Cultural Landscapes of the Common Ground: Mapping Traditional Anishinaabe Relationships to the Land

by

Sheldon Christopher Lee Ratuski

A Thesis submitted to the Faculty of Graduate Studies of
The University of Manitoba
in partial fulfilment of the requirements of the degree of

MASTER OF NATURAL RESOURCES MANAGEMENT

Clayton H. Riddell Faculty of Environment, Earth and Resources

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Winnipeg

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ABSTRACT

The primary goal of this research was the facilitation of cross-cultural communication between local Anishinaabe and settler communities within the context of the Rat Portage Common Ground Conservation Organization. Through the course of this study a combination of western cartographic conventions, phenomenological principles, and cultural asset mapping techniques have been applied. The original data discussed are the aggregation of three separate data collection initiatives. Each initiatives' individual results have been utilized in various ways to record, communicate, and verify the final research process and products. The research also sought to gain insight into the application of particular mapping methodologies to a phenomenological inquiry. The phenomenon under investigation was the place-based Anishinaabe cultural landscapes of the Common Ground Lands. While the employed mapping conventions were found to assist in realizing the phenomenological objectives of the research, it was also observed that phenomenology itself offered valuable insights into the act of mapping.

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ACRONYMS

ACL - Anishinaabe Cultural Landscape

CGL – Common Ground Lands

CGMI – Common Ground Mapping Initiative

CGRF – Common Ground Research Forum

LUOA – Land Use and Occupancy Activities

MBIS – Map Biography Interview Session

OGI – Obashkaandagaang Garden Islands

OGIW - Obashkaandagaang Garden Island Workshop

OLSI - Ochiichagwe'Babigo'Ining Lake Sturgeon Initiative

RPCGCO – Rat Portage Common Ground Conservation Organization

Chapter 1: Introduction to Research

1.0 – Introduction

Human beings exhibit unique psychologies of place based on their experiences of that place. As such, geography, being the common anchor of individuals with diverse psychologies of place, is an important component of cross-cultural partnerships which seek to share a territory and resources in a mutually beneficial and constructive manner. The geography of the Rat Portage Common Ground Conservation Organization (RPCGCO) are the Common Ground lands (CGL), where a mandate of a "constructive relationship" between those partners of First Nation and settler decent exists (Common Ground Research Forum 2013).

Several strategies to attain such a goal of constructive cross-cultural land use co-management were included in the project's planning, which included the facilitation of a mutual understanding of local landscape that could be communicated clearly and efficiently through maps. As such, the Common Ground Mapping Initiative (CGMI) was initiated under the Common Ground Research Forum, the curator of the Community University Research Alliance funding meant to support the work of the RPCGCO. In addition to the map biography interviews conducted under the CGMI, this research was also informed by two independent research initiatives: the Ochichagwebabigoinning lake sturgeon initiative (OLSI) project and the Obashkaanadagaang garden island workshop (OGIW). It was deemed that these initiatives provided significant enough spatial, thematic, and participant overlaps to warrant inclusion. This introductory chapter forms a picture of the historical and current political climates the project worked within. The literature review, covered in Chapter 2, assisted in determining the course of the project's methods and techniques, which are outlined in Chapter 3. These methods and techniques were used for the collection of data, their processing, presentation, verification, and displaying of results that are covered in Chapter 4. The final two chapters contain the discussion and conclusion of the research process and results, placing both in a larger context beyond the RPCGCO.

1.1 – Research Objectives

The purpose of the Common Ground Mapping Initiative (CGMI) was to aid in the cross-cultural communication of landscape values between local Anishinaabe and settler communities within the context of the RPCGCO. It was through the process of mapping Anishinaabe cultural landscapes (ACL) that the research contributed to this communication, and was where the more academic objectives of the research were centred. These objectives were to:

- a) gain insight into the cultural landscapes of the Common Ground lands of the Anishinaabe people of Wauzhushk Onigum First Nation, Ochiichagwe'Babigo'Ining First Nation, and Obashkaandagaang First Nation;
 - b) explore the utility of mapping an individual's experiences during a phenomenological inquiry, including the value of identifying spatial patterns or themes amongst the various narratives of each participant; and,
 - c) assess how well the proposed cartographic conventions function in the recording of the participants' shared experiences, and in the communication of those experiences to others.

Two data collection initiatives contributed directly to create the final CGMI maps and narrative tables. Those were the mapping interviews done specifically for the CGMI, and also those completed as part of the Ochiichagwe'Babigo'Ining lake sturgeon initiative (OLSI), which due to its function in participant relationship building, its overlapping methodological approach, and overlapping spatial and thematic data, was chosen for inclusion in the final CGMI dataset. A study of the Oabashkandagang Garden Islands assisted in the achievement of the CGMI objectives by informing participant selection, providing an applied example of an alternative method for data collection; which is later contrasted with the central methods of the CGMI, and also by acting as a valuable external verification tool. Each of these three research initiatives employed certain theoretical and methodological tools designed to

best serve the purpose of creating clear accounts of ACL, both on and around the Common Ground Lands (CGL). Before moving forward into the specifics of how this was accomplished, it is important to paint a picture of how the historical and current political and social landscapes have thus far shaped the physical and cultural landscapes of the local area surrounding the CGL.

1.2- A Primer On Historical Perspectives

Human appraisals of the landscapes of northwestern Ontario have changed over time with the introduction and evolution of various cultures. Three distinct historical eras representing dominant landscape values in the region are pre-fur trade, fur trade, and western resource settlement.

Understanding how these changing perspectives of the landscape have influenced local Anishinaabe land use and occupancy activities regionally, was necessary to contextualize this research's findings within the dynamic cross-cultural relationship between the local First Nations and settler communities whose cultural landscapes continue to overlap on the Common Ground Lands (CGL).

1.2.1 - Pre-Fur Trade

Before contact with Europeans, the Anishinaabe—or Ojibway—people occupied a large portion of what is now northwestern Ontario. For thousands of years they developed a relationship to the land, creating a cultural landscape filled with narratives and founded on a close relationship to the earth. Their land use activities within this territory mainly consisted of cyclical seasonal subsistence hunting and gathering of various resources, such as wild rice, maple sugar, fish, duck, muskrat, moose and deer (see Table 4.3 p.70). While this form of land use had a less dramatic impact on the local physical landscape than the later settlement and economic activities of Euro-Canadian settlers, the Anishinaabe people were still active in shaping aspects of the landscape to serve their needs. An example of Anishinaabe- driven landscape alteration was the common practice of using fire to open corridors or to initiate favourable natural processes of re-growth. "Often the pinelands were burnt so that berries could be obtained, or the berry patches themselves were burned to maintain the berries" (Davidson-

Hunt 2003 p.28). Littoral zones were also strategically burned and "created safe places to camp as well as providing pasturage for the main ungulates which were hunted" (Davidson-Hunt 2003 p.28). The arrival of Europeans to the area, however, saw new values being placed upon the landscape that would eventually change ACL and land use patterns in the region.

1.2.2 – The Fur Trade

The European fur trade required levels of resource extraction beyond anything previously experienced in the region. What's more, this new regime of land use activity was based solely on foreign profit rather than the traditional local subsistence activities of the Anishinaabe. During this era, the Anishinaabe became fully integrated into the operation of the fur trade in a variety of capacities, and "were critical to the success of the Northwest Company for the supply of furs and provisions" (Davidson-Hunt 2003 p.26). "For two centuries, the Ojibwa had laboured in the fur trade as hunters, fishermen, interpreters, and guides, as well as trappers" (Peers and Brown 2000 p.543). This involvement in the fur trade greatly influenced ACL, both in what the Anishinaabe did and also where they did it.

Fur traders and company agents encouraged the Anishinaabe to move westward, beyond their traditional territories, to areas supporting higher populations of fur bearing wildlife; while missionaries promoted more static agrarian based communities (Peers and Brown 2000 p.542). Despite these new societal influences, the Anishinaabe were able to maintain continuity in land use practices and connections to the landscape. It was not until 1873, and the signing of Treaty #3, that drastic and rapid change to Anishinaabe society and local physical landscape occurred.

1.2.3 – Western Resource Settlement

In 1763 a Royal proclamation from England "established treaty making as the lawful process whereby the Crown's [self proclaimed] underlying title to Indian territories could be converted to a full and unencumbered title that would provide for disposal and regulation" (Usher 2003 p.377). The full

In Lake of the Woods region 110 years later when Treaty #3 was signed between the Anishinaabe and the Canadian government (Figure 1). Not only did the signing of this treaty mark a new dynamic of power between the two cultures, but also a new system of values and interests regarding the landscape. Buggey (2009 p.30) describes this shifting of values as "not so much a layering of cultures and uses as a concurrence of cultures and [land] uses."

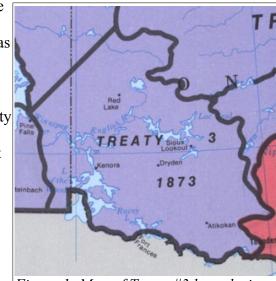


Figure 1: Map of Treaty #3 boundaries. (Map retreived from www.Geogratis.ca)

It was in an environment of prolific national development and expansion that Treaty #3 was negotiated and signed. As noted by Davidson-Hunt (2003 p.30), "[p]art of the stimulus for signing Treaty #3 was to establish the Dawson trail as well as to begin planning for the Canadian railway that became the Canadian Pacific Railway." As Euro-Canadian settlers moved west, and their communities began to grow, so did the economic importance of timber (Davidson-Hunt 2003 p.30). Coupled with an additional demand for wood railway ties, timber quickly became the paramount concern of the new local governments and settler communities. This shift in land use practices was also reflected in the addition of the new large-scale practice of timber harvesting to the seasonal cycle of local Anishinaabe plant harvest (see appendix A). This transformation in land use priorities from fur to timber also brought with it many drastic changes to both the local political and physical landscapes, beyond the mass harvesting of trees. For example, 1878 saw Ontario's first Fire Act passed, which greatly restricted the Anishinaabe traditional use of fire, and the amenities it provided (Davidson-Hunt 2003 p.30).

The Canadian government's mandate of expansion, settlement and economic development did not stop at timber but instead branched into other resource sectors. As Usher (2003 p.368) noted,

"[b]eginning 14 years after the treaty, and continuing for another 70 years, a network of 18 dams was constructed to provide power for local mines, mills and towns, and for the City of Winnipeg." Hydro projects, along with the later adoption of pulp and paper mills along local river systems, disrupted the remaining traditional subsistence cycle of the Anishinaabe people. These developments led to the flooding of their gardens and rice fields, loss of natural moose and duck habitat, and tragically the mercury poisoning of fish populations (Usher 2003 p.368). All of these practices were critical to Anishinaabe livelihoods. These physical landscape changes, together with the later implementation of restrictive federal and provincial game and farming laws, greatly limited the resource base available for sustaining Anishinaabe communities (Peers and Brown 2000 p.545) This largely economic valuing of the physical landscape, on the part of settler governments and communities, has dominated planning of land use and resource development on and around the CGL, largely ignoring the landscape values and needs of Anishinaabe communities. However, as of late, another transformation of land use priorities has taken place. This change can again be linked to economic influences, but conversely, the historical boom of economic growth through resource extraction is now being replaced by a bust seen in the recent collapse of the forestry industry in Northwestern Ontario. This economic downturn has caused local governments and community members to once again evaluate their relationships to the landscape and move into a new era which seeks to explore other values placed on the landscape including those of the Anishinaabe communities (Sinclair et al. 2008 p.12).

1.2.4 – A New Era

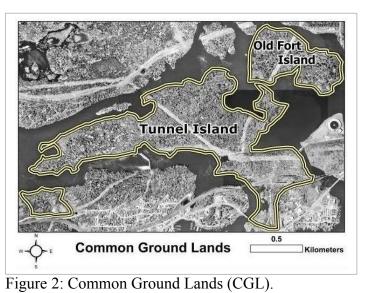
"Qualitative research seeks to understand the ways people experience the same events, places, and processes differently as part of a fluid reality; a reality constructed through multiple interpretations and filtered through multiple frames of reference and systems of meaning-making" (Hay 2005 p.147).

It is precisely these 'filters' and 'frames of reference' that cause settler and Anishinaabe cultures occupying the same space, to imagine different cultural landscapes of their shared place; and also their

"willingness to be open to significances of [that] place, [or] to know and respect [one another's] symbols" (Cosgrove 1978 p.69). Usher (2003) emphasized these culturally different perspectives of landscape, and human relationships to it, with the example of former Quebec Premier Robert Bourassa's statement, "water that runs uncontrolled to the sea is 'wasted,'" (p.371) referring to the damming of Canada's northern waterways for energy production. The 'wasted' water Bourassa referred to is the necessary lifeblood of many First Nations communities and cultures, including those living within Treaty #3 territory. In response to Bourassa's comments Usher (2003) continued by warning "[t]his is a cultural divide with serious consequences" (p.371).

The Rat Portage Common Ground Conservation Organization (RPCGCO) is a cooperative initiative involving the City of Kenora, the Grand Council of Treaty #3, Abitibi Consolidated Inc., Wauzhushk Onigum First Nation, Ochiichagwe'Babigo'Ining First Nation, and Obashkaandagaang First Nation. The overall goal of the RPCGCO is "to foster constructive working relationships between First Nations and non-First Nations governments on a variety of mutual concerns in a region that is

shared by all" (Sinclair et al. 2008 p.11). This 'constructive relationship' is centred on the management of an evolving "assembly of lands approach[ing] 162 ha" (Sinclair et al. 2008 p.12) within the city limits of Kenora, which has been placed in the trust of the organization, and is referred to as the Common Ground Lands (CGL) (see Figure 2).



Having been continually utilized by the local First Nations communities for the past 7000 years (Vandervliet 2008), CGL holds great symbolic significance, and continue to act as a venue for

culturally important ceremonies. Today, the CGL are also frequented by many First Nations and settler residents of Kenora and the RPCGCO First Nations communities for a variety of activities, including walking, running, cycling and other types of recreation (Wheeler Wiens 2011). The governments of the communities involved have recently taken great strides towards recognizing and respecting the other's culture and connection to the land through the RPCGCO.

In support of this new relationship, the Common Ground Research Forum (CGRF) has been formed among the local communities, the University of Manitoba and the University of Winnipeg. More specifically, the objective of the forum "is to understand and build capacity for cross-cultural collaboration" (Sinclair et al. 2008 p.11) between the local settler and First Nations communities.

Comprising a small piece of the larger CGRF efforts to support the RPCGCO, cultural landscape mapping research was meant to contribute directly to many other aspects of the Common Ground initiative including: cross-cultural environmental education programs, the 'collaborative and sustainable' management of CGL, and enhancing both communities' connection to the CGL (Sinclair et al. 2008 p.14-15). The communication processes required to construct and share the cultural landscape maps has also been valuable in building sustainable dialogues in the community at large, beyond the framework of the RPCGCO.

1.3 – Data Collection Initiatives

1.3.1 – Methods Summary

The data collected for this project were gathered over the course of three individual initiatives: the Ochiichagwe'Babigo'Ining lake sturgeon initiative (OLSI) mapping interviews, the Oabashkandagang garden island workshop (OGIW), and the Common Ground mapping initiative (CGMI) mapping interviews. Three different methods were employed during these data collection exercises, which include: modified map biography interview sessions (MBIS) referred to as mapping interviews, various workshop group activities, and walking probe interviews. The OLSI interviews

closely followed the MBIS method, as described by Tobias (2000, 2009), to gather historical knowledge of local First Nations' relationship to the lake sturgeon population in the Winnipeg River north of the Norman dam to the White Dog dam.

During the OGIW three different group activities were employed to collect participant knowledge of their community's land use relationship with the ten islands of focus. Brainstorming was utilized during the workshop to generate an extensive list of the group's land use and resource harvesting activities on the island, while a group mapping exercise allowed participants to attribute specific activities to individual islands as well as to mark out travel routes around the islands. The third group activity provided participants a structured opportunity to share personal narratives and memories they associate with the islands.

The CGMI interviews employed two methods of data collection, mapping interviews and walking probes. The mapping interviews were used to collect the lived experiences of the participants on the CGL and allowed them freedom to define what those connections are and which experiences are important. Two participants in the CGMI, however, were not part of the mapping interviews but instead took part in a modified walking probe around the islands, as a method of sharing their knowledge of the area. As described by De Leon and Cohen (2005 p.202) "[w]alking probes involve visiting a location that has meaning to an informant and discussing the place and the built environment that the informant associates with the locale."

1.3.2 – Scope of Interrelationships

The thematic and spatial scopes of the three data collection initiatives play key roles in how the shared knowledge recorded during each initiative was utilized in the overall research process and final research products. As seen in part A of Figure 3, the thematic scope of the CGMI is the same as that of the OGIW, namely the lived experiences of local First Nations Elders on specific islands. The thematic scope of the OLIS, being focused only on activities surrounding the lake sturgeon harvest however, is

much smaller than that of the CGMI, which encompasses it. In terms of the relationship between the three spatial scopes seen in part B of Figure 3, while the OLIS's included the largest area by far it did not overlap with the garden islands of the OGIW.

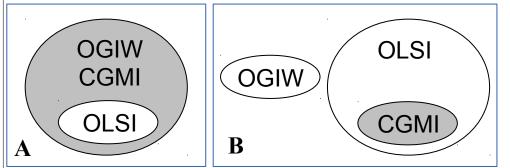


Figure 3: Comparison of thematic (A) and spatial (B) scopes of the Common Ground Mapping Initiative (CGMI), Ochichagwe Babigo Ining Lake Sturgeon Initiative (OLSI), and Obashkaandagang Garden Island Workshop (OGIW).

Once the interrelationships of the three data collection initiatives have been illustrated, the role of their thematic and spatial scopes becomes more recognizable in the later connections made between each initiatives during data processing, presentation, and verification portions of the research. Regarding data processing and presentation, because the OLSI's thematic and spatial scopes overlap with the CGMI scopes the researcher felt justified in combining the OLSI data into the CGMI final results, excluding those results which bear on areas beyond the spatial scope of the CGMI. The OGIW, on the other hand, only shares a thematic scope with the CGMI, as no part of the garden islands themselves fell within the spatial scope of the CGMI. Because the OGIW CGMI shared identical thematic scopes however, data collected during the workshop was valuable in both the verification process, understanding the diverse nature the of ACL that was partially represented by CGL, and a reflection on the methodological application of memory probes.

1.4 – Technical Details

"A society's environmental perception, values, institutions, technologies and political interests will result in particular planning and management goals and objectives for a

specific landscape" (Davidson-Hunt 2003 p.21).

To facilitate a mutual understanding of the landscape between local Anishinaabe and settler societies "[a]n operational bridge is needed to connect special place locations (geography of place) with their underlying perceptual rationale (psychology of place)" (Brown 2005 p.19). Geography, being the common anchor of individuals with diverse psychologies of place, becomes an important component of building cross-cultural understanding and one which lends itself to be clearly and concisely communicated with maps. Three technical constructs have been used together in order to accomplish this bridging. They are outlined here to provide an introduction to the fundamental concepts upon which the research theory and methods are grounded. Their purpose and application are further explained in the literature review in Chapter 2.

1.4.1 – Cultural Landscapes

The idea of cultural landscapes encompasses "the complex and dynamic sets of relationships, processes and linkages between societies and [their] environments" (Davidson-Hunt 2003 p.22). In 1992, the World Heritage Convention defined elements of cultural landscapes as being either intentionally created, organically evolving, or associative (Parks Canada 2009). While these first two categories focus only on the physical expressions of a culture on the landscape, associative cultural landscape elements include purely immaterial or spiritual connections to the land as well. More specifically, associative cultural landscapes are the:

"large or small contiguous or non-contiguous areas and itineraries, routes, or other linear landscapes – these may be physical entities or mental images embedded in a people's spirituality, cultural tradition and practice. The attributes of associative cultural landscapes include the intangible, such as the acoustic, the kinetic, and the olfactory, as well as the visual" (Parks Canada 2009).

The cultural landscape maps created through participants' shared knowledge will act as part of the necessary 'operational bridge' required for the successful shared administration and management of the CGL.

1.4.2 – Map Biographies

Knowledge relating to the 'geography' and 'psychology' of culturally important places for the partnering First Nations communities was primarily collected through mapping interviews closely based on the Tobias' (2009) MBIS method. The map biography's interview schedule is "semi-structured to provide a good balance between rigour and flexibility" (Tobias 2009 p.305), and is comprised of two main elements. The first is the sharing of personal narratives of land use and occupancy within a given area. These narratives describe the tangible and intangible connections an individual has to the landscape; the 'psychology of place'. The second element of this method records the 'geography of place' by having the participants identify the specific locations, or general areas, associated with each personal narrative. While mapping interviews were the main tool utilized during data collection, phenomenology served as a foundation for the entire project's research strategy and design.

1.4.3 – Phenomenology

Phenomenological inquiry is the pursuit to understand reality through the individual experiences of several people regarding a single place, event or phenomenon; and involves the identification of themes in the data collected from individual participant's accounts (Groenewald 2004). A key aspect of phenomenology is the recognition and compartmentalization of the researcher's personal biases and preconceptions concerning the research, its participants and the phenomenon itself. Employing the map biography method, where participants map the spatial characteristics of their experiences with minimal influence from the researcher, greatly benefited this aspect of a phenomenological study. Identifying and analyzing patterns based on the spatial components of the participants' narratives further encouraged an objective role for the researcher.

1.5 – The Next Chapters

Now that the background has been set, moving forward into the technical details requires first

an outline of the literature reviewed in determining which methods would be most suited to the goals of the project. The literature review chapter will provide the reader with background information on several terms and concepts central to the research design. Those being the significance of place, which includes the important definition of cultural landscapes, the three truths of mapping, a primer on western cartography's truths and lies, phenomenological research philosophy methods and theory and, finally, understanding the researcher and the cartographer. Chapter 3 will then outline the specific methods utilized when determining participant selection, data collection, data processing, presentation and verification. The final two chapters are the results and discussion sections. The results of the map biography interviews were amalgamated with the Lake Sturgeon data to form several maps and narratives of land use values. The Garden Island Interview results were also included as a verification tool. In addition, two other verification data sets are include: a previous generation's land use and occupancy activities on the CGL and historical aerial photographs of the lands. In the end, twelve maps were created which include individual map biographies and composite thematic maps. The narrative results were divided into four major themes: temporal, hunting and trapping, residential schools, and settler relations. The final discussion chapter places the themes of the research in a contemporary context and touches on possible future utility of the knowledge gained and methods employed.

Chapter 2: Literature Review

2.0 – Introduction

The literature reviewed in creating the research methodology focuses primarily on the theory and practice of mapping, and the use of phenomenology in a project such as the Common Ground Mapping Initiative. Woods (1992 p.24) identifies that "all maps, inevitably, unavoidably, necessarily embody their authors' prejudices, biases and partialities." When this truism is coupled with the phenomenological concern of 'ego' contaminated research, it becomes essential to recognize, acknowledge, and understand how personal biases of the researcher will affect the research process and outcomes. As a starting point for exploring mapping, the concept and significance of 'place', and an individual's 'sense of place', is explored first. Next, the role of mapping in the creation of places is investigated, along with some of the inherent biases within the mapping process; and the implications of these biases cross-culturally within the context of map creation and use. Then an examination of how divergent social and cultural perceptions gain power within maps, with a particular focus on the modern Western conventions of mapping; as this will be the style of cartography employed to collect, compile, and communicate the research. Next, the philosophies and methods of various phenomenological traditions are investigated in order to gain better insight into the best practices for mitigating the impact of the researcher's biases. Finally, an outline displaying how the issues identified in previous sections directly impacted the design of the research methods is presented, along with a more in depth look at the main research method employed: a modified map biography interview session referred to as mapping interviews.

2.1 – The Significance of Place

"Human ideas mould the landscape, human intentions create and maintain places, but our experience of space and place itself moulds human ideas." (Cosgrove 1978 p.66)

Representing these 'human ideas', a map's subject embodies the transformation of "space to

place" (Wood 1992 p.113) within a society. Cosgrove (1978 p.69) further describes this transformation from space in the way "[p]laces achieve identity and meaning through human intention towards them, and the relationship which exists between those intentions and the objective attributes of place: the physical setting and the activities which take place within it." With its various mechanisms of communication and cultural biases, a map "is as much a commentary on the social structure of a particular nation or place as it is on its topography" (Harley 2001 p.157). More than simply a description of a society and its relationship to the landscape, maps "bring into being the vision of the world they posit" (Wood and Fels 2008 p.xv). With these ideas in mind one realizes that not only does the final Common Ground Mapping Initiative (CGMI) cultural landscape atlas record and present an image of the past, but the mere fact it was created acts as an indicant to the current political and social landscape of the local region.

2.1.1 – Maps: A Multitude of Places in a Single Space

"We use language to cut up the visual continuum into meaningful objects and into persons filling distinguishable roles. But we also use language to tie the component elements to one another." (Sitwell and Bilash 1986 p.137)

Similar to Sitwell and Bilash's ideas of language, 'we use [maps] to cut up the visual continuum [or landscape] into meaningful objects and into [places] filling distinguishable roles. But we also use [maps] to tie the component elements to one another.' Viewing maps as language enables one to better understand the different roles a map's authors and readers play in creating common ideas of place through the creation and utilization of maps.

Ogden and Richards' Semiotic Triangle was designed to demonstrate the function of language in relating the objective subject ('referent'), an individual's subjective perception or idea of a subject ('thought'), and the resulting subjective communicant word ('symbol') used by the individual to refer to the subject (Sitwell and Bilash 1986 p.133). The idea of a triangle comes from "[t]he relationships [that] may be simply illustrated by a diagram, in which the three factors [are] involved whenever any

statement is made, or understood, [which] are placed at the corners of the triangle, the relations which hold between them being represented by the sides" (Sitwell and Bilash 1986 p.133). Regarding "language [as] a system of signs that express idea[s]" (Sitwell and Bilash 1986 p.133) enables a direct comparison of the role language holds in society to that of maps, or in essence "view maps as a kind of language" (Harley 2001 p.53) communicating interpretation of landscape and place.

To fully explore the relationships between language and maps, and their roles in communicating ideas of place, particularly through the mapping interview process, a modified 'semiotic triangle' (Figure 4) becomes particularly useful in understanding the roles of the actors involved. The top and

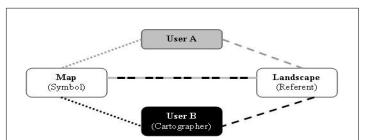


Figure 4: A new version of Ogden and Richard's Semiotic Triangle, modified to illustrate the various relationships between the perceptions held by different users of the same map, or between a map's author and its users.

bottom corners of the diamond represent two individuals separated by a single map (symbol) and the landscape (referent) it represents. The different patterns and shades of the lines connecting each corner of the 'semiotic diamond' represent how the same symbol and referent are not perceived, or interpreted, identically by the individuals. More specifically, the similar elements shared by some of the lines' patterns represent the common elements of both users' differentiation between symbol and referent. Whereas the different shades in each line show how these perceptions, while similar, are not identical. Finally, the combination of both shades in the line connecting 'Map' to 'Landscape' illustrates how a map's actual representation of a landscape is a combination of all the perceptions held by all of its users. Imagining one of the users as the map's author further adds value to this semiotic diamond example, as it then also highlights the realities of the cultural biases of cartographers inherent in all maps; and how these biases are communicated and misinterpreted by map users.

As "any landscape is composed not only of what lies before our eyes but what lies within our

heads" (Buggey 1999 p.12). As such, being aware of the differences in perceptions and interpretations between map authors and informants is very important as "all maps are prone to misinterpretation when not approached, like any other historical documents, as products of a particular time, place, and society" (Binnema 2001 p.208). Approaching the study of maps from a linguistic perspective also:

"helps us to see maps as reciprocal images used to mediate different views of the world [and] it also prompts a search for evidence about aspects such as the codes and context of cartography as well as its content in a traditional sense" (Harley 2001 p.53), which is later addressed in the consideration of Woods' (1992) system of cartographic codes throughout the planning and implementation of this research initiative.

The semiotic diamond, and its landscape 'referent', emphasizes how maps are "not only subjective, [as] they have an objective subject" (Brealey 1995). Finally, the correlation of maps to 'symbols' within the diamond highlights how "maps are characterized by a 'symbolic realism,' so that what appears at first to be cartographic 'fact' may also be cartographic symbol" (Harley 2001 p.77) embodied in the line connecting the cartographer to the map.

2.1.2 – Sharing Place

"[S]ubjective reformulation of the external world is characteristically human [and it is] shared images and experience of place and landscape [that] result from life in society." (Cosgrove 1978 p.68)

Maps are products of a society's collective perspective of various physical and cultural aspects of the landscape at a particular time (Binnema 2001). This is not to imply however, that maps themselves create, or indicate, a common world view amongst their authors and readers. As Harley (2001 p.66) points out, "the social consciousness of space is difficult to gauge, and it would be wrong to suggest that common design features [such as those of a map] necessarily contributed to identical world views." The possibility of creating a commonly understood 'experience of place' based on social and cultural connections does exist though, and it is in the ability to create a map based on that

experience that the question for the map maker becomes how to engage in a different culture's 'sense of place'; "sense of place refer[ing] to a type of attachment or emotional bond people develop with a place" (Brown 2005 p.18).

"The cultural landscape of one society is not always visible to members of another society due to differing perceptions, values and political interest. Perceptually, a cultural landscape only becomes visible as you move within the landscape under guidance of people who are intimately aware of the forms, functions and processes of a specific landscape." (Davidson-Hunt p.22 2003)

"Relph argued that we must be 'inside' a place fully to grasp its meaning" (Cosgrove 1978 p.69), or its 'sense of place'. In order to better understand this concept of 'insideness', "Relph developed an 'insideness' scale which reflected knowledge of the physical details of place, sense of connection with community, and a personal connection with place" (Brown and Raymond 2007 p.91). This succession of an individual's 'sense of connection' from 'physical' to 'community' and finally 'personal' denotes the degrees to which a person can be 'inside' a place, and the 'place' of another. An individual's culture, or world view, is partially responsible for people sharing a single space, or the same 'behavioural insideness', and not sharing the same experiences of 'empathic' or 'existential insideness' of that space with one another. This divergence in experience of a single place causes different views and uses of a landscape to develop across cultures over time, and eventually results in very different cultural landscapes.

2.1.3 – Culturally landscaped

"Culture is invented, carried on and slowly modified by people living and working in groups, as each group occupies a particular region of the earth and develops its own special and distinctive system of culture." (Norton 1984 p.69)

It is the expression of culture, through things such as land use and occupancy activities, that people collectively shape their physical and cultural landscape. Summarizing this relationship Norton (1984 p.64) notes that "[c]ulture is the agent, the natural area is the medium, the cultural landscape is the result." Sitwell and Bilash (1986 p.132) acknowledge how this connection between culture,

landscape and cultural landscape is widely accepted, making the point that "[t]he idea that elements of the cultural landscape have meaning or value for those who create them, or that such landscapes reflect the meaning, values, or beliefs of their creators, has been suggested by many scholars." Brown (2005) further clarifies the nature of this relationship through the concept of transactional relationships as they exist between humans and the physical landscape. He notes how "[t]he transactional concept of human landscape relationships... [states that]... humans are active participants in the landscape — thinking, feeling, and acting – leading to the attribution of meaning and the valuing of specific landscapes and places" (Brown 2005 p.18). The transactional model also asserts that an individual's perception of the landscape will be unique, as it is not simply based on the objective physical landscape but also on the subjective nature of personal utility. As a result, "humans will likely associate a range of values with a given landscape, but the mix of values and the weights placed on them will differ from individual to individual" (Brown 2005 p.18). Highlighting the collective social realization of these individual perceptions of a landscape's reality, Cosgrove (1978 p.70) discusses the "[c]onsciousness of place, [as being the attachment of meaning to places and landscapes, and the creation too of places and landscapes [which] are each an expression of social consciousness." The diverse natures of the two primary cultures living within this study's defined geographic area work to further exacerbate the influence of personal utility in creating individual and group perspectives of a single landscape, as the historical foundations for their respective cultural landscapes differ greatly.

