial and anti-oppressive methodologies to this project. These methodological influences are closely related to a community-based participatory research design, which was not enacted in this project, but was an aspiration throughout. Finally, given their usefulness in other scholarly work in the field (Cidro et al., 2015; Daigle, 2019; Kamal et al., 2015), and given the preference of informants that I spoke with as part of community engagement, Chapter 3 highlights my choice to leverage conversational interviews as a means to explore my research questions and address my research aims.

CHAPTER 3: Methodological Influences, Research Design and Methods

Methodology brings together ways of knowing and doing (Sloan Morgan, 2021); it is "a set of rules and procedures about how research should be conducted." (Kirby et al., 2017, p.13). Methodology guides methods. Methodologies are the theories behind the methods, providing the context for why certain methods are chosen in research and how these relate to research outcomes. Research design can be seen as a 'plan' that outlines *how* a researcher will answer their research questions (Patton, 2015). As part of the research design, methods are a tool by which research questions are answered. Methods work in concert with the theoretical and methodological frameworks with which they are interdigitated; methods operate less as conceptual aspects of research and more as grounded, applied tools that a researcher uses. This chapter explains and details the various methodological influences and associated research design and methods used to answer my research questions.

Seeking to explore the experiences of folks involved with food sovereignty and the ways in which sociopolitical, cultural and environmental factors prohibit and enliven these experiences, I employed qualitative methodologies in this research. Qualitative methodologies "embrace the complexity of social interactions as expressed in daily life" (Kirby et al., 2017, p.36) and they "inquire into…the meaning-making process" (Patton, 2015, p.3). As such, this study's grounding in qualitative theory is appropriate to illuminate the complex health experiences of those enacting food sovereign practices in northern BC.

This chapter thus outlines the key methodological influences that informed this study. These methodological influences are 1) an interdisciplinary lens, 2) a strength-based influence, and 3) an anti-oppressive and de-colonial orientation. Next, the chapter outlines the research design this study was inspired by, namely community-based participatory research (CBPR). I discuss the parts of this study that were in line with a community-based research process, and the parts that were not participatory, concluding that, overall, this work was community-informed, if not fully CBPR. I go on then to discuss the concrete methods that I leveraged in this study, including conversational interviews, thematic analysis and member-checking. Lastly, I discuss ethical considerations, including negotiating my 'outsider' status (further discussed on p.51), being trauma-informed, and honouring free, voluntary ongoing consent and involved knowledge holders' confidentiality preferences.

3.1 Methodological Influences

The following section outlines the methodologies that influenced this study, and which were informed by my initial research questions and the written and spoken voices discussed in Chapter 2. Given that this study's research questions inquire about peoples' holistic health experiences as they relate to pursuing food sovereignty in northern BC, I saw an interdisciplinary methodological lens as necessary to grapple with peoples' inevitably complex and holistic ideas and words. I drew from a strength-based methodological influence in light of harms that have been inflicted on Indigenous peoples as a result of extractive and deficit-focussed research (Aldred et al., 2020; Bryant et al., 2020) and in an effort to highlight Indigenous self-determination and decolonization that are closely related to food sovereign practices (Daigle, 2019). Given the unique barriers that Indigenous food sovereignty champions face as a result of settler land dominance (Rotz, 2017), resource extraction (Cote, 2016; Jonasson et al., 2019; Schmid, 2020) and settler understandings of Land as private property (Kepkiewicz & Dale, 2019), and given the ways in which colonialism is closely tied to the patriarchy (Mollett & Faria, 2013), I was informed by an anti-oppressive and de-colonial methodological influence. I drew

from an anti-oppressive and de-colonial methodological influence in an effort to resist oppressive and colonial power dynamics that exist in the places and spaces where I conducted this research. Specifically, I engaged communities of people who have been traditionally excluded from research (including rural farmers and Indigenous knowledge holders). Through undertaking qualitative research that foregrounds community experts' holistic health experiences of food sovereignty, I made efforts to counterbalance dominant, quantitative, food security and deficitfocussed Indigenous health research. I engaged with community in an effort to foster authentic relationships before asking community experts to be part of this research. I privileged the voices of women and people of colour when reviewing written and spoken voices and when inviting community members to engage in conversational interviews, and I positioned involved knowledge holders as experts in this research rather than participants. Through listening to the requests of those involved, I offered small compensation services and gifts that were tailored to their needs.

3.1.1 Interdisciplinary Methodological Lens

Scholar-activists see food studies as inherently interdisciplinary, having diverse disciplinary roots that include contributions from geography, anthropology, history, Indigenous studies, nutrition and agriculture science (Hammelman, 2020), and benefiting from drawing on an "interdisciplinary dialogue between food sovereignty scholarship and Indigenous studies" (Daigle, 2019, p.300). Interdisciplinarity is seen an approach to help 'make sense of' the complexities of human social life. Though having roots in Kantianism and the foundation of the 'modern university,' political and economic factors led to the abandonment of interdisciplinarity in favour of solidifying disciplinary boundaries and specialization within the academy in the 20th century. The recent resurgence of interdisciplinarity— largely driven by the perceived need to address epistemological 'blind spots' during the Cold War era —challenges the academic status quo and, particularly, the validity of the 'expert.' (Callard and Fitzgerald, 2015).

Robin Wall Kimmerer, the author of *Braiding Sweetgrass*, writes that while bringing together paradigms of knowledge (a prerequisite for interdisciplinary thought) can result in an awkward teetering between two worlds, it can also enable a "dance of cross-pollination that can produce new species of knowledge and new ways of being in the world" (Kimmerer, 2013, p.47). Though more closely related to transdisciplinarity, interdisciplinarity can be seen as comparable in some ways to the Indigenous methodology of Two Eyed Seeing given their similar approaches in integrating the strengths of different ways of knowing (Kirby et al., 2017). First proposed by Mi'kmaq Elders, Albert, and Murdena Marshall, Two Eyed Seeing methodologies aim to bring together the best that Western and Indigenous knowledges have to offer, where each knowledge paradigm is represented by the lens of one eye. Using a Two Eyed Seeing framework, different knowledges are seen as equally valuable, legitimate and bringing

unique, complementary strengths to research (Wright et al., 2019). In this way, scholars consider Two Eyed Seeing a decolonizing methodology in that it honours Indigenous knowledge and recognizes the unique and necessary perspectives that Indigenous ways of knowing offer in ways that Western knowledges cannot (including relational ontologies) (Wright et al., 2019). Given that I seek to highlight multiple truths and holistic perspectives in this research project, I see this work as informed by Two Eyed Seeing approaches; however, this project was not designed to operationalize Two Eyed Seeing, nor did it do so, in all aspects of the research.

Further, in *Monocultures of the Mind*, Shiva (1993) critiques the ways in which dominant knowledge systems like science have become recognized as universally applicable and true in a way that destroys diversity. Dominant knowledges do this, Shiva argues, through ignoring, delegitimizing, and destroying the integrative conditions required to uphold local knowledges. Shiva likens dominant knowledge systems to monocultural farming practices that similarly destroy the physical conditions necessary for a diversity of living and non-living beings. I thus saw it as imperative that I employed an integrative, interdisciplinary lens when approaching questions around alternative food sourcing given the multitude of harms caused by physical and mental monocultures.

Given that questions around food are "made stronger through engagements across disciplinary lines" (Hammelman, 2020, p.7), this research draws from diverse disciplines—most notably health science, First Nations studies, environmental studies and geography—to explore questions around food sovereignty and health. In doing so, it seeks to respond to scholar-activist calls for engagement with 'radical food geography praxis' seen as necessary to move forward equity and sustainability-oriented food praxis (Levkoe et al., 2020; Hammelman, 2020).

3.1.2 Strength-based Methodological Influence

As previously mentioned, this research intentionally foregrounds the strength and resilience of knowledge holders by focussing on positive, health-related experiences related to food sovereignty. I see a strength-based approach as necessary in this research in order to avoid perpetuating harms associated with neoliberal pathologizing of Indigenous communities (Aldred et al., 2020; Cooper & Driedger, 2018). It is well-documented that deficit narratives prevail in Indigenous-focussed health research wherein Indigenous communities are pathologized from a Western biomedical point of view (Aldred et al., 2020; Bryant et al., 2020). As eloquently stated by Dawn Hoogeveen in a session with McIntosh and others (2021), Indigenous-focussed research has been plagued by a deficit focus, which has narrowly approached only the 'endpoints' of healing journeys. Other scholars such as Bryant et al. (2021) and Hyett et al. (2019) echo these concerns. These deficit-focussed depictions are often highly racialized and subjugate Indigenous knowledge by positioning biomedical understandings of health as the most objective and legitimate way of knowing. As a result, strength-based approaches are gaining traction as a means to disrupt harmful deficit narratives through highlighting Indigenous sovereignty, selfdetermination and resistance (Bryant et al., 2021). Bryant and colleagues (2021) conceptually map three main approaches to strength-based health research with Indigenous communities: resilience, social-ecological and sociocultural approaches. They stress the importance of employing sociocultural approaches that highlight collective, socially mediated strengths. Indeed "despite variations across Indigenous cultures, both the sources and outcomes of strength in Indigenous models are largely thought of as social rather than primarily individual." (FNIGC, 2020, p.21). Focussing on collective assets inherent in Indigenous-focused health research requires that scholars engage with and centre Indigenous concepts and experiences in strengthbased health research. In spite of the diversity of healing practices across Indigenous communities in Canada, there are commonalities among Indigenous understandings of health, well-being, strength and resilience. According to FNIGC (2020), these common themes include balance and interconnection, culture and spirituality, family and community and connection to Land and environment.

In line with the literature and in an effort to counter dominant health and strength narratives that prioritize reductionist and individualistic understandings of physiological and mental health (Bryant et al., 2021), I made an effort to highlight collective strength that knowledge holders expressed, which I expand on in Chapter 4. Learning that family, community and connection to Land are common themes central to Indigenous understandings of health, well-being, and strength (FNIGC, 2020) helped me to situate knowledge holders' ideas that drew on these themes in a larger context of collective strength.

3.1.3 De-colonial and Anti-oppressive Methodological Influences

In Age, Race, Class and Sex: Women Redefining Difference, Lorde (1980) describes the various forms of deviance that result in privilege and oppression:

Racism [is] the belief in the inherent superiority of one race over all others and thereby the right to dominance. Sexism [is] the belief in the inherent superiority of one sex over the other and thereby the right to dominance. Ageism. Heterosexism. Elitism. Classism. (p.2).

For Lorde (1980), failure to recognize and work across differences limits the oppressed from uniting as equals for a common goal. In the context of feminism, Lorde suggests that acknowledging difference [requires] "women of Color to step out of stereotypes [which] is too guilt provoking, for it "threatens the complacency of those women who view oppression only in

terms of sex." (p.3). Lorde's theory likely explains hooks's (1994) recount of white women professors being resistant to engage in critical feminist thinking with black students. This is true, Lorde argues, as long as difference is neglected or understood in terms of *deviance* and hierarchical binaries such as superiority/inferiority. To overcome this oppressive thinking, it's necessary to "recognize differences among women who are our equals, neither inferior nor superior, and devise ways to use each other's difference to enrich our visions and our joint struggles (Lorde, 1980, p.6).

With scholars and activists calling for more attention to gendered and culturally sensitive analysis in research on social and ecological determinants of health (Mollett & Faria, 2013), I carefully considered gender in the research design. According to Kleinman (2011), operationalizing feminist research necessitates both attending to *how* gender inequalities are 'lived out,' and how they are resisted, as well as "becoming cognizant of patterned absences" (p.11). For instance, considering ways in which women are written in or out of certain roles within food systems, how factors encourage these folks to occupy certain roles, and how they exist within or resist oppressive structures.

The need for gender, and culturally-sensitive analysis is echoed by food sovereignty advocacy groups. Many of these advocates have long seen struggles for food justice as inherently connected with resistance to patriarchal domination and with struggles for the rights and respect of women (La Via Campesina, 2020). For instance, women make up the majority of the world's food producers (La Via Campesina, n.d.) and women occupied the role of Land stewardship and food distribution in many matrilineal societies such as Haudenosaunee (Delormier & Marquis, 2019). Women thus play a central role in food systems, demonstrating the interconnection of gender, food systems, and rights. This research therefore considered it imperative that women's voices were at the forefront of conversations around food (traditionally dominated by men). While acknowledging that the patriarchy is closely tied to colonialism and racial capitalism, this research was also sensitive to intersectionality. It adopted a nuanced view of 'gender,' seeing it as something that is fluid, context-dependent, and inherently underpinned by race, racialization and racism (Mollett & Faria, 2013).

As part of my commitment to operationalize anti-oppressive research, I have been committed to seeking out relevant learning opportunities throughout this master's project. As part of this commitment, I attended an anti-racism event put on by the Collective for Anti-Racism (CAR). During this event, Métis/Cree clinician and educator, Jennifer-Lee Koble, shared a piece of advice for aspiring allies: 'Don't *tell* me you're an ally, but how do I *know* you're an ally?' I had made this mistake once before— stating my intention for allyship rather than showing it. My privileged ignorance was met by a reminder that allyship isn't something that is up to me to decide. My white and fragile ego took a blow. As I remembered this incident and listened to Jennifer, I wondered how marginalized friends and colleagues might *know* that I'm an ally. One way that Jennifer suggested was engaging in 'clean' discomfort— naming and disrupting everyday acts of racism and oppression. As aptly explained by Kendi (2019) "the only remedy to racist discrimination is anti-racist discrimination" (p.19). In other words, one cannot refrain from engaging with racist systems, rather they engage with them constantly through either racism or anti-racism.

In her Ted Talk 'How Studying Privilege Systems Can Strengthen Compassion," Peggy McIntosh likens privilege to an inherited bank account. Like a gifted sum of money, privilege is something that one does not earn, but that one can use to help weaken oppressive systems through engaging in anti-oppression work. A central tenet of anti-oppressive research is to "name

and then disrupt oppressive thinking by deliberately asking questions that illuminate these processes [and] to question standard research assumptions such as 'objectivity' or 'hierarchies of evidence' or 'positivism'" (Kirby et al., 2017, p.37).

This research aspired to leverage an de-colonial and anti-oppressive methodology in several small ways. Firstly, through focussing on qualitative experiences of food sovereignty, rather than settler defined, quantitative 'food security' metrics, this research attempts to challenge 'hierarchies of evidence' (Kirby et al., 2017). It highlights the importance of lived experiences and traditional ecological knowledge informing discussions around food and health, and in doing so, illuminates the shortcomings of solely relying on positivist, Eurocentric research metrics. Identifying science's narrow scope, and that certain questions are 'too big for science to touch' (Kimmerer, 2013) is one way in which anti-colonial scholars can 'name and disrupt' oppressive knowledge hierarchies. In Chapter 4, I highlight the inadequacy of science in grappling with the questions posed in this research and the ideas of knowledge holders in an effort to counter the aforementioned oppressive hierarchies of evidence and as part of my attempt to leverage anti-oppressive and de-colonial influences in this work.

In addition to naming and disrupting oppressive knowledge paradigms, de-colonial scholarship encourages giving "full credit to Indigenous laws, stories and epistemologies" to combat the erasure of Indigenous contribution to scholarly thought. (Todd, 2016, p. 13). Scholars such as Ahmed (2014) in Todd (2016) see the concept of "citational rebellion" as a promising step in anti-colonial praxis. Citational rebellion includes giving particular citational attention to "POC, women and others left out of many academic discourses…and… [familiarizing oneself] with…Indigenous thinkers…[to] broaden the spectrum of who you cite and who you reaffirm as 'knowledgeable'." (p.19). Wilson (2003) echoes that listening intently to other perspectives and

ways of knowing without 'insisting' on the predominance of one's own way of knowing brings them closer to enacting de-colonial research (Wilson, 2003).

3.2 Research Design

The following section explores the research design, or the 'plan' outlining how would answer my research questions. I was inspired by (though did not fully operationalize) a community-based participatory research design, as is discussed in the following sub-section.

