Abstract

Following the Calder Decision in 1970, subsequent legal rulings in Canada have defined the government’s duty to recognize First Nations’ pre-existing rights to their Traditional Territory, undermining the racist discovery doctrine and terra nullius arguments of the Crown’s claim to radical title to the Province of British Columbia. In doing so, the courts have declared the importance of First Nation historical research, specifically Oral History evidence, in demonstrating Aboriginal Rights and Title. With this, an industry of consultants and academics has arisen to aid in the collection of place-based Traditional Knowledge held and protected by community members. Employing scientific rigor and GIS, various studies documenting land use, occupancy, and Traditional Knowledge have proven to be effective means of resistance for First Nations by securing vital concessions of revenue and management authority from the Province. Yet, these studies are vulnerable to reproducing essentialist images of First Nation culture and have limited utility on their own in Aboriginal Title litigation. This thesis seeks to demonstrate how recent legal accommodations by the Canadian Courts and secure Web 2.0 technologies open space for the deployment of First Nation-led participatory research for both Aboriginal Title litigation and cultural revitalization efforts. The need for this research was identified via a community-based research approach focusing on experiential learning and dialogue with Elders from two communities of the St'át’imc Nation and interviews with experts in the field. The application of community-led participatory research more directly addresses the barriers to research and compromises in representation made for efficacy of the current research paradigm. By allowing for the production of research outputs that expand the reach of community voices to promote understanding and empathy in their own communities and settler society, community-led participatory research can ultimately result in greater space for First Nation self-definition and determination. Therefore, First Nation research strategies should supplement quantitative land use studies with long-term participatory research projects more appropriate for addressing the dualism of First Nation Self-determination - external decolonization and internal cultural revitalization.
Lay Summary

This thesis summarizes the current research strategies on offer to First Nations in Canada seeking to prove their ownership of their unceded traditional territory. I examine how Glen Coulthard’s ‘politics of recognition’ functions in First Nation’s adaptation of traditional knowledge to meet the Provincial and Industrial validity requirements for research and how this can potentially lead to settler cultural invasion of First Nation institutions. After conducting 2 years of participant observation and expert interviews, I conclude that through First Nation-led research and community controlled research outputs emphasizing perpetual participatory video and GIS collection and management, it is now possible to begin complimenting the current consultant driven land use and occupancy research methodologies with more holistic and contemporary cultural representations of First Nation communities.
Preface

This thesis grew out of the invitation to aid a community-initiated project to document St’át’imc Knowledge and history of two communities of the St’át’imc Nation, Tsal’alh and Xwisten, and gained specificity during the two years of discussion that ensued (2014-2016). The shape of this thesis is also meant to outline my learning process in my interactions with the Elders I have come to view as my friends, and my reflection based upon these experiences.

The identification, design, implementation, analysis, and writing of this study was conducted by Zachary Zabawa. The study has been approved by UBC’s Behavioural Research Ethics Board through a Minimal Risk Review, Project Title: St’át’imc Trail Knowledge Mapping Project, certificate: #H15-00568.

The results of this study are the property of the St’át’imc communities of Tsal’alh and Xwisten.
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**List of Acronyms**

AT – Aboriginal Title  
BC – British Columbia  
BCH – British Columbia Hydro  
BCTP – British Columbia Treaty Process  
CBR – Community-Based Research  
CIS – Community Information Systems  
CLR – Community-Led Research  
CRAC – Community Research Advisory Committee  
DTD – Direct-to-Digital Methodology  
EWG – Elders Working Group  
FN – First Nation  
ILUOP – Inuit Land Use and Occupancy Project  
IP – Intellectual Property  
LRD – Lands and Resources Department  
LTC – Lillooet Tribal Council  
LUOS – Land Use and Occupancy Study  
OCAP – Ownership, Control, Access, and Possession  
PGIS – Participatory Geographic Information Systems  
PR – Participatory Research  
PV – Participatory Video  
SOC – Strength of Claim  
SCC – Supreme Court of Canada
SGS – St’át’imc Government Services
SKMP – St’át’imc Knowledge Mapping Project
TK – Traditional Knowledge
TKW – Traditional Knowledge Workshop
TUS – Traditional Use Study
TUSP – Traditional Use Study Program
UBCO – The University of British Columbia Okanagan
UNDRIP – United Nation’s Declaration of the Rights of Indigenous People
VGI – Volunteered Geographic Information
Glossary

Úcwalmicw – The people of the land
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I would like to thank my supervisor, Janette Bulkan, for the immense patience, emotional support, and requisite firm hand in helping navigate the immense challenges involved in community-based research.

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Special thanks are owed to my parents, whose have supported me throughout my years of education, both morally and financially. Further my siblings, extended family, and friends for offering me sound advice and thoughtful comments on the many ideas found in thesis, especially Jessica Saunders.

Yet, without the time, patience, and care afforded me by those I worked with in Tsal’alh and Xwisten, I would not have been able to produce this thesis. I am extremely grateful for the opportunity to get to know and work hand in hand with Tim Peter of Tsal’alh. Further, gratitude is needed for Charlene John, who withheld judgement and had great patience in the early stages of the project. Lastly, the insights found within this thesis are products of listening to the Elders involved in the project: Gerald Michel, Randy James, Ida Mary, Larry Casper, Gasper Jack, Albert Joseph, Aggie Patrick, Kenny Thomas, Carl Alexander, Marie Barney, Lena Sangret, Eugene Alexander, Pete Alexander, Desmond Peter Jr., and Desmond Peter Sr.
Chapter 1: Introduction

In the wake of the landmark Aboriginal Title (AT) case, Tsilhqot’in Nation v. British Columbia (2014; hereafter *Tsilhqot’in (2014)*), untreatied First Nations in British Columbia (BC) possess a new path to Self-determination via recognized property rights within the Canadian legal tradition. AT can remove many of the paternalistic policies of the Canadian Federal Government, circumvent the disingenuous BC Treaty Process, and strengthen First Nation positions in Provincial land management negotiations. This particular case marks the first formal acknowledgment of Aboriginal Title possessed by a First Nation in Canada (Ray, 2015), and removes the more onerous provisions of the Indian Act (1867) and Provincial Forest Act (1995) on proven Aboriginal Title lands. Ultimately, *Tsilhqot’in (2014)* undermines the assumed position of the Provincial government as the ultimate arbiter of property rights in the province.

The Supreme Court of Canada (SCC) decision built upon various legal rulings starting with Calder v Attorney-General of British Columbia (S.C.C 1973; hereafter *Calder*) that has gradually propelled the settler state to address the ‘Indian land question’ of unextinguished Aboriginal Title in BC. ¹ This thesis seeks to demonstrate how these recent legal accommodations – namely the admission of Elder oral history testimony and movement towards a consent model of consultations – along with recent technological advancements – community

¹ The unresolved question of Aboriginal Title dates back to 1862. In this period there existed widespread knowledge for the necessity of compensating First Nations for their lands among the general public, BC officials, and the British Crown. This has been documented by Tennant and is patently demonstrated by the signing of treaties on Vancouver Island and Treaty 8 in the Northeast corner of BC. According to Historians, the inaction of both the British Crown and the Colony of BC to settle the Indian Land question is attributed to both parties’ failure to provide funds for treaty making. This effectively resulted in inaction until the BC Treaty Process in 1993 (see Tennant, 1998).
information systems (CIS) and Web 2.0 participatory data collection – render new opportunities for First Nation to fundamentally alter how research is undertaken and utilized in preparation for AT litigation. Thus moving the current research paradigm from a formalized consultant and expert driven process of land use and occupancy studies (LUOS) and Traditional Knowledge (TK) studies to that of perpetual community TK collection that benefits to a greater degree both rights-based Self-determination strategies and cultural revitalization efforts.

Yet, the promise of increased Self-determination afforded by Tsilhqot’in (2014) is far from guaranteed for First Nations in BC. AT potential underlies the entire province, except where AT has been extinguished by the signing of treaties. Currently, the Provincial Government of BC has refused to revise its relationship with First Nations proportionally to the reality of pre-existing Aboriginal Title. Instead, the Province has undertaken a position of attrition knowing that the quantity and quality of documentation required to prove AT in Provincial courts will be difficult to achieve for most underfunded First Nation governments. ‘Evidence of occupation’ is the legal and scientific proof that First Nation communities need in order to demonstrate occupation of sufficient and exclusive nature, and a continuity of connection to the territory to prove AT as outlined in Delgamuukw v. British Columbia, (1997; hereafter Delgamuukw). This test places a high burden of proof on First Nations, who have been heavily impacted by waves of settler intrusion and colonization from the 19th century in BC.

Whether intended or not, the burden of proof for ‘evidence of occupation’ placed solely upon First Nation communities extends past injustices associated with the near-universally condemned assimilation policies of the 19th and 20th centuries. Such policies like the residential school system that existed until the 1980s, not only caused tremendous physical and emotional inter-generational harm but also systematically dismantled the mechanisms for intergenerational
knowledge transfer in these communities. The most visible factors the province is relying on in this legal strategy of attrition are (a) the disruption of traditional education systems caused by the residential school system, (b) the passing away of the last Elders to live largely without the impact of settler\(^2\) intrusion, and (c) the disruption of territorial use that occurred with the establishment of the reserve system in BC. The residential school system represents the greatest impact on evidence of occupation collection for First Nations. By removing First Nation children from their homes and placing them in residential schools far away from their territory, the province greatly diminished the affected generation’s connection to their community, language, culture, and lands. Connections and knowledge that now have monetary value when used in courts and negotiations. Through these and countless other forms of community disenfranchisement, the collective memories of how each First Nation used and occupied their territory, or evidence of occupation, are increasingly more difficult to document. Or as the High Court of Australia reviewing the land claim commission of the 1970’s stated “…Aboriginal claimants’ ties to the land are broken by “the tides of history” (Yorta Yorta Aboriginal Community v. Victoria, 2002, cited in Ray, 2015, p. 11). From my perspective, this statement is abdicating responsibility, as this situation was caused by the continuous and intentional destruction of First Nation societies by settler state assimilation policies. When multiplied by the inevitable cultural transformations imposed by the introduction of the market economy, national

\(^2\)The terms settler and settler state are used purposely in this thesis to provoke a sense of unease in wider Canadian society. This is necessary because of the government of Canada’s present reconciliation position functions to place injustices perpetrated against First Nation people as only happening in the past. This negates the active colonization taking place today. Refer to Glen Coulthard’s Red Skin, White Masks (2014) for further reading.
education systems, and mass media, these interventions have led to a seemingly inevitable loss of First Nation ways of knowing.

The psychological minimization of historical wrongdoing seen in the Australian Courts is also present to a lesser degree in the sentiments of reconciliation in Canada. Public discourse on the topic of residential schools, such as the Truth and Reconciliation Commission (TRC), has helped raise national awareness and opened avenues for First Nation people to share their stories to the wider Canadian populations. Yet, the TRC tended to discuss the impacts of assimilation policies in personal and intangible terms for the settler population, such as intergenerational trauma and loss of community and place. While the TRC’s Calls to Action (2015) highlight the systemic issues that must be addressed at both Federal and Provincial levels, the current Liberal Government’s failure to implement these recommendations effectively bolsters the status quo of First Nation territorial dispossession by placing these injustices in the past and appearing to be proactive to lesser informed segments of the population. Government inaction leaves only reconciliation through individual action, and actively diminishes the public’s perception of ongoing colonizing policies of economic development in BC.

The loss of place-based TK is a vastly under-acknowledged barrier to First Nation rights-based Self-determination. Place-based TK is needed to demonstrate the cultural and environmental impacts of resource development in the legally mandated First Nation/industry consultation and accommodation framework, and now in establishing AT. Prior to AT, the only options for First Nations to gain effective management input over their traditional territory that did not require surrendering Aboriginal Rights and Title were through the consultation and
accommodation framework with the province and industry or road blockades and protests. The latter is an effective form of direct action in BC, but requires First Nation people placing their physical and legal well-being at substantial risk. The first option of consultation and accommodation only elevated First Nations to a position of stakeholders that can be ignored if the Provincial and Federal oversight bodies find the First Nation’s positions unreasonable. From the St’at’imc perspective and my own this is patently unjust, “We are not stakeholders, we are the stewards and owners,” (Chief Ida Mary, personal communication, May 2016).

The current period of official reconciliation characterized by public recognition of past injustices without adequate accommodations and allocation of resources to address their continuing impacts on First Nations are demonstrative of the tactics BC has employed to promote the status quo of continuing First Nation territorial dispossession (Coulthard, 2014). Nevertheless, despite antagonistic behavior by the settler state towards First Nations in Canada, there exist models of resistance and paths forward that point to a more promising future. This thesis seeks to investigate just one of these possibilities; that through the implementation of existing participatory methods, specifically a ‘direct-to-digital’ (DTD) interview methodology

3 Other options for First Nations to gain governance authority and remove restrictions of the Indian Act are (a) the First Nation Land Management Act that provides far reaching authority to manage the reserve lands but has resulted in a 50% reduction in operational funding and land title remains with the Crown (Alexander, 2014); (b) the Fee Simple Movement that seeks transfer of all reserve land to freehold private property to be distributed by Band Governments. Yet, the Fee Simple Movement would unnecessarily undermine the traditional communal tenure systems of many First Nations. Both of these options from the perspective of the St’at’imc Nation that underlies this thesis fundamentally compromise the responsibility model of First Nation Rights and Title discussed in both section 2.4 and section 4.1, and would result in deep cultural and institutional transformations that are contrary to goal of First Nation cultural revitalization. Further, these options only apply to reserve lands, which in BC were allocated at a significantly smaller percentage of traditional territories than in the rest of Canada. For more information see Pasternak (2015) and Harris (2011).
(Olson, Hackett, & DeRoy, 2016) and CISs, First Nations can increasingly rely upon community researchers to collect and organize oral history that meets both the Canadian legal system’s ‘laws of evidence’ and First Nation cultural revitalization goals. In doing so, First Nations can drastically reduce the cost of AT preparation while practicing and promoting Indigenous values. In this way, First Nation can use the settler state’s contradictions for their own benefit.

The choice to pursue AT can be difficult as it is a protracted and costly endeavor that can divide communities beset by pressing concerns of insufficient housing, healthcare, and even safe drinking water. Although the rationales inevitably vary for First Nations pursuing AT litigation, this decision can be broadly attributed to three characteristics of BC’s relationship with untreated First Nations: (a) the stalling, expensive, and disingenuous nature of the current BC Treaty Process (BCTP) (Coulthard, 2014; Samson, 2016), (b) the failure of many consultation processes to accommodate First Nation fundamental objections to resource development proposals, and (c) the new opportunities afforded by the clarification of Aboriginal Title in Tsilhqot’in (2014). Yet any decision to pursue AT must be made after a preliminary and sound assessment of the strength of the evidence of occupation or ‘strength of claim’ (SOC), and this requires an existing body of territorial research to base the decision on. In this light, a database of community-led participatory research can provide an accessible base to begin contemplating an AT legal strategy, while not wasting limited community resources.

Given the reasons above, First Nations in Canada are implementing digital CISs that build on previously existing community member research and past studies to protect and respectfully represent endangered TK. This is due to the developments of AT and affordable technologies discussed in this thesis, and by the settler state’s establishment of collaborative resource management regimes and their imposed duty to consult. While an analysis of
collaborative management and the duty to consult are needed to fully understand this field on a Provincial level, they are beyond the scope of this thesis. This decision is a reflection of how these opportunities have yet to materialize for the St’át’imc because they refuse to negotiate singular agreements or management plans without comprehensive compensation for past, present, and future infringements on St’át’imc Rights and Title. Therefore, a discussion of the duty to consult and collaborative management would be irrelevant to the communities involved in this research.

In the highly dynamic field of research documenting First Nation territorial use, there remains a gap in the literature concerning how LUOS and traditional use studies (TUS) impact Indigenous cultural revitalization. I seek to build on the work of critically aware TUS practitioners Rachel Olson, Jeffrey Hackett, and Steven DeRoy in their paper on the inclusion of First Nation values into TUS, *Mapping the Digital Terrain: Towards Indigenous Geographic Information and Spatial Data Quality Indicators for Indigenous Knowledge and Traditional Land-Use Data Collection* (2016). In this thesis, I explore how research innovations that prioritize First Nation ways of knowing, such as relational Indigenous spatial quality indicators and video interviews, can strengthen the complexity of representation and applicability of research commissioned for the consultation process to AT litigation preparation. Yet, I argue these methods should be implemented in long-term qualitative studies more apt than the quantitative map biography method for demonstrating the varying notions of territorial use and values held by each community. It is assumed that the productions of complex and contextualized research outputs can be more effective in upsetting essentialist notions of First Nation identity than typical LUOS datasets.
As will be explained in detail later, it is also an assumed position that is the Federal and Provincial governments insistence on maintaining western rules of evidence in disputes with First Nations and providing funding for studies that meet these requirements is a form of cultural invasion by the settler state as described by Paulo Freire (1970). The mandate for research objectivity is just one of the many forms of cultural invasion that have resulted in First Nation governance models resembling the models used by the settler state. In short, by setting the terms of communication in negotiations, the settler state is dictating the resulting reality.

With the above assumptions clarified, the establishment of AT in the Canadian context represents the furthest limit of settler state recognition politics, and consequently, can function as a test to identify the extent of settler state accommodations. It is my belief that once the limits and their impacts are documented, public awareness can be raised about the superficial nature of reconciliation discourse in the context of current BC land policies, and specific recommendations can be made. Bureaucrats and resource developers can then be propelled to alter their acceptable forms of spatial knowledge and decision making to those more amenable to First Nation conceptions of territorial value.

For this Master’s thesis, I conducted a multi-method triangulated qualitative study that focused on the possibility and applicability of CLR participatory video and mapping techniques for collection and representation of First Nation TK and oral history. This was done to address the need for long-term, critically aware research in First Nations in BC, which has been identified by academics (Bryan, 2011; Coombes, Johnson, & Howitt, 2014; McIlwraith & Cormier, 2015) and First Nations alike. I researched and sought input from AT and TK experts in unstructured interviews on two research questions that originated from a community-based research project with the St'át'imc Nation. Firstly, how do the recent legal outcomes in
Tsilhqot’in (2014) and new technologies for collecting and reproducing TK and oral history online affect the barriers to research that in turn impact access to constitutionally protected Aboriginal Rights and Title? Secondly, how do community-led participatory methodologies for collection of First Nation oral histories impact First Nation cultural and institutional revitalization and amending settler perceptions of First Nation people?

The following chapter presents the literature review for this thesis that is divided into four sections. Section 2.1 begins with a presentation of the currently accepted methods and practices available to First Nations seeking to demonstrate their use and control of their territory. Section 2.2 critically examines these methods for accessibility and the effect of the currently accepted compromises in voice and representation that are characteristic of the research paradigm. Section 2.3 summarizes developments in Aboriginal Title and the ‘Laws of Evidence’ as set out in Tsilhqot’in (2014) that directly impact First Nation research priorities in Canada by opening space for experimentation in First Nation research. The chapter will conclude with Section 2.4 concerning how emerging participatory GIS and video methods enabled by ‘Web 2.0’ and accessible digital database technology (a) further the applicability and availability of community-led research (CLR) methods to enhance First Nation Self-determination strategies (b) can produce more representative research outputs that espouse greater empathy in inter-cultural dialogue needed for First Nation self-definition.

Chapter 3 describes the methods used to investigate the research questions in this thesis. This investigation employs triangulation of two methods: participant observation and expert interviews. I will present the decisions and rationales made to gather and analyze the qualitative data and the findings from both methods. This chapter will also function to position myself in the
field and in relation to the people with whom I have interacted, and to critically examine my own assumptions and position within the theoretical framework of critical constructivism.

In Chapter 4, “The St’át’ímc Knowledge Mapping Pilot Project” (SKMP) will explain the development and motivation for this dedicated and interdisciplinary research approach. This experiential learning opportunity attempted to follow Freire’s thematic investigation (1970) allowing for dialogue required to develop the mutual understanding needed to identify the unique limiting situations and untested feasibilities of both the researcher and participants. The primary outcome of the community interactions and input from the community researcher involved in the study was the development of a concept for an open-source web application and research methodology to allow community members to preserve and organize Traditional Knowledge and voices of the community while retaining each individual contributor’s ownership of their knowledge. This process, while still requiring some technological training, can democratize the currently expert-driven field of LUOS. Further, this section functions as a practical account of how preservation of and adherence to First Nation values through documentation of community perspectives can result in greater community cohesion. Effectively resulting in greater concessions from the settler state.

Finally, Chapter 5 presents the findings from the series of expert interviews and the responses to them given by the St’át’ímc Elders in SKMP. They will be presented in four themes: (a) Aboriginal Title Preparation, (b) Methodological Innovation, (c) Cohesion and action, and (d) Resistance is revitalization.
1.1 Notes on Being a Settler Studying Self-determination.

This thesis grew out of the invitation to aid a community-initiated project to document St’át’imc Knowledge and history of two communities of the St’át’imc Nation and gained specificity during the two years of discussion that ensued (2014-2016). When I began this research, I believed that my potential contributions to the project were primarily limited to addressing the technological and logistical challenges facing the community. However, as I read, researched, and conversed, it became apparent that I must analyze the deeper unintended consequences of my philosophical foundations and how they impact the community. The shape and structure of this thesis are meant to mirror my learning process in seeking the answer that fundamental question, “what is my role in First Nation research as a settler?”.

In this reflective analysis, I will reference three terms frequently: paradigm, ontology, and epistemology. In order to minimize the tendency of social change literature to refer to buzzwords of the day that are then rendered meaningless through desensitization, it is necessary to provide concrete definitions of the terms. For this I will defer to the work of Margaret Kovach (2010):

> [P]aradigm as used within a research context includes a philosophical belief system or worldview and how that belief system or worldview influences a particular set of methods. A paradigm is both theory and practice. Ontology is a theory or set of beliefs about the world (Strega, 2005; Mertens, 2005). The term epistemology is defined as knowledge nested within the social relations of knowledge production. It has been a term used by Indigenous researchers to express Indigenous worldview or philosophy (Ermine, 1995; Meyer, 2001; Wilson, 2008)

> These terms have found much use of late in Indigenous academic circles and other non-positivist research traditions due to their utility in articulating the demand for critical self-reflection and positioning of the researcher vis-a-vis their subjects (Kovach, 2010). More
importantly, these terms point to complexities and compromises in voice and representation inherent to the qualitative research process. While compromises in voice and representation can be mitigated through the implementation of participatory methodologies, which will be discussed in section 2.4, it is the intent of this paper to explore the potential to reduce these compromises even further, by having communities perform the research themselves.

1.1.1 Self-Awareness

“The most objective assessment is one that takes the personal viewpoint fully into account.” (Douglass & Moustakas, 1985)

In my exposure to Indigenous methodologies over the course of the past three years, I have seen plenty of research papers that attempt to place the researcher into the research context. The authors of these research papers often speak to the impact of personal attributes of the researcher on their analysis and ability to act as an advocate. The considerations involved in these reflections are normally limited to status or non-status as an Indigenous community member, privilege, and gender. While I agree that these aspects are vitally important in positioning, I view the ontological and epistemological orientations of the researcher as deeper than just possessing a First Nation worldview or not. With this in mind, I will speak to my theoretical foundations and biases first and then how my positions in society as a white/settler/privileged person inform these biases. This is intended to reflect how I felt the process of gaining trust during my fieldwork was based more upon being transparent in my motivations and worldview than about my position in society. While there was an interrogatory aspect to my introduction to the community, this did not overwhelm the inherent human
interactions of love and trust that I have experienced in the research. However, this could be the privileged white male in me speaking.

Further to this point, as a non-Indigenous person, I know there is a limit to my potential contributions in this space. From the beginning of this research, I made it known within the community and in academia that I am uncomfortable with and most likely incapable of representing First Nation perspectives and Traditional Knowledge. This basic position underlies my motivation to explore the potential of CLR in a First Nation context. With this, I have only sought to elucidate the decision-making process for a First Nation to seek AT and CLR, and where appropriate deferring to experts in the field. It is also worth noting here that these limitations also include that I cannot speak to the shape of Indigenous cultural and institutional revitalization that is actively being undertaken. Nonetheless, I believe I can comment on the potential of truly representative research outputs to radically change First Nation-settler relations.

Even while I attempted to follow Indigenous methods in this research to the best of my ability, there were times that I had to come to decisions on my own. The following section is meant to elucidate my personal beliefs and how they impacted those decisions.

1.1.2 Ontological Considerations

I want to make clear how the decisions I have made in finding and investigating the research questions have inevitably been influenced by my personal beliefs and motivations. First and foremost, in this inquiry is my perspective that the cross-cultural nature of investigating the practical, legal, and ontological barriers preventing First Nation self-representation in research necessitates the thoughtful inclusion of both western and Indigenous ways of knowing into the investigation. For me, this decision to include Indigenous methodologies into my research design would be valid even if it was only based on the recognition that in scientific inquiry all
assumptions made must be continually challenged and reevaluated when alternative information is found. This realization undoubtedly includes Indigenous research methods as they question many of the basic assumptions of scientific inquiry.

However, my rationale is based more on my view that the colonial relationship between Canada and First Nations is still being perpetuated by conscious and unconscious decisions in research and government policy. Therefore, every assumption of the relationship between Settler Society and First Nations must be challenged and renegotiated, and this can only begin with a firm commitment to mutual respect, which is described in detail in the following section. This extends to myself through mandating an assessment of my personal assumptions that underlie my world view. The two main issues that need discussing are (a) my status as a newcomer to the field both intellectually and geographically and (b) my inclinations towards legalistic and technologic determinism.

Through my ongoing critical reflection, I believe one aspect has impacted my decisions to a greater degree than the others listed here and that is my position in the field as a newcomer both as a Master’s student and a United States citizen studying in Canada. Being an intellectual newcomer predisposed me to the basic human tendency towards idealism in new practitioners that just is waiting to be smashed by interactions with the ‘real’ world. This naivety has potentially damaging implications for novice researchers and the communities in which they work, especially if the researcher is placed into a position of power in the research setting. This phenomenon is examined more broadly by Tobias (2009) in his critique of political correctness and the hiring of ideologues.

On the other hand, if this idealism is based on progressive tenets of the field of study, say radical prescription to First Nation sovereignty, along with a recognition that the researcher is
still learning even after the conferral of a Master’s degree, it can produce a situation of harm reduction in a decolonizing context. By starting from a radical position and slowly renegotiating the researcher’s assumptions in the field based upon firsthand experience with real world limitations to their preconceptions and human interactions, the resulting pragmatic approach will likely not be a perpetuation of the status quo but a newly negotiated reality. In effect applying Descartes’ ‘method of doubt’ to western knowledge production. From this perspective, it is a safer position for the researcher to start from a highly critical position as perceived by experts in the field and implement a safe environment for experiential learning, than to assume the legitimacy of current conventions of research or economic paradigm. However, this must be tempered with the humility to recognize the insights of other practitioners in the field and reconcile those with the researcher’s critical perspectives.

The above process explains how being a newcomer to the field has both the positive and negative consequences on the ability to pose valid policy recommendations in this space. Compounding this situation is my position as an outsider to both Canada and the communities in which I work. While this status as an outside observer with few vested interests in the field and economic prosperity of Canada renders my critiques easier to make, it also impacts my ability to offer relevant and astute observations. This is particularly acute with my idealist position of absolute acceptance of First Nation sovereignty in Canada, and how this must be reconciled with the fact that First Nation people constitute less than 5% of the Provincial population (Statistics Canada, 2012). Such a consequence might be that there must be a recognition of Settler rights in the province. In my opinion, this negotiation should happen after the power dynamics and revenue have been shifted substantially in favor of First Nations.
In addition to the considerations above, my lack of experience in the field can very well lead me to make recommendations that are overly deterministic and simplistic, this applies to both legal and technological tools, as well as notions of community. Access to technology and legal remediation unquestionably have an effect on the First Nation Self-determination. Yet, I cannot overlook how my exposure to western conceptions of universal justice, and my upbringing in a rapidly changing technological landscape, do not compel me to some measure of legalistic and technological determinism. I have also noted this predisposition in the Canadians I have interacted, especially in their assumption of inevitable reconciliation. I have attempted to account for these novice tendencies by undertaking expert interviews. This, however, is not a panacea for the potential bias of these ontological positions. Active consideration of these potential biases must be present at all stages of research and in fact in their entire career.

The last specific issue is my privilege. My unique 2-year unrestricted research fellowship and additional family support have allowed me to undertake a longer research and relationship building process than what is typically allowed in the current academic funding model. This model is focused on immediate results and impact and requires robust research proposals outlining the tangible goals of the study. This would have been impossible for this study. Therefore, I have come to the preliminary conclusion that while CBR methodologies, and for that matter Indigenous research, can produce research questions and outcomes both relevant and beneficial to First Nation communities, it is most likely incapable of having success on a large scale. Especially, if it is investigating a solution for the complex reconciliation of government, industry, and First Nation interests based solely on the time required.

All of these issues can broadly be attributed to my position as a settler in this space. I could say much more here, but I have limited my personal inquiries in this thesis to the above
issues as I feel they have had the largest impact on my analysis. What follows is an accounting of the commonly held tenets of Indigenous Research Methods, and how I sought to abide by them.

1.1.3 4 R’s of Indigenous Research

Attempting to decipher this rich code and to represent it adequately requires that the researcher becomes an advocate of the Indigenous knowledge system and at the very least incorporates the ‘Indigenous voice’ in their work. (Pualani, 2007, p. 134)

This thesis and the insights in it are based on my time working with the St’át’imc communities of Ts’al’alh and Xwisten in South Central BC. The work primarily revolved around documenting and organizing St’át’imc knowledge in regards to trails and other forms of knowledge that can be interpreted as ‘evidence of occupation’, one aspect of the test required in land title applications made to the government of BC. From the beginning, this project has sought to follow the principles of Indigenous research methodologies by having the community involved at all stages of the research planning, execution, and review. The involvement of the community can more specifically be defined as the participation and approval for each step of the process by community appointed leadership and a Community Research Advisory Committee (CRAC), and meaningful inclusion of the community co-researcher. However, this is not enough, if the research is to be both critically aware and relevant.

The basis of Indigenous research can succinctly be demonstrated through adherence to the four R’s — respect, relevance, reciprocity, and responsibility (Kirkness & Barnhardt, 1991). These requirements have been present in the decisions that underlie this project.

In order to build the relationships that are necessary, not just for the chosen research methods of this thesis, but for the creation of meaningful friendships and resulting trust, it was crucial that I conducted myself in a respectful manner towards those I worked with. I attempted
to achieve this through a critical exploration of the assumed values of research in the field. In doing so I made a cognizant decision to not blindly assume the superiority of the methods of academic research at the cost of undervaluing those conceptions of truth used in the community. While appearing as a great endeavor, this merely entailed discussing the research methods available to the community, not as an expert that discredits other non-academic perspectives, but as offering it as an option with either no value judgment aired or even a critical presentation of it. In this process, we discussed the underlying assumptions of each research decision and tried to build our own vision of potential projects. From my perspective, this demonstrates the respect necessary to undertake Indigenous research. Further instances are demonstrated throughout the thesis.

The relevance and reciprocity of this research were slightly harder to fulfill. From my interaction with researchers in the field, community leaders, and the Elders, relevance seems to be understood as placing more focus on the immediate outcomes of the research, and not necessarily on structural critiques of the system. While I personally see the value and need for immediately applicable research, I also see the need for long-term strategic planning that requires contextual and critical research. I managed to grapple with this quandary through discussion with my supervisor and CRAC. This process established a means to provide both immediate benefits of increased representation of the communities’ ties to the land and outputs for long-term planning purposes. By separating my field work outputs of the SKMP and my thesis, I have justified my role in the community by producing the agreed upon SKMP outputs, while also allowing me time to investigate the necessities of research in the community (See Appendix C).

Of central importance to research methodologies in a decolonizing context, is the importance of the direct reciprocity or benefit to the community (Denzin & Lincoln, 2008;
Smith, 1999). The most direct ways this project was beneficial to the community were the expected SKMP research outputs of community maps and associated databases as well as the education and empowerment that they can be utilized for. Less tangibly, the training of the community researcher in research methodologies and technical skills has the possibility to provide continual and multiplying benefits for the community. Moreover, the community cohesion that has been built in the Elder Working Group is already being utilized for other community studies. While not primarily an outcome of this study, this cohesion reduces the mobilization costs of future research projects.

The last fundamental realization based on the four R’s of Indigenous research is the necessary responsibility to protect the intellectual property of the Nation and First Nation people that have contributed to both my research and SKMP. In order to ensure proper intellectual property protections, the researcher and both communities entered into a comprehensive research agreement and data-sharing protocol that is based on Ownership, Control, Access, and Possession (OCAP) principles (Assembly of First Nations, 2007). This is a core issue to the framework guiding this research and should not be taken lightly.
Chapter 2: Literature Review

2.1 Current Research Paradigm

Beginning with the Inuit Land Use and Occupancy Project in 1973, quantitative Land Use and Occupancy Studies have become the predominant means of representing First Nation interests in (a) resource development consultations with extractive industries seeking to satisfy their duty to consult and (b) treaty negotiations concerning their traditional territory and rights (Freeman, 2011; McIlwraith & Cormier, 2015; Tobias, 2009; Wyatt et al., 2010, p. 9). These studies are widely respected and utilized by academia, industry, and First Nation communities, and when presented in conjunction with qualitative TK Studies, supporting archaeological surveys, and historical document reviews can corroborate a valid legal argument for recognition of Aboriginal Rights (Brealey, 2015; Weir, 2016). The principal utility of LUOS lies in its ability to document First Nations’ use of their territory and assert their pre-existing rights geographically in a format familiar to government and industry. LUOS, therefore, opens up a space for First Nation presence and collaboration in natural resource and environmental planning, albeit within the framework of Canadian colonial law (Wyatt et al., 2010, p. 9; Sparks, 1998).