The two most common factors that initiate and contribute to the anthropogenic alteration of the physical landscape, and their subsequent cultural landscapes, are change in location and culture evolution. Change in location refers to the physical impacts to the landscape caused by the emigration of a cultural group from a traditional area to a new environment. Norton (1984) identifies two ways in which this movement of a cultural group to a new environment may elicit landscape changes. The first is the transfer of foreign land use practices utilized by a culture in their original environment to their

new surroundings. Secondly, the adoption of the previously unknown practices of the emigrating culture by their new neighboring cultures also result in changes to the physical landscape. Cultural evolution within a group, which sees changes in the way people interact with their landscape both physically and symbolically, is inevitable. No longer utilizing the natural landscape directly for shelter, protection and food gathering, modern settler societies are an example of local cultures that have reframed their value of landscapes into the aesthetic and symbolic domains (Cosgrove 1978).

2.1.4 – Forces of Consequence

When attempting to analyze or understand human relationships to landscape it is important to realize the number of individual forces at play are nearly infinite; while at the same time "neither form nor process are static" (Norton 1984 p.25). Time allows for even the slowest geological forces to drastically alter the physical landscape. In fact, "much of what meets the eye in [our] landscape come[s] from vanished causal forces and circumstances" (Norton 1984 p.20). Interacting within the grand scales of 'geological time' are landscape changes that do not need the eons required by some natural forces. Although settler communities have only been in Northwestern Ontario a relatively short time, their shared cultural perceptions of landscape are a powerful force for landscape changes; gaining "power through sheer numbers and an awesome growth of technical capacity" (Norton 1984 p.70).

2.1.5 – Determined to be Indeterminate

The body of forces affecting any given landscape is comprised of both random and non-random elements, which are not always easily distinguishable. The final outcome of a system with countless variables in constant flux is that "there is not a clear one-way relationship between form and process" (Norton 1984 p.24) that is, form affects process as much as process affects form. Cosgrove (1978 p.66) likens this two-way causal interaction to "[t]he relationship between mind, or the totality of the psychic life, and society [and how it] is not...unilaterally causal [either], but is one of interplay and conflict." This idea of complex interplay between human and landscape forces is relatively new and not

uniformly accepted across academia. Academic tradition has typically been to view the relationship of humans and their landscape from a deterministic perspective. Anthropology, sociology and geography have all developed under the premise of cultural determinism, social determinism, and environmental determinism respectively (Norton 1987). Within the field of geography, however, there has been a steady move away from deterministic perspectives, and more focus has been placed on the unity of humans and landscape. This shift in paradigm has become continually more apparent with the emergence of humanistic views, such as phenomenology and existentialism, both with an increasing focus on individuals within the larger groupings of culture and society (Norton 1987). As observed by Davidson-Hunt (2003 p.23,) "[t]he strength of the cultural landscape concept is that it provides a strong metaphor for the two-way relationship between people and place for a specific time in history." Cultural geographers have traditionally focused on cultural landscapes in the study of the humanlandscape interface, investigating "a heritage of many eras of natural evolution and of many generations of human effort" (Norton 1984 p.20). In the case of the Common Ground Lands (CGL), an example of this indeterminate and shifting dynamic of landscape values can be recognized when the Europeans first moved west for the fur trade and permanent settlement. These events marked the beginning of drastic changes to the role of the CGL for local Anishinaabe people; who began to adapt to their new neighbours, along with the places which comprised their cultural landscapes, to facilitate contact and commerce with neighbouring settler communities.

2.2 – Three Truths of Mapping

"[M]aps are neither what they seem nor proclaim themselves to be... but [are] partial truths masquerading as the whole story, lies layered on top of lies, nests of interests advancing one cause at the expense of others." (Wood and Fels 2008 p.xv)

It is the act of de-legitimizing the 'cause' of one cultural group, while enfranchising another's, that maps are sometimes regarded as ideological weapons (Brealey 1995). Contrary to this negative comparison, maps may also be viewed from a more positive perspective, as "flexible tools for

knowledge building, in addition to platforms for presentation of...information" (Suchan 2000 p.146). Whether one regards them as 'weapons' or 'tools', there are three inescapable truths to which every map is subject. First, "[a] map is not the territory, yet it often precedes, and even becomes that territory" (Wood and Fels 2008 p.6); second, "[a]s social constructions of reality, maps embody the values, truth-claims and power-structures of the cultures that make them" (Brealey 1995 p.140); and finally, "[w]hether a map is produced under the banner of cartographic science - as most official maps have been - or whether it is an overt propaganda exercise, it cannot escape involvement in the processes by which power is deployed" (Harley 2001 p.54-55).

2.2.1 – Building the Lie

While on the surface it may seem intuitive that a 'map is not the territory' it represents, awareness of this truth often goes unrealized by individual map users. This is not surprising as we are taught from a very young age to accept without question "[t]he fundamental cartographic proposition that this is there" (Wood and Fels 2008 p.xvi), which is the foundation upon which all other elements of a map's utility is based. It is with the uncritical acceptance of this proposition that users not only validate what a map claims to be in reality, but also validate the cultural biases the map's author has of that territory, including the physical landscapes and cultures within it (Brealey 1995). Western cartographic conventions, for example, are just one method of creating and presenting models of the real world, and therefore create just one of many possible images of a territory. While utilizing maps created in this tradition has proven beneficial in our own cultural context, this in no way implies Western cartography's superiority over other diverse cultural mapping practices. Norton (1984) speaks to this point, stating the fact that "several quite different models may give the same result" (p.24). It would be ignorant to disregard these cultural nuances of a map's nature, as they are always present in some form and intentionally, or not, convey some kind of meaning to the reader. Also, the very nature of mapping, regardless of cultural context, is one of necessary selectivity; designed "to avoid hiding

critical information in a fog of detail, the map must offer a[n]...incomplete view of reality" (Binnema 2001 p.210). Despite this incompleteness, map makers and users alike seem to be satisfied with the models of the real world presented in their maps.

2.2.2 – Context, Context, Context

"Just as the historian paints the landscape of the past in the colours of the present, so the surveyor, whether consciously or otherwise, replicates not just the environment in some abstract sense but equally the territorial imperatives of a particular political system [as well]." (Harley 2001 p.54)

Another truth embodied within every map is, "like any other historical document, [they are] products of a particular time, place, and society" (Binnema 2001 p.208). The already established selective character of cartography makes maps a natural vessel of cultural biases. Bryan (2009 p.26) highlights the necessity of this aspect of mapping though, by making note of how "[m]aps work in part by showing only the most essential information needed to communicate a pattern or perspective." Defining 'territorial imperatives,' and other 'essential' social agendas however, is the privilege of the authoring culture or society. The dominant cultural 'perspective' communicated in the cartography of northwestern Ontario for example, has been that of the European fur trade, and more recently the Canadian forestry sector. This cultural dominance in the region is evident within the earliest collections of cartographical accounts, based on fur trade activities and exploration; while the later geographical data and maps describe the region, directly or indirectly, in terms of the forest industry's interests and activities.

Harley (2001) described the result of this selective privileging of geographic data as a 'map's silence'; which "exert[s] a social influence through their omissions as much as by the features they depict and emphasize" (p.67). A 'map's silence' is not only defined by what information is omitted from it, but also in how the information that is present is displayed as well. Wood and Fels (2008) described one process by which a map's data can remain silent through its presentation as "spatial"

magic, [where] the existence of a tree is transmuted into the existence of a forest, the existence of the forest is transfigured into the existence of an ecosystem, [and] the existence of an ecosystem is transmogrified into the existence of nature" (p.7) or visa versa. The manner by which spatial data are categorized and labeled on a map can greatly impact that map's role in influencing social behavior and landscape changes. This is particularly true when the third truth about maps is recognized, in which the labels and categories in question become associated with laws and regulations.

2.2.3 – Unavoidable Power

The third and final truth of maps, as Harley (2001) wrote, is that they "cannot escape involvement in the processes by which power is deployed" (p.54-55). The social assent offered to a map's proclamation that this is there "endows that map with an intrinsic factuality whose social manifestation is the authority [or power] the map carries into public action" (Wood and Fels 2008) p.xvi). Wood and Fels (2008) described an example of this public action in the account of the Preddys, who grew and sold tomatoes on their private land until the area's zoning designation changed from rural to urban. When the zoning of their land was changed, with the assistance of maps along the entire planning and decision-making process, so too did the rules governing what was considered appropriate and legal behavior on their land. One day the Preddys were permitted to sell tomatoes from their residence and the next day they were not; while the only physical change in the real world was line and label on a map in the city's planning department. The same power of maps' authority in the appropriation of lands and rights has occurred on a much larger scale for indigenous peoples around the world. Brealey (1995) described the fate of First Nations land rights in British Columbia, where "[t]here was no real military conquest of one culture by another...this seizure [of land and rights] was accomplished in large part through maps...and, in so doing, [permitted colonial forces to] exert ideological (if not actual physical) control over hitherto 'unknown' territories" (p.141). This exertion of ideological and physical control over a territory through maps highlights another powerful aspect of

mapping's influence over the landscape; namely, the "exercise of power at a distance, removed from the actual site of application" (Bryan 2009 p.26) by concentrated centers of cultural power. The extent to which this type of remote exercising of power by one culture over another through the process of mapping is made clear when one considers that "more indigenous territory has been claimed by maps than by guns" (Bryan 2009 p.25).

2.3 – Western Cartography Denying the Truths

"The dominant view of modern Western cartography since the Renaissance has been that of a technological discipline set on a progressive trajectory." (Wood and Fels 2008 p.6)

The contemporary system of normalized coordinate systems and map scales has overshadowed the before mentioned truths of maps, with promises of 'accurate' measurement and descriptions of spatial relationships all under the guise of objectivity (Harley 2001). For map historians, the European Renaissance represents this transition in Western cartography from a 'decorative' art laden practice with bias and political agenda, to a 'scientific' system based on the objective representation of geographical facts (Harley 2001). However, authors such as Harley (2001), Binnema (2001), Wood and Fels (2008) have pointed to flaws in such assertions. Culture and power are still very much at play in Western cartography and a map is still not a perfect mirror of reality.

2.3.1 – Believing the Lie

Harley (2001) believed that it is the accepted 'mythology' of cartographic accuracy that has greatly hindered our understanding of the influence maps have on the development of changes in social power structures and the physical landscape. As he notes, there is a well embedded view in western culture that "maps can produce a truly 'scientific' image of the world, in which factual information is represented without favour" (Harley 2001 p.63). It is also in this blind adherence to the idea of an objective Western cartography that our society has devalued other cartographic styles and world views. Wood and Fels (2008 p.6) speak to this cultural prejudice, reflecting on how "[we] often assess early

maps by this modern yardstick, thereby excising from the accepted canon of mapping not only maps from the pre-modern era, but also those from other cultures that do not match Western notions of accuracy." This biased position, however, does not stem from any 'inadequacies' of culturally different mapping conventions, but rather from Western society's "attempts to understand what the map [created by a different culture for that culture] means without first enquiring about how ... [that culture's] maps convey meaning" (Binnema 2001 p.218). Two examples of culturally different mapping conventions are those used by the seafarers of Greenland (Figure 5) and the Marshal Islands (Figure 6). In both of these examples, the utility of the maps' ability to simply depict major landscape features is valued above overwhelming detail; not to mention the fact that both of these map types can float, and are undamaged if accidentally dropped overboard.

Ironically, it is Western cartography's achievements in perceived spatial accuracy and



Figure 5: Carved maps depicting the coastline of Greenland. (http://www.flickr.com/photos/colleenmorg an/2301642257/)

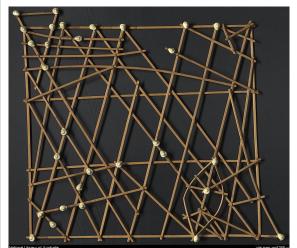


Figure 6: A stick chart from the Marshall Islands utilizing bamboo slats and shells to represent travel routes and islands respectively.

(http://nla.gov.au/nla.map-rm4388)

objectivity that greatly contribute to its maps' ability to skew information. More than simply creating a false sense of factuality, and "far from being incompatible with symbolic power" (Wood and Fels 2008 p.xvi), the ability to achieve more exact measurements directly increases a map's ability to influence

social perceptions and policies. It is this ability to 'accurately' relate a territory with its various physical and cultural elements that has made maps so valuable to so many for so long. For example, "maps link the territory with the taxes, military service, or a certain rate of precipitation, with the likelihood that an earthquake will strike or a flood will rise...Maps link land with all these and with whatever other insensible characteristics of the site past generations have been gathering information about for whatever length of time" (Wood 1992 p.10). It is the large scale reproduction and utilization of Western maps that affirms their authority within society (Wood and Fels 2008). Regardless of the apparent dangers of allowing such effective vehicles of persuasion to operate under such little scrutiny, the 'ethic of accuracy' as the true and only measure of a map's worth "is [still] being defended with some ideological fervor" (Harley 2001 p.155).

2.3.2 – No one right answer

The expression of a culture's relationship to the landscape, or its cultural landscape, in the form of maps has a very long and diverse history. Many cultures around the world have developed various cartographic conventions; some similar and others quite unique. Harley (2001) provided an example of one similarity:

"where people believe themselves to be divinely appointed to the center of the universe, [which] can be traced in maps widely separated in time and space, such as those from ancient Mesopotamia with Babylon at its center, maps of the Chinese universe centered on China, Greek maps centered on Delphi, Islamic maps centered on Mecca, and those Christian world maps in which Jerusalem is placed as the 'true' center of the world" (p.66).

In contrast to this example of similar cartographic conventions spanning many diverse cultures and landscapes, is the somewhat unique modern Western cartographic convention of creating maps of overwhelming detail. Binnema (2001) pointed out how this "cause[s] more confusion than enlightenment [to those unfamiliar with Western cartography]... the Eskimo, the tribesmen of Siberia and central Africa, and the Cree Indian all have agreed on a set of conventions for map making"

(p.219), valuing simplicity and utility over spatial accuracy and detail. Binnema (2001) continued by stating that "it is the modern cartographer with his satellite photographs and computers who is out of touch with the rest of the world" (p.219). It would appear that despite being 'out of touch with the rest of the world' Western cartography seems to be the dominant method in the local and global arenas of power and politics.

Binnema (2001) provided a very descriptive account of the confusion caused by the ignorance of cultural context with an example surrounding an old Blackfoot map created for non-Blackfoot users (Figure 7). This map has perplexed many highly trained cartographers of the Western tradition, only to be eventually dismissed as a primitive attempt at map making and of little value. What these frustrated cartographers did not consider, however, was what the map's author understood the function of a map to be, and his significantly different way of relating to the landscape. Old Swan, the map's author, created a map easily memorized and recalled, where "simplicity was a goal, not a mere [primitive] characteristic of Blackfoot

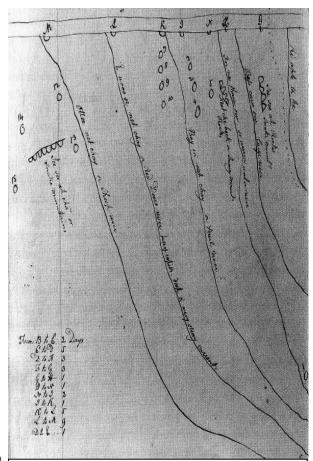


Figure 7: An example of Blackfoot cartography, annotated by western cartographers. (Binnema 2001)

cartography" (Binnema 2001 p.211). Instead of using an evenly spaced imaginary grid to divide up the landscape, for Old Swan the "topographical features served as concrete reference lines" (Binnema 2001 p.213), which were prominent from the perspective of a person on the ground. These Western cartographers "were confused because they did not understand the syntax of the map" (Binnema 2001 p.218). This idea of a map having a syntax relates the production and use of maps to that of language,

and stresses the value of comparing the study of maps with the field of linguistics (Sitwell and Bilash 1986; Harley 2001). As previously mentioned, the study of maps as a type of language used to communicate is not only valid, but essential in exploring the meaning and power which comprise maps from any culture. Had the failed users of Old Swan's map approached the foreign document as a type of foreign language, perhaps the issues surrounding authorship and the contribution of their own 'carto-illiteracy' in the 'foreign tongue' would have minimized their devaluing of the map (Harley 2001). Harley (2001), also a proponent of iconology as being an important perspective when studying maps, insisted that the context maps provide "can be used to identify not only a 'surface' or literal level of meaning but also a 'deeper' level, usually associated with the symbolic dimension in the act of sending or receiving a message" (p.54).

2.4 - Phenomenology

Phenomenology is a collection of methods for philosophical and sociological investigation, first conceived by the German mathematician and philosopher Edmund Husserl, and which has since been adapted by later scholars into several diverse approaches to research (Creswell 2007; Edgar 2002). Husserl's original work, called transcendental phenomenology, is the study of shared human experiences surrounding a given phenomenon. Its intent is describing such experiences in common themes, as gathered from the sharing of research participants' lived experiences (Groenewald 2004). Creswell (2009 p.130) notes that it is in the "[u]nderstanding [of these] lived experiences marks phenomenology as a philosophy as well as a method."

2.4.1 – As a Research Philosophy

As a philosophy, phenomenology emphasizes four main perspectives on how a researcher should approach the study of lived experiences. The first is that the world can be legitimately explored not only through empirical observation, or science, but also through the sharing of ideas, emotions and memories of people's lived experiences (Creswell 2007). The second and third philosophical

perspectives, emphasized by phenomenology, together describe reality as being comprised of neither an individual's perceptions nor their objective physical surroundings alone, but as a 'Cartesian natured' linkage between the two, which are brought together within one's consciousness (Creswell 2007). The final essential philosophical perspective of phenomenology is the idea that researcher's need to suspend, or bracket, their personal egos and judgments when studying the perspectives of others (Creswell 2007).

2.4.2 – As a Research Method

Husserl's transcendental phenomenology as a method also has identifiable perceptions and assumptions. The first of these assumptions is that people are conscious of their experiences in relation to a phenomenon (Creswell 2007). Once it has been established that people can be aware of the nature of their experiences as part of reality, phenomenology as a method then assumes that the 'essence' of these experiences can be described (Creswell 2007). From these first two assumptions, phenomenologists arrive at the final conclusion that the lived experiences of people can be legitimately studied (Creswell 2007).

2.4.3 – Variations of Theory

While many elements of transcendental phenomenology continue to be present within all subsequent varieties of phenomenology, many scholars and philosophers have sought to modify and contribute to Husserl's original work. These contributions have resulted in several types of phenomenology, each having a slightly different view of the various assumptions made within transcendental phenomenology; such as the universality of reality and the ability of researchers to bracket their egos within a phenomenological study (Edgar 2002). Creswell (2007) identified one of these variations by making the distinction between transcendental and hermeneutic phenomenology. Created by Martin Heidegger, Husserl's student and protégé, hermeneutic phenomenology differs from its predecessor in two important ways. The first was Heidegger's emphasis on the improbability of a

universal reality experienced by all people (Edgar 2002). Heidegger, instead advocated strongly for the idea that reality was strictly based on individual perceptions, and has often been quoted making such comparisons as forests of 'timber', mountains of 'quarry of rock', and rivers as 'water-power' (Edgar 2002). The second major point in which Heidegger's hermeneutic phenomenology diverges from Husserl's transcendental perspective was in a researcher's role as an interpreter, rather than simply providing descriptions of other's lived experiences (Edgar 2002).

Emmanuel Levinas, French existentialist and founder of ethical phenomenology, modified Husserl's original phenomenology, focusing on a different assumption; the bracketing of the researcher's ego (van Manen 2000). Levinas viewed Husserl's perspective on this issue as 'idealistic', and whose own personal "Jewish experience of Nazi brutality" (van Manen, 2000) led him to instead promote an ethical obligation of phenomenology to address the vulnerability of others whose life experiences force them to seek help or assistance. By making this assertion, Levinas responded to one of the biggest critiques of Husserl's phenomenology by action researchers, which is that "it does not go beyond interpretation; it does not become emancipatory" (Campbell 1997).

The final variation of phenomenology, discussed here, is the Practice of Phenomenology as described by van Manen (2000). Broadening the discussion of traditional phenomenology, which focuses primarily on "[t]he interest of the professional philosopher, [that] tend to lie with philosophical topics, themes, and issues emanating from the study of historical developments of philosophical systems and from the study of issues arising from the works of leading phenomenologists" (van Manen 2000), the Practice of Phenomenology offers the benefits of phenomenological investigation beyond the arena of the full-time philosopher. Examples of professional practitioners of phenomenology include educators and nurses, who are primarily focused on how phenomenology can be utilized to solve real world problems within their fields through the understanding of student and patient experiences respectively (van Manen 2000). Van Manen's (2000) inclusion of non-philosopher

practitioners of phenomenology, and their unique approaches, as being legitimate in conducting phenomenological studies proves very useful for researchers who do not want to focus on the questions raised by phenomenology's philosophical roots, such as German and French existentialism, but can still see the value in utilizing the various techniques and ideas that phenomenology has to offer their research designs.

2.5 – The Researcher and the Cartographer

Given phenomenology's concern with a researcher's judgments influencing the research process and products, and mapping's tendency to soak up the cartographer's biases, special attention is required when decisions are made and actions taken throughout a phenomenological mapping process. Heidgger, Levinas, and van Manen's (2000) philosophical and methodological variations of Husserl's original phenomenological approach; Woods' 1992 system of ten cartographic codes; and the interactive adaptive approach as described by Nelson (2002) were all utilized to guide and balance these two roles throughout the CGMI.

2.5.1 Phenomenological Assumptions

Bernard Nietschmann wrote, "more indigenous territory has been claimed by maps than guns... this assertion also has its corollary: [as] more indigenous territory can be reclaimed by maps than by guns [as well]" (Bryan 2009 p.25). While this research will not directly reclaim First Nations' land outright for the Rat Portage Common Ground Conservation Organization (RPCGCO) First Nations partners, the maps created and the perspectives communicated during the research could have a large impact on the potential for the shared management of areas within Treaty #3 territory based on an increased mutual understanding among all stakeholders.

As noted by Bryan (2009 p.25), "[m]apping lands from an indigenous perspective in order to counter colonial patterns of exclusion also opens up the possibility for new forms of assimilation." By acknowledging this grave truth, and the fact that maps are especially powerful tools of persuasion in

the arena of land use policy and decision making, clearly emphasis must be placed on the risk of the researcher's ego, judgments, or preconceptions influencing the mapping of the information gathered from the participants' life experiences, in the absence of any checks or balances. While many other scholars have viewed Husserl's thoughts on suspending one's own ego while in the role of the researcher as idealistic, there still needs to be a conscious recognition and compartmentalizing of personal biases during the undertaking of research activities; as far as this type of ego separation is possible (Groenewald 2004). As noted by Suchan (2000 p.147), "[q]ualitative-research practitioners [must] explicitly accept that balanced observation and reporting are an alternative to taking a [positivistic] position of objectivity."

The cartographic style most useful for the maps to be produced during the CGMI research conformed to the modern Western cartographic approach; as this style is viewed as being legitimate in the already established local, provincial and federal land use decision-making processes of the territory. Also this specific tradition of mapping is what the researcher is most qualified to apply and adapt, better facilitating the achievement of the project's objectives of cross-cultural communication and understanding. Fitting the gathered experiences of the research participants into this formal format required a certain degree of interpretation of the extracted themes. Employing the legitimacy of previous phenomenologists' approach to this dilemma, such as Levinas' ethical phenomenology proved to be invaluable in this area.

Phenomenology suggests that reality is not a common experience around the world but instead is distinct, as it is comprised of both universally objective and individually conceived elements joined within people's unique consciences (Groenewald 2004). It is with this idea that the assumption is made that while many members of both cultures have a personal history with the same geographical region, The First Nations residents of Treaty #3 will have very different and unique perspectives from other members of the local community. If this was not the case, no one would need to bother with

interviewing anyone, as everyone's interpretation of their individual experiences would be no different from the themes gathered from the research participants.

While phenomenology is often likened to positivistic philosophies of research in that both emphasize direct observation of phenomena, phenomenologists are engaged in a study of reality described in words, as opposed to numbers, charts and graphs (Bernard 2006). It is this move away from the often perceived reliability of quantitative data that the philosophical issue of whether or not the world can be legitimately explored by methods other than positivistic natural science becomes an important consideration that was included as a foundation of this research's design (Creswell 2007). As this was the researcher's first serious attempt at exploring any part of the world using an intentional philosophical approach, he was forced to take previous phenomenological research successes as proof of this assumption's legitimacy.

The individual lived experiences of past First Nations residents of the CGL made up the foundation of their collective or communities' cultural landscape and sense of place. It was in the mapping of cultural landscapes that common themes were found to link the individual lived experiences of each research participant to one another. It is at this point in the research design that the first methodological assumption was made (as opposed to the philosophic), which is that research participants are intentionally aware of their lived experiences relative to the given phenomenon of land use change. Again, as the researcher did not have any previous experience with potential research participants, or their personal perspectives on land use changes in the Treaty #3 territory, the evidence presented in previous phenomenological studies led to the conclusion that this assumption is well founded.

Another methodological assumption of phenomenology required here is that the 'essence' of people's life experiences can be communicated. As the researcher had no previous experience in attempting to describe another person's life experiences with a formalized method, the success and experiences of previous phenomenological studies described in the literature, provided basis for this to

be a sound assumption.

2.5.2 – Cartographic Codes

In his book, Power of Maps, Wood (1992) outlined ten cartographic codes that contribute to how maps communicate. The codes are divided into two categories: those that directly contribute to a map (the intrasignificant codes), and those that provide context to the map indirectly (extrasignificant codes). The five intrasignificant codes include iconic, linguistic, tectonic, temporal and presentational. They describe how the various 'internal' elements of a map, including choice of text, layout, and spatial scope are important considerations for cartographers when mapping. Each of these intrasignificant codes is then connected to one of the five extrasignificant codes, which are thematic, topic (as in topographic), historical, rhetorical, and utilitarian. Focusing on influential elements beyond the map itself, the extrasignificant codes outline how the cultural context, audience, and physical landscape influence a map's discourse. As mapping comprised a large part of nearly every portion of the research, including the planning, data collection, and presentation phases; considering these ten cartographic codes assisted in managing the concerns of personal bias, misinterpretation, and other concerns outlined in earlier sections. They also provide a vital set of criteria to follow in order to ensure a set of quality maps is produced, which are capable of communicating the perspectives of the research participants as transparently as possible.

The iconic code is concerned with what events or 'things' are mapped. As such, the iconic components of the final thematic maps created were the land use and occupation activities recalled by the research participants. The iconic code is connected with the thematic extrasignificant code, where the issue of the map's purpose or "what shall it argue" (Wood 1992 p.113) is addressed. The tectonic code answers the questions of 'where', and is linked most closely with topic code. Concerned with the spatial aspects of a map, these two codes address the issues of scale, extent, projection and the orientation. How space is represented in a map is very important as:

"[t]he geometrical structure of maps – their graphic design in relation to the location on which they are centered or to the projection which determines their transformational relationship to the earth – is an element which can magnify the political impact of an image even where no conscious distortion is intended" (Harley 2001 p.66).

The temporal and historical codes combine to first define a map's 'thickness', or the era and breadth of time represented within a map (i.e. northwestern Ontario land use 1873-1973), and then to place that data into the current 'historical' context in which the map was created. The presentation code involves the how; the 'nuts and bolts', or 'paramap' as defined by Wood and Fels (2008). The presentation code encompasses: "titles, dates, legends, keys, scale, statements, graphs, diagrams, tables, pictures, photographs, footnotes, [and] potentially any device[s] of visual expression" (Wood 1992 p.131) of a map, which are combined to convey meaning. Wood and Fels (2008 p.xvi) note that "[u]ltimately, it is the interaction between map and paramap that propels the map into action." The presentational code is closely linked to the rhetorical code, which "orientates the map in its culture" (Wood 1992 p.114), and the culture of its readers. This focus on the context created between a map and its users closely relates to the final two codes as well. Concerns regarding the appropriate use of language, choice of medium and intended map use, along with the makeup of the anticipated audience, are all important considerations when mapping, which Wood (1992) has summarized in the utilitarian and linguistic codes.

2.5.3 – Interactive Adaptive Research Framework

Nelson's (1991) framework for an interactive adaptive approach to research is similar both in its structure and applicability to the CGMI, as Wood's (1992) coding system described above. Comprised of twelve individual categories, this framework outlines a scope of considerations for anyone conducting research. Intended to be applied to both "the planning and conduct of research" (Nelson 1991 p.116), these elements are context, market, language, politics, completeness, distribution, focus, types of study, the field, organization, follow-up, and the spiral (Nelson 1991 p.117). Not surprisingly,

as much of this study's research involved the use and creation of maps, many elements of Nelson's (1991) framework share several characteristics of Wood's (1992) codes. While considered in the context of the CGMI these two systems do overlap in many areas, Nelson's broader scope of research in general provides additional valuable insight into the role of a researcher.

Adhering to Nelson's (1991) framework, the CGMI's 'type of study' is classified as "spatial [as it] has to do with characteristics of places, the biology and geography of places, these being dynamic through time" (p.117). The 'fields' in which this research is situated include historical, cultural, and human; or as Tobias suggests "the geography of oral tradition" (Tobias 2000 p.xi). The 'organization' of the project, and the researcher's role in it could be characterized as "part of a long term... serendipitous activity...in order to earn some type of qualification" (Nelson 1991 p.118). The 'focus' of the project, in terms of Nelson's dichotomy of 'topic' and 'problem', would be considered a 'problem' as it is not merely "a subject of interest to the researcher out of curiosity" (Nelson 1991 p.117), but rather about making 'recommendations' and 'improvements'. The remaining categories of the framework are directly related to the cartographic codes discussed above.

2.5.4 – Map Biography Interview Sessions

Map biography interview sessions (MBIS) are "face to face interview[s] during which the participant indicates on a map the places he or she has harvested resources or gone to for spiritual purposes" (Tobias 2000 p.5). As a method, map biographies were pioneered as part of the ministry of Indian and Northern Affairs' (MINA) 1976 Inuit Land Use and Occupancy Project, and have since then been adopted, and adapted by various First Nations communities across Canada and the United Sates (MINA 1976; Tobias 2000). The most comprehensive and intuitive manuals on the planning and implementation of map biographies are Tobias' books Chief Kerry's Moose (2000) and Living Proof (2009), which were both valuable resources during each phase of the two research initiatives that employed the MBIS methodology from their initial planning, to data collection, storage, analysis, and

finally presentation.