3.2.1 Community-based Participatory Research

Kovach (2010) notes the interconnectedness of method, research design and paradigm (a paradigm being, really, a methodology). Community-based participatory research (CBPR) is considered a variant of participatory action research (McIntyre, 2008). Participatory action research methods are seen as well suited for research concerning complex human-ecological relationships and they're particularly valued for "their capacity to acknowledge the multiple contexts, stakeholders, and processes involved in both human and environmental systems" (Parkes & Panelli, 2001, p. 87). While the extent and ways in which participatory action research is operationalized vary greatly, the central tenets of participatory action research include action and participation. Though participatory action research was an aspirational thread throughout this research, this project was not focussed on action, nor did it leverage participatory action research approaches. Rather, I explore participatory action research in this thesis as part of my learning process as a research trainee and as an aspirational design for future research projects that are not under the time constraints of student research projects (Kirby et al., 2017). Ultimately, I can say with comfort that this project was a community-informed work: I learned so much from, and remain humbled by the guidance that so many generous knowledge holders and community

members gave me.

Participatory action research methods are rooted in and enhanced by many of the methodological and theoretical approaches mentioned in the previous chapter, including the anti-oppression scholarly works of Marx and Friere, as well as feminist scholarship by hooks and others (McIntyre, 2008). Thus, given its origins in anti-oppression, and feminist theories, community-based participatory research serves as an appropriate research design to explore the research questions.

Research is inherently political (Kovach, 2010) and thus typically responds to and serves the priorities of those in positions of power and authority. In *Community Based Participatory Research for Health* Minkler & Wallerstein (2003) see research as an opportunity for democratic participation, especially for those who have traditionally been confined to the role of the researched as opposed to researcher (Checkoway, 2003). While there *has* been a lot of work involving both of these populations in recent years, farmworkers and Indigenous knowledge holders are among those who have traditionally been excluded from research production spaces. As such, this provided further impetus to strive for a community-based participatory research design in this project. As previously noted, while I strove to engage community during the early stages of this master's through asking people questions about my project ideas before I began any formal research process, I was not able to operationalize a community-based participatory research design in this master's project.

Intentionally avoiding extractive and colonial research approaches, this research was motivated by and designed in line with a community-based participatory processes where research is seen as a "shared story" (Snow, 2018, p.4), conducted *with* and *for* those involved (Koster et al., 2012). Striving to do this research with and for community was important for me

not only as a settler seeking to do socioecological-justice oriented research, but also as an outsider and humble learner in northern BC geographies. To do this "with and for" research, Koster et al., (2012) note the importance of steering away from traditional research methods and attending instead to Indigenous research principles, which closely relate to those of communitybased participatory research. This entails recognizing that the community should be identifying and driving appropriate research methods and should be involved in every step of the research process: from the co-creation of the research question and methods to the sharing and dissemination of the research findings. Lastly, it entails aligning research with the 'four Rs:' respect, reciprocity, relevance and responsibility (Kirkness & Barnhardt, 1991). As previously mentioned, I was only able to partially fulfil the characteristics of CBPR. I feel that I respectfully engaged with community in the early stages of this research that allowed for the research questions and methods to be shaped by informants and involved knowledge holders such that they were relevant for them. I feel that I upheld reciprocity through tailoring compensation to knowledge holders' wants and needs and I feel that I responsibly honoured consent and confidentiality through providing all involved knowledge holders with a research information letter and through member checking. Despite this, I wasn't able to operationalize CBPR in all areas of the research. Data analysis was not participatory, nor was the identification of methodological influences, research design, findings, discussion or conclusion. My inability to fully operationalize a community-based participatory research process was partly due to my lack of research experience, as well as academic time constraints that are discussed later in this Chapter. In Chapter 5, I discuss potential ways to mitigate some of the institutional barriers to engaging with community-based participatory research with the hope that this project could in a small way help inform future graduate research in this field.

Community-based participatory research seeks to democratize the production of knowledge to foster 'co-learning' and treat community knowledge holders as 'active research partners' (Balazs & Morello-Frosch, 2013). While the central tenets of participatory action research include collective commitment, reflection, decision-making, and action through researcher and participant alliance that yields benefit to all those involved, McIntyre (2008) explains that participatory action research follows "no fixed formula for designing, practicing, and implementing...projects. Nor is there one overriding theoretical framework that underpins [its] processes." (p.3). Community-based participatory research has been operationalized to connect environmental and health justice activists with researchers and is seen as a promising approach to strengthen the 'rigor, relevance and reach' of sustainability, health and justiceoriented research. Particularly, participatory research approaches have advanced the field of 'cumulative impacts' of social and ecological determinants of health through providing impetus to have research inform policy and decision-making action (Balazs & Morello-Frosch, 2013). Given the ways in which questions around food are inherently interconnected with sustainability, health and justice, and due to the documented usefulness of community-based participatory research in supporting social and environmental justice praxis, I aspired to leverage CBPR as a research design to engage with in this study, though I only engaged with parts of this research design in meaningful ways as previously discussed.

Realizing the difficulty in fully and completely operationalizing the community-based participatory research process (Castleden et al., 2012), I made efforts to overcome some of these barriers, including making authentic relationships with involved knowledge holders, though I was not successful in overcoming them all. As previously noted, I had conversations with several knowledge holders prior to commencing any formal stage of the research process, an approach

seen as covered under the scope of 'community engagement' (Kirby et al., 2017). Potential involved knowledge holders were identified through snowball and purposive sampling (Kirby et al., 2017; Patton, 2015). During these initial conversations, we discussed my general research interest, spoke about whether my research might have benefit to their community, and if so, what research direction would be most helpful. Community members responded with specific goals for their community and ideas about how academic research in this area could help the community achieve their goals. As such, communicating openly and transparently with community members informed the research process such that it could be tailored to specific community needs.

While this project in its entirety did not always fully adhere to a community-based participatory research design, I see several elements fitting with a community-engaged research design. In this way, the work is deeply informed by communities. By exposing and highlighting barriers experienced by those involved with food sovereignty in northern BC communities through qualitative analysis, this project attempts to counter dominant, southern and urbancentered, quantitative food security narratives. While participation varied in different stages of the project, knowledge holders were engaged to help inform the research questions and methods during the community-engagement phase and had the opportunity to discuss matters of importance to them during the conversational interviews. Further, in the winter of 2022 I worked with some of the involved knowledge holders on knowledge exchange projects that I discuss in Chapter 5. On the other hand, theoretical and methodological influences were chosen by me alone and, though all interviewees were given an option to review their transcript, there was limited participation in the analysis phase. For a timeline of this research project, please refer to Appendix 4 (p.137).

3.3 Methods

The following section outlines the concrete methodological tools (methods) that I used to address my research questions. Given that I seek to make space for interdisciplinary, complex, and de-colonial understandings of the relationships between food, community, ecology and wellbeing, conversational-style interviews were an appropriate method to help capture holistic ideas and worldviews. Conversational style interviews can also facilitate storytelling (Nagar, 2013) that can act to counter oppressive structures and re-centre marginalized and community-based voices (Aldred et al., 2020, Gislason et al., 2018). In this way I see conversational interviews as being in line with the methodologies (interdisciplinary, strength-based and anti-oppressive and de-colonial) that influenced this research project.

After transcribing the conversational interviews, I sent unedited transcripts (transcribed verbatim) back to all contributors. I asked if they wanted to edit, remove, or add material in their transcript. I also asked whether or not they'd like to be identified by their name, and if not, I invited them to pick a suitable pseudonym. In follow up emails, I informed knowledge holders that they had one week to respond to raw transcripts with their suggestions for changes after which time (granted that they didn't request additional time) their transcripts would be finalized.

One knowledge holder asked for a part of their transcript to be removed in order to not offend people in her remote community. One knowledge holder asked that no excerpts from their transcript appear in the final draft due to concerns about being identified in a small community. I respected both requests. Involved knowledge holders had different preferences regarding identification. Many chose to be identified with a generic pseudonym such as 'knowledge holder 1.' With this in mind, then, the knowledge holder/participant would be cited as '(K1)'. Others asked to be identified by their real names. In the latter case, I used their initials in the interest of space. For instance, Andrew Adams of Hope Farm Organics is cited as (AA). These names are spelled out in the following table.

Acronym	Full Name
СВ	Cameron Bell (Farmer Cam's Foods)
AA	Andrew Adams (Hope Farm Organics)

Table 2: Knowledge Holder Identification

I also sought to offer some compensation to honour knowledge holders and their contributions. I sent all knowledge holders a 'compensation menu' with examples of the kinds of honoraria that I could offer them (appended in Appendix 3). Compensation for some included research assistance in the form of literature reviews and other communication tasks, help with website development, academic editing assistance, monetary and seed donations for local food sovereignty programs. For others, this was manual farm labour, or a nice book. Those who insisted that compensation wasn't necessary were nonetheless mailed a personalized gift to honour their time. The gifts included snuggly socks, locally made candles and soap, and homemade granola that I baked.

To the best of my ability, I transparently and clearly communicated to informants and involved knowledge holders that a significant part of this research project will entail me submitting an academic master's thesis. With this in mind, I also solicited thoughts on other ways the work could be manifested. Some participants suggested ways the knowledge could also be translated so it helps them and their community needs. These suggestions included helping knowledge partners with creation of a provincially funded Indigenous food sovereignty report in February 2022. As part of my contribution to this report, I met with knowledge holders to identify what parts of my literature review would be helpful and put together documents summarizing relevant food sovereignty content. This method of soliciting direction from participants aligns with knowledge exchange and integrated knowledge translation frameworks that I will expand on in Chapter 5 (Thomas et al., 2014; Kothari et al, 2017). Further, Kovach (2010) notes soliciting direction from participants is capable of honouring orality and relationality. In allowing for sharing and active listening (Struthers, 2001), these methods set the foundation for building strong relationships (Kovach, 2010).

3.3.1 Conversational Interviews

I used qualitative inquiry methods, including conversational, semi-structured, virtual (zoom or email) interviews with community members and knowledge holders involved in food sovereignty initiatives. According to Gaudet (2016) "conversations offer a form of learning, teaching, and seeking multiple truths. They permit us to move beyond duality, to grow in our knowledge and experiences, and to depart from compartmentalized concepts, such as Western ideas of health and well-being. Conversations can also elucidate our understanding of colonial systems and help move us toward the renewal of Indigenous thought and stories." (p.57). In this way, conversational interview methods may align with interdisciplinary and de-colonial methodologies like Two Eyed Seeing that are further discussed earlier in Chapter 3.

Kovach (2010) emphasizes the importance of visibility and transparency in conversational research, arguing that it is often *covert* rather than *overt* biases that are most harmful. As previously mentioned, it is for this reason that I had conversations with people involved with food sovereignty projects across northern BC, many of whom I now consider friends. I feel that this initial community engagement allowed for 'deeper' conversations during conversational interviews, which is supported by Kovach who considers relationship-building as

necessary in relational research. Contrary to positivist research that prioritizes the impossibility of 'objectivity,' Kovach considers relationships an asset in research given the ways in which they create deeper moments of connection and sharing (2010). Virtual, conversational interviews were carried out from October 2021 until January 2022. They were operationalized through an iterative, open-ended interview guide. Examples of questions in the interview guide that were informed by community engagement conversations include the following:

- What does food sovereignty mean to you/ why is it important or significant for you?
- What challenges have you faced with pursuing food sovereignty? Do you have any thoughts about how these challenges could be mitigated and/or how you could be better supported in doing this work?
- How do you see food sovereignty as connected to place, land and watersheds?

This approach was chosen to foster flexibility and to better attain a 'conversational style' interview (Patton, 2015) wherein knowledge holders could guide the conversation. The interview guide provided a framework and a 'clear sense of direction' for the conversation, while allowing for adaptation based on the contexts, needs and preferences of knowledge holders. Struthers (2001) suggests conducting research in a 'participant-selected setting.' Such an approach was simple to operationalize in this research given that interviews were conducted virtually given COVID-19 public health orders. During community engagement, I spoke with informants over their preferred communication medium that included email, phone, and Zoom. During conversational interviews, all but one knowledge holder chose to engage through Zoom. This knowledge holder was emailed the interview guide and respond to questions via email due to factors that precluded them from joining on zoom. The knowledge holder who formally engaged

via email followed a semi-structured written format wherein certain question responses were lengthier and more in-depth than others. The methods employed were thus informed by knowledge holders involved in various stages of this research who had the opportunity to choose which method of involvement was most suitable and feasible for them (e.g zoom interviews, email correspondence).

3.3.2 Data Analysis

Data analysis began in January 2022. I employed qualitative inductive analysis to highlight findings in the data (people's stories) (Patton, 2015). I used cross-case thematic analysis, wherein patterns provided the basis for thematic names (themes) (Patton, 2015). Through researcher interpretation, thematic analyses have the ability to highlight "both implicit and explicit ideas within the data" (Guest et al., 2012, p.9). I chose to use thematic analysis because I was interested in exploring shared experiences or *patterns* of holistic health as they relate to food sovereignty pursuits in northern BC and in exploring the implications of these generated themes (Patton, 2015).

My 'first pass' of analysis took the form of a deep and thick familiarity with peoples' words. This was anchored in interacting with *individual* knowledge holder's transcripts via doing the transcribing myself, and contemplating words and meanings as I went, as well as afterwards. I used manual analysis (Tracy, 2013). I made this choice in order to spend time with the gift of their time and stories that people gave me. My deep and reflective engagement with people's voices was an act of respect and of honoring their time, knowledge, reflections, and stories.

I analyzed transcripts by reading the stories and voices in conversation with each other, as opposed to in a purely individual way. I read in an intimate, iterative manner, mapping out common patterns, ideas, and threads and engaging in a reflective and reflexive practice as is

recommended in qualitative analysis (Patton, 2015). I highlighted and then colour coded key words and phrases that enabled me to organize them under broader themes. I documented ideas for my analysis as is recommended by Kirby et al. (2017). After the coding phase, I re-read the transcripts and refined the themes. I took familiarization notes for individual transcripts and the entire dataset, paying particular attention to the ways in which they spoke to my initial research questions as is recommended by Willig & Rogers (2017). Lastly, I took some 'space' from the analysis for a week's time where I worked on other parts of the research project. This approach to analysis is recommended by Kirby et al. (2017) in order to "ensure that the analysis is solid, steady and unlikely to change (p. 282).

The strengths of thematic analysis lie in its ability to provide the foundation for various types of qualitative analysis and to be flexible to various epistemological contexts (Maguire & Delahunt, 2017). I chose this method for analysis given its suitability to identify patterns in peoples' stories "that are important or interesting, and [to] use these themes to address the research or say something about an issue." (Maguire & Delahunt, 2017, p.3353). In my case, I felt that thematic analysis was suitable to identify commonalities (and nuances) in peoples' experiences of food sovereignty and holistic health in northern BC. The combined process of transcription and analysis resulted in the five themes (Holistic Health, Intergenerational Wellbeing, Neoliberal Capitalism, Colonialism and Relationships) that I situate in relation to existing literature in the next chapter.

Where necessary, and for contextual or grammatical purposes, I added additional words with parentheses to the transcripts, as suggested by Patton (2015). I also went through and 'scrubbed' transcripts by removing any 'filler' words and phrases such as 'like,' 'umm,' and

'you know.' This process is referred to as 'clean verbatim transcription.' It's cited as a useful approach to improve clarity, succinctness and readability (Soltani et al., 2020).

I made the stylistic choice to cite excerpts from transcripts in long block quotes. I did this in an effort to maintain contextuality, as well as a means to 'let the quotes speak for themselves.' In *Life Lived Like a Story*, Cruikshank (1992) demonstrates how researchers can give primacy to the voices of participants by engaging minimally with their stories and simply allowing them to stand on their own. While Cruikshank doesn't perform *any* analysis of the stories featured in *Life Lived Like a Story*, other scholars, such as Patton (2015) cite benefits to engaging in qualitative analysis given its power to "transform data into findings" (p.521). As such, in an effort to strive for a balanced level of analysis, I adopted engaged in thematic analysis while preserving knowledge holders' words in long quotes.

3.4 Ethical Considerations

During the summer of 2021, I completed and submitted an ethics application to the University of Northern British Columbia Research Ethics Board. As part of the ethics application process, I completed the Tri-Council Policy Statement Course on Research Ethics (TCPS CORE) that can be found in Appendix 2. In September 2021, I successfully gained ethics approval to go forward with this research project. Please find a copy of this ethics application in Appendix 1.