One popular and influential LUOS methodology put forth by the foremost expert in the field, Terry Tobias, in his data collection guide Living Proof, The Essential Data-Collection Guide for Indigenous Use-and-Occupancy Map Surveys (2009) has become heavily relied on by First Nation communities in BC. The methodology, based on the ILUOP, employs a combination of community member map biographies of territorial use and associated primary document review. The primary focus of this methodology is to produce high-quality quantitative outputs capable of withstanding intense scrutiny from questioning or even hostile interests. This
methodology and others based on it are founded on the proposition that cultural research must respect the fundamental, positivist principles of scientific inquiry to be useful in furthering the goals of First Nations. Tobias has stated that by sticking to impartial and objective scientific methods, researchers and project managers can circumvent many issues of conducting First Nation research in a highly political and socially consequential area.

This last point of the highly impactful nature of First Nation research recognized by Tobias and others is foundational for this thesis. The primary intentions behind First Nation research are inherently political and markedly different from standard academic research seeking to further human knowledge. There is now the possibility of well-executed and documented First Nation research to leverage new Canadian legal processes, protections, and governmental commitments to increase First Nation access and control of their institutions and territory. The traditional map biography method and the new innovations spoke to in this thesis provide much-needed tools for empowerment of First Nations within the framework of Canadian colonial law. The most notable and promising examples of utilization of these opportunities are found in *Tsilhqot'in (2014)* and the collaborative management regime found in the Great Bear Rainforest Agreements (2016). Further, the new commitments by both the Federal and Provincial governments under the United Nation’s Declaration on the Rights of Indigenous People (UNDRIP) and various other reconciliation documents lend credence to this positive outlook. These new concessions can and are aiding in the resurgence of First Nation traditions and modes of governance in the overall hopes of improving the lived experiences of their members.

However, the new tone and posture of Provincial and Federal Government of Canada must be viewed with skepticism, as the relationship remains highly adversarial, even though government officials proffer rhetoric favoring reconciliation. On this point, Coulthard (2014 p.
14) asserts, “colonial relations of power are no longer reproduced primarily through overtly coercive means, but rather through the asymmetrical exchange of mediated forms of state recognition and accommodation,” hereafter referenced as ‘politics of recognition.’ This asymmetrical exchange can be witnessed in the failure of many First Nation governments to afford the lengthy research process required to prove Aboriginal Rights and Title, and even if AT is successfully recognized it is still subjected to infringement by the Province. Such infringements point to the fundamental difference between Canada’s term of Self-governance and First Nation’s definition of Self-determination. Self-governance does not challenge Canada’s claim of sovereignty over First Nations within its borders, and, ultimately, allows such infringements of First Nation governmental authority. This is fundamentally incongruent to First Nations notions of Self-determination, especially those that have not signed treaties but still applies to those that have. 4

This lack of funding is likely an outcome of the observed motivation of Provincial leadership to reduce fiduciary responsibility in Provincial land management by devolving management responsibilities to municipality and band governments. This movement aligns with forms of recognition offered to First Nations as “most involve the delegation of land, capital and political power from the state to Indigenous communities through land claims, economic development initiatives, and self-government processes” (Coulthard, 2007, p. 438). A related shortcoming has been repeatedly demonstrated amid these concessions. The Provincial and

4 For further reading on First Nation Self-governance vs. Self-determination in Canada, see John Burrows Freedom and Indigenous Constitutionalism (2016).
Federal fiduciary responsibilities are lessened, while the burdens on local institutions are increased. Even though this devolution has improved resource management responsiveness and revenue potentials for rural communities (Prince & Abele, 2003), this is problematic in a First Nation context because the history of First Nation/Canada relations has been one of dispossession, both financial and cultural. Meaningful reconciliation requires compensation for First Nations in both veins of dispossession in order for justice to be achieved. In short, reconciliation cannot be solely a fabrication for financial gain by the settler state.

While Funding continues to be allocated for this research by organizations such as EcoTrust Canada and Ministry of Forests for research. If the accessibility of such legal mechanisms remains distant for most First Nations or if the significance of AT continues to go unrecognized, then these new postures equate to continued colonization and disrespect for First Nation sovereignty. Although necessary, this funding typically favors studies that are useful in economic/resource development, i.e. LUOSs. This prioritization of economic development over First Nation interests is most aptly demonstrated by BC’s continued construction of Site C dam in Treaty 8 Territory and the New Prosperity Mine in claimed Tsilhqot’in Territory in the face of unanimous Tsilhqot’in opposition. This directly ignores the opinion of the SCC in *Tsilhqot’in (2014)*, that companies seeking to attain operational certainty should gain consent even in areas where AT is claimed but not yet adjudicated.

Nevertheless, through a forceful assertion of their constitutionally protected rights in AT litigation First Nations can overcome BC’s intransigence, and enter into a truly new relationship of greater bargaining power than on offer by the current BCTP. This is possible because TK and land use mapping, in addition to historical research, can meet the test for exclusive, sufficient, and continuous occupation. In elevating the presence of AT from a unique site-specific
phenomenon to a nation-wide issue, the settler state will no longer be able to ignore the ‘Indian land question’. Widespread AT would effectively raise the financial liabilities of inaction by the BC government by requiring them to compensate already permitted natural resource concession holders in areas to which they no longer possess title. Therefore, meaningful steps can be taken towards redressing the impacts of Canada’s paternalistic assimilation policies and the systemic disposition of First Nation territory. For most researchers in the field, this potential of rights-based strategies places increased urgency and importance on any First Nation research project undertaken.

Yet, poorly executed research can undermine First Nation ambitions for Self-determination. Of central importance to the ability of a First Nation community to undertake research projects is the prerequisite motivation among the community members and leadership to undertake research. Even though my experience demonstrates a strong desire to perform research among the members of the communities with whom I worked, this exists in spite of centuries of research malpractice by academics. When research is performed that is neither beneficial or relevant to the communities participating, the communities limited resources are wasted. These not-so-distant negative encounters with research have led many First Nation peoples, to rightfully view such projects, and the researchers undertaking them, with skepticism. Moreover, many First Nation people view scientific research as part of settler state colonization that is dialectically opposed to First Nation ways of knowing (Tobias, 2009).

Subsequently, the production of research outputs that are neither beneficial nor relevant to the community, can reinforce the pre-existing antagonisms towards academia in First Nation communities. This phenomenon is broadly referred to as ‘research exhaustion’ or in the common sentiment of First Nation people feeling ‘researched to death.’ This damages the ‘research ethic’
within communities and makes the meaningful participation of community members less likely, which while understandable, undermines First Nation ambitions.

More recently, Indigenous academics and leaders have departed from this absolutist position to restructure research within these communities. A primary goal of this realignment is to make research outputs correspond with First Nation perspectives and promote Indigenous self-definition. The primary utility is oppositional to the continuing colonial processes that seek to impose ‘acceptable’ forms of indigeneity. Historically, this reductionist view can be witnessed in the tendency of early British anthropologists and explorers in the 19th century to “codify, quantify and tabulate flora, fauna and peoples” which functioned to distance modernity from the practices of First Nation peoples (Stewart-Harawira, 2013, p. 40). More recently this tendency has evolved into paternalistic protections as seen in continuing Aboriginal Title limitations of acceptable use of a resource to those that preserve of said resource for future generation (Tsilhqot’in, 2014). While territorial preservation and respect for future generations are traditional values held by many First Nation people, this should not be mandated by the settler state and is a limitation on First Nation sovereignty.

Adding to the immense challenges described above are the vast difficulties involved in undertaking research in First Nation communities. While seemingly innumerable, the primary practical issues within these communities are reduced technological and institutional capacity, funding for research, requisite research oversight by the community, ownership over data, the physical distance between the researcher and the community, and many others (Coombes, Gombay, Johnson, & Shaw, 2011). Also according to Tobias (2009), the trend in academia to romanticize the community as ‘always right’ can place political correctness over practicality.
This often derails projects and can hinder the usefulness of studies to represent First Nation interest in negotiations and litigation (Tobias, 2009).

Furthermore, due to the many unknown potential uses of the data produced when the LUOS is commissioned, it has become commonly accepted that any research methodology must meet the positivist laws of evidence as outlined under Tsilhqot’ín (2014), even in cases where litigation is unlikely (Olson, Hackett, & DeRoy, 2016; Wyatt et al., 2010, p. 44). To achieve this level of data integrity, a strict research methodology that can be defended in cross-examination during litigation must be followed. The defense of research findings often requires the study’s lead investigator to take the stand in court proceedings to defend methodological decisions and the conclusions reached (Brealey, 2015; Olson et al., 2016).

According to Tobias, these demands require experienced practitioners well versed in balancing community interests while maintaining scientific validity to lead the study, and such trained professionals are seldom found within the community. This has resulted in multiple publications, resources, and training seminars aimed at training community members in authoritative methodologies. Yet, given the immense difficulties in facilitation and logistics for a LUOS to take place, a systemic reliance on experienced outside consultants and academic researchers to produce, represent, and defend the research findings has developed (D. Mildon, personal communication, December 6, 2016; Natcher, 2001).

While the appropriateness of such research is debatable for cultural revitalization, quantitative LUOSs have provided concrete benefits for numerous First Nation communities throughout Canada.
2.2 Critiques of Current Practices

The successes of this expert-driven LUOS strategy are well documented\(^5\), but less known are the costs associated with its implementation. The current research on the topic of the First Nation historical and geographical research invites two broad areas of critiques. First are the practical limitations of land use studies, mainly arising from the financial constraints of First Nation governments and the limited utility value of the studies in AT litigation and cultural preservation. Significantly, these positions are recognized by Tobias and other practitioners (Tobias, 2009, McIlwraith & Cormier, 2015; Coombes, Johnson, & Howitt, 2014; Natcher, 2001). Second, and no less important, are the ontological and representation issues surrounding how LUOSs risk misrepresenting and appropriating Indigenous knowledge (McIlwraith & Cormier, 2015). The former issue of misrepresentation gives rise to one of the central arguments of this thesis: the need to implement community-led methodologies whenever gathering data from First Nation communities to ensure more accurate depictions of modern First Nation perspectives.

The following sections detail critiques of the practical and ontological limitations of the current research paradigm. In response to such criticism, the literature has identified a need for longer-term qualitative studies that provide a platform for the voices of the community to be heard (McIlwraith & Cormier, 2015; Coombes, Johnson, & Howitt, 2014). Nevertheless, the

\(^5\) In Living Proof (2009), Tobias presents a case study of the Tsleil-Waututh Land Use and Occupancy Project (1998). The project was successful in building and cataloging ethnographic research and creating new research and professional capacity in the Nation. This example has been widely cited in First Nation research literature. For further reading refer to Gina Dawn Richard’s “Radical Cartographies: Relational epistemologies and principles for successful Indigenous cartographic praxis” (2015).
needs of research for First Nations are diverse ranging from language and cultural preservation to engagement and inclusion of First Nation perspectives in regional planning and negotiations. LUOS remains a viable means of achieving these ends. The method’s track record over forty years provides a measure of confidence to First Nations who feel that they cannot afford to gamble on experimental approaches to imminent crises. Therefore, this section is meant not to refute the current research paradigm but to highlight the need to investigate supporting research methods owing to new developments and opportunities now available to First Nations. The developments discussed are limited to the recent legal accommodations to First Nation oral history in Canada and the expansion of participatory research methodologies aided by accessible technologies. These will be discussed in sections 2.3 and 2.4 respectively.

2.2.1 Practical Considerations

I will begin the critique of the current research paradigm with the practical issues that may be understood more readily by those with less grounding in Indigenous cultural and institutional revitalization. These factors should be enough to function as a catalyst for the re-examination of the research methodologies on offer to First Nations. The primary issues that inform this section are (a) the financial burdens of undertaking research for First Nation communities, and (b) the concerns raised that are inherent in third-party funded research. These issues all point directly to a need to alter the current research paradigm.

Tobias (2009, p. 34) estimates that the money and resources spent on LUOS in North America could be as high as CAD 1 billion. Further to this point, Natcher (2001) explains “...few [First Nations] are in the position to internalize the costs of conducting land use research. Among the costs are salaries and travel expenses for a research staff, bursaries for community interviews,
mapping supplies, and appropriate mapping technologies (i.e., GIS and GPS software, equipment, and training), and the associated costs of workshops and community validation meetings” (2001, p. 117).

This economic reality, in which the budget constraints of many First Nation governments limit their access to LUOS, results in disproportionate representation being available to those First Nations that either have dedicated research budgets or those relying on industrial proponent or government funding (Natcher, 2001). The lack of independent funding for research is a considerable source of frustration for First Nation communities who are aware of their potential legal protections on their territory but do not possess the means to collect evidence to achieve these protections. Community members often view this as another form of disempowerment by the settler state (Natcher, 2001).

In most cases, the sources of project proponent or government funding flow from growing mandates associated with the duty to consult with First Nations established over the past three decades beginning with R. v. Sparrow (S.C.C., 1990). This body of case law is continually being refined, but generally, requires proponents of projects that may negatively impact First Nations lands to adequately consult with communities impacted proportionately to the strength of their claim to Aboriginal Rights and Title. This requirement has resulted in a process of informing communities of development proposals known as ‘referrals’ (which faces multiple critiques outside the scope of this thesis). More recently, in order to satisfy their duty to consult, industry has begun to fund land use research to determine the extent of Aboriginal Rights and Title in areas that will be impacted. This will be referred to as ‘proponent funded research’.

To highlight the importance of funding in this critique, First Nation governments are the largest in the world when measured by per capita spending (Graham, 2015). The responsibilities
allocated to First Nation governments under the current Canadian governance scheme render First Nation governments the sole provider for the majority of services otherwise provided by municipal, Provincial and Federal governments, including healthcare, education, social services, resource management, and policing, among many others (Graham, 2010).

The financial obstacles of First Nations are exacerbated by the limited potential revenue opportunities afforded First Nation governments. These streams of revenue are generally limited to Canadian government funding, potential legal settlements, revenue-sharing agreements with government and industry, and First Nation-run businesses such as ecotourism and resource development operations. The most notable exclusions are the inabilitys of First Nations to leverage taxes on band members and privatize reserve land. The latter equates to the inability to utilize reserve land as loan collateral for the financing of First Nation government projects (Curry, Donker, & Krehbiel, 2014; Flanagan, 2016; Pasternak, 2015). With the responsibilities of First Nation governments highlighted here, the necessity of not wasting resources on research that results in little or no benefits to the Nation becomes clear.

In this light, proponent and government-funded research have provided increased access to research. Yet, this model creates additional issues for First Nations. First and foremost is its impact on intellectual property (IP) that such funding agreements carry. While not always the case, it is common that the proponent funded research compromises the principles of Ownership, Control, Access, and Possession (OCAP) of the First Nation Information Governance Centre (2014), by either stipulating future industry or governmental use and/or storage of the data (Natcher, 2001). This phenomenon is largely due to lack of First Nation resources to manage data by themselves and can be remedied through capacity building or comprehensive data sharing protocols with the parties storing the data.
There have been positive movements by industry to respect these IP concerns, as the funding and research agreements are normally drafted by the First Nation themselves. However, First Nations have not generally made use of the legal protections available to TK under the United Nations World Intellectual Property Organization (WIPO), and enforcing data-sharing protocols can be difficult and costly for First Nation governments (ibid.). Consequently, ensuring that the data gathered during research remains in First Nation control and does not enter into the public domain is the only affordable and reliable protection.

With the two primary practical issues of the current research paradigm discussed above, the issues of representation associated with the reliance on site-specific LUOS studies and costly consultants will be presented next.

2.2.2 Ontological Considerations

As important as the practical considerations are to this thesis, equally so are the ontological and representation critiques that more directly impact the two fronts of Indigenous Self-determination: (a) the outside process of unsettling the settler state or more commonly decolonization and (b) the internal attempt to create or recreate alternative governance and resource management regimens based on traditional First Nation practices to restore and regenerate Indigenous nationhood, known as Indigenous Resurgence (Alfred, 2005; Coulthard, 2014; Simpson, 2011; Snelgrove, Dhamoon, & Corntassel, 2014).

As a settler that has witnessed and studied current works of cultural and institutional revitalization in First Nation communities, I recognize the interrelated and co-dependent nature of the two processes. However, my position as an outsider that has benefited from colonization necessitates that my comments on Indigenous cultural and institutional revitalization be limited
to recognizing its significance and in identifying the role it can play in furthering the decolonization of First Nation spaces, not in dictating its form.

The primary critiques of the current research paradigm in this body of work revolve around the perceived tendency of LUOSs to overly simplify a First Nation’s connection with the land, and how this greatly impacts the representation of First Nation society. Arguments in the literature on the topic of LUOS posit that these quantitative research techniques and its static outputs separate traditional knowledge from the knowledge keepers (McIlwraith & Cormier, 2015; Coombes, Johnson, & Howitt, 2014; Natcher, 2001), promote the legally refuted “postage stamp” conception of Aboriginal Title, increase reliance on non-First Nation professionals (Natcher & Davis, 2007), and are used by industry to satisfy consultation requirements without directly consulting the community members (McIlwraith & Cormier, 2015). All of these issues are fundamental to this research. While the current methods meet the immediate needs of First Nation governments for protecting or benefiting from their territory, the ambitions of First Nations and official guidelines in the TRC’s Calls to Action demand First Nation perspectives and institutions be respected and incorporated to ensure understanding in the courts and negotiations with their colonialist equivalents explicitly stated in recommendation 45, section I and IV (Truth and Reconciliation Commission, 2015). The most striking commitment made to date is not limited to the TRC, but the document on which it is based, UNDRIP. Yet, inaction remains at the Provincial and Federal Government, even as the current Liberal party controlled Federal government of Canada has recently issued its progressive Principles respecting the Government of Canada's relationship with Indigenous peoples (Department of Justice, 2017) and promised to implement both UNDRIP and the TRC’s Calls to Action.
In McIlwraith and Cormier’s paper ‘Making Place for Space: Land Use and Occupancy Studies, Counter-Mapping, and the Supreme Court of Canada's Tsilhqot'in Decision’ (2015), a valid argument is made based on the extensive firsthand experience of both authors’ complementary roles — the first as an academic dealing in critical reflection on traditional use studies and the second, a Title & Rights Director for a First Nation in BC focusing on community action. This combination of perspectives is particularly relevant to Freire’s praxis of critical reflection and action, which forms the basis of this paper (Freire, 1970). The primary conclusion is that the current LUOS site-specific methodology and outputs fail to reflect the complex connection of First Nations to their territory. The reducing of complex interactions and stories to points and polygons on a map, the authors note, effectively renders the space in between these points as areas available to be developed in the eyes of developers and government (McIlwraith & Cormier, 2015).

Broadly, the critiques of McIlwraith and Cormier are demonstrative of a recent shift by Indigenous and non-Indigenous academics and leaders to build constructively on the absolutist position against research as colonial practice in order to restructure research for the benefit of these communities. A primary goal of this realignment is to make research outputs correspond with First Nation perspectives and promote Indigenous self-definition. Self-definition is useful in addressing the continuing colonial processes that seek to impose ‘acceptable’ forms of indigeneity still present in most First Nation / settler state interactions.

The failure of the LUOS outputs to adequately represent the intricacies specific to individual First Nations is more salient given the findings by Natcher and Davis (2007) that the current models of devolution of Provincial and Federal resource management responsibilities to First Nation governments often result in the continuation of settler state policies and practices.
The entrenchment of these policies reduces the ability of First Nations to implement new forms of management that are more representative of their values and traditions. A primary reason cited for this phenomenon is the lack of resource management capacity within First Nation communities that necessitates the hiring of non-First Nation employees that have experience with the state system (Natcher & Davis, 2007). While unintentional, these employees spread their ontological and epistemological constructions based upon their past experiences with Canadian resource management practices within the community.

Further yet, even First Nation leaders can be influenced by the enmeshing of their institutions into larger processes that require “deadlines, project objectives, and program administrations” into adopting the top-down methods of the state they are trying to rid themselves of (Natcher & Davis, 2007; Shuurman, 2001). These methods of the settler state are referred to by Freire (1970) as ‘tools of the oppressor’. These findings point to how the same mechanisms by which government bodies and industry pervert the meaning of knowledge underlying LUOSs may also be employed by First Nation governments due to limited capacity. These observations highlight how the lack of resources available to First Nations can impact their ability to utilize seemingly benevolent concessions by the settler state. Therefore, the need becomes clear for any research project to be critically aware of the unintended impacts associated with their methods and outputs, even if it promises immediate and tangible benefits.

Although these arguments do identify the weaknesses of LUOS to holistically represent First Nations’ varying notions of place and unintentionally promote the utilization of tools of the oppressor within First Nation institutions, they neglect the realistic expectation that Federal, Provincial and First Nation government officials, resource developers, and engineers are more likely to utilize these site-specific formats. Therefore, LUOSs in effect result in greater
representation of First Nation perspectives in planning than research outputs more amenable to First Nation knowledge systems. Yet, given the power dynamics between these parties, it is more appropriate that the government, who is dictating terms, accommodate the needs of the First Nations who are impacted, and less able to defend their interests. Especially so if the recent rhetoric of meaningful and respectful reconciliation is to be believed.

For some, it would be easy to dismiss these ontological criticisms as unrealistic and patronizing, as First Nations must be allowed to pursue their own trajectory, even if that is towards neo-liberalization of their institutions. On the other hand, this path should be a conscious decision made by the community as a whole, and not the result of unintentional decisions that cause deep and lasting societal transformations. It would be academically reckless here to disregard the immense difficulties that I, the communities, and their leadership with whom I collaborated with have had to overcome in the advancements of First Nation objectives to date. Therefore, it is essential to state that the intent of this thesis is to demonstrate the current accommodations by Canada and the provinces do not empower First Nations to the extent that their rhetoric of reconciliation suggests. Therefore, the largest shift needs to be in the limits of the settler state’s accommodation of First Nation perspectives, in addition to respecting First Nations constitutionally protected rights to Self-determination.

For Linda Smith (1999), speaking about the Maori context in New Zealand, this mandate for inclusion of First Nation voices and perspectives is absolutely necessary for the restoration of Maori institutions. Additionally, she adds this can only be achieved through the creation of space
for Kaupapa Maori or in the global context, Indigenist research and education. 6 This model of Indigenous research can be roughly defined as the active negotiation of “...priorities, policies, and practices...” by those impacted by the research or more succinctly on Indigenous terms.

Central to the attainment of Indigenist research are Smith’s (1999, p. 297) primary steps for the creation of this space. These are specifically applied to the case of the Maori but are even more appropriate for Canada’s context because the rights and representation afforded First Nations in Canada are significantly less than those found in New Zealand.

…[F]irst, some space [is needed] to convince Maori people of the value of research for Maori; second, to convince the various, fragmented but powerful research communities of the need for greater Maori involvement in research; and third, to develop approaches and ways of carrying out research that take into account, without being limited by, the legacies of previous research, and the parameters of both previous and current approaches” (ibid).

While the first two steps are far from complete in BC, I have witnessed signs that they have been achieved to a degree. The first challenge has been met based on my fieldwork with the St‘át‘imc where a desire for research within the communities was repeatedly demonstrated. For the second challenge, the growing acceptance of Indigenous methodologies and partnerships with First Nations in the large Canadian universities is an encouraging sign, but this needs to be critically examined further to ensure they are meaningful. This leaves the exploration of Indigenist research alternatives at the forefront of First Nation priorities according to Smith (1999).

6 Indigenist research is different and more expansive than Indigenous research. Indigenist research is research that is conceived, executed, and represented by Indigenous peoples.
2.2.3 Summary

In these two sections, I have laid out an argument combining both ontological and practical concerns of the inadequacies of the current models of research available to First Nations. This was done in order to identify the ‘legacies and parameters’ of the previous research paradigm spoken to by Smith (1999). Further, I have begun to demonstrate the need for more time and resources to be allocated toward longer-term qualitative research methodologies that better reflect the varying notions of identity, territory, and occupation that First Nations in BC possess (McIlwraith & Cormier, 2015; Ray, 2015; Weir, 2016). This will be expanded upon in section 2.4, Is Participation Enough.

Again it is important to reiterate that this review is not meant to negate the current work being undertaken with good intentions and outcomes in a very difficult environment, but merely to highlight the vast importance and troubled history of the work. I will now turn to the new legal mechanisms available to First Nations seeking to carry out Indigenist research and assert their State-recognized rights. Through forceful assertion of their rights, First Nations can begin to compel the settler state to alter the unjust relationship with First Nations in order to realize the necessity First Nation-led research to restore balance and respect for knowledge creation in our pluralistic society.

2.3 Reasons for Optimism in Rights-Based Strategies

Starting in the 1970’s with Calder, Canada has been slowly defining the legal procedures for inclusion of Aboriginal Rights, Title, and perspectives into the courtroom. This willingness has provided First Nations a greater opportunity to further their aims of Self-determination than previously afforded by the state-sponsored land claims process (Samson, 2016). More recently,
the 2014 Supreme Court of Canada’s decision in *Tsilhqot’in (2014)* upholding of the Provincial ruling of Justice Vickers’ in *Tsilhqot’in v. British Columbia* (2007; hereafter *Tsilhqot’in (2007)*), specifically the test for Aboriginal Title and inclusion of First Nation oral history, has created new space for First Nation-led or Indigenist research.

There are valid critiques regarding the appropriateness of undertaking social dialogue in the contentious environment of the courtroom, but they are beyond the scope of this paper and current reality due to the present unwillingness of BC to amend the structure of negotiations to the guidelines recently proposed by the Federal Justice Department (Justice, 2017). The unwillingness of the Province to meaningfully reform the relationship from Coulthard’s (2014, p. 14) “asymmetrical exchange of mediated forms of state recognition and accommodation” or recognition politics to that of full legal and societal acceptance and promotion of Indigenous Self-determination is presently disheartening. However, the Supreme Court of Canada’s recommendation to move towards consent to eliminate future liabilities for AT infringement provides optimism for the future. The continued intransigence by both the Federal and Provincial Governments demonstrates the need for forceful renegotiation of the power of dynamics between the Crown and First Nations. For now, using the legal system by defending rights guaranteed by the Canadian Constitution and Federal commitments may be the only effective means to increase bargaining power and public presence to continually pressure the settler state to reevaluate the legitimacy of current land policies. This legal strategy has been labeled as the rights-based approach by Indigenous political theorists (Corntassel, 2012). Further, the compensation earned through enforcement of Aboriginal Rights, such as Benefit Sharing Agreements (BSA) with logging and mining operations that share a small portion of total
revenue, can be used to address the immediate needs of First Nation members to fund research and cultural programming.

There are well-reasoned critiques of a rights-based strategy to achieving First Nation Self-determination. Namely, it can only provide utility for First Nations up to a point. According to Corntassel (2012), this rights-based approach runs in direct opposition to the responsibility ethics that underlie most traditional First Nation governance models. Commonly, it is critiqued that rights-based strategies privilege individual and not communal rights due to their being part of a property regime that favors free-hold conceptions of individual private property. On this point, Corntassel (2012, p. 152) states, “…the rights discourse compartmentalizes Indigenous Self-determination by separating questions of governance and community well-being from homelands and relationships to the natural world.” Self-governance should only be “one of several layers of Indigenous self-determining authority” (p. 153). If all focus is placed upon the assertion of rights and not adhering to their cultural practices, these movements “… risk mimicking state functions rather than honoring their own sustainable, spiritual relationships with their homelands” This argument when viewed in the limiting context of Coulthard’s recognition politics, demonstrates the need for simultaneous focus on the revitalization of Indigenous culture by living cultural practices while pursuing research aimed at external audiences.

With the above considerations, I will now present new developments in Canada’s recognition politics that, while not perfect, provide more room for Indigenous cultural and institutional revitalization.
2.3.1 Acceptance of First Nation Oral History

Although the process has been far from linear, the legal system in Canada has been moving towards recognition of the evidentiary validity of First Nation oral history over the past two decades starting with R. v. Van der Peet (1996) and Delgamuukw. These cases set the expectation that courts must adapt the laws of evidence for Aboriginal land claim and title adjudication. The rationale put forth by Canadian Supreme Court Chief Justice Antonio Lamer in Delgamuukw was “given that most Aboriginal societies “did not keep written records,” the failure to do so would “impose an impossible burden of proof” on aboriginal peoples, and “render nugatory” any rights that they have….” (cited in Miller, 2011, p. 3).

These cases and subsequent ones pressed the argument that if the Crown seeks to faithfully adhere to section 35(1) of the Canadian Constitution of 1982, especially in an official period of reconciliation, then altering the underlying Eurocentric assumptions of the laws of evidence to account for the difficulties faced by First Nation Communities is required. Although many cases addressed this mandate directly, no formal process was established and the implementation was left to the discretion of the presiding judges on a case by case basis (Miller, 2011; Weir, 2016). This remained the standard practice until Tsilhqot’in (2014) and resulted in the limited applicability of oral history in Aboriginal Title preparation for First Nations. However, this approach changed after upholding Justice Vickers’ opinion in Tsilhqot’in (2014).

Justice Vickers’ decision to alter the test for oral history in Tsilhqot’in (2007) was largely based upon the work of Jan Vansima’s, Oral Tradition as History (1985). Vansima sought to apply the same validity tests for written records broadly referred to as ‘Scientific History,’ or ‘rules for evidence’ to oral history and tradition (Weir, 2016). However, in Tsilhqot’in (2007), Vickers went further, rejecting Vansima’s requirement for historical evidence to have the
corroboration of additional “writings, archeology, linguistic or even ethnographic evidence, etc.” (cited in Weir, 2016, pg. 171). Instead, he chose to rely upon extensive genealogical records and cross-examination of informants to determine the reliability of oral history testimony offered in defense of the Tsilhqot’in land claim.

While still obiter dicta or non-precedent setting, this test effectively challenged the uncritical acceptance of European evidentiary procedure in Canadian Courts and ultimately has led to the increasingly important role of oral history testimony in proving Aboriginal Title claims (Smith, 2008, p. 4). Due to this seemingly minor aspect of *Tsilhqot’in* (2007), the accepted practices of First Nation historical research should be reexamined to ensure the most effective methods are being employed to maximize accessibility of research to take advantage of the increasingly favorable political climate in Canada towards Indigenous Self-determination.

The optimism above should always be tempered. According to Weir (2016), while Justice Vickers succeeded in giving equal weight to oral history and rejecting the usual prima facie priority afforded written accounts (*Tsilhqot’in*, 2007, p. 176), he did so by separating oral history from oral tradition. Although it is difficult to completely differentiate oral history from tradition, Vansima was again utilized in forming Vickers’ opinion. Vansima (1985, p. 12-13) argued oral histories are “reminiscences, hearsay, or eyewitness accounts about events and situations which are contemporary, that is, which occurred during the lifetime of the informants, but oral traditions are no longer contemporary. They have passed from mouth to mouth, for a period beyond the lifetime of the informants” (pp. 12 - 13). This represents a major limitation to oral history evidence, as it can only concern happenings during the lifetime of the witness, or in cases where the origin of the knowledge can be attributed to a deceased Elder that can pass the test for direct testimony.
Ultimately, Vickers extended the same tests for oral history to oral tradition. This represents continuing failure to reconcile both legal orders by maintaining the “us/them literate/oral binary” and relegating oral tradition to mere “myths” and “legends” (Tsilhqot’in, 2007, p. 178). This remains a major barrier for First Nations with less evidence of occupation available due to increased settler impact or disintegration of community knowledge protocols. Therefore, the disregard for oral tradition must still be addressed by the judiciary if their commitment to section 35(1) Canadian Constitution is to be credible.

2.3.2 Impacts of Aboriginal Title

In light of the continued intransigence of the BC government, it is logical to surmise that the awarding of AT in Tsilhqot’in (2014) should be viewed with skepticism. This is primarily due to three factors: the high costs of pursuing AT, the undefined test for justifiable infringements of AT, and the failure of BC to reform ‘the duty to consult’ to align with the judiciary’s recommendations to ensure certainty for developers. However, there are many progressive statements within the case law of AT that are affirmed in both Justice Vickers’ initial 2007 ruling and the subsequent 2014 SCCs appeal upholding of Justice Vickers’ findings. These should not be easily dismissed by those evaluating the future of Aboriginal Rights and Title in Canada. The two main statements are (a) the differentiation in acceptable uses between AT and Aboriginal Rights, and (b) the requirements of consent inherent to AT and by extension to land under or with suspected AT claims, and (c) the creation of a more extensive conception of First Nation self-government that is closer to First Nation held notions Self-determination.

The first reason for optimism is the inherent ability of AT to transcend the essentialist confines of Aboriginal Rights discourse. In Justice Vickers’ decision, he relies heavily upon the
distinctions between Aboriginal Rights and Title of Chief Justice Lamer in Delgamuukw.