Two different and equally vital aspects of a participant's cultural landscape are addressed in a MBIS. The first is addressed in collecting the spatial component of their cultural landscapes, answering the question of 'where'. The second is addressed by participants sharing information about the 'what' of their cultural landscape in the form of personal reflections of lived experiences. The defining component of the map biography method is the use and creation of maps during the interview sessions.

2.5.5 – Interview Schedule Development

The main issues of concern when regarding 'open' versus 'closed' styles of enquiry, such as is employed in the development of the CGMI interview schedule, are: the comprehension of questions and answers, on the part of both interviewer and interviewee; the impact of design limitation on a respondent's ability to fully explore a topic, either allowing him (or her) too much freedom to go down unrelated tangents creating unusable data, or in contrast being too restrictive and not fully encompassing the participant's perspective on the issues being studied; and, finally, the ability of the data to be generalized and analyzed quantitatively (Foddy 1993; Hay 2005).

At its most basic level, question design should ensure that the participants "will both understand the question[s] and have the knowledge to answer them" (Hay 2005 p.149). Two ways Foddy (1993) suggested identifying how respondents interpret and understand a question were unintentionally employed, but nevertheless employed during the CGMI interview sessions. These were to have the participants "rephrase the question in their own words; the 'double interview' procedure...[or by] having respondents think aloud as they answer questions" (p.36).

In regards to the restrictiveness of 'closed' questions, this is typically a result of "researchers [being required] to have a clear and full understanding of what the range of answers to a question will be" (Hay 2005 p.149), which may not always be pertinent in a study. Researchers have also found

"problems arise [when using closed questions] because respondents have been required to express their answers using categories that are both limited in number and undefined in terms of explicit comparison standards" (Foddy 1993 p.180). As a result, "[o]pen and closed version of the same questions have been found to typically generate quite different response distributions [and] ... [m]ethodologists who have considered [these] issues have tended to settle on the compromised position that a judicious mix of open and closed questions is best" (Foddy 1993 p. 151), as was employed when developing the CGMI interview schedule.

Chapter 3: Methods

3.0 - Introduction

This chapter chronicles the process that culminated with the creation of the final individual participant and thematic maps. These maps will help facilitate the cross-cultural communication of the Rat Portage Common Ground Conservation Organization's (RPCGCO) First Nations members' cultural landscapes of the Common Ground lands (CGL). First documented is the introduction of the researcher to the participating First Nations communities and then the selection of Elders to participate in the Common Ground Mapping Initiative (CGMI). Next, the methods used for collecting data are best understood by explaining the use of maps as probes in the Map Biography Interviews (MBIS). Then, the contributing research projects are explained as to how the Ochiichagwe'Babigo'Ining lake sturgeon initiative (OLSI) and the Obashkaandagaang garden island workshop (OGIW) helped to inform the CGMI researcher and participants. This leads into a chronological account of each of the three initiatives, detailing the methods utilized in each and the processing of the datasets. Finally, the methods employed to create the final presentation documents and the verification of those documents are outlined.

3.1 – Participant Selection

Preliminary meetings with relevant RPCGCO partners were held during the summer of 2009. These meetings guided the task of identifying potential map biography interview research participants for the CGMI. The participants were Elders from the three First Nations communities. Focusing on Elders' participation permitted the gathering of the most unique and diverse experiences offered by each community, spanning the longest period of time; through both the elders' lived experiences and knowledge of oral traditions. Given the "fragility of this traditional knowledge in the face of permanent settlements and cultural change" (Parks Canada 2009), preserving the knowledge of the Elders' experiences also supported the individual communities' objective of maintaining a record of

their traditional knowledge for future generations.

In addition to contributing data to the CGMI and verification of its results, the OLSI and the OGIW informed the participant selection for the CGMI. Both of these studies served as opportunities to introduce the CGMI to potential participants. Foddy (1993) stressed the importance of addressing participant understanding stating, "[a] necessary precursor to a successful question-answer cycle is that both the researcher and respondent have a shared understanding of the topic under investigation" (p.36). These initial projects allowed participants to begin forming an understanding of the CGMI's players and objectives, as well as to reflect on their relevant personal experiences on the CGL before their individual mapping interview. Further to this end, a brochure (see appendix B) describing the CGMI was distributed to participants of the garden island workshop and sturgeon mapping interviews. It was also left with the appointed research partners at each community's band office to raise awareness with any other potential participants who were not able to attend these initial projects. The brochure was also intended to address other concerns that perspective participants may have had, including assurances about confidentiality and how participants would be selected for inclusion in the research (Hay 2005 p.153).

3.1.1 – Avenues of Access: Political vs Cultural Authority

Tobias (2009) notes that "it's important not to confuse political and cultural authority[, as] [r]esearch takes place in the context of politics, but that doesn't mean politics should influence the way in which a map survey is conducted" (p.319). This important distinction between political and cultural authority, within the context of community research, necessitated clarification of how each community was to be engaged for participation within the CGMI. Each member First Nations community's RPCGCO representative assigned a CGMI research partner, whose task was to facilitate community participation in the research project. While the coordinating process to identify participants in each community began similarly, three distinct approaches emerged as the process unfolded. These

'Avenues of access' were the means by which the researcher was put into contact with potential participants who held knowledge of lived experiences within the CGMI's study area. Political avenues resulted in a process of participant identification networked solely through the community's band office. Alternately, cultural avenues relied on Elders in the community whose knowledge and experience allowed them to direct the researcher. The third avenue of access represented a hybrid of the political and cultural approaches, accessing the community's knowledge and seeking guidance from both in and outside of the band office's community networks. The avenue of process for Obashkaandagaang was political, with all CGMI interviews being arranged by the assigned community partner, who was not an Elder in the community. Accessing participants from Wauzhushk Onigum, however, came to represent a cultural process, when after the RPCGCO appointed community partner was unable to arrange any interviews, the researcher was directed to speak with a senior Elder in the community, who was regarded as a cultural leader. As it turned out, this Elder acknowledged that there were no community members he knew of that would have had the types of lived experiences the CGMI was interested in, namely ones associated with the CGL. Also, because of his age and experience within the community, it was likely no living member of the community had the sought after lived experience to share. Finally, it was during the process of accessing potential participants from Ochiichagwe'Babigo'Ining that the political and cultural avenues of access intersected. Working closely with the RPCGCO appointed community partner, who themselves had shared many lived experience of the CGL along with the Elders, the researcher was able to hold a meeting with the community's Family Heads People, a traditionally based governance structure that exists to provide direction to the community's band leadership. On March 9, 2010 a meeting was held to discuss the CGMI and to seek direction in identifying and approaching community Elders who had the knowledge to speak about he CGL. Out of this meeting the researcher gained permission to pursue potential CGMI participants with the guidance of their community partner.

3.2 Data Collection

3.2.1 – Contributing Research Initiatives

As mentioned previously, three mapping initiatives conducted by the researcher contributed both directly and indirectly to the final CGMI results. The methods of each of these is outlined in detail in sections 3.2.3 to 3.2.5. While the OGIW data did not directly go into the results of the CGMI, in addition to its importance in participant selection and result verification, it and the OLSI, provided a platform for what Berg (2004) referred to as an 'extended focus group'. In place of the questionnaire distributed to participants, as described by Berg (2004) however, these data collection initiatives instead provided the researcher the opportunity to engage participants in casual conversation about the CGMI and the ways in which members of their community were getting involved.

Additionally, connecting with participants through congruent research projects allowed the CGMI mapping interviews to be personalized somewhat in style to better reflect the researcher's already developed relationship with the participants. Conducting the CGMI interview sessions according to the varying degrees of familiarity appeared to result in a more open, friendly, and relaxed atmosphere for the interviewees. The attention to a participant's level of comfort is often crucial in determining the quality and quantity of information gathered during a single mapping interview (Tobias 2010). This point becomes especially important if the use of a translator is required (Borchgrevink 2003 p.110), which in many cases it was. Finally, in the case of the sturgeon project, data was collected during the mapping interviews, such as the participant's full name, birth date, place of birth, and time spent in study area, which then did not need to be covered during the CGMI interviews; providing participants more time during the session to focus on sharing their lived experiences.

3.2.1 – Probing with Maps

As previously outlined, two of the three mapping initiatives employed map biography interview sessions (MBIS) to collect data, those being the CGMI and the OLSI. Maps were employed as object

probes to assist participants' recall of experiences and details connected to different locations during the two map biography processes and for one of the workshop exercises (De Leon and Cohen 2005). Foddy (1993 p.91) advocates for the use of such probes to mitigate "problems associated with the recall of information in long-term memory." He goes on to say that "[e]ven when the researcher is sure that respondents have been exposed to an event, it is dangerous to assume that they will be able to remember information about it" (Foddy 1993 p.188). Scale was an important factor for considerations since maps were used as probes and data collection tools. Specifically, three factors were considered when the scale and extent of the map were selected for the mapping interviews. First, it was important to consider the scale of maps most familiar to the participants. Second, the spatial extents of the experiences shared during the mapping interview needed to be taken into account. Finally, map scale of the spatial extent of the RPCGCO's interests had to be considered. Maps assisted participants in answering the question of 'where' (spatial component of landscape value) and 'what' (personal reflections of lived experiences) introduced in section 2.5.4's review of MBIS (p.37).

3.2.1.1 – **Sharing the 'Where'**

A custom base map of the study areas was overlaid with a transparent sheet of Mylar that the participant marked using various colours of non-smudging, permanent markers. Participants were asked to identify the location of various aspects of their cultural landscape. These locations were recorded using 'X's, to indicate a single point on the landscape, and polygons, to associate entire areas with certain activities or values. The thematic nature of these connections to the land were denoted using a two-lettered-system; where, for example, an overnight campsite would be labeled 'OC' and a fishing site would be labeled 'FS'. During this component of the MBIS, participants were responsible for making the 'X's while the researcher was the one who recorded the two-letter labels. New sheets of Mylar were provided to each participant, so as to avoid previous participants' shared knowledge influencing the sharing of the later participants.

3.2.1.2 – Sharing the 'What'

"Through narrative associated with a place, [people] reflect aspects of culture which imbue the location with meaning." (Buggey 1999 p.8)

In pursuit of this meaning, and the second component of their cultural landscapes, participants were asked to share their knowledge of Anishinaabe LUOA. This was accomplished through a series of open ended questions that were centred on participants' lived experiences focusing on the topics and categories identified during the previous research initiatives, and during the CGMI interview schedule's pre-tests. Having utilized a format of open ended questions, along with the visual stimulus of the base map, participants were allowed to focus on what aspects of their relationship to the landscape are important to them and to their communities. Participants were encouraged to share long narrative answers, while continuing to couple these reflections with their spatial components on the map itself.

As "a map is always of something, always has a subject" (Wood 1992 p.23), the central question in the map biography process then becomes: what will the subject of this map be? In addressing this issue, "Dr. Peter Usher, one of the pioneers of land use and occupancy methodology, has made an important distinction between 'use' and 'occupancy'" (Tobias 2000 p.2). The term 'use' describes activities surrounding "the harvest of traditional resources; things like hunting, trapping, fishing, gathering of medicinal plants and berry picking, and traveling to engage in these activities" (Tobias 2000 p.3). Occupancy, on the other hand, "refers to the area...a particular group regards as its own by virtue of continuing use, habitation, naming, knowledge, and control" (Tobias 2000 p.3). This distinction between 'occupancy' and 'use' becomes important as one realizes the different spatial aspects of each category; such as the spatial extent of 'use' almost always exceeds that of 'occupancy' (Tobias 2000 p.3).

3.2.2 Interview Schedule

A 'judicious mix' of both open and closed questions, as recomended by Foddy (1993) was

employed in all interview sessions. The specific questions are laid out in the following sections and make apparent that the concerns associated with generalizing data through closed questions are of little importance for the research as closed questions were only utilized for orientating participants' demographically (including age, place of residence, occupation, etc.), and then open questions were employed to gather their experiential data. Also, applying a phenomenological approach to the data, focusing on the individual level of perception rather than the group, makes generalizing the data collected even less relevant.

3.2.3 - Ochiichagwe'Babigo'Ining Lake Sturgeon Study

3.2.3.1 – Primary Objective

The primary objective of this initiative was to catalogue the historical abundance of lake sturgeon within the study area, which in turn will be used to aid in the development of a recovery plan for the sturgeon population. More specifically, the data gathered during the study was of interest to various government agencies, including the Department of Fisheries and Oceans, the Ministry of the Environment, and the Ontario Ministry of Natural Resources to set benchmarks by which to gauge the success of their various roles in a recovery effort. This initiative also presented an opportunity for data to be collected that may be used specifically for the benefit of the participating community. Data regarding the historical and current nutritional, economic, spiritual, and cultural importance of sturgeon to the Ochiichagwe'Babigo'Ining First Nation were also collected.

3.2.3.2 – Study Population

Interviews were conducted with twelve Elders from the Ochiichagwe'Babigo'Ining First

Nation. Participant selection was organized through the band office by the community's economic

development officer Debora Henry and by band councillor John Henry Jr. Participants were selected

based on the intimacy of their knowledge of the study area, of sturgeon harvesting activities within the

study area, and the time period of their knowledge of the study area. Based on these criteria, Elders

who have lived in the area the longest, as well as Elders who have been employed as fishing guides on the river were selected.

3.2.3.3 – Recall Interval

Participants were asked to recall both their lived experiences of sturgeon, which generally were between the 1940's and 1970's, as well as any knowledge of sturgeon which had been passed to them from previous generations.

3.2.3.4 – **Study Area**

The study area focused on during this project was the section of the Winnipeg River between the Norman and White Dog dams, which encompasses the CGL as well. It was this spatial overlap, along with a thematic overlap, between this initiative and the CGMI that resulted in the inclusion of relevant participants' knowledge shared during the OLSI interviews into the CGMI.

3.2.3.5 – Questionnaire Categories

A meeting was held on February 1, 2010 at the community's band office to specify the scope of the study and the logistics of organizing participants and interview sessions. Present at the meeting, along with the researcher, were the project coordinator, Ryan Haines, the community representative, Debora Henry, and the acting band manager, Jackie Nachuk. The following interview schedule was developed to address all of the key topics identified during the meeting.

- 1. Personal History:
 - a. Where were you born?
 - b. How long did you live there?
 - c. Where did you move to then?
 - d. How long have you lived at Ochiichagwe'Babigo'Ining?

[Questions b and c were then repeated until the participant had outlined all the places they had lived and the periods of time spent at each.]

- 2. Personal nutritional and cultural significance of sturgeon:
 - a. How often did you eat sturgeon?
 - b. What time of the year did you eat sturgeon?
 - c. How was the sturgeon prepared for eating?

- d. Was sturgeon used for medicinal purposes?
- e. Who was involved in the sturgeon harvest? (family/community)
- f. Describe the process of the sturgeon harvest.
 - i. When
 - ii. Where
 - iii. Materials/methods used
- g. How was the sturgeon distributed within the community?
- h. Do you know of any ceremonies or feats involving sturgeon?
- i. Do you know of any traditional songs or stories involving sturgeon?
- j. Do you know of any traditional place names associated with sturgeon?
- k. What was the economic significance of sturgeon? (trading and selling)
- 3. Impressions of the Government's interest in bringing sturgeon back to the region:
 - a. What do you think about sturgeon being listed under the Species at Risk Act?
 - b. What do you think a recovery plan for sturgeon should focus on?

3.2.3.6 – Questionnaire Sections

Twelve one-on-one interview sessions were conducted between February 17 and March 2, 2010. At the beginning of each interview session participants were assigned a unique random number that was used to identify their contributions to the study, as a way of maintaining a reasonable level of anonymity. A table was added to the community project coordinator's final report which linked each participant's identity to their participant identification number.

Personal history questions were covered at the beginning of each interview session, and used to determine the time period of the participant's lived experience within the study area. Later this biographical data was used to convert the different ages of the participants' in their sturgeon related memories to standard dates that could be used to better compare the data between the individual participants.

The personal nutrition and cultural significance themes, which comprised the majority of the interview sessions, were coupled together into a single section and structured to follow the personal timeline of the participants' movements in and out of the study area. It was during this segment of the interview sessions that participants were asked to mark the location of any spatial information they had regarding sturgeon or the harvesting of sturgeon on sheets of transparent Mylar overlaid on National

Topographic Survey (NTS) maps (scale 1:50000), following Tobias' (2009) map biography methodology. New unmarked Mylar sheets were provided for each participant to record their experiences with sturgeon, as to not have a previous Elder's recorded knowledge impact the sharing of a later participant. Each interview session ended with questions regarding how the participants perceived the government's role in the recovery strategy of the local lake sturgeon population.

While the biographical and impressions of government sections were very structured, the nutritional and cultural significance part was conducted in a semi-structured way. The flexibility to skip around to different questions or omit others entirely allowed the participants to, at times, share long narrative answers to any given questions, often providing answers to several closely related questions. For example, when asked 'how often did you eat sturgeon', a participant might answer 'the only time I ever ate sturgeon was during Treaty Day celebrations on Old Fort Island'; also answering the questions 'what time of the year did you eat sturgeon'.

3.2.3.7 – Attaining Consent & Exporting Data

Although the final report for the OLSI was submitted in early 2010, participants were not asked to consent to the inclusion of the knowledge they shared during their OLSI mapping interviews into the CGMI until mid 2011. This delay was a result of the researcher not realizing how well the data generated through the two initiatives would compliment each other in the overall objectives of the CGMI until after the compilation of the initial CGMI dataset. Nine of the original twelve OLSI participants consented to have their shared knowledge included into the CGMI.

3.2.3.8 – Data Management

Along with the digitized record of the data recorded on the overlaid maps, the audio data from the individual interviews, recorded using a digital voice recorder, were stored on a password protected USB storage device by the interviewer for the duration of the project. Copies of the audio files were then recorded to a data CD and given to the community project coordinators, and the original files held

by the interviewer were deleted.

Written transcripts of the interviews were created by the interviewer in order to properly identify the themes used to organize the information gathered during the project. Hard copy and digital copies of the transcripts were given to the community project coordinators at the completion of the project.

Once consent had been attained, the records of the original project's spatial database, in the form of an ESRI shapefile, which contained data contributed by those Elders who had agreed to share their previously recorded information with CGMI, were imported into a new spatial database using the GIS software package QGIS 1.6. Minor formatting changes, such as resizing attribute table columns and field names, were required in order to append the data to the spatial database created from the CGMI mapping interview data. See section 3.4 for a detailed explanation of how this data contributed to the final research products of the CGMI.

3.2.4 – Obashkaandagaang Garden Island Workshop

3.2.4.1 – Primary Objectives

The Obashkaandagaang garden island workshop's (OGIW) main objectives were to collect information on the community's land use activities on the garden islands, and to record narratives describing different aspects of the participants' relationship to the garden islands.

3.2.4.2 – Study Population

Fourteen community members contributed to the information that was shared throughout the course of the workshop. Nearly half of the participants partook in the entire workshop, while others attended only the second and third exercises. Participants were selected based on their past lived experiences on the islands of interest.

3.2.4.3 – Recall Interval

Participants were asked to share memories of their lived experiences of the garden islands,

which were typically of the Elders as children in the 1950's and 1960's.

3.2.4.4 - Study Area

The garden islands, which are the focus of the OGIW initiative, are a group of ten islands on Lake of the Woods, south of Clearwater Bay and west of Corkscrew Island. These islands are located over 30 kilometres from the CGL following along the north shoreline of Lake of the Woods. This journey following the north shore was one often traveled by canoe, a travel route partially documented near the bottom edge of Figure 9 (p.69). This close proximity to the CGL, and their similar biophysical makeup, implies that the Anishinaabe cultural landscapes which encompass the CGL would likely include these garden islands as well.

3.2.4.5 – Construct Workshop Schedule

A meeting was held at the community's band office to specify the scope of the study and how it related to the community's current land claim involving the garden islands. Present at the meeting were the community representative and band council member Kris Chartrand, Obashkaandagaang's legal council Will Majors, and Chief Alfred Sinclair. A second meeting was held with Kris Chartrand, who was also the co-facilitator for the workshop, to discuss the logistics of organizing participants and interview sessions. The following group workshop activities were designed to address all of the key topics of interest identified during these two meetings.

3.2.4.6 – Themes of Garden Islands Connections Exercise

The purpose of this exercise was to identify what land use activities, and other special connections, comprise the participants' and community's relationship to the islands in question. It was hoped that by first having the participants compile a 'master list' of their connections to the landscape, it would help to ensure a wide variety of landscape connections to be discussed during the two subsequent workshop exercises, which was in fact the case.

Firstly, the participants were lead into a discussion about what makes up the community's

relationship to the land. The group's discussion quickly covered different types of food and medicine harvesting, as well as recreational activities that took place on the garden islands. Participants were then asked to talk about how these relationships changed with the seasons and over time. A grid outlining the seasons of land use, as identified by the participants, was recorded on a flip chart as the group conversation unfolded.

Next, a brainstorming and seasonal sorting activity was done. This had participants list all the land uses and types of special places that make up their important connections to the garden islands area, no matter how 'big' or 'small'. Again the participants' responses were written on a flipchart, allowing the participants to see the list grow and more easily identify any missing details. Once this 'master list' of land use and special place types had been created, participants then organized items into the seasonal grid created earlier, along with other general categories such as food and medicine. Having the participants think about their connections to the garden islands in relation to these various categories brought about further memories of other connections to the garden islands, which were also included in the final list. Finally, the ranges of answers given by participants were outlined, including a summary of the number of items in each category.

3.2.4.7 – Mapping Garden Island Connections Exercise

The objective of this second exercise was to link the participants' memories of their land use and occupancy activities (LUOA) to specific garden islands. Once the group had reconvened after lunch there was a quick review of the types of LUOA we would be mapping. Special attention was paid to the importance of recording details such as what activity took place, where it took place, who was involved, what time of the year it took place, and what years. Participants were encouraged to record as much detail as possible for each experience they shared, but also not to feel discouraged if they could not remember all of the specific details.

The larger group was then divided into two subgroups to begin the mapping. Each subgroup

was led by one of the co-facilitators. The spatial aspects of the experiences shared by participants were recorded on base maps overlaid with transparent Mylar sheets that were annotated with permanent markers by the participants. Before the exercise began, the corners of the base maps were marked with reference crosshairs on the Mylar sheets so the two could be accurately lined up again during the digitizing process. Participants examined the base map and marked the location of the various landscape connections to the garden islands. Photographs of the garden islands area were shown to assist the memory recall of the participants. The importance of being as accurate and specific as possible when drawing the points, lines and polygons was continually reinforced with the participants throughout the mapping exercise. Facilitators also inquired about areas or islands void of place locations throughout the exercise, to ensure a more complete representation of the community's relationships to the garden islands area was recorded. After 80 minutes, the two subgroups were brought together, and the co-facilitators quickly reviewed the maps created during the session and discussed the participants' impressions of the mapping process.

3.2.4.8 – Personal Narrative Sharing Exercise

The purpose of this final exercise was to give participants an opportunity to highlight and share particularly important, or special, memories of the garden islands area. After reviewing what types of stories would be shared, such as personal lived experiences of the garden islands or knowledge of their community's history of the garden islands, the facilitators reviewed how the stories would be shared. A volunteer was asked to share the first story. After the first participant shared their story the person to their left was asked to share their story, continuing around the circle for as long as time and willingness of the participants allowed for. Participants were able to 'pass' if they did not wish to participate.

3.2.4.9 – Make Copies of Materials Containing Raw Data

A data table was constructed from the brainstorming exercise that categorized the LUOA and resources into four categories, which were: animals harvested, wild plants harvested, cultivated plants,

and activities. Next, the mapping exercise data was digitized and organized into a data table outlining which participants had partook in various LUOA on specific islands. Finally, transcripts of the audio recordings of the workshop's sharing circle exercise were made. All of the data was stored on two password protected flash drives for the duration of the project.

3.2.5 – Common Ground Mapping Initiative

3.2.5.1 – Primary Objective

The primary objective of the CGMI is to help facilitate the input of local First Nations knowledge and landscape values into the decision making process within the cross-cultural shared-management environment of the RPCGCO. Other earlier stated objectives of this research project stem from this primary objective.

3.2.5.2 – Study Population

Nine Elders from the three RPCGCO partnering First Nations communities participated in the CGMI. Four Elders participated from both Obashkaandagaang and Ochiichagwe'Babigo'Ining, and one Elder participated from Wauzhushk Onigum. Seven of the nine Elders had been previously interviewed for either the OLSI or OGIW.

3.2.5.3 – Recall Interval

Participants were asked to share their memories of their lived experiences on the CGL, as well as any other special connection or knowledge they may have of the CGL. The lived experiences of the Elders interviewed typically spanned the 1940's to the 1970's, while the knowledge shared with them by previous generations extends back far beyond the 1940's.

3.2.5.4 – Study Area

The CGL are located within the city limits of Kenora where the Lake of the Woods drains into the Winnipeg River. Comprised mainly of two islands, Old Fort Island and the north-western half of Tunnel Island, the CGL measure nearly 162 hectares

3.2.5.5 – Questionnaire Categories

In consideration of the phenomenological concern of ego tainting, the only 'rigid' categories of the CGMI were the broad topic of LUOA, and the spatial extents of the CGL. Placing a 90cm x 120cm aerial photo of the CGL lands in front of participants kept most of the session spatially focused and the nature of the Elders' relationships to the CGL generally kept the sessions thematically on topic with little input from the interviewer. A running list of the various LUOA mentioned by previous participants was kept and used by the researcher to facilitate the Elders' memory recall and, when necessary, to keep the sessions on track.

3.2.5.6 – Questionnaire Sections

As was done during the OLSI interview sessions, participants were first given a unique identification number that would be used to anonymously identify their contributions to the project. Then a series of biographical questions were asked in order to record the information necessary to later convert the age of the Elders, as recalled in the memories of their lived experiences, into years. This conversion from age to date was done in order to compare all of the Elders' experience on and around the CGL. The biographical section of the questionnaire was also used to create a general timeline of the Elder's life on the CGL which was used to structure the sessions' line of inquiry during the rest of their interview session. The rest of the interview was semi-structured, with very open ended questions.

3.2.5.7 – Base Map Design

Unlike the standard 1:50000 scale NTS maps that were used as base maps during the OLSI interview sessions, a custom base map was created for the CGMI. A digital black and white aerial photo of the CGL was purchased from the City of Kenora and used as the backdrop of the base map. The CGL boundary was digitized over the aerial photo and major toponyms were added with the GIS software QGIS. The high resolution image and large scale of the final base map were selected because of the relatively small spatial extent of the CGL themselves, which also determined the extent of the

base map. The detail of the aerial photo allowed participants to recognize the vegetation and land cover of the landscape, as well as the intricacies of the shoreline, aiding the recognition of past sites.

3.2.5.8 – Testing and Refining the Questionnaire and Base Map

Two pre-tests of the CGMI mapping interview schedule and base map were conducted with Elders from the Ochiichagwe'Babigo'Ining First Nation. Both Elders had been previously interviewed during the OLSI interview sessions and as such, the interviewer was somewhat familiar with the nature of their relationship to the CGL. Following Tobias' (2009 p.297) advice, regarding careful pretest participant selection, each Elder had at one time been "an active harvester and knowledgeable about the local system of use and occupancy." These specific participants were chosen for the pre-test not only because of their personal knowledge of the CGL, but also due to their level of comfort and openness when talking about their lived experiences on the land in general; and because of their ability to read and relate their experiences to bird's-eye images of the landscape. Since, as Tobias (2009) notes, "[a]n interviewer usually has no idea how map-literate a respondent is until the individual shows up for an interview" (p.307).

The interview schedule was tested to determine how well the biographical questions helped to inform the structure of the preceding line of questioning, and how well structuring the questions around the participant's biographical timeline encouraged the participants to share knowledge of their lived experiences on the CGL. The interview schedule was also tested as to how much time was required for the participants to feel they had adequately shared what they remembered of life on the CGL. In both cases the structure of the interview sessions appeared to adequately engage the participants, allowing them to share details of their lived experiences on the CGL. The interview schedule was also found to be sufficient in recording the participants' knowledge in a timely manner and followed in both interviews Tobias' (2009 p.299) "two hour rule of thumb." As he suggested, the interviews should be restricted to two hours so as to not over burden the participants. The adequacy of the base map in

aiding the recording of the participants' lived experiences on the CGL was examined mainly in terms of scale, resolution, and extent. In addition to testing the interview schedule and base map, these initial pre-test sessions were also used to create the original 'master list' of LUOA that was used to facilitate later interview sessions.

3.3 – Data Processing

3.3.1 – Digitized Biography Maps

Digitizing is the process of capturing new features within a spatial database as points, lines, or polygons. These features are inherently spatial and are linked to one or more tables of attribute, or thematic, information. Included in the resulting spatial databases were fields for: the feature's unique identification code (F_ID), the type of feature being recorded (F_TYPE), the participant identification number of the Elder who shared knowledge of the feature (PIN), and the year or period of years associated with the contributing participant's experiences on the CGL (YEAR_S_). Some features also included a brief comment of quoted or closely paraphrased text from the participant's interview session (COMMENT), and any family or place name that was associated with a particular feature (Place Name). Finally, a temporary field was created (DIGI_COMM) that contained any internal comments for the researcher only, which came up during the digitizing process, as well as being a place to make note of the symbols used to mark the Mylar sheets in case it would later be necessary to revisit the original documents again during the research process.

The spatial data mapped by the Elders on the transparent Mylar sheets were digitized shortly after each interview session. Constructing a spatial model of the data by compiling the digitized features throughout the data collection phase of the project into a single database helped to inform the interviewer about the spatial details of the knowledge the participants were sharing. Each individual interview's mapped data was digitized independently however, so as not to have the location of one participant's shared knowledge affect the recorded position of another participant's features. This point

becomes particularity important when considering the use of internal clusters to verify the results of the entire CGMI dataset.

The digital aerial photo used to create the interview session's base map was already georectified when it was purchased from the City of Kenora. This meant that the image's digital file could be loaded directly into the GIS software, and the participants' mapped features were digitized onto the same image seen by the participants as they recalled the events and their locations.

3.3.2 – Transcribe Audio Recordings

Transcripts of the digital audio recordings were made after all of the interviews had been completed. Digital copies of these documents were stored on the two password protected flash drives mentioned above.

3.3.3 – Data Management

Digital audio recordings were made for seven of the nine interviews held. Two of the participants preferred their interview sessions not to be recorded. Copies of the digital recordings were stored on the two separate password protected flash drives. Digital copies of the spatial data recorded by Elders on the clear Mylar sheets were also stored on these flash drives. Only eight of the nine Elders interviewed provided spatial data, as one Elder did not have any lived experiences on the CGL to map.

3.3.4 – Data Preparation

The marked Mylar sheets from each CGMI interview were hand-digitized using Quantum GIS, a powerful and intuitive free and open source GIS, which organized the information in three spatially related databases. Features' topology were digitized with either points, lines or polygons, as they were recorded by participants. All of the polygon, and some of the line features were later changed to point features for mapping purposes only, and the original topology of the Elders' shared knowledge remained intact.