As a newcomer to northern BC, I was consistently cognizant of being what Innes (2009) refers to as an 'outsider.' Innes defines outsiders as researchers who do not come from the communities with which they are doing research. Outsider researchers have been traditionally favoured within positivist research paradigms under the assumption that coming from outside of the research context allows one to hold a more 'objective' perspective; however, growing anti-colonial critique of outsider research highlights the ways in which insider researchers may be

better suited to respectfully engage with local knowledges (Innes, 2009). While outsiders may be more likely to erase or overlook important insider perspectives and have a harder time gaining trust and fostering authentic relationships within a research community, insider research is not without its shortcomings. For instance, Innes highlights critique of sometimes heightened insider research bias and how insider research can lead to fragmentation and solipsism. Being aware of some of the challenges and benefits that come with being an 'outsider' researcher was crucial in helping me navigate this project. Importantly, realizing my outsider position reiterated to me the importance of stepping into the role of humble learner throughout this project.

This research was supported by my co-supervisors, Drs. de Leeuw and Parkes, who are accomplished scholars committed to promoting health in northern BC. Anchored in their interdisciplinary teams, I was thus already connected with some pre-existing partnerships in Haida Gwaii, Terrace, Hazelton and Prince George, BC. In spite of this, and given my outsider position, I understood that "getting in" [can be] difficult (Struthers, 2001, p.130) and that I needed to work hard to build strong and trusting relationships. I also realized that northern BC encompasses vastly diverse territories, peoples and cultures, including more than 60 First Nations, four Indigenous-led health organizations, multiple Urban Indigenous communities, and widely diverse settler groups (First Nations Health Authority, 2022). This diversity meant that food sovereignty endeavours appeared and were experienced differently across places and spaces in this geographical area. As such, this research was narrowed in focus to explore food sovereignty in a smaller area within northern BC.

I was also sensitive to food-related traumas experienced by Indigenous communities in across the geographies of so called northern BC, including peoples and communities malnourished, people and communities being separated from culturally appropriate foods, and

foodways being disrupted through the residential school system and being employed as slave labour on farming operations, and people being purposely enrolled in unethical, cruel and dehumanizing nutritional research with known risks including nutritional deficiencies (Dashcuck, 2013; Johnson, 2021; Ostroff, 2019; Owen, 2019). Before engaging in any conversational methods with knowledge holders, I familiarized myself with community supports, specifically mental health services, in case these traumatic experiences are recalled in food sovereignty conversations and the knowledge holders needed access to a regionally appropriate list of supports (e.g. the First Nations Health Authority help lines).

I adhered to the principles of OCAP (ownership, control, access, and possession) in order to ensure that data gathering, and dissemination is as respectful and ethical as possible by sending back all verbatim transcripts to involved knowledge holders and inviting them to edit them before I used any quotes in the thesis drafts (FNIGC, 2022). Further, in accordance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans (2018), I honoured the voluntary and ongoing negotiation of consent through written and verbal, ongoing consent. For instance, after having given consent to engage in a conversational interview and after having gone through several rounds of draft revisions which included her quotes, I respected the decision of one involved knowledge holder to withdraw her transcript as she no longer felt comfortable with me including her words in this thesis. All involved knowledge holders were provided with a 'Research Information Letter' that includes project information and consent protocols. I asked all knowledge holders about their confidentiality preferences and invited them to pick their own pseudonym should they prefer that the information they share be kept de-identified (King, 2020). In the case that their preference was to remain anonymized, documents and data files were identified by their chosen pseudonym rather than their name.

Unless otherwise requested, they were not identified by name in any completed study reports. Knowledge holders were informed that they may request for all/any of their data files and research contributions to be revoked, destroyed, or returned to them at any point before the finalization of the final thesis report. Any information that might disclose their identity was not released without their consent.

Further considerations around one involved knowledge holder having pulled back from the research pertained to re-evaluation of themes and thematic analysis, which I updated to reflect the withdrawal of the participant's stories. This experience was a helpful reminder that engaging with a complex community concerns is a messy process where relationships and commitments are constantly being negotiated. Aspiring to operationalize community-engaged research that honours reciprocity can sometimes involve time commitments for the researcher that do not always translate to contributions to the final thesis, but that have benefits in terms of relationship-building and contextual awareness. For instance, during community engagement, some informants invited me to a series of community webinars that I attended and took notes at, and which they suggested I might thematically analyse in future in exchange for their involvement in my research. Further, I edited and provided feedback on one informant's PowerPoint presentation for a community event, and I edited and provided feedback on several pieces of work completed by the knowledge holder who revoked their transcript. In spite of my efforts to honour reciprocity, none of these people contributed stories that I could cite and write about in this thesis. Nonetheless, these experiences were helpful learning moments where I realized that despite my efforts to engage in reciprocal relationships, these efforts will not necessarily always result in the kinds of contributions that I had expected given the evolving, ongoing and always voluntary nature of consent in research. While their words are not reflected

in this thesis, all of these informants and knowledge holders provided me with helpful insights which undoubtedly informed parts of this work and helped me in my personal learning journey.

CHAPTER 4: Findings and Discussion

The following chapter focuses on patterns within and selections from the raw data (usually narratives pulled from transcripts). The chapter also includes discussion of those narratives that emerged from the data. In the discussion these stories are linked with broader themes and discussed in the context of existing literature and knowledge. The findings outlined in this chapter address my initial research questions:

How does practicing food sovereignty affect peoples' health in northern British Columbia?' and 'What are the sociopolitical, environmental and cultural factors that foster (or limit) peoples' food sovereignty practices?'

By linking my findings and discussion back to those research questions, I hope to offer insights about the conditions that affect the food sovereign pursuits, and related health experiences, of people living in northern BC.

4.1 About the Knowledge Holders:

Findings and discussion in this chapter emerged from 10 in-depth interviews with diverse food sovereignty knowledge holders across northern BC. Interviews varied in length from 20 minutes to an hour long and mostly took place over zoom. There was one email interview at the request of the involved knowledge holder. The people who contributed to this research project identify as representing a range of backgrounds and holding an array of experiences in local food systems. They include farmers, mothers, cooks, settlers, business owners, Indigenous Land-based and food sovereignty educators, social and environmental justice activists, employees of the nonprofit sector, community food coordinators, and those working at the intersection of food and mental health. For an anonymized table with involved knowledge holder demographics, please

see table 3. In line with an anti-oppressive methodological influence, women, people of colour, and Indigenous food sovereignty champions were prioritized when negotiating which knowledge holder were involved through conversational interviews. I also made an effort to be especially flexible and accommodating to the schedules of people from these demographics. For instance, I expressed willingness to extend my interview timeline in an effort to reach these folks and facilitate their participation in the research. The extent and length of their involvement with local food is varied, spanning from one-year-long employment in local food projects to decades of farming experience to lifelong, intimate, kinship connections with food and Land. In spite of their diversity, these people hold a shared, long-term, and deep-seated interest in food. 60% of involved knowledge holders were women and almost 20% were Indigenous. All knowledge holders live in northern BC as is defined by the Northern Health Authority, with the exception of one knowledge holder in Bella Bella, an island on the central coastal region of BC.

Knowledge Holder	Demographic Characteristics
Name/ Pseudonym	
K1	Woman, mother, settler, farmer, employee of community-based,
	environmental-justice focused non-profit
K2	Man, cook, settler, employee of non-profit sector
K3	Woman of colour, Indigenous Land-based educator, mother, food
	sovereignty advocate, director of non-profit
K4	Woman, settler, charitable organization food security coordinator,
	gardener

K5	Woman, settler, community food security coordinator national mental
	health organization
K6	Woman, settler, employee of grassroots sustainability and cultural
	wellness-focussed non-profit
СВ	Man, settler, farmer
K8	Woman, settler, homesteader, employee of provincial farming
	education non-profit
К9	Man, Indigenous farmer, father, Land-based educator, food
	sovereignty expert
АА	Man, settler, father, farmer, food justice advocate

It is worth noting that while 'northern BC' as a geographic region can refer to jurisdictions relating to Health Authorities and Tourism, northern BC in itself is not a 'formal' geographic place, but rather a colonial construct. Geographic orientation to the concept of north is often lacking consensus and very subjective (Pitblado, 2005). Definitions of northern often overlay with concepts of remoteness and rurality, and in BC often refers metaphorically to anything "beyond hope." (Lonie, 2018; Snadden, 2005). In other words, "fundamentally, north is defined with little or no rationale in the rural health literature of Canada." (Pitblado, 2005, p. 165). Given the Bella Bella knowledge holder's extensive experience in Indigenous food sovereignty and given the rural and remote nature of the community, in addition to the proximity of Bella Bella to 'northern' BC, I wove Bella Bella into understandings about northern BC. This knowledge holder joined this conversation fully prepped through email correspondence and

research materials (a research information letter and compensation menu) that this was a conversation about food sovereignty in northern BC.

4.2 Themes

Five broad themes emerged from conversations I had with the 10 knowledge holders. Quotes offered in this section provide evidence for these central themes. I have ordered these themes such that they work progressively from problems and issues to more appropriate ways of doing things. This way of grappling with complex issues is in line with political ecology literature in which scholars tends to first wield a metaphorical hatchet to expose power asymmetries before planting 'seeds' which may provide alternatives to the complex issue (Batterbury, 2018; Robbins, 2004). Further, given that part of this project has included contributing to a provincially funded report characterizing Indigenous Food Sovereignty in BC (further discussed on p.48), this order may be most helpful to inform future documents targeting policymakers and future funders.

Theme 1: Neoliberal Capitalism centres knowledge holders' perceived barriers to food sovereignty as being mostly a result of neoliberal capitalism. Theme 2: Colonialism similarly foregrounds colonialism as a key force limiting food sovereignty practices. Theme 3: Holistic Health draws from knowledge holders' understandings of food sovereignty as being inherently connected with holistic health. Theme 4: Intergenerational Well-being emerged out of knowledge holders' shared goal to support the health of future generations through food sovereignty endeavors. Theme 5: Relationships reveals that knowledge holders perceived relationships and community connectedness as a key factor that fosters food sovereignty

pursuits. Rather than having a separate section to discuss these themes, I present and discuss the implications of findings together in this section.

4.2.1 Theme 1: Neoliberal Capitalism

In Chapter 2, I provide a brief historical overview of agribusiness as a manifestation of neoliberal capitalism. In Chapter 3, I discussed the limitations of 'alternative consumption' narratives, which include food sovereignty. One commonly cited limitation of such discourses is that they are vulnerable to being 'folded into neoliberal projects' (Agyeman & McEntee, 2014). While some knowledge holders expressed feeling that neoliberal capitalism and big agribusiness is a glaring issue in food production for a multitude of reasons, not all knowledge holders who are quoted in this section used this language. In other words, while this theme came from my analysis of knowledge holders' words, I was the one who ultimately chose to use this language for this theme, not them.

Many knowledge holders involved in this study expressed feeling that a lack of social (e.g., centralized government) support for food sovereignty initiatives as a barrier to being able to pursue food sovereignty. Most commonly, they cited limited or precarious financial support as a barrier to being able to pursue food sovereignty. Many knowledge holders expressed a need for increased and longer-term funds to be allocated to food sovereignty projects: these funds could then be leveraged in community-centred ways. The following excerpts demonstrate this expressed need:

[Barrier] number three is money, it's expensive, even if you're doing things very inexpensively like we did here at Tea Creek like we've really bootstrapped things here to get started, but it still costs us let's say about 150 thousand dollars which, if you've got a lot of money that's cheap! But if you don't have money that can seem insurmountable

and ... so we're running into that challenge all the time where First Nations are like "yea we want to do this" and we're like "okay how much money do you have? And they might say "oh \$5000 dollars." Like "Sorry you could do a bit more gardening, but you can't really get into food sovereignty". ...And... we actually have to produce an abundance of food, it's not enough to just do some small scale gardening and to say that you're doing food sovereignty—you're doing a piece of food sovereignty Tea Creek grew enough food to feed maybe 25 families worth of potatoes for the year and maybe six families worth for an entire year but that's stretching it so what we need for a food sovereignty future just in our valley we would need around a dozen or more Tea Creeks so that has to be part of the discussion and that isn't really right now, people are like "we have a sea-can that grows vegetables so yay food sovereignty" and no no no we're like barely scratching the surface so and that brings me back ... to the money thing, we need to look at investing serious dollars into regions to support getting food production back up and running in a serious way. (K9)

They have funding, it's good for a little while, the funding runs out, these systems break down. (K8)

Another knowledge holder (K4) suggested that funds could be leveraged in their community to help build infrastructure for food sovereignty projects:

I mean money is always a thing too ... I'm trying to do some workshops and we don't have a kitchen where I work so like I have to go to other places that have kitchens and that costs money and it's like okay we're trying to do good stuff here but that's the other thing is like being able to afford to do these things. (K4)

Other knowledge holders suggest a specific need to fund farmers:

It seems like there's a lot of people out there who would be interested in growing food but the economics of farming are so marginal that affording land or accessing land is a huge barrier...it's just a very bizarre world we're living in where all of these farmers are part-time farmers, they all have other jobs because no one can afford that equipment so they're all just in-dept and on-contract to grow so it's not even like spending all of their time in a tractor, it's just not even a connection to, so even though it's farming it's just really lacking that healthy community component, when growing food is maybe something you got into because you wanted to produce food and all of the sudden you're just like indebted to your machinery and to your contracts and having a part-time job as a bus driver to subsidize your farming. (K8)

Knowledge holder K8 stated that access to land and the financial precarity of farming served as major barriers to pursuing food sovereignty in northern BC. Limited access to land and financial precarity led to fewer people taking up farming. Scholars and activists call this issue the 'farm renewal crisis,' which refers to the decreasing number of new farmers over the past decades. Currently, farmers make up only 1.6% of the Canadian population, and only 10% of those farmers are under the age of 35 years old (Smith, 2021). From 1971 to 2016, the number has decreased by 62.7%, a drastic slide downward on any scale (Statistics Canada, 2020). The fall in percentage of the population who are farmers is explained as being driven by increased automation and the 'expanding' size of agricultural operations. But, this is only one part of the story. This trend toward fewer and bigger farming operations is a product of the rise and spread of free-market capitalism and neoliberalism, as it is in the best interest of corporations to increasingly monopolize markets (Foster et al., 2011). Increasing farm size, crop concentration and employing monocultural farming practices reliant on high technologies are all pressures associated with neoliberal capitalism.