*Delgamuukw* determined “the content of Aboriginal title, how it is protected by s. 35(1), and what is required for its proof” (*Tsilhqot’in*, 2007, p. 168). The key distinction by Lamer C.J. is the differentiation of acceptable First Nation territorial uses enabled by AT.

Aboriginal title is a right in land and, as such, is more than the right to engage in specific activities which may be themselves aboriginal rights. Rather, it confers the right to use land for a variety of activities, not all of which need be aspects of practices, customs and traditions which are integral to the distinctive culture of aboriginal societies. Those activities do not constitute the right per se; rather, they are parasitic on the underlying title. However, that range of uses is subject to the limitation that they must not be irreconcilable with the nature of the attachment to the land which forms the basis of the particular group’s aboriginal title” (*Delgamuukw*, para. 111)

Justice Vickers interprets these limitations to be “uses that would destroy the ability of the land to sustain future generations of Aboriginal peoples” (*Tsilhqot’in*, 2007, p. 170). While still withholding absolute decision-making authority by mandating sustainable use, this distinction offers greater flexibility to First Nations that possess AT than those with Aboriginal rights. Consequently, First Nations can partially escape the continued attempt by the settler state to regulate forms of First Nation interactions with their territory or more succinctly their Self-determination potential. The importance of this lifting of acceptable forms of practicing Indigeneity will be expanded upon in section 2.4.2.

The second reason for optimism is the requirement to move beyond the current consultation model, where First Nations are effectively considered a stakeholder that should be reasonably accommodated, to a consent-based model guaranteeing accommodation for approval. The ruling states;

Aboriginal title confers on the group that holds it the exclusive right to decide how the land is used and the right to benefit from those uses, subject to one carve-out — that the
uses must be consistent with the group nature of the interest and the enjoyment of the land by future generations. Government incursions not consented to by the title-holding group must be undertaken in accordance with the Crown’s procedural duty to consult and must also be justified on the basis of a compelling and substantial public interest, and must be consistent with the Crown’s fiduciary duty to the Aboriginal group. (Tsilhqot’in 2014, p. 298)

It is commonly held that BC’s government is seeking to answer the Indian land question to provide certainty for investors seeking to develop BC’s natural resources. In this light, if BC wants to attain certainty for industrial development, then the above statements demonstrate the necessity of respecting internal First Nation territorial governance authority, even on lands with only suspected AT. While this calculation has yet to materialize in any meaningful way in the Province’s relationship with First Nations, it does point to a future where First Nations become the ultimate decision makers concerning resource development in their territory. In fact, BC’s Crown Industries, such as BC Hydro, have in limited cases decided to pursue comprehensive settlements with First Nations concerning past and future damages in order to gain operational certainty. The BC Hydro-St’át’imc Agreement that funds this research is one example and will be discussed in section 4.2.1.

However, the notion of justifiable infringement in cases of “compelling and substantial public interest” is a particularly unsettling exemption that demonstrates the frailties of rights-based strategies to date. Although seemingly negative in its consequence on Self-determination, the decision is a creation of a more expansive conception of First Nation self-government that has yet to be clearly defined and is closer to First Nation held notions Self-determination. As The Assembly of First Nations states, Self-determination is “the right of a people to freely (1) determine their political status and freely pursue their economic, social, and cultural development; and (2) dispose of and benefit from their wealth and natural resources” (Assembly
of First Nations, 2012). Yet, in permitting such infringement by Crown, the court is still limiting the extent of the ruling in regards to First Nation Self-determination. Historically, the term Self-determination has been rejected by the Canadian government, in favor of Self-government, as the latter term does not concede First Nations to be completely separate political entities possessing inherent sovereignty. Nevertheless, the judgment continues “Governments and individuals proposing to use or exploit land, whether before or after a declaration of Aboriginal title, can avoid a charge of infringement or failure to adequately consult by obtaining the consent of the interested Aboriginal group (Tsilhqot’in, 2014, p. 301). This equates to a warning that the Crown and industry should defer to First Nation land management authority, even in cases where they can justify infringement. Ultimately, the movement by the courts towards consent and a higher level of justifiable infringement in cases of proven or assumed AT have furthered the limits of Canada’s recognition politics, while stopping short of a declaration of a right to full Self-determination.

If research outputs are intended to benefit internal First Nation governance decisions, as would be the case in a truly consent-orientated Canada/First Nation relationship, then compromises to maintain external validity in either the academic or legal sense could be rendered moot. This situation would allow a more holistic approach utilizing unedited video and audio recordings. Such a strategy could mitigate the impacts of misrepresentation referenced throughout this thesis. This situation is currently unlikely for most First Nations, but even the mere existence of a more robust consent-based consultation demonstrates the need for culturally relevant research oriented toward First Nation interests rather than those of the Province and resource developers.
2.3.3 Impact of First Nation Oral History Inclusion on Research

By solidifying the legal standing of First Nation oral history given as testimony by First Nation Elders as equivalent in weight to the written historical record normally used to affirm Aboriginal Rights and Title cases (Ray, 2015), the Federal SCC has provided further motivation for experimentation with research methodologies. As noted in the previous sections, this methodological experimentation should be done to allow for more community collection and self-representation of First Nation history and culture in formats more amenable to their traditional knowledge systems.

The immediate ramification of this legal shift is that the necessary reliance on historical and cartographic experts to maintain impartiality required for academic validity and evidentiary legal norms for First Nation historical research has been partially lifted. The greatest remaining barrier is the process of effectively collecting and communicating the community’s territorial knowledge to outsiders. Until this issue can be addressed, expert witnesses will still be needed to represent First Nations in court.

The process of including Elder testimony undertaken in Tsilhqot’in (2007) demonstrates the necessity of reforms to the physical accommodation of the courtroom and media used to convey First Nation research in litigation. During the initial phase of the 5-year trial (2002-2007), Judge Vickers employed a new model for hearing oral evidence and accommodating Tsilhqot’in protocols. Instead of holding all of the hearings in Vancouver, which would have been highly burdensome for community members seeking to testify in the hearing (Sparke, 1998), Vickers held a series of mapping interviews in the school house in Nehemiah Valley in 2002-3 with 28 Tsilhqot’in Elders that adhered to cultural protocols. This accommodation was challenged by Province’s legal team based on the conception of justice applying equally
everywhere within the abstract space of the state. While the court recognized the fallacy of such neutrality in a First Nation context, this decision demonstrates the tenuous nature of current accommodations made to First Nations, being wholly contingent on the discretion of the presiding judge.

In a presentation, Dr. Ken Brealey (2014), who functioned as the Tsilhqot’in expert cartographer in the case, explained the remaining difficulties of the new accommodations made by Vickers. Brealey stated that of the 28 witnesses, only a third of those interviewed were able to point out sites in the cartographic format utilized during their testimony in front of Judge Vickers. He explained further that the mapping sessions were only able to capture 60 percent of the place-based knowledge conveyed by the Elders to the judge. In order to address this shortcoming, Brealey was hired after the mapping session to review the transcripts in order to conservatively map remaining points identified verbally but not geographically in the testimonies, and defend their placement during cross-examination. He was able to present his findings on an interactive map that showed settler accounts of the territory, and then overlaid various map layers of oral history and traditions accounts, both written and recorded, to demonstrate the strength of claim.

The insights offered by Brealey demonstrate the necessity of experimentation with methods and tools specifically designed to organize and represent First Nation oral history in formats other than map biographies or reports prepared by outside researchers. If a robust CLR methodology and supporting multimedia mapping platform can be developed, these would allow First Nations to directly use the first- or second-hand accounts of respected community members concerning past activities in the territory and to bypass the costly requirement of outside researchers or lawyers to represent them in legal proceedings.
The reliance on outside researchers is not necessarily a hindrance for First Nation communities as was demonstrated in *Tsilhqot’in (2007)*. However, outside representation of First Nation interests in legal proceedings and research introduces unnecessary opportunities for the researchers’ latent ontological differences to impact or distort the representation of the community as a whole (Coombes et al., 2014), and should only be considered a stop-gap compromise.

Whenever possible the communities’ own narration and voices should be used in deliberations with the outside world. The value of this basic assumption has proven surprising in the past to legal experts well versed in adjudicating disputes. As Justice Addy in Blueberry River Indian Band v. Canada (1988) noted,

> The spoken word and the visual impression are both preserved as part of the record to explain and at times to modify and even upset the conclusions that one might otherwise come to by a mere reading of the transcript. Having read the transcripts previously, I was quite surprised to note the degree to which some of my original impressions as to the effects of the evidence were either modified or completely changed upon viewing the actual videotaped recordings. (Apsassin v. Canada, pg. 39-40; cited in Hutchings & Baker, 2008, p. 23)

What is important here is how audio and video recordings provide insight into emotion and emphasis that are lost in transcription. By viewing the faces of the Elders detailing their knowledge of the history of their territory, through empathy, their testimony is given more value than a disembodied voice.

While the use of community-led or participatory collected oral history media continues to face challenges when used as evidence in the courtroom, the above observation by Justice Addy indicates the potential value of video and audio recording in preparation for litigation, and cross-cultural dialogue. The next sections will cover the underpinnings of Participatory Research (PR)
and its necessity in the First Nation research paradigm. This will be followed by a discussion on how increased access to technological tools enable the use of Participatory Video (PV) and Participatory Geographic Information Systems (PGIS) projects to erode persisting barriers to First Nations seeking to demonstrate their claim to their territory.

2.4 Is Participation Enough?

This section will present the rationales found in the literature for participatory methodologies in First Nation research. The benefits posed here when viewed in the context of the increased First Nation legal avenues highlighted in the previous section create a promising option for First Nation Indigenist research to be used in the larger process of First Nation cultural, territorial, and institutional revitalization based upon internally negotiated traditional practices. Once the development of the field has been elucidated, the current popular trend of both PV and PGIS to address issues of representation surrounding the current research paradigm will be examined. Included in this discussion will be the benefits and risks of such methodologies broadly and specifically in a First Nation context.

The primary motivation for this section is to investigate whether the developments in the field of participatory research can overcome ontological and epistemological differences inherent in traditional researcher/subject and First Nation/Academic relationships, and contribute to the ongoing process of self-definition for First Nation people. My argument is that even though participatory methods are needed in the present for reasons presented below, they cannot eliminate the many distances between the researcher and subject. Yet, the potential of participatory research, and CBR more broadly, to provide mutually beneficial outcomes for both academia and First Nation communities seeking to address very real and immediate issues facing
First Nations necessitates their use. As Mistry, Bignante and Berardi (2016) state the benefits of participatory methods “can potentially enable social change through raising awareness of issues, building capacity to engender action and as a vehicle for communicating and potentially influencing decision-makers at local, national and global levels” (Plush, 2012; Wheeler, 2012). Although beneficial, the many challenges associated with proper implementation can make these benefits unlikely to be achieved on a systematic level, therefore the role of who commissions and carries out the research becomes the primary issue at hand. Yet, the methods, motivations, and considerations that underlie these participatory research practices can be effectively employed in the CLR framework.

Participatory research, particularly participatory video, is helpful in both creating awareness of the necessity of research within First Nation communities and dismantling the many mechanisms through which misrepresentation occurs as demonstrated in the literature (Milne, 2016; Mistry, Bignante, & Berardi, 2016; Walsh, 2014). But is this enough? If the goal is to restore the balance of knowledge production between settler society and First Nations, then no it is not. This must be viewed as one portion of the larger process of First Nation cultural and institutional revitalization to overcome systemic barriers facing First Nations, and a stepping-stone to CLR. Other forms of resistance and self-expression are required, such as First Nation produced literature, music, blogging, and other media that utilize the oral narrative and performative structure that underlie many First Nation knowledge systems.

Just as a critical examination of the opportunities afforded First Nations by the legal victories is essential to maintain relevance and perspective in research and Self-determination strategies, so too must First Nations and researchers critically examine the assumptions and limitations of participatory methodologies to ensure these fit the interests of those they seek to
empower. Most importantly the role of power and agency of the actors involved in any project must be deliberated to determine the potential of the project to attain this change (Walsh, 2014). This consideration is captured by Freire’s praxis model of action and simultaneous critical reflection (1970).

The most conspicuous assumptions of participatory methodologies identified to date can be categorized as (a) the romanticized notion of community (Walsh, 2014), (b) the tendency to frame the methodology as a heroic effort, and (c) promotion of western notions of personal liberalism. This last point is critical in the First Nation context, as it is an unfortunate inclination of research in this field to place the burden of change squarely onto those that are affected by the systemic barriers. In order to address this tendency, the admission must be made that movement is required on both sides,— Indigenous communities and the settler state — towards a position that is more accepting and capable of reproducing the fluidity of First Nation identity straddling both their role as stewards of their traditional territory and participants in modern society. With this recognition, the increased voice afforded by participatory methodologies must only be viewed as a transitory step in the process to full Indigenous cultural and institutional revitalization underscored by First Nation political theorists. Nevertheless, it is entirely possible that First Nation people must be the instigators of change due to the slow pace of the settler state in addressing the most pressing and basic issues of housing shortages and access to clean water. Therefore, given the potential sociological change of critically aware participatory research, the conscious navigation and deliberation of the implications of both tested and untested research strategies on First Nation cultural and political revitalization must be highlighted and considered in decisions to pursue research. This section seeks to summarize this discussion.
2.4.1 Development of Participatory Methodologies

Over the course of the 20th century, research concerning First Nation peoples has moved from primarily exogenous research carried out by academics for academia to research that is carried out for First Nation peoples by academics, often in collaboration with First Nation counterparts, and more frequently by First Nations themselves (Coombes et al., 2014, p. 851). This shift in ethnographic, geographic, and historical research corresponds to the postcolonial academic transition that started in the in the 1970s in rejection of the mandate of objectivity and that aimed to address issues caused by the “crisis of representation” (Gubrium & Harper, 2013).

Most critiques of the traditional practices of these fields concern the unaccounted influences of “power, trust, and ownership” within positivist social science that reinforces the differences between the colonizers and the colonized (Gubrium & Harper, 2013; Spivak, 1988). One critique especially relevant to this thesis made by Johannes Fabian (1983), concerns the tendency of anthropologists to speak of their research subjects in the past, placing them firmly in the category of ‘the Other’ and rejecting their position as ‘coevals.’ This de-emphasizing of the central role of dialogue with research participants in the present was used “to conform to norms of objectivity in scientific writing” (Gubrium & Harper, 2013, p. 28). According to Gubrium & Harper, the result of this distancing of the researcher and the participants “holds back the emancipatory and humanistic potential of ethnography for recognizing other people’s lived understandings of the contemporary world” (2016, pg. 28).

In response to these and other theoretical critiques from feminist, postmodern, and postcolonial scholars, ethnographers began to critically reflect on their subjective position as privileged academics operating in marginalized communities. This subsequently brought about
methodological experiments that sought to use participants’ own voices and narration to empower the research subjects to attain the position of Fabian’s coevals.

The potential community empowerment or emancipatory potential posed by participatory methodologies, met with much optimism in the field, has increasingly been tempered by the continued political and economic limitations that face marginalized communities (Dorman, Cooke, & Kothari, 2002; Milne, 2016; Walsh, 2014; Williams, 2004). These realizations by practitioners and participants have moved community participation in research from a panacea to one of many tools required to truly address the crisis of representation. It has become an imperative that any application of participatory methods includes an analysis of the “systemic and institutional limitations” that impact the realization of the emancipatory potential of participatory research (Walsh, 2014).

2.4.2 The Necessity of Participatory Methodologies for First Nation Cultural and Institutional Revitalization

With both the legal applicability of First Nation oral history offered through the direct voices of the knowledge holders and popular consensus in academia around the utility of participatory research to address representation in research now established, First Nations can begin addressing the lingering ontological and representation concerns that arise from the current research paradigm’s compromises for efficacy. Two concerns specific to the Canadian First Nation context will be presented to demonstrate the necessity of participatory methods in Indigenous spaces. The first is a problem that arises due to the lack of accurate representations of First Nation culture in Canadian society. This representation issue largely concerns the legal systems requirement for First Nations to utilize an essentialist Indigenous identity as a basis to
protect their territory as opposed to a sovereignty argument. The second issue is how Freire’s ‘cultural invasion’ functions in Canada due to reliance on outside expertise, and how this is antithetical to the production of alternative First Nation institutional designs required in Indigenous cultural and institutional revitalization.

The discussion of representation is relevant to this thesis because of the continuing tendency of non-Indigenous people and the government of Canada to view the decision of First Nations to pursue Self-determination as a dichotomous choice between assimilation to Canadian values or remaining confined to the essentialist notions of Indigeneity (Marker, 2006, p. 483). The latter, while offering limited protections from resource development on their territory through rights-based legal strategies, effectively frames the argument in the minds of less informed portions of settler society, not as a conflict between sovereign nations disputing property rights, but as First Nation people that are either environmental stewards or ‘inauthentic Indian’ and social burdens. The social burden narrative is obviously problematic, but the former — that of environmental stewards — is equally so, in how it functions as one more way First Nations are reduced to essentialist notions of Indigeneity and defined through mechanisms outside of their control.

Here one example is needed that demonstrated the difficulties imposed on modern Indigenous populations by essentialist conceptions of indigeneity. For this, I will recount the public response to the Makah whale hunt that took place off the coast of Washington state in May 1997, and how it demonstrated the underlying intolerance for nuanced Indigenous identity within the current animal rights and environmental movements. In response to the whale hunt, the climate towards Native Americans in Washington was reminiscent of the conflicts over Native American fishing rights that heavily impacted the commercial fishing industry in the
1970’s (Marker, 2006). Yet the whale hunt differed in how the media coverage and protests by
environmental activists characterized the Makah as “not involved in anything cultural—whatever
culture means—and that sinister economic forces, such as Japanese businessmen, were
manipulating an already corrupted group of factionalized and even fictionalized Indians”, instead
of an overt settler resentment towards Aboriginal fishing rights themselves during the 1970’s
(ibid., p. 487). According to Marker, this situation resulted from a fundamental cultural
difference, where the dominant culture has idealized and personified charismatic mega-fauna
beginning in our education system in order to espouse conservations ethics. This subordinates
cultures who view the animal as part of an “effort to reclaim stolen cultural space and autonomy
in the shadow of colonial and corporate hegemony” (ibid., p. 486).

The cultural difference and more importantly the lack of understanding by the dominant
society produced a volatile and hateful environment for Native Americans both locally and
nationally. Some of the more tangible forms of intolerance demonstrated in the aftermath where
sign held stating “Save a whale, hunt a Makah” (ibid., p. 483) and “threats to destroy Makah
whaling vessels, blockading the Neah Bay harbor, and swamping the annual Makah Days
gathering with protestors” (Erikson, Ward, & Wachendorf, 2002, pp. 207–208). The issues
highlighted by Marker and others, while seemingly few in number, can be witnessed in other
current events, namely the coverage to the North Dakota Access Pipeline that privileged the
environmental steward narrative of the protests at the expense of the issues dealing with broken
and unjust treaties.

With all that said, the exercising of Aboriginal Rights, realistically an affirmation of
settler state-sanctioned essentialism, may be the only effective option available to many First
Nations in Canada seeking to promote their goals, and therefore should not be shunned by
academics. Further, if First Nations attempted to placate all of the settler state grievances based upon misconceptions, then less effort can be allocated towards the intensive process of incorporating Indigenous values into their everyday interactions or cultural revitalization. This observation is also aware of Walsh’s critique of participatory methods as enforcing liberal democratic values that overly emphasize the role of the individual in addressing injustice and attaining personal freedoms (Walsh, 2014). This assumption not only ‘blames the victim’ of colonization but also runs in direct opposition to the Corntassel (2012) responsibility model described in section 2.3 that privileges? the role of the individual in the context of the group.

However, this compulsory choice to claim indigeneity in a rights-based strategy can lead to uncertain outcomes. If First Nations claim the right to develop their land and resources or use them in ways contrary to the prescribed acceptable views held by settler society of First Nations, then they are labeled as inauthentic and risk popular backlash for taking advantage of the settler state’s better nature (Coombes, Gombay, Johnson, & Shaw, 2011).

The restrictions on First Nation Self-determination that result from having to conform to the settler state’s acceptable expression of Indigeneity undermine the emancipatory visions and aims of various Indigenous political theorists. Coulthard (2014), Alfred (2005), and Simpson (2011) state that while adherence to the traditional values is essential to Indigenous cultural and institutional revitalization, this must be accompanied by active negotiation of what traditions mean and the acknowledgment that traditions can change. What is important is that First Nations can, as Leanne Simpson (2011, p. 51) states, “…re-creat[e] the cultural and political flourishing of the past to support the well-being of our contemporary citizens” and First Nations must escape the imposed “…rigidity of colonialism.”
For Rappaport (2008, p. 13), the essentialist view of Indigeneity “simplifies a complex reality, since it imposes an exclusive topographic metaphor upon a dynamic and heterogeneous social landscape.” Within Indigenous communities are complexities that need to be taken into account. Individuals that move between these settler and Indigenous spaces complicate the essentialist view of Indigeneity. For instance: political leaders who receive training from outside the community and become isolated because of it; Indigenous intellectuals who must deliberate with established settler perspectives; and non-Indigenous collaborators who spend most of their time outside the geographical limits of the community but form a large portion of the administrative capital of the community. These are a few of the many distinctions that require a nuanced view of what it means to be Indigenous.

At the core of the realization above is the necessity of promoting a relational view of Indigenous identity to combat the essentialist tendency of western thought. In their reluctant attempt to define Indigeneity, Coombes et al. (2011, p. 477-8) make a profound distinction between two historically similar terms, Indigeneity and autochthony.

Historically, the two terms emphasized similar traits: originariness, legitimated authority and fidelity of culture with place. Today, however, autochthony is more closely aligned with the coincidence of people and place, whereas Indigeneity extends to Indigenous peoples’ engagement with cultural others and social processes beyond their normatively assumed rangelands (Pelican 2009). Likewise, Indigeneity transcends territorial connection to include moral claims against neo/colonial administration. It constitutes both “a counter-weight to the hegemonic strategies of states” (Niezen 2003: 198) and the solidarity which flows from experience of colonial oppression (p. 10). Endogenous-exogenous, past-present, enchanting-rationalizing and global-local collide in uncertain ways to co-produce Indigenous and globalized discourses of identity. Juxtaposed against the more restricted definition of autochthony, therefore, the meaning of Indigeneity is always situated at the interplay of multi-scalar processes and multi-dimensional performances.
The point here is that through relational thinking about the Other it becomes possible to break preconceived notions and build empathy through examination of the complexity of the Other’s lived experiences. While not necessarily causational, this increased empathy will likely correlate with greater flexibility in affirming or altering the acceptable expressions of Indigenous peoples held by the settler state or in other words greater space for First Nation self-definition. This notion of empathy in inter-cultural communication is expanded in 2.4.3.1.

An effective way to build this empathy is by creating additional platforms for First Nation peoples to voice their concerns to settler society about their lived experiences such as the impacts dams and mining on their territory and the philosophies behind their traditional practices. Through this process, First Nation people can begin to offer a more nuanced view of First Nation societies within the settler state. These community produced cultural outputs of participatory research and ever expanding artistic media like First Nation literature, film, art, and blogging, are being used to nurture this relational view of Indigeneity within the settler state. In this way, First Nations and settler society can begin to grapple with the tremendously multi faceted identities that incorporate the subsets of North American society and discourage essentialist representations. The potential of participatory CLR methods that privileges the voices of the community to effectively present the multilevel and spatial realities of First Nations will be covered in the next section.

As referenced in section 2.2.2, the oversimplification of First Nation ties to the land that occurs during quantitative LUOS studies negatively impacts this process of amending settler perceptions to allow for more Indigenous space. By presenting only the recognized traditional practices, these studies and their maps promote the essentialist notions of indigeneity as required by Canadian law and are harmful to First Nation cultural and institutional revitalization.
Research providing true and dynamic representations of First Nations also weakens the underlying assumptions of past criticisms of pursuing political correctness by Terri Tobias (2009) and others. This line of argumentation stresses that community research projects that are overly concerned with appeasement of all parties’ critiques or political correctness will likely produce indefensible outputs that waste marginalized communities’ scarce resources and build resentment toward community leadership. While logically true, it remains that the concerns in this thesis are just as real as those able to be perceived by outsiders. While issues of representation and revitalization may be more difficult to comprehend, they are still valid and worthy of discussion. The critiques by Tobias and others are based on real experiences, yet they neglect the larger role research and community consensus around a project can foment, including greater representation of community perspectives in intercultural communication. Since the negative outcomes associated with political correctness remain problematic, it is critical to be cognizant of the risks and immediate needs involved in First Nation governments and communities’ decisions in undertaking research. Nevertheless, Tobias’ fear of research failures places too much focus on the immediate impact of the research and neglects the inherent risk of cultural invasion (Freire, 1970).

The first requirement for Freire’s cultural invasion to occur is the conscious or unconscious perception of both the researchers and the community itself that First Nation ways of knowing are inferior to western research models and governance structures (Freire, 1970). While this is tacitly acknowledged by practitioners as a necessary compromise to aid First Nations in asserting their recognized rights, the process of amending First Nation knowledge to forms more amenable to Canadian government requirements without critical reflection about its effect on social transformation is effectively producing the same outcome as overt cultural
invasion. By acquiescing to the dominant society’s needs for scientifically valid research outputs in written form and site-specific geographic data, the researchers are demonstrating their ingrained value structures and are perpetuating them within the communities in which they work. While this compromise is undoubtedly an important and currently necessary aspect of the research paradigm, it is important to recognize that it is only a small portion of the larger cultural invasion occurring through many systems such as education, media, and political involvement or more succinctly the everyday lived experiences of First Nation peoples in Canada.

This unintended cultural invasion has important detrimental consequences for the development of unique First Nation models of governance and resource management. As Freire states, “the invaders penetrate the cultural context of another group, in disrespect of the latter's potentialities; they impose their own view of the world upon those they invade and inhibit the creativity of the invaded by curbing their expressions” [emphasis added] (Freire, 1970). A practical example of this impact was highlighted in section 1.2.1, where Natcher (2007) speaks to the continued prevalence of settler state practices in First Nation resource management strategies.

The imperative of avoiding this invasion has been further developed in the schooling tradition of Kaupapa Maori in New Zealand. Prominent Māori educationalist, Graham Smith, speaks to the threat of what he calls ‘domestication,’ of Indigenous institutions saying “[a] Kaupapa Maori without critical theory becomes an opening for a browning of the mainstream institutions rather than a space from which to challenge them” (Smith, 2012). This Browning or domestication, where colonial institutions are superficially altered to allow for Indigenous participation, is a product and the process of cultural invasion, where “the more invasion is accentuated and those invaded are alienated from the spirit of their own culture and from
themselves, the more the latter want to be like the invaders: to walk like them, dress like them, talk like them” (Freire, 1970). Ultimately, this supports the fundamentally unjust relationships between settlers and First Nations recognized by both Freire and Māori critical theorists, the necessity of this space free from unnecessary cultural invasion is critical in order to develop unique First Nation solutions and is, therefore, critical to this thesis.

Cultural invasion is not an absolute outcome of the current model. Most non-Indigenous and externally trained First Nation government employees and researchers are ideologically aligned with First Nation interests and practice adequate reflexivity. Their decision to forego higher salaries elsewhere possibly speaks to their dedication. The probability of cultural invasion is much greater if there is not a concerted effort within operating mandates of First Nations to critically challenge assumptions held by the dominant society.

It is worth noting here that there are two common critiques in Canada against this praxis model of social change and participatory research in general. First is that it tends to promote itself as a heroic effort by the researcher and increasingly by the university. This propensity often results in self-serving outputs that are not relevant to the communities themselves. In the case of universities, it is embodied in the development of impact agendas needed to maintain relevancy in an age where the university’s monopolistic hold on the creation of knowledge is being questioned. This creates an aura of inauthenticity around the emergence of participatory research and can perpetuate negative sentiments towards research in First Nation communities (Brown & Martin, 2013). Second, and more importantly, is the burden this effort places on First Nations that are facing dire immediate circumstances surrounding housing and other social services, and cannot endure the endless process of researcher-subject dialogue required for Freirean social transformation. The conversations required to produce critically aware and relevant participatory
research are inherently difficult. They involve, at least, navigating the complex power dynamics within communities to come to a consensus about large concepts such as group identity and aspirations that vary as much as in the general population. This realization points to the how participatory or CLR must be part of a much larger process that is dependent upon many factors outside the purview of the scope of the project and most often take place far away from the eyes of outside researchers.

In summation, this thesis is an attempt to propose a compromise between the pursuit of Indigenous space for true Indigenous cultural and institutional revitalization and the very real constraints imposed by the limiting situations of colonization and continuous resource extraction by the settler state. Nevertheless, by fearing to undertake the difficult facilitation process required for realization of Freire’s ‘untested feasibilities’ for new empowering processes and research, consultants and First Nations themselves can overly utilize western ways of knowing and being. This not only risks cultural invasion but also can perpetuate the pessimistic attitude found toward research in Indigenous communities. For the reasons mentioned in section 1.2.2, LUOS and similar site-specific studies that emphasize traditional practices devoid of the associated social relations should only be used sparingly as ways to communicate with outside parties in a legal setting, not as the primary form of research and cultural preservation. This is recognized by practitioners of LUOS, but due to financial constraints and the optimism among proponents of the rights-based approach, it has resulted in systemic over-representation of LUOS in First Nation research strategies.

First Nation research strategies should include more culturally appropriate long-term qualitative studies that represent the complexities of First Nation epistemologies (McIlwraith & Cormier, 2015; Olson et al., 2016; Roth, 2009). Therefore, investigating alternative models of
First Nation historical research and representation that attempt to maximize the communities’ potential to collect, organize, and represent their own knowledge is both timely and relevant. This should be accomplished using modern technologies that address practical barriers to research. Once the barriers are addressed, long-term qualitative research methods can be employed that minimize issues of representation and focus on raising awareness within the community to strengthen the culture of research within the community.

With these recommendations, geographers and anthropologists, myself included, have implemented various participatory GIS and video projects in Indigenous communities since the 1990s. These projects seek to take advantage of the proliferation of GIS, video production and database technologies available to First Nations in Canada. While still theoretically relevant, Peluso’s (1995, p. 387) assumption made 20 years ago that “mapping is unlikely to become a science of the masses” because of the level of investment required is beyond the means of the marginalized is being undermined by the increasingly accessible methods of PV and PGIS. The advances testified to by the practitioners and literature mentioned in this thesis form a considerable body of work discussing the difficulties and considerations associated with PGIS and PV in an Indigenous context.

2.4.3 Participatory Methods and Indigenist Research

At the core of both of these developments in participatory research, PGIS and PV, is the premise of sociological intervention. Through the application of these methods, the researcher seeks to identify and address needs within the community. In order to accomplish this in an Indigenous context, a few broad questions must be answered by the researcher seeking to identify the appropriateness of participatory methods. According to Milne, Mitchell, and De Lange (2012) these are: (a) Is motivation present in the community and (b) how does it relate to
other aspects of the context within the community. These questions are meant to make the outside researcher aware that participatory research does not take place in a vacuum or at the behest of the researcher. While still relevant for Indigenist research, in this context the implementation of PGIS and PV needs to be part of a larger First Nation research strategy. So these considerations more easily distinguishable.

Before I continue, it is critical to define the terms of PV and PGIS. PV is generally defined as a “tool for individual, group, or community development… whereby community members use video to document innovations and ideas or to focus on issues that affect their environment” (Cohen, Salazar, & Barkat, 2009, pp. 348–349; cited in Corneil, 2012). Moreover, Yang (2012) points to six main features of PV: (1) film subjects as filmmakers, (2) shared authorship, (3) intervention, (4) close rapport between filmmakers and audiences, (5) close rapport between filmmakers and film subjects, and (6) reflexive communication. These characteristics fundamentally alter the traditional filmmaking structure to more accurately depict the realities of the film subjects.

For PGIS, there exist two definitions largely based on the position of the researcher as either an observer or advocate. The first definition is based largely on incorporating GIS into a participatory process that includes various types of knowledge and perspectives of all stakeholders, government and industry included. The second is proposed by community advocates, as a “means to represent local people’s spatial knowledge with expert skills, rather than input” (Corbett, 2006). This second definition speaks to the necessity to address the issue of misrepresentation by refuting the top-down and expert-driven nature of GIS (Chambers et al., 2004, p. 26).
Yet, the mechanisms through which PV and PGIS function contain inherent risks. A similar aspect of both fields is the risk of neoliberal cultural invasion. For Foucault (2008, p. 318, cited in Bryan, 2011), “neoliberalism is less a coherent theory or ideology than it is a way of doing things that offers both a principle and method for rationalizing approaches to government in terms maximizing the functioning of the economy.” The primary way this functions in both PV and PGIS is how it burdens individuals with the responsibility to liberate themselves. This can be construed as a form of political liberalism that Walsh (2014, p. 406) states “is the social aspect of neoliberalism that includes the tenants of individual freedom, equality and private property, and an emphasis on individual legalistic rights.” Again this runs in contradiction to Corntassel’s (2012) community responsibility model of Indigenous governance by placing the value in terms of the individual, and not the community. This potentiality places PGIS and PV squarely in the purview of critiques surrounding the rights-based approach of Self-determination, such as Corntassel’s. Yet through careful implementation and conscious attempts to maximize the role of community leadership and members in guiding the project, a middle road can be found to aid in both internal cultural revitalization and utilization of openings following from the SCC’s acknowledgment of expansive AT.