Each interview's audio transcript was separated into individual statements regarding land use or occupancy activities, rearranged into a data table, and coded as specific feature types according to the topics and categories identified during the CGMI initial pretest; a list which was later added to by subsequent participants. The data table included columns for the contributing participant's identification number, the feature's thematic type, and room for statements under the heading 'Comments'. Unlike the spatial database however, this data table has five columns for feature type as a single statement may be representative of more than one theme or category of landscape values. Once all of the transcripts had been entered into the data table, each statement was reviewed to identify any connections between them and specific mapped features. As a result of this process, the final data table also included three columns of feature identification codes. QGIS software was utilized to organize the collected data since, "GIS perform reliable information management and analysis when the spatial dimension plays a substantive role in understanding given phenomena" (Voss et al. 2004 p.636), as it did in the CGMI.

3.4 – Data Presentation

3.4.1 – Composite maps

Composite maps refer to the images created by first compiling all the participants' mapped features, during both the CGMI and OLSI, onto a single canvas, and then reorganizing those features based on their common themes. Essentially taking "[w]hat others have seen or found out or discovered...the things they learned piled up in layer on top of layer so that to study even the simplest-looking image is to peer back through [lifetimes] of cultural acquisition" (Wood 1992 p.7). After all of the data from each session was entered into the databases and data table, maps of each individual map biography were created and similarly formatted for comparison. Once all of the individual maps were completed, composite maps based on the topics and categories identified during the initial pretest were created. Tobias (2000 p.18) highlights that "[w]hile the map biography is used for collecting an

individual's use and occupancy information, the map composite is used for displaying or presenting the entire community's data...the composites are what are used for presentation, education, [and] negotiation." Creating a map composite, like all "mapping requires any number of decisions about what to map and how to map in order to create certain... effects" (Bryan 2009 p.24). As mentioned in earlier sections, many of these 'effects' stem from the fact that "all maps, inevitably, unavoidably, necessarily embody their author's prejudices, biases and partialities" (Wood 1992 p.24). It is for these reasons special attention to the design features was needed to avoid embedding the cartographer's personal biases in the map composites as much as possible. Attention was also required to ensure the maps created were suitable to their various intended audiences and purpose.

3.4.2 – Simplifying Features

Polygons define the extent of a feature and imply a homogeneous trait throughout its interior. All polygon features captured by Elders were converted into points through a process of first digitizing the original polygon feature and then systematically deconstructing them into the lowest common typological denominator amongst the other mapped features of the same feature-type, which in all cases was points and therefore, no polygon features appear in the final maps (see section 4.3 p.83). This decision to simplify the typology of the originally captured features was made so that all features of a common feature-type would be represented by the same vector-type, which in this case was a point. This was done for the purpose of creating final maps that were easy to read and understand, which was partially achieved due to the uniformity this particular mapping convention provided for. The various variables mentioned here were manipulated several times in a variety of configurations until a reasonable representation of the original polygons' extents were achieved, as well as to communicate the fact that the same LUOA occurred within that extent (see Figure 8). Polygons that were smaller than 4000m² were represented by single points, each polygons's centroid. A centroid is a single point feature located at the geometric centre of a polygon's extent, which may or may not lie within the

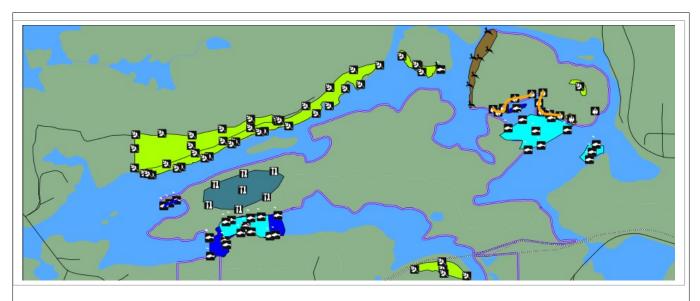


Figure 8: Digitized polygons and lines from the original features as recored by Elders', overlaid with their corresponding point features which appear in the final thematic maps.

polygon itself. Considering the intended scale of the final maps, the extent of the polygons that measured 4000m² or smaller were adequately represented by a single point. Polygons that originally measured greater than 4000m² were simplified into points with a two step process. It was to this end that the larger polygons were represented by their original polygons' extents at 200m intervals, except for the first and last points plotted which were always separated by a distance less than 200m. Twice a line feature was used by an Elder to represent habitation sites on the south end of Old Fort Island, "all along the shore" (06CG), and once to indicate fishing sites along a shore on the west end of Tunnel Island. These lines were changed to points at 50 metre intervals. While the methods of simplifying both the polygons and lines into point features were formulaic and applied equally to each feature, decisions regarding the 4000m², 200 metre, and 50 metre were clearly judgment calls of the researcher. They were based on the researcher's opinion of how well each setting allowed for the best overall visual representation of the Elders' original intentions when first drawing the polygons and lines.

3.4.3 – Reading the Readers

"The subtlest of details can determine how map data is read and interpreted. The shape of a marker, the width of a line, the arrangement of a pattern – each conveys specific

information" (Brewer 2005 p.143).

Tanimura et al. (2006) highlights the need to exercise caution when formatting every map element, pointing out as an example that "[i]t is well known that the perceived area of proportional symbols does not match their mathematical area; rather, we are inclined to underestimate the area of larger symbols." Brewer (2005) outlines concerns over map design in great detail, addressing issues from intended audience to chosen media. She suggests that:

"[i]f the audience is new to the information mapped, [if they are non-experts, or simply do not have much time to invest in reviewing the map] they may require a simpler presentation... In contrast, maps for people who already know about the topic can be more complex...[and] will motivate advanced map readers to spend more time examining a map" (Brewer 2005 p.4).

The ideas of expert and novice map readers with varying degrees of knowledge of a map's theme, and having different amounts of time to read a map were addressed in the final thematic maps with the selection of icons to represent LUOA, and in the presence and content of the Elders' quotes that accompany the icons. The map icons provide those map readers who do not have much time to dedicate to the maps the opportunity to gain a basic level of understanding of the Elders' shared experiences within the CGL. The Elders' quotes however, provide a more thematically detailed account of the shared lived experiences, beyond the spatially centred understanding offered by the mapped icons alone.

3.4.4 – Formatting and Layout

"Hierarchy [of importance] is established by an element's position in the map layout, its size, and the amount of space around it." (Brewer 2005 p.13)

The layout of a map's elements, such as legends, titles, images and sub-maps, can have a substantial affect on a map's discourse. At its most basic level, the assigning of rank to the most important information based on the focus of the maps, the focus here being the Elders' shared features and quotes, was achieved through their location within the final maps' extent. This effectively made

them a part of the map's 'picture'. Furthermore, within each map extent the contemporary toponyms of the CGL are paramount, with their large font and bright white text contrasting the darker background image, followed by the Elders' quotes, again presented in white. The data disclaimer's text-box's position at the bottom right corner of the extent and its small dark font that blends into the background implies to the average reader its low level of importance relative to the other features within the extent, while its position inside the map's extent in the first place conveys a high degree of importance overall. To the right of the maps' extent (from top to bottom) are the title, legend, map description, scale, north arrow and other metadata. The order of each map elements' importance is directly related to their order with the title being the most important, and the maps' authorship being the least.

According to Brewer (2005 p.20) "[w]hen you are creating a page layout, you should size each map element relative to its importance for the map purpose." Following this idea in general, the sizes of fonts used for individual text elements of the maps, such as (from largest to smallest) the toponyms, title, legend, Elder quotes, map description, and data disclaimer and credits, may be easily equated with the importance of the information each communicates to the average intended reader. The toponyms and title situate all other information spatially and thematically. The legend, Elder quotes, and map description then provide greater details of the theme of the information presented. Finally, very specific details regarding the data used to create the map is presented in the smallest font as this information will likely be of little interest to the casual reader, and really only concerns those readers who intend to carefully read the map in its entirety.

3.5 – Data Verification

Verification refers to the evaluation of the collected spatial data in comparison to both internal and external datasets. Once the CGMI's spatial data had been compiled, formatted and symbolized the resulting thematic maps were then used to verify each participants mapped contributions. The CGMI's "preliminary set of thematic maps is the best research product on which to focus verification efforts"

(Tobias 2009 p.319), both internally and externally. An internal dataset is a dataset which has been created with the information recorded during the CGMI Elders' map-biographies, and as such comparing the results of one Elder's map-biography against all of the CGMI map-biographies represents a means of internal verification. An external dataset is one which exists independently of the CGMI, but that intersects either spatially, thematically, and/or temporally. The OGIW is an example of an external dataset collected as part of a separate research initiative. The results section will also utilize another external dataset that was completed with participants from a generation previous to that of the Elders who participated in the CGMI, which overlaps both thematically and spatially with the CGMI. Permission to utilize this previously collected dataset (see Figure 10 p.73) as part of the CGMI verification process was granted by a recognized community Elder, and descendent of one of the original informants, during a meeting with the researcher on March 28, 2013. Aerial and satellite imagery of the study area are also considered as external datasets, which too are used in the external verification process.

3.5.1 – Internal Verification Methods

3.5.1.1 – Internal Terrain Consistency

"Data patterns must fit the terrain. Verification requires that these correlations make sense." (Tobias 2009 p.317)

A common sense approach is the most basic level of verification, and was conducted by the researcher mainly during the CGMI interview sessions themselves, while the features were first being mapped. If the location of a feature being mapped did not make sense to the researcher, for example a campsite placed in the water, the researcher asked first for clarification of the site's location and then commented to the participant of his concern with the feature's placement.

The terrain of the CGL was also examined in person by the researcher once the preliminary thematic maps were completed for the purpose of internal verification. On July 8, 2012, the researcher

traveled around the CGL by boat in order to take photographs of areas previously mapped by Elders. The researcher was looking for more detailed physical evidence that indicated the veracity of the location of certain mapped LUOA. More specifically, areas where clusters of habitation sites had been indicated were expected to be level with not a lot of dense tree growth. Places of plant harvest were also investigated to determine veracity, such as blueberries being harvested in rocky clearings and 'weekay' being harvested in marshes. Eighteen areas were photographed and had their findings summarized during this process.

3.5.1.2 – Internal Cluster Consistency

"Certain patterns are logically expected in datasets and are a means of supporting data veracity...[which can be] as simple as data clusters." (Tobias 200 p.317)

Clusters are tightly grouped, or overlapping, features of a similar feature-type. In terms of internal consistency, clusters were identified between the mapped data collected during the CGMI only, "checking for congruence between respondents' data" (Tobias 2009 p.317). The premise of this cluster verification is that the more LUOA features of a similar nature that are identified for a single site, or the area immediately surrounding it, the stronger the veracity of those features becomes.

3.5.2 – External Verification Methods

3.5.2.1 – External Terrain Consistency

"[A] location that is clearly wrong according to an aerial photograph or satellite image is another example of using external sources to verify map data." (Tobias 2009 p.317)

Physical evidence of previous habitation sites, specifically grassy areas cleared of trees, were also verified using aerial photographs from 1928, 1950, 1965, 1974, and 1989, purchased from Natural Resources Canada's National Air Photo Library, and the satellite image of the CGL from 2008 used to create the CGMI base map. All three external datasets were captured during the summer months, when clearings absent of trees inland from the waters edge are more easily identified. Shadows provide "sharp tonal gradients [which] enable the interpreter to identify objects which themselves are just on

the threshold of recognition" (Flexible Learning Toolboxes 2012). In this case, the researcher looked for the absence of trees, by the absence of their shadows.

3.5.2.2 – External Cluster Consistency

"In many cases a community's use and occupancy data can be compared with cultural mapping that has been previously done." (Tobias 2009 p.318)

In the case of the CGMI dataset, external cluster verification was conducted using data collected for a previous Ochiichagwe'Babigo'Ining First Nation mapping initiative, which were created in the context of negotiating compensation. This earlier mapping project was conducted by local historian Cuyler Cotton, and represents the knowledge shared by two Elders of the Ochiichagwe'Babigo'Ining First Nation. The study recorded traditional LUOA carried out by members of their community, a mandate which easily encompassed the CGL. The participants of this previous mapping research represent a generation previous to that of the Elders who participated in the CGMI, and did not directly take part in the CGMI or OLSI. While not overlapping spatially the thematic data gathered during the OGIW, being in relatively close proximity to the CGL and with similar biophysical profiles, did allow for a thematic comparison of feature-types between the two studies.

3.5.3 – Final Verification Check

"The preferred standard approach for verification is respondent review. Other types of verification can be used to complement it." (Tobias 2009 p.318)

Heeding Tobias' (2009) instruction, small-group and individual interviews were conducted as a final verification exercise. The final thematic maps outlining the six identified categories, as well as each Elder's individual contribution, were reviewed with the participating Elder who contributed the mapped features to the CGMI. The purpose of these interviews was to present the individual and composite map biographies to the Elders, with a focus on confirming each map's accuracy. This format not only allowed Elders to comment on their own map biographies, but also provided the opportunity for them to see how their contributions fit with those of other Elders as well. Overall, six Elders were

interviewed and in addition to verification of the maps themselves, spatial features and metadata alike, these interviews elicited new data that arose during conversations throughout the course of each session resulting in twenty new features being mapped and added to the CGMI's spatial database and final cultural landscape atlas.

3.6 - Summary of Methods

The act of identifying participants through various avenues of access resulted in important inclusions to the course of this project. Once it was determined that in addition to the CGMI, the OGIW and OLSI research initiatives would provide invaluable information to the project, the parameters of the research expanded. Reading the specific objectives of each contributing initiative. and the specific interview schedules, displays their value to the overall project. The process of digitizing maps, transcribing audio, managing and preparing data and finally presenting said data through formatting and layout, is an elaborate and technical procedure, which is crucial in ensuring that a map reader can interpret the information meant to be communicated. Finally, the last step of data verification is vital to the integrity of a map. Using both internal and external data verification tools ensures that these maps can stand up to public scrutiny. This brings us forward into the final results and discussion chapters which make apparent the necessity and value of this research methodology. That being said, the culmination of the CGMI, in the form of the final mapped and narrative results have complied to the research methodology laid out. In the next chapter, in addition to containing the comprehensive results of these research initiatives, further insights are highlighted regarding methodological choices.

Chapter 4: Results

4.0 – Introduction

The final results of the Common Ground Mapping Initiative (CGMI) are divided into external verification results, internal verification results, final mapped results, and narrative results. The verification results follow the methods outlined in section 3.5 (p.63). The full results from the Obashkaandagaang Garden Island workshop (OGIW), while not a part of the internal data of the CGMI, are included in the external verification section as they are used to compare the land use and occupancy activity (LUOA) themes identified between the OGIW and the final CGMI results. The second and third sections of this chapter include both the results of the Ochiichagwe'Babigo'Ining lake sturgeon initiative (OLSI) interviews and the CGMI, as these results were combined based on their overlapping spatial and thematic components.

4.1 – External Verification

External verification is the comparison of a dataset resulting from one data collection exercise with datasets that intersect either spatially and/or thematically. Three external datasets are used to evaluate the veracity of the results generated from the CGMI process. The first is a comparison of the thematic components of the OGIW results with those land use and occupancy themes identified in the CGMI dataset, as the two study areas are close to one another, and represent similar biophysical traits common to boreal forest islands within the Canadian Shield. The second external dataset evaluated against the CGMI results, both spatially and thematically, is that of a mapping interview process conducted by local historian Cuyler Cotton with the Ochiichagwe'Babigo'Ining First Nation. This particular mapping initiative was conducted in preparation for a negotiation of compensation process in which the First Nation was engaged. The Elders interviewed by Mr. Cotton did not participate in the CGMI and represent a previous generation of community members utilizing the CGL much later in their lives. As such, their recorded memories of land use and occupancy activities, on and around the

CGL, represent a valuable touchstone by which to gauge the accuracy of CGMI participants' recollections since they were generally gathered from their childhoods. The third external dataset used to evaluate the results of the CGMI are a series of aerial photos of the CGL. These aerial photographs were used to identify the presence and absence of trees in relation to the location of habitation sites identified during the CGMI.

4.1.1 – Comparing Garden Island Themes

The Obashkaandagaan garden islands (OGI) discussed during the OGIW are located just over twenty kilometres from the CGL and are biophysically comparable, supporting similar types of plants and animals. Results of the OGIW data collection exercises indicate a strong similarity of LUOA between the OGI and CGLs, and between the two groups of participants themselves, which are outlined in Table 4.1-3 and spatially orientated in Figure 9. The information included in Figure 9 and

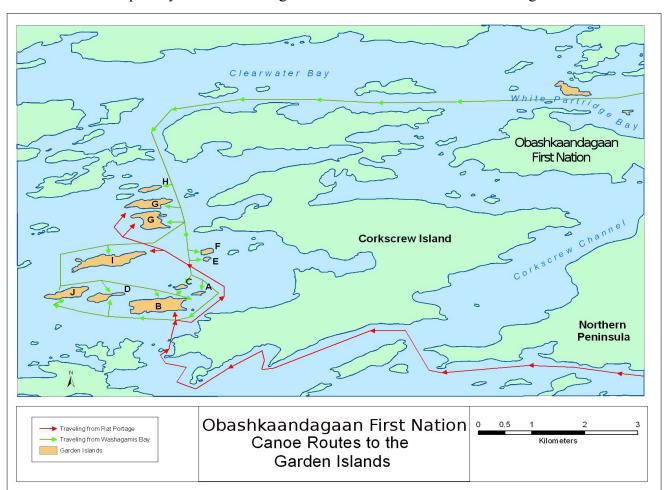


Figure 9: Results of the Mapping Garden Island Connection Exercise, including the routes participants accessed the islands and the key for the spatial components of the themes recorded in Table 4.1, as prepared for the Obashkaandagaang Garden Island Workshop initiative.

Table 4.1 – OGIW Participants' connections to specific garden island shared during the Mapping Garden Island Connection Exercise, as prepared for the OGIW initiative.

Informant	Gardend Island	Activity	Comment
		Camping	She camped on the island during the 1950's.
13GC	В	Plant Harvest	Weekay is harvested from the largest bay on the west end of the island by certain people, not everyone, during the early spring time.
		Fishing	She used to fish around the island during the summertime in the 1950's.
		Camping	She used tents and would live on the island for a month at a time during the summer.
		Gardening	Planted a crab apple tree on the island.
10GC	В	Fishing	Her family had a commercial license and did a lot of seasonal fishing.
		Hunting/Trapping	Hunted for beavers, muskrats and ducks.
		Building	Her ex-husband built a fire place on the island.
06GC	G	Ceremonies	Several pow wows were held on these tree islands. People from communities all around the Treaty #3 territory, including Dalles and Rat Portage.
		Camping	She camped with her parents.
150	A D C II	Fishing	Various types of species were abundant around the islands.
15G	A,B,G,H	Plant Harvest	She picked blueberries, choke cherries, and red berries.
		Other	She smoked and prepared meat on the islands.
		Camping	Camped with family while fishing and for recreation.
		Fishing	Her family used nets to catch fish around the islands.
14G	B,D,G,H	Other	Would walk on the ice to the islands with her parents and siblings. It was important to her father that they remember where the islands are located.
		Camping	Camped with her parents and siblings.
		Hunting/Trapping	Father hunted on the islands.
16G	G,H	Fishing	Father was a fisherman in the area. It was the families main source of sustenance.
		Ceremonies	Games and ceremonies took place on these islands.
		Other	Bannock was cooked on the islands.
17G		Ceremonies	She was present at ceremonies on the islands where the entire 'Obash' reservation would attend.
06GC	A-J	Gardening	He and other elders, such as Jack Cherry and Allen Paypom, in the past planted corn, onions and other vegetation.
		Building	His grandmother, father George, and George's wife had several cellers on these islands used to preserve food for winter.
		Other	His parents met and got married on these islands.
		Ceremonies	The whole community would attend traditional and recreational ceremonies on these islands which lasted 4-6 weeks .

Table 4.2 – Results of the OGIW Personal Narrative Sharing Exercise, as prepared for the OGIW initiative.

Informant	Story Summary
19G	People would travel by canoes from island to island for rice picking, blueberry picking, hunting an
190	fishing. They would camp on each island along the way.
13G	Remembers camping on the islands with other people. People used to fish and would live there f
	the summer. In the winter they would move back to their homes on the reserve.
18G	In the spring time lots of people would be fishing around the islands.
	Her dad used to take their log cabin with them when they would move out to the islands for an
10GC	extended period of time. When they were ready to leave the island he would disassemble it agai
	and move it with them.
	Remembers how her parents would take her out to the islands so she could learn about them and
146	remember them. They would pick blueberries and set fishing nets. Her parents met for the first
14G	time on the islands during a gathering with many different people from various communities with
	Treaty #3 territory.
16G	Her father was a fisherman and hunter, who spent a lot of time on the islands. The islands
	provided for a large part of their sustenance. The islands were beneficial to all the people in their
	community. Remembers traveling to the islands in canoes. It was like a vacation spot for the
	children.
17G	Remembers playing on the islands, sitting on the rocks and fishing for minnows.

Table 4.3 – Summary of all land use and occupancy activities occurring on and around the Obashkaandagaang garden island (OGI), as noted by the OGIW participants, and the Common Ground Lands (CGL), as noted by the CGMI participants.

Land Use Type		OGI	CGL
	bear	х	
	beaver		х
	bullhead	х	
	cat fish	х	х
	clam	х	х
	coyote	х	
	crappie	х	
	deer	х	х
	duck	х	
	fox	х	
	goose	х	
	jackfish	х	х
Animal Harvest	lake trout	х	
	lawyer	х	
	lynx	х	
	mink	х	
	moose	х	х
	muskrat	х	
	otter	х	
	partridge	х	х
	porcupine	х	х
	rabbit	х	х
	seagull egg	х	
	snapping turtle	х	
	squirrel	х	
	sturgeon		х
	tulabi		х
	walleye	х	х

Land Use Type		OGI	CGL
	acorn	х	
	balsam	х	
	birch bark	х	х
	blackberry		х
	blueberry	х	х
	bull rush	х	
	cedar		х
	cherry bark root	х	
	chokecherry	х	х
	cranberry		х
	cundamoo	х	
	goose berry	х	х
Marial Diame	moss (diapers/building)	х	
Wild Plant Harvest	pin cherry	х	х
Haivest	poplar	х	
	rabbit root	х	
	raspberry	х	х
	red willow	х	
	rock root (for dying)	х	
	spruce	х	
	strawberry	х	
	weekay	х	х
	wild apples	х	
	wild peanuts (on tree)	х	
	wild plumbs	х	х
	wild rice	х	х
	wild rose hip	х	

Land Use Type			CGL
	carrot	х	х
	corn	х	
	crab apple	х	
6 lii . I	cucumber	х	
Cultivated Plant Harvest	potato	х	х
	radish	х	
	squash	х	
	tomato		х
	turnip		х
	berry picking	х	х
	burial		х
	camping	х	х
	canoeing	х	х
	ceremonies	х	х
	cookout	х	х
	fish filleting	х	х
	fishing	х	х
	gardening	х	х
A -44': :144	gathering rocks	х	х
Activities	logging	х	
	smudging	х	
	swimming	х	х
	wild crafting (birchbark canoe planters, baskets, whistles, drawings, fire)	х	x

Table 4.1 was collected during the Mapping Garden Island Connections exercise (see section 3.2.4.7 p.52). Table 4.2 summaries the stories shared by participating Elders during the Personal Narrative Sharing exercise (see section 3.2.4.8 p.53). More specifically, of the forty LOUA shared during the CGMI thirty-one were previously identified by the OGIW participants. It is this correlation between the two datasets' thematic nature, outlined in Table 4.3, with nearly seventy-five percent of the CGMI dataset overlapping with that of the OGIW; building a higher degree of perceived accuracy of both participating groups' knowledge and recall of their communities' LUOA in the respective spatial locations. Evaluating the results of OGIW exercises, with a total of sixty-nine identified LUOA, can also demonstrate a likely presence of many more LUOA associated with the CGL not identified during the CGMI.

4.1.2 – Comparing a Previous Generation's Land Use and Occupancy Activities Dataset of the Common Ground Lands

The external cluster verification of the LUOA sites identified during the CGMI with the previous TLUO mapping project, conducted with participants independent of the CGMI and of a previous generation than that of the CGMI participants, has revealed eight accordant areas where the same LUOA was identified by both mapping initiatives. These eight areas are outlined in Figure 10, identified by letters 'a' to 'h'. More specifically, these highlighted locations represent: habitation sites, such as those on the small island between the mainland and Tunnel Island's north shore (a), on the island marked 'Jay Island' on the previous TLUO mapping project's map (e), on the north-central and north-east points of Tunnel Island (d, f), and along the southern shore of Old Fort Island (h); as well as fish harvest sites, including those along east of the Norman Dam (c) and between Tunnel Island and Old Fort Island (g); and finally, the portage route mapped over Tunnel Island (b).

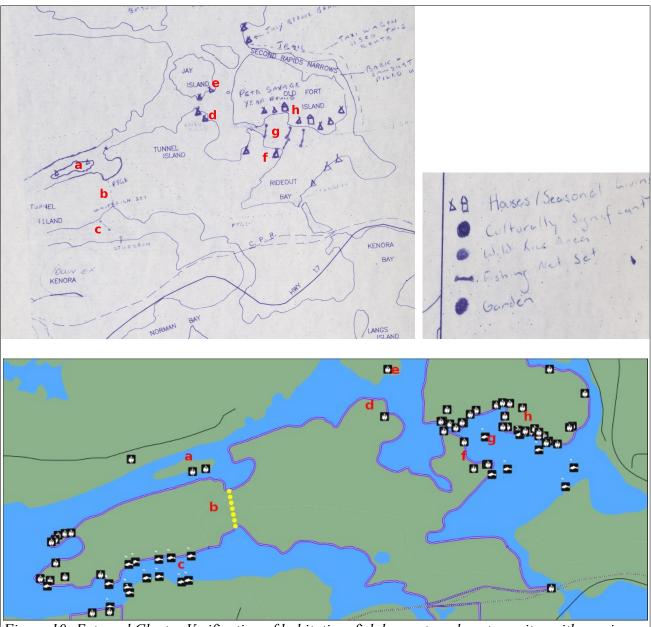


Figure 10: External Cluster Verification of habitation, fish harvest, and portage sites with previous TLUO mapping project conducted by local historian Cuyler Cotton with participants independent of the CGMI.

4.1.3 – Comparison of Historic Aerial Photographs

Six aerial photographs, five monochrome contact prints (1928, 1950, 1965, 1974, and 1989) and one monochrome digital image (2008), showing Old Fort Island and the north-east point of Tunnel Island were examined as part of the external verification process. The first area canvassed was the southern shore of Old Fort Island, where the highest concentration of habitation sites had

been indicated. A pattern emerged from the absence of the shadows of trees on the contact prints; as shadows provide "sharp tonal gradients [which] enable the interpreter to identify objects which themselves are just on the threshold of recognition" (Flexible Learning Toolboxes 2012). This pattern of areas barren of trees was observed in the general areas where CGMI participants had indicated as the highest concentration of habitation sites (see Figure

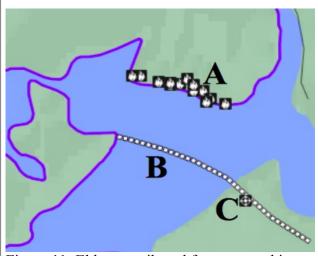


Figure 11: Elder contributed features used in aerial photos verification process.

11). And what's more, this pattern of barren land appears to be relatively unchanged from the earliest photographs taken in 1928 up until the most recent image captured in 2008, implying the spatial and thematic accuracy of the mapped habitation sites along Old Fort Island's southern shore (see areas marked 'A' in Figures 12-17). The general static nature of these sites, in terms of forest

Figure 12: Old Fort Island & Rideout Bay 1928.

encroachment and absence of trees, is in keeping with more specific comments shared by CGMI participants of how the old campsites

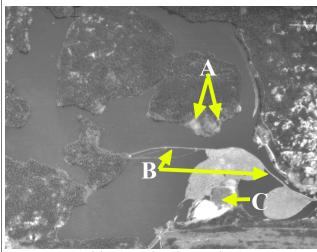
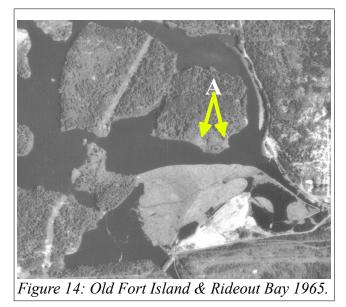
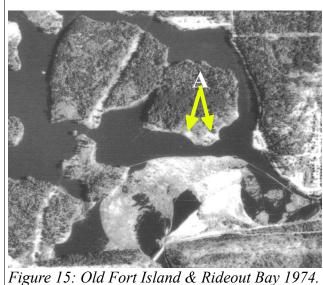


Figure 13: Old Fort Island & Rideout Bay 1950.





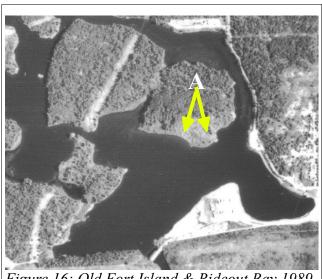




Figure 16: Old Fort Island & Rideout Bay 1989.

Figure 17: Old Fort Island & Rideout Bay 2008.

can be seen today because the land is still absent of trees and thick undergrowth. As one Elder recalled, "tourists use those old sites now because they are high and already cleared" (02SC).

In contrast to the unchanging nature of the shoreline vegetation, the series of aerial photographs and the digital image also verify participant comments of the changes their communities have observed of the land and waters surrounding the CGL. First, the presence of the log boom stretching from Tunnel Island to the mainland, which first appears in the 1950 photograph (see areas marked B in Figure 13) is then gone by the time the 1989 photograph was captured. It

was on this log boom, recorded on the final travel thematic map (see Figure 11), one participant recalled walking to get to town as a child (02SC). This same Elder also recalled how the shoreline of the mainland in Rideout Bay had been greatly changed with the building of the paper mill's circular holding pond (see Figure 11), which can been seen in the 2008 image (see area marked C in Figure 17); construction which appears to have begun sometime between 1928 and 1950 (02SC).

4.2 – Internal Verification

"Verification of internal data consistency is...better thought of as checking for congruence between respondents' data [and between the topography onto which they mapped individual features]" (Tobias 2009 p.317).

Internal data verification was evaluated by looking at spatial groupings of thematically similar features contributed from more than one participant, and also by visiting individual sites identified by participants to determine if their physical features, such as ground cover and slope, are congruent with what is known about the nature of the feature type associated with the individual sites.

4.2.1 – Internal Clusters

"Certain patterns are logically expected in datasets and are a means of supporting data veracity, [patterns] as simple as data clusters." (Tobias 2009 p.317)

The following images show thematically common features mapped by more than one participant that overlap spatially. This spatial overlap of common themed features, contributed independently of each other, indicates the veracity of the individual participant's mapped contributions. The following figures (Figures 18 to 22) show the LUOA themes as icons associated with the personal identification number of the CGMI participant (text outlined in white) who contributed the mapped feature. Clusters were defined not simply by a pre-defined spatial measure, but rather by the topography of the CGL. For example, the term cluster encompasses groupings of common thematic features identified along a single shoreline, on a single peninsula, and in a single

bay or channel. Holding to this definition, twelve clusters were identified in the mapped features recorded during the CGMI. Of those twelve clusters, eight were corroborated by two participants (a, b, c, e, f, i, j, k), one was confirmed by three participants (g), and two were supported by four individual participants (d, h).