Reflecting such constraints on famers, several knowledge holders who farmed voiced that operating within a highly competitive food market with little financial support served as a barrier to them pursuing food sovereignty. For instance, knowledge holder (CB) describes how needing

to operate within the confines of capitalism rendered it difficult for him to prioritize growing storage crops even though these crops would yield better food security outcomes. He described needing to do a balancing act of growing staple crops that will feed his community while also growing more profitable crops that will sustain him financially but yield fewer caloric outputs:

It is important for me to grow the things that are profitable, it's also important for me to grow the things that are storage crops so that we can continue eating local food throughout the winter and actually get calories in our bellies rather than just eating microgreens and lettuce even though those are the most profitable things for me. (CB)

Another way in which the pressures of neoliberalism and free market capitalism make farming a precarious employment option is through creating conditions (wherein the most powerful agribusinesses monopolize the market) in which food knowledge is increasingly inaccessible and where educational farming opportunities are limited. As discussed in Chapter 2, this is likely a result of the spread of neoliberal capitalism that has led to dismantled social supports, dynamics of hyper-competitiveness and the rise of agribusinesses which have destabilized social relations in some small-scale farming communities (Sebby, 2010):

I think every other farm in the Northwest, or in the lower Skeena you might say, is owner operated, is like mom and pop...they don't employ people...we don't have much of an agricultural economy here, so if somebody wants to get into farming and they want to stay in the Northwest and they want to learn how to do it, it's like trial and error, it's the internet and books or it's a little bit of volunteering... I also would love to see more training opportunities ... and maybe that happens through the college or through another institute or organization but ultimately I think that it is a barrier right now that if somebody says 'hey I'm thinking about farming' it's like 'K where do you go? What do you do?' (CB)

While all but two knowledge holders spoke about a need for increased financial assistance, they often described the purpose of this financial aid as being specifically to fund food sovereignty projects. In addition to identifying a need for increased investment in local food growing, knowledge holder (K1) identified a more general need for increased financial assistance to help socially support community members interested in pursuing food sovereignty. In other words, in addition to needing more money to fund food sovereignty projects, K1 also describes a need for better funded childcare and other social services. This would help to ensure that people have their 'basic needs' met, allowing them more freedom to pursue food sovereignty practices and build more robust food sovereign communities:

First [barrier] is money. There's a lack of investment into growing food in general. I think that the government no matter what political party is in power should be putting way more importance into that and supporting it more ... and at the end of the day money takes priority because that's what runs our lives.... [Further] if there was more support from the federal government or provincial government or just some sort of additional support to cover basic needs, then there wouldn't be as many dropped connections in the food sovereignty community. (K1)

This knowledge holder similarly expressed lacking social support as a barrier to food sovereignty and particularly focused on food sovereignty barriers faced by those experiencing poverty:

The way food bank Canada is set up is they require a lot of information about your living situation and why you deserve to get the food ... and I think we need to move away from that model towards a more compassionate... if someone's asking for food they've already gone through so many steps to ask for food so I've been working on a little pantry here trying to like give people access to food without [requiring them] to 'prove their poverty'

... I think with food sovereignty, like giving people dignified access to free food when they need it is huge and the systems, we have in place like food banks don't necessarily do that. (K4)

In different ways, all knowledge holders identified pressures associated with neoliberal capitalism as a barrier to food sovereignty. For instance, knowledge holder (K8) shed light on how neoliberal societies foster hyper-competitive and individualistic environments where people are exceptionally busy trying to manage their basic needs, and thus often have limited time to devote to learning skills like farming:

It wouldn't be that hard for communities to be food sovereign but everyone's too busy trying to pay off their mortgages and they don't have the skills...they don't realize how easy it is. (K8)

Reflecting mainstream society's emphasis on individualism, many knowledge holders described a lack of communication, coordination, and collaboration within and between communities as a key barrier to food sovereignty. The following quotes illustrate this subtheme:

There's a lot of food security/food sovereignty work being done in this region and in Canada at large really but one of the issues that's clear is that they're working in silos— a lot of these organizations— so pursuing the work but not necessarily communicating with each other...it's this issue of overlapping effort and not necessarily an efficient use of resources because a lot of organizations are trying to do the same thing. (K2)

The other thing that holds back a lot of these things is [that] there's so many different organizations and they're trying to do similar things ... so communicating with these different organizations is one of the hardest things. (K4)

Another knowledge holder attributed coordination and communication difficulties between agencies, organizations and interested actors to the fact that jobs dedicated to supporting local food systems and food sovereignty are often impermanent and unstable:

The nature of that kind of support and work is it's shifting all the time in terms of resources and that can make it challenging in terms of supporting those resources but also for the people trying to access those resources because it's not consistent, so I guess consistency is part of it... (K5)

Given its emphasis on dismantling social programs and promoting social and entrepreneurial 'freedom,' scholars argue that neoliberalism ultimately fosters an environment in which individualist, consumerist, and competitive values are adopted in place of values of interdependence, social cohesion and equality (Cohen, 2016). As demonstrated in the above findings, individualism was reported by knowledge holders as a barrier to food sovereignty.

Competing with the 'global food system' (big agribusinesses that monopolize the market) was a common barrier, as was expressed by knowledge holder (K8):

Another challenge is knowledge about food and where it comes from and how it's produced and how it should be valued ... we're still competing with the global food system so people can be like 'Oh I can go to the local farmer's market, maybe I'll get a few things there' but they're still doing the bulk of their shopping at the big chain grocery stores. (K8)

As mentioned in Chapter 3, scholars in the field see both material and discursive factors as legitimate barriers to food sovereignty. While they can also act as material and financial barriers, Agri-tech narratives and technological approaches proposed as food sovereignty solutions can be seen as a *discursive* barrier to food sovereignty by failing to promote self-

sufficient communities and by failing to capture relational responsibilities to Land and community. As knowledge holder (K9) noted, Agri-tech initiatives should not be understood as food sovereignty solutions given that they *increase* reliance on outside inputs:

And that's one of the things that really has been bothering me about food sovereignty discussions is seeing businesses that have one solution that they're trying to sell across the whole country to First Nations as 'the' solution to food security and food sovereignty, the other things that really bothers me is [that] government agencies and businesses and initiatives have noticed that food sovereignty has become much 'sexier' than food security so they've taken food security initiatives that definitely aren't food sovereignty and they've re-labeled them 'food sovereignty' just because it sounds better and First Nations leadership are saying "well we want food sovereignty" and they're saying "okay well here's this sea-can that'll grow food—that is food sovereignty... it's a food sovereignty solution" and that's a huge problem because the sea-can or the greenhouse or whatever they're selling is not food sovereignty because it *increases* reliance on outside suppliers and sources and knowledge and information... it decreases [reliance on] your local food knowledge keepers. (K9)

In other words, given that food sovereignty is gaining popularity among scholars and activists, this knowledge holder suggests that, in an effort to *capitalize* from food sovereignty, some corporations and other actors (e.g., states at various scales) have begun to advertise their initiatives and products under the banner of 'food sovereignty.' This can confuse communities and lead them to mistakenly purchase and invest in products that will not be able to offer them true food sovereignty. With regards to operating within the global food system, many knowledge holders discussed the irony of exporting locally grown foods while offering technological solutions to address food insecurity. In other words, the conversations I had with knowledge holders seem to illustrate that true actions for food sovereignty fly in the face of, contradict, and

can be hampered by federal and provincial agricultural efforts that have largely been informed by big agribusiness for the last 50+ years. This is indeed aligned with the work of scholar-activists like Shiva (2016) who sheds light on the ways in which agribusiness models work against food sovereignty, sustainability and health. Shiva suggests that extricating agriculture from the rules of international free trade and instead abiding by the principles of food sovereignty are necessary steps to take in order to meaningfully address food insecurity (Shiva, 2016):

I mean why are we growing all of these apples so that we can ship them out of the country? Same thing for blueberries. I'm sure you've read the food security report from a couple years ago where they [asked] "how can we grow more blueberries and then we could ship them away?" and it's like I thought this was about food security... I was working with Young Agrarians when that report came out and it brought many of us to tears...the focus on Agri-tech and the future farmers riding the sky train and spending a couple hours in a lab, it was just super disconnected and it was a report on Agri-tech which is fine but call it what it is, don't call it a food security project. (K8)

Another knowledge holder similarly discussed the irony of exporting locally grown food:

I'm originally from Williams Lake and there's a lot of cattle ranches out west of Williams Lake, most of that isn't going to be sold locally, most often what happens is the cattle get shipped [to] somewhere else and they're processed somewhere else and the meat's going somewhere else ... so even though there's a lot of cattle ranches, that doesn't mean there's more of that local beef in the local market. (K5)

As noted in Chapter 3, one way that food sovereignty activists see the global food system as hindering food sovereignty practices is through food gentrification, wherein foods that were once staples for communities are now being depleted, exported and rendered financially inaccessible through the global food system. As noted in Chapter 2, Indigenous chef and food justice activist, Jared Qwustenuxun Williams describes how salmon, once a staple food in BC, has been rendered cost prohibitive by being infiltrated and re-routed through global markets by big agribusinesses. As knowledge holder (K2) noted:

Wild food is almost 100% shipped away overseas, to the south, that kind of thing, so take the example of seafood, fish, shellfish, seaweed, and then another good example is mushrooms... the Pacific Northwest is one of the best regions in the world for wild mushrooms, and a lot of people don't even know that ... but they just get put on a boat and get shipped away, so part of our mission here is to get some of that local food into local supply chains and a lot of the time these supply chains don't exist....[However] even if you do divert some of that food that's shipped away or even if you do make this local distribution network, it's never going to be as cheap and convenient of this convenience food that's in the grocery store... (K2)

Without naming it outright, K2 recognized the ways in which free-market capitalism and neoliberalism limit community engagement in community food sovereignty endeavours (through big agribusinesses infiltrating local markets and re-routing trade and sales networks). This finding resonates with the literature reviewed in Chapter 2 including the work of Agyeman & McEntee (2014), Bryant & Goodman (2004) and Newman (2019) that identify neoliberal capitalism as a force that hinders just and sovereign food practices by disrupting Indigenous relationships to Land and community (through extractive resource development projects and the commercialization of food grown in Indigenous Lands and Waters) (Cote, 2016; Daigle, 2019) and by compromising food justice movements (Agyeman & McEntee, 2014). Discussing food sovereignty opportunities in his community in northern BC, he exposes the irony of being food insecure with such an abundance of wild Land and sea food. In essence, free-market capitalism and neoliberalism divert the affordability and convenience of food provided through the global

food system, rendering foods from food sovereignty harvests feel out of reach for many. Given how neoliberal capitalism fosters financial monopolies and offers limited social services to support communities, it renders engaging in food sovereignty (that, by comparison, is *less* convenient and *less* affordable) challenging. Another knowledge holder similarly noted how the global food system skews the 'real' price of food:

I think one of the challenges is that food is so cheap yet so much... even where I live which is really remote we can still get food really cheaply and I think that's great cause there's a lot of people that don't have much money but I think the value of the food that's grown locally can be kind of [skewed]...people don't want to spend the money on a farmer because you can get the same broccoli or a bigger broccoli from California so I think because of that our sense of how much food should cost is morphed ... and I think that kind of limits peoples' engagement. (K4)

Colonial understandings of Land as a private resource and corresponding extraction are undeniably connected with neoliberal and free market capitalist logic (Kepkiewicz & Dale, 2019), and they also clash with longer term Indigenous relationships with the Land (Cote, 2016). Extractive resource development was identified as a major barrier to food sovereignty practices by several knowledge holders. This finding is consistent with the literature including contributions from Cote (2016), Jonasson et al., (2019), Schmid (2018) and Johnson (2020) as mentioned in Chapter 3. For example, K6 and AA stated the following:

Our systems of like coming in, shaving off the ecology that's existing there, planting a monocrop or just our preferred, very weak, very dependent systems ...it's failing now and ... I think [we need to ask ourselves] if we see soil as a substrate, a medium for extraction, or [if] we see it as a living thing that we need to tend in order to create a cyclical response... Do we want to feed the world through destroying ecology and producing monocrops or chemical dependence? Or do we want to feed the world by

empowering or reminding or just allowing people to subsist the way that makes sense between those people and that Land? (K6)

There is a disconnect from those who come from multiple generations of settler beliefs on land management from the reality of what this ecosystem can sustain in terms of disturbance. We need to listen to Indigenous leaders on land management and commit to the recommendations of UNDRIP. (AA)

Not only can resource development be seen as a *material* barrier to food sovereignty (through contaminating and depleting traditional food stores), but also culturally, mentally and spiritually, through severely threatening the health of communities that have traditionally relied on local Lands and Watersheds to provide food. As knowledge holder (K3) eloquently noted:

I think I've shared pretty publicly in lots of different spaces that for me a lot of the work that I do around food sovereignty is really deeply personal and tied to my mental health particularly after the Nathan Stewart oil spill in 2016 I spent the emergency phase of the spill response acting as the incident commander for Heiltsuk and one of the really deep challenges (I mean there were many challenges but one of the underlying challenges) was that the area that was heavily impacted by the spill was an incredibly sensitive marine and inter-tidal environment where there were dozens of different food species that community members heavily relied on and so amid all of the chaos and destruction and uncertainty, there's all this really deep grief knowing that it was unknown whether we would be ever able to go there to harvest food again and it was a place that many families and community [members] felt intimately tied to and their sense of well-being was really deeply tied to the knowledge that they could go to that place and sustain themselves and sustain their families and just the loss of agency to our relationship with that place was so really devastating in the community and for me as the incident commander trying to help that response happen in a way that mitigated the damage without honestly being able to accomplish much I feel on the bad days ... I came out the other side of that experience with a diagnosis of PTSD, I had a really hard time managing my depression and my

anger at just how unjust it was that for a community that fought so hard to take good care of its Land and specifically spent so much time campaigning around tankers and energy issues that in spite of everything we've done this spill happened. (K3)

Others such as K8 spoke about the threat of resource development to their food sovereignty pursuits:

We just feel like there is nothing we can do, like there are these greater forces that are in control and all this bigger system of where the money is going, and who is making the decisions, the faceless corporations, it's a horrible feeling and it affects our well-being and health to feel like you have no control over what happening on the land around you. (K8)

The unsustainable way in which neoliberal capitalism and large-scale agribusiness bears on food sovereignty practice discussed in Theme 1 sheds light on the importance of countering these pressures with increased social support, and values of interdependence, collaboration and collectivity. As previously noted, many of the people who contributed to this project through sharing their experiences and knowledge with me expressed a deep connection to Land and watersheds, one seen as necessary for health and well-being. This intricate connection sheds light on the inadequacy of capitalistic, technological solutions to address food insecurity and foster community well-being. Seeing extractive projects out until there are no 'resources' left in accordance with capitalist logic would not only yield (further) devastation for non-human entities but also humans in more way than one, given the interdependent nature of health and well-being explored in Theme 3 and in literature discussed in Chapter 2 (Buse et al., 2017; Redvers et al., 2020; Redvers et al., 2021).

4.2.2 Theme 2: Colonialism

As mentioned in Chapter 2, food sovereignty can be seen as perpetually under attack by the Canadian colonial project (Cote, 2016; Daigle, 2019; Kepkiewicz & Dale, 2019; Morrison, 2020; Whyte, 2016). Although I did not specifically ask them about colonialism, there was a strong statement among knowledge holders that colonialism is a pervasive threat to food sovereignty. Several Indigenous and non-Indigenous knowledge holders explicitly acknowledged the ways in which colonialism limits their food sovereignty practices. In other words, they overtly described colonialism as a barrier to pursuing food sovereignty in northern BC. For instance, Indigenous knowledge holder (K9), reflecting on barriers to food sovereignty, explained how the dearth of knowledge around food growing in the Skeena geographical area is a direct result of colonization. Prior to colonial influence, they believed that this knowledge was commonplace for families in their community. They put it this way:

I was introduced to that knowledge; it completely shifted my perspective and it made me hungry for more knowledge on like 'how can we do this?' And 'why aren't we doing this?' And finding out the reason that we're not is that lack of knowledge, people just don't know... And again, that's a colonial impact because if you look here, every family had a very productive garden...—Indigenous families here — they had root cellars and they ate their own meat, their own meat proteins and their own vegetable proteins and they had surpluses that they shared with the broader community and even settler communities that became poor, refugees from Europe—they were fed! (K9)

Another knowledge holder described how colonialism has impacted the collective mental health of her community through violently disrupting Land-based relationships and food knowledge:

I think, in the small personal details of things, the biggest hurdle is just getting people to buy into hope and resilience and food sovereignty I think we've had generations of people who've been discouraged from being out on the Land, who've not maybe had the same ancestral teachings that other families have had just because of how residential schools and the sixties scoop have affected certain families in the community and there are myths that you need to dispel about what you can do here, what you can grow here and ... I think the big barriers are just around building hope and momentum ... since contact we've been regulated away from our homelands and our resources that we'd normally rely on and that has been very driven by racism and capitalism and a desire to prioritize these massive commercial fisheries and resources extraction projects that have really decimated resources in our territories and there's so much important restorative, regenerative work that needs to be done that industry is never going to do and government is never going to do and I think what needs to happen, to really deeply support Heiltsuk sovereignty and Heiltsuk food sovereignty is bringing that power back into the community and I mean it's always been there but I guess recognition of that power by settler governments and other people who are in our territories, deeper control of the commercial fisheries which we're starting to see happen through direct actions like occupying the fisheries office finding ways to exert our control over the outside forces that are at play in our territory we're doing everything that we can or we're on the path to do everything we can to support the integrity of our Lands and our systems and there's still a lot we need to do to exert control around what everyone else is doing here. (K3)

Scholars and activists see displacement from Land and disruption of Land-based relationships as a concrete colonial impact that impedes food sovereign practices (Cote, 2016; Daigle, 2019; Rotz, 2017; Williams, 2021). In line with the literature, K3 eloquently frames capitalism, racism and resource extraction all as colonial influences that continue to impact her community *mentally* (making it difficult to build hope and momentum around food sovereignty), but also *physically* (through threatening the Lands and Watersheds that the community relies on for food). Another Indigenous knowledge holder explicitly named land inaccessibility as a colonial barrier to food sovereignty in northern BC, suggesting the dire need of a true Land Back⁶ movement to mitigate this ongoing challenge:

The...thing that I see missing is land, a lot of First Nations were forced or pushed or relocated off of crown land, you'll see that in a lot of places like Kamloops is a prime example, Kamloops First Nation or band was relocated multiple times and it was like "oh wait no that's good land? That's good ranch land?" [They'd be told to] 'move you off of that' and they got shuffled. Same thing in Vancouver and so many places when First Nations were on crown land and that's where you live and that's where you get your food all around the world, and they were constantly relocated into sub-prime, terrible locations where you can't put a shovel in the ground to grow food and actually there's a video that I can send you that isn't published yet but one of the Nations we're working with is in that situation, they were relocated from prime soil, river front, up to a new location that's all clay and they can't grow on it, so the next barrier I would say is land and in order for Indigenous food sovereignty to have legs and get moving there needs to be a real Land Back movement, a reconciliation movement, where whoever it is, whether it's government or private people, or a mixture, start funding First Nations to basically purchase back their Land that's agricultural or food producing. (K9)

Many settler food sovereignty knowledge holders also explicitly recognized and struggled with the impact of colonialism that has impacted and limited Indigenous food sovereignty. For instance, settler knowledge holder (K6) suggests that *ongoing* colonialism poses a major threat to Indigenous food sovereignty through destroying staple foods like salmon, much like colonizers intentionally killed the buffalo in an effort to gain control of Indigenous Lands as is discussed in Chapter 2:

⁶ Land Back refers to a longstanding, multi-generational and international movement advocating for Land to go back to Indigenous communities (NDN Collective, 2021).