However, if these sociological interventions do not account for the constructions of power and agency of participants and hegemonic actors both inside and outside of the community, then they can perpetuate the limiting structural dynamics of the colonial situation. What must be included is a statement and clarification of the state’s responsibility in both creating and addressing the issues identified in the PV and PGIS projects.
2.4.3.1 Participatory Video

The application of PV into a First Nation context offers many advantageous characteristics as First Nations are “oral, visual, and performance-based societies” (Liberman, 1985 cited in Laflamme et al., 2012). Therefore, the visual digitization of First Nation culture may present fewer barriers and distortion than do other means of communication. PV, in particular, is appropriate “because its methods effectively incorporate Aboriginal data” or the information Elders use to communicate knowledge (LaFlamme, Singleton, & Muir, 2012). This increased inclusion of Aboriginal data into LUOS and similar studies can be used to inform leaders in the community of the desires of the community, in effect restructuring power relations within the community and correcting misconceptions outside the community (Corbett, Singleton, & Muir, 2008).

On the surface, PV poses many obvious benefits for the goals highlighted in this paper, namely promoting auto-definition of First Nation peoples. However, a more complex situation arises when you make the important distinction between prospective internal and external audiences of the media. The optimistic stance often spoken to in the literature is that PV can “bring hidden experiences into the public domain in ways that will intervene both to produce shifts in the lives of those that participated… and to highlight issues to concerned audiences” (Pink, 2006, p. 99, cited in Kindon et al., 2012). Further, it is noted that these visual tools can have a greater impact on decision makers than written texts (Kindon et al., 2012).

Yet, all of these outcomes are subject to the level of contextualization that accompanies the media. If the media are presented outside of the community and the context is not understood by the audience, it can support pre-existing racist conceptions held by the audience members. This was witnessed by Kindon et al. (2012, p. 61) in presentations of products from a Maori PV
project to the wider New Zealand public. The authors concluded that this ultimately undermines the outcomes alluded to above. Further, the polarizing nature of decolonizing discourse can effectively isolate the holders of these misconceptions from dialogue with the audience members that can understand the implications of the underlying context of the media presented.

This experience by Kindon et al. (2012) points to the need to account for the particular audience in the presentation of the project when attempting to use PV for cross-cultural dialogue. In the context of First Nation oral history collection, this would require separate conversations about the considerations for intra-community use, and then another conversation on potential external use. This should include what non-sensitive information to include and how to present it to outsiders. Moreover, this speaks to the larger necessity of multiple and wide scale media of representation and education in the public sphere that can raise awareness of the deeper context and struggles of Indigenous peoples. Ultimately, PV can lessen the burden on an individual project to overcome inter-cultural differentiations.

While the literature speaks more to these benefits in a local setting, it has been argued by Meadows (2009, p. 520) that Indigenous video projects can “break down stereotypes of Indigenous people for the non-Indigenous community…playing an important role in enabling cross-cultural dialogue.” The assertion here of utility of PV in inter-cultural communication reflects the position by Valaskakis (1993) that “[i]t is through the prism of parallel voices, of competing narratives, expressed in public text -- in literature, art, music, ceremony, and media -- that we can access the subaltern experience, expand our concepts of inquiry, and approach our points of connectedness.” Access to the ’subaltern experience’ by the settler population is a primary goal for this thesis. PV has the ability to navigate the larger social dialogue to produce empathy and understanding in an intercultural space.
2.4.3.2 Participatory GIS

In this section, I will discuss the postcolonial scholarship that scrutinizes the presentation of Indigenous knowledge in the Cartesian plane and highlights the need to account for the unique counter-resistances of Indigenous peoples to neo colonial processes. PGIS as a “means to represent local people’s spatial knowledge with expert skills, rather than input” (Corbett 2006) represents a mechanism through which the persisting colonial tendencies of geographic knowledge can be challenged. Yet, PGIS is itself vulnerable to perpetuating the system it desires to uproot. LUOS here could reasonably be described as participatory mapping and its specific inadequacies have been discussed at length in section 1.2. This thesis is seeking to demonstrate that a future can and will exist where the expert is no longer needed. Most broadly this literature “shifts the discourse from a politics of survival to a more nuanced evaluation of how the Indigenous other can complicate and transform colonial practice through self-representation in practice and outputs” (Jacobs, 1996).

I will first present the major issues associated with geographic knowledge in an Indigenous space and how they can be grouped into three areas of critiques: the transformation of TK to information vs. a dynamic system of knowledge (Corbett, 2013); the potential to extend neoliberal modes of governance (Bryan, 2011); and issues of accessibility. All of these issues can be partially, if not completely ameliorated, through a robust community research approach when the requisite capacity and leadership are present within the community. In cases where these are lacking, a continuation of an outside consultant and expert inclusion will be necessary.

In “I Don’t Come from Anywhere,” Corbett (2013) argues that there are fundamental differences behind the ethos of geographic information, especially volunteered geographic information (VGI), and Indigenous knowledge. First is the distinction between knowledge and
information. Second is the difference in intended audience and how this impacts the issue of trust of participants and, ultimately, the intellectual property considerations for the information collected.

First, the essential nature of GIS must be made clear. Curry (1998) speaks to how GIS represents a division of labor in research. The practice is primarily concerned with the collection of information and not necessarily producing knowledge. This differs from the traditional research method as GIS places focus on enabling future knowledge creation through the geographic organization of data, instead of on knowledge itself. With this view, a fundamental distinction emerges between information and knowledge. Information is “passive and inert until used by those with the knowledge needed to interpret and process them” (David & Foray 2002, p. 12 cited in Corbett, 2013). This points to the largest problem in current First Nation GIS strategies. If the associated First Nation specific knowledge needed to interpret the information on the map is not held by the audience, then the audience must either be guided by a knowledge holder or the information must be accompanied by appropriate contextualization to understand a single point’s significance in the larger social and environmental context. Failure to do this results in an ‘interpretation gap’ that is easily filled with the viewer’s preconceptions.

While objectivity in GIS is measured in the technical terminology of accuracy with all its components, the practice itself is far from positivist and value neutral as it necessitates an individual with their inherent biases to undertake the work (M. Curry, 1998). To grapple with this, a neccessary dualism has developed for GIS practitioners, where they often view the practice from a positivistic lens but the selection of projects on which to work as a value-based decision (M. Curry, 1998; Eades, 2006). However, even with this basic recognition of the duality of GIS, further analysis of its ethics is required.
In the age of Wikipedia, there is an inherent popular predisposition to see value in the sharing of volunteered information to enable more democratic means of knowledge creation throughout society. This unfettered sharing, however, can reproduce the colonial situation of First Nations by dispossessing FNs of their cultural heritage if the knowledge is introduced into the public domain. As TK is a “key element of the social capital of the poor and constitutes their main asset in their efforts to gain control of their own lives” (World 2002, cited in Corbett, 2013, p. 233). Increasingly the TK of First Nations in Canada, specifically place-based TK, is being utilized to demonstrate the degree required to accommodate First Nation interests in resource development on their territory (McCreary & Lamb, 2014; Olson et al., 2016). These accommodations have resulted in both increased protection and extension of First Nation values in resource management regimes, as well as financial compensation for damages and shares of potential revenue (ibid.). Mentioned in section 1.2, this revenue comprises a vital income stream for First Nation governments seeking to expand their control of their territory and the services provided to their members.

The ability of TK to produce monetary value for First Nations has effectively resulted in its commoditization. The primary impact of this commodification is that it places the utmost importance on maintaining control and access to First Nation TK due to the lack of intellectual protections afforded to it by the settler state. This is acuter given the historical misappropriation of First Nation knowledge in Canada. First Nation peoples often have direct experience in sharing sensitive knowledge about the ecosystems in their territory, only to have its basic insights be implemented for short-term management decisions at the expense of deeper meanings and implications. These holistic prescriptions are difficult for outsiders to understand without the societal and ecological knowledge needed to interpret the unspoken or implied limitations or to
be able to ask the right question. Moreover, this commodification could be an indicator of the current pervasiveness of neoliberal modes of thought in First Nation governance by viewing it as a means of empowerment, more than as a responsibility to protect one’s heritage. Yet, this decision cannot be judged and weighed by academics, and must solely be decided by the designated research bodies and leadership in FN communities.

There are many postcolonial works that critique such neoliberalism in this space. Bryan (2011) makes a poignant argument for the role and risks of participatory mapping and GIS for First Nations. For Bryan (2011) PGIS and mapping have the potential to:

“extend neoliberal modes of governance by reworking Indigenous peoples’ claims to territory and autonomy in terms of the contractual freedoms associated with property ownership…. [This] challenges prior claims that maps are a “tool of empowerment” (cf. Herlihy and Knapp, 2003; Chapin et al., 2005), raising questions about who is empowered by the use of maps and under what conditions that empowerment occurs. That concern is further supported by consideration of any number of unintended or unforeseen outcomes of mapping that often negatively affect Indigenous peoples’ access to land and resources, re-inscribing hierarchies of race, class, and gender and racializing cultural differences (Fox et al., 2006; Hale, 2005; Hodgson and Schroeder, 2002; Peluso, 1995; Sletto, 2009a,b; Walker and Peters, 2001). While some have argued that these problems are inherent to maps themselves (Rocheleau, 2005; Wood, 2010), others have called for a more theoretically-informed approach to mapping that better represents Indigenous concepts of space and addresses the issue of Indigenous ownership of their knowledge (Finley-Brook and Offen, 2009; Roth, 2009)

Nevertheless, Bryan comes to the conclusion that the benefits that are earned through mapping First Nation territory are worthy of compromise, but these compromises must be made with adequate foresight given to their potential impacts. I too share this opinion.
2.4.3.3 A New Direction: Methodological Innovation

With the insights above concerning the methodological considerations and potential impacts of participatory research in a First Nation context, the conversation must shift to how place-based TK and associated media will be collected and managed to enable the entire research process be carried out by First Nation governments. To this end, this section will discuss the impacts of new methods, specifically the DTD map biography method and Indigenous spatial quality indicators, and how Web 2.0 platforms can enable CLR and community managed digital databases.

While existing since the 1970s, First Nation participatory mapping has primarily involved the map biography method. Collection of use and occupancy information in a positivist methodology has been aided by new technological advancements in GIS, but these have been utilized to improve, not alter, the map biography method. Corbett and Keller (2004) point to two fundamental questions that need to be examined to ensure GIS fulfills its intended purpose of representing TK for First Nations, “Can GIS succeed in expressing the unique relationship between people and place? Or does it mould Indigenous peoples’ knowledge into a more Western conception of space? (Harley, 1988; Rundstrom, 1995; Kyem, 2004).” I have sought to answer these questions in the discussion concerning the current highly resource intensive methods of LUOS in section 1.2. In the process, I have come to the conclusion that the methods, while successful in attaining concessions in resource management and governance, require improvement in both efficiencies and capturing the complex relations between people and territory (Olson et al., 2016).

In this line of critique, Olson et al.’s (2016) DTD methodology marks the most promising advancement to enable participatory CLR in First Nation geographic research. Adhering to the
basic needs of scientific validity, the method employs the free software Google Earth as the primary tool for recording the geospatial data in map biographies. This eliminates the processing time and effort needed to digitize the paper maps, and, in doing so, reduces the professional skills and compensation needed to perform the study (ibid.). Further, the method also increases accuracy by presenting the cartographic representation in three dimensions that is more similar to the first-person visual accounts of the landscape. The three-dimensional presentation of maps also lowers the skill level needed by the informant to read standard topographic maps. This is particularly valuable when interviewing Elders who may not be familiar with mapping.

The second advancement by Olson et al. (2016) is the need for Indigenous-specific data quality indicators to amend typical indicators associated with GIS. The need to amend, not alter, these standards is explained by Olson et al. (2016),

Yet, because of existing constraints that underpin legal and regulatory requirements, the use of spatial data quality, rooted in Western-based representations of space, manifests the necessary visual and credible base to engage with the ‘technical-legal valences’ required by legal and regulatory institutions (McCreary and Lamb, 2014, p. 602). Because of this paradox, establishing quality indicators that are confined to a positivist approach do not adequately address the complexity and the possibilities of TLU for the representation of IK and use and occupancy.

In their attempt to grapple with this paradox, the authors propose amending Tobias’ (2009) land use data diamond of who, what, where, and when to include Indigenous spatial quality indicators, or what I call ‘Indigenous meta-data’ for each site-specific data point. Olson et al. (2016) explain these additions as “relational data (how sites are connected to each other), kinship data (family participation in particular land-use practices), IK transfer (who taught the interviewee the particular practice), and observational ecological data (the quality and quantity of available resources in the place)” to lend greater depth of meaning to individual data points.
They refer to the four additions to Tobias’ data diamond as creating a ‘data star,’ not replacing the traditional measures of quality but amending them for Indigenous perspectives. For the authors, the inclusion of Indigenous metadata is helpful for tracing the origin of TK and in social network mapping, both of which are helpful in preparing for AT and revitalizing cultural practices by increasing the depth of data-collection.

I agree in principle with the inclusion of Indigenous meta-data into accepted LUOS methodologies. However, I fail to see how it can be collected effectively in the linear data collection model of LUOS. While it is entirely possible to ask these qualitative relational questions in structured surveys, the answers will soon become burdensome as the researcher tries to capture the “living and elastic geographies” created through the storytelling of Elders into database fields. For Mazzullo and Ingold (2008), “Indigenous narratives are so highly contextualized and purposeful that they cannot be understood in a linear, rational nor literal sense” (cited in Coombes et al., 2011, p. 479). Due to this observation, it is reasonable to assume that the foundational structure of map biographies must be amended or discarded altogether. I posit that it is more appropriate to include quantitative geographic data into open-ended qualitative studies and interviews that are more likely to be able to accommodate this narrative data, even if this compromises the utility of the research outputs for the settler state.

The paradox of how to create more representational geographic data for First Nations and uphold the technical-legal valences lies at the center of this thesis. It is my position that the current prominent status of quantitative LUOS and TUS originates from the requirement of and limiting funding to research that meets the ‘technical-legal valences’ of the settler state. These institutional requirements amount to continued violence against First Nation knowledge systems that not only fails to address past harms from TK destruction, residential schools being the
primary example, but directly benefits from them. By requiring translation of TK by the communities least able to perform it, to media that render it less meaningful, and for the benefit of outsiders, is patently unjust. Therefore, the settler state must make accommodations towards First Nation perspectives in research outputs. The refusal to do so equates to continued colonization.

2.4.3.4 The Last Piece: Community Information Systems

Building on the increased accessibility of web-based GIS and database technologies, a movement within Indigenous communities has emerged to begin systematizing large bodies of collectively held information into digital databases referred in the literature as community information systems (CIS). These systems “allow for local knowledge to be documented on a map-based format, while incorporating a wide range of data types, such as text, photos, and video. This information is managed and communicated via an interactive map” (Corbett 2014, 10). The primary purposes of the maps and databases can be for communication with outsiders or to facilitate greater intra-community information sharing. CIS pose many potential points of value for First Nation cultural revitalization. This section will cover three points of value. How CIS can (a) customize user permissions to account for IP and social protocol concerns of specific First Nations; (b) be provided as a free service to First Nation communities via academic or government funding of software development and support; and (c) be used to supplement efforts of concurrent cultural revitalization programs and preserving their outputs for future use, specifically intergenerational TK transmission in First Nation school curriculums.

While many definitions exist, Web 2.0 primarily describes the phenomenon of new web technologies and platforms that allow for greater levels of interactivity than previously seen on
the World Wide Web. The term became widely known after O’Reilly Media Web 2.0 Conference in 2004 (Gaertner, 2015, p. 62). By allowing users to more directly contribute and collaborate on the internet in a ‘many-to-many’ information dissemination model, a movement has formed using these technologies to build online communities and openly share information (Corbett, 2013). This differs from the ‘one-to-many’ dissemination model prevalent on earlier websites and applications, where authors of websites would place information online that could only be consumed by the user.

Not surprisingly, this many-to-many model of web interactivity has been utilized by practitioners of participatory research to further empower research participants to act as collaborators or, further yet, researchers themselves (Reddick & Aikins, 2012). This is due to the similar ambitions for social change and inclusion espoused by both participatory research and Web 2.0 proponents and has resulted in many points of collaboration between the two fields. More specifically to this thesis, the core tenet of democratizing knowledge creation to address the issues of representation, first perceived by feminist and post-modern anthropologists, has led to experimentation with media platforms and accessible production techniques to further reduce barriers to media creation for community members (Dougherty & Sawhney, 2012).

Filling this need specifically for First Nations, a proliferation of free and paid software solutions have been created utilizing Web 2.0 interactive mapping platforms. Currently, most commercial CIS software services focus on enabling First Nation Lands and Resources Departments (LRD) to more easily accommodate industry referrals on their territory. The most prominent examples are Cedar Box Apps, Trailmark Systems, and Truvian Labs. Broadly, these software platforms utilize queryable online maps, customizable survey forms, specific user access permissions, and user-friendly data management tools to reduce the burdens on LRD
employees in responding to referrals for proposed resource development on their territory. Overall, these tools have proven to be a valuable tool for capacity-limited First Nation LRDs. Yet, the impacts of CIS have mostly been limited to the assertion of Aboriginal Rights through the duty to consult, not AT. However, CIS use in the referral system only accounts for a small portion of the potential utility of Web 2.0 platforms for First Nations.

Since the late 1990s, Web 2.0 has seen increasing interest and use as a way to create fluid and ever changing First Nation accounts of their culture (Gaertner, 2015). For Gaertner (2015, p. 62) Web 2.0 interrupt[ed] the static representations of its predecessor, the “new” Internet provided a more active space in which Indigenous community could be imagined in cyberspace, providing for interactive, dynamic sites of knowledge sharing in which stories, histories, and even identities were responsive to current events and real-time interactions”

For this thesis, the potential of web interactivity to portray the ever-evolving First Nation territorial use against more essentialist and frozen notions of Indigeneity is a central concern. The reproduction of the fluidity of First Nation identity and traditional practices is absolutely necessary when viewed against the profound transformations that the reserve system and settler intrusions continue to have on First Nation territorial use patterns.

This potential utility of Web 2.0 serves to highlight the contradictions to participatory ideals with the current implementation of CIS focused on the referral system. These CISs typically rely upon a top-down information curation and management framework to maintain adequate data handling protocols. Most importantly, the software I have investigated does not allow community members to easily use, access, or amend the data. This is not a perfidious design of First Nation governments or software companies developing them, but merely a legacy of traditional GIS and resource management practices that prioritize data quality and
management over access and knowledge transmission within the community. The data contained in these databases can be and are used for community purposes outside of the referral system. This just requires collaboration with the LRDs to grant access to the databases and in some cases fees from the CIS providers for additional user access. Nevertheless, this stifles access to these collectively owned assets by non-employed or disenfranchised community members.

The persisting top-down structures of First Nation CISs leave room for more adaptive and fluid community managed CISs. These CISs or software designs should not replace the referral and LUOS functionality in resource management but amend them to add community interfaces to the databases. This would serve the recommendation of this thesis for First Nation research to aid Self-determination through both external rights-based and internal cultural revitalization strategies by allowing continuous community input and alterations. Yet, such a strategy would require a robust permission system to allow the right users to access the data without compromising the control First Nations must have over their intellectual property. This must be further researched.

The primary issue that needs to be accounted for is how TK is often not universally held by the community. According to Ray (2015) “[r]ather, specialized knowledge can only be shared among those of the same gender, or among members of a particular social group.” The identification of this need has resulted in innovations to database design to accommodate Indigenous-based user permission controls. At the time of writing, the most sophisticated system of user permission control is Murkurtu Content Management System (CMS). This software, developed through an academic partnership with Aboriginal communities in Australia, sought to create a digital database to store cultural heritage primarily for use in digitizing museum collections of Indigenous artifacts. By adhering to user specific attributes like age, gender, and
community membership, Murkurtu seeks to limit access to items in the digital database based on the traditional social protocols. While Murkurtu has limited GIS utility currently, the concept of digitally reproduced social protocols has great potential to be applied to other CISs to protect Indigenous IP on the internet and in building trust of community members in digital technologies to store their cultural heritage.

One aspect of Murkurtu that warrants further discussion is its commitment to providing the software as a free and open-source (FOS) application to Indigenous communities. This model of service provision has many obvious benefits for financially constrained First Nations. However, without a robust volunteer support team that may be possible in this environment, the stability and support required for it to be a useful and reliable tool requires external funding for software maintenance, innovation, and community training. Here, Murkurtu’s financial support from academic institutions and funding agencies provides a great advantage to First Nations unable to justify expenditure on the current free market CIS solutions discussed above. The need for external funding provides either the Federal or Provincial levels of government an opportunity to fund First Nation research in ways that do not stipulate the form it takes. Further, government or academic funding of a First Nation CIS platform could implement commonplace performance metrics for similar projects that would not limit First Nation governments themselves but the organization managing the project. Such an approach would provide a point of much-needed collaboration and remove a central critique of this thesis — that the current research paradigm reproduces settler ontologies through funding and output restrictions.

Lastly, CIS can further facilitate intergenerational TK transfer initiatives already present or planned within the community. Intergenerational knowledge transfer could benefit from more accessible tools aimed at facilitating participatory collection and presentation of TK within the
community. A previous study investigating the inclusion of St‘át’imc knowledge in regional school curriculums recommended the recording of St‘át’imc stories and oral history to present in classrooms in the Lillooet area (S. Graham, 2009, p. 106). The study’s authors also recommended that assignments should be created for the students to interview and record these stories for use in the classroom. All of the outputs from such an academic program could be cataloged in the CIS. This would have multiple benefits for Indigenist research. First, it would increase the available human resources for collection of St‘át’imc oral history by exposing younger generations to multi-media production and interviewing techniques (Isogai et al., 2013), in effect producing a new generation of community researchers. Second, it would immediately facilitate greater connections between the youth and knowledge holders and create more pathways to preserve St‘át’imc Knowledge. This would be in addition to the increased knowledge transmission potential of the recording themselves. Lastly, the assignments could mandate students to perform acts of service for Elders to ensure adequate reciprocity is given for the interviews. This would reduce the financial requirement of monetary honorariums and compensation for researchers that are typically associated with research in First Nation communities while building community cohesion.

2.5 Literature Review Conclusion

The literature review above laid out the known positions and opportunities concerning Indigenist research in BC. It began with a discussion of the current research paradigm and critiques of its inaccessibility (Natcher, 2001; Natcher & Davis, 2007), tendency to both produce essentialist notions of Indigeneity (Brad Coombes et al., 2011; McIlwraith & Cormier, 2015), and reproduce settler ontologies in First Nation government employees (Bryan, 2011). This was
followed by a discussion of how recent judicial decrees in Canada to accommodate First Nation perspectives and oral history in the wake of *Tsilhqot'in (2014)* constitute an opportunity to reduce the prevalence of the consultant-driven model of research. Building on these openings, I laid out the benefits and limitations of participatory research to enable more accurate representations of the lived experiences of First Nation people and increase the options for Self-determination afforded First Nations by the settler state. I concluded with a review of technological advances to facilitate and utilize participatory data collection by First Nation governments in a holistic process of external decolonization and internal cultural revitalization needed for Self-determination.
Figure 2.1: Summary chart of research strategy impact on Self-determination strategies.
Chart by Zachary Zabawa

The entirety of this literature review attempted to be cognizant of the role of the settler state in perpetuating and addressing these injustices. Yet, as there remains much optimism surrounding the current research paradigm’s ability to aid rights-based First Nation strategies, both litigation and consultation in both academic literature and practitioners, the recommendations for the Provincial and Federal Governments are unlikely to be adopted by the settler state and their funding institutions in the near future. Therefore, the current research model and legal strategies must be utilized and supported to provide for the immediate needs of
First Nation communities, while raising awareness of the compromises currently required by the settler state and promoting experimentation in methods when the circumstance permits.

2.6 Research Questions

For this Master’s thesis, I conducted a multi-method triangulated qualitative study that focused on the possibility and applicability of CLR participatory video and mapping techniques for collection and representation of First Nation TK and oral history. This was done to address the need for long-term, critically aware research in First Nations in BC, which has been identified by academics (Bryan, 2011; Coombes, Johnson, & Howitt, 2014; McIlwraith & Cormier, 2015) and First Nations alike. I researched and sought input from AT and TK experts in unstructured interviews on two questions. Firstly, how do the recent legal outcomes in Tsilhqot’in (2014) and new technologies for easily collecting and reproducing TK and oral history online affect the barriers to research that in turn impact access to constitutionally protected Aboriginal Rights and Title? Secondly, how do community-led participatory methodologies for collection of First Nation oral histories impact First Nation cultural and institutional revitalization and amending settler perceptions of First Nation people?

To examine these questions two areas are covered, (a) how I developed these research questions through participant observation on a collaborative First Nation-led research project and (b) the process through which I sought to answer them. For the first aspect, I will describe my fieldwork in two communities of the St’át’imc Nation while working as a project technician on a traditional knowledge study in chapter 3. The second area is covered first in chapter 3 that describes the research methodology for this study.
Chapter 3: Research Methodology

In this chapter, I present the qualitative research methods I have utilized to investigate my research questions. I have questioned the applicability of CLR through a multi-method approach. The process consisted of participant observation of the St’át’imc Knowledge Mapping Project (SKMP) and an expert interview process. The expert interviews were performed to assess the validity of observations made during SKMP and to increase the value of the research to the communities that helped identify the research questions. Importantly, this is not CLR because the investigation and analysis were primary conducted by the academic researcher and verified by the participants. It is therefore CBR.

This inquiry occurred over a two-year period from January 2015 – to April 2017, and consisted of multiple stages that when viewed retrospectively form a multi-level picture of the challenges and opportunities that face community-led oral history collection and curation. The project sought to encourage experiential learning and dialogue in both the researcher (myself) and the participants. This allowed the focus of this thesis to be collaboratively identified by the research team and participants.

3.1 Theoretical Framework

The overarching goal of this research is to further the growing body of work aimed at the transforming the exogenous research relationships between the settler society and First Nations to one of equal respect for differing knowledge systems. This consequently requires an investigation of the effects of hegemonic research structure of western thought on Indigenous knowledge systems. Currently, the research paradigm and, by extension the production of knowledge, are still heavily favored towards western notions of value and verifiable truth. The immense power of western research institutions functions as a homogenizing force reproducing
itself in the spaces and people seeking legitimacy. To ignore the role of education and power to perpetuate specific realities, or even presenting research as value neutral is to live in subjugated consciousness. With this great power of education to perpetuate ontologies in students and the globalization of academic research, the need for intercultural knowledge exchange and respect for other intellectual traditions is greater than ever. If only for the acknowledgment that diversity in thought and societal organization can heighten our societies ability to creatively address seemingly intractable solutions like drug abuse and environmental degradation, much akin to the argument for the conservation of biological diversity. With this, ethical spaces have emerged to support methodological experimentation to satisfy this need. Indigenous research, in this light, is an ethical framework to protect the space for Indigenous peoples in knowledge creation.

Based upon this interpretation of Indigenous research, I have attempted to implement a theoretical framework of critical constructivism guided by Indigenous research methods. Constructivism scrutinizes the “… ways in which events, realities, meanings, experiences and so on are the effects of a range of discourses operating within society” (Braun & Clarke, 2006). Kincheloe (2008, p. 29) expands this notion in critical constructivism to include the necessity to investigate how the “dominant power plays a key role in shaping the form the constructions take.”

This framework is implicit in the primary argument of this thesis. Given the limitations of recognition politics in Canada (Coulthard, 2014), currently required adaptations of First Nation knowledge to settler preferences is a direct form of violence against the legitimacy and survival of traditional knowledge systems. Replacing the fluid role of the knowledge holders in guiding the learner to arrive at a proper interpretation of place-based knowledge with points on a map creates an “interpretation gap” in the transmission of knowledge. This happens whether the
audience is a First Nation child or resource developer. Without a simultaneous focus on cultural revitalization and education in the community or contextualization of research outputs when presented outside the community, the Cartesian representation of TK mandated by the settler state can bolster the adoption of settler epistemologies, such as viewing land as an inanimate object to be exploited. In the absence of cultural teachings and tutorship, these interpretation gaps can be colonized by either essentialist notions of indigeneity or direct neoliberal assumptions. Both of these are unacceptable as they render the establishment traditional governance structures more difficult.

Further, following this logic and the effect of inadequate institutional capacity on the resulting form of governance articulated by Natcher (2007), if First Nation LRDs utilize the same site-specific research outputs used in settler state decision-making processes, then their decisions are likely to either resemble or perpetuate those policies of the settler state on lands earned through the assertion of their recognized rights. Most importantly, this outcome is not the fault of First Nations, but a result of the current market structure and research funding model that heavily favors quantitative, site-specific studies. This funding model has resulted in the systemic reliance on outside researchers and administrators. The form of current research can almost be entirely attributed to the settler state and its agents, as they have a great degree of control over the allocation of funding for research. This is all the more tragic in light of the Federal government’s failure to fulfill the fiduciary responsibility to First Nations, as demonstrated by the contaminated drinking water found on many reserves in Canada. Here, the value of inexpensive research methods and supporting accessible technologies to undermine the mechanisms the settler state utilizes to construct reality is made clear.
This is just one example of how critical constructivism functions to explain how continuing asymmetrical power relations perpetuate the realities of the powerful, at the expense of First Nation peoples. On the other hand, it also serves to demonstrate how our reality is temporally and situationally specific and contains actionable inherent contradictions. If the funding model is changed, which is happening as more First Nations gain unrestricted income from revenue sharing agreements made possible by recognition politics, then the efforts can be made to further cultural revitalization. Ultimately, what is true today, will not be tomorrow. This potential for radical change underlies the optimism found in this thesis.

3.2 Qualitative Methods

In order to properly investigate the applicability of CLR and technological toolkits available for First Nations to collect and organize TK, I have implemented a multi-method qualitative research methodology of participant observation, consisting of two years working as a technician on a community-led TK study with two communities of the St’át’imc nation, and interviews with experts in the field of TK and AT concerning the findings from my participant observations. For this research to be valuable to the varied Indigenous communities in Canada and abroad, I will base these interviews and their analysis in a reflexive research approach. This decision is critical for the single case study research design of this thesis, where readers of the outcomes of this research would need to take the critical insights and apply them to their own unique context.

Based on the basic acknowledgment that no single method is perfect for every situation among others. I have relied on method triangulation to mitigate the known shortcomings of each of the two methods in contemplation of the unique characteristics of this study. The decision to implement a series of expert interviews was centered on my realization that the narrow
perspective gained as a technician on a small project required a multi-level approach was unlikely to produce policy recommendations capable of transfer to other First Nations contexts. The sequential order of the methods reflects this decision.

This section will first cover the methodology used in the participant observation stage that produced the research questions and elucidated the needs for research. This will be followed by the methodological justification and considerations made to utilize expert interviews in the study.

3.2.1 Participant Observation

Most broadly, participant observation is defined by Schensul et al. (1999) as "the process of learning through exposure to or involvement in the day-to-day or routine activities of participants in the researcher setting" (p.91). The use of this methodology has a strong historical precedent in the field of sociology and anthropology. While the method allows for both qualitative and quantitative methods, this study will rely upon qualitative methods to collect data. The primary purpose of this method is how it allows the researcher to learn the culture and language of the subjects, in order to be able to maintain perspective and write about it in a convincing way (Bernard, 2002, p. 324).

The ability of the method to enhance validity has been witnessed in the following ways according to Bernard (2002. p. 333): (a) It allows the researcher to increase the trust required to provide insights into the community’s internal politics that would have been difficult for an outsider to learn; (b) It reduces reactivity of participants by allowing the researcher to demonstrate empathy over and over again. These gestures can then be taken as genuine with the research participants. In turn, the participants may begin to share stories of actual frustration and accomplishments within the context they find themselves, or more succinctly “presence builds
trust. Trust lowers reactivity. Lower reactivity means higher validity of data” (Ibid. p. 334); (c) Lastly, “it helps the researcher to develop questions that make sense in the native language or are culturally relevant… It gives the researcher a better understanding of what is happening in the culture and lends credence to one's interpretations of the observation” (Ibid). These advantages of the method have led to its prominent position in the field.

The critiques of the method can be broadly described as arising in the process of the researcher assimilating to the culture, and to a lesser degree when the researcher is not transparent that participatory research inherently involves impression and relationship management (ibid.). When the researcher is forthcoming on this front in their analysis, many of the issues listed here can be mitigated. The first issue commonly spoken to is the impact of the decision of what and what not to observe. If these decisions are not made with the acknowledgment of the researcher’s biases, like the tendency to select informants with similar views as the researcher, then the validity of the study can be seriously undermined (De Munck & Sobo, 1998). This bias can be addressed by analysis of the participant's competency on the topic being discussed (Bernard, 2002).

Another serious point of contention, especially for young researchers, is the tendency to not report the negative observations of the community. This can be negated by actively contemplating the researcher’s biases beginning in the first stages of the study. Further implementation of multi or mixed-method studies at different levels, interaction models, and reference frames can allow a less biased view of the subject and increase objectivity (Kawulich, 2005).