Figure 18: Internal Cluster Verification of blueberry harvest sites on the south shore of the mainland north of Tunnel Island.

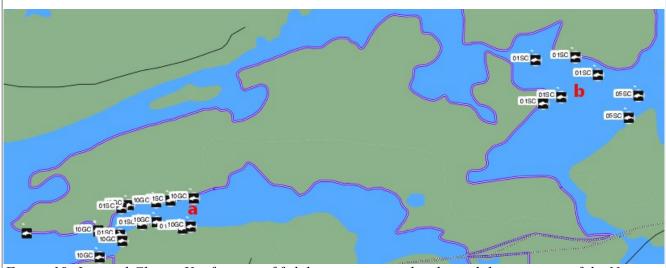


Figure 19: Internal Cluster Verification of fish harvest sites in the channel down stream of the Norman Dam and in Rideout Bay.

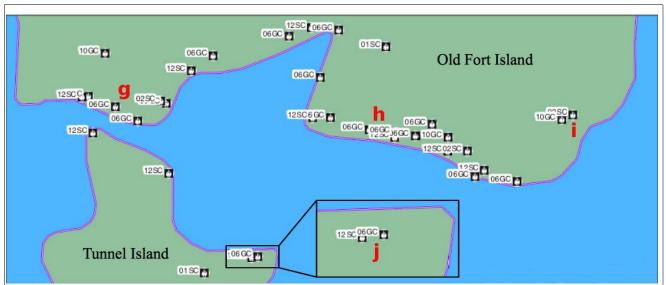


Figure 20: Internal Cluster Verification of habitation sites on the south shore of Old Fort Island and the northeast shore of Tunnel Island.

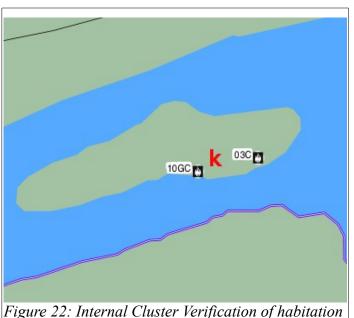


Figure 22: Internal Cluster Verification of habitation sites on the small island north of Tunnel Island.

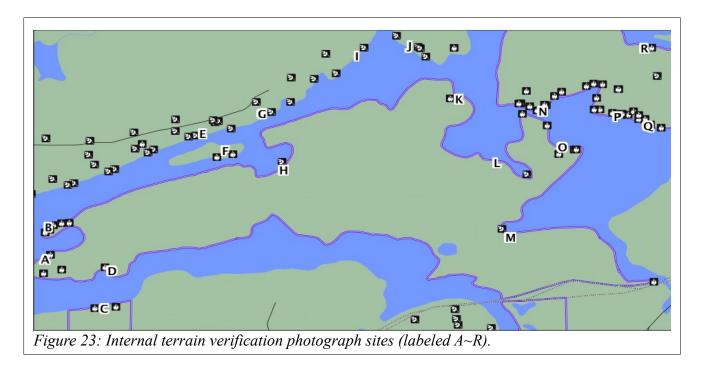


Figure 21: Internal Cluster Verification of habitation sites on the northwest shore of Tunnel Island and the north shore of the Rat Portage.

4.2.2 – Ground Truthing

Unlike the arial photographs used during the external verification process, Tobias (2009) considers using the actual land itself to verify data veracity as an exercise of internal verification. Tobias (2009 p.317) comments "data patterns must fit the terrain. Verification requires that these

correlations make logical sense." It was to this end that a series of sites were visited and photographed by the researcher to evaluate how the physical features of the immediate landscape surrounding the site, including ground cover and slope, align with feature types associated with it by participants during the CGMI. The locations of the sites visited are outlined in Figure 23, indicated by letters A to R, which are presented along with the Elder mapped sites along with their feature type; namely plant harvest, habitation, and travel sites.



The plant harvest sites visited were identified as weekay harvest sites and blueberry harvest sites. The weekay harvest sites were expected to be shallow water columns with marshlike conditions (06SC). As seen in the photographs of all three such identified sites (sites M, L, and H), these are the conditions that existed at the time the photographs were taken. The blueberry harvest



Figure 24: Site: M - Feature Type: Plant Harvest (Weekay)

sites were to be characterized by rocky landscapes free of trees which would overshadow the low lying blueberry plant (10GC). As was found with the weekay sites, the observed blueberry sites (sites E, G, I, and J) also exhibited the physical traits that would make them suitable to the LUOA with which they have been associated. The areas observed by the researcher which were identified as habitations sites (sites A, B, C, D, F, K, N, O, P, Q, and R) were expected to be relatively flat, grassy places, cleared of trees. Once again these expected physical traits, as described by CGMI participants, were the ones observed by the researcher (02SC). Finally, a travel site (site N) was observed by the researcher that was identified as being a place where rocks had been stacked along the shore up out of the water so canoes, loaded with things such as fish and wild rice, could be towed from the shore; as the current along this shore was known to be too dangerous to be simply paddled through (12SC). These stones lining the shoreline, unlike any of the other shores seen in the surrounding area, were observed and photographed by the researcher. The repeated concurrence between the mapped LUOA sites, and



Figure 25: Site: L - Feature Type: Plant Harvest (Weekay)



Figure 26: Site: H - Feature Type: Plant Harvest (Weekay)



Figure 27: Site: E - Feature Type: Plant Harvest (Blueberries)

their associated physical traits, observed on the landscape, further verify the accuracy of the CGMI participants' shared memories as recorded on the final thematic maps.



Figure 29: Site: G - Feature Type: Plant Harvest (Blueberries)



Figure 30: Site: I - Feature Type: Plant Harvest (Blueberries)



Figure 28: Site: J - Feature Type: Plant Harvest (Blueberries)

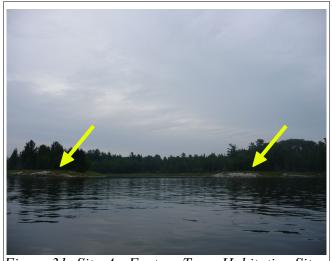


Figure 31: Site: A - Feature Type: Habitation Site



Figure 32: Site: B - Feature Type: Habitation Site



Figure 34: Site: C - Feature Type: Habitation Site



Figure 33: Site: D - Feature Type: Habitation Site



Figure 36: Site: F - Feature Type: Habitation Site



Figure 35: Site: K - Feature Type: Habitation Site



Figure 38: Site: N - Feature Type: Habitation Site



Figure 37: Site: O - Feature Type: Habitation Site

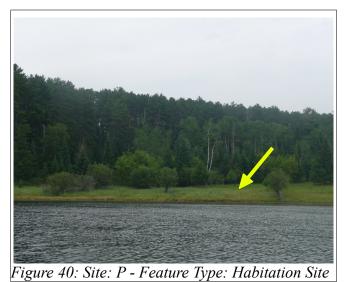


Figure 39: Site: Q - Feature Type: Habitation Site



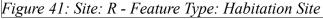




Figure 42: Site: N - Feature Type: Travel Site

4.3 – Mapped Values

The mapped results of the CGMI were compiled into twelve thematic maps, six maps based on common themes shared between participants' mapped data and six maps containing all the features mapped by each individual participant. The six common-theme maps are the main research product which will be used to facilitate the cross-cultural exchange of landscape values to the non-First Nation members of the Rat Portage Common Ground Conservation Organization (RPCGCO). In addition to the mapped features themselves, represented by a total of one-hundred-and-four point and line features, each map includes quoted text from the CGMI participants which further describe

the message of each map's theme. Additionally, the common-theme maps include a brief description of each map's theme.

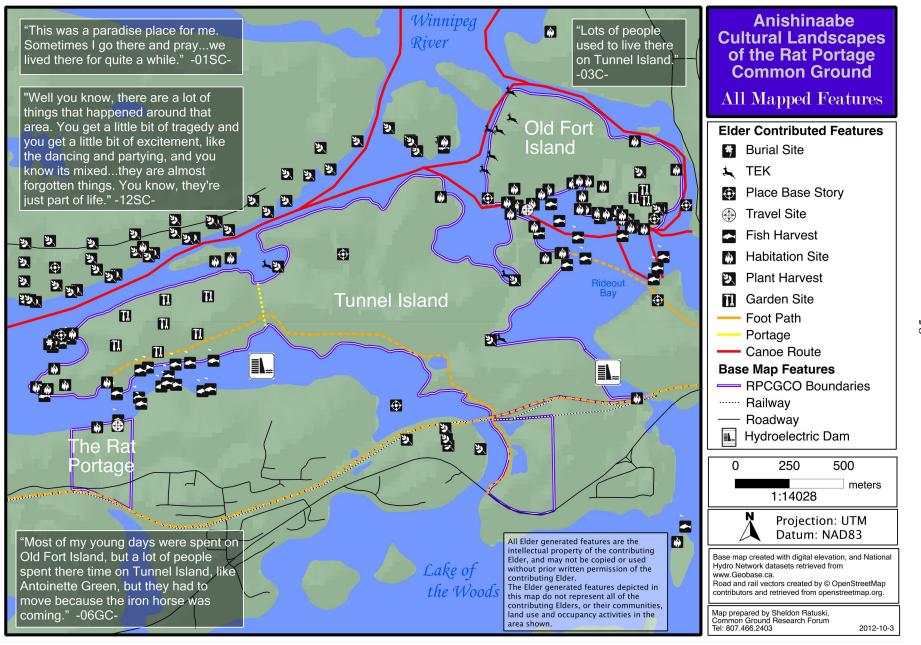


Figure 43: Final Thematic Map: All Mapped Features

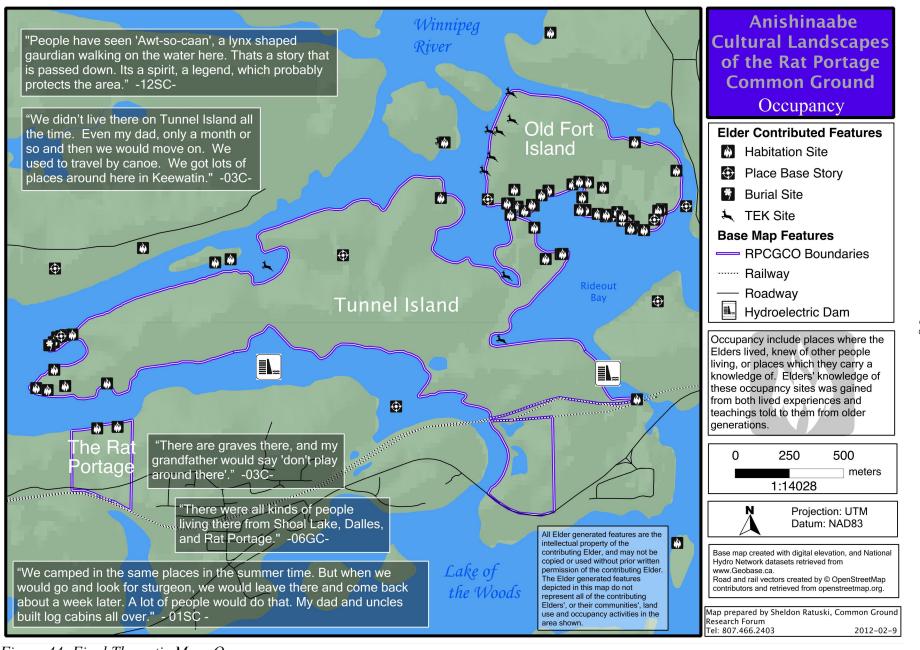


Figure 44: Final Thematic Map: Occupancy

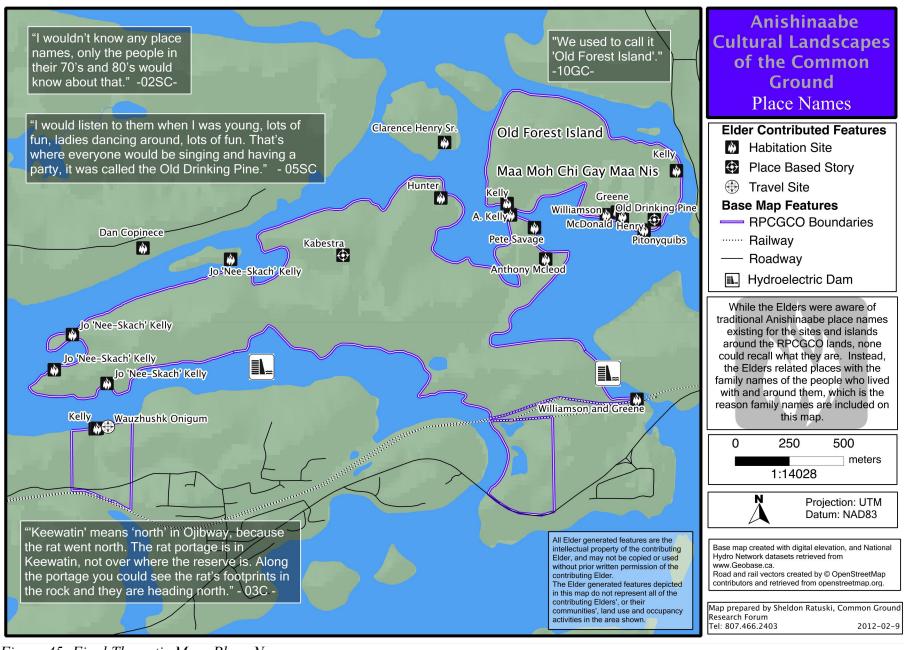


Figure 45: Final Thematic Map: Place Names

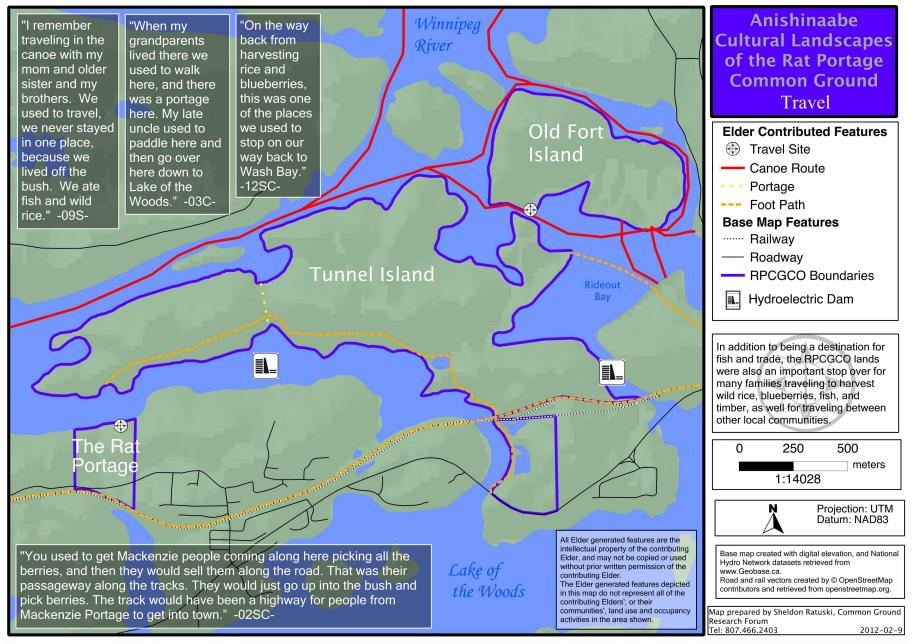


Figure 46: Final Thematic Map: Travel

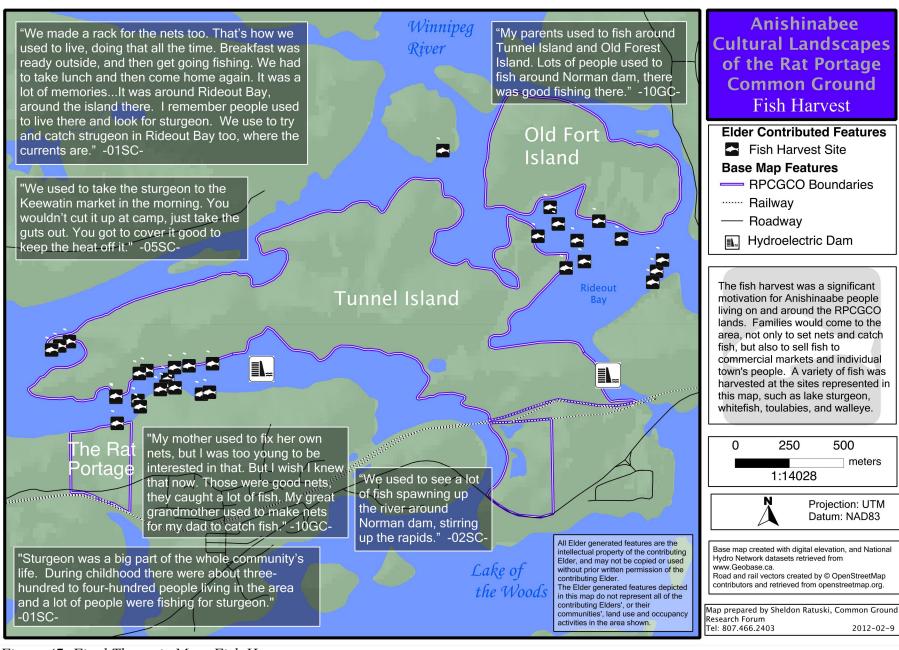


Figure 47: Final Thematic Map: Fish Harvest

Anishinaabe

Plant Harvest

Roadway

250

1:14028

500

Projection: UTM Datum: NAD83

meters

2012-02-9

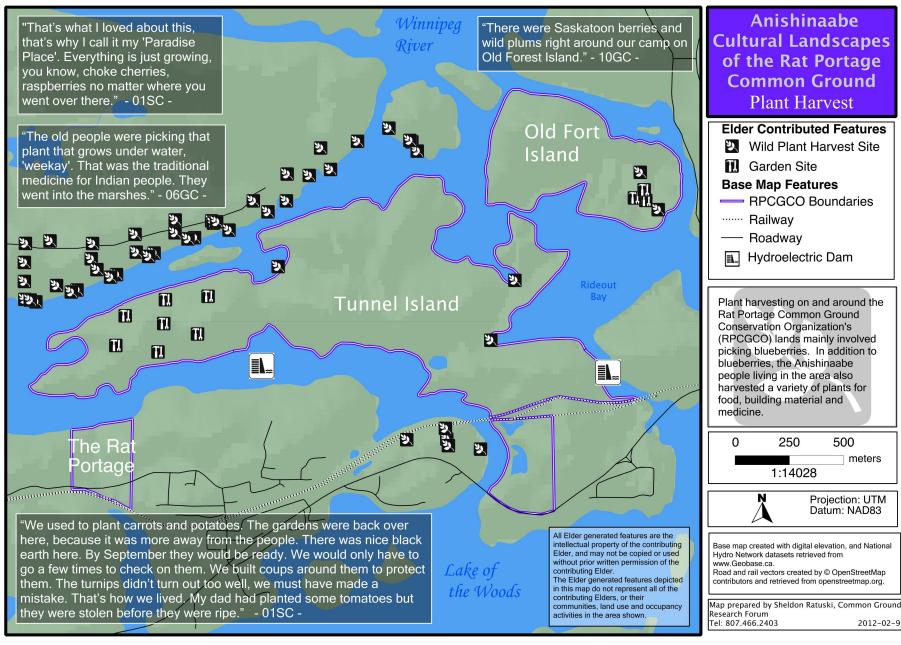


Figure 48: Final Thematic Map: Plant Harvest

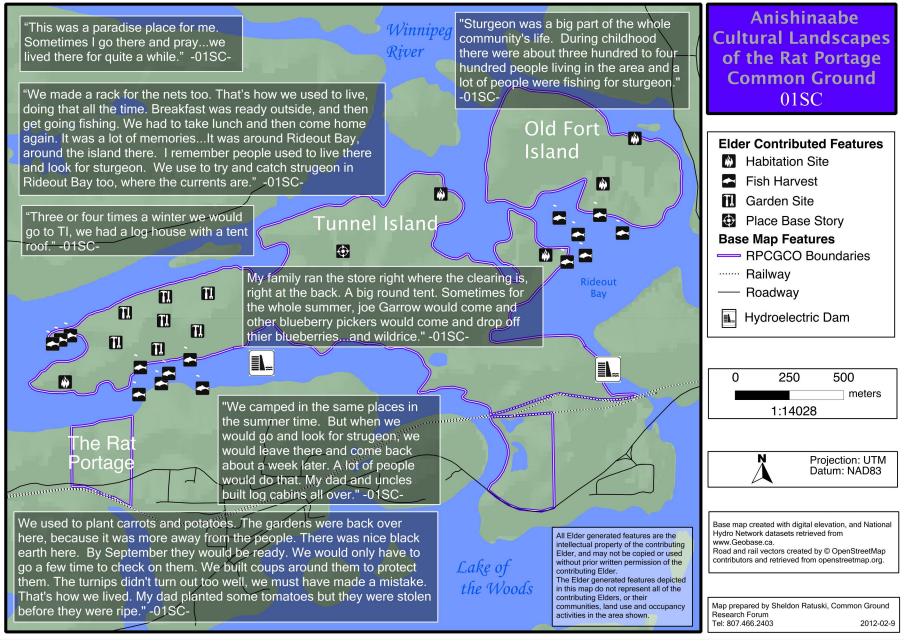


Figure 49: Individual Participant Map: 01SC

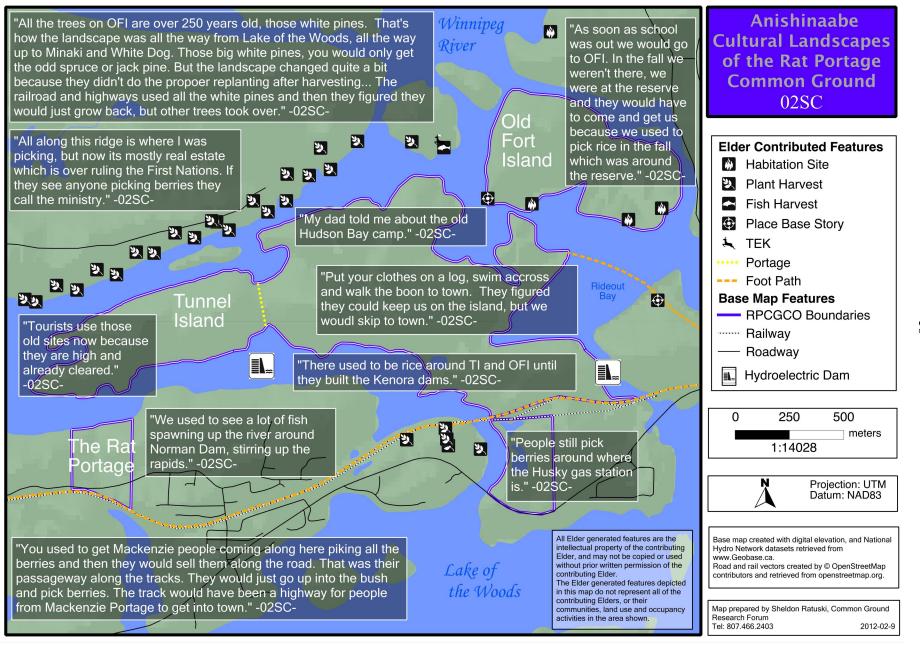


Figure 50: Individual Participant Map: 02SC

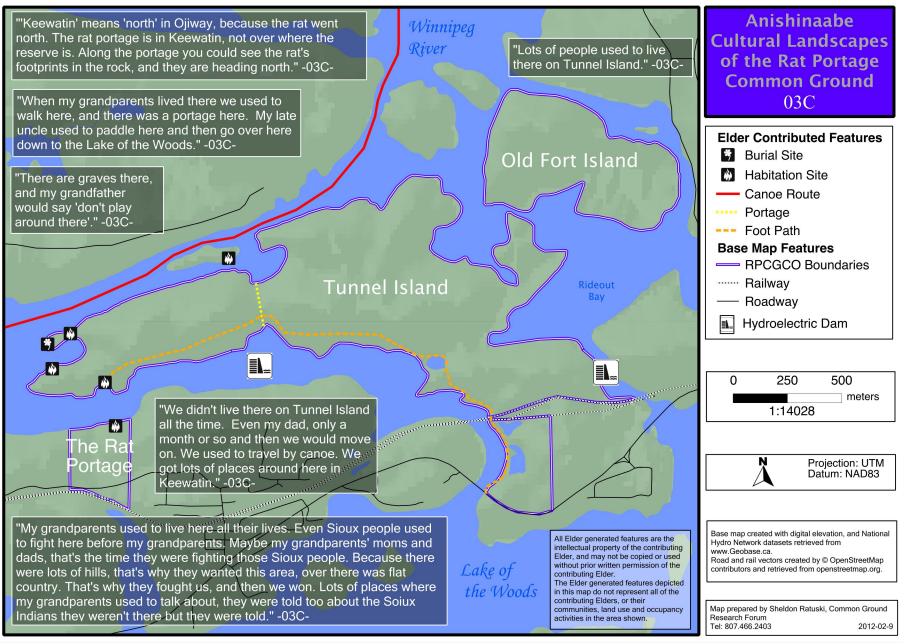


Figure 51: Individual Participant Map: 03C

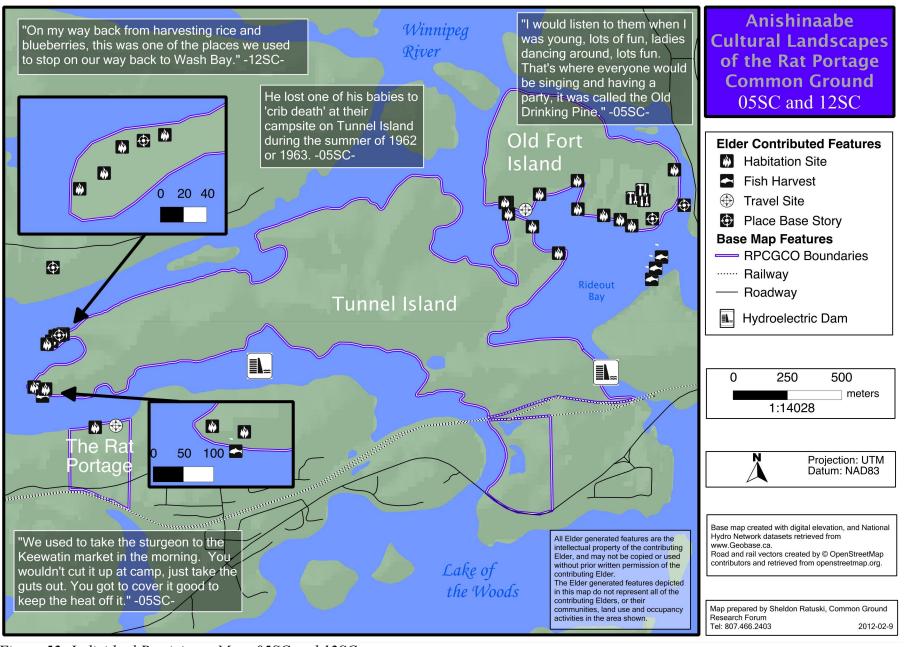


Figure 52: Individual Participant Map: 05SC and 12SC

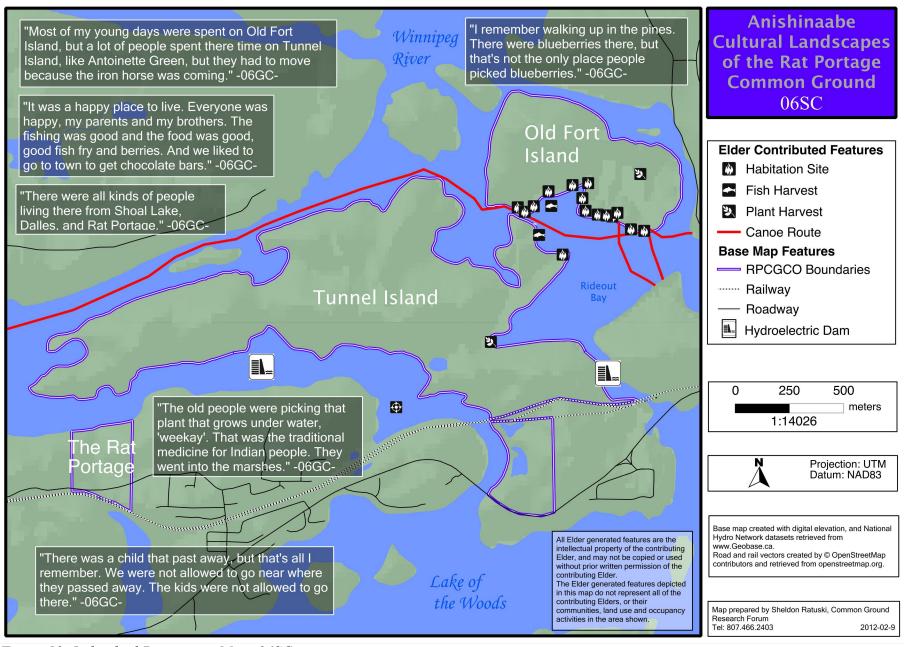


Figure 53: Individual Participant Map: 06SC

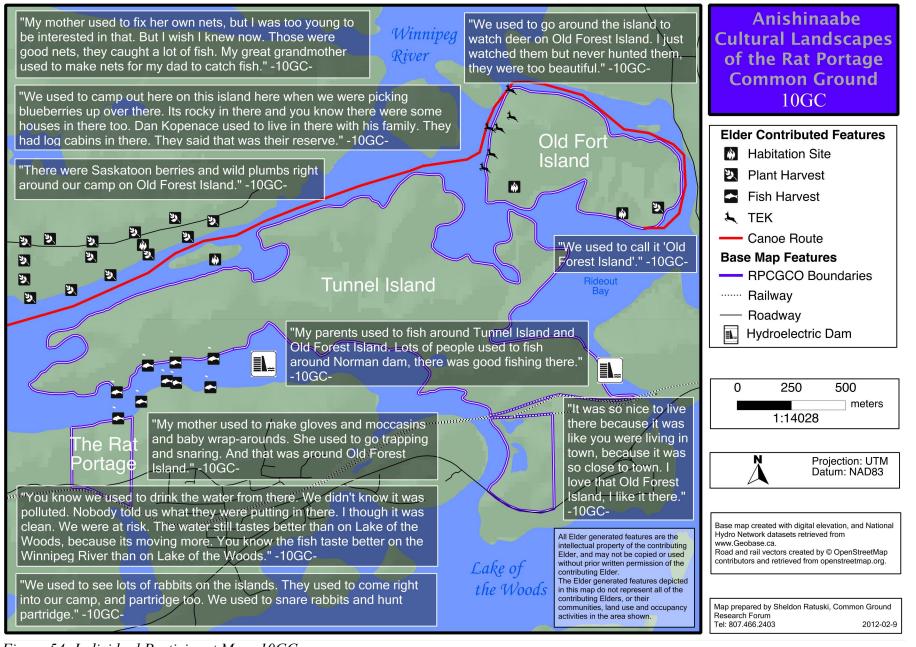


Figure 54: Individual Participant Map: 10GC

4.4 – Unmapped Narrative of Values

Going back to the nature of cartography, selectivity is an unavoidable factor in the creation of a clearly communicative map. As Binnema (2001) said, a map must always offer an incomplete picture of reality. In the mapping process of this project, details arose which, if included, risked 'fogging' that which the map was intended to share. The temporal periods associated with each participant's mapped contributions are a good example of these complicating details. In addition to the selectivity of cartographic design, is the selectivity of research design. A researcher is forced to make choices when developing his or her methodology. Every question can never be asked, and every answer can never be anticipated. In designing both this project's interview schedule and map parameters, choices had to be made on the part of the researcher as to what could be included in the final maps themselves. In addition to the mapped features, unanticipated and unmapped narrative values were also shared during the interview sessions (see Table 4.4). Valuable insights into the themes of the maps, namely ACL of the CGL, can still be gained by including these elements into the final research products, but due to

mapping limitations and for the sake of
maintaining clarity through simplicity, these were
chosen to be included as separate unmapped
narrative values. In addition, any documented
knowledge of LUOA has the potential to inform
future land use planning decisions on the CGL and
if nothing else hold intrinsic value in and of itself.
As such, the land use and occupancy values shared
by the CGMI participants which are not mapped as
point-features, are separated into distinct
narratives of individual and closely related value

Table 4.4: Themes and sub-themes of unmapped data.