I know that I felt personally uncomfortable bringing agriculture and lotting it as like 'the answer' into the work I was doing but I've since learned like there's a lot of gray area like cultivation is not colonial, it's human, but ...that the colonial system knows that if you destroy a food source you destroy a people, that's why they killed the buffalo that's why they're killing the salmon I mean it's a bit controversial to say right now but I mean it's true, destroying staple food is how you win a war, burning the crops as you retreat...so I know there's a really urgent and real fight in this. (K6)

Other knowledge holders, such as K8, more implicitly suggested the ways in which colonialism impacts food sovereignty. In these cases, the knowledge holders did not overtly name colonialism as a barrier to food sovereignty, but rather they discussed ways in which colonial processes and outcomes can threaten food sovereignty endeavors. For instance, settler knowledge holder (K8) grappled with the Eurocentric and colonial concept of 'Land ownership.'

It's a weird world where Land is capitalized. I think that is another major issue here is land ownership at all...like land access is only a barrier because we have a land ownership system and that's a very colonial thing to think that this is your piece of Land and you can do whatever you want to it, whereas in an Indigenous culture perspective it seems as though Land is meant to be shared, looked after, communally, and when you have healthy forests you have healthy people. It's a thing we have to contend with, this land ownership. (K8)

As discussed in Chapter 2, scholars such as Kepkiewicz & Dale (2019) and Rotz (2017) see settler land dominance (enabled through colonial understandings of Land as private property) as a major barrier to food sovereignty. Knowledge holders commented on the difficulties of working with ideologically dissimilar economies (colonial and Indigenous), one operating based on money where Land and food are capitalized, and another being a subsistence economy:

[We're] really facing this like: "well you can give me 40 salmon but I can't give you 40 chickens because like I can't actually afford that in my food economy" and so there are different economies going on and they overlap and they intersect but they don't actually speak to each other very well or like carry the same feelings or values or bounty...(K6)

The above quote from knowledge holder K6 speaks to the colonial social context that bears on food sovereignty practices in this human and ecological geographic context of northern BC, explaining the ways in which food sovereign pursuits are overtly impacted by colonialism in ways that they may not be in other geographic and social contexts.

In spite of recognizing the ways in which colonialism limits food sovereignty pursuits in northern BC, especially for Indigenous food sovereignty doers, many settler knowledge holders expressed a lack of clarity, and discomfort around how to mitigate this challenge. The following excerpts exemplify this subtheme:

The challenges are myriad...so like how to divert peoples' diets into fresh local food, because convenience food is just that —convenient— it's cheap, it's everywhere, it's extremely unhealthy, and it's just creating this massive health problem, not only physically but spiritually too...we do grow cucumbers and tomatoes and it's awesome but also tomatoes and cucumbers mean absolutely nothing in a cultural context in Prince Rupert, so we're trying to bridge the gap of growing prolific plants but also choosing ... things that are culturally appropriate here as well, and ... back to the point I was trying to make earlier about trying to bring Indigenous plants into the garden...to do so ethically is not so easy. (K2)

I wanted to be more in touch with my food [and that] has led to all kinds of other opportunities for health and growth that I'm really deeply grateful for but at the same

time I'm like how come I can access them but other folks here can't, like where's that imbalance? (K6)

I know there's a lot of Indigenous-run food sovereignty projects going on around the province and I would like to do more of that here but our connection with... there's kind of two overlapping, or three, actually, traditional territories that we're living on and all of the people from those territories were really pushed down and there's no reserve or anything around here so it feels very colonial in this town, so figuring out a way to bring some of that traditional knowledge back into the community would be really great for learning about systems of food that we have lost ... but trying not to put my own ideas of what they should do about food ...(K4)

Indigenous food sovereignty scholarship makes clear that food sovereignty practices taking place on stolen Indigenous Land must be Indigenous led. As noted by knowledge holder K9, in order to promote Indigenous food sovereignty, there needs to be real Land Back and reconciliation efforts wherein First Nations are supported to buy back their ancestral Lands in order to be able to pursue self-determined food practices. It is important to note that the Land Back movement suggested by knowledge holder K9 is not ideological or symbolic, but rather a legitimate movement that has resulted in land physically going back to Indigenous communities in the Americas and elsewhere. Examples where Land Back has been operationalized include Oklahoma (Silverman, 2020) and Bolivia (Murphy, 2010). As such, these suggestions are realistic, and are not a matter of logistics but rather one of political will. The findings in Theme 2 reiterate the necessity of true adherence to UNDRIP (implemented as Bill-41 in BC) that recognizes the right to Indigenous Food Sovereignty as is explained in Chapter 2.

4.2.3 Theme 3: Holistic Health

In Chapter 3, I explored the inherent connection between human health and the health of the Land and Watersheds that sustain life. I also discuss the ways in which Indigenous framings of health can offer more expansive understandings that are not exclusively focused on bio-physical health, but rather incorporate mental, spiritual, cultural and emotional dimensions of well-being. Knowledge holders undoubtedly expressed these sentiments of interdependence during our conversational interviews. They expressed diverse ways in which holistic health and well-being is inherently and intricately connected with food sovereignty praxis. In developing and finding evidence for this theme, I considered any description a health outcome that affected whole beings or whole (human and non-human) communities as relating to holistic health. Knowledge holders used words such as 'whole,' 'holistic,' 'cyclical,' 'symbiotic,' 'connection' and 'interwoven' when discussing the interconnectedness of food sovereignty and holistic health and well-being. For instance, knowledge holder (K3) spoke about interconnections and multifaceted ways in which food sovereignty fosters health:

I absolutely buy into the idea that, access to nourishing food is healthy for our bodies but the act of going out and harvesting in the wild or growing it in our gardens is also good for our souls for our mental health for our sense of community that's big for our social health it's really just one of those things, it benefits us as whole people and as a whole community (K3).

While acknowledging the bio-physical health benefits of food sovereignty, this knowledge holder cites many other ways (including socially, mentally, and spiritually) that food sovereignty fosters health in a holistic manner. In doing so, they move beyond Eurocentric, reductionistic and neoliberal understandings of health explored in Chapter 3. Instead, K3 favours holistic and collective portrayal of interdependence between food sovereignty and social, mental, and spiritual health. Indeed, many knowledge holders reflected on the ways in which food, Land, watersheds and humans are interdependent:

Food is what sustains us. It's what creates culture. Food comes from the land. Culture will take care of the Land to sustain sources of food in it's cyclical nature. Without culture (food) there is no tradition, no connection to the Land, no ability to sustain oneself... [my goal in pursuing food sovereignty is] To give people the ability to sustain themselves with food, culture and health while treading lightly on the natural ecosystem [and to] help communities become part of a niche within an ecological system of symbiotic relationships through education and example. (AA)

In other words, and this knowledge holder reflects, if food sovereignty is done sustainably and ethically it can foster health in synergistic ways and ultimately promote balanced ecosystems of which humans are a part. Many knowledge holders touted the benefits of food sovereignty in terms of ecological sustainability, but also with regards to social sustainability by fostering community connectedness, unity and collective agency:

For me in the work that we've done here in Quesnel that's continuing a big piece of it is the connection, so not only the connection to the environmental piece, and that whole system of things but also the community connection and the ability to connect as a community around food and the food system and that inter-woven support as well as cultural components that can come with that... (K4)

Knowledge holder (CB) suggested that 'sustainability' cannot be conceptualized in purely ecological terms without considering human and social life. Scholarly contributions in the field of political ecology support this knowledge holder's understanding. They caution against failing to consider humans in discussions about ecology. Political ecology scholarship rather fractures the false dichotomy between humans and ecology, being especially weary of the colonial misconception that humans are separate from and cannot exist harmoniously with the rest of the environment (Robbins, 2012). As knowledge holder (CB) put it, humans are connected with every aspect of the environment, including soil, and these relationships are enacted in engaging with food sovereignty:

Healthier soil that's gunna give you better yields ... and I value that, and I quantify it too, it's the organic matter content in my soils ... I'm pulling something out of the ground in order to be able to put something back next year, so I think that food sovereignty includes that whole circle of where the inputs come from, are your farmers able to keep doing this for the long run financially and physically and mentally and then how are the consumers accessing that food... There's no such thing as environmental sustainability. There's sustainability and that includes environmental, social, and economic factors. (CB)

In Chapter 3, I discuss scholarly work suggesting that food sovereignty is a vehicle for cultural identity, which can in turn foster well-being. Indeed, scholars such as Martens et al. (2016) and Robin (2019) found connection to identity to be a central theme of Indigenous food sovereignty experiences in their research. This sentiment was certainly echoed by knowledge holders during our conversations about the ways in which food sovereignty practices impact health. For instance, several knowledge holders expressed the important connection between food sourcing and cultural identity in their community. The following quotes exemplify this sentiment:

You hear from the Gitxsan, the Wet'suwet'en, any nation you spend time with will say like 'if the food's gone, we're gone,' ... 'if the salmon is gone, we're not a people anymore' it's *that* intricately connected...if a chief can't care for his people on the territory that he has because it's been so ravaged like he's no longer a chief, he has no

status in the feast hall, he can't provide...I really just see the access to food and food knowledge there's so many ways you can destroy someone's access to food and they're all being threatened, they're all under attack, if you can't access food, if you don't know how to access food, if you can't deal with the food once you have it, if you can't preserve the food then the culture, the Land, the claim on the Land starts to slip away and it's profoundly and intricately connected. (K6)

In other words, these knowledge holders draw no distinction between being food sovereign, engaging with traditional foodways and existing and living as a people—all of these are inextricably intertwined. It is important to note that they discuss identity as a collective characteristic, which starkly contrasts neoliberal portrayals of identity, strength and health that frame these concepts in purely individual terms. As discussed in Chapter 2, scholars such as Bryant and colleagues (2021) note the importance of steering clear of neoliberal strength-based approaches that fail to capture Land-based relationships in favour of approaches that highlight collective, relational assets. In accordance with a collective strength-based framework, the messaging of involved knowledge holders was clear: food sovereignty is central to collective identity and strength that are always mediated through the socio-cultural context in which community exists. Knowledge holder (K3) discussed how fostering collective identity in youth through teaching values of Land-based connectivity can serve as a vehicle to protect ecological health:

[With] the Land-based youth programming that our organization runs... a big part of what we are trying to do is rebuild that sense of place-based connectivity and really help youth to understand how their identity is tied to the places that they come from, how our stories and our laws and the names that we hold and aspects of language are tied to different places on the Land so that they start to see that as being a really deep part of their identity and we have a really firm belief that if we can support our kids to really

deeply love our homelands, they're going to protect what they love. And it's an indirect way of ensuring that we're raising a generation of leaders and stewards who are going to take really good care of our territory into the future. (K3)

Another knowledge holder spoke to the importance of actively engaging in food growing as an act of *human* identity:

There is a little bit of a desire in all of us to have our hands in the dirt, not everyone has a passion for growing or gardening, but I think that that connection to the Land and to the earth is really ingrained in who we are. (K8)

Essentially, this knowledge holder suggests that, in addition to through socio-culturally mediated ways, food sovereignty pursuits can help foster holistic health through connecting us with our collective human identity that is fundamentally tied to cultivation and food sourcing.

In Chapter 3, I discussed scholarly work in the field of 'ecohealth,' which provides alternative framings of health and well-being. Through an ecohealth lens, one can emphasize the false division between sustainability, social justice and health, and shed light on the inherent connectedness and interdependence of these things. Many knowledge holders expressed how food sovereignty practice has a 'ripple effect,' suggesting that by fostering holistic *human* health, we can simultaneously and more readily address the major socio-ecological challenges facing us today. For instance, several knowledge holders discussed the way in which food sovereignty promotes human health *and* sustainability simultaneously through community members simply growing food closer to communities:

Food traveling that far is not good for many reasons, and a big one of those is that when food travels that far it's losing a massive amount of nutritional value, they're having to do

things to the food while growing and transporting that's harming it as well to preserve it of course so I mean nutrition is an extremely important part of what we're trying to do and that's simply addressed, partly, by getting the food closer to where you're living. (K2)

I think that at the most basic physiological level, something that hasn't travelled a long way is likely to have dropped [fewer] nutrients in the trip... there is less *need* for chemicals to maintain the state of that food in itself so that it doesn't degrade in that transport and therefore it's just more nutritious, and I personally think that's where everything starts...you need to have good fuel to run your day and without that everything else comes in second term...so growing things close to you and having a grasp of that economy and even the relationships built through these local growers and providers...is the first step to building a healthier society in general. (K1)

Other knowledge holders spoke about the way in which food sovereignty pursuits can serve as an access point to better nutrition and physiological health, which can in turn ripple to affect change communally and ecologically:

Not only is diversity healthy for a garden, because a multitude of plants are working together as opposed to a monoculture which is bad for a lot of reasons, but it compromises the health because it makes it prone to attack and then the same notion applies to diversity in the diet too... So ... by shortening our supply chains and growing food or procuring food closer to home, we are taking a stand against these monocultures and massive farming conglomerates which I mean you don't even really need to state that it's a massive issue in the food system that needs to be addressed and this can be just naturally be done by sourcing our food closer to home. (K2)

As discussed in Chapter 2, scholar-activists caution against abandoning diversity in favour of (both material and discursive) monocultures. In discussing monocultural farming practices, this knowledge holder K2, quoted above, touches on the 'many reasons' that these farming practices

can be harmful. Scholars are increasingly recognizing the negative implications that industrial agriculture has on human and planetary health (Alders et al., 2018; Hathaway, 2016; Sherwood & Uphoff, 2000). Scholarship in the field identifies a myriad of harms associated with industrial agriculture practices, which includes the use of monoculture crops, (Alders et al., 2018; Brown 2018) chemical fertilization (Rhodes, 2010) and homogenous seed varieties (Frison, 2016). These farming practices have been associated with topsoil depletion, decreasing biodiversity, and polluted air and waterways (Kremen et al., 2012; Horrigan et al, 2002). Further, industrial agriculture may negatively affect human health through facilitating disease outbreaks (Alders et al., 2018) exposing farmers and consumers to potentially harmful chemical pesticides (Brevik et al., 2019), and failing to help address global hunger (Horrigan et al., 2002) and micronutrient deficiencies (Frison, 2016).