Of primary concern for the validity of participant observation are the impacts of personal biases and attributes of the researcher and participants. The issues of intellectual biases were
covered in the self-reflection section 2.3 because they apply to all of the methods employed in this study. However, one issue spoken to prominently in the literature that affects observation is the effect of sex of the observer on access to the community (DeWalt & DeWalt, 2002). My position as male limits my access to certain spaces and grants access to others. This is most apparent by how the relationships I have built are almost exclusively with male counterparts. Further to this point, my rural upbringing in Montana and enjoyment of the outdoors has allowed me to bond with Elders that share these interests. The Elders I feel closest to are the ones that I shared my experiences on the land and learned from theirs. While being a common thread that allows deeper interactions, it also predisposes me to gain disproportionate amount insights from these participants at the exclusion of others.

While it is acknowledged that objectivity does not require neutrality (Bernard, 2002, p. 350). The act of participant observation is still a balancing act to not “become so involved that objectivity is lost” but still maintain the empathy necessary to “apprehend the world from their perspective” (Denzin, 1970, p. 368). This proved difficult for me because the line is not clearly defined. Any researcher working in First Nation communities that is seeking to empathize must make clear their political and philosophical positions to those that they are working with. This proved true for myself. Only after making clear my non-academic motivations for the work was I able to notice a shift in how the community members interacted with me. After these often sincere, and sometimes interrogatory, discussions, I was increasingly invited to other activities in the community that provided deep insight into the structures that I was working that I would have missed. I will only speak to these generally as the specifics do not warrant inclusion.

Given the benefits I earned from transparent interactions and participation in political activities, the potential effect of such actions on my objectivity has not been lost but rendered
less consequential and should only be applied to the methodological design of the study. I have come to the conclusion that participant observation in this First Nation space must include full emersion into the community’s worldview, including withholding judgment and analysis, in order to faithfully as possible represent their voice and learn what is to be learned, even if this compromises objectivity. More succinctly, the researcher cannot remain neutral in the struggle for First Nation Self-determination (Smith, 1999). The notion of respect in Indigenous methodologies requires this.

3.2.1.1 Selection of the Site and Inclusion Criteria

The site selection criteria used for this study was based largely on accessibility. The admissibility of this decision into the research methodology is the requirement for reciprocity in Indigenous methodologies. In order to carry out this study of little immediate value to the community, it was required to have an exchange of real value. In this case, access to the communities was gained through the researcher’s work on the SKMP. This exchange provided the impetus to carry out this research in the communities of Tsal’alh and Xwisten.

Further, the participants in the study were chosen by the community. While a broad assessment of prestige of the informants is still necessary (Vidich & Shapiro, 1955, p. 514), the community’s decision to include members of the project speaks to their competence and respect within the community better than I could as an outsider. However, many of these decisions could be based on a lack of capacity within the community more than the quality of the participants. During the research, I kept assessment of informants in mind, and the affirmation of the community’s decisions become apparent in my time working in the community.
3.2.1.2 Observations- Rationale and Validity

The observations for this study consisted of seven two-day TK workshops per year in 2015 and 2016. The workshops were designed to make use of vacant times during an already underway community-led study assessing the impacts of different flow regimes of a nearby dam on the cultural and spiritual values associated with the Bridge River. Each TK workshops consisted of one-day driving with the group of 12 Elders in a 15 passenger van up the Bridge River Valley to perform the survey for the other study. This functioned as an excellent informal opportunity to build relationships with the Elders and get feedback and recommendations for the TK sessions. The second day of the TK workshops was spent in the Band office with the same group of Elders conducting mapping sessions or individual interviews.

Besides the initial planning meetings between the advisory committee and the researchers and first two TK sessions, all of the meetings were video and audio recorded with the consent of all participants in a process of continuous monitoring. This allowed partial alleviation of the requirement to provide a written record of descriptive observations such as the physical environment, the participant's appearance, and interactions that occur in the setting (Merriam, 1988). This decision to use the meeting recordings also reflects the basic assumptions that underlie this research, that although you can mitigate subjectivity through self-reflection in research, the best alternative is to preserve the medium of observations and insights in unedited video or audio of the actual interaction. Instead of opening it up to the immediate distortion that occurs in the observation and note taking process. This is rendered more important given my limited ability to record observations in real time, as I was actively engaged in running the meetings.
While the meetings were primarily concerned with the data collection for the TK study commissioned, the group of Elders involved also served to guide the study and provide feedback. These insights were most often given in direct response to a specific occurrence during the study, and not made during a dedicated methodological discussion time. Therefore, the recordings proved immensely valuable in reviewing the meeting for interactions about the wider research process that I missed from being distracted by conducting the meeting. This did affect the immediacy of my note taking, and ultimately impacts the validity of my observations. In a few instances, I was unable to review the recordings until well after the meetings. This is problematic according to Bernard (2002) as it introduced the possibility of bias through increased reflection by the researcher that can construe the validity of the observation process. However, since reviewing audio and video has less inherent bias than traditional field notes, this may still be a net positive in study validity.

Even while it is recognized in the literature that video recording is a more accurate depiction of first-person accounts than other forms of direct human observation, it is not immune to biases (Green, Camilli, & Elmore, 2006). The primary ways a video recording can be biased is by the positioning of the camera in the space and who or what is the focus. With this in mind, I made an effort in the group meetings to place the camera to the side of the group using a wide-angle lens to not privilege either the Elders facing the front of the room or the people conducting the meetings in the front of the room. The placement of microphones was also made with this consideration. Further, the recordings produced are not data by themselves, they require interpretation. This introduces the need to investigate the interactional phenomena that are required in all qualitative observational research. This will be covered in the next section.
A common critique of this method that is irrelevant to this specific scenario, but worth mentioning, is the Hawthorne Effect. The Hawthorne Effect refers to the increased performance of research participants that occurs when they are being monitored. This is irrelevant to this study because the use of continuous monitoring, video and audio recording, is required in any LUOS and TKs study to provide external validation of the findings. Therefore, the use of continuous monitoring does not produce extra reactivity than an ordinary study in the community.

In addition to the recordings of the meetings, I kept a field note journal that consisted of accounts of interactions that occurred inside and outside of the TK meetings. These were most often limited to discussions with the project leader about goals, planning, and happenings in the community, data organization sessions with the community researcher, and in the first day of traveling with the Elders. Further, I was invited by participants of the TK meetings to attend various community gatherings. These experiences were recorded in my field notes and were critical in understanding the larger socio-political context of the project and the communities.

The reliance on both of these methods of video review and field notes for observation can mitigate the dilemma of deciding between the two methods of field notes, (a) making unthinking observations that are used to substantiate or refute a hypothesis upon review of the notes or (b) the decision to take notes on issues that test the hypothesis which is formulated prior to the observations (Becker, 1970, p. 410). The field notes here partially functioned as the latter because the hypothesis was developed as the study progressed but was unquestionably influenced by note taking and the recordings as the former. This dual note taking strategy was warranted because it allows for multiple levels and time frames for analysis which improve validity. Additionally, continuous monitoring allowed for satisfying the recommendation of CBR
to allow the theoretical framework and research questions to develop from the participants in the study by providing initial observations that are less influenced by the preconceived concept of the researcher (Schensul et al., 1999).

### 3.2.1.3 Observation Analysis

During and immediately after my field work sessions, I conducted preliminary analysis consisting of internal validity checks and reviewing my notes and recordings to begin identifying recurring topics and themes. The first step was ensuring internal validation of field notes that posed high value to the research questions. This consisted of verbally cross-checking observations gained from informants. When I found a particularly valuable insight into the subject of the study, I would carefully raise it in a discussion with other informants, and ask the informant if they could refer me to others that were knowledgeable of the insight offered. Prior to this cross-checking, I would first record the initial observation as soon as possible after the interaction to limit the effect of my personal reflections on the recording. Then I would review the note prior to inquiring for verification from other informants to relay an accurate depiction of the observation to the validator.

I elected not to transcribe the recorded meetings as this would needlessly compromise the promises made in the SKMP consent form and research agreement to protect the IP of the Elders. This was also a practical decision as most of the continuous monitoring of meetings recordings would pose little or no value to the research interests of this paper. Instead of verbatim transcription, I performed observational analysis during the review of the recordings entailed for the SKMP methodology. Through this process, I became familiar with the topics discussed in the meeting and those interactions I missed during the meeting. I recorded the video start and end time and a brief note or code of the subject matter of any interaction that concerned the project
itself and not the data collected for the study. After identification of all project comments and completion of my literature review, I reviewed all of the notes and deduced themes and central critiques relevant to the research questions.

The benefit of this analysis method is that it allows the subject matter expertise I have gained through the literature review and course work as well as the knowledge learned about the communication norms in the community and specifically to each Elder to inform the analysis. While the subject matter knowledge is more obvious in its benefits, the experience with communication norms warrants explanation. During my time with the Elders, it became apparent that the use of critiques aired as humor, often without normal indicators of facial cues or laughing, was a primary mechanism for commentary by the participants. Therefore, the familiarity with each participant’s dispositions towards certain topics and their disposition generally were critical in understanding the intent behind their comments. Further, keeping the medium in video recordings reduces the known disadvantage of transcriptions to lose the visual indicators used to assess implicit meaning (Green et al., 2006).

3.2.2 Expert Interview Methodology

This section will first clarify the decision to use an expert interview methodology. This will then be followed by a detailed accounting of the methodological considerations made to limit the known shortcomings of the method. The primary critiques of this method, which have increasingly been dealt with in literature, are assessing reliability, quality, and validity of research results (Dorussen, Lenz, & Blavoukos, 2005; Glaser & Laudel, 2009). The use of multi-method triangulation was meant to account for these persistent issues associated with the expert interview method.
Expert interviews can provide a series of benefits that account for the often lacking transferability of participant observation. First, they can function as easy entry points into fields of research. During the interview, informants that are closely connected with other practitioners and are respected in their field can open opportunities to gain deeper insight from larger circles of practitioners (Bogner, Littig, & Menz, 2009, p. 2). Second, according to Bogner and Menz (2009), the primary value of expert interviews is how they function as a test of praxis because the role of experts is largely to transition theory into practice or balance critical reflection and action in the words of Freire. Lastly, in my experience in the study, when personal interest by the informants was demonstrated, the interviews provided better outcomes than were expected. In these cases, the informants showed interest in ensuring my understanding of the subject and what still needs to be done. This allowed to me to quickly gain results desired for orientating the findings from my participatory observations and constructing a view of the field that exists outside of my immediate circumstances.

Implementing Bogner and Menz’s (2009, p. 46-7) typology of expert interviews, I utilized the popular systematizing expert interview methodology. The primary function of this methodology is to gather or reconstruct the exclusive knowledge held by expert informants regarding the praxis that has been developed through practice. An important benefit to this method of expert interviews is the comparability of information gained across the various facets of subject of inquiry if the same framework is used (ibid., p.47)

The above benefits of expert interviews pivot on one often overlooked aspect of the method, the means by which expert interviews can provide objective information. In order for expert interviews to fulfill objectivity in the constructionist theoretical framework of this thesis, the researcher must account for the subjective aspects of expert opinions. This requires
accounting for the informants’ position as a functional elite with all the biases that entails, as well as the ontological considerations concerning their background and interests in the study. Bogner and Menz (2009) define this as the ‘interaction model’ of expert interviews. This model runs in direct oppositions to the ‘archeology model’ that treats expert knowledge as static and absolute. Instead of viewing any interaction of the interviewer as potential interference with overall validity as in the archeology model, this framework analyzes the communication structure between interviewer and interviewee to maximize the goals of the study.

. The interaction model of expert interviews places emphasis on the “perceptions, ascriptions, and suspicions about competence in relation to the interviewer” (ibid., p. 57). “The expert is… a guide who possesses certain valid pieces of knowledge and information” (ibid., p.47). Through a process of assessing the interviewer’s knowledge of and placement in the field, information is deemed relevant by the informant and shared to the interviewer. Here the authors define five types of perceptions of the interviewer that impact the communication structure of the interview, (1) co-expert of equal status, (2) expert from a different knowledge field, (3) interviewer as layperson, (4) interviewer as authority, and (5) interviewer as potential critique. Each of these typologies represents unique advantages and disadvantages, as well as different applications. For the use of systematizing expert interview, it is recommended that a position of the interviewer as a co-expert or pseudo expert be sought by the researcher.

Michaela Pfadenhauer (2009) expands this emphasis to account for the effects of the position of pseudo-expert on communication structure. The positioning of the researcher as a pseudo expert enables the “creat[ion] of a communication situation with which [the informant] is familiar, that is to conduct a quasi-normal conversation” (ibid., p. 84). In doing so, the interview can avoid the common issue of expert/public communication that employs metaphors or self-
legitimizing tactics in relaying information, and therefore the interview can get closer to the unobscured praxis knowledge of the expert (ibid., p. 85). The resulting conversation concerns the identification, remediation, and causation of problems, among others. However, this communication structure has the potential to render the conversation overly technical and based upon on the informant’s frame of reference (Bogner & Menz, 2009, p. 69). Techniques to mitigate this outcome are covered in the next section.

The process used to develop my status as a pseudo expert consisted of both theoretical grounding and participation in the field. The theoretical grounding was achieved by an extensive literature review of all of the bodies of work that experts in TK and AT must be familiar with. This included the case law of both AT and evidentiary requirements for court and negotiations in Canada, the literature surrounding LUOS and participatory methodologies specific to BC such as Tobias’s map biography method (2009), and the various international declarations of rights such as UNDRIP. Pfadenhauer (2009), makes clear that theoretical knowledge is not sufficient in of itself to meet the level of competence required to be viewed as a pseudo expert. What is required is an “acquisition of virtual membership in the events that are being researched” (Honer, nd., as cited in Pfadenhauer, 2009, p. 91). My two-year experience participating in SKMP was vital to the openness I perceived in the expert interviews I conducted. Repeatedly over the course of the interviews, my practical experience was referred to by the informants as a means to discuss the problems observed. Additionally, I organized and participated in various workshops on Indigenous Methodologies that familiarized myself with the most current ethical and practical expectations when conducting research in First Nation communities. This helped to alleviate the concerns of the informants that I was seeking to have them speak for the communities with which they worked. While I was largely still viewed as a graduate student with much to learn, I
was able to achieve a productive two-way conversation that revealed exclusive expert knowledge characteristic of co-expert interviews.

Due to time constraints and limited access to the informants in the study, I was forced to rely upon video conferencing software for all of my interviewers. This is superior to phone interviews because phone conversations compromise many aspects of what makes in-person interviews manageable. Nevertheless, compromises still remain in the video interview method when compared to meeting in-person. While the ability to control distractions and interruptions remains problematic for video conferencing, the visual identification of facial cues allows for greater examination of the informant’s interest in the conversation. This ultimately can be useful in deciding to probe further with more questions or take a more conversational approach (Christmann, 2009). Therefore, I concluded that video interviews were an acceptable method for conducting expert interviews.

When examining new means of knowledge production and control, especially with experts in the field who have their own vested interests and high potential influence the study, it is important for the researcher to delicately balance defending the study’s purpose to the expert while addressing the interests and vulnerabilities of the expert to minimize harm (Obelene, 2009). Nevertheless, the literature surrounding the ethics of expert interviews point to the negotiation favoring mitigating the potential harm done by the informant than to the informant (ibid.). Here Obelene (200) makes an interesting observation based on this fact, that it may be counterproductive to employ democratic research ideals into the expert interview methodology, as the experts’ motivations can have an undue influence on the study.

The motivations of experts’ participation in the interviews must be analyzed as they can have a large impact on the study (Obelene, 2009). Obelene speaks to her experience negotiating
the involvement of expert informants where they would often ask “What is in it for me?” or “Why should I care?” For this study, those questions did not arise. The experts I reached out to expressed deep interest in the topics I presented to them. This positive motivation has both positive and negative consequences. The positive aspect is that the expert will seek to shape the study into something that is both valuable to the field and to them. If the value does not overly accommodate the expert’s desires at the cost of the value to the field, then this can be a positive outcome for the study by providing increased relevance to the field. If on the other hand, the research harms the expert unnecessarily or becomes a platform to benefit a particular expert the ethics of the study are called into question. In this case, thoughtful negotiation of roles between the researcher and informants must be undertaken.

With the considerations above, the decision to employ the contentious methodology of expert interviews was based on many factors relating to the specific nature of Indigenous Research in BC, and my position to it. Namely, the small and highly dynamic nature of the field requires sustained and personal interactions in order to foment the trust required to disclose trade practices. Through utilizing the network of practitioners identified by my acquaintances at UBC and my field work, I was able to gain the personal references and perspectives needed to demonstrate the basis for building trust with the experts involved in the study.

Furthermore, this methodology proved to be the most effective way of surveying the field, as experts can give insights or ‘inside’ information about the policy making process and provide quick access to comparative observations (Dorussen, Lenz, & Blavoukos, 2005). The ability to gain inside perspectives was particularly relevant because the decision of First Nations to undertake research is only one part of the larger struggle of First Nations for Self-determination, and therefore is inherently political. These political motivations for pursuing
research are most often left out of studies and reports, as reports are most often drafted by outside consultants who must maintain impartiality required for study validity. This leaves abstracted expert observations, so as not to misrepresent clients, as the most effective way to make policy recommendations on a Provincial scale.

All of these factors led to my decision to employ expert interviews in this thesis. Below, I will speak to the methodological decisions made to mitigate the shortcomings of this data collection method.

3.2.2.1 Selection of Participants

A key distinction for this method to ensure validity is who qualifies as an expert. While this primarily depends on two considerations, “the pragmatic definition of the expert interview and the sociology of knowledge perspectives,” the distinction lies between them (Meuser & Nagel, 2009, p. 18). The key aspect according to Meuser and Nagel (ibid.) “is... if he or she possesses an ‘institutionalized authority to construct reality’ (Hitzler, Honer, and Maeder, 1994, cited in Bogner & Menz, 2009). While this undoubtedly depends on the perception of the researcher, verification methods exist to make sure the interviewees qualify. The space that this investigation takes place in is currently emerging and highly dynamic. In light of this, new authorities are being identified as they propose innovative solutions and demonstrate competence. I found relying on the opinions of my peers in the academy, the community, and the other informants to identify these experts as the best way to proceed. This also entailed a thorough review of the work and publications of the experts identified through these personal referrals, know as ‘snowball sampling’.

Recruitment of the expert interviewees was accomplished via extensive email correspondence. The invitation email was drafted to conform with BREB’s expert interview
protocols, mainly concerning the compensation for inclusion, the purpose, potential publications, the recording of the interview, and the right to withdraw their contributions to the study at any time. This invitation letter was approved by BREB. After the initial contact negotiation occurred to clarify any questions the informant had about the study and their position to it. This conversation gave me the opportunity to reflect on the potential value each participant could provide to the study.

The composition of the interviewees was chosen based on the three primary ontological perspectives highlighted in course of the literature review and fieldwork; legalistic, academic, and practitioner. To represent the legal implications of this work, I interviewed Drew Mildon of the law firm Woodward & Company that was successful in representing the Tsilhqot’in Nation in their AT case. Drew’s primary interests involve the development of consultation processes based upon academic research to ensure that clients are meaningfully and effectively resourced to enter into fair negotiations and the role of First Nation oral history in legal strategies. Both of these interest make him uniquely qualified to speak on the topic of this thesis.

Jon Corbett’s vast experience with conducting participatory research projects, as well as participatory research journal. He was selected to present insights into the strengths and pitfalls of participatory research. Corbett is an Associate Professor in Community, Culture and Global Studies at UBC Okanagan and the co-director of the Centre for Social, Spatial and Economic Justice. Jon’s community-based research investigates Cartographic processes and tools that are used by local communities to help express their relationship to, and knowledge of, their land and resources. Jon has worked with Indigenous communities in Australia, Indonesia, the Philippines and since 2004 with several First Nations communities in British Columbia. All aspects of his research incorporate a core community-based element. This means that the research is of tangible
benefit for the communities with whom he works; that those communities feel a strong sense of
ownership over the research process; and that community members are engaged and engage in
the research endeavor.

Steve DeRoy was chosen to provide specific praxis knowledge of Land Use Planning in
First Nation Communities. Steve’s traditional name is Waterdrum Man and he is active in sun
dance and other Indigenous ceremonies. He is Anishinaabe and from the Ebb and Flow First
Nation and Lake Manitoba First Nation. Steve is also a founding director of the Firelight Group,
a research group dedicated to providing community-based research and technical support
through high-quality, evidence-based research that is respected by communities, as well as
government and industry. Since 1998, Steve has worked as an award-winning cartographer and
geographic information systems (GIS) specialist with Indigenous groups across the country and
internationally. He has engaged with numerous First Nations on land use planning and
comprehensive community planning, from community facilitation to data and GIS analysis to
drafting planning reports. He also provides project management, advisory and senior research
support, particularly for cultural impact assessments for large-scale environmental assessments
and regulatory processes. Steve developed the direct-to-digital (D2D) mapping method for
documenting Indigenous land use and occupancy values using Google Earth. He is also actively
involved with training local and Indigenous participants with mapping and GIS technologies and
founded the annual Indigenous Mapping Workshops (www.Indigenousmaps.com).

The Indigenous research methodology of this study resulted in a selection criterion for
experts being aligned with the motivations of improving research in First Nation communities,
even at the expense of their personal livelihoods. While I experienced this to be true, there
remained an additional issue of minor conflict between the three perspectives of lawyers,
academics, and consultants that I sought to include in the study. Each expert offered minor critiques of the other informants’ roles in First Nation research. It was, therefore, crucial for the researcher to be able to determine the vested interests of each participant and defend the need to interpret their critiques through that lens. If the researcher sought to abide by a purely democratic negotiation where the researcher and experts have the same power in decision making, then this would undermine the objectivity of the study. This is especially true if the scenario is one of “studying up” where the researcher defers to the expert’s opinions due to power relations between the researcher and the expert (Hammersley, 1995, p. 56). This was not the case because of my attempt to assume the role of pseudo-expert.

To ensure an acceptably wide data-collection process, snowball sampling was employed to connect to the small field of TK researchers and aboriginal title lawyers. Initially the minimum sample size was to be 10 interviews, however, this was revised downward to reflect saturation of data, and the view of informants that I have spoken to the prominent experts in the field. To reduce the possibility of community bias that snowball sampling is prone to, findings from the expert interviews will be analyzed and presented in the St’át’imc community interviews. I believe this will be helpful in attaining perspective in the prioritization of proving aboriginal title to other responsibilities of Band and Nation Governments, which TK researchers and Aboriginal Title lawyers may have a potential bias in.

3.2.2.2 Data Collection

The interviews were semi-structured with the use of guiding questions that were target towards the expert’s particular field. The interviews were partially structured to ensure collection of the account of each informant’s personal perspectives and motivations for their work in the field, as well as opinions of the other research participants. The primary purpose of this was to
negate the tendency of the expert interview to focus exclusively on technical or practical issues that face the field. This was done in addition to the primary focus of investigating the research questions from each unique perspective of the participants.

3.2.2.3 Data Analysis

Before conducting the expert interview analysis, I reviewed the observations from the participant observation to reorient myself to the context and meaning I identified previously. This was primarily done to maintain comparability of the two methods by maintaining the same theoretical framework. The process included re-reading my field notes and recordings, as well as the preliminary themes and findings identified in the analysis of the field work.

In the analysis of the transcripts of the expert interviews, I utilized thematic analysis to organize the various perspectives and insights found in the expert interviews. Considered a foundational method for qualitative research, thematic analysis offers great flexibility for the inclusion of multiple epistemological approaches (Braun & Clarke, 2006). The constructionist paradigm, where the subjectivity of each informant must be analyzed, requires this flexibility. It “can potentially provide a rich and detailed, yet complex account of data” (ibid.) The intent of thematic analysis is to move the process of theme identification from a passive process of discovery to that of an active process of explaining how the researcher uses their own perspectives to identify patterns and process and building academic rigor (ibid.). This basic assumption requires positioning the researcher into the landscape of their research to make their epistemological and ontological positions known to the reader, this was covered in Section 1.1.

The application of constructionist framework was important for the expert interviews, as the influence of the informant’s position in the field as a lawyer, academic, and research practitioner had a perceptible impact on attitudes towards aspects of the study outside their
particular specialty. This required familiarity with the agreement and disagreements between the fields that arise from the crowded and competitive marketplace that makes up the Indigenous research landscape.

### 3.3 Study Limitations

A few notes on the limitations of this research need to be mentioned. The first limiting factor to the validity of the study is the small sample size of both community Elders and expert interviewees. The small sample sizes in both sets of interviews can be attributed to the methodological decision to focus on relationship building and continual feedback of research participants. It would have been at the detriment to the conversational method employed to spread the limited resources allocated to the study further than the included participants. The impact of this is, ultimately, limited external validity and theory building potential of the research findings. While triangulation strengthens both of these aspects, I recommend that further study and outreach to practitioners is needed in the field.

Another limitation is how I am not a trained solicitor. I have attempted to accommodate this limitation by performing an extensive literature review and interviews with legal experts. However, the lack of personal knowledge in the procession of legal cases could affect the relevance to the conclusions reached and this affects validity.

Lastly, the very nature of investigating First Nation research strategies in action orientated research requires that the statement is made that every First Nation has intrinsically different aspirations, ways of being, capacity, and difficulties. I have attempted to demonstrate how the situation facing the St‘át‘imec may be representative of the wider issues facing BC First Nations as a whole. The decision to pursue both rights-based territorial repossessions and cultural revitalization are value-based decisions. Therefore, the conclusions in this paper must be
weighed and analyzed against the specific values and circumstances of the individual First Nation. Only then can the recommendations be considered valuable. Yet, if the research presents enough contextualization of the community and my subjective perspective, the readers of this research should be able to apply the lessons learned through thoughtful application to other specific scenarios.

With these limitations aired, I will now present the background and findings for SKMP.
Chapter 4: St‘át‘imc Knowledge Mapping Project Pilot Study

Figure 4.1: Photo of Elder Working Group. Photograph by Charlene John

This chapter describes a pilot study commissioned by two communities of the St‘át‘imc Nation that began in February 2015 and continued over the following two years. The project at the time of writing (Spring 2017) is currently ongoing. The project has sought to abide by Indigenous research methodologies that stress the importance of dialogue and group decision making. This renders the process inherently iterative in an attempt to maintain the relevance of the project. To achieve relevance, the project direction and goals were revisited through the entire two-year process, and continue to be altered with the inclusion of new perspectives and developments.
4.1 The St'át'imc Nation Context

Figure 4.2: Elder Ken Thomas participating in a group mapping session. Photograph by Zachary Zabawa

In order to comprehend the motivations that underlie this thesis, the story and ambitions of the St'át'imc Nation must be told. The people with whom I have interacted during this research and come to regard as my friends have been willing to share portions of their past, and the values guiding them into the future. Their openness has given me the opportunity to begin to comprehend the complex political-economic context that I have been allowed to immerse myself in. The determination and strength that were communicated in these interactions have left an indelible mark, propelling me to do what I can to further their struggle for justice.
Due to the applied nature of the meetings and interactions held during the SKMP, I will be relying on the work of Sarah Moritz in her thesis *Tsuwalhkálh Ti Tmícwa (The Land is Ours): St’át’imc Self-Determination in the Face of Large-Scale Hydroelectric Development* (2012) to relay the intricacies of the St’át’imc story. Moritz’s work in the same communities that I have found myself involved with has been extremely beneficial to my own understanding of St’át’imc perspectives. While not a substitute for my own process of relationship building and learning in the community, Moritz’s work has allowed me to more quickly empathize and understand the impacts and motivations that shape every member of the community. Moritz’s work meant that we did not have to cover the same ground, allowing the research team to focus on the applied nature of my study.

The utility of Moritz’s research in my own orientation in the community points to the continued relevance of ethnographic research for the creation of narratives and the social mobilization that can occur when the work is truly representative of the communities’ realities. Moritz mentions there is much appetite for works on St’át’imc history within the community, and I have also noted this. Her thesis and continuing work in the Nation are being done within the aims of addressing this need in the community. More importantly than aiding outside researchers, by producing collaboratively drafted accounts of St’át’imc history the preservation of knowledge is ensured, and inter-cultural communication is increased.

However, where we differ in methods only is that these forms of documentation, heavily predicated on the labor of outside researchers, are not addressing the systematic separation of knowledge from the knowledge holders, even though Moritz’s research is heavily based on the interviews and approvals of community members. This research into the impact of knowledge separation was most likely absent from the mandates and directives given by the community to
Moritz in the project planning stages of her research. This was also outside of the research mandate I was given. Yet, it became apparent to me that this was a need expressed by community members themselves. Initially, I was apprehensive about pursuing a research agenda outside of the original scope of the project at hand. However, this changed once I discussed my concerns with CRAC. My work on SKMP, in the eyes of the people overseeing the project, functioned as the reciprocity mandated by Indigenous research and the St’át’imc ‘ethic of sharing’. Therefore, my pursuing research that was not immediately valuable to the community, was seen as a reasonable form of reciprocity.

4.1.1 On Being Úcwalmicw

The notion of being Úcwalmicw or ‘The People of the Land’ is manifested in every aspect of St’át’imc Culture. The primary implication of this identity is that it requires a constant dedication to the St’át’imc ethics of sharing, responsibility, and respect to all people and the land. From those with whom I have interacted, the adherence to these immensely deep obligations is non-negotiable. Thus far the bad faith deliberations with settler state have required, as a cost of entry into negotiations, a suspension of their identity as Úcwalmicw. Negotiators and land managers have attempted to force St’át’imc leaders to compromise their responsibility to the land by seeking settlement of specific issues without thought to the past, present, and future grievances of the Úcwalmicw. In contrast, this holistic requirement of a St’át’imc negotiator to be grounded in Úcwalmicw identity has been constant and unyielding.

The history of St’át’imc resistance to illegitimate Canadian appropriation and colonization of their Territory can most succinctly be demonstrated by the 1911 Declaration of the Lilooet Tribe. This document has been cited in many conversations as the basis of St’át’imc autonomy and property rights.
To Whom It May Concern:

We the underwritten chiefs of the Lillooet tribe (being all the chiefs of said tribe) declare as follows:

We claim that we are the rightful owners of our tribal territory, and everything pertaining thereto.

We have always lived in our Country; at no time have we ever deserted it, or left it to others.

We have retained it from the invasion of other tribes at the cost of our blood. Our ancestors were in possession of our Country centuries before the whites came. It is the same as yesterday when the latter came, and like the day before when the first fur trader came.

We are aware the B.C. government claims our Country, like all other Indian territories in B.C.; but we deny their right to it.

We never gave it nor sold it to them. They certainly never got the title to the Country from us, neither by agreement nor conquest, and none other than us could have any right to give them title. In early days we considered white chiefs like a superior race that never lied nor stole, and always acted wisely and honorably.

We expected they would lay claim to what belonged to themselves only. In these considerations we have been mistaken, and gradually have learned how cunning, cruel, untruthful and thieving some of them can be.

We have felt keenly the stealing of our Lands by the B.C. government, but we could never learn how to get redress.

We felt helpless and dejected but lately we begin to hope.

We think that perhaps after all we may get redress from the greater white chiefs away in the King's Country, or in Ottawa. It seemed to us all white chiefs and governments were against us, but now we commence to think we may yet get a measure of justice.

(SIGNED)

James Nraiteskel, Chief Lillooet Band
James Stager, Chief Pemberton Band
Peter Chalal, Chief Mission Band
The hope and strength found within this document are not confined to the past. From my experience, it permeates every decision made by leadership and the worldview of the people I encountered. This is embodied in the commonly expressed axiom “We are not a stakeholder, we are a nation” and the assertion, not of Aboriginal Rights and Title, but of St’át’imc Rights and Title. Further, the trust and guidance that was afforded me in my first trip Xwisten, in the face of the long history of territorial and cultural dispossessions, is demonstrative of the commitment to St’at’imc values, even if the encounter is overtly one-sided.

This section will discuss the recent pivotal moments that characterize the ever-evolving relationship between the Province and the St’át’imc Nation, and how they have been shaped by St’át’imc values interpreted through a lens of forward-looking practicality. The historical position of the St’át’imc has been of continual assertion of St’át’imc sovereignty, while more recently seeking compensation for infringements through consultation and accommodation.
outside of the BCTP. The St’át’ímc fundamentally refuse to participate in any negotiations that include extinguishment or impacts on St’át’ímc Rights and Title. According to Moritz,

For St’át’ímc people and their stance of Self-determination a comprehensive treaty, whether historically or as part of the modern BCTC treaty process is not an option, mainly because no one is prepared to extinguish Title and Rights for a disadvantageous exchange. (2012, p. 98)

A point of frustration for many St’át’ímc is how their assertion of sovereignty and mere existence as the St’át’ímc Nation and its inherent governing representative authority, have not been formally recognized by the province. This impasse lasted until the signing of the Protocol Agreement to establish government-to-government relations on June 7, 2004 (UBCIC, 2007).