Time Periods of the Lived Experiences of the Common

Time	Experiences of the Common Ground Lands	
Detailed Land Use and Occupancy Activities	Hunting and Trapping	
	Medicinal Applications	
	Diet	
	Community Life	
Residential School	Abduction	
	Abuse	
	Changes to Land Use Patterns	
Settler Relations	Buy/Sell/Trade	
	Institutional Encounters	
	Relationships with Individuals	

statements organized in a table (see appendix A). In addition to the themes of LUOA documented by the mapped features described in the maps of the previous section, additional narrative themes were identified from the CGMI data set which are described here.

4.4.1 – Time

Time was not explicitly included in the scope of the final map elements. It was decided that the point of the research was not to determine when LUOA occurred, but instead simply to record and communicate the fact that the activities did occur at some point in time and are important to the participating Elders. Scoping the maps in this manner proved to keep the mapping of LUOA manageable while including other temporal information in the non-mapped narratives ensured this still

valuable temporal information would not be lost. The inclusion of Table 4.5 displays that the time period associated with the mapped features contributed by the CGMI participants spans from 1935 to 1985. Within this period of time two main factors seem to emerge as to why participants, and their communities, ceased their land use and occupancy activities within the CGL and surrounding waters. For the participants who noted their LUOA ending between the 1940's and early 1960's, it was their forced admittance into the residential school system which altered their

contributions.	
Participant Identification Number	Time Period of Mapped LUOA Features
01SC	1944-1970's
02SC	1965-1969
03C	1935-1985
05SC	1941-1970's
06SC	1945-1961
10GC	1938-1945
12SC	1954-1967

Table 4.5 Time periods associated

families' LUOA pattern on the landscape surrounding the CGL. Alternately participants who associated the late 1960's and 1970's as the time their communities ceased their LUOA in and around the CGL accredit this change to the closing of the commercial fishery on the Winnipeg River. This closure occurred once the Canadian government declared fish caught in the area, which included the waters surrounding the CGL, as unfit for human consumption, eliminating one of the primary reasons for occupying the CGL (Usher 2003 p. 370). Although the lived experiences of the Elders may be

gauged in decades, the knowledge systems they partook in on the Common Ground Lands represent millennia of experiences and teachings, reflected in the resourcefulness and insightful quality of the Elder's shared lived experiences of their traditional land use and occupancy activities on this land.

4.4.2 – Hunting and Trapping Theme

Although the activity of hunting and trapping on and around the CGL must have a strong spatial component, like similar LUOA such as fishing and plant harvest, no specific locations for these activities were offered by the CGMI participants. While not being mapped however, hunting and trapping activities were mentioned by two Elders. As told by one Elder: "I was 6 years old, and I was very interested to learn everything, and I went with the trappers. I use to have my rabbit fir moccasins and that's how I learned how to skin a beaver." She also remembers how she was first taught "to skin a mouse, and how to take the feathers out of a little bird... I was helping the trappers making fire. I would go with the trappers to Tunnel Island when I was six. My grandmother made me rabbit moccasins to keep me warm... I even ate porcupine, yeah it was good" (01SC). The other Elder recalled how she "used to see lots of rabbits on the islands. They used to come right into our camp, and partridge too. We used to snare rabbits and hunt partridge...My mother used to make gloves and moccasins and baby wraparounds. She used to go trapping and snaring, and that was around Old Fort Island" (10GC). Also in addition to the fishing and plant harvest sites included in the final maps, Elders shared a lot of extra details about these activities such as the medicinal properties of lake sturgeon and the different ways in which various foods were prepared.

4.4.3 – Residential School Theme

Six of the seven participants who contributed mapped data during the CGMI mentioned residential schools during their interviews. Regarding the removal of First Nation children from the CGL and surrounding areas, one participant recalled:

"We got picked up and taken away. [Children's Aid] took us to the local place

where they used to keep kids. My parents were gone doing their shopping and things, and someone must of saw us and we got picked up. Me and my brother tried to jump out but they still dragged us back out in one of those old paddy wagons...My sister was old enough to take care of us then but they still took us. I must have been about eight years old, or maybe seven years old. My sister must have been 14 or 15 years old. They took us...there were six of us. And they did that periodically. Some of them never came back...Some of them they took them away to somewhere we didn't know. Those are the kids that were taken up north to some areas and given to families up there. Some of our people are still up there...Some of them adapted to it pretty good but the majority of them you still hear complaints from them because I run into them in Winnipeg or in Kenora, and they tell me they didn't have a very good life in those places. It was very rare they would run into a good family. They were abused and they didn't feel like they belonged in those communities. Always treated as an outsider. And INAC was part of the whole problem, and Children's Aid at the time. They thought they were doing something good because of their ignorance. They didn't really understand what they were doing to these families. Our family was affected, I still have two brothers up there. And one of them is trying to come back but they wouldn't let him back to my community. They transferred him out of there but then wouldn't let him transfer here...That's some of the stuff that happened up and down this river and over in Rat Portage too, and the other communities around here, not just here" (12SC).

Another Elder similarly recalls, how "[s]ome kids had to go to school, and it was sad for them because they got taken away and those are the ones still trying to come back, to transfer" (03C). Participants spoke of the emotional impacts of their separation:

"A lot of my friends died of alcohol abuse. I think they couldn't take what happened in those residential schools. It was like a prison, that's how we felt. But I liked that it felt like a big family with all the girls, but a lot of bad things happened...I think I went in there when I was six or seven and left when I was twelve...[I remember one time] when my parents came to see us I gave them a hug, and she (one of the nuns) told me 'don't do that you're not a baby'" (10GC).

Another Elder recalled his time spent in residential school, remembering:

"When I was there I had a friend called 'White Man', an Indian boy who had blond hair [who was] my best friend. We were roughed up and once, he got knocked out one day and then I never met him again. I don't know what happened, but I heard that he ended up in hospital and died" (06SC).

In addition to the emotional impacts the residential schools caused, was the added impact of the

act of simply removing First Nation children spatially from the lives they had known, which the CGL were a large part of. Participants recalled how their time spent in residential schools impacted their ability to maintain the relationship to the CGL that they previously had. Many of the participants of the CGMI described theirs, and their siblings, years in residential school as essentially marking the cessation of their participation in the LUOA on the CGL. Through the physical removal of First Nations children from the CGL, to attend both local and non-local residential schools, they were forced not only stop their participation in LUOA, but also in lessons taught to them through that participation. One Elder also commented on how he felt he did not learn anything in residential school because "it didn't matter if you were right or wrong you still got punished" (06SC). The fact that the separation occurring was not only spatial but also generational resulted in a two way loss of relationship to the land where the older generation was no longer undertaking in the sharing of knowledge with the youth and the youth were no longer undertaking in the learning end. This loss of knowledge sharing was commented upon by several participants who, during their interviews, spoke of how participation in LUOA is more than an act of collecting food, or traveling from one place to another; it is the means by which knowledge and teachings are passed from one generation to the next. One Elder recalls, "my grandfather's parents were also fishing for sturgeon, that's how they make their living. His parents they did almost the same thing, how they were taught from their parents. Things were almost the same from my great grandparents to my parents, not much changed" (01SC). Another Elder remembers how:

"The older men would teach the younger kids to do that kind of stuff (fishing, hunting, and harvesting plants). That's how we were brought up, they'd teach you. There were teachings there. They used to tell us 'you got to learn these things because when you grow up you'll know what to do'." (09S)

Finally two other Elders recalled how a new role, or land use, on the CGL had emerged due to their forced attendance to residential schools. The CGL, due to its close spatial proximity to St. Mary's

residential school, became a place where children would leave their families to attend residential school and then again where they would come to rejoin their families at the end of the school year. "Sometimes we would spend the whole summer there until August...before we would go to St. Mary's school...When school was out we would go to Tunnel Island and when school started we would go back" (01SC). "We would stay there [on Old Fort Island] until school was open. As soon as school was out we would go to Old Fort Island, and in the fall we weren't there [though], we were at the reserve and they would have to come and get us because we used to pick rice in the fall, which was around the reserve" (02SC).

4.4.4 – Settler Relations Theme

Apart from the antagonistic legacy of residential schools noted above, the Elders interviewed also recalled other aspects of their personal and communities' relationship to the settler society which developed around the CGL; some of which were perceived as positive and others not. The positive associations noted by the Elders were generally regarding their relationships to individual settlers and their families. Examples of these relationships with settlers and their families include the trading of sturgeon with Ukrainian farmers for things like potatoes, carrots, and chicken eggs and "sometimes the kids would go to the farms and help collect the eggs in exchange for sturgeon" (01SC). Another Elder reminisced how his parents had sold fish, wild game, pin cherries, black berries, goose berries, choke cherries, and blueberries in town to tourists, and how sometimes the settlers would give them sealed glass jars of jams and other preserves in addition to payment (02SC). One Elder fondly remembered interacting with the children of neighbouring settler families. "We were running all over the place. Even the local kids in town, we used to play with them. [and] talk to them, and [then] they would go their own way. We didn't meet up with them everyday but we did play with them every now and then. Kids from Keewatin, we would meet them by the tracks" (12SC). Also while living on Old Fort Island, another Elder recalled, "[o]nce a week my parents would go to town. They would paddle across the

bay and then they would walk into town...I would [sometimes] go with my parents to town..to get chocolate bars" (06SC). This idea of the relatively close proximity of the CGL to town being beneficial, was reiterated by another Elder who commented that "[o]ut here (on Old Fort Island) they probably felt like they were private and not having people coming in and out, like town people and stuff like that. That's probably why they parked out here on the island. It was easy to look after kids for the baby sitters while the adults were in town and doing their business and chores in town. Some of them might have had temporary jobs in town for local people" (12SC). This same Elder also remembered as a young boy he would carry the fish for his dad to the old settler ladies' houses, who would buy their fish. He liked to go because they would give him cookies, or juice, or sweets.

Sometimes they would pack him a bag with potato chips and soda pop. He also remembers how some of them used to have birds and animals living in their houses, and they would have gardens.

Depending on the time of year, some of the old ladies would give them fresh vegetables, on top of what they paid for the fish. There was a good relationship between the people selling and buying fish (12SC).

Negative associations with the surrounding settler society, as with the residential schools, was primarily focused on the settler's institutions and not the individual settlers themselves. Three main themes emerged from the Elders' shared memories, which were: the building of the hydroelectric dams along the Winnipeg River, the paper mill, and the planning of the towns' development itself. Several Elders interviewed recalled how the building of the hydroelectric dams greatly impacted the natural seasonal water levels on the Winnipeg River and Lake of the Woods resulting in the destruction of the wild rice stands on which their communities depended. "There used to be rice around Tunnel Island and Old Fort Island until they built the [Kenora and Norman] dams" (02SC). "[I]n September there used to be rice. Now its getting a lot of that water. We used to thrash rice. Not [directly] around Tunnel Island or Old Fort Island, but around Locke Bay, there used to be a whole bunch of rice there.

We would camp on Old Fort Island and then pick the rice up there. We went there to look last summer (in 2009) and there was a little bit of rice but there was too much water" (01SC). "That was my livelihood too, what I was taught and they took it away. We never had wild rice harvesters but now anyone can go in with those machines. And then on Lake of the Woods they flooded out the rice, they killed it." (10GC)

Reflecting on the construction and operation of the paper mill, which was adjacent to the waters surrounding the CGL, Elders recall feelings of betrayal and suspicion. "You know we used to drink the water from there (Rideout Bay). We didn't know it was polluted. Nobody told us what they were putting in there. I thought it was clean [but], we were at risk" (10GC). Another Elder remembers his cousin's family was on Old Fort Island one summer, and "that's when the police came and told people to leave this area (the CGL). [Some time around] 1968, it was probably the RCMP. We don't know who ordered them to do that, maybe the paper mill, but we will have to figure that out later" (12SC).

Finally, regarding the planning and development of the City of Kenora, an Elder lamented on the fact that their people's special places were, and still are, ignored in the planning processes that paved the way for private and municipal housing and infrastructure developments. "People used to live right where they are building those new condos (Headwaters), and they used to live right where the city of Kenora is. We used to live in town, but when the white man came they pushed us out. The white people think they own the land, but this is our land, free. But they moved here because they have money" (03C).

4.5 – Summary of Results

The results of the CGMI are intended to create a clear picture of LUOA on the CGL. In the end, six individual maps, six themed maps, and a narrative table made up the whole of the final mapped and unmapped results. In addition, three external verification datasets were included for comparison.

These were the OGIW results, the traditional land use and occupancy map created by Elders of a

previous generations and the historical aerial images. Through the process of identifying internal clusters and groundtruthing, internal verification was also conducted. Each of the maps may be used as tools to aid in the cross-cultural communication of landscape values between local Anishinaabe and settler communities on the CGL but, a further discussion of their validity and application is necessary, as well as how the overall research process was informed by phenomenological principles. Chapter 5 includes a discussion of how the final research findings met the stated objectives of the research, as well as how the research processes and products fit within a contemporary Canadian context.

Chapter 5: Discussion

5.0 – Introduction

The stated purpose of this research was to aid in the cross-cultural communication of landscape values between local Anishinaabe and settler communities within the context of the Rat Portage Common Ground Conservation Organization (RPCGCO). Three academic focuses were central in the researcher's goal of completing this task, those being to: (1) create a 'picture' of the First Nation communities' cultural landscape on the Common Ground lands (CGL); (2) investigate the utility of mapping in a phenomenological inquiry; and, (3) evaluate the cartographic conventions used for recording and sharing lived experiences on a landscape. A discussion of the effectiveness of each of these, as displayed through the qualitative data collected, allows for an evaluation of the degree to which each of the academic objectives were met and unexpected results emerged. Finally, a look at the importance of land use and occupancy activities (LUOA), within the context of the current and ongoing definition of First Nations treaty rights, illustrates the utility of the methodological and theoretical elements evaluated as part of this research.

The research findings discussed in the previous chapter point to a changing local ACL on the CGL, which is obviously part of a much bigger narrative; one that exceeded the researcher's prior conceptions in various aspects of the research's subject matter. As phenomenology was chosen to theoretically and methodologically guide this research process, a deliberate reflection on the part of the researcher as to the role phenomenology is also included in the following sections. Providing opportunity for the management of personal ego and biases on the part of the researcher, a phenomenological concept itself, this reflection on the role of phenomenology through the research process includes considerations of the researcher's new insights into the ACL surrounding the CG and the ethical significance of these insights, as well as the methodological importance of the phenomenological principles employed. More specifically, revelations discussed include the physical

landscape's abundance within the ACL around the CGL, as well as the temporal aspects of that cultural landscape. The methodological considerations discussed from the perspective of phenomenology are divided into three sections, which are implications for the: collection of lived experiences, synthesis of a common narrative from those lived experiences shared by multiple individuals, and communication of that common narrative to others.

5.1 – The Cultural Landscape of the Common Ground Lands

The data collection initiatives conducted during this research process have provided the researcher with valuable insights into the Anishinaabe people of Wauzhushk Onigum First Nation, Ochiichagwe'Babigo'Ining First Nation and Obashkaandagaang First Nation's cultural landscapes of the CGL and surrounding area. The LUOA recalled by the participating Elders during the Ochiichagwe'Babigo'Ining lake sturgeon initiative (OLSI), Obashkaandagaang garden island workshop (OGIW), and the Common Ground mapping initiative (CGMI), outlined in sections 4.3 and 4.4, and in appendix A, describe a vibrant, busy, and diverse lifestyle closely matched with the physical landscape of the of the CGL and the surrounding area. Rivers and lakes provided travel routes from one community to another, as well as to and from natural resources such as fish, wild rice, and blueberry harvest sites. The CGL also provided the RPCGCO First Nations community members with a staging area from which to engage in commerce with the settler communities of Keewatin, Norman, and Kenora. This allowed them to sell their harvests and purchase items not harvested, such as flour, chicken eggs, and chocolate bars (01SC and 06SC). Being situated along these main travel routes, the CGL were utilized by other communities aside from the RPCGCO First Nations members, such as the communities of Iskatewizagagan 39 Independent First Nation, which is over 20 kilometres east of the CGL, and Wabaseemong Independent First Nation, which is over 40 kilometres north of the CGL (06SC and 01SC). Habitation sites, plant collection, and land travel routes dotted around the CGL

indicate the islands themselves were also a source of natural resources as well as a place to partake in many LUOA.

In addition to learning about the nature of local Anishinaabe cultural landscapes (ACL) on the CGL, and the best way to record the lived expressions of those ACL, the researcher gained other valuable and unexpected insights beyond the individual and collective accounts of LUOA themselves. The first of these insights surrounded the abundant diversity of resources included in LUOA of local First Nations. Next, the temporal extent of LUOA in terms of the length of time in which the local areas have been continually occupied by First Nations peoples and how recently First Nations subsistence lifestyles have been active in the local area. Finally, the introduction of settler legislation, industrial development and residential school policies in the area are addressed, in terms of how they have affected the actualization of First Nations cultural landscapes of the local area; and more specifically how they altered the LUOA of the CGL. Each of these insights deserves to be recognized and further documented as they help to situate the ACL within the contemporary legal, policy and planning structure that has facilitated the realization of a dominant settler cultural landscape value within the region.

5.1.1 – Abundant Diversity

Before undertaking the data collection initiatives of this research the researcher was largely unaware of the volume and variety of resources offered by the local boreal forests landscape. It was assumed by the researcher that beyond the hunting and trapping of a handful of animals, and the harvesting of blueberries and wild rice, the forest offered little more by the way of food and medicine. After conducting the OGIW, the researcher's introduction to the forest's true wealth, it was made evident that this assumption was entirely unfounded. The examples of twenty-seven wild plants harvested, the nine cultivated plants, and twenty-eight animals hunted, trapped and fished that were documented through this research exceeded the researcher's expectations (see Table 4.3 p.70). This

realization of the physical landscape's abundance has led the researcher to develop a greater appreciation of the resourcefulness of the local First Nations communities. Beyond that personal appreciation, the ability of this type of research to highlight this abundance can broaden the scope of dialogue surrounding the protection of treaty rights of traditional land use.

5.1.2 – Temporal Insights

Temporal insight into the local ACL contain two closely related themes. The historical depth over which the LUOA occurred upon the CGL, and how recently subsistence lifestyles had been active on the local landscape, as well as how far those ACL reached towards the present day. In preparing for the field component of the research process the researcher became aware of the archeological evidence indicating a 7000 year history of continual occupation of the CGL by First Nations people (Vandervliet 2008). What was more surprising to the researcher however, was that after speaking with Elders it became clear that the main components of that ancient traditional subsistence lifestyle documented in the archeological record, being seasonal travel and diverse resource harvesting, was still remembered as a way of life and part of the participating Elders' lived experiences. In particular, one Elder had commented how she had spent her childhood moving around Shoal Lake harvesting things like wild rice and fish with three or four other families, and that these resources were never sold but used by those that harvested them. In fact, she further recalled that it was not until she was eight or nine years old, sometime in the mid-1950's, that she saw a 'white' person (09S). Being able to hear first had accounts of 'life on the land'; like the one offered by participant 09S, free from immediate settler society influence, was completely unexpected on the part of the researcher. What is more, these lived experiences of traditional subsistence, and their stark contrast to the recalled lived experiences of the Elders' later years, made the researcher more aware of how recording the lived experiences of this generation of local Anishinaabe as part of the research was not only documenting a change in the LUOA of the CGL but also a major shift in the cultural landscapes of the local First Nations population, that have been in continual existence for over 7000 years. This realization of a fundamental change in ACL, brought forth by the shared accounts of Elders, was further emphasized through other outside research with First Nations Elders from the surrounding area external to the CGMI and OGIW.

Over the course of this research process, the researcher had the opportunity to work with dozens of First Nations Elders from twelve communities around northwestern Ontario in projects outside the scope of the CGMI. This included an Elder-youth outing with one of the RPCGCO member First Nations, during which the researcher had been told in casual conversations that an alarmingly large segment of local First Nations youth from these twelve communities today have little knowledge or lived experience in traditional LUOA. This has effectively removed them from the cultural landscapes of their parents and grandparents, both spatially, and in substance. The recency of this change in local ACL, and that lived experiences of more traditional ACL still exist, has greatly altered the personal bias of the researcher. Namely, a bias that held this orphaned cultural landscape to be simply a matter of 'ancient history' from 140 years ago when Treaty #3 was signed in 1873. On the contrary, it seems that if recognized and acted upon through initiatives which value these lived experiences, such as the RPCGCO's cross-cultural partnership these attachments to the recent past have great potential to advocate change both within the First Nations communities cross-generationally, as well as crossculturally, in their relationships to their neighbouring settler society. Furthermore, it is this type of research, which records traditional knowledge of place from first hand experience, that instills a sense of legitimacy and cross-cultural reliability. Legitimacy that becomes essential when considering the nature of this knowledge and how it will likely have lasting impacts for the First Nations communities as it describes their connection to the landscape and helps to define traditional territory.

5.1.3 – A Narrative of Injustice

The findings of this research, which point to a changing local ACL on the CGL, are obviously part of a much bigger narrative; one that likewise exceeded the researcher's prior conceptions. As

phenomenology was methodologically chosen to guide this research project, and included the opportunity for ethical guidance, a deliberate reflection on the part of the researcher as to personal ego and biases is best served by an analysis of how the researcher's narrative picture of the societal influences on local ACL was informed. After doing so, a discussion of the researcher's phenomenologically established ethical obligations is presented.

The general narrative of the changing local ACL, taken away by the researcher from the research process itself, was informed initially by the review of academic literature and later by speaking with the First Nations Elders in and out of the official research interview setting. First reading Davidson-Hunt's (2003), Peers and Brown's (2000), and Usher's (2003) accounts of how local Anishinaabe family structures and their LUOA had changed due to their historical relationship to the fur trade, and to that of later settler society, highlighted many inequalities in the early settler-local First Nations relationships. What really stood out, regarding this historical relationship, was the willingness of the local First Nations to accommodate their settler neighbours, while conversely the actions of settlement unfolded with reneged commitments on the part of the developing social and political institutions of the settlers. Actions that directly limited the ability for local Anishinaabe communities to sustain themselves as so many previous generations had. This altering of ACL through processes of settlement was exemplified by the encouragement of First Nations, originally situated further east, to move westward to assist with the expansion of the fur trade. Further to this point, with Christian missionaries encouraging First Nations people to abandon their traditional seasonal subsistence lifestyles for a more agrarian way of life, and once an attempt was made to do so on the part of First Nations, it was not long until the arrangements made by First Nations to sell their produce were deemed illegal by the Canadian government in an attempt to protect the interests newly settled european farmers (Peers and Brown 2000 p.545). Understanding the impact these settlement strategies had on the ability of First Nations to sustain themselves sheds light on the importance of the reserve

lands they were left with. These lands were chosen because they offered bountiful resources, confirmed in the research, but they did not retain their natural characteristics once the waterways which fed them had been dammed for water control and hydroelectric production; another example of reneged commitments. Still, as the researcher learned in the interviews and the literature review, the First Nations harvesting lifestyles endured through a changed focus on fishing for sustenance and for commerce. This too was only short lived, relatively speaking, as pollution and settler land use practices increased mercury levels within the local waters, making the fish unfit for human consumption; thus destroying the last real industry left to the First Nations which could sustain their families and communities while still remotely resembling the utilization of a ACL that had existed for millennia (Usher 2003).

What also struck the researcher was how several of the Elders interviewed talked not only about the loss of these harvesting activities in terms of their ability to feed themselves, but also as a loss to their way of life and the way they organized their communities; the way of teaching and connecting older and younger generations. These changes to the communities organization were described through the course of the interviews as being augmented by the devastating legacy of the residential school policy, with its abduction of children from their families and from their way of life. It is especially these last two points, the polluting of the fish and the forcing of children from their families and communities as accounted by Elders interviewed, which rang most clearly as to why the traditional cultural landscapes of the local Anishinaabe for most living members are memories and stories, and not a reality on the landscape. This narrative of astonishing injustice clearly, in the mind of the researcher, places this research, and similar initiatives, firmly in Levinas' realm of ethical phenomenology; where the lived experiences shared, and the final research products produced, are not done to simply tell a tragic story, but instead to effect change in the contemporary setting both the research and researcher find themselves (van Manen 2000). As such, an overview of how these injustices are currently being

addressed both legally and politically, and how the methods employed and results gathered in this research project can facilitate a more inclusive decision making process, will act as a final discussion topic for this chapter. First however, the final two academic focuses must be adequately discussed as they highlight the usefulness of this research project in informing the aforementioned ethical responsibility. This theme of injustice, although a more specific type, also comes up later in the discussion (see section 5.3.1).

5.2 – Mapping and Phenomenology

The second academic objective of the research conducted was to explore the utility of mapping an individual's lived experiences during a phenomenological inquiry, as well as the value of identifying spatial patterns or themes amongst the various narratives of each participant. In terms of the utility of mapping in a phenomenological study, the value of maps used as probes to aid in the elicitation of memories was observed. The spatial patterns which emerged during and after the research process were useful too, both as a thread by which to sew together individual accounts into a common narrative, and to ensure that this common narrative blanketed as much of the landscape which it describes as possible.

5.2.1 – Comparison of Probes

As outlined in the earlier account of the data collection process (see section 3.2 p.43), maps can be employed as object probes to assist in participants' recall of experiences and details connected to different locations (De Leon and Cohen 2005). In addition to the use of maps, two other types of memory probes were also utilized. The first was participation in a group atmosphere, as in the OGIW, and the second was being out on the land itself, as in the final two interviews of the CGMI. Three types of probes are compared in terms of their individual benefit and disadvantage to the overall research process. Given that one of the primary objectives of the research was to evaluate the advantage of utilizing maps within phenological inquiry methods, it was useful to have had two other methods of

probing for comparison.

Each of the methods used to probe participants' lived experiences with LUOA was successful in its own right, but each differed in the nature and volume of the information obtained. No one method stood out clearly as the 'best' tool for conducting a phenomenological study of this type. The mapping interview method did prove, however, to provide the best balance of resources spent, volume of data collected and the richness of shared information about lived experiences. In terms of resources spent, those being; researcher time spent in data collection and processing, as well as the participants' time and funds used to conduct research, relative to the amount of data collected, the group workshop setting was the least resource intensive. However, in terms of addressing the lived experiences of each individual, as is the primary objective in a phenomenological study, the group probe method fell short. This shortfall becomes apparent when the depth of detail in both the spatial and thematic quality of the results were compared.

While the group workshop environment elicited far more individual feature types, as seen in Table 4.3 (p.70), the willingness of each participant to share more details of their personal accounts of their LOUA experiences on the gardens islands within a group atmosphere appeared to be limited when compared to the in-depth results of the individual mapping interview methods (contrast Tables 4.1 and 4.2 to Appendix A). On the other hand, the walking probe method, which sees the researcher moving out onto the land guided by participants, provided a high degree of details of lived experiences, but was found to be very resource intensive in terms of the number of participants engaged and the number of individual lived experiences recorded. An example of this richness in detail can be found in 12SC's account of their abduction as a child from the area immediately surrounding the CGL (see section 4.4.3 p.99). This kind of depth and quality of account, was linked to both the probing of memories due to physical characteristics of the landscape and the broadening of the spatial and thematic scopes that come into context by the mere act of traveling from the community to the study's

spatial focus, the CGL, and back again.

Another example of the quality and uniqueness of detail offered by the walking probe is seen in the discussion of physical evidence of the local ACL. Physical evidence, such as the presence of oak trees (see Figure 55), which can be indicative of an area utilized as a camp ground or resting place. The idea, as recalled by an Elder



Figure 55: Oak trees on a small flat island are evidence of a habitation site.

(12SC), is that where the remnants of a past meal of acorns harvested from elsewhere eventually result in a stand of oak trees, intentionally or otherwise. Closely related to the CGL, another physical feature on the cultural landscape which was gathered through walking (or boat) probes, was the observation of stones along the shore which identified places where loaded canoes were towed from the shore, described in detail by participant 12SC and marked as site N (see Figure 42 p.83). The nuanced nature of the information gathered in these last instances display how even the subtlest physical landscape feature can tell a greater story of life lived in that place.

This type of physical probing and gathering of information, allowed the researcher to have a first hand experience with the phenomenon Davidson-Hunt (2003) described in regards to cultural landscapes becoming visible only to an outsider when "you move within the landscape under the guidance of people who are intimately aware of the forms, functions and processes of [that] specific landscape" (p. 22). Overall, being led onto the land by the participants was very valuable to the researcher in terms of creating a deeper understanding of the connection between all the participants' recalled LUOA, the ACL, and the project as a whole. Compared to the efficiencies of the employed mapping interview methodology, in terms of resource expenditure, this more in-depth approach fell

short. For example, the two hour rule of thumb that Tobias (2009) sets out for a mapping interview was something that was not practical for walking probes which took at least twice that time to conduct. Furthermore, inefficiencies are recognized in the post data processing of the walking probes as well. Additional time was required to process photos and GPS points onto maps and record into datasets. The ability of a mapping interview method to create collective spatial patterns from the individually shared narratives was much more cost-effective.

5.2.2 – Spatial Patterns and Spatial Narratives

Another benchmark of a successful phenomenological study is it's ability to compose a common narrative from the individual experiences shared by participants surrounding a given phenomenon, essentially gaining a greater understanding from the whole of their contributions than can be realized when addressed separately. In the case of the CGMI this phenomenon is the ACL, centred on the CGL and defined by participants' LUOA; a phenomenon which emphasizes the importance of the spatial component of each participant's shared experience. It is this strong spatial aspect of the shared phenomenon that allows the process of collective mapping interviews is able to provide such a clear image of the common narrative of community and shared space on the CGL. Evidence of this can be observed in the final thematic and individual participant maps (see section 4.3 p.83), which together describe a reality using little more than the shared experiences of the Elders themselves. True to the phenomenological principals of their creation, these maps tell a story.