In addition to providing an alternative to large-scale, industrial agriculture and the associated harms mentioned above, knowledge holders discussed how having well-nourished and community members can better equip them to address social-ecological problems:

I feel like simple nutrition stuff is one of the access points to feeling good in your body which is one of the access points that end in just trying to have the wisdom in living well...getting in touch with how you eat and how you feel in your body.... Is like this massive revelation in the actual felt sense of sovereignty and then extrapolating from there to our families, into our communities into our systems, I guess it's just that it feels to me to be one really core lynchpin into how any *body* or family or community can feel health on multiple levels ... if you can access good and beautiful and bountiful food, there's so much more that's accessible to you and I've watched it in a lot of people, have this cascade effect of well-being... cause I mean we can do a lot of work out there but until our selves are well I don't really believe we can create wellness outside of an unwell self, I don't say that in a preachy ... 'do your work or don't do it at all' kind of

way...let's do it all but let's not expect fully functional, wholesome, democratic culture if we don't have that in our bodies. (K6)

While food sovereignty can foster human health, which can in turn foster socio-ecological health, many knowledge holders saw it the other way around, feeling that food sovereignty can foster ecological health, which can in turn foster human and community health:

There's another component that I've only in the last year sort of come to grips with and that it the importance of a healthy surrounding ecosystem, so not just a human ecosystem which we're focussing on so training people and building these skills to support food trees and plant life and animal life so the story I wanted to tell about that: our forest here at Tea Creek, it turns out it's very diverse and healthy and somebody was asking me if we needed to use pest control of any kind, non-organic or organic, and I said no...and then I was asked do we need to put up bear fencing, deer fencing, to prevent wild animals from eating our vegetables and I said no and people were shocked and that made me start wondering 'why?' 'Why don't we need to use pesticides?' 'Why don't we need to keep the deer and the moose and the bears out of our fields in this location surrounded by forest?' And I was walking around the forests around here, seeing all of this animal activity, dozens of moose beds, deer beds, all kinds of hawks and ravens and eagles and raptors flying around, and I realized that we haven't needed it because the forest is so healthy that it provides, in the forest, what animals need so they don't need to come to our farm... I definitely observed ... when we had insect pests come in... and non-insects such as mice, we've had the predators come from the forest and basically clean them up, so I almost applied pesticide once to our new orchard that we had put in and the trees were quite fragile and they were being attacked heavily by aphids... I got some organic pesticide and I went out and I was going to apply it to the trees and then I stopped, I actually applied it to one tree and then I realized that these insects that were falling off were spiders, and spiders are 100% beneficial, there's no such thing as a bad spider because ... they only eat other bugs so I saw the spider come off and I was like 'oh no'

and I took a step back and noticed that the trees were covered in spiders that were eating the aphids so I was like 'okay,' I stopped spraying and sure enough by the next day, the spiders had it under control, and then you ask 'where did the spiders come from?' And there's this healthy forest around so I suspect that they made their way in and I haven't seen a lot of studies on this anywhere...I haven't really seen much discussion around the importance of healthy forests period. (K9)

This knowledge holder describes the importance of having a healthy forest in order to have sustainable food sovereignty practices that do not overly rely on agro-industrial chemical inputs (that include creatures that may be labeled 'pests' by some). Given the previously mentioned potential health harms associated with pesticide usage on food (human and ecological), this knowledge holder suggests a potential connection between healthy forests and healthy, food sovereign communities. Indeed, many knowledge holders highlighted the importance of pursuing food sovereignty within an ecologically diverse and healthy environment:

I think about soil health, I think about increasing the organic matter in my soil which helps to secure carbon, ... so there's soil health and ecosystem health, we have a pollinator garden and I want to put in a couple other pollinator strips just to help with insect populations and there's a pretty healthy population of birds of prey out here, and it makes a big difference. We grow cucumbers, we grow tomatoes, we grow zucchinis [and] a lot of those pollinating, flowering crops need to have some pollinations so it's good to have those insects around from a financial perspective too ... you can think about it in this larger holistic context, ... I'm in this natural wilderness where you really integrate ungulate populations ...which is actually kind of good for me ... I've never had problems with deer or moose eating my crops...(CB)

If we are to support growers that are near our homes, it's in our best interest to have good quality soil to have our food in and that provides a healthier Land to provide for us. (K1)

As explored in Chapter 2, scholars have found relationships with Land and community to be central to food sovereignty, and, relatedly, holistic health experiences (Cidro et al., 2015; Gilpin & Hayes, 2020; Martens et al., 2016; Robin, 2019; Risheq, 2020). This was a prominent theme across knowledge holders' reflections. For instance, the Indigenous knowledge holder K3 described how food sovereignty initiatives help to foster community connectedness and wellbeing in her community:

It's been really beautiful to see the uptake in community, recognizing that we survived the spill, survived generations of residential school trauma, the sixties scoop, poverty, all sorts of really terrible things but there are still things that we can come together around that are positive and that remind us that we have agency in our lives and that we have control over some of the things that matter and I think it's a huge part of my personal strategy and my organization's strategy to support wellness writ large in the community. (K3)

Knowledge holder K3 ultimately suggests that community engagement with food sovereignty can serve as part of a counterbalance to colonial trauma through a sense of collective agency and security that can in turn promote healthy, resilient communities. Indeed, as illustrated in the quote that follows, several knowledge holders spoke to the ways in which food sovereignty can address food insecurity and associated poor health outcomes in communities that have experienced colonial harm:

The more connected our communities are to our local food growing system— that can be very healing, especially in these regions where people are really struggling, there isn't much work anyways, there is lots of intergenerational trauma, there are lots of Indigenous communities around here, there are a lot of social issues and to create a community that is

growing and producing its own food and has that security is really important I think for people's well-being. (K8)

Knowledge holder K8 thus explains how connectedness to local food can provide people with a sense of security, and in turn, better (mental *and* physical well-being). They speak specifically about unique factors affecting northern BC communities and suggest that food sovereignty can provide opportunities for healing despite the challenges faced by people in these physical and human geographies. Other knowledge holders suggested that community connectedness over food sovereignty could in turn have a positive effect on ecological health:

One cool thing is just the coming together of people around [food sovereignty], that's what spearheaded the project to begin with was that there was a bunch of community members that came together that said 'hey we see this as a problem, how can we work on this?' And a lot of people [are] sharing that same passion and I think that that was something that speaks to health on a broader sense in terms of the community piece cause there's an opportunity for people with a similar passion and drive and empathy to come together and work with that in a different way which in turn could ripple out and affect things ecologically. (K5)

Several knowledge holders discussed the ways in which food sovereignty can serve as an antidote to individualism, and rather foster interdependence through sharing food and providing mutual support. Having interdependent communities was reported as a factor that fosters collective well-being:

There are a few elderly couples that will buy upwards of 50 dollars of my produce every single Saturday and then go and deliver it to her sister or her friends or just sharing it around to people who can't get to the market or they're concerned about COVID... I

think that builds a lot of social capital in the community too where you kind of create that opportunity through food. (CB)

Knowledge holder (K1) expressed ways in which building community through food sovereignty can allow for better social support. She particularly focussed on her experience as a new mother:

[Food sovereignty] contributes a lot to a sense of community, community is such a 'fad' word these days but as a Mum now it's so important for me because there's so much truth to... what's that saying? You need a village to raise a child or something like that? And it's true. Man, we live in a society that promotes independence, but I'll tell you what: it's really hard to raise a kid with just one single person and a community can just help with that and everything else too. (K1)

The narratives supporting the theme of holistic health being experienced as interconnected with food sovereignty (Theme 3) clearly aligns with Indigenous food sovereignty literature. As discussed in Chapter 4, interconnection, culture, community and connection to Land and environment are central themes running through diverse Indigenous understandings about health and well-being. My project findings, drawn from the words of knowledge holders in northern BC, reinforces approaching such questions through the various methodological influences that informed this study —including interdisciplinary, strength based, anti-oppressive and de-colonial research. In contrast to reductionist, Eurocentric research frameworks, which largely frame health in bio-physical terms, the aforementioned methodologies allowed for the emergence of culturally-mediated, and place-based health perspectives where knowledge holders perceived health holistically, collectively and intricately connected with food sovereignty. In other words, my findings validated my methodological approach in that if I had been informed by different methodological influences (e.g., quantitative, deficit-focussed) this project would not have been able to grapple with the holism and complexity conveyed through knowledge holders' stories. Further, if this project had not been influenced by anti-oppressive approaches, it might have exclusively featured the stories of a highly privileged, homogenous group of community members (e.g., white, man-identifying farmers) which would have yielded very different findings given the ways in which socio-economic status and culture influence worldview. As explored in Chapter 4, my thematic finding reinforces that 'certain questions are too big for science to touch' (Kimmerer, 2013). In a small way, my own narrowing of a theme from northern BC knowledge holder's words helped me to gain richness in understanding local and Indigenous perspectives on food sovereignty through engaging in conversational interviews preceded by pre-research and relationship-building.

4.2.4 Theme 4: Intergenerational Well-being

Significant amounts of research, as discussed in Chapter 3, makes clear that connection to Land is a central tenet of Indigenous health promotion. Relations with Land has the ability to connect past present and future generations—these relationships have, in other words, an ability to foster health intergenerationally. The people with whom I spoke from so called northern BC reinforced this sentiment. Many knowledge holders clearly expressed an understanding that intergenerational health and well-being is connected to food sovereignty. Knowledge holders used words and phrases including 'multi-generational,' 'youth,' 'kids,' 'education,' 'instilling values' and 'creating memories' when discussing the intergenerational health impacts of food sovereignty. One avenue through which food sovereignty was seen as promoting intergenerational health was as experiential education. Many knowledge holders described how their own education and experiences around food sovereignty drove their personal efforts to provide educational opportunities (both informal and formal) for new generations of youth and their lives and communities. For instance, knowledge holder (K9) reflected on how impactful their Indigenous food sovereignty training program had been for a youth's well-being in their community:

One of our youth, young women she's in her twenties and came to Tea Creek, and she only came here a few times, one of the things that really surprised me is people would sometimes come for as briefly as a few hours and tell us what a big impact it had had on their life which I can kind of appreciate ...because it's not just being outdoors and being on the Land, it's being exposed to all these potentials that you didn't realize were there...when I first started looking into food production I remember having a similar experience when I realized how much food could be produced in a sustainable healthy way on not a lot of land, it just completely blew my mind and changed my perspective on the world and life and my own path. (K9)

Knowledge holder K9 describes the inspiring revelation they had through partaking in food growing and realizing that food sovereignty pursuits have the potential to help foster healthy, sustainable, and self-sufficient communities. Because of this, they express their motivation to provide these learning opportunities to youth in their community as a means of fostering intergenerational health and well-being. Another knowledge holder (K4) discussed the importance of children being exposed to food growing as an experiential and inspirational educational activity in a similar way:

I have a bit of outdoor space so now I can grow my own food so that's led to [me] trying to figure out seed security and saving my own seeds...that's actually been a really cool part of my job is learning about seed saving and there's lots of knowledgeable people in our community...so we've done some learning about that...and I think that getting kids involved with growing food is such a powerful thing for them to be able to understand where their vegetables are coming from ...it's just magical to see a seed that can turn into

a food that you can actually eat ...like planting a seed and getting a seed out of that on the other end and seeing the cycle. (K4)

Describing food grow (from seedling to vegetable) as 'powerful' and 'magical,' this knowledge holder similarly paralleled their own food growth experience with their desire to create opportunities for youth involvement: both were a way to share these experiences that were impactful for them. Other, knowledge holders discussed a desire to share food-related values that had been passed down to them with the next generation, or as K3 so aptly puts it:

The act of harvesting and preparing food is very multigenerational, family activity...I was out on the Land harvesting ancestral foods right from childhood and so for me the act of harvesting and preparing food...it's an expression of love, there were really deep values of self-sufficiency and hard work that we built into that when I was growing up and lots of teachings that were bigger than food of course embedded in the gathering and the processing, [for] my grandparents in particular—that was an opportunity for them to start teaching us about Heiltsuk laws and values and customs and [to] help us know how to relate in a good way to our territory and understand our responsibilities and so for me harvesting food was really a way into that and it's something that I'm really excited to instill in my little ones now. (K3)

On another level, other knowledge holders spoke about the connection between food sovereignty and intergenerational health. Knowledge holders expressed the understanding that more selfsustainable food practices can better ensure that food will be available for future generations:

My priorities have drastically changed in the past 5 months because I have a little human to take care of now, so my priority now is for my child to have food available no matter what the global situation is. So, if I want to contribute to a reliable future for him then I need to walk my talk and support local growers and even growing our own vegetables in our own backyard as a self-sustaining technique, perhaps sharing them with our neighbours, that sort of thing, I think is important simply because what's the point of bringing him into the world and just dropping him? (K1)

I've heard stories here that like two guys go and they do their first goat hunt of the year and they watch the goats and they count them and they figure out how many old ones there are, how many babies there are, how many males and females there are and then they come home with their kill and they share it out and they talk to their whole community about what they saw and what the community can afford to take this year and like that's management, that's cultivation and that's a really close and beautiful relationship with the Land that I feel has been really left out of our conversations between nature and humans and that critical intersection of food...How do we get it? How do we maintain it? How do we keep it coming back for generations? (K6)

These knowledge holders (K1 and K6) voice clear feelings about the inherent connection between food sovereignty and intergenerational health: promoting sustainable food sourcing practices fosters socio-cultural, community health for those living their values and providing for their community. Food sovereignty helps to ensure that future generations will have enough food and food knowledge to be sustained and nourished. Like Theme 3 (Holistic Health), Theme 4 (Intergenerational Well-being) is consistent with findings and evidence in existing scholarly literature exploring Indigenous health and well-being. As noted in previous sections, Indigenous food sovereignty champions face additional colonial barriers associated with leveraging generational and ancestral teachings around food (Delormias & Marquis, 2018); however, Landbased practices (including food sovereignty) can serve as a key connection point for present and future generations (Ratima et al., 2019). Food sovereignty practices can thus serve as part of healing to colonially inflicted intergenerational trauma, providing impetus to create better, longterm supports for food sovereignty projects.

4.2.5 Theme 5: Relationships

In addition to being an *outcome* of food sovereignty praxis, knowledge holders expressed the ways in which good relationships with Land and community *foster* food sovereignty endeavours. One tangible way that community connectedness fosters food sovereignty is through accumulating shared food resources and knowledge that can be leveraged in times of need. For instance, knowledge holder (K4) reflected on the ways in which community connectedness and support mitigated the damage associated with the devastation of a seed collection in a wildfire:

There was a woman this summer [who] had like the biggest seed library saved up from over the years and lost everything in the fire this summer in Lytton, but the cool thing is since she had been sharing her seeds with so many people, people are now like growing the seeds out and bringing them back so that next year she'll have ...those varieties (K4)

Another knowledge holder explicitly identified strong community relationships as the main factor that mitigated barriers they experienced to food sovereignty:

I think the strongest thing has been relationships and that's the thing you *do* get to have in small communities...we have a really good relationship with our suppliers, some almost friendships with them and they look out for us and we try our best to treat them respectfully and respect their time and their effort and definitely as a team we wouldn't have gotten through the challenges that we faced with weather and infrastructure without that commitment to 'I' er done' and to each other so the community has also been helpful... relationships have been the highlight and the core point of it all. (K6)

In addition to feeling that existing communal relationships foster food sovereignty, many knowledge holders felt that increased collaboration would further help promote food sovereignty in this geographic and socio-political climate. The following quotes illustrate this: We need more skills around farming, and we need collaboration, we need people to come together and say: 'Where are the gaps?' 'What crops are you going to grow' 'What crops are *you* going to grow?' 'What machinery could we potentially share?' 'What sales channels could we either collaborate on or could we divide and conquer?' (CB)

Research can be shared, resource can be shared, so something as simple as here on our urban farm, we could take that funding that we get and have an equipment tool shed that people could just come use, they could sign it out and come use it instead of multiple organizations buying the same piece of equipment that they use once per season... a lot of this stuff is necessary, but you don't need to use it all the time. (K2)

In addition to human relationships, many knowledge holders described healthy relationships with Land as a factor that fosters food sovereignty in northern BC. For instance, an Indigenous knowledge holder described how revitalizing ancestral relationships with Land can foster food sovereignty practices in her community:

I really like to remind people that we have those deep relationships and that deep knowledge throughout the territory, and I think it's an important aspiration for us as a community to rebuild that sense of connectivity and intimacy throughout the whole territory too... and I've been reintroducing my whole family to ancestral foods that aren't commonly eaten anymore. (K3)

Knowledge holders such as K6 described the deep and intimate connection to Land that they observed in their community. They describe these relationships as being central to food sovereignty.