Even with the formal agreement, the status of the St’át’ímc Nation has been undermined in negotiations with the Province. According to then Xwisten Chief Bradley Jack quoted in Moritz’s thesis,

[The 2004 Protocol Agreement] was the start of the government-to-government discussions: Us as ‘government’, ‘St’át’ímc government’. The Province as a ‘government’. Trying to deal with lands and resources in our Territory. We went through that for a few years and basically, the government kept cutting the funding, basically, the government kept walking away from their table because they couldn’t see us going their way, I think, really, and you know, us being pretty strong in our stance and where we wanted to go and didn’t agree with us and so, to me, they just weaseled away on us…. So we never did get a land use agreement in this part of the Territory, the Northern part of the Territory. They kind of broke us up really, because, in the last few years they signed with the southern communities, they guised the land and resources. That didn’t help our table at all either. (Moritz, 2012, p. 66)

The failure to negotiate resource development or management proposals with the province is not solely based on environmental ethics, but also on the continuing commitment to St’át’ímc Rights and Title that are inextricably linked to ecological responsibility. Quoted by Moritz (2012, p. 57), Sekw’el’wás Chief Perry Redan explains,
Title is misleading… well, title, we vote title. It’s difficult to say it’s ownership’. It’s more of a stewardship relationship with the land. We can’t own the land, we can’t take it with us, we gotta protect it for future generations. And I believe because we are the rightful stewards of our territory – rights is a legal term – I’ve been taught we hold title to that territory and rights flow from that title.

There is a missing term associated with title and rights. There is title, there are rights but there’s also ‘responsibility’. We have responsibility to protect the land for future generations, to understand, to protect the wildlife, the fish, these types of things. You can’t separate any of those three.

This concept of St’át’imc Rights, Title, and Responsibility has resulted in a unique St’át’imc conception of consultation and accommodation held by Nation leaders. Moritz (2012, p. 67) states that the view of St’át’imc government officials is that the St’át’imc Nation “has authority over all of St’át’imc Territory and asks for accountability, respect, transparency, honesty and sharing from anyone else who has interest in lands and resources and thereby in St’át’imc culture and history.” This requires that any negotiation of consultation and accommodation be viewed as a continual process that accounts for past, present, and future grievances, as well as formalized mechanisms to ensure respectful decision-making in the future.

While most likely viewed as unreasonable by the Provincial negotiators, the St’át’imc view of the duty to consult is also a mechanism to ensure accommodation. Typically, this takes the form of an involuntary abstention through breakdown in communication before negotiations. In most cases, this is due to the leadership's unyielding commitment to addressing the outstanding issues and grievances associated with resource development prior to consultation about current or future projects, which Provincial negotiators fundamentally refuse to oblige (Moritz, 2012, p. 71). From my personal experience participating in meetings with proponents, leadership explicitly states that the meeting does not constitute consultation, nor could it. This is
demonstrative of the deeper St‘át‘imc meaning of consultation and how it often differs from the notions held by industry or outsiders making presentations in the community.

This omnipresent dedication to St‘át‘imc values in deliberations with outside interests served as a catalyst for the BC Hydro (BCH) Agreement. Prior to negotiating the terms to ensure compensation for past and future damages and certainty for BCH operations that was finalized in April 2011, the St‘át‘imc negotiation team required a Relations Agreement. This agreement stipulated a government-to-government relationship, addressed failures to adequately consult in the past, as well as established a process for handling unforeseen consultation in the future. Importantly, it was explicitly established that these negotiations cannot be construed to impact St‘át‘imc Rights and Title. This model of formally established expectations was critical in gaining community support for the agreement that was witnessed in its 77% approval in the vote in 2011 (St‘át‘imc Government Services).

In the years that followed, the St‘át‘imc Hydro Agreement was negotiated concerning areas of environmental, cultural, economic, and governmental importance. The Province announced the finalized agreement as a ‘New Relationship.’ Yet, the communities saw it as a ‘small measure of justice’ and exclusively between BCH and the Nation. According to leaders and Elders interviewed by Moritz (2012), the agreement is considered only a minor, promising transition in the continuing colonial relationship. The agreement must be followed with similar agreements concerning all of the extractive industries operating in the territory. These have yet to materialize.

The benefits from the finalized BCH-St‘át‘imc Agreement include a compensation for existing facilities and damages equating to 210 million CAD to be divided and held in separate trusts for each of the 10 communities (St‘át‘imc Hydro Agreement, 2011). Other aspects of the
agreement included management provisions: Long-term environmental mitigation plans to help restore land, water, fish, wildlife, and vegetation; A heritage and culture plan to preserve, protect, and promote St’át’imc culture; A relations agreement to assist in developing a long-term sustainable relationship between the St’át’imc and BC Hydro; and an education and training component to build capacity within the Communities (ibid.). Lastly, the establishment and funding of St’át’imc Government Services (SGS) and the research organization, St‘át’imc Eco Resources (SER), were important results of the agreement. These two bodies conduct the majority of St’át’imc research currently.

For Moritz (2012, p.58), the BCH agreement “does not fully embrace the St’át’imc holism but acknowledges St’át’imc claims to territory and assertions to St’át’imc Title and Rights.” She contrasts this to the limitations of the postage-stamp model of Aboriginal Title and frozen Aboriginal Rights. The BCH Agreement represents a movement toward recognition of St’át’imc Title, Rights, and Responsibility. As Xaxli’p community member, Isaac Adolph explains:

As far as I know, St’át’imc Title and Rights is intact. As far as I know, this Hydro Agreement did not impact Title and Rights. As far as I am concerned, our St’át’imc Title and Rights are safe right now.

In dealing with BC Hydro, we do have other work to do with BC Hydro, they’re a Crown Corporation, we have to go further, higher than them to deal with other issues. (…). In my mind, the Declaration of the Lilooet Tribe 1911 is everything that we need as a position, to pay for and dealing with the future. The 8 articles in the Declaration of the Lilooet Tribe 1911 spell it out who we need to deal with and what issues we need to deal with. (…). It’s a very strong emotional message that we have to be there for our kids that they recognize the Declaration of the Lilooet Tribe 1911. Not all of them do but if some recognize it without knowing about it then that’s inspirational. I think one other part of the Declaration is: It is the effort to sacrifice yourself today for the benefits of tomorrow because we have not forgotten the past. (Moritz, 2012, p. 56)
Through a rigid commitment to St‘át‘imc values in deliberations, the Nation has been able to secure non-compromising, tangible benefits for long-term comprehensive community planning to occur, containing economic development, research, health, education, and conservation initiatives. The ability for me to carry out the project described below is a result of the agreement. This is a testament to the necessity of community values and cohesion in action, which will be referenced throughout the paper.

4.2 Project Background

In the winter of 2014, a dialogue was initiated by SER fisheries researcher Dave Levy and then elected Chief Larry Casper of the Tsal’alh and SER with Assistant Professor Janette Bulkan of UBC Faculty of Forestry to discuss the potential of a project to document St‘át‘imc knowledge in the areas impacted by BCHs operations in St‘át‘imc Territory of two communities, Tsal’alh and Xwisten. These discussions resulted in the formation of CRAC consisting of myself, Dave Levy of SER, Hereditary Chief Ida Mary, Elected Chief Larry Casper of Tsal’alh, and Gerald Michel of Xwisten. It also designated Tim Peter of Tsal’alh as the community researcher and myself as the UBC graduate co-researcher. Together we comprise the research team.

The need for the project developed broadly from a desire by the two communities’ leadership to holistically document and operationalize the oral history of their traditional territory relating to the trails and areas used for traditional purposes. Furthermore, that this is accomplished utilizing the unused time of the Elders Working Group (EWG) on another study. The immediacy of the project was due to potential threats from a recent recreation development proposal in St‘át‘imc Territory and neighboring First Nation/BC agreements that impacted
overlapping St'át'imc land claims. Due to recurring complications stemming from the lack of information sharing agreements between national and band level governments and BCH, both communities’ leadership had determined it to be beneficial to collect and maintain the intellectual property at the Band government level for the time being. Once proper information sharing agreements are in place between St'át'imc Government bodies, it is intended that the outputs from SKMP will be complementary to the currently underway SGS LUOS.

The unique situation surrounding data sharing and intellectual property resulted in CRAC’s decision to pursue the study at the community and not nation-level. This ultimately led the researchers to investigate methods that minimize human resources and complement the concurrent SGS LUOS. This goal propelled both myself and the community researcher to investigate existing efficient and cost effective methods for collecting and organizing community knowledge due to limitations of Band Government resources. After conducting a lengthy technology and literature review of similar studies and guidebooks, the research team and CRAC decided to employ open software tools like Google Earth and inexpensive group audio and video recording, together with pre-existing multi media mapping database software to document St'át'imc Knowledge in the project area. Additional goals identified by CRAC were (a) aiding in the preservation and dissemination of St'át'imc knowledge for present and future generations, (b) serving to represent St'át'imc interests in deliberations with outside parties concerning St'át'imc Rights and Title, and (c) do so utilizing the available time of the EWG.
4.3 Project Area

The project area for the SKMP comprises the regions that have been used and controlled by both communities of Tsal’alh and Xwisten since time immemorial, and are included in the asserted territory of the SN. For Xwisten, this is primarily concentrated in and concerned with the Bridge River Valley (BRV) to the Fraser River extending to the community of Gold Bridge and up the Yalakom Valley (YV) and further extending north to Graveyard Valley. For Tsal’alh,
the concerned area consists of the area surrounding Seton Lake of Mission Ridge to the town of Lillooet and Seton Mountain Massif to the south of Seton Portage.

4.4 Research process

In order to test this hypothesis, Dave Levy and Chief Casper arranged the Traditional Knowledge Workshops (TKW) with a group of 10-15 Elders, forming the EWG, after the half-day fieldwork required for the other study. The TKWs consisted of group interviews of the EWG utilizing Google Earth’s 3D Satellite imagery and a Microsoft Access database to identify trails and significant points. Parallel to this process, individual storytelling mapping interviews were held to investigate in-depth the points identified in the group sessions that demonstrate high potential for use as evidence of occupation in litigation. The primary purpose of the TEKW was to test both the viability of current direct-to-digital method available to First Nations and identify additional features such a project should possess in order to meet the specific needs of the leadership and community. This was accomplished by actively experimenting with the meeting format from meeting to meeting. Additionally, the team tried to make room for dialogue from all persons involved in the project to discuss the purpose and challenges.

From the onset, the project sought to create an informal environment where the members of the EWG and technicians felt comfortable providing feedback and recommendations about the project. This not only enabled what Kovach calls the Conversational Method to develop that allows for storytelling and the deepening of relationships (Kovach, 2010). The conversational method also allowed for truthful admissions about the underlying issues facing the community and, by extension, any research project attempting to be successful here. While likely a result of the inexperience of the research team, this characteristic of the TEKW produced an environment greatly different from an expert-driven research process by displaying an equal peer to peer
dialogue. This situation allowed relationships to be built between researchers and the members of the EWG, and ultimately enabled greater freedom of the group to propose changes to the methodology and in some cases produced profound insights into the wider research process. If a strictly structured interview methodology would have been applied from the onset, these insights possibly would not have emerged.

The group interviews format presented both value and increased difficulty to the researchers seeking to collate the group's findings into a coherent report. First, it made a noticeable impact on the accuracy of points identified through having multiple knowledgeable Elders in the group. Each point was often verified by others present. Second, as an outsider, I found it beneficial to more quickly build trust and familiarity amongst the group. This was most
apparent by forcing me to face the mandatory criticism and hazing directly in a group setting. Through this sometimes comical derision, I was able to quickly understand and address underlying perceptions and criticisms that were delivered as jokes by the Elders, often to entertain themselves. Those friendly jeers would have been harder for the Elders to direct to me in a one-on-one conversation or structured interview setting.

While those aspects were helpful, it is important to note that this format has been identified by more experienced practitioners as possibly deterring involvement of less respected or socially marginalized participants like younger Elders or women by introducing an avenue to be criticized for offering inaccurate knowledge (Tobias, 2009). More likely from my perspective, is the tendency of this format to have the conversation dominated by more powerful personalities within the group. This could be managed by a thoughtful discussion facilitator who can guide the discussion towards the strengths of those not participating, but this would take a level of familiarity with the Elders, and/or use of the Talking Stick format, that may be better suited for a community researcher.

Due to the critiques of group interviews, the research team decided to pursue a mixed methods approach to the mapping interviews to mitigate any shortcomings of any particular interview methodology. We used the group interviews as a means to rapidly survey the territory to determine the extent of the study area and identify the area of specialty of each Elder participating in the working group. These introductory group interviews were concerned primarily with point and area identification, including the collection of six corresponding data attributes for each entry; the contributor(s) of each point, the Stát'imc name, type of use, season of use, first or second-hand knowledge, and approximate timeframe of use. A major critique found in the literature and witnessed accounts concerns how the most sacred and familial
knowledge is not shared in communal settings. This was the primary reason to conduct the individual interviews.

The group interviews were followed by individual interviews with each member of the EWG. These interviews attempted to cover points identified in the group interviews as demonstrating the potential to corroborate AT claims by demonstrating ownership or intensive use. However, the research team quickly found the need to keep the interviews partially unstructured to enable the Elders to speak about points and issues they deemed relevant. This proved immensely valuable as points not mentioned in the group sessions were identified. While this points to issues with the group mapping methodology, it also highlights a critical shortcoming of current highly-structured research methodologies. This issue will be further discussed in the Findings section 4.6. The interviews also functioned to provide time to experiment with how to document the Indigenous spatial indicators discussed by Olson et al. (2016). This was accomplished by asking broad questions about four areas of interest and allowing the Elders to elaborate on them using personal or passed down narratives.

Thus far, the EWG mapping sessions have been successful in identifying hundreds of significant points and stories to the communities of Tsal’alh and Xwisten. Significantly, there has been interest from other Elders in the communities to participate. One of the intangible benefits mentioned by the Elders is how the interview sessions are a chance to get the community together to discuss happenings and stories on the territory.

4.5 My Role

In order to be faithful to Freire's radical pedagogy and its dedication to critical self-reflection, I must examine my position as a graduate student attempting to build relationships in and with a community of Elders. I have spent two years traveling to St’át’imc Territory under
the guidance of my supervisor, Dr. Janette Bulkan and then Chief Larry Casper of Tsal’alh, to aid in developing a St’át’ímic research methodology to capture Elders’ place-based knowledge and memories of their territory. Through this process, I reached various conclusions about the sustainability of the research design used in the study, especially my role in it.

I have come to view my role, not as a project manager or expert driving the research process, but as an available resource to identify tools and insights from outside the community that can aid already present community-led mobilization efforts and achieve the broad goals that have been elucidated over the past two years of interactions. This personal realization was discovered by the observed tendency of collaborators to (albeit rarely) regard my opinion as more important than that of those present within the community. I found this highly problematic. While my outside perceptive founded in expensively-acquired academic theory can provide useful recommendations, I lack the social and cultural knowledge to ensure relevancy of the solutions I offer. Therefore, the recommendations I made throughout the project were made with comments about how each of my recommendations should not be implemented blindly but viewed as a potential solution amongst many other valid solutions proposed by the community members themselves. Therefore, I was seeking to begin a dialogue about the issues that leaves room for the creativity and problem solving of the community.

For the sake of transparency, it is necessary that I place a caveat on this research. I believe that due to the various arguments concerning the difficulties of participatory research discussed later in this chapter in section 4.6.1, I could not achieve the level of meaningful dialogue or participation of the community that is required for this study to be considered as representative of community interests. In particular, my introduction to the community was mainly limited to the small group of Elders comprising the EWG. While influential and
knowledgeable about the topics covered in the study, their viewpoints may not be representative of the community as a whole. Therefore, recommendations of outside experts should only be used to complement community ambitions or as those of an actual consultant, and not as those of a project manager. Without this, the researcher risks wasting community resources by the irrelevance of recommendations or what Freire (1970) refers to as ‘preaching into the desert.’

However, even if I managed to reach a level of participation that would satisfy my requirements, it would not be a substitute for the direct voice of the community members. This thesis and chapter are, at best, an approximation of the reality of the St'át'imc I perceived in spending as much time as possible in the community, and should not be construed to be the voice of the community. Due to this inherent difficulty of CBR, I have ultimately chosen to investigate alternative possibilities in research to lessen the systemic reliance on academic and professional researchers that are now currently leading most First Nation cultural research.

4.6 Findings

After reviewing my field notes and reflecting on the time working with the EWG, I have come to various conclusions on how the values and specific characteristics of these communities and the research methodology itself have led me to this thesis. These observations can mostly be attributed to the Elders’ experience with past studies. These will be discussed below.
One of the immediate benefits of the informality and dialogue present in the workshops was how the existing technology and research prowess within the EWG enabled an in-depth discussion of technical and data sharing issues facing the project and the community as a whole. Two members of the group presented great value to this ongoing discussion, Randy James and Gerald Michel. Randy is a member of the Band Council of Tsal’alh but also functions as the retired GIS specialist and internet service provider for the community. Gerald currently serves as the Lands and Resource Manager for Xwisten and has participated in most of the past archaeological and ethnographic fieldwork in the Xwisten. These two Elders, and also every other Elder’s inclusion in the study provided profound insights into the complexities of and
needs for research performed in the communities. From these discussions, several key issues were identified.

First, the recently changing nation-level governance and research structures of the St’át’imc Nation have resulted in many research outputs being effectively lost due to lack of data-sharing agreements between St’át’imc government bodies. This has restricted access to past studies and has led to inadequate storage and maintenance of databases. The shifting of research responsibilities from the Lillooet Tribal Council (LTC) to St’át’imc Government Services (SGS) after the BCH-St’át’imc Agreement in 2012 is a particular concern for this research. The data and recordings of past highly relevant studies are still housed in the LTC office but they are not maintained. This presents not only a practical barrier that would necessitate searching through rooms of unorganized file boxes but the inability of the research team to make informed decisions about what research questions have already been answered. That unsatisfactory situation clearly demonstrates that access to previous studies is critical in order to use community resources wisely.

My initial reaction to learning of these difficulties was to recommend that the project wait until these issues of cooperation between governance bodies were addressed and the project be implemented at the First Nation level. However, after further discussions with CRAC about these issues, it became clear that the likelihood of these issues being addressed quickly was remote due to lack of capacity to organize and enact such agreements in Band and First Nation administrations. Further, as very few resources, outside of lunch and the community researchers time, were required to conduct the meetings, very few of the known research risks were involved.

Second, through interactions in and outside of the TKWs with the Elders, I was able to understand that the process of collecting St’át’imc place-based Knowledge has been a continual
and often individually-led practice undertaken in the community. Most of the Elders in the working group at one time or another, as well as my research partner, have produced maps, recordings, or writings of St’át’imc knowledge and history. For instance, it was a common situation to be discussing a specific point with an Elder, only to have them tell me after the conversation that they have a map or recording of the concerned area stored in their home or the LTC office. This would have been less surprising if the research team had the ability to access the LTC. Upon learning of this existing individual desire to record and protect St’át’imc Knowledge, the research team has identified ways to empower community members to actively and continually contribute as a primary goal of the study.

The last finding from the TKWs was the general distrust of the EWG concerning the ability of both external and community researchers to maintain the intellectual property protections guaranteed in the consent form in perpetuity. This distrust was superficially obvious to the researchers from the onset of the project, following on from the Elders’ reluctance to share their knowledge of certain areas and the deeper stories of points and areas. However, only recently did the Elders feel comfortable sharing the reasons for their apprehension. At and after the TKW in August 2016, members of the EWG explained that although they trust the current research team, their familiarity with failures of past research projects to maintain their contributions and ambiguity about future uses make them reticent to share intimate and protected knowledge.

Another sentiment that was aired in the planning sessions that directly addresses the core issue of TK digitization was recognition that the traditional means of knowledge transmission in the community have been disrupted and no longer are functioning. While this speaks to the need to revitalize these cultural practices, there remains an immediate need for alternative knowledge
transmission mechanisms. Ida Mary stated in a CRAC meeting that the youth are no longer learning through hunting and exploring the territory with Elders as was the traditional way of learning about the territory. Due to this fact, CRAC has acknowledged that new mediums of TK preservation and dissemination are needed. This is all the more urgent given the current age of the last proficient speakers of St'át'imcets, the language of Northern Interior Salish First Nations (Matthewson, 2000), and those Elders whose livelihoods were primarily supported by traditional practices.

The last observation was the value of not attempting to guide conversations with Elders. This was repeatedly demonstrated. I have pondered the consequence of this insight in the academic research tradition. Cajete (1999, p. 81) speaks to this issue,

Building on prior learning and traditions is never a direct or linear path. Instead, Indigenous science pursues a rather meandering path around things and over obstacles, a roundabout way. In the Western mindset, getting from point A to B is a linear process, and in the Indigenous mindset, arrival at B occurs through fields of relationships and establishment of a sense of meaning, a sense of territory, a sense of breadth of the context.

While the LUOS survey methods that employ a linear method of data collection are needed for the external decolonization and territorial protection via St'át'ímc Rights and Title, it is necessary to include a study methodology that is built around the concept of flexibility and relevance. Instead of attempting to collect the entire body of TK around an issue in a short period of time, utilizing a perpetual community research model would allow space for the relationships and time for the relevance model of data collection to be used. This would have two benefits that would help achieve the mandate of long-term qualitative studies identified in the literature (McIlwraith & Cormier, 2015): decreased costs and increased depth of data.
4.6.1 Key Issues of SKMP

Through my participation in the study, a few key obstacles were identified in the current research environment. Broadly, these can be attributed to my position as an outside researcher. By analyzing these persistent obstacles, the hypothesis was found that if a robust research methodology based on the concept of CLR and new accessible Web 2.0 technologies were implemented, a system of community-led oral history collection can effectively isolate these barriers into the remaining essential functions of representing research findings to external audiences. That would ultimately free a portion of First Nation research to be aimed at the internal use of data.

The first barrier that led to this hypothesis is the contradiction of the researcher needing to remain objective for study validity, and, yet, honest conversations about political motivations and social justice beliefs are necessary to build the trust required to access intimate and sacred knowledge. This essentially requires duplicity in note taking to maintain researcher impartiality if the study wants to be admissible in court subsequently. This requirement, partially based upon the scientific method perspective that a community researcher or knowledge holder is inherently biased, has since been provisionally deemed irrelevant in the new oral history test in Tsilhqot’în if the knowledge holder meets the test for reliability (Weir, 2016, p. 173). However, this requirement for expert witnesses to be free from bias still stands.

The second issue that applies to most Academic-First Nation research projects is that the distance between the academic institution and the community increases financial and management costs associated with the study. The most obvious factor is the costs involved in transportation and lodging of the researcher. While this can lead to more effective meetings due
to the need to maximize time spent in the community, it can also negatively impact the time spent on less immediately relevant but nonetheless important processes of relationship building.

The distance also presents issues in maintaining community interest and involvement in the project. The ethical requirement of reducing costs for a project requires the researcher to either spend a longer period in the community or take fewer trips. Often the latter is chosen because of academic responsibilities placed upon the researcher, such as access to archives or other professional commitments, that require them to be away from the community. Ultimately, this can result in the loss of momentum between community visits. The loss of momentum is significant when considering the normal overburdening of First Nation employees.

In conclusion, the high costs incurred with the utilization of an outside researcher to familiarize her/him self with social and political realities in remote First Nation communities create a difficult environment to producing meaningful, and independent research outputs within the typical academic research setting. My ability to overcome these issues can be largely attributed to the flexibility afforded by my unique two-year fellowship that is not characteristic of most grants and scholarship for social studies that require formal proposals and deadlines that constrain the work (Coombes et al., 2014). The fact that it took over a year to identify the research questions is demonstrative of the limited utility of CBR for First Nation/academic partnerships if the funding model remains unchanged. This thesis is a response to my grappling with this paradox. However, this pessimism should be tempered by the fact that the Stát'imc have continually built meaningful relationships with researchers, such as Moritz, who continue to work in the communities.
4.7 SKMP Conclusion

My exposure to St‘át‘imc Values over the course of the past two years has forced me to grapple with the fact that the primary research methodology being used today to demonstrate First Nation Territorial use and occupation is unable to convey these deeper meanings of exercising Aboriginal Rights and Title. Further, the knowledge shared with me by the Elders about traditional practices and St‘át‘imc interpretations of current politics has personally demonstrated the value of the preservation of the words of Elders. The ability of these words to propel the audience to understand living cultural practices underlies the motivation of this thesis: to increase the scope of documentation of St‘át‘imc voices through participatory research methodologies; and to document, adequately protect, and, where appropriate, share respectively what living cultural practices in the contemporary world can aid cultural revitalization. Ultimately, this would fill the interpretation gap, discussed in section 2.4.3.2, for those seeking to understand a specific Indigenous worldview.
Chapter 5: Where to Now?

After reflecting on my observations and conversations in Tsal’alh and Xwisten, I analyzed the findings from the three expert interviews. Three insights emerged from these discussions. The first regards the decision to undertake an AT case versus the continued barriers facing First Nations. Second, I considered the way new innovations in the map biography method has minimized the risks mentioned in this thesis, and lastly the difficulties inherent in trying to address injustice as an outside academic. Through these themes, I sought to evaluate the appropriateness of CLR and new technologies to meet both the rules of evidence and immediate needs of research for First Nations. These discussions will be followed by the responses aired by the Elders in the presentation of these findings.

These themes were identified in response to the research questions guiding this thesis: How do the recent legal outcomes in Tsilhqot'in (2014) and new technologies for easily collecting and reproducing TK and oral history digitally reduce the barriers to research that in turn allow for greater access to constitutionally protected Aboriginal Rights and Title? Second, how do community-led participatory methodologies for collection of First Nation oral histories address the current shortcomings of the current consultant-driven research paradigm in aiding First Nation cultural and institutional revitalization, ultimately amending settler perceptions of First Nation people?

5.1 Aboriginal Title Preparation - A conversation with Drew Mildon

My conversation with Aboriginal property and commercial lawyer, Drew Mildon, produced valuable insights into the processes of deciding to, preparing for, and undertaking rights-based legal strategies for First Nations in BC. The first impression from my discussion with Drew was that it was overly concerned with the practical deliberations about the decision to
pursue AT litigation, among other legal actions. Yet, in hindsight, the conversation provided great value for the communities involved in this research. Interestingly, or maybe not, is how many of these decisions resemble ordinary business decisions, with long-term planning and opportunity costs factored into the First Nation leadership's calculations. The ability to act deliberately can be attributed to the courts defining many of the questions left open by *Delgamuukw* 20 years ago. These legal clarifications, in turn, provided some degree of certainty in pursuing litigation. For Drew (Interview December 2016), an example of a First Nation leadership decision-making process is as follows,

“Well, this small area is worth 50 million dollars annually. If we have to spend 10 or 20 million to do a claim to this small area, let's make the investment and there's enough information now post Tsilhqot’in that you can have a pretty good idea on whether something is winnable on the evidence or not.”

This assessment of evidence, known widely as the strength of claim (SOC), is dependent on an established inventory of present and historical territorial use and occupancy information held by the nation. As established in *Delgamuukw*, the strength of claim requires that three elements of evidence of occupation be demonstrated; occupation of sufficient and exclusive nature, and a continuity of connection to the territory. Yet, until *Tsilhqot’in (2014)* the quantity of evidence required remained unknown. Now under current methods, LUOS map biographies possess value for determining the extent of present and/or recent occupation of the territory and therefore can be used to demonstrate the sufficiency of the claim. However, these studies have limited, or in some cases contradictory, impacts on proving occupation of sufficient and exclusive nature, and in demonstrating a continuity of connection to the territory. Drew identified two primary failures of LUOS: its inability to document time frames of use and associated date markers; and the inadequate focus on issues that impact AT, such as the incidental documentation of unauthorized
incursions by neighboring First Nations or inclusion of erroneous accounts by community members.

Mildon explains the first problem:

What we want is the traditional use that is modified by the dates that are required for Aboriginal Title. So it's actually useful evidence in court. In what you're trying to get at and what we really need is to (A) get those dates of use in there and (B) identify date markers. The date marker for the Tsilhqot'in was they had language that meant my grandmother's grandmother. (Drew Mildon Interview, December 2016)

The use of language and other types of cultural date markers are crucial when attempting to establish occupation prior to the assertion of Canadian Sovereignty over BC in 1846. Current LUOS methods, limited by scientific and legal validity concerns, focus on the first-hand accounts of territorial use. Ideally, then the maps produced of recent use are contextualized by corroborating historical evidence, such as archaeological reports and primary documents to provide evidence for First Nation use and occupation through time. This remains problematic because LUOS accounts are heavily impacted by the restriction of movement caused by the reserve system and provide a distorted picture of historical use. As the passing on of stories most often occurs while performing traditional activities, the restriction of movement equates to lost opportunities for the younger generations to hear the names and stories of areas outside of the reserve. Of course, these acts of assimilation are in addition to the widely documented impacts of plague and colonization that decimated First Nation culture and societies even before the widespread influx of settler migration.

The second issue is LUOS’ possible collection of contradictory, erroneous, or incomplete accounts that potentially compromise the success of AT litigation. This is only an issue if the claimants do not identify and prepare responses for these issues in anticipation of the court trial date. Yet it raises the amount of legal preparation and, therefore, costs of litigation. Mildon
attributes this liability to the fact that many research interviewers are unaware of the evidentiary and case building requirements for AT. While a lawyer might need to be present, as insinuated by Mildon, training interviewers about the importance of either avoiding information that might adversely affect AT or investigating each instance thoroughly could rectify this shortcoming.

Mildon provides a practical example of this issue.

[A] quick example, one of the Elders in Tsilhqot’in was being cross-examined and they talked about the salt water houses that people from Butte Inlet had built within Tsilhqot’in territory identified in a previous TUS study. They were only there for a few years. But you know we were trying to meet the test for Aboriginal title to exclude others. The Crown was all over [the salt water houses] in cross-examination of the witness and … because we knew the information … We were able to go back and say well the Holmelco guy married a Tsilhqot’in woman and that's why he was allowed to build a house here. And five years later the Tsilhqot’in decided it wasn't a good relationship and threw him out. So we knew that because we were deeply familiar with the evidence. But that's the way it went…Those TUSs come back to bite people in the ass. (Drew Mildon Interview, December 2016)

This speaks directly to the necessity of preserving and cataloging all previous studies and their data to be able to easily identify gaps and contradictions in the evidentiary record. Indirectly, the story is demonstrative of the importance of the legal team’s preparation and familiarization with past research outputs and the meeting with knowledge holders to discuss their roles as witnesses in AT litigation. From my perspective, this need for the lawyers to be intimately familiar with both the evidence and community members points to the value of a robust CIS database that could more quickly orient the legal team to the knowledgeable Elders than having to search through boxes of audio recordings.

For some of the clients we work for, it's a slow 10-year process. They haven’t filed the title claim, but we are in the communities all the time working with counsel on various things. What we do is we do organize initial meetings with some Elders to try and determine who holds what knowledge. The goal is really to have a really strong sense of
what evidence is out there before you start developing that evidence in a way that it's going to be discoverable. (Drew Mildon Interview, December 2016)

While many of the law firms specializing in AT maintain reasonable hourly rates for this work compared to other areas of legal practice, legal fees are still a large expenditure for First Nation communities (Drew Mildon Interview, December 2016). Where possible this expense should be mitigated. A CIS based upon Indigenous spatial quality indicators, including the attribution of TK and territorial knowledge to specific Elders, would be highly useful for orienting outside researchers and lawyers to the social knowledge landscape in the community. Ultimately, this could increase the scale of the title by allowing wider collection of land use information in a less resource intensive method than the current research process.

A key issue highlighted by Mildon is the value of Solicitor-Client privilege for research and evidence preparation strategies. The solicitor-client privilege protects evidence and documents prepared in contemplation of litigation between a lawyer and potential witnesses from being revealed to the party to the suit with opposing interests, in this case, usually the Crown. This aspect was not covered in the literature debate to my knowledge, and as a non-lawyer, I found this to be a potentially novel insight for new practitioners.

Anything that is relevant to the court case has to be turned over, which means all of your data [in the CIS] is getting turned over if it was not prepared by a lawyer. Then an expert witness or anthropologist, who is using that data, writes the report. It’s the expert witness that goes to court and has to provide all the notes and data that they used to write their report in discovery before they can actually go to court. So, in the end, the [Crown] ends up with all of that data. (Drew Mildon Interview, December 2016, emphasis added).

Further, as the issue of IP is a fundamental point of mistrust in First Nation/Academic research partnerships, the strong protections of solicitor/client privilege could equate to greater trust between the researcher and interviewee, ultimately, stimulating wider disclosure of
sensitive place-based and spiritual knowledge. In turn, increased trust can logically equate to
greater SOC.

This creates a dilemma for First Nations seeking to perform research. Should a First Nation
utilize cost minimizing research strategies and prepare for AT without the protection of solicitor-
client privilege, risking potential inclusion of damaging information into the public record? Or,
should they wait until they can afford a full legal team to identify and prepare evidence in
contemplation of litigation? According to Mildon, the latter has been successfully utilized after
building a ‘war chest’ of available funds for AT litigation from financial compensation earned
through negotiation and litigation of commercial interests on the territory.

Yet, Mildon shared that the continuing loss of TK occurring in First Nation communities
may demand First Nations perform the studies regardless of solicitor-client privilege to preserve
their cultural heritage. The rationale being, once a First Nation has lost most of its cultural
knowledge, litigation will be near impossible. Further, the more cultural knowledge included in
the litigation increases the probability of more extensive AT being recognized. This compromise
in favor of performing low-cost research as soon as possible is supported by the calculation of
the revenue potential from successful commercial litigation. As noted earlier, that is based on the
First Nation’s SOC to the areas impacted and more importantly there being commercial activities
qualifying for compensation. Logically, if a First Nation can begin to gather evidence of
occupation prior to negotiations it will result in greater compensation through more extensive
SOC. Additionally, as mentioned by Mildon, many proponent-funded studies are performed, not
to demonstrate First Nation claims, but rather to avoid questions that could demonstrate
expansive claims, effectively producing postage stamp studies. Once these postage stamp studies
are produced, they can pose great difficulties for more comprehensive research produced at a later date.