Over and above the communicative worth of adding a visual dimension to the telling of the participants' stories, mapping their lived experiences also offered a very practical value in the research process and the collections of the narratives themselves. Having digitized and compiled the participants' marked maps throughout the CGMI data collection process, the researcher was able to track patterns in the participants' shared experiences and identify areas absent of previously mapped features. This then allowed the researcher to inquire intentionally about the areas containing few or no

features to ensure the most complete overall image of Anishinaabe LUOA within the CGL. This in no way implies, of course, that areas which do appear to have no mapped values are in fact void of any cultural value. This point was also included in the disclaimer found within the bottom right hand corner of each the final maps' canvases.

5.3 – Recording and Communicating Shared Experiences Through Maps

The ability of the final maps to combine both visual icons with select detailed text allowed for a more complete description of the individual's and community's cultural landscapes on the CGL. This achievement was verified during the validation interviews, during which the participants confirmed their satisfaction with how their originally mapped and shared experiences communicated the reality of their lives lived on the CGL as represented in the final collection of maps. In addition, the maps themselves aided in this final review process making it easier for participants to view whether their lived experiences were accurately represented in the final product.

5.3.1 – Illustrating the Disconnect

While it was verified through participant review that the final maps were adequate records of the Elders' shared lived experiences of the CGL, the employed mapping process fell short in representing the disconnection of participants from the CGL that has occurred over the past several decades. As noted in Table 4.5 (p.98), the time periods that participants associated their shared lived experiences with the CGL spanned ranges of several years to several decades, which eventually had all ended sometimes in the 1980's. This theme of disconnection may be better illustrated in a graph which can not only be used to communicate the observed trends in the temporal aspect of the data collected, but also the trends of different scenarios such as seen in Figure 56's 'Ideal' line.

The ideal represents a connection between the participants and the CGL through lived experiences of those places within the spatial scope of the CGL which is unbroken, with their lived experiences extending to the present. The 'Ideal' line in Figure 56 is characterized by an initial rise as

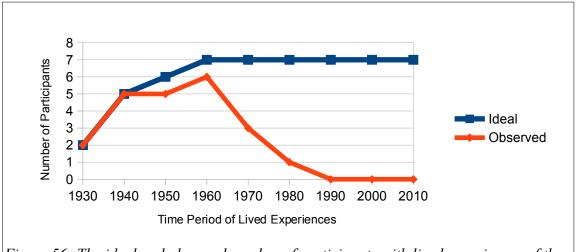


Figure 56: The ideal and observed number of participants with lived experiences of the Common Ground Lands mapped for each decade.

participants are born and being to have lived experiences of the CGL. As more participants are born the line continues to rise, eventually plateauing once all participants have begun having lived experiences of the CGL. In the ideal, this plateau continues to the present as all the participants have been able to maintain their special relationship with the CGL through uninterrupted TLUOA.

The 'Observed' line in Figure 56 represents the accumulative overlap of each individual Elders' time period of shared lived experience divided into decades. The curve of this line is similar to the Ideal in initial rise, for the same reasons as described above, the only deviation was the cessation of one Elder's lived experiences with the CGL from the 1940's to 1950's. From the 1960's to the present however, the Observed line is nothing like that of the Ideal. It is this discrepancy that describes the disconnection of the Elders and their communities' with the CGL, an important theme not communicated in the final maps.

5.3.2 – Epistemic and Testimonial Injustice

In terms of the maps' ability to act as an operational bridge for the cross-cultural communication of Anishinaabe landscape values amongst the RPCGCO partners, success can not be evaluated at this time. Circumstances beyond the research project itself have not allowed for a viewing of the final

maps by the RPCGCO in an environment in which their communicative value could be gauged or evaluated. In addressing the employed cartographic convention's value in communicating information in general however, the researchers personal experiences in the community can provide some insight into the project's ability to build an operational bridge for cross-cultural communication. A discussion of Miranda Frickers' ideas on epistemic injustice, which is the exploration of the link between ethics and epistemology (the philosophy of knowledge), aids in analyzing the cross-cultural communication of the results with the community at large (Fricker 2007).

When the sharing of knowledge occurs in a climate of injustice the person who is the source of the knowledge is wronged because of the ingrained discrimination on the part of the listener, who devalues the knowledge based on their false perceptions regarding its source. Epistemic Injustice seeks to uncover and understand such occurrences in order to rectify the situation as it is in everyones best interest that truth flows freely not be hindered by discriminatory perceptions (Fricker 2007). One stream of epistemic injustice which speaks well to the sharing of CGMI results is testimonial injustice. Testimonial injustice occurs "whenever prejudice on the part of a hearer causes them to attribute a deflated level of credibility to a speaker's words" (Dieleman 2012 p.256). People have prejudices, but that is not an injustice, the injustice happens when prejudices can not be alleviated once proven unfounded. A useful example of this comes up when utilizing memories of lived experiences as a source of truth.

Many people are not comfortable trusting their own memories as a reliable source of factual information. We have lists, journals, books, pictures and movies to act of sources of reliable factual knowledge on experiences. As such, it can be difficult for people to then accept another individual's account of an experience based solely on memories; especially when said experiences happened over an extended period of time. This scepticism however, does not denote an injustice itself, but only after a testimonial has been proven to be genuine, perhaps through a set of critical verification process' as

were undertaken throughout the course of this project, and it continues to be devalued that testimonial injustice has occurred. The personal experiences of the researcher in publicly sharing the premise and methods employed in this research project have provided great insights into the usefulness of western style cartography and process' of verification as a tool to highlight and overcome instances of testimonial injustice.

The intended goal of impacting land use policy making decisions through the mapping of individual lived experiences can elicit scepticism. It is easy for someone to question the legitimacy of utilizing documents created solely from people's memories to impact the discourse of land use policy decisions, even if there is no ingrained discriminatory feelings. In response to these apprehensions the researcher was able to explain the value of comparing independently recorded memories, through their common spatial components, as a means of verifying the veracity of the dataset as a whole. Including these easily demonstrable means of verification, being the recognition of spatial patterns in terms of external data sets (see section 4.1 p.68), internal patterns of lived experiences (see section 4.2.1 p.76) and the congruence of those historical and contemporary lived experiences on the physical landscape (see section 4.2.2 p.78), allowed for the verification of the individual memories thereby legitimizing the overall message of the maps, that being that the CGL are of great importance within the local ACL. Many of the discernments of those who the context and nature of this project were shared, appeared to be diminished and even dispelled after this objective verification was explained. The interactions and comments which arose in this communication process helped to remove peoples apprehensions of accepting memories of lived experiences as reliable sources of knowledge, and highlighted any testimonial injustices surrounding the knowledge being shared. In terms of this project's ability to aid in cross-cultural communication of landscape values between local Anishinaabe and settler communities within the context of the RPCGCO, by providing community members and decision makers the opportunity to overcome prejudices surrounding the ability of memories to provide credible evidence on which to base land use planning decisions, the mapping process can help to legitimize the goals of the project and the larger Common Ground initiative.

5.4 – Cultural Landscape Mapping Beyond the CGMI

"A constitution is the set of rules that define the political principles, the institutions, the powers and the responsibilities of a State. [It] is considered the supreme law of a state's legal system. It is more fundamental than any particular law, and contains the principles with which all legislation must accord." (GCPCO 2011)

As of 1982, the Canadian constitution has included three recognized types of governments within its territory, which are the federal government, the provincial governments, and First Nations governments. Section 35:1 of the 1982 constitution affirmed the recognition of aboriginal and treaty rights which existed at that time, which includes the agreement between local Anishinaabe and the Government of Canada outlined in Treaty #3 (GCJLW 2013). Why is it that a definition of constitutional rights has been chosen to open the final discussion of a research project which had no stated purpose of influencing treaty implementation? Just as the introductory chapter to this project required a historical perspective so too does it's closing, as the questions surrounding treaty rights are largely centred on the ability of First Nations to participate in their traditional LUOA; and it is the communication of those LUOA that is the focus of this study.

At the very foundation of Canadian settler social structuring, and the realization of its western worldview on the landscape, is the belief in the rule of law and the innate right of the federal and provincial governments to enact landscape values over Canadian territory. It is at this most fundamental level of Canadian society that the special recognition of First Nations communities and their individual citizens', entitlement to the right to express their unique traditional landscape values is situated. The realization of these rights however, has been slow and in a state of continual definition. Once enshrined in the Canadian constitution First Nations treaty rights, in theory, allow for the unimpeded engagement of traditional LUOA. As it is the responsibility of the settler governments to

safeguard these rights, the methods used in this research project provide useful tools and opportunities for moving towards this end. Several external examples of the clarification and codification of treaty rights into provincial and federal law have become apparent over the course of this research project, each emphasizing the importance of the spatial components of ACL and in some cases the imperative need to define First Nations traditional territories; a task which greatly benefits from the implication of the kind of mapping interview methodology discussed here. A summary of these can further stress this importance of ACL mapping for the definition and realization of First Nations treaty rights on the physical landscape.

The following examples display how the mapping of cultural landscape knowledge, and the traditional territories which are defined as a result, are being used to benefit First Nations communities in northwestern Ontario. A recent decision of the Ontario Ministry of Natural Resources to withdraw its official court appeal regarding a case where members of the Aroland First Nation in Treaty 9 is just such an example. The dispute between the First Nations and the province was focused on the right of the First Nations to build hunting cabins, a traditional LUOA, within their traditional territory without building permits (Goulais 2011). Another recent example of changing attitudes at the provincial level regarding the state's duty to First Nations treaty rights, is in how the Ontario Ministry of Northern Development and Mines is proposing changes to the Mining Act to accommodate for First Nations values on the landscape by removing culturally significant sites from potential resource development (MNDM 2011). This example provided a current instance in which the practise of CL mapping is being adopted as the mechanism by which First Nations knowledge is being applied to the western decision making process of government.

In August 2011, "Ontario's Superior Court ruled [...] that the province cannot authorize timber and logging if the operations infringe on federal treaty promises protecting aboriginal rights to traditional hunting and trapping" (Seglins 2011). Grassy Narrows First Nation, the Treaty #3 First

Nation at the centre of the 2011 Superior Court decision "has long argued it only agreed in 1873 to sign a treaty with Canada involving the Keewatin lands north of Kenora on a promise that the federal government would protect its traditional ways of life" (Seglins 2011). Although the Ontario Superior Court's decision, in favour of the First Nation, was overturned in a 2013 Ontario Court of Appeals decision, all had not been lost for the First Nation of Treaty #3. As the "ruling states that Ontario 'cannot take up lands so as to deprive the First Nation signatories [of Treaty #3] of a meaningful right to harvest in their traditional territories.' It also says the government must consult with First Nations" (CBC News 2013a). This newly defined responsibility to consult and build understanding between the province and the First Nation will greatly benefit from the cross-cultural communication enabled though the creation of ACL maps.

In addition to these provincial court decisions, a moratorium on geophysical surveying, and subsequent mining activities, has been placed on the traditional territory of an Ontario First Nations community in an effort to secure their rights to LUOA in that area. The moratorium was enacted in March 2012 by the Ontario government, where "23,000 square kilometres of land near Kitchenuhmaykoosib Inninuwug First Nation from future mining claims" (CBC News 2012). In response to the decision Kitchenuhmaykoosib Inninuwug's Chief commented, "It's our traditional territory [...] I hunted, trapped, I had parents born, buried there. There's a graveyard" (CBC News 2012). This decision to prioritize First Nations rights to LUOA "indicates that we are serious ... We want to give clarity to the province's mineral exploration industry and avoid future disagreements over the land in question" stated a Ministry of Northern Development and Mines spokesperson (CBC News 2012).

Finally, on the federal stage two Alberta First Nations are raising the issue of treaty rights and First Nations LUOA beyond the boundaries of their reserve lands. The Mikisew Cree and Frog Lake First Nations are requesting "a judicial review of the environmental provisions in two budget bills –

Bill C-38 and Bill C-45 – because of proposed changes to the Fisheries Act and the Navigable Waters Protection Act" (MacKinnon 2013). As the First Nations commented, "[w]e depend on ... our livelihood, our way of life ... out on the land. They're (the government) supposed to protect our land, waters, air. Now it's giving industry open season to our territory" lamented Mikiswer Cree Chief Steve Courtoreille (MacKinnon 2013). Furthermore, it was noted that "[t]he bands are basing their application on past Supreme Court of Canada decisions that have recognized that the government has a constitutional duty to consult with aboriginal groups about decisions that may adversely impact lands, waters and resources that are subject to aboriginal or treaty claims" (MacKinnon 2013).

Each of these cases point to a new chapter of cross-cultural discourse in the political sphere in which First Nations LUOA are a major theme. As such, the utility of mapping an individual's experiences through phenomenological inquiry becomes apparent. Furthermore, the ability of the cartographic conventions utilized in this research to function in the recording of shared experiences and in the communication of those experiences to others, as has been demonstrated in this research, can only be beneficial to the political cause of building a common understanding of cross-cultural landscape values as they exist over the physical landscape.

The stated purpose of this research was to aid in the cross-cultural communication of landscape values between local Anishinaabe and settler communities within the context of the RPCGCO. It was intended that through the mapping of Anishinaabe cultural landscapes the research would contribute to this communication. It was through the act of mapping but also, the reviewing of literature, the methodology employed, the stories heard and the relationships built, that it became apparent that this type of mapping can have significant value beyond the context of the RPCGCO.

Chapter 6: Conclusion

6.0 – Introduction

Through the course of this study a combination of western cartographic conventions, phenomenological principals and cultural asset mapping techniques have been applied in an attempt to aid cross-cultural communication of landscape values between local Anishinaabe and settler communities within the context of the Rat Portage Common Ground Conservation Organization (RPCGCO). The process of developing and conducting this project has highlighted the importance of facing and mitigating the inherent biases that can arise when mapping in a cross-cultural environment. Maps can be very powerful tools of persuasion and must be applied within an ethically and technically sound framework. That being said, upon completion of the final maps the apparent value of cross-cultural asset mapping was found to outweigh concerns of map author biases, especially when addressed through an appropriate research methodology and put through a rigorous verification process. In concluding this research three final questions warrant further discussion, which are: whether or not the theoretical foundation of the research process were adequate to carry the research into effective action, how the final research products can be applied to effect change, and what are possible areas for future study.

6.1 – Theory into Action

The literature reviewed prior to developing the research methodology set the context for the study by examining the historical and contemporary cross-cultural relationship between First Nations and settler communities in the region. The review

then moved into the cultural and technical nature of mapping, followed by the methodological approach of interactive adaptive and map biography interviews. Finally, the philosophical and methodological grounding of various phenomenological traditions were reviewed.

The researcher felt the reviewed academic sources sufficiently equipped him for the challenge of developing and conducting a complete research project. Despite this feeling of academic preparedness however, once the project was underway it became apparent that the research methodology would need to be flexible and adaptive in order for the researcher to secure participants, foster a comfortable relationship with community members, and to gather a significant data set that could be applied to the project goals and to verify findings. As such, it was determined that various avenues would need to be taken to access participants. The adaptive approach towards the overall project's research design led to a decision to include two previously conducted independent projects, the Ochichagwebabigoinning Lake Sturgeon Initiative (OLSI) project and the Obashkaandagaang Garden Island Workshop (OGIW). This flexibility opened the data collection framework to included methods other than map biography interviews, including walking probes and group workshops. As discussed in Chapter 5, the addition of other data collection initiatives created an opportunity for comparison of the methods employed during each one, and their relative usefulness. In the end, it was concluded that the map biography methodology described by Tobias, while still well suited to the project, must be modified in order to be employed as part of a phenomenological investigation of place; namely in terms of rigidity of interview

schedule development and thematic scoping.

The theoretical grounding of phenomenology's principals of ego management and the existence of subjective realities revolving around a single phenomenon were imperative to help the researcher bridge his own experience of a cross-cultural divide with portions of the research's subject matter. In addition, the clear understanding of space versus place developed during the literature review stage of the research, proved to be consistently useful. Furthermore, an interesting pairing of phenomenological principles of inquiry with the premise that place is not universally realized but is dependent on individual unique perceptions of space, had the researcher becoming aware of his own perceptions of the space being studied.

The historical research of the area helped to take this space/place dichotomy and ground it in a firm understanding of the contemporary and historical cross-cultural context of the local region. This provided the opportunity for the researcher to recognize that the theory was coming into practice on the Common Ground Lands (CGL); where the final maps provide lasting opportunity to transition individuals' understanding of this shared space. These correlations between theories, in addition to the informative findings that came out of the study, support a conclusion that there was sufficient relevant theoretical review to allow for a thoroughly grounded methodological inquiry into the landscape values of the Anishinaabe on the CGL.

6.2 – Potential for Application

The final results of the overall research project discussed were in Chapters 4 and 5 as to how they can effectively aid cross-cultural communication of Anishinaabe

landscape values in decision making process'. As the final research documents have vet to be applied in a land use management discussion however, it becomes relevant to explore ways this communication may be realized through real world opportunities which could be facilitated by the application of the results. Opportunities for the application of the final research results come from the maps themselves, which can aid the land use planning for the RPCGCO by communicating the spatial and thematic nature of the lived experiences of the partnering First Nation communities in a format easily utilized by land use planning decision makers. Similarly, the verification process along with the final maps provide RPCGCO members and decision makers, who may be sceptical regarding the accuracy and legitimacy of the shared lived experience, the opportunity to reevaluate their personal biases when reviewing the mapped knowledge. Like the information recorded on the final maps themselves, these personal reevaluation can also work to bridge the cross-cultural divide between the two cultures. Unlike these first two examples, which describe opportunities for cross-cultural applications, the final maps also provide a means to communicate the Anishinaabe cultural landscapes (ACL) of the CGL within the First Nations communities themselves. This opportunity for crossgenerational bridging becomes particularly significant within a First Nation's where the typical youth may not otherwise be aware of their community's greater connection to the landscape beyond the reserve boundaries.

6.3 – Areas of Future Study

Through the synthesis of various theories and methods of inquiry, findings were made through the course of this project to support the idea that using phenomenological

inquiry paired with mapping techniques could build opportunities for cross-cultural communication in a way accessible to all parties of the RPGCGO, this however, is not where the research should end. Instead, the findings of this research act to open up new research directions, such as the broadening of the spatial scope of the Common Ground Mapping Initiative (CGMI) to include the entire life of a participant; and not just the times their lives intersected with the geographic space of the CGL. Also, there is the potential for investigation of First Nations mapping initiatives from the perspective of epistemic injustice.

For some of the participating Elders of the CGMI the CGL represent the southern most extreme of their lived experiences of regular traditional land use and occupancy activities in the region, while for others the CGL are the eastern edge. As indicated in the OGIW results, and alluded to by Elders during their CGMI interviews, the sites indicated on the CGL represent only a small fraction of the places experienced through their traditional land use territories. Recording this valuable knowledge on a regional level would act to broaden understandings of ACL for their inclusion into the local land use planning decision making processes. Processes which dictate the physical realization of cultural landscapes in the area. The local circumstance of the region necessitates not only a broadening of spatial scope but also places an urgency on conducting this research. The necessity of recording this knowledge in a timely manner stems from the fact that the Elders' experiences shared during their participation in the GCMI interview process likely represent most of the few remaining lived experiences connected to thousands of years of traditional activities on the CGL; lived experiences that do not appear to be typical of the

generations they preceded.

While the broadening of spatial scope would simply act to extend the CGMI, the next recommendation takes potential research in a new direction. Miranda Fricker's (2007) recently developed concept of epistemic injustice provides excellent context within which to discuss the nature of the value this type of research has, as well as the significant role it can play in the ongoing development of the cross-cultural relationship between First Nations and settler governments, industry, and individuals. Testimonial injustice, briefly discussed in Chapter 5, provides a means of describing how the cultural landscape maps produced during the CGMI may work to affect the opinions and biases of individual land use decision makers. Further research into how these types of maps overcome prejudices among the recipients of the knowledge they strive to convey, as identified within the realm of testimonial injustice, would be of great value and importance. Specifically, such a study could be structure to investigate individuals' perceptions before and after viewing a set of cultural asset maps, with the verification process explained to only a portion of the participants.

The second opportunity for future study offered by the theory of epistemic injustice is in investigating how First Nations landscape values have been included, or marginalized, in the physical realization of cultural landscapes over shared space.

Hermeneutical injustice, another form of epistemic injustice outlined by Miranda Fricker (2007 p. 1), occurs "when a gap in collective interpretive resources puts someone at an unfair disadvantage when it comes to making sense of their social experiences." In the circumstances of this research project, hermeneutical injustice is characterized by the lack

of suitable means, both culturally and operatively, for interjecting First Nations' landscape values into land use planning and decision making processes. Realizing this transition of landscape values can not be adequately realized without necessary structural change in how land use options are evaluated, opens up an opportunity to examine whether cultural landscape maps could act as effective tools to transition culturally broader landscape values into reality. This line of study would then in turn allow for further exploration into whether the absence of First Nations cultural landscape maps are representative of the 'gaps' characterized in Fricker's (2007) hermeneutical injustice. Also, looking into the historical efficacy of the application of various type of crosscultural mapping, would have researchers not only recording efforts to map First Nations cultural landscapes, but also those efforts' ability to affect the outcome of their respective land use planning processes. Clarity on the variables that dictate the efficacy of such mapping initiatives in the realm of decision making processes would help to inform current and future efforts to include First Nations landscape values into the decision making processes of land use planning.

6.4 – Final Thoughts

Initially, this research set out to investigate the potential benefits that maps and mapping might offer a phenomenological inquiry. It was through this research process however, that it became apparent that significant insight may also be gained from the perspective of what phenomenology has to offer mapping. One such benefit was the fostering of a sense of social context around the activity of mapping itself, especially when considering the basic truth that maps have an inherently selective nature and an

often concealed persuasive ability. Combining this with an awareness of mapping's potential to profoundly affect peoples lives and lived experiences only compounded the need to place the mapping process in a social context. The affects that maps have on people's lives can span generations, touching not just those influenced by the creation of a map in the present, but also those in the future as well. This sense of generational awareness became particularly acute in creating Anishinaabe cultural landscape maps of the Common Ground, given how this place's relationship to the Anishinaabe people spans to the ancient past all the way to living memories today; memories of activities recalled by the Elders interviewed which have not been participated in by the generations that have come after in the same ways. The process of self-reflection offered by phenomenology has provided for this heightened degree of insight into the mapping work being done and fostered deliberate attempts to continually be aware of the uniquely diverse context of this research, thereby allowing for the historical, regional, social and cultural interplays to inform the map making process. This not only allowed for more informed research and cartography, but also personally assisted me in becoming a more informed and responsible citizen; where the lessons learned, and the perspectives gained through this phenomenological inquiry have changed my conduct and professional role as a researcher and cartographer.

Having been a part of the Common Ground Research Forum's larger mandate to support the RPCGCO through conducting the CGMI has raised questions for me concerning the obligations that exists with all citizens of a treaty nation such as Canada. It would be neglectful to regard this research project as only being relevant to the

RPCGCO and the local decision makers involved in the process of land use management. Instead, there is a necessity to reflect on the notion of the ethical responsibility for all the citizens of nations partnered through treaties. Specifically, a responsibility to understand and engage in the duties outlined by treaties and cross-cultural treaty-relationships; both historical and contemporary. Furthermore, this realization of citizen responsibility becomes even more apparent when institutionally the nation has admittedly fallen short of developing a just cross-cultural relationship. We all need to ask ourselves what it means to be a citizen of a treaty nation. Do we understand the relationship outlined by our treaties? Are we trying to understand the landscape values placed on our lands beyond our own? Can we recognize our personal and institutionally engrained prejudices within that relationship? And, what mechanisms are available to help us in the process of becoming more informed citizens? These are all questions that should be asked, and ones for which this research, and future studies streaming from it, could contribute to the conversations they elicit.

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APPENDIX A:

Table of Mapped and Unmapped Narrative Values

P_ld	F_Type1	F_Type2	F_Type3	F_Type4	F_Type5	Comment	F_ID1	F_ID2	F_ID3
01SC	residential school	plant harvest				"We moved to Minaki when I was about 12 years old and that's when I stopped going [to OFI] regularly, because we had a private teacher in Minaki and we had to start learning things. We had a tent where the teacher would come and teach us things in the summer like how to read I would still go [OFI] lots, when I would ever have the chance. Sometimes we would stay there for three weeks, because we would miss the spot. We had swings there and a see-saw, all home made, a table and cupboards nailed onto the trees to put the dishes and the food. We also had a big cell here too, where we would store our food. We would put the lard and the jam there. We never use to buy jam, we did our own. Cherry jam, lots of them. The cranberries must be ready right now. Right at the bottom of a cliff. Usually I got my snowshoes and duck rubbers and I go and pick them."	7		
01SC	buy/sell/trade					"We would go and buy some flour from Keewatin. They used to make slips with the flour sacks. We use to cut them up and wash them. Some kids use to like to do that, like underwear."			
01SC	buy/sell/trade	habitation				She remembers how her father used to have a little store on TI where he would sell "25lbs or four, and 10lbs of potatoes, and a lot of tea. My family ran the store right where the clearing is, right at the back. A big round tent. Sometimes for the whole summer. Joe Garrow would come and other blueberry pickers would come and drop off their blueberries to another tent we had there. My dad was a busy guy. My dad had his cheque book, and he was given an old barge and he would colled at lot of things and then pack it up onto the barge and bring it to town to sell. Mostly blueberlies and rice. It was a busy life. Getting before the freeze up we would put away the wild rice, all that we wanted to eat for the winter. We had to be prepared. I was 10 years old when he was running the store. He only ran it for two years. He was making good money anyways, but he would never 'gyp' his customers. He was a councillor at one time too."	11		
01SC	buy/sell/trade					The family use to sell sturgeon at the local fish markets in Kenora and Keewatin			
01SC	burial					"When people started disappearing, you know they had died because of that influenza. They were getting sick and I feared that that flu killed quite a few kids. I don't remember where on TI, I don't know where they buried that kid. He was a Hunter anyways. I used to play with him there. Its sad when kids die so young. I don't know how we managed not to get sick, but my grandmother kept giving us medicine. That was when I was 13. It was just that one summer we went back. We wanted to stay away until all that germs disappeared. I don't know how it came there. It was like everything was turned upside down, it was very sad. So we went back up to Minaki. But then the (inaudible) came, and that's another thing. I said 'oh my God whats going on'. There was the odd [person] living here [Ochichagwebabigoinning], maybe three tents. It was Roy Henry, Charlie Green and Andy Green. I said 'what happened' and they said there were quite a few in the hospital. They didn't have burial grounds, because they didn't have coffins, they just put them in canvas bags. All along where they are building houses along the shore. There are quite a few buried over there. Clarence Henry Sr. and I were walking around and he was showing me."			
01SC	e col ogical knowledge	hab itation	fishing			"We had a tent right here and then we would go around here and fish. It was more easier to fish off there. And there were hardly no bears around there. We never had seen a bear on that island, but there were foxes. But the bears swim and if they smell the food they could come over."	10		
01SC	e col ogical knowledge					"Now a days you see lots of wolves around Laurence's bay, but they never used to be there. We use to go that way and portage to the Anderson Road. And my dad built a bridge there all the trucks and horses would go."			
01SC	fishing	buy/sell/trade	settler relations			Sturgeon was also used to trade for other kinds for food with the non-First Nation farmers in the area. The Ukrainian farmers used to love the taste of sturgeon and would trade things like potatoes, carrots, and chicken eggs. Sometimes the kids would go to the farms and help collect the eggs in exchange for sturgeon.			
01SC	fishing	ecological knowledge				The sturgeons caught by the grandfather were so large (4-4.5 feet long), small cedar tug boats were made to bring them to shore. After the first sturgeons were harvested in May they would keep the eggs in jars and spread them around the river in cances to encourage spawning.			
01SC	fishing	habitation				Someone would always camp near where the hooks were set to check them. Once a sturgeon was caught they would go and get the whole family to help with the harvest.			
01SC	fishing	plant harvest				"I used to run along the shore when they would bring in the sturgeon, and everyone would help out. And we used to have a feast and everyone was ready with wild cranberries."			
01SC	fishing					Father stopped fishing for sturgeon in the 1970's because they knew something was wrong with the water.			
01SC	fishing					"We made a rack for the nets too. That's how we used to live, doing that all the time. Breakfast was ready outside [in the morning] and then [we would] get going, go fishing. We had to take lunch and then come home again. It was a lot of memories."			
01SC	fishing	travel				Although sturgeon was often caught near Dalles they also traveled quite a bit to find sturgeon in the surrounding area, as far south as Rideout Bay.			
01SC	fishing					"Lots of people were storing sturgeon, there never used to be a shortage of sturgeon."			
01SC	fishing					"We used to live up near Minaki doing the commercial fishing."			
01SC	fishing					Grandfather and father fished for sturgeon in the spring time and caught one every 2 weeks, 3 weeks at the most; 4 or 5 sturgeons were caught in a summer.			
01SC	future					"I would like to try and find the big hooks and try to catch sturge on again."			\vdash
01SC	future					Since the paper mill has shut down and stopped polluting, it would be worthwhile to try and bring the sturgeon back. It would be exciting to see the sturgeon come back.			
01SC	habitation	fishing				"My uncles were all over there (the waters surrounding TI and OFI), they were fishing."			
01SC	habitation	fishing	travel			"We camped in the same places in the summer time. But when we would go and look for sturgeon, we would leave there and come back about a week later. A lot of people would do that. My dad and uncles built log cabins all over."			