You need to be more dependent in order to be super connected [with Land], if it's a choice it's not quite as deep, and the more that I pay attention the more that [I realize] the

richness of the food, the wild... the food that was here and accessible on the territories, that has been basically the backing of the economy of this place for thousands and thousands of years, that's the capital, that's the security, and so that's been the basis of the culture. (K6)

The above quote from K6 is specific to northern BC geographies in that it sheds light on the cultural dynamics (deep interdependent relationships with Land and community) and ecology (rich plant food) that are unique to this place and have been customary for thousands of years.

The findings in Theme 5 are clearly aligned with the literature: there is a deep connection between Land, community, food and health (Buse et al., 2018, Ratima et al., 2019; Redvers et al., 2020; Redvers, 2021). As discussed in Chapter 2, scholars suggest that food is constituted by Land and community (Cidro et al., 2015; Gilpin & Hayes, 2020; Martens et al., 2016; Robin, 2019; Risheq, 2020), highlighting the importance of nurturing these relationships in order to foster food sovereignty practice. The findings from Theme 5 reaffirms current scholarship suggesting that relationships to Land and people foster food sovereignty practices. Given that neoliberalism limits food sovereignty through fostering an individualistic and hyper-competitive environment (as shown in Theme 1), Theme 5 provides further impetus to allocate resources to social supports and community-driven projects, particularly as they relate to food sovereignty.

4.3 Emerging Finding: Northern, Rural and Remote BC Barriers

After pulling a series of specific themes from the stories from the knowledge holders I spoke with, it became apparent that there was an overarching consideration specific to pursuing food sovereignty in northern BC. I came to realize that this emerging finding cannot be neatly summarized as a theme, but rather cuts across all themes given its specificity to northern BC geographies in which this research took place. In the following section I quote the words of knowledge holders to illustrate this emerging finding.

Scholars such as Mitchell-Foster & Gislason (2016) stress the importance that local lived experiences inform health research given the complex and constantly changing nature of socioecological contexts. Though struggles to integrate community wisdom with technical "mainstream practice" persists (p. 174), Mitchell-Foster & Gislason (2016) encourage health scholars to grapple with lived experiences in order to create more nuanced and relevant research that is situated in real-world realities. Attention to non-technical, nuanced, experiential and tacit community knowledge is especially important given that micro socioecological scales are systematically excluded in macro-logics.

Many knowledge holders spoke about facing unique conditions related to living in northern BC. The conditions discussed pertained to both physical *and* human northern BC geographies. For instance, many considered living in northern BC to pose unique risks to food security, a consideration that increased their impetus to pursue food sovereignty given the tenuous supply chain and the large physical distance that food must travel from urban centres:

Prince Rupert is really at the end of the line here, our food is coming from so far away and that's true for even where you are as well but we're even *that* much more removed and then we have this issue here of outlying communities ... smaller communities with

much more difficult accessibility issues, some of them only accessible by boat, some of them accessible by float plane ... so they're even farther removed but like our food comes here, perhaps the food will come from a ferry or boat from the lower west coast, and it's creating this issue...not only are things like the pandemic creating supply chain disruptions, but even taking that out of account is like food traveling that far is not good for many reasons. (K2)

Our community is really remote, and we're really influenced by the supply chain ... [For instance] this week [because of the recent flooding] we haven't been able to get any food trucks to our grocery store so there are no vegetables or fruit in the grocery store or eggs so I think that's top of mind right now...our grocery store is so small that it doesn't really have storage for like frozen food even if they do a shipment of veggies ... what's on the shelves is what they have ...(K4)

Others spoke to the unique demographic makeup of northern BC geographies and the ways in which resources being concentrated in southern, urban environments, creates a situation wherein there's less demand and infrastructure in northern BC communities for food sovereignty:

It would absolutely be different in an urban centre, there are microgreen businesses that employ multiple people, year-round, just growing microgreens and you can do that if you're living in a city with a million people because you've got a dozen restaurants buying your microgreens every single week and you might have enough chefs that you can grow basil microgreens and amaranth but that's not me...there's just not enough people here to make that work (CB)

Grain doesn't grow very well up here so we couldn't source organic, and if anything goes wrong with the farmer's crop we're screwed, I had to import protein crops like soy which was incredibly expensive because we can't grow much rich food up here so we've been looking into other alternative options... whereas if you're in the South or the States or

something you can just pick a grain buyer, ask them to make a ration, they're all certified, they know how to do it... (K6)

On the other hand, knowledge holder (K8) spoke to the unique food sovereignty opportunities that northern BC geographies can provide:

Vertical growing indoors...these ideas that are super energy-intensive, [they] rely on a lot of supplies and plastic and unsustainable products when we have land, lots of land, that's perfectly well-suited to either growing food or foraging and collecting food so the idea of vertical indoor farming maybe [makes sense] in the middle of Tokyo or Mexico City or places where there isn't enough land to grow food for that population ... but to go in BC...to put that kind of energy into food production is just I think gimmicky. (K8)

In Chapter 2 (pages 21-27), I review cases and existing research of food sovereignty in Canada. Despite some of this research having taken place in northern geographies (Kamal et al., 2015; Pawlowska-Mainville, 2020), the large majority of Canada-specific cases that I reviewed in the literature focussed on urban centres. In a study with Poplar River First Nation in northern Manitoba, Pawlowska-Mainville discusses some food sovereignty challenges associated with remote living, particularly the high cost of grocery store food items. While issues with the globalized food system supply chain were undoubtedly echoed by knowledge holders in my research (as demonstrated by the quotes in themes 1 and 2), pursuing food sovereignty initiatives *outside* of the global food system presented unique opportunities and challenges that are specific to northern BC itself. As previously stated, this finding is embodied in all of the previously outlined themes but is important to consider in itself given the dearth of literature pertaining to food sovereignty in northern BC geographies.

Along this vein and given unique geographical conditions that bear on food sovereignty practices, many knowledge holders stressed the importance of not adhering to 'blanket' food sovereignty approaches:

It's a hard thing to prescribe a solution...saying like 'here's your recipe to food sovereignty' because the ecological and cultural diversity is just so massive *and* beyond that, economic diversity so a food sovereignty solution in Vancouver would look drastically different from one here [which] would look drastically different from one in Yellowknife, or somewhere in Asia ...so that's why at Tea Creek we've been really cautious and clear that we don't prescribe one solution as a 'fix all' and that's one of the things that really has been bothering me about food sovereignty discussions is seeing businesses that have one solution that they're trying to sell to across the whole country to First Nations as 'the' solution to food security and food sovereignty. (K9)

Knowledge holder K9 draws attention to the fact that adopting a 'one size fits all' approach to food sovereignty can lead to communities allocating resources in ways that that are not optimized and, in some cases, do not support community food sovereignty at all, as is illustrated by the following story:

I just heard a story of a First Nation here in BC that was sold something like seven greenhouses as a 'food sovereignty' solution and they got them, put them up and they require water and power, and they have no water and power so they're not able to use them so that's definitely not food sovereignty— it's the opposite (K9).

Northern BC community needs being poorly understood and addressed was something that many knowledge holders cited as a challenge to pursing food sovereignty in this place. For instance,

knowledge holder CB discussed the ways in which some research is misaligned with the needs of northern BC communities:

I got a call last week from somebody out of UBC who's working with an artisan farmer's market association down there and they're looking into how the Skeena Valley producers could do collective marketing to sell products to Vancouver and I'm like "what do you think this is? That's not going to happen." But... it's just academics and people in Vancouver that don't understand what's happening up North. (CB)

Given the limited literature pertaining to food sovereignty conditions specific to northern BC geographies, in addition to the stories shared by knowledge holders where institutions failed to address their food sovereignty needs, I identify this as a gap in the literature that is in dire need of addressal. While this research has just scratched the surface, I see it as contributing to this gap by creating awareness and making the case for further research and evidence-based food policy that comes from listening to the lived experiences of those working in local food in northern, rural, remote and Indigenous geographies.

As discussed in Chapter 1, Canada-specific food sovereignty research is largely focussed on southern and urban geographies. Given the previously mentioned unique conditions facing those pursuing food sovereignty in northern BC, more research focussed on the needs of food sovereignty champions in northern and Indigenous BC communities would help to support these people that are among the hardest hit by challenges related to food insecurity (Council of Canadian Academies, 2014).

4.4. Conclusion to Findings and Discussion

Through an exploration of five themes pulled from stories shared with me, this chapter discussed the many ways in which peoples' experiences of health are connected to their involvement with food sovereignty initiatives in northern BC. Specifically, the chapter identified that neoliberalism, free-market capitalism and colonialism limit peoples' ability to engage with food sovereignty in this socio-political, cultural and environmental context, whereas community health and relationships foster and uplift food sovereignty practices. The chapter details my finding that holistic and intergenerational health are intricately interconnected with food sovereignty endeavours. Themes 1-5 discussed in this chapter largely align with the literature and written and spoken voices reviewed in Chapter 2. Lastly, this chapter highlights emerging findings that begin to address a gap in the literature around northern BC food sovereignty experiences. In other words, the emerging findings pertaining to northern BC add new insights to existing food sovereignty literature and signal to future researchers a need to further explore community experts' experiences in northern BC geographies. In the final chapter, I will discuss limitations of this research, personal reflections, and suggestions for future research in the field.

CHAPTER 5: Synthesis and Conclusion

This chapter offers a synthesis and concluding thoughts pertaining to the research questions, aims, and findings of this study. In the first section, I provide a synthesis of the findings and discussion in relation to my initial research questions and aims. Specifically, I explore the findings and discussion from Chapter 4 with the goal of identifying northern BC food sovereignty leaders' perceptions or experiences of health as it relates to food sovereignty, the challenges and mitigators that they face when engaging with food sovereignty, and the ways in which they could be better supported in pursuing food sovereignty initiatives. I describe the concrete ways in which the stories of knowledge holders helped me to answer my research questions. Next, I highlight personal reflections and thoughts about this master's project and learning journey, specifically focussing on how this thesis facilitated personal growth and instilled in me values of humility, curiosity and accountability. I then discuss this project's limitations and areas needing improvement with a particular focus on confines imposed by the colonial academy. Finally, I offer suggestions for future research in the field that may work to address the limitations of this study, including arts-based and narrative approaches, and more focussed action-oriented research.

5.1 Synthesis of Findings

The findings discussed in the previous chapter can be seen as providing answers to or evidence to respond to my initial research questions. The discussion from Theme 3 and 4 address research question #1—How does practicing food sovereignty affect peoples' health in northern British Columbia? Theme 3 and 4 address this question by demonstrating the inherent connection between holistic health and food sovereignty pursuits, and the direct impact of food sovereignty practice on intergenerational well-being in northern BC respectively. Through their stories, knowledge holders conveyed that the connection between practicing food sovereignty and holistic, intergenerational health is inseparable. As is consistent with understandings of holistic health in ecohealth and Indigenous health scholarship discussed in Chapter 2 (Buse et al., 2018; Parkes, 2015, many of the involved knowledge holders drew no distinction between the health of humans and non-human entities, nor the health of past, present or future generations. Similarly in line with integrative and Indigenous indicators of well-being, many knowledge holders described health as something that cannot exist outside of a just or sustainable society (Buse, 2018; Parkes 2015), one in which food sovereignty practices can thrive and, in turn, can further promote justice, sustainability and health through food.

The discussion that emerged from themes 1, 2 and 5 respond to research question #2— What are the sociopolitical, environmental and cultural factors that foster (or limit) peoples' food sovereignty practices? Specifically, the findings expressed in themes 3 and 4 expose how the forces of neoliberal capitalism and colonialism *limit* people's food sovereignty endeavours in northern BC, whereas Theme 5 suggests that relationships with Land and community *foster* food sovereignty in this place. While most knowledge holders did not overtly critique neoliberal capitalism or colonialism as a barrier to food sovereignty, they unanimously described the various conditions created by these social forces as being things that stifle their food sovereignty practices. Limited social support from public institutions, individualism and competitiveness, resource extraction, and competing with the global food system are all conditions that are created by these political, ideological and economic processes. On the other hand, Theme 5 relationships— speaks to knowledge holders' perception that Land-based community connectedness fosters food sovereign practices through sharing, relating to territory and fierce collaboration. Theme 5 can thus be seen as inextricably linked with Theme 1 and 2, given that relational ways of being with community and ecology serve as an antidote to the individualistic and *dis* connected climate promoted by neoliberal capitalism and colonialism.

Neoliberal capitalism and colonialism are often framed in the literature as patriarchal influences that have manifested the objectification and subordination of women and nature (Campbell, 2014; Guerrero, 2003; Portman, 2018). The themes discussed in Chapter 4 can be seen as reflecting my attention to gender throughout this project. Theme 1: Neoliberal Capitalism, and Theme 2: Colonialism, speak to patriarchal processes that knowledge holders described as limiting their food sovereignty practices in various ways. Conceptualizations of Land as 'property' or 'resource' and related extractive projects exemplify manifestations of patriarchal ways of knowing which bear on food sovereignty pursuits in northern BC.

Related to eco-feminist arguments put forth in the literature over the past several decades, scholars and activists suggest that food justice activism must be attentive to feminist issues (Morrison, 2020; Mukherjee, 2013; Patel, 2010; Portman, 2018; Shiva, 1993). Similarly, decolonial scholarship has positioned (w)holistic ways of knowing as feminist approaches that reject colonial, reductionist, static binaries (Tai, 2016). Theme 3: Holistic Health, Theme 4: Intergenerational Well-being, and Theme 5: Relationships all reflect holistic ways of knowing, which more closely align with Indigenous, feminist, regenerative-oriented paradigms as opposed to Western, patriarchal, production-oriented paradigms (Morrison, 2020). Paying particular attention to, and highlighting, feminine practices of knowledge in my project's analysis and findings demonstrates a small way in which my research promotes de-colonial thought and pushes against oppressive gender hierarches.

In essence, all themes discussed in Chapter 4 are connected: Neoliberal capitalism and colonialism infringe on peoples' ability to pursue food sovereignty in northern BC. Relationships with Land and community, however, actively push back against these socio-political forces, and, in turn, can foster food sovereign practices in this place. Given that relationships help foster food sovereignty—seen as interconnected with holistic health and intergenerational well-being— they can thus help promote the health and well-being of humans and non-humans in northern BC as they have in the past, as they are today and as they can for future generations.

5.2 Knowledge Exchange

For scholars in the field of knowledge exchange in Indigenous health research, such as Morton Ninomiya and colleagues, effective and appropriate knowledge translation is about sharing knowledge that respectfully engages with local and context specific knowledges. This is especially important, they argue, in Indigenous health research given that both Indigenous people and Indigenous knowledges have been neglected and erased in academic literature. Although many scholars understand knowledge translation (KT) as a process that involves mutually created knowledge that is mediated by social and environmental contexts (Thomas et al. 2014), KT approaches can fail to effectively align with values of Indigenous knowledge sharing such as the 'four Rs of research' (relevance, respect, responsibility, reciprocity) and the principles of 'OCAP' (ownership, control, access and protection) (Morton Ninomiya et al., 2017).

Scholars and knowledge users identifying such shortcomings of knowledge translation approaches has led to the increasing attention to integrated knowledge translation (IKT) as a potential alternative strategy to better usefulness and impact of research (Kothari et al., 2017). IKT sees knowledge users as having "unique expertise pertaining to the research topic, including

knowledge of the context and the potential for implementation." (Kothari et al, 2017, p.299). Further, IKT involves knowledge users as partners in research, and is capable of yielding outcomes that are more likely to be relevant and helpful to knowledge users (CIHR, 2015). In this way, IKT can be seen as connected with CBPR methodology given its emphasis on cocreating knowledge with and for the communities that are intended to benefit from it (CIHR, 2015).

As mentioned in chapter 3, I had ongoing conversations with knowledge holders throughout the research process about potential ways that this research could help them and their communities. These conversations led to me ultimately being presented with a knowledge exchange opportunity where one of the involved knowledge holders reached out to me to contribute to a government-funded report they were writing on Indigenous food sovereignty in BC. We communicated via zoom and email about how I could best help with this and, drawing on things I had learned through my master's thesis project (particularly during my literature review and community engagement stages), I created and shared some content with them for this policy report. Through having these ongoing conversations and developing authentic relationships with involved knowledge holders, these efforts can be seen as in line with integrative knowledge translation (IKT) approaches where elements of research outputs were identified by and co-developed with community partners (CIHR, 2015).

5.3 Personal Reflections

Before coming to UNBC, I dreamt of doing a master's focussed on the health benefits of regenerative agriculture. Coming from an undergraduate program that prides itself on critical thinking, I assumed that this project focus would undoubtedly translate to research promoting

social and environmental justice. Upon beginning my graduate coursework in Political Ecology, First Nations Research Methodologies, and Health Promotion, I ultimately began to question my initial idea to focus on regenerative agriculture and its potential to promote health. I started to see the ways in which regenerative farming narratives can perpetuate neoliberal dynamics and I noticed that the folks engaging with 'alternative' agriculture seemed to come from a fairly homogeneous (privileged) demographic. These reflections led me to question why some groups are being underrepresented in alternative agriculture movements, such as regenerative agriculture. Engaging with political ecology and Indigenous scholarship allowed me to realize that alternative agriculture not only has the capacity to be neoliberal, but also neocolonial, by often failing to incorporate social justice considerations, like not acknowledging that most 'alternative farming' takes place on stolen Indigenous Land in Canada.

Not wanting to perpetuate colonial harms through research, and in an effort to in some small way combat deeply entrenched power dynamics and colonial histories within the academy, I decided to re-focus this master's on the experiences of those pursuing food sovereignty and Indigenous food sovereignty in northern BC. This decision, however, was uncomfortable and I was unsure how, as a white settler and newcomer to the area, I could help northern and Indigenous communities through research.

Largely through graduate coursework in First Nations Studies, as well as through my own reading and guidance from friends and colleagues, I learned that addressing this discomfort lies in ongoing, transparent and humble communication. I learned that, in contrast to positivist research paradigms, authentic relationships *can* and *should* be fostered in justice-oriented research and that research can be a co-learning process wherein all knowledge holders involved

are collective experts in the research (Koster et al., 2012; Kovach, 2010; Struthers, 2001; Wilson, 2008).

These realizations led me to speak with over 50 knowledge holders involved with food sovereignty across northern BC as discussed in Chapter 2. While these interactions were mostly pleasant and validating, some were difficult and sparked some uncomfortable but necessary and valuable personal growth. During one interaction, I implied that I was hoping to pursue this research as a settler ally/accomplice. In response, I was clearly informed that it is not up to a settler to be considered an ally or accomplice and that I should commit to reciprocity and acknowledgement in order to be successful in this work. I initially felt shocked that my 'good intentions' could have been interpreted as entitled, privileged and colonial, but with the help of my supervisors and supports, I stopped myself from indulging my self-absorbed perspective. I began to reflect: "if this is how I feel coming from a position of immense privilege when simply told that I overstepped and made a mistake, imagine how people felt when colonizers arrived and decimated their Lands, disrupted their communities, took away their children, delegitimized or capitalized off of their knowledge, and CONTINUE to perpetuate colonial harms to this day?" This interaction ultimately led me to read literature, listen to podcasts, and attend workshops on cultural humility, anti-racism, and ways to respectfully and humbly navigate research with Indigenous communities as a settler.

An article written by settler scholar Kathy Snow (2018) reflecting on graduate research she conducted with Indigenous communities really resonated with me and provided insights around navigating inevitable tensions in the work I was hoping to do. In spite of the complexity of such work, Snow (2018) encourages settler students to not 'shy away' from working with Indigenous communities in a research capacity. Snow rather expresses the importance of adhering to Kirkness and Barnhardt's Four R's framework (respectful, relevant, reciprocal, and responsible) as is discussed in Chapter 3. Snow's personal research experience inspired her to propose four additional R's for settler researchers to adhere to: rights, relationships, returning and reflection. Reflecting on Snow's article and the works of others (Koster et al., 2012; Struthers, 2001) guided me through the (at times) messiness of this research journey and helped me to continually return to my commitment to fostering respectful, reciprocal, responsible, and constantly evolving relationships in this project. Returning to lessons learned from these works was crucial during times when these priorities represented more time commitments for me and when they did not necessarily align with my project's timeline. For instance, as is further discussed in Chapter 3, when one involved knowledge holder revoked verbal consent, Snow's article re-affirmed my decision to respect their decision without letting the academic time constraints I faced interfere with our relationship or their right to ongoing voluntary informed consent.

While I cannot speak for the knowledge holders involved in this study, I feel that my intention to adhere to (both) the Four R's frameworks throughout this project and a commitment to continual self-reflection in the form of journaling and seeking advice from mentors has enabled me to foster meaningful and reciprocal relationships with those involved. Despite having never met many of them in person due to restrictions associated with the COVID-19 pandemic, I consider many of them as friends, some of whom I hope to visit with on their beautiful farms in the near future, and with whom I feel a unique connection over our shared passion for food. I feel deeply grateful to everyone involved in this project for their time, wisdom, insights and sharing, and most of all for their commitment to pursue food sovereignty in the name of justice, sustainability and collective health and well-being.

5.4 Project Limitations and Research Lessons

As mentioned in Chapter 4, through reading work such as Castleden et al.'s "I Spent the First Year Drinking Tea" Exploring Canadian university researchers' perspectives on community-based participatory research involving Indigenous peoples, I learned early on in this master's degree that there are inherent challenges in pursuing justice-oriented research under the constraints of the colonial academy. The 'catch-22' noted by Castleden and colleagues regarding the need for funding and ethics, but the simultaneous need to make relationships with communities is a sentiment that I experienced in this work. Though I made a concerted effort to speak to a diverse array of knowledge holders pursuing food sovereignty in northern BC before initiating this research, having pursued a project involving folks with whom I already had a longstanding relationship would have freed up more time to be able to truly carry out community-based participatory research wherein folks could have been more heavily involved in all steps of the research process. It is worth noting that the constraints that I faced to pursuing community-based participatory research were not only a result of the colonial academy. Factors such as already limited community availability and capacity as well as additional stress facing communities as a result of the COVID-19 Pandemic also hindered my ability to engage in a participatory research process. I will explore these factors later in this section.

While conversing with many informants prior to beginning this research gave me new insights, perspectives and contextual information that helped inform this project's direction and approach, unfortunately a large number of these people who expressed initial interest in the project were unable to participate when the time came. While this decline in engagement can be partly seen as a result of the pandemic and associated stress and responsibilities, there is also an inherent challenge with engaging with folks who work long and tiresome days on the land and often need to supplement their food sovereignty work with other employment, require government grant funding that has time consuming application processes, or participate in multiple farmers markets and selling avenues that is similarly time consuming and tiresome. In other words, farming is a full-time intensive job and for many of these people this is not their only role. Managing multiple roles is particularly common among women and thus made it especially difficult for women food sovereignty leaders to give time to this project (Heath & Weber, 2020).

As such, upon reconnecting with many of these folks when I was prepared to engage in conversational interviews, many who had expressed initial interest did not follow up, and many expressed their regrets due to not having the capacity to further contribute to this project. Even for those that *did* show renewed interest, scheduling was often difficult, and many meetings were postponed several weeks (even months in some cases) and others were unintentionally missed due to Land and community-based responsibilities. These experiences made me aware that in the name of pursuing more 'equitable, diverse and inclusive' research, researchers can place unnecessary burden on knowledge holders whose capacity is already stretched in working to resist oppression. An overall finding from this work is that communities are strapped for resources, are busy with other projects or various events needing response, and possibly even burning out due to research fatigue. Staying flexible and understanding of community members and potential involved knowledge holders (e.g., giving space, not pressuring people to respond to emails and research demands) was crucial for me navigating these complex dynamics. Further, future settler researchers wading through the challenges of community-based research could benefit from co-developing compensation menus with community members in an effort to help

lesson these aforementioned burdens (e.g., offering a farm hand, research or administrative assistance and other unconventional compensation options in academia). Devising ways that the academy and affiliated institutions could incentivize 'with and for' research (Koster et al., 2012), while fully recognizing its time consuming and 'messy' nature, could be a real step in the direction to fostering more just, sustainable and action-oriented research partnerships.

As noted in Chapter 3, we must move forward in justice-oriented work through a "web of consensual relationships... through lived experience and embodiment." (Simpson, 2014, p.16). The findings from this study reiterated this truth, highlighting that the nature of food sovereignty experiences in northern BC is embodied and lived. As part of grappling with embodied realities, Indigenous health and political ecology scholarship stresses the importance of fracturing false dichotomies between humans and nature. For instance, Redvers et al. (2020) express the importance of fostering communities of people that see themselves as being *of* nature—being *embodied* by nature—as opposed to simply existing *in* nature that surrounds them. Such a shift in understanding, Redvers et al. (2020) argue, is crucial in promoting healthy futures on micro and macro scales. Further, as briefly discussed in chapter 4, scholars such as Mitchell-Foster & Gislason (2018) encourage researchers and policymakers to grapple with embodied and local-lived realities to better inform processes addressing cumulative socio-ecological impacts.

Despite the importance of grappling with communities' lived realities in health, social and environmental justice research, a limitation of doing research in an academic setting via remote interviews is that part of this embodied experience gets lost in translation. As is noted by Morrison (2020), the English language itself tends to struggle to encompass the highly contextdependent, interdependent, "verb-based" systems of Indigenous food sovereignty that are better understood as "lived realities" (p.26). I will discuss ways to potentially mitigate these limitations in an effort to promote more representative, holistic contributions in the following section.

5.5 Suggestions for Future Research in the Field

Conversational interviews can be seen as a methodology that enables storytelling (Nagar, 2013) and I chose this method as it can facilitate the re-centring of community voices, marginalized narratives, and subjugated knowledge (Aldred et al., 2020, Gislason et al., 2018). Throughout this master's, though, I learned that arts-based and narrative methods such as digital storytelling can be even *more* useful than other knowledge sharing techniques in narrating peoples' lived realities as they have the capacity to move beyond the limitations of narrative research methods like interviews, serving as a community-driven initiative that can better resonate with oral wisdom (Cunsolo Willox et al., 2013). Digital stories have been leveraged in projects seeking to integrate environment, community, and health in northern BC contexts (Gislason et al., 2018) as well as in work with youth in a northern BC context (Ward & de Leeuw, 2018) Given the embodied nature of food sovereignty experiences, future research might benefit from leveraging more creative arts-based and narrative methods such as digital storytelling.

As another methodological option, scholars cite the evolving field of geopoetics as having the possibility to grapple with radical geographies in new and necessarily nuanced ways (de Leeuw & Magrane, 2019). As discussed in Chapter 2, given that questions of food sovereignty are increasingly being explored through the lens of radical food geography (Levkoe et al., 2020; Hammelman, 2020), leveraging geopoetics as a creative and expansive methodological tool could offer promising future contributions to the field. Further, while I was attentive to gender in the context of food sovereignty during my review of background information, I was not able to carry through gender considerations as much as I had intended in the findings and discussion sections due to the breadth and timeline of this project. As such, future research with a particular focus on gendered experiences of food sovereignty and holistic health in rural, northern and Indigenous geographies would contribute to a gap in current literature and would inevitably advance the field. Lastly, while this study did, in part, explore ways to mitigate existing barriers to food sovereignty in this socio-political and geographic context, this was not its core focus. Given the dire need to promote more sustainable, just and self-determined food systems, future research in the field should focus on action-oriented, policy and systems-level approaches to address existing barriers and challenges to pursuing food sovereignty in northern BC.

5.6 Summary

Engaging in this project has been an incredible experience and I gained extraordinary insights from talking with people and being informed by lived experiences of food sovereignty in northern BC. Despite its brevity in length, in a small way the novel insights gained in this research may contribute to the progression of the growing field of food sovereignty. The insights gained through this study may be used to help inform future northern BC food sovereignty projects, funding and education. As outlined in section 5.1, the study's findings answered the original research questions: 1) How does practicing food sovereignty affect peoples' health in northern British Columbia? And 2) What are the sociopolitical, environmental and cultural factors that foster (or limit) peoples' food sovereignty practices? Identifying the ways in which food sovereignty practices affects people's health, and, relatedly, which factors help and hinder

these practices in northern BC can pave the way for future research that has a more concerted focus on tangible strategies to uplift these practices and, in turn, people's collective health and well-being. I feel deeply grateful for the opportunity to come in from the 'outside' and try my best to privilege Indigenous stories about what has historically worked around food sovereignty and how these practices are being re-ignited by community. My hope is that this research might inspire future students and scholars in the field to use their academic privilege to learn from and make space for community food sovereignty experts, many of whom are working every day in an effort to promote a more just, sustainable, and healthy food system for future generations.

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APPENDIX 1. UNBC Ethics Board Approval Letter



RESEARCH ETHICS BOARD

MEMORANDUM

To: Katja Korol-O'Dwyer

CC: Sarah de Leeuw Margot Parkes

From: Davina Banner-Lukaris, Chair Research Ethics Board

Date: September 16, 2021

Re: E2021.0809.036.00 Experiences of Food Sovereignty in Colonial Northern BC

Thank you for submitting the above-noted proposal to the Research Ethics Board (REB). Your proposal has been approved.

We are pleased to issue approval for the above named study for a period of 12 months from the date of this letter. Continuation beyond that date will require further review and renewal of REB approval. Any changes or amendments to the protocol or consent form must be approved by the REB.

During the COVID-19 pandemic, no *in-person* interactions with participants are permitted without an approved Safe Research Plan and the protocol mitigations for COVID-19 being submitted as an amendment and approved by the REB. Please refer to the <u>Chair Bulletins</u> found on the REB webpage for further details. If questions remain, please do not hesitate to email <u>reb@unbc.ca</u>.

Good luck with your research.

Sincerely,

Dr. Davina Banner-Lukaris Chair, Research Ethics Board

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APPENDIX 2: TCPS CORE Certificate

PANEL ON RESEARCH ETHICS Navigating the ethics of human research	TCPS 2: CORE	
Certificate of Completion		
This document certifies that		
Katya Korol-O'Dwyer		
Ethical Cou	npleted the Tri-Council Policy Stat Conduct for Research Involving H rse on Research Ethics (TCPS 2: CO January, 2021	lumans

APPENDIX 3: Compensation Menu

Experiences of Food Sovereignty in Colonial

Northern BC

COMPENSATION 'MENU'





The following compensation options are informed by conversations with knowledge holders involved with food sovereignty and Indigenous food sovereignty initiatives in Northern BC.

FINANCIAL HONORARIA

\$25 cheque, \$25 market dollars for the Prince George (or other local northern BC) Farmer's Market, \$25 gift card to a gardening supply store, \$25 gift card to a local restaurant.

MANUAL LABOUR HELP

Fruit and vegetable harvesting, weeding, planting, transporting food goods.

RESEARCH ASSISTANCE

Help with background research and analysis to inform community-led policy documents and educational materials.

PHYSICAL GIFTS

Home-made canned food goods, home-made dishes, food-related books.

APPENDIX 4: Timeline of Research

Semester date	Thesis task
Winter 2021 (Jan-April)	 Finalize proposal Schedule proposal defense Submit Research Ethics Board and make revisions as needed Check if CIHR graduate scholarship application was successful
Spring/Summer 2021 (May-August)	- Write review of written and spoken voices section
Fall 2021 (Sept-Dec)	 Conduct interviews Write introduction and methodology, research design and methods sections
Winter 2022 (Jan-April)	 Write findings, discussion, and conclusion sections Supply knowledge holders with appropriate compensation for their time and contributions Schedule thesis defense
Spring/ Summer 2022	- Submit and defend thesis