In some instances, it may not be beneficial to firmly define the known evidence but rather to effectively exert *de facto* power by insisting on their conception of territorial ownership, not that of the Crowns. Ultimately, I posit that unknown strength of claim with known ability to enforce and disrupt commercial and government projects on traditional territory may be more powerful than a known SOC in negotiations. This was the case of the St‘át‘imc, who based their negotiations with BCH on an unwavering claim to the whole territory enforced through roadblocks. The signing of the BCH-St‘át‘imc Agreement has resulted in the war chest for litigation and research protected under Solicitor-Client privilege recommended by Mildon. Yet, even this outcome based on the firm rejection of the Province’s limits on maximum awardable territory may be out of reach for remote First Nation communities that have seen little resource development or possess few resources to conduct the research to demonstrate the strength of territorial claim and damages required for compensation to be awarded.

I now summarize, in Table 5.1, four key issues remaining in Aboriginal Title preparation: Entry of TK into the public domain, the continuing impact of individual judges understanding and perceptions of First Nation issues, the presently non-binding nature of international declarations regarding Indigenous Rights, and the overly specific oral history test based on Tsilhqot’in societal organization. This table is far from an extensive accounting of all remaining issues, but merely an accounting of issues that recurred during my fieldwork and interviews.
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<tr>
<th>Legal Issue</th>
<th>Explanation</th>
<th>Representative quotes from research participants</th>
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<tr>
<td>Entry of Traditional Knowledge into public domain</td>
<td>During the evidence discovery phase of litigation, all material of relevant studies not conducted under lawyer-client privilege must be turned over to both parties in the case. This often makes informants reluctant to disclose sensitive knowledge.</td>
<td>You know one of the stories in the case [Tsilhqot’in] is that the Fish Lake area was not a place where we had information about during the trial and it wasn't until well afterwards when Teseko [mining company] was really pushing forward with the mine that the family who had the most knowledge about fish lake and the spiritual practices there was prepared to make that public. (Drew Mildon Interview, December 2016)</td>
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<tr>
<td>Judicial Discretion</td>
<td>Successful Aboriginal Title and Rights litigation depends largely on the judge in the case. Allegedly, many judges in Canada are still from the business corporate world and are unsympathetic towards Aboriginal issues</td>
<td>So he [Justice Vickers] was very much from the left New Democratic Party (NDP). The NDP has always had its kind of intellectual side and the blue collar side, and he really was from the highly intellectual side. Ultimately, Vickers had the intellectual capacity to deal with complex inter-cultural questions. (Drew Mildon Interview, December 2016)</td>
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<tr>
<td>Non-binding international law</td>
<td>International Declarations such as UNDRIP, are international ‘soft law’ and non-binding in Canadian Courts. However, it demonstrates the international consensus on the issue and provides guidance for the presiding Judge in the case.</td>
<td>In the past, the court has said the UN stuff is not binding on this court. However, it does demonstrate the international perspective on what should be the level of requirement. So I think we'll move there. It's not happening tomorrow. But I can go to court and say Prime Minister Trudeau has promised that they will put consent in place. We'll see how that goes. I think we're going to get there. But it took 20 years after Delgamuukw to get title. Like 20 years, it's a long time. But in the scheme of things, it's not a long time. (Drew Mildon Interview, December 2016)</td>
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<tr>
<td>Specificity of oral history test</td>
<td>The test for oral history outlined in <em>Tsilhqot’in</em>, has been too narrowly interpreted by the courts in subsequent cases. If the First Nation does not meet the prescribed requirements of oral history protocols found in <em>Tsilhqot’in</em> (2014), it is rejected.</td>
<td>There's one fishing case from the northwest coast where the nation was stating &quot;we have these potlatches and we have the ceremonies that involve all these checks and balances&quot; and the court was like &quot;yeah but you didn't actually address the <em>Tsilhqot’in</em> test so we can't depend on this to be reliable. (Drew Mildon Interview, December 2016)</td>
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Table 5.1 Legal issues still remaining after *Tsilhqot’in Decision (2014)*
5.2 Methodological Innovations – A conversation with Steve DeRoy

After discussing legal accommodations and limitations with Drew Mildon, I arranged for a conversation with Steve DeRoy, Director and GIS team lead for Firelight Group, a consultancy group specializing in First Nation TUS and LUOS studies for Environmental and Cultural Impact Assessments. DeRoy’s 20-year experience working on GIS projects with First Nations provided great insight into the considerations of implementing CLR strategies in First Nation communities. DeRoy and his colleagues Rachel Olson and Jeffrey Hackett have secured the scientific and legal validation of the DTD map biography methodology that enables community collection of land use data by reducing the need for expert GIS technicians and the time for data processing. The method itself has been a subject of experimentation by numerous practitioners over the past decade, but until recently it remained unproven as a methodology capable of withstanding cross-examination in litigation and negotiation.

When asked about how to approach decisions regarding First Nation research strategies, DeRoy states:

…Use and occupancy is just one tool in a toolkit. You wouldn't use a screwdriver to hammer a nail. You use a hammer. So you have to look at all the tools in your toolbox and determine which tools are going to meet the needs of the research you're trying to achieve… there are a number of research products that can achieve the test of occupation. One being that you could do a use and occupancy study where you're mapping out places where people collect resources, so plants, animals, and fixed habitation sites, fixed cultural sites, where those cultural activities actually are out on the landscape… Use and occupancy study is great for showing the distribution of those resources and fantastic for land use planning purposes. Unfortunately, it's limited in its ability to be able to show how and why those places are so important. And so, it's important to supplement use and occupancy research with things like the Indigenous knowledge or traditional ecological knowledge that talks about the knowledge communities have, based on their experience, based on oral history, based on those cultural traditions. To be able to look at the system itself…. If they want to do planning, they should be doing use and occupancy. If they want to be doing an Impact Assessment looking at the potential impacts of large-scale
energy developments, I would suggest doing traditional knowledge use study. It's a combination of the two methods where you are looking at that kind of fixed cultural sites. And again we're talking about the continuous occupation. So you would likely not necessarily do a use and occupancy. You might look at a harvest study where you are documenting seasonal harvesting amounts and the resources required for future populations. You might be doing a toponym study where you're looking at kind of re-mapping the territory and reclaiming sovereignty by the nation. You might be doing a written history and ethnography study where you're looking at what's in the written record of those communities. (Steve DeRoy Interview, February 2017)

The wide array of options listed here have seen intense scrutiny and now cover the many needs of First Nation research in litigation, resource and management negotiation, and cultural revitalization. However, where the DTD method differentiates itself is in the focus on increasing accessibility and reducing resources required to conduct research. DeRoy explains the need for innovation.

The reason we changed it [the map biography method], was because we are working within the BC Environmental Assessment and National Energy Board processes. When companies are in that realm, as soon as they submit the application, that triggers the timeline. So what we have is a very restricted timeline to be able to give the community an opportunity to get those values onto the record. So we had to come up with a very different approach. Around 2010-2011 google earth came out with some pretty good tools and so we designed our entire method around a direct-to-digital mapping exercise using Google Earth as the base map. This allowed us to be able to incorporate and do the same kind of map biography process. But it allowed for an efficient collection and visualization of that data. But also post-processing, it reduced our time from months to hours. So once we finished the interview process… we were able to convert it into a GIS format that allowed us to do the analysis in a mapping format. It took what was sometimes a multiple year process and reduced it down to two or three months. And that's giving us a lot of time. The fastest we’ve done is a week. So it allowed us to really streamline the data collection process using these open tools. (Steve DeRoy Interview, February 2017)

While not a central factor in their need for innovation, the associated reduction in costs and resources of DTD is particularly relevant for the needs for increased access to research.
DeRoy continued to reaffirm the need to conform to external validity measures, such as Tobias's data quality metrics.

All I would say is that those [community databases] need to conform to the standards of the law of evidence and include the ability to quality check and confirm all of that information, and then do the spatial data quality verification tests. Tobias talks about this in his book, *Living Proof*. There are a number of quality indicators that you need to be able to demonstrate that the information gathered has followed. What we're suggesting is that the data of the direct-to-digital method beats these quality objectives, but also that there is a need for other measures of quality that are more in line with Indigenous perspectives. (Steve DeRoy Interview, February 2017)

A point of contention between experts arose between legal and consultant perspectives, Mildon noted that much of the requisite information for AT is often missing in previous studies and it is the role of the legal team to commission studies to address these gaps. Ideally, this would be conducted with a lawyer to maintain solicitor/client privilege in anticipation of litigation. Similarly for DeRoy, lawyers are in a position to make strategic decisions regarding research but the community carries out the bulk of the research with experts testifying to methods of study. Importantly this ignores the potential value of Solicitor/Client privilege in litigation preparation.

If you're going for Aboriginal Title, you need strong methodologies. And I think it can be vetted by the lawyers as admissible evidence. I don't think that the lawyers need to be one’s going to collect this information. But the research can be collected by the community. (Steve DeRoy Interview, February 2017)

Here DeRoy highlighted the need to include the Indigenous relational ‘data star’ discussed in section 2.4.3.3. Many of the recommended indicators would increase the potential for land use studies focused on the consultation process to be used in AT litigation, possibly bridging the gap between research consultant and legal perspectives. However, more comprehensive study on the particular value of each indicator in AT litigation is necessary.
the dearth of publications on the case building aspects of AT, I recommend a comprehensive
guide and rubric be created to aid community researchers in crafting the particular question to
ask and information to include in surveys to aid AT preparation. Such considerations could be
included in the data star of spatial data verification.

Another practical insight that arose from the expert interview with DeRoy is how the
research process is moving away from research conducted and analyzed by consultants towards
research facilitation by outside consultants with the community conducting the research. DeRoy
explained,

We were only going to hearings. We're constantly acting as expert witnesses for these
studies. And we can stand behind the research methods and speak to those. But the
knowledge and the information that goes along with that really comes from the
community. And so we can't speak to what they say about it. We can only say that we
collect the information in this manner and that we followed rigorous methodologies, and
the content of the information needs to really come in the communities. So our role in all
of these hearing processes, which are essentially court, is that we're standing by the
research method. And it's up to the communities that have used this method to be able to
speak to the content of that information. (Steve DeRoy Interview, February 2017)

This process is normally conducted in the following manner.

Now the research, what we do is we tend to collect information or set up the
methodology and support communities to actually carry out that research. Our goal is to
facilitate the interviews but the mapping of the information and data information
management can be done by the communities. What we suggest is after 100 hours of
interviews, those people are in a position of being able to lead those interviews and start
asking those questions. So a lot of the work that we've done is with communities,
supporting that capacity development of those existing skills at the community level.
They participated, the communities have identified people to participate in a training
exercise where we would train them through the research methods and the mapping and
information management. And after 100 hours of doing that mapping and information
management work, they essentially could be leading the research, with support obviously.
But the communities could be in the driver’s seat for actually doing that data collection.
(Steve DeRoy Interview, February 2017)
DeRoy’s insight into the continued need to support community researchers is not lost in the conclusions of this thesis, just contextualized with other needs for reconciliation and revitalization. The conclusion that LUOS and related studies overly simplify First Nation research outputs is well documented (B Coombes et al., 2014; McIlwraith & Cormier, 2015), and can be expected to confirm pre-existing essentialist images of First Nation culture and territorial connection. Yet, as noted by DeRoy, real limitations remain for CLR that must not be naively disregarded. The point of this thesis is to further highlight the costs of the currently necessary compromise of outside researcher support and to raise the possibility that these compromises, based upon recent legal accommodations and accessible technologies may not be necessary in the near future.

5.3 Cohesion and Action – A conversation with Professor Jon Corbett

The conversation with UBCO Community, Culture, and Global Studies Associate Professor Jon Corbett produced great insights into the process, expectations, and limitations of a participatory research. Corbett’s vast experience with participatory GIS and video projects seeking to empower rural communities in BC and globally was the primary reason for his inclusion in the study.

The first aspect stressed by Corbett was how any participatory project needs to be cognizant of the political nature of mapping.

Mapping is a political act. And so we can’t be naive about it. We have to understand that mapping in the context of what we do [Indigenous mapping] is overtly political. So I suppose to remove ourselves from that political context is truly disingenuous. (Interview with Jon Corbett, January 2017)

While the fact that Indigenous mapping is overtly political is often stated in the literature, the implications for mapping projects and the community are often not explained in detail, especially
the intra-community politics. Corbett provides a practical account of such political impacts on conducting political research.

You know you have a number of Elders and other people in the community that are real doers. But at the same time, they don’t want to get enmeshed in the politic that is related to treaty because our politic is not just an internal-external politics, it is an internal-internal politics as well. (Interview with Jon Corbett, January 2017)

This is a key insight for the recommendations found in this thesis. First and most tangible is the need for realistic expectations in the process of conducting social and political dialogue in small communities. As easily as these practices can build understanding and cohesion, they can also bring about confrontation. This points to how the values used in deliberations, both inside and outside the community, are not absolute but interpreted based on pragmatic strategic decisions, taking into account the unique geographic, political, and economic situation of each First Nation. Values must be interpreted to fit into the modern context in which First Nations operate. Even if every member of the community were evaluating their preferred Self-determination strategy solely upon the same exact definition of St’át’imc Values, there would be differences in opinions because of current limiting situations of the Nation. The interpretation of values is further complicated by how each First Nation person’s lived experience shapes their view of their culture and its values. If a person was employed in the resource extraction industry and provided generously for their family and community, they may have a more nuanced view of resource development than others within the community. Differentiation in personal opinions about communal identity and possible resulting conflict reveals the importance of pre-existing social cohesion, caring, and shared understanding at the community and Nation levels. This is all the more necessary if the First Nation is seeking to present a united front against settler policies required for a successful Self-determination strategy.
The increased cohesion that occurs when shared values and empathetic understanding within the community are supported in an appropriate format reduces susceptibility to ‘divide and rule’ BC negotiation tactics highlighted in section 4.2. In this light, PGIS and PV present options for capturing and sharing the diverse views held within the nation, and in the process opening dialogue between community authorities and dissenters to begin to address any potential conflicts before they become intractable.

On the other hand, if such a project seeking to give voices to everyone went forward in a community where community bonds were already strained, the platform could devolve into confrontation similar to many social media online comment sections where only contentious opinions are aired. While seemingly trite, the inhumanity on display in online comment sections poses lessons for this thesis. I posit that the reprehensible behavior online occurs primarily because of a deficiency of mutual understanding and respect required to listen to people with differing opinions and a lack of penalties for anonymous comments. This phenomenon is likely a consequence of the physical distance and anonymity between people online, among many other plights of the modern age. Any projects preaching internet solutions for societal problems should be cognizant of known shortcomings of social media and only attempt to complement pre-existing and close knit community movements that include in-person community meetings.

If the trust and respect are present, the various processes of participatory research can aid community movements in concrete ways. Again here Corbett gives some sage advice:

I think the map can often become this very objective thing. People can focus their attention on it, which sort of helps to ease and facilitate conversation. (Interview with Jon Corbett, January 2017)

But he places a caveat on the potential above,
I think we [participatory researchers] need to be a lot less grandiose. We need a better way to describe the work we do and the impacts that are related to it. So rather than looking at the end game, did we impact treaty? You look at the things that you can actually realistically talk about, which is ‘we have this process and we were able to get there, and there's a whole bunch of younger people that know stuff they didn’t know before. They had the option to talk to people that they didn’t before.’ It doesn't speak to 'wow man we saved the world' which is obviously what people are looking for. And I think these grandiose type impacts, we can't really talk to because we'd be speculating... So you know this is just a small incremental step that helps, using this process. It doesn’t even have to be any mapping. This is a process to actually build community, so we can look back and talk to that in an honest way. (Interview with Jon Corbett, January 2017)

In explaining this tendency for researchers to search for the grandiose, myself included, the need for humility and listening in participatory research emerges as a central theme of Corbett’s interview. The value of both characteristics may be obvious. However, they need to be expanded in the realm of First Nation Research. The requirement for the researcher to promote the research as revolutionary and profound emerges from the competitive model of research grants, academic positions, and publications. In the often stressed minds of university researchers, the competition can replace the often truly intended commitment to community needs in favor of the imposition of new popular topics in the research at the expense of those participating in the research (Coombes et al., 2011). Not only does this run contrary to Corbett’s advocacy for humility in participatory research, it is misplaced generally in a First Nation context. Indigenous methodologies require that there be mutual respect and listening from both parties in the project. It is assumed that the researcher can no longer impose their sole vision on the research project. Rather it must be representational of community needs and interests, and above all understandable. While the first two issues have seen improvements through dedicated research agreements outlining community expectations, the last issue of understanding remains
commonplace in First Nation research outputs. Corbett elucidates the need for language the community can comprehend.

In the end, it [impact orientated research] just doesn't work. Why does the community engage in research? The thing is you're talking to two different languages. It's fine to talk about the terrible state that we live in and really critique on all these different things. But I mean if you're working in a community, and this is important if you want there to be impact in the community, it's just two different languages. You are basically excluding. It’s just like I want to come here, I’m going to talk to you. We’re going to critique this thing. Now, I am going to write this book in a language, which you’re never going to be able to understand, read, make sense of, and basically in doing so, I furthered my career. But what have you got? Fuck all. (Interview with Jon Corbett, January 2017)

This tendency to produce irrelevant research is quickly being uprooted in First Nation communities in Canada, as the ‘parachute’ or ‘smash and grab’ researchers’ reputations are now quickly spread through the increasingly interconnected First Nation research networks. Nevertheless, unless the competitive culture and funding requirements of research are altered to accommodate humble and listening-oriented research, communities will be treated as subjects for testing preconceived hypotheses in the guise of community research. Not only does this waste the communities’ time for the researchers’ gain, it stunts the potential empowerment that arises from Freire's conscientization when communities are treated as equals or where communities are capable of perceiving, acting upon, and altering social and political contradictions.

As the next section demonstrates, the Elders with whom I interacted are hyper-aware of the injustices surrounding them. They think critically about their environment, and propose solutions. What is missing is the audience to hear them. If any research process or product can aid future researchers and external audiences to more quickly understand the need for listening involved in engaging with First Nations, then the potential for First Nation Peoples to act as a Freirean object capable of influencing their surroundings is heightened (Freire, 1970). I fear this
unfortunate characteristic of academic research will remain as long as communities are isolated and disconnected from other research subjects, and the feedback gap between the field site and academia continues unbridged.

5.4 Resistance is Revitalization – A presentation to the Elders

In my final presentation to the EWG, the mandate to highlight the continued intransigence of the settler state and difficulties facing First Nations came to the foreground. With the aim of this research to give voices of the community more space to be heard, I believe the feedback I received from the Elders upon hearing my theoretically focused thesis must be central to this analysis. The feedback can be grouped into the following areas: (a) The continuing and ubiquitous impact of the Indian Act; (b) The injustice of the burden of proof in Title and Rights deliberations being placed upon First Nations; (c) Overlapping land claims as a manifestation of divide and rule tactics; and (d) Ways of practicing resistance and cultural revitalization.

Due to the fact that my presentation was focusing on BC-wide issues facing First Nations, many of the Elders were quick to explain particular instances of injustice facing the St’át’imc. Most of these statements took the form of tragic irony. One of the most troubling revelations made by Xwisten Elder Gasper Jack was the impact of the Indian Act on the St’át’imc livelihoods and, by extension, Self-determination.

Ever since they started the Indian Act, they stripped the Úcwalmicw of the right to ownership. One point would be mining. Some Úcwalmicw had core samples with gold in it and instead of that person going to where you could register the ownership of that mine, they were denied. The gold cache up Duffey Lake was denied because that person was Indian. Then the Goldbridge-Bralorne mine was another one that one of our Elders had rights to, but it never came to be. The government said no Indian has a right to ownership of a gold mine. They made all these rules and regulations you can't do this you
can't do that. You even have to have a permission to get off your reserve. (EWG Session March 2017)

This withholding of private property and mining concessions to the most productive gold mines and hydroelectric operations in the region is even more stunning considering how much economic value St‘át’imc territory and its members have produced for BC. The construction of the provinces most extensive hydroelectric facilities, in addition to multiple large gold mines, and logging operations for over 150 years is indicative of this value. Here, the astounding irony of the social burden narrative, often aired in settler spaces and as demonstrated in the Pierre Trudeau’s White Paper (1969) that almost became Federal policy, that stresses First Nations should abandon their cultural identity and territories to participate in Canadian capitalistic society is laid bare and not lost on the Elders. According to Samson (2016, p. 98) speaking of the fee simple movement that is logically linked to the social burden narrative, “it is easy to see how officials might see the switch from Aboriginal dependence on direct state funds to wage labour and entrepreneurialism as an attractive proposition.” Yet, many of the Elders with whom I spoke, were employed in the construction of the dams and mines that now dominate the territory. However, they were denied the ownership stake in such activities that Aboriginal Title now demands.

A primary negative repercussion of this withholding of ownership is the absence of long-term revenue that would have allowed these communities to plan and invest in more sustainable economic activities as compared to the insecurity of the boom and bust cycles of modern commodity-based natural resource extraction. While those employed were able to provide for their families and communities, once these activities subside, the ability of First Nation people to benefit from their territory is significantly reduced. Even through the lens of economic
development, while beneficial for the St’át’imc communities that participated, the historic St’át’imc Hydro agreement is nowhere near the economic reconciliation required from the Province. Future agreements must account for not only the centuries of resource dispossession and the resulting loss of intergenerational wealth, but the lost opportunities of capitalistic accumulation that occurred from the stripping of the ability of First Nation people to own any portion of wealth creation taking place in their territory. The Province’s inability to grasp even western notions of value in deliberations with First Nations is demonstrative of the extent of the hypocrisy the province is using to sidestep its debt to untreatied First Nations.

Further, the Indian Act and its reserve system effectively destroyed the traditional practices and knowledge that the courts are now asking for as evidence. Elder Desmond Peter Jr. passionately stated (EWG Session March 2017),

The whole system is flawed because you can put down a date like 1846 and at the same time, they put you on reserve and tell you can’t leave the reserve to use your territory. How can you maintain use? When you take a look at points that we are putting on the map for different uses. This burden of proof shouldn't be on us. That is one of the things I am having a hard time with when you look at Title and Rights.

When you take a look at everything that the government can use to contradict us, they shouldn't be backtracking to start the consultation and accommodation process. They're not anywhere near there yet, and at the same time, they are letting mines in [to the Territory]. You know you get a non-native person to claim an area that is two times bigger than the community that I live on. What’s with that? Is all of a sudden our citizenship in our own territory less than for everybody else because we have the burden of proof? We have to prove that we existed.

Here, Desmond Peter Jr.’s frustration makes clear the impact of the feigned reconciliation dialogue on St‘át’imc perspectives and morale concerning owed financial obligations and the injustice of the burden of proof on First Nations. If the Province was meaningfully adhering to its stated position of seeking nation-to-nation relationship, or more importantly St’át’imc values of
respect, sharing, and responsibility, negotiations should not start with a process of refuting the others existence, as now required in the court litigated land claims process. The current negotiation process is predicated on the power of the settler state to mandate the use of fundamentally incongruent settler terms and conditions. The adherence to settler terms of veracity and ownership creates unbridgeable antagonisms from inherent differences between western and First Nation legal traditions, such as shared ownership and responsibility model of governance spoken to in section 2.4.2. This feigned nature was also exemplified in detail during the discussion of the history of BC – St’át’imc land use negotiations in section 4.1.2.

The last issue that recurred throughout the TKWs and the presentation of this thesis was the extensive issue of overlapping land claims, and how this strains inter-First Nation cooperation. The current concessions by the Province to individual First Nations fail to address the issue of shared territories. This is easily viewed from the Elders’ perspectives, as an intentional use of divide and rule tactics by the Province. The following exchange between Elders, Gasper Jack, Ken Thomas, and myself is demonstrative of this perspective (EWG Session March 2017):

Gasper Jack: What you’re doing right now is actually verifying our existence in recording and documenting things that we’ve done in our territory, and other Úcwalmicw people are encroaching on our territory, like the Shuswap, Tsilhqot’in, and Sto:lo. Everybody is getting a chunk of St’át’imc Territory. When everybody is submitting all their claims to their lands. We end up with probably a third of what territory is.

Ken Thomas: Can I say something; we will end up with nothing. Tsilhqot’in claims all of our land.

Gasper Jack: Down to Tsal’alh.

Ken Thomas: No, down to Port Douglas.
Zac: I mean the Tsilhqot’in are claiming an extensive area knowing that they will only be given 10 percent of the claimed area.

Ken Thomas: It’s still important.

Gasper Jack: Well we are unburying the hatchet, we are taking the hatchet back. What’s ten percent of nothing?

‘Unburying the hatchet’ references the symbolic settling of hostilities between the Tsilhqot’in and St’át’imc on the historic battleground of Graveyard Valley in 2003. While partially said in jest, as the St’át’imc leadership is collaboratively working with the Tsilhqot’in on many issues, the over claiming of traditional territory is a product of Provincial negotiating tactics. By effectively mandating maximum awardable settlement amounts in treaty negotiation tables based upon negotiation precedents, BC can force First Nations to disregard mutually agreed upon boundaries between First Nations in the hopes of earning a greater share of their traditional territory. With the fast-moving negotiations especially after Tsilhqot’in, these strategic decisions by one First Nation government requires abandonment of past inter-First Nation agreements and understandings (Larry Casper, EWG Session March 2017). This creates conflict with neighboring First Nations. Ultimately, these tensions between First Nations can weaken their ability to act as a united front against the policies of BC.

The need for cohesion between First Nations is a prerequisite to establishing effective forms of resistance that function as acts of cultural revitalization and not division. The ability of unified resistance to transcend the perceived futility of long-term rights-based approaches is spoken to in the following exchange.

Kenny: Elders could tell you what to put on that piece of paper. Then it would be up to you to take it to those who need to hear it. But it don't work that way, we know that. You know what? What we say here don't mean a darn thing.
Zac: I mean in the eyes of BC yes, …. you know I think right now they're terrified of what's going on.

Kenny: What terrifies them is, like Tsilhqot’in said, if all the natives in BC got together we could kick the government out. But do they want it, it’s coming down to it.

Here Gasper Jack intervened to offer a solution,

Gasper: We need you guys [the other Elders] to start stepping out to put up S7istkens [subterranean pit houses] and hunting cabins throughout the whole territory. Get out the farthest reaches of your boundaries and start building cabins and S7istkens. Re-establish your hunting and your berry picking and whatever it is that you used to do outside of the reserve. Go out there and do it.

As Úcwalmicw, it's within your rights. We can go out into the territory and build your S7istken, build your cabin, and the cops and conservation officers can't do anything about it. You're within your territory.

Kenny: You're within your rights. You are just re-establishing your entitlement to be an owner of that territory and land.

The fundamental non-recognition of Provincial authority contained in this exchange, for the Úcwalmicw, is a point of pride and commitment to St’át’imc Rights and Title. The act of reclaiming the territory through (re)occupation is not new or novel for the St’át’imc. In addition to the decades of blockades, I was told about three current (re)occupation villages in the territory. These were placed strategically on roads near historical sites to prohibit logging and development by resource developers. Importantly, these camps do not have unanimous support among the community and are a point of contention between Band leadership and the activists occupying the territory. Yet thus far, the province and band have decided to not forcefully remove the sites as long as these permanent roadblocks are occupied. The success of these acts of resistance, or St’át’imc Title and Rights, not only validate the existence of St’át’imc Rights and Title, but its de facto power. As Gene Sharp (2005, p. 253) explains

As
When people refuse their cooperation, withhold their help, and persist in their disobedience and defiance, they are denying their opponents the basic human assistance and cooperation which any government or hierarchical system requires. If people do this in sufficient numbers for long enough, that government or hierarchical system will no longer have power.

Movements, such as these, are not only forms of resistance but they are contemporary examples of spreading one’s culture, values, and lived experiences. A key component of colonization for both Freire and Fanon is how it functioned as “an experience of spatial confinement, of restraint and prohibition” (cited in Coombes et al., 2014, p. 846). In the act of restricting settler physical mobility, First Nations can reproduce their own lived experience of imposed physical limitations in the minds of the temporarily disrupted settlers (Borrows, 2016, p. 52). If this can be aided by the expanding understanding of First Nation issues and visibility in settler society, the power of these actions will only increase as the Province seeks to maintain their reconciliatory public posture. Further, as enforcement of Provincial land management regulation is largely left either to the concessioners or relatively small numbers of law enforcement officers, the exertion of customary power by First Nations can aid in unsettling the centuries of disenfranchisement and disempowerment First Nation people have endured. Ultimately, these expressions can produce increased community cohesion and calls to action, while exposing the overly leveraged enforcement powers of the settler state.

In summation, the views and motivations in these exchanges need to be captured and propagated by PV and PGIS projects within all First Nation communities. Capturing and disseminating dissenting and authoritative opinions opens dialogue channels and can facilitate conflict resolution, as well as fomenting action within the community. When aired outside the community, these voices can help negate the essentialist environmental steward narrative that is seemingly incompatible with neoliberal notions of economic development held by many settlers.
in favor of a sovereignty argument that can open space for more advancements in First Nation Self-determination

5.5 Patient Optimism

With the frustration and acts of resistance of the community firmly aired, it is now appropriate to discuss the cautiously optimistic outlooks of the experts interviewed. Each expert was quick to mention the remaining barriers facing First Nations and the long time frames required to address them. Yet, statements were made that point to an improvement in First Nation/settler government relations. First, the barriers and limitations of the current environment are presented concerning the perhaps unrealistic expectations inherent to social change discourse and the remaining limitations to AT. Following this, the positive developments and outlooks voiced by the experts are elaborated.

One limiting factor discussed by Mildon is the placing of the burden for First Nation empowerment onto community researchers.

[T]he thing is that they [the First Nation communities] end up having to say to the young community members ‘go off and get graduate degrees, then we want you to come back to the community and help out. But we can only afford to pay you X and you have to live in this remote community.’ Yet, those young people really have lots of opportunities elsewhere. So at this point, it still depends on a lot of people who are enthusiastic about wanting to help First Nations and I have seen that really work. I know people with law degrees who have gone off and they work lands department and they're not lawyers and they make an OK living and they're just really happy to be working for a First Nation. (Interview with Drew Mildon, December 2016)

The comment above does not imply that to not come back to the community constitutes a failure of the youth. It speaks more to the importance and necessity of reliance on outsiders to perform the work in the community. Secondly, it references the need to create and maintain connections for the youth to the territory and community, and in doing so, cultivating an ethic of
responsibility regardless of physical proximity to the community. This ethic of responsibility can
take many forms, the decision to live outside and represent the community outside the territory is
a necessary component for raising the consciousness of the settler population. Therefore, it is
another form of fulfilling their responsibility to the collective. Yet, in order for these
communities to survive individuals must be willing and able to contribute to the functioning of
First Nation institutions.

This brings me to my next observation that was a shared point among the informants, the
current questionable value of AT. DeRoy states, “…just because a community gets Title, just
because the Nation actually managed to secure that recognition, doesn't mean that the fight is
over” (Steve DeRoy Interview, February 2017). DeRoy is referencing how two years after
Tsilhqot’in, BC is still undertaking costly litigation regarding the interpretation of the ruling.
This demonstrates the continuing cultural transformation that needs to occur in offices at all
levels of settler government in order for meaningful reconciliation to occur.

Yet, there are positive developments that can be viewed as offering a better future. Here
Mildon recounts Dr. Bruce Miller’s (2011) optimistic observations of the culture change
happening at UBC,

He really talks about how law school is attended by all these people, who come from all
these different disciplines and have colonial theory knowledge and critical theory
knowledge from women's studies, anthropology, geography, and that those people are
going to go to law school and end up on the bench. And that changes who's listening to
the stories that are being told. He's very optimistic about it and I agree with him I think
that changed and there will be more thoughtful judges as we go ahead. (Interview with
Drew Mildon, December 2016)

The potential of future judges educated beyond the narrow confines of settler legal
traditions referenced by Mildon is urgently needed to address the remaining issues separating
settler and First Nation legal traditions. The issues that require innovative solutions are (a) the public disclosure of TK and oral history required for inclusion in litigation, (b) enshrining and acting upon the mandates of non-binding international law into Canadian jurisprudence, (c) generalizing the specificity of oral history tests to be achievable by First Nations other than the Tsilhqot’in, and (d) inclusion of Oral Tradition evidence. These are all items that are reasonably interpreted as required by section 35 of the Constitution Act, and most securely under UNDRIP, specifically articles 13 and 26 (United Nations Declaration, 2008).

Mildon further expanded on promising developments in the courts to address some of these issues.

[T]here's a few things that have gone right, if you look at some treaty cases since Tsilhqot’in came down. The courts are much more amiable now that they're looking and saying ‘OK so there is broad territorial title.’ When people entered treaty they were doing a tradeoff of that broad territorial title, and so when we say the extent to which the Crown has to honor those treaties is more expansive. They're actually putting a higher level of duty in response to some treaty nations. So that's changed how judges are thinking.

(Interview with Drew Mildon, December 2016)

Further, both DeRoy and Mildon offer insights into the movement towards consent-based consultation with First Nations. DeRoy states,

And what Tsilhqot’in (2014) moved us into was a realm of consent or free prior informed consent (FPIC). It moved that process into the limelight. Now communities need to be very informed on what the developments are. It needs to be a relationship [with the state] and the stakes are so high that the Supreme Court of Canada decided that the best way to proceed when First Nation have Aboriginal title is to obtain that consent. And the Province is acting at the peril of developers that want to know more about their own risk.