P_ld	F_Type1	F_Type2	F_Type3	F_Type4	F_Type5	Comment	F_ID1	F_ID2	F_ID
01SC	habitation	travel	10000000	T. A. LOTTO-1000		"I was about 9 when I would spend the winters [on TI]"Three or four times a winter we would go to TI, we had a log house with a tent roof."		OSSEC.	
01SC	habitation	travel			80	"In the fall we would go back there again and live there for a while, until it gets cold. If you want to live there you have a poor chance when it gets cold."			
01SC	habitation	travel				"Some people would come in canoes but I don't know where they were coming from. They would come and put up their tents. Mostly people from White Dog and Mackenzie Portage. They would camp where the clearing was over here in the middle of [OFI]. It didn't matter, they would even pitch tents over here. They would go back and make their own washroom just with ordinary sticks, that is how they used to do it. That's how we lived. You chop some trees down and make your own washroom."			
01SC	habitation					"My grandmother said there never used to be any logs there [in Rideout Bay]. They had two houses somewhere on TI, but she never told me whereshe was delivering bables [at that time]. For four or five years. She was a nurse. It was closer for her to live there. They would have a little shack with all the white aprons with the collars on them and the hats. I seen them. It must be still there, I would like to go there and take a picture of it. I know they had a whole bunch of kids there."			
01SC	habitation					Small groups of extended family would live together.			
01SC	habitation	place name			S	"Kerry Green was here a good fifteen years with his parents, Andy and Charlotte Green, [who] were our neighbours there."	6		
01SC	habitation				1 1	"We camped so we could be near to the shore. There was always ice and it wasn't far to come across."		1 1	
01SC	habitation					"We were all over the [islands back] then, [Anthony McCloud] was on the other side."			
01SC	habitation					"All the reserves (Obashkaandagaang, Ochichagwebab igoinning, and Wauzusk Onigum) were together then. It was nicer then and I miss that. Everyone got along good. But now its lonely sometimes, you feel like you cant go and visit people. Too many dogs, they say 'too many dogs not enough Indians'."			
01SC	habitation					She remembers Alfred Sinclair's parents, and Kay Williamson's parents living on [OFI and TI].	66		
01SC	hunting/trappin 9				20	"I was 6 years old, and I was very interested to learn everything, and I went with the trappers. I use to have my rabbit fir moccasins and that's how I learned how to skin a beaver?"			
01SC	hunting/trappin g					She remembers how she was first taught "to skin a mouse, and how to take the feathers out of a little bird. And we had lots of turtles there on TI, we raised quite a few. We found 80 of them but they were too small, and we had a big long box (about 5m long) and we fed them and then when they were bigger we released them."			
01SC	hunting/trappin g					"I was helping the trappers making fire. I would go with the trappers to TI when I was six. My grandmother made me rabbit moccasins to keep me warm."			
01SC	hunting/trappin g					"[The older people] showed us how to trap."			
01SC	hunting/trappin g					"I even ate porcupine, yeah it was good."			
01SC	med idin e					Sturgeon was used as a medicine to cure whooping cough, and would also be made into a soup for bables. The grandmother would sometimes fry sturgeon and store the drippings in jars to spread on bannock and feed to people when they were sick.			
01SC	plant harvest	habitation				We used to plant carrots and potatoes. The gardens were back over here, because it was more away from the people. There was nice black earth here. By September they would be ready. We would only have to go a few times to check on them. We built coups around them to protect them. The turnips didn't turn out too well, we must have made a mistake. That's how we lived. My dad had planted some tomatoes but they were stolen before they were ripe. Families had there own gardens. We would go around to see what different people would do and it was amazing. We made a birch bark cance that lasted about three years. Cedar is good too. We all helped out, we would shellack it and make homemade paddles. Now you go to Canadian Tire to buy them. Its so nice to make your own."			
01SC	plant harvest	travel	ecological knowledge	settler relations	ade	"Sometimes in July we would take off from Minaki there and make a living picking blueberries. We would clean them off, and then in September there used to be rice. Now its getting a lot of that water. We used to thrash rice. Not around TI or OFI but around Locke Bay, there used to be a whole bunch of rice there. We would camp on OFI and then pick the rice up there. We went there to look last summer and there was a little bit of rice but there was too much water. We would bring the rice back to OFI to clean it up and bag it up and then we would bring it to Shoal Lake Wild Rice to sell. Ben was buying back then, fish too. He was so kind."			
01SC	plant harvest			-	3	"There used to be wild plums too, but I went back there and I couldn't see any."			
01SC	plant harvest					"Some people were picking blueberries on the island but there were so many people, people had to travel over night to get berries. Like in Locke Bay."			
01SC	plant harvest	habitation			2	"The most interesting part in my life, when you get up in the morning, you get all ready and set up with your canne to go. It was a nice spot, you can just sit around and say your prayers and then you could go anywhere. That's what I loved about this, that's why I call it my paradise place. Everything is just growing, you know, chock cherries, raspberries no matter where you went over there."			
01SC	physical	fishing				"If went back there and walked around seeing all our old stoves where we used to live. I was trying too look for that old hook we used, it was made of steel but now its gone. We used to use them for the sturgeon. You have to have a certain tool to get them."			
01SC	physical					"We used to play around there quite a bit. We have markings all over the place. The day we were born and who was living there. On the rocks but I'm not sure if they are still there."			
01SC	physical					"Everything has changed. We were looking at that TI, oh my God, the memories and the big long stove is still there. My dad had bought it from that old man, I still see him walking around, who owned the hardware store."			
01SC	physical					Sturgeon was mostly eaten in the summer but would also be stored for winter by digging deep holes (nearly 7 feet deep) in the ground, where it could be kept cool.			

P_ld	F_Type1	F_Type2	F_Type3	F_Type4	F_Type5	Comment	F_ID1	F_ID2	F_ID
01SC	place name	Touches a	1000000	0.7070000	8	"Ka boot ta win" the name of a little island somewhere around TI.		S	
01SC	place name				9 0,	"I remember seeing sheep all along the shoreline here (O chichagwe babig oinning), but no one believes me. That's why they call this the Dalles, because there were lots of sheep here at one time."			
01SC	residential school				3 #	"Some kids had to go to school, and it was sad for them because they got taken away and those are the ones still trying to come back, to transfer."			
01SC	residential school					"When school was out we would go to TI and when school started we would go back."			
01SC	story/legend					"There was a big fight with thirteen Indians from Saskatchewan came here to fight the Indians here. My grandmother remembers that. They had a chance to see that and would tell us about that. By Keewatin bridge is where they used to wait for people. They would take women and tie them up. So my grandmother and her sister were paddling and they heard this whistling and they saw this Indian laying by the shore all bloody, and he was trying to ask them for some water, and the old lady in the back who was paddling finished him off. We don't know how many people here they slaughtered. That was before I was born."			
01SC	residential school					She remembers when she was 12 years old, she would come to TI in April when the snow and ice would be gone. "Sometimes we would spend the whole summer there until August. In the meantime we were doing that school, before we would go to St. Mary's school."			
01SC	settler relations	physical				Everything was so nice, not because it was close to town, just because it was lots of fun there. We were so lively and people and we used to go and visit eachoter. Go and have some tea and sit around and talking about religion. We used to go there and gather up when they would catch the sturgeon and we would all sit around and admire it. The rock we would put between two trees, it was our marker point. We would put be woo live to see this, and I have. Our old shoes are there where we lived.			
01SC	settler relations					"By the mill there used to be a big siren, at 12 o clock, that was our clock."			
01SC	settler relations					"They were planning to make birch log houses [on TI] at one time. Because it was easy to buy groceries and not too far from the store. You just have to walk up to the mill. And go and see the teacher sometimes."			
01SC	settler relations					"A lot of people know [OFI] very well, because I know there was a lot of people from the farms and they set up there tents there too. Those farmers would leach us how to plant and give us boxes and stuff like that. Whatever they had like seeds and gunny sacks, and tents sometimes, Hudson Bay blankets. Griffith, Bill Seagerson, Norlean, Anderson, Matt Morrison, there was quite a few, and lots more. My old canoe friends. I would have been 10 or 11 years old. I still see them sometimes and they still know are names. I didn't recognize your grandfather (Ben Ratuski). We used to bring a lot of fish there. They use to call it the OCA docks back then."			
01SC	travel	habitation	buy/sell/trade		0	"We would move [to TI] around April, as soon as the ice and snow was gone. We would stay here for two weeks, but my dad would stay longer with my uncles, because there was lots of livelihood here to feed yourself. This was a main spot."			
01SC	travel				3 3	She remembers traveling by dog team a lot with her parents and grandparents in the winter.			
01SC	travel					"We always had a little cance. And we would always portage Its really nice when we would portage because we could get around anywhere we needed They had little motors, that's what they used to have."			
01SC	fishing				8	Sturgeon was a big part of the whole community's life. During childhood there were about 300-400 people living in the area and a lot of people were fishing for sturgeon.			
01SC	habitation					"This was a paradise place for me. Sometimes I go there and praywe lived there for quite a while."			
01SC	habitation					"This was our favourite place, our paradise place."			\vdash
01SC	habitation		_			"I know this Tunnel Island from head to toe."			-
01SC	habitation				S 90	"All the things we did as we grew up there, I will never forget that place. And I'm sure all of those things are still there that made me so happy."			
01SC	habitation					"I was so happy to be with my parents, because they didn't start drinking until we were old."			\vdash
01SC	habitation					"A sad memory, was during that war because we had to get stamps. It was very hard and very sad, and we were told the water was polluted it really broke everybody's heart. It was just like you didn't know what to do anymore. But the reserve was never deserted, there was always a couple of people here who didn't want to leave, just like my dad. You see he made houses. We used to live across the island with old Roy Henry. They made a house for him there. We used to live with him there. There was no electricity, but we made a big garden on one of the islands.			
01SC	fishing				8 8	Sturgeon used to be boiled or smoked. The grandmother would split open the sturgeon heads and bake them with wild onions on top. The sturgeon eggs would be mixed into bannock to make a type of cake, which was sometimes used as birthday cake.			
01SC	fishing					There were many jobs involved with the sturgeon harvest such as making and mending nets, sharpening hooks, and building drying racks. Watching and participating in the sturgeon harvest, along with other food gathering activities such as harvesting wild rice, was a way the older people could pass knowledge down to younger generations. All of the children participated, and took their turn doing different jobs; there were no idle teenagers at that time.			
01SC	fishing					Sturgeon was always served during special feasts or ceremonies, such as Treaty Day when families from all over would gather in Rideout Bay and share food. Sturgeon was also what was eaten for Christmas dinner.			
02SC	habitation	travel				He left the Ochichagwebabig oinning reserve and OFI around 1969, but would still see people camping there on his way to Minaki. He was working in Minaki for a family that had a small village called Kelly's Town.			

P_ld	F_Type1	F_Type2	F_Type3	F_Type4	F_Type5	Comment	F_ID1	F_ID2	F_ID3
02SC	buy/sell/trade	F-025983 - 0	F-029800	C 27 (2003)	5.37.5877	His parents sold fish, wild game, pin cherries, black berries, goose berries, choke cherries, and blueberries in town. They would focus mostly on what they could sell to tourists. Certain people would can the berries, and preserve them for their winter feast. Sometimes people would give sealed glass jar of jams and other preserves.			989
02SC	ecological knowledge	settler relations				"All the trees on OFI are over 250 years old, those white pines. That's how the landscape was all the way from LOW all the way up to Minaki and White Dog, was those big white pines, you would only get the odd spruce or jack pine. But the landscape changed quite a bit because they didn't do the proper replanting after harvesting. All around the Dalles used to be white pine. The railroad and highways used all the white pines and then they figured they would just grow back but other trees took over. Poplar is what takes over now. Paper mills are really harvesting small trees now."			
02SC	e col ogical knowledge					Attention should also be paid to the shallow waters, and in the wild rice stands, where the young sturgeons are a likely to seek refuge from larger predatory fish.		, ,	
02SC	fishing	ecological knowledge			8 0	The dams break up the fish's natural migration because the waterways they block were a major spawning route.			
02SC	fishing					"We used to see a lot of fish spawning up the river around Norman dam stirring up the rapids." While in small boats propelled with 8-10 hp motors.			
02SC	fishing					Does not really remember much about sturgeon while growing up, as his family mostly ate bullheads.			
02SC	future					He recommends that a fishway along the portage should be built for the fish to move between the Winnipeg River and LOW. He recommends that underwater cameras be placed in the narrows to search for sturgeon. He recommends that camping trails and a bridge over the fishway be constructed to promote tourism. He also thinks that open camping areas for people who wanted to put teepees, as well as more structured camping sites where tents could be put up on platforms would be a good idea. "All of these transform lines make a route and then make a bridge to the old Hudson Bay trading post, if they wanted to keep it historical. And then people could camp around there like Anishinaabe Park and then a little store to sell souvineers and milk and butter and things."	56		
02SC	story/legend	7 3				"My dad told me about the old Hudson Bay camp."	51		
02SC	habitation					He remembers the Peetanaquips from Obashkaandagaang and three different Henry families, along with Pete Savage lused to each have there own campsites here.	7		
02SC	medicine	fishing				Sturgeon is also used as a medicine, as long as you don't eat too much.			
02SC	plant harvest	buy/sell/trade				In the mid 1960's is when he remembers people picking blueberries around TI and OFI, "that's how I made my money when I was 10 or 11. I would pick about four baskets and make pretty close to 80 bucks which was a lot of money back in 1965."			
02SC	plant harvest	settler relations				"I've been logging ever since I was young."			
02SC	plant harvest	settler relations		-	0 0	"There used to be rice around TI and OFI until they built the [Kenora and Norman] dams."		1	
02SC	plant harvest					"All along this ridge is where I was picking [blueberries], but now its mostly real estate, which is over ruling the First Nations. If [property owners] see anyone picking berries they call the ministry." When he was younger, "anyone who wanted to pick blueberries could if they wanted to."	54		
02SC	plant harvest				1 7	"People still pick berries around where the Husky gas station is."	55	1	
02SC	physical	habitation			6 - 33 3 9	Old campsites can be seen today because the land is still absent of trees and thick undergrowth. "Tourists use those old sites now because they are high and already cleared."			
02SC	place name					"I wouldn't know any place names, only the people in their 70's and 80's would know about that."			
02SC	residential school	travel	plant harvest			"We would stay there [on OFI] until school was open. As soon as school was out we would go to OFI, and in the fall we weren't there [though], we were at the reserve and they would have to come and get us because we used to pick rice in the fall, which was around the reserve."			
02SC	habitation					"It was a good campsite; cleared and flat, not too much of a slope."	114		
02SC	settler relations					He remembers the log booms that would run the length of the bay, and how the bay itself would be filled with logs.			\vdash
02SC 02SC	settler relations settler relations					This area was all filled in, man made, in the 1970's Sturgeon populations were decimated during the late 1800's and early 1900's because of over fishing. The sturgeons were burned by the railroad to generate steam. Sturgeon eggs were also more valuable than a gold mine to investors during that time.	48		
02SC	travel	plant harvest				"You used to get Mackenzie people coming along here picking all the berries and then they would sell them along the road. That was their passageway along the tracks, they would just go up into the bush and pick berries. The track would have been a "highway" for people from Mackenzie Portage to get into town."			
02SC	habitation				8	People used to wash their cans after they used them so the bears would not come near their campsiles.	28	6	
02SC	habitation				3 8	He remembers his dad getting "kicked off" OFI and moving to a smaller island just off shore from OFI.	114	3	
02SC	habitation	travel			·	He remembers how children used to cut across the bay and walk the boon (30-50 yards). "Put your clothes on a log, swim across and walk the boon to town[The adults] figured they could keep us [kids] on the island, but we would skip to town."	36		
03C	habitation	. ×				His home reserve is on Big Island, but he was raised by his grandparents who lived here. "I was brought up by my grandfather mostly, on Quarry IslandWe would come to TI in the winter."			
03C	burial				() v	"There are graves there [on TI], and my grandfather would say 'don't play around there'."	13		
03C	fishing					Used to fish with nets while living there, but only remembers setting nets west of TI, more in Keewatin Bay.			
03C	future					He mentioned that TI is the place where he and his wife have been promised a house.			
03C	habitation					He used to live with dad on TI in summer while he was "still single", around 15 years old.	14		

P_ld	F_Type1	F_Type2	F_Type3	F_Type4	F_Type5	Comment	F_ID1	F_ID2	F_ID3
03C	habitation	settler relations	Porton			"People used to live right where they are building those new condos (Headwaters), and they used to live right where the oty of Kenora is. We used to live in town, but when the white man came they pushed us out. The white people think they own the land, but this is our land, free. But they moved here because they have money."			
03C	habitation	travel				"We didn't live there on TI all the time. Even my dad, only a month or so and then we would move on. We used to travel by cance. We got lots of places around here in Keewalin. Nothing in here around TI or OFI."			
03C	habitation					"That TI is the only place I used to spend time over here."			
03C	habitation	1			9	Dan Copenace's summer campsite.	14		
03C	habitation					Dan Copenace's winter campsite.	15		
03C	habitation					"Lots of people used to live there on TI."	10.700		
03C	habitation	3			3 8	Walter Redsky from Shoal Lake may know something about Tunnel Island.		3	
03C	habitation					He remembers spending most of his time on TI getting ready for logging.			
03C	habitation	3			8 8	He remembers living here] in the summer time, with his grandparents.	16	17	
03C	habitation					"I never heard of anyone ever living around the tunnel or bridge"			
03C	habitation					He does not remember seeing anyone else living on TI, other than his family, including his parents and most of his aunties.			
03C	habitation	1				"We used to spend time in Rideout Bay."			$\overline{}$
03C	habitation	3				His father only lived here only in the winter time.	15		
03C	plant harvest	fishing				He remembers his grandparents only fished, and did not collect plants while on T1.			
03C	plant harvest	habitation				He remembers collecting wild rice to the west of TI. "[t] here was lots of rice there. That's where lots of people used to live."			
03C	place name	story/legend				"Keewatin' means 'north' in [Ojibway] because the rat went north. The rat portage is in Keewatin, not over where the reserve is (Wauzhushk Onigum). Along the portage you could see the rat's foot prints in the rock and they are heading north."			
03C	place name					He can not remember any Ojibway place names for TI or OFI, but commented that he knows lots of places to the west of Common Ground islands.			
03C	story/legend					"My grandparents used to live here all their lives. Even Sioux people used to fight here before my grandparents [were alive]. There were some [people living here], maybe my grandparents' moms and dads, that's the time they were fighting those Sioux people. Because there were lots of hills, that's why they wanted this area, over there it was flat country. That's why they fought us, and then we wonLots of places where my grandparents used to talk about, they were told too about the Soiux Indians they weren't there but they were told. We don't have that anymore, to fight one another."			
03C	travel	plant harvest			DX 122	"We used to travel north of TI to go towards the Dalles. Sometimes when your rice picking, that's the time when you travel. We used to go all over by cance. I would travel with my wrife, my kids were just young at that time. I would have been maybe 25-45 or 50. Most of the places we used to go was for willd rice, where ever it was. Some times we used to go out onto the big lake (Lake of the Woods) when we had those big boats with motors on the back. But we used to have to sleep over there and then get rice and then you really load it up with the rice and then come back."			
03C	travel					"I used to walk to get to town, but that trail isn't there anymore."			
03C	travel	· ·			3 83	"The water is running all the time, that's why there is a dam there. It doesn't freeze so we had to use canoes even in winter."			
03C	travel					"When my grandparents lived there we used to walk here, and there was a portage hereMy late uncle used to paddle here and then so over here down to take of the woods."	31		
03C	travel					"Years ago I suppose they used to paddle over to Kenroa, but I didn't paddle because I was already traveling by cars [from Obashkaandag aang to Kenora]. Those were the hard times my grandparents used to say, when they had to paddle everywhere."			
03C	residential school					Some kids had to go to school, and it was sad for them because they got taken away and those are the ones still trying to come back, to transfer.			
048	e col ogical knowledge					Sturgeon like a sandy bottom			
05SC	buy/sell/trade					He recalls how in the past the liquor store would not sell alcohol to First Nations people at all. "Just the boofleggers [would sell us alcohol], the white mans, and they didn't charge much 10 or 7 dollars [for a bottle of wine] at that time."			
05SC	burial	hab itation				Early one morning he remembers he lost one of his babies on Tunnel Island to crib death. It was back in either 1962 or 1963, she was only two or three months old.			
05SC	e col ogical knowledge	fishing	travel		× 5.	He remembers there being a lot of sturgeon in the area and everyone on the reserve would go after them between early May and August.			
05SC	e col ogical knowledge	fishing			50	Sturgeons are very sensitive and will not go near an area where there are a lot of people, or to an area that is not clean. To catch sturgeon the hooks would be set far enough from the campsites so people would not scare them, but close enough that they could be watched, to make sure no one was stealing. Also, the nets and lines have to be kept very clean, and the bail has to be changed every 4 days or the sturgeon won't come. When the bail is changed the old bailt can not be left in the water or the sturgeon won't come. Sturgeon like muddy bottoms, so before hooks were set in an area a large rock would be lowered down to the river bottom on a rope and then brought back up; if the rock had mud on it that's where the hooks would be aset. Hooks would be anchored to the shore between the rocks and set about 30 to 50 feet from the shoreline depending on water depth Hooks would usually be set at a depth of 10 feet			
05SC	e col ogical knowledge	travel				Sturgeons do not stay in one place for long, so people had to keep moving around to find them. If they did not catch anything for about a month they would move on.			

P_Id	F_Type1	F_Type2	F_Type3	F_Type4	F_Type5	Comment	F_ID1	F_ID2	F_ID3
05SC	fishing	buy/sell/trade				If the sturgeon was going to be sold at the fish market they would keep them alive overnight by stringing a line through the sturgeon's mouth and gill, and then anchoring the line to shore. Early in the morning the sturgeon would be killed and gutted and then taken to the market by canoe. All of this needed to be done very early so that the sturgeon would stay fresh.			
05SC	fishing	ecological knowledge			- 0	The sturgeons being caught were about 4-4.5 feet long and would require a lot of help bringing them to shore.			
05SC	fishing	habitation			20	When a new line of hooks or net was set most people would leave an offering of tobacco, and even when sturgeons were plentiful they were not over harvested.			
05SC	fishing	settler relations			- 6	By the 1970's it was really difficult to catch sturgeon, and most people stopped trying to catch them.			
05SC	fishing	8			72	A large hoop-snare tied to a thick stick was used to move the sturge on to shore, and 2 canoes were needed, with 2		5 %	
	-			 	- 5	people per canoe. Once on shore anyone who wanted to come and help could, it was not just family. Every part of the sturgeon was eaten, even the head. It was boiled or smoked but not fried. A lot of people used to			
05SC	med idin e					smoke it and dry it for winter. A soup made from sturgeon, potatoes and wild rice was used as a medicine for sick people.			
05SC	place name	hab itation				"I would listen to them when I was young, lots of fun, ladies dancing around, lots of fun, that's where everyone would be singing and having a party, it was called the Old Drinking Pine. There is a cement pad in there some where."			
05SC	settler relations	buy/sell/trade				He remembers going door to door to sell fish to people in town. "You could get more than selling it at the fish market, around 1 dollar per fish (two fillets). The people would call and tell their friends to come and buy fish, or they would give you a house number and you would go there and knock on the door and sell fish. They had to watch out for the game wardens though."			
05SC	settler relations	future				Pollution from the paper mill made the sturgeon move further north to cleaner waters. It's a good idea that they are trying to bring the sturgeon back now that the mill is gone because now the sturgeon will stay and survive.			
05SC	travel	story/legend				"Some people see ["Mc Mc Gwc Shig"] by canoe, but when you go closer you don't see them any more. That's why we put tobacco in there. Even when we go to Kenora by boat we leave anything we have in the canoe into the water. They ask for tobacco, or if I had a nice sweater they would ask for it."			
05SC	fishing	habitation			98	The sturgeon harvest was central to family and community life on the river between Rideout Bay and Laurence's Bay. When a big sturgeon was caught in the summer time it would be out up and shared with everyone. There were also lots of jobs around camp that were shared between families such as making and mending nets, and smoking the sturgeon meat.			
06SC	story/legend					As a child he lived with his grand mother who taught him about ceremonies and the seven teachings.			
06SC	burial					"There was one child that had past away, but that's all I remember. We were not allowed to go near where they passed away, the kilds where not allowed to go there."			
06SC	fishing					People went fishing with nets all the time around TI and OFI for walleyes and jacks.	41	42	
06SC	habitation				0	"Most of my young days were spent on OFI, but a lot of people spent there time on TI, like Antoinette Green, but they had to move because the iron horse was coming."			
06SC	habitation				- 0	"There were all kinds of people living there from Shoal Lake, Dalles, and Rat Portage Williamson used to live here, Greens here, and Pitonyquibs here. I don't know if the ashes would still be there where the fires were."	5	6	3
06SC	hunting/trappin g	settler relations			- S	He grew up on the family trapline with his mother, and in logging camps during the winter. In the summer they would work at tourist camps cleaning and guiding.			
06SC	hunting/trappin g				- 3	People from the Dalles were likely trapping and hunting small game in the area because they lived just up the river.			
06SC	plant harvest					"I remember walking up in the pines, there were blueberries there, but that's not the only place people picked blueberries."	43		
06SC	plant harvest				86	"The old people were picking that plant that grows under water, weekay. That was the traditional medicine for Indian people. They went into the marshes [MP8]."	2		
06SC	place name			-	- 6	"I didn't know of any traditional place names. My parents called OFI something but I cant remember."	_		\vdash
06SC	residential school					He went to residential school but feels he did not learn anything because "It didn't matter if you were right or wrong you still got punished."			
06SC	residential school					"When I [attended residential school] I had a friend called "White Man", and Indian boy who had blond hair; my best friend. We were roughed up and once, he got knocked out one day and then I never met him again. I don't know what happened, but I heard that he ended up in hospital and died."			
06SC	residential school					"I must have been about 6 years old [when I spent time on TI], just before I went to residential school. The last time I went back [to Ti] with my family I was 16. They had a tent there." He spent every summer on OFI with his parents.			
06SC	travel	habitation				He remembers living in the Kenora area most of his life on the Obashkaandagaang, Wazushk Onigum, and Ochichagwebabigo inning reservations; as well as on Paul Island, near Ena for blueberry picking, and the city of Kenora by Old Fort Island.			
06SC	travel	plant harvest				Blueberry picking season was from the end of June to beginning of July, when the Elder would travel north near Ena with his and other families. Next was wild rice harvesting and then in the fall they moved back to Obashkaandagaang.			
06SC	travel	plant harvest			- 8	Wild rice was usually harvested on the Winnipeg River north of OFI.			
06SC	travel	settler relations				While living on OFI, "[o]nce a week my parents would go to town. They would paddle across the bay and then they would walk into town I would [sometimes] go with my parents to town."			
06SC	travel					"You cant travel to Dalles during the winter time because of the ice, cold and current. Lots of people died."			
06SC	travel					"We would travel through the northern channel to Keewatin and then through Lake of the Woods. We would go close to town to go up to the Dalles, but there was fast moving water around this way. We would go by lake all the way."			
06SC	habitation	settler relations		1	100	"It was a happy place to live. Everyone was happy. My parents and my brothers. The fishing was good, and the food was good, good fish fry and blueberries. And we liked to go to town to get chocolate bars."			

P_ld	F_Type1	F_Type2	F_Type3	F_Type4	F_Type5	Comment	F_ID1	F_ID2	F_ID
06SC	habitation	travel				"I remember Moses Henry from Dalles, he was a band councillor. I remember my grandmother telling me to go and pick him up, because someone was calling, we were just little kids and could hardly paddle a cance, and we picked him up. I guess he went to town and he was trying to get back to OFL"	1	25	
06SC	plant harvest	fish ing				"We ate a lot of fish, and lots of blueberries."			
06SC	habitation					"I remember going to a meeting with my dad. There [was] a lot of people there. I know Moses Henry [was] there. There were a lot of old men there. Redsky from Shoal Lake was there too, but he lived here (Obashkaandagaang) because he married a woman from here."			
06SC	habitation	travel				"Moses Henry went into town one time but someone borrowed his canoe so he couldn't get back when I was about 6 years old, that's why he was yelling."	25		
06SC	habitation			-		"I just liked that place where we used to live."			⊢
06SC	habitation					He remembers there were a lot of children on OFI that would all go swimming just off from where the tents were. "We would play a ball game in the water, and there was an big old snapping turtle that would swim around where we were. We weren't afraid of him, he didn't bother us he just wanted to be part of the game."	4		
078	buy/sell/trade	travel				The family would go down to Old Fort Island about 3 or 4 times a summer to sell sturgeon and other fish at the markets in town. They did not need to follow the sturgeon, they used to catch them very close to their home on the Dalles.			
078	buy/sell/trade					Sturgeon was traded with other First Nations from White Dog and Shoal Lake for different types of food, herbs and medicine; there was never any money involved.			
078	fishing	ecological knowledge				While growing up at Dalles, 4 or 5 sturgeons would be caught in a year. The boats used to catch them were about 10 feet long, and the tails of the sturgeon would be sticking out the backs of them.			
07S	medicine	fishing				The spinal chord of the sturgeon used to be cut up into small pieces and shared with everyone, as it was said to be the part of the animal with the most medicine. The oil from the sturgeon was also collected for medicinal purposes. Once the sturgeon was cut open the grandmother would scrap the oil out and keep it in jars. The oil was thick like motor oil and would be used for different things like arthritis. The older ladies would also put it in their hair, and the hair of the children.			
07S	physical					Grandparents would smoke and dry the sturgeon meat and then salt it and pound it until it was very thin, like paper. After this they would store in deep holes dug in the ground for winter. The eggs of the sturgeon would be mixed into bannock to make cakes, like rice crispy squares.			
078	fishing	fishing				While living in White Dog it was important that the young people got involved in the sturgeon and other harvests, so that they could learn how to do traditional things from the elders. When a sturgeon was caught near the shore someone would whistle a particular way to let everyone know a sturgeon had been caught. Lots of people would come down to see and help with deaning it. Some people would barter with the person who caught it, if they needed it for some reason.			
078	habitation	hunting/trapping	fishing	plant harvest		You can not just take and take you must also give something back. This is why ceremonies would be performed before any type of harvest where people would offer food and tobacco into the water.			
078	fishing	fishing				While growing up at Dalles 3 or 4 families would work together to harvest the sturgeon. The men would go and harvest the sturgeon while the ladies were getting ready to prepare and dean the fish. During this time big bonfires would be built so that people could sit around and work into the night mending and making nets, and cleaning the fish. Everybody would share whatever they killed.			
078	habitation					Around Dalles a single family would include about 8 people: the couple, the grandparents, and 4 or 5 children. There were about 5 or 6 families who would all know each other and live in the same area.			
08S	e col ogical knowledge					Sturgeons go where there is a current and deep water.			
088	fishing	ecological knowledge				Since moving to Dalles they have gone out every year on the river from Rideout Bay to Minaki trying to catch sturgeon with a rods and large minnows but hasn't seen or caught one yet.			
088	future	ecological knowledge				It is worth the effort to try and bring them back because people use them for their feasts and ceremonies. The water is starting to get deaned up, but the water levels might stop the sturgeon from coming back.			L
088	settler relations	ecological knowledge			e	The paper mill poisoned the water and that's what has killed the fish.			
08S	fishing	habitation				Father would perform a ceremony for all of the fish he would catch at the beginning of the season. He would sing an old traditional song and prepare two offerings with little pieces of each type of fish he was going to catch. He would put the fish on birch bark with a little tobacco and place one in the water and bury one in clean ground.			
098	buy/sell/trade					Her parents would never sell or trade anything they harvested. They would always say that everything needed to be kept for winter.			Г
098	settler relations	medicine			2	After moving to Rat Portage in the 1950's she did not eat sturgeon or wild game any more, and started eating store bought food for the first time. It was at this time she started getting sick with pneumonia. She does not remember getting sick before this and blames it on the change in diet.			
098	habitation	travel				3 or 4 families would move around together harvesting different things, and everyone would share whatever they got. All of the work, like drying and mending the nets was shared by everyone. The elders would teach the younger people how to do things, there were teachings in everything they did.			
098	habitation					While in Shoal Lake and Northwest Angle, the start of the sturgeon harvest, like all of the other seasonal harvests, was marked with a ceremony. All of the families who were living together would make a big circle and food was laid out on blankets in front of a bonfire. The elders would be talking and the kids had to be quite and listen; it was very serious.			
					7 70	"We used to live around the Dalles. My dad built a log cabin there with my brother."			
10GC	habitation					"That was my livelihood too, what I was taught and they took it away. We never had wild rice harvesters but now an yone			-

P_ld	F_Type1	F_Type2	F_Type3	F_Type4	F_Type5	Comment	F_ID1	F_ID2	F_
10GC	fishing	hunting/trappin g	102100			"We used to pick rice at Poplar Bay Portage, by the Dalles, and we used to go fishing there too, and hunt for moose and deer. We were commercial fishing with nets."	- 1		
10GC	fishing	90 0				"My parents used to fish around TI and Old Forest Island. Lots of people used to fish around Norman dam, there was good fishing there."	47		Г
10GC	fishing					"My mother used to fix her own nets, but I was too young to be interested in that. But I wish I knew that now. Those were good nets they caught lots of fish. My great grandmother used to make nets for