(Steve DeRoy Interview, February 2017)

Mildon ended our interview with a recent story about the plea being made for recognition of consent by the courts in Canada

Last week our own lawyer, Dominique Nouvet, was at the Supreme Court of Canada and it was the consultation case on Arctic drilling that's going to impact narwhals. She got up
and said to the court, “You have to say that sometimes consultation, the outcome of consultation, will be consent is required. Otherwise, the whole process is meaningless”. So you have to actually say that where consultation demonstrates that the claim is so strong and the damages so high that consent will be required, even in the non-title area.

I think we'll get there, and I think we're going to get there on lots of fronts. But it took 20 years after Delgamuukw to get title, and this isn't a joke right. Like 20 years it's a long time. But in the scheme of things, it's not a lot. For a lot of our clients, It's been generations of bullshit. But things are changing. (Interview with Drew Mildon, December 2016)

If the courts can meaningfully implement a consent-based relationship with First Nations, the burden of proof will shift from First Nations having to prove their existence, to Canada having to defend their control over the territory. While secondary to the obvious consequence of unsettling most Provincial land management authority in BC, the ramifications of moving beyond mere consultation and reasonable accommodation cannot be understated. In the context of this thesis, by moving from a system of external verification of occupation based on the laws of evidence and objectivity in consultation and accommodation to an internal First Nation decision making process with oversight by the Federal government, all of the previous assumptions and compromises of the current research paradigm would no longer be relevant. Therefore, First Nations would be free from the imposed timelines and resulting financial and representation repercussions that plague the current model of research. This less obvious outcome will likely be a result of (1) shifting settler popular opinion regarding the illegitimacy of the exertion of Canadian Sovereignty over lands not procured through treaty, and (2) be precondition to the larger implications of First Nation land management authority allotted under AT. In moving AT from a site specific occurrence achieved by a few First Nations with the means to conduct multi-decade court battles, to a Provincial-wide issue requiring systemic
solutions, the government of BC will finally be forced to seek a solution in good faith to the Indian Land Question.

The mere potentiality of this outcome of consent and AT, if only based on the Federal Government’s stated position on consent, requires preparation of a coherent strategy by First Nation governments. Research in First Nation communities should continue to function as is, but they should be cognizant of the transformations that research can impose. Where applicable, First Nations should rely on the unstructured participatory collection of interviews and stories of the members of the community to complement current LUOS focused research. These recordings should be primarily stored unedited and categorized with the appropriate protections to ensure intellectual property of the individual contributors is maintained. Above all, the communal heritage documented should remain accessible to the community and follow the social protocols surrounding each story.
Chapter 6: Conclusion

I began this thesis attempting to convey the difficult odds facing First Nations in BC seeking Self-determination through the legal system. It has now become apparent to me that I did not give sufficient attention to two areas. First, I minimized, due to ignorance, the disregard of First Nation sovereignty by the Province and absence of the Federal Government in their relations with First Nation people. Second, I did not fully comprehend the power of the current system’s superficial inclusion of First Nation perspectives to bolster and reproduce the marginalized position of First Nations on their territory. I felt a pull to placate potential employers by speaking to the positive developments in the area of First Nation research, while highlighting the immense difficulties faced by all parties. Yet, after concluding this research with a presentation to the Elder Working Group, I was greatly impacted by their honest and pragmatic consternation about the dire decisions before them. On the one hand, they must either choose to utilize all the tools offered by the Province, risking profound cultural transformations, while still having future decisions limited under continuing Canadian Sovereignty. Alternatively, as in the case of the St‘át’ímc, First Nations can adhere to radical self-affirmation of their Title and Rights in search of fair compensation with the forfeiture of present day opportunities and improved livelihoods afforded by the province. More succinctly, this is a decision to exist or not to exist in the eyes of the province with the costs being paid by the St‘át’ímc.

The St‘át’ímc Nation is currently following a middle path of non-negotiable St‘át’ímc Rights and Title, while seeking comprehensive compensation for impacts on their constitutionally protected rights that are contingent on respectful and holistic government-to-government negotiations. Yet, the starkness of the choice between ‘existing or not’ warrants that much more responsibility be placed on the Province to accommodate First Nations in ways that
do not include such drastic actions of First Nation governments foregoing livelihood improvements of its members in order to uphold traditional values. While the recommendations contained in this thesis support the need for further research on the topic, the most essential decisions required now of the Province toward accommodation of First Nation Self-determination are: (a) Reform the funding models for programs such as the BCs Ministry of Forests’ Traditional Use Study Program for First Nation research to accommodate more innovative and open-ended studies outside of requirements for immediate consultation. This should be in addition to providing funding for technological innovations in First Nation data management that prioritize video interviews as the primary format to maintain the voices of the contributors, instead of GIS databases. This could be handled at either the Provincial or Federal level; (b) The courts must amend the rules of evidence to account for the differentiation in oral history stewardship between First Nations. The current narrow interpretation of the oral history test based upon Tsilhqot’in societal organization has proven exclusionary to other First Nations; (c) Dismantle the oral/written history binary to allow for inclusion of Oral Tradition for First Nations that have lost considerable portions of their collective knowledge and the system meant to steward the knowledge. These changes must also be reflected in the current consultation framework; (d) Learn from the failed BCTP, and begin negotiating in good faith based upon assumed Aboriginal Rights and Title of First Nations to their Territory, as acknowledged in recent court cases; (e) Work towards reforming the most egregious aspects of the Indian Act and institute land management authority for First Nations on their traditional Territories outside of reserve land, instead of using the promise as leverage in the BCTP. If these issues could be addressed between First Nations and the Province, it may be possible to replace the costly
litigation-centered dialogue with a more respectful and less adversarial dialogue addressing past injustices and future collaboration.

Those skeptical of the Provinces motivations may point to the drastic change and potential liabilities required in such a transition to acceptance of AT in land management as unrealistic. Nevertheless, the calculation is straightforward and has been witnessed in private industry’s dealings with First Nation governments. Here, the St’át’imc Hydro Agreement could function as a prototype to allow for engaging First Nations with little or no collaboration history with the Province. BC Hydro initiated the process to ensure operational certainty for the hydroelectric operations in the Territory. The St’át’imc participated in the discussions, not in spite of their responsibility to protect their environment and Nation members, but because of it.

Yet, if the eco-warrior narrative where all development is unacceptable to First Nations spoken to in section 2.4.2 is present in the minds of Provincial decision makers, they will be unlikely to conclude that attaining operational certainty for the owners of allotted Provincial resource concessions is possible through good faith negotiations, and the status quo will be maintained. Once this inaccurate notion is dispelled, and a long-term perspective is taken on economic development to include past, present, and future costs, the settlement of outstanding liabilities provides financial advantages through collaborative, sustainable, and inclusive resource use and development. However even with existing positive examples, the province still has yet to implement this framework, even with the St’át’imc in other areas of infringement such as mining and forestry. This lack of action is disheartening because the most difficult step of building shared understanding and respect that took years during the St’át’imc-BCH agreement could easily be replicated. This leads me to believe that instead of signally drastically different government-to-government relations as promised by BC, it was a singular action by a sub-entity
of the BC government to ensure operational security, and more provocation by First Nations through the courts is necessary.

Through the CBR methodology presented in this thesis, I have demonstrated that CLR coupled with an accessible and secure CIS is a necessary, feasible, and beneficial option for First Nations to amend current research strategies for the goals of both an external decolonization, through a rights-based strategy, and internal cultural revitalization. Further, greater space now exists at all levels that regulate research, government institutions, academia, and First Nation governments, for experimentation in CLR methodologies. This should be done for First Nation oral history collection and documentation to more adequately represent First Nations perspectives and culture. At the governmental level, the inclusion of oral history testimony and various commitments to consent-based consultation reduces the need for scientific validation of research outputs and by extension, the reliance on outside researchers. Experimentation in academia has been facilitated by the respectful incorporation of Indigenous curriculum into a few programs including professional degrees. Additionally, through acceptance and promotion of participatory and Indigenous methodologies, universities are ensuring the ethical protections for creating and maintaining space for new forms of Indigenist research to take root. Both of these decisions are producing future government, industry, and legal professionals who are more likely to be sympathetic to the pursuit of First Nation Self-determination in all its forms. Lastly, First Nation communities are being empowered by increasing technological accessibility and research capacity, as well as the acceptance of them. These developments function to minimize the pitfalls of conducting research in First Nation communities, such as research fatigue and frustration, discussed by Tobias (2009), and therefore allow greater experimentation with research methods.
While important in and of itself, the sole investigation of if CLR is a feasible solution for First Nations would have rendered this research idealistic and naïve to many practitioners. It appears to me that too much complacency remains around the current research model, and this is restricting dialogue and experimentation. Therefore, I sought to make perfectly clear the patently unjust nature of the current consultation and AT research framework in the hopes of achieving systemic change. This, also idealistic, realization has resulted in the considerable scope of this thesis.

The triangulating of participant observation and expert interviews used in this investigation provides a multi-level analysis of the research considerations facing First Nations in BC that strengthens the potential for research for policy making and future research directions. By presenting community, academic, and industry perspectives concerning participatory data collection and handling for TK, as well as the commitment to reflexivity, the potential external validity of this research is greatly increased. Lastly, through a process of community identification and validation of research questions and findings, this thesis can build upon the body of collaborative ethnographic research being produced in St’át’imc Territory to demonstrate and protect St’át’imc culture.

The academic value of this research, while secondary to the value to aid St’át’imc leadership, is the addition of personal and expert insights into the praxis of theory and practice of current research strategies for First Nation Self-determination and cultural revitalization. The value of participatory research is known to the field, if not overstated. Yet, its potential utility in Indigenist research has been primarily limited to improving collaborative research partnerships with academic and governance institutions. Therefore, this investigation poses a new way of
viewing the roles of academic research and government institutions in conducting First Nation Land use and historical research.

The positions in this paper are shaped by my ontological foundations but are also representative of the Elders’ worldview. St’át’imc Title and Rights represent an assertive and independent strand of Indigenous discourse in BC. With the positive tone found in universities of both official reconciliation and CBR, there is a need to provide balance to the ongoing necessary investigations of popular successes such as the Great Bear Rainforest with accounts based on First Nations’ lived realities who view collaboration with the province as untenable based upon their values. Best case scenarios are useful for identifying best practices for a future of improved relations. Nevertheless, they have only marginal value for First Nations that do not possess the same resources or amenable values permitting interaction with the settler state. Therefore, this investigation focused on the ability of current accommodations of the settler state to amount to systemic empowerment and Self-determination for First Nations in BC and was not limited to First Nations that are highly visible to the public.

An important personal discovery was how St’át’imc Values or identities, such as the ethic of sharing and responsibility, are instrumental for the leadership in guiding deliberations with outsiders. This research began with a vague acknowledgement of the need for understanding cultural values to be respectful and reduce the harms of my presence. It was only after my time spent with the Elders changed from novelty to routine, that the Elders began to take seriously the arduous process of ensuring my understanding. This change not only contained the St’át’imc values mentioned in previous literature, but their ever-evolving interpretations in the modern context. Through the argument in this thesis and my personal experience, I posit that any understanding of current phenomena happening within these communities can only be
comprehended when these evolving values are meaningfully understood by the audience. These values must be included in research outputs as contextualization for either quantitative or qualitative studies for outsiders and to aid intergenerational knowledge transfer that amounts to cultural revitalization, not the cataloguing of Indigenous knowledge seen in early anthropologists.

Such values, while inextricably linked to the past, as demonstrated by the 1911 Declaration of the Lillooet Tribe, are always being interpreted and negotiated by later generations. While similarities in values exist between First Nations, how these values are acted upon varies widely between every level of First Nation social organization, be it at the Canadian, Provincial, First Nation, community, or individual level. Tangible examples of living one’s culture mandated by many Indigenous theorists (Corntassel & Bryce, 2012; Coulthard, 2014) can be manifested in actions as simple as when First Nations base their interactions with the Province on their specific negotiated cultural values or in sharing the interpretations of current events with the youth or new leadership. The significance of these cultural exercises is only increased when founded on a more diverse body of community member voices. This collection of voices must include all members of the community from trusted Elders, leadership, and even uninterested or adversarial community members.

Not only do the interpretations and values of authoritative sources need to be preserved and disseminated when traditional modes of knowledge transmission break down, but they need to be collected and stored in a form that allows for contribution by every level of First Nation society to represent the fluidity of First Nation negotiated identity in the modern era. This can now be practically achieved through an amalgamation of open-sourced web 2.0 technologies. Such multi-level collection of lived-experiences would allow for the protection of past personal
stories in personal diaries, pictures, and photographs to shape the narrative of the community. The only aspect that is lacking for such a useful tool is the financial and technical support for such an endeavor.

In this light, current LUOS and TUS studies that are primarily stored and shared in GIS datasets, are devoid of the contextualization that Elders’ opinions and interpretations can provide. This, in certain cases, can create an interpretation gap in the understanding of the audience. If this audience is a presiding judge in an AT case or a low-level forestry technician, the lack of understanding can effectively result in the unintentional implementation of the postage-stamp model of Aboriginal Rights and Title that has been refuted by the courts. Currently, the lack of contextualization and resulting interpretations gap has formed for a variety of reasons, including the lack of funding for general research outside the consultation process and the short timelines of EAP that necessitate prioritization of efficiency over representation. Yet, the most important realization is how all of these issues and barriers that shape First Nation research are created by the settler state’s unwillingness to accommodate First Nation perspectives. Re-state why: because viewed as economically detrimental to Provincial government and settler enterprises used to cheap access to First Nations’ natural resources.

More importantly when analyzing the impact of the simplification of TK, is how this gap is likely to be filled by the audience’s own ontological foundations, and not the voices of the community. When viewed within the current movement of regularization of Indigenous property rights within a neoliberal framework as noted by Bryan (2011), and the breakdown of intergenerational knowledge transmission in First Nation communities, the interpretation gap is an opening for reproducing settler neoliberal ontologies in First Nation communities, and perpetuating essentialist notions of indigeneity in the settler population.
CISs created through PV and PGIS outputs that enable continual collection, editing, and spreading of community voices can produce First Nation research and media outputs that are more likely to exhibit greater nuance, fluidity, and relevancy of First Nation values and perspectives than research conducted and represented by outside consultants. If these outputs can be embedded within settler state mandated LUOSs and TUSs, the increased contextualization can unsettle essentialist notions of indigeneity and build more empathy in the minds of decision makers. In short, this increased contextualization can yield more space for First Nation Self-determination.

The solution posed in this thesis of an open source participatory research software suite should be viewed not as another research tool in the toolbox as asserted by Steve DeRoy, but as the toolbox itself containing geographic LUOS, TUS, Archeology, and TK studies, as well as non-geographic archival projects. Every First Nation research output should be contextualized by present day community voices. Practically, the most expedient and accessible way to achieve this is in a community curated digital gateway of PV and PGIS outputs documenting commentary and storytelling of Elders and leadership.

A key value of PV and PGIS outputs, and thoughtful and collaborative ethnographic work, such as Sarah Moritz’s research, lies in orientating future researchers and legal teams to the specificities and interpretations of First Nation cultural values. These values are essential for understanding the desires of the community and are essential for future community-based-research. Further, these community-led projects can enhance pre-existing cohesion and spread shared images of community identity amongst the various actors in the community. This cohesion is vital to providing a united front to effectively engage and utilize the various forms of
authority won through rights-based Self-determination strategies to express First Nation values and responsibility-based governance.

These participatory methods facilitate greater sharing of perspectives and knowledge. However, limitations remain. First, PV and PGIS can only aid current movements of cultural revitalization, not create them. Therefore, these projects must not be viewed as a comprehensive solution. They are only part of an ever-increasing effective and creative body of artistic and community experiments in Indigenous cultural revitalization taking place in Canada and globally. Lastly, unless a robust methodology can be created to ensure PV meets the law of evidence, like the PGIS DTD method, PV will have limited utility in litigation.

In my graduate studies I set out to understand if community-led and controlled research can address the issues of inaccessibility of recent legal victories in Canada. I felt more comfortable addressing the practical issues in the field, as this would allow me to side step the primary issues of being a settler and researcher in this space. Yet through this experience, I have come to understand that my role as an outsider to Canada, Tsal’alh, and Xwisten, cannot be limited to not doing harm and my role is much more comprehensive than I imagined. The burden of change rests upon those in power to deconstruct the barriers that have held First Nations from achieving their aspirations. In Canada, all parties are working towards a better future and this thesis is a testament to this. Yet, while those in power have made positive statements, the reality on the ground has remained the same. As Freire and Fanon, among other pioneering social theorists have noted, power is never willingly surrendered; it always needs a struggle. Only through the understanding by those in power that statements and apologies do not alter the systemic dispossession of territory and identity can reconciliation be achieved. There must be real value exchanged for First Nation Territory. However, the missing link in this struggle is not
grandiose or straightforward, it is mere empathetic communication. Therefore, it is the role of persons who have the opportunity to listen to the lived frustrations of the current system to spread, not their stories, but the necessity of listening. The solutions here are predicated on this realization.
References


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Jurisprudence, Legislation and Other Documents


St’át’imc (PC) Settlement Agreement, [2010].


Appendices

Appendix A  Expert Interview Recruitment Letter and Cover Letter

Cover Letter for Invitation

In order for this study to document consent, I have chosen to use an invitation letter as my primary means of gaining consent as per chapter 10.2 of TCPS2. This is due to the letter sufficiently explaining the study, the informants being in senior or communication positions in their respective fields and familiar with North American research ethics protocols.

The following key sections have been excluded or not mentioned explicitly in the invitation letter because of the rational below;

1. Consent shall be given voluntarily.

   a. Through use of plain language, it is clear that the participants are voluntarily choosing to participate in the study and it explicitly covers there will be no direct benefits from participation. The harms are not mentioned because there are none. This is due to the information being covered in the interviews is not of a sensitive nature and firmly within the purview of their daily activities performed in their work.

2. The identity and contact information of the appropriate individual(s) outside the research team whom participants may contact regarding possible ethical issues in the research;

   a. Every informant will be familiar with North American Behavioral Research Ethics protocols as they are researchers themselves. Inclusion of such formalities may seem overly formal and lead to increased perceived burden of participating in the interview, which will essentially be an informal conversation.
Dear [Insert Name],

I am a Graduate Student in Faculty of Forestry at the University of British Columbia. Over the past year, I have had the great opportunity to work with the communities of Tsal’alh and Xwisten of the St’át’imc Nation on a Traditional Knowledge mapping project. The project seeks to document, preserve, and operationalize the community’s collective knowledge of the system of trails used for various purposes in their traditional territory. With recent developments in the neighboring Tsilhqot’in and Shuswap nations concerning overlapping land claims, the communities have expressed desire for the project to be oriented toward demonstrating occupation. As this is a very specialized field with few academic publications, I have reasoned interviews with practitioners as one of the few viable options for study. I am specifically interested in the ability of community researchers, given proper tools and training, to defend traditional knowledge in Canadian Courts and how the traditional reliance on expert witnesses impacts this process.

[describe how informant was identified]

If you choose to participate in the study, participation would include a semi-structured interview lasting approximately 1 hour that will be audio recorded, and a follow-up request to define key terms identified in the interview. As snow ball sampling is being used in this study, I would also ask you to recommend additional knowledgeable informants in the area that I can reach out to for interviews.

The goal of the interview will be to provide insight into the realistic expectations of such a project spoken to above, and possibly to develop a rubric to judge the potential of place-based knowledge points to be used as evidence of occupation preparation by First Nations. These findings will be used in a thesis publication in fulfillment of my Masters of Science in Forestry and could be used in a future submission to the journal The Canadian Geographer. It is your decision if you want to be identified and your responses to be used in such publication. I will send you a copy of the paper prior to submission and allow you to make additional comments or to withdraw your contributions completely from the paper with no justification necessary. There will be no direct benefits or compensation issued for your participation in the study.

Thanks for your time and consideration, if you have any further questions regarding the study, feel free to contact me at z.zabawa175@gmail.com or (778)-251-2672.

Best,

Zachary Zabawa, BSc
MSc. Candidate, Faculty of Forestry
The University of British Columbia
Appendix B  SKMP Informed Consent Form

Consent Form
St‘át‘imc Trail Knowledge Mapping Project

Principal Investigator
Forest Resource Management, UBC

Co-Investigator
Forest Resource Management, UBC

Purpose:
The purpose of this study is to collect traditional ecological knowledge of the St‘át‘imc Nation or “St‘át‘imc Knowledge” in regards to historical and present trails used for hunting, fishing, gathering of forest products, and cultural purposes. This project has been initiated at the behest of [Name] of the Ts’al’alh Band of the St‘át‘imc Nation, we are seeking approval from the Ts’al’alh and Xwisten Band Councils of the St‘át‘imc Nation. You are being asked to participate in this study because of the respected place you hold in your community as caretakers of traditional knowledge. This process will help to record and protect your St‘át‘imc Knowledge for use by future generations.

Study Procedures:
If you agree to participate in the study, the research process will follow a community participation model. We will begin by conducting a series of group mapping interviews of 6-12 St‘át‘imc Elders four times a year for three hours to locate and actively confirm trail names, locations, uses, and descriptions. These meetings will also be used to discuss project goals and methods with community Elders. Over the course of these interviews, if the researchers and participants so determine, we will perform individual map biographies or other interview techniques in addition to the group interviews. They will be carried out in the allotted group interview times. In order to properly document these sessions, they will be audio and video recorded. If you do not want to be video recorded but still wish to participate in the study, a separate interview will be held in the time allotted or the video will not be recorded.
Study Outcomes:

The recordings from these interviews will be transcribed and organized into a database and comprehensive report that will remain in the control of your Band government and Stát’imc Government Services [SGS]. Where appropriate, the knowledge gained will be geo-referenced and compiled into a multimedia digital map to be made available to the Stát’imc nation. Only with explicit review, editing, and permission of each of the participants, Tribal Band, and the Stát’imc Nation will the results of the study be used for thesis publication or in academic journals.

Potential Risks:

To avoid any risks of misappropriation of Stát’imc Knowledge by outside interests, adherence to the principle of the First Nations Information Governance Centre’s report “Ownership, Control, Access, and Possession” (OCAP) and Stát’imc Knowledge specific protocols will be made a priority.

There may be questions that you will not feel comfortable sharing with outside researchers due to the personal and/or spiritual nature of the topics discussed. In these instances, or any others, you do not have to answer any questions you do not want to. The chosen method of group interview might also work against the personal nature of recounting your experiences or beliefs. If you are uncomfortable in the group setting, let the researcher know your preferences regarding the format of the study, and reasonable accommodations will be made.

Potential Benefits:

Most benefits of this study will accumulate at the community level by contributing to the cultural heritage of the Stát’imc and representing the Stát’imc claim to the territory. It is entirely possible there will be no direct benefits to participants. Nevertheless, to have your knowledge heard and recorded offers the potential to reflect on past memories and experiences in a valuable and new context. You may also appreciate the recording of your ideas and knowledge for future reflections and purposes of your own.

Confidentiality:
Original recordings, maps, and transcripts will only be stored on computers that are encrypted and password protected. After the completion of the study, data and results will be given to SGS and each band government. Additionally, the data and recordings will be held for a period of five years on a password protected and encrypted hard drive secured in Dr. Bulkan’s office at UBC and will be destroyed after this period. Dr. Bulkan and Zachary Zabawa will be the only people with access to this data. Other persons must gain consent of each participant and SGS to access the data.

Your confidentiality will be respected. Information that discloses your identity will not be released without your consent. You may choose to not be identified in the results of this project. Please choose one of the following options:

- The researchers may include specific reference to you in the final report or publications associated with study.

- The researchers may not include specific reference to you in the final report or publications associated with study.

**Remuneration/Compensation:**

In order to defray the costs of inconvenience/transportation/loss of wages each participant will receive an honorarium for your participation in the study. St’át’íme Eco Resources and your respective band government will pay these honorariums.

**Contact for information about the study:**

If you have any questions or desire further information with respect to this study, you may contact Janette Bulkan or one of her associates at (604)-822-8089

**Contact for concerns about the rights of research subjects:**

If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics at 604-822-8598 or if long distance e-mail RSIL@ors.ubc.ca or call toll free 1-877-822-8598
Consent:

Your participation in this study is entirely voluntary and you may refuse to participate or withdraw from the study at any time.

Your signature below indicates that you have received a copy of this consent form for your own records.

Your signature indicates that you consent to participate in this study.

____________________________________________________
Participant Signature     Date
Appendix C  UBC Band Council Research Agreement

THIS COLLABORATIVE RESEARCH AGREEMENT

is made this _____ day of ____________, 2015

BETWEEN:

________________________________ First Nation/ Band Council

Contact Person(s):
Organization:
Address:
Telephone
Email:

AND

Principal Researcher(s)

Name:  
Supporting Agency: University of British Columbia
Address: Forest Sciences Centre 2021
        2424 Main Mall
        Vancouver, BC V6T 1Z4

The principal researchers, as named, and the St'át'imc First Nation agree to conduct the named collaborative research project in accordance with the guidelines and conditions described in this document.

1. Purpose of the Research Project
The purpose of this research project, as discussed with and understood by the St’át’imc First Nation in the community of ___________, is to holistically collect traditional ecological knowledge of the St’át’imc Nation or “St’át’imc Knowledge” in regards to historical and present trails used for hunting, fishing, gathering of forest products, and cultural purposes that reflect the interconnectedness of the land and people. This project has been initiated at the behest of Chief Larry Casper of the Tsél’alh Band of the St’át’imc Nation.

The data provided by the Elders will be collected and organized by the UBC researcher. After the project all materials and data produced will remain within the community. However, as the project is currently not funded externally, the UBC researcher will work towards a thesis publication required for graduation as the primary benefit for the efforts given to the project. Prior to any publication, the UBC researcher must gain approval of both Band Councils. If approval is received from the band council to use the site-specific results in a thesis publication, the site-specific results of this research will be held encrypted and securely stored for a period of five years by UBC researchers and then will be turned over to the band or destroyed.

2. Scope of the Project

The objective of this project is to create a comprehensive map and report that will remain as property of the St’át’imc Nation and will serve the community in the following ways; 1) aid in the preservation and dissemination of St’át’imc knowledge to present and future generations; 2) Serve to represent St’át’imc interests in deliberations with outside parties concerning St’át’imc Territory and Aboriginal Rights. In order to accomplish these goals, the following types of information will be gathered: Individual and group map biographies related to trail knowledge; video and audio recordings from group and individual interviews; and Previous SGS and band government studies and data regarding trails.

3. Methods & Procedures

The research process will follow a community participation model that will begin by conducting a series of group mapping interviews of 6-12 St’át’imc Elders approximately 4 times a year for 3 hours to locate and actively confirm trail names, locations, uses, cultural significance, and descriptions. Over the course of these interviews, if the researchers and participants determine it to be beneficial to perform individual map biographies or other interview techniques in addition to the group interviews, they will be carried out in the allotted group interview times alongside the group. In order to properly document these sessions, they will be audio and video recorded.

After the group mapping interviews have been satisfactorily completed, a process of data quality verification will be carried out. This process will include comparison to previous trail map sources, and field GPS verification of trails and site locations.

Individual consent to participate in the project will be obtained by giving each participant a consent form that highlights the purpose, methodology, risks and benefits, and remuneration prior to any interview. The researchers may also be available on a continuing basis to answer any questions a participant may have via contact methods provided on consent form. Participants
have the right to withdraw from the project at any time for any reason without any fear, especially physiological, emotional, or social repercussions. In this case, that participant’s data will be destroyed.

Research data will be kept confidential in the following ways: recordings of the interviews, maps, and data will be stored on an encrypted and password protected hard drive. Maps and physical documents created in the study will be kept in the presence of the researcher and, if not, locked in a secure office at UBC. The following persons will have access to research data: the UBC researchers, a community appointed researcher, Chief Larry Casper and Dave Levy of St’át’imc Eco Resources, and St’át’imc Nation members with the permission of community leaders.

Data will be analyzed and organized through a collaborative process with Tim Peters, the community-designated researcher. After each interview the researchers will actively engage the participants in verifying conclusions drawn from their responses. The reporting of findings will be presented to the community in a language and format that is clear and comprehensible to community members.

Community consent will be gained through the following process: after data collection is complete, the counterpart St’át’imc and UBC researchers will make oral presentations of the results of their findings to the interviewees. The researchers will then incorporate comments and edits from this presentation into their report. Later, St’át’imc and UBC researchers will make oral presentations of the results of their findings to the 2 participating communities. Subsequently: a written copy of the findings, in a culturally appropriate format, will be returned to the communities. Wall posters, maps and videos may also be part of the longer-term outputs. Only with the explicit permission of each band council and SGS will the UBC student and lead researcher produce some academic outputs (publications) from this research, co-authoring with the St’át’imc specialists and contributors to this project.

4. Expected Benefits and Risks
Expected benefits from this project might include:

- Recording St’át’imc knowledge of trails used for hunting and gathering, including berries, mushrooms, roots, and medicines, strategic travel as well as fishing. This information would support current knowledge of mule deer migration routes, as well as the SGS Land Use and Occupancy study.
- Further documentation in the form of industry standard maps of St’át’imc occupancy and use of the territory.
- Cataloging of trails, and dissemination to the communities can lead to increased use of abandoned trails, which would demonstrate continued occupation of the St’át’imc people in the territory.
- The recording of Elders knowledge of the trail systems would aid St’át’imc knowledge preservation and dissemination to present and future generations
Risks associated with the study might include:

- In the case of a breach of data security protocols outlined in this agreement, misappropriation of St’át’imc Knowledge by outside interests might occur if data is entered into public domain.
- If community review of research findings is not sufficiently sought, research findings might negatively affect community interests in regards to Self-determination and aboriginal title, as well as negatively affecting public perceptions of the community by outsiders.

5. Obligations & Responsibilities

External Research Partner

- To do no harm to the community.
- To involve the community in active participation of the research process and to promote it as a community-owned activity.
- To ensure the research’s design, implementation, analysis, interpretation, reporting, publication and distribution of its results are culturally relevant and in compliance with the standards of competent research.
- To undertake research that will contribute something of value to the community.
- To ensure that new skills are acquired by community members, such as research design, planning, data collection, storage, analysis, interpretation and so on.
- To be stewards of the data until the end of the project if requested or appropriate.
- To promote the dissemination of information to society at large if desired and appropriate through both written publications and oral presentations.
- To be involved in any future analysis of the data after the data is returned to the community, if requested.
- To abide by any local laws, regulations and protocols in effect in the community or region, and to become familiar with the culture and traditions of the community.
- Within their respective roles as researchers and community representatives, to advocate and address health, social or other issues that may emerge as a result of the research.
- To ensure that the community is fully informed in all parts of the research process, including its outcomes through publications and presentations, and to promptly answer questions that may emerge regarding the project and its findings.
- To communicate equally with the other partners in all issues arising in the project.
- To ensure that research carried out is done in accordance with the highest standards, both methodologically and from a First Nations cultural perspective.
- To support the community by providing resources as a matter of priority (e.g., research funding to support community research coordinator).
• To abide by their own professional standards, their institution’s guidelines for ethical research and general standards of ethical research.

**Community-Based Researcher**

In addition to the obligations listed for the external research partners, the community researcher is obligated:

• To provide a link between the research project team and other community members, and provide relevant, timely information on the project.
• To place the needs of the community as a first priority in any decision where the community researcher’s dual roles of community member and researcher may be in conflict.
• To be stewards of the data until the end of the project if requested or appropriate.

**Community Partner**

• First and foremost, to represent the interests, perspectives and concerns of community members and of the community as a whole.
• To ensure that research carried out is done in accordance with the highest standards, both methodologically and from a First Nations cultural perspective.
• To communicate the results of the research to other communities, and to share ideas as well as program and service development for mutual benefit and involvement.
• To serve as the guardian of the research data during and/or after completion of the project.
• To offer the external and community researchers the opportunity to continue data analyses before the data are offered to new researchers.

6. **Data Ownership and intellectual Property Rights**

The individual owns his or her personal information while the Stˈátˈímc Nation owns the collective data.

Access and stewardship of the collective data are negotiated and determined by the First Nation Band.

7. **Dispute Resolution**

In the event that a dispute arises out of or relates to this research project, both parties agree first to try in good faith to settle the dispute by mediation administered by an agreed upon neutral party before resorting to arbitration, litigation or some other dispute resolution procedure. A mediator will assist the parties in finding a resolution that is mutually acceptable.
If a dispute cannot be resolved to the satisfaction of both parties, the research project may be terminated according to the terms described below.

If the project is terminated all St’át’imc knowledge data gained through the project will be returned to the community or destroyed.

9. Term & Termination

This agreement shall have an effective date of ________________

and shall terminate on ________________.

This agreement may be terminated by the written notification of either party.

10. Signing Authorities

IN WITNESS whereof, this agreement has been executed on behalf of the parties by their duly authorized representatives:

__________________________________________________________________________  ________________
Name and Title                          Date

__________________________________________________________________________  ________________
Witness                                Date

__________________________________________________________________________  ________________
Name and Title                          Date

__________________________________________________________________________  ________________
Witness                                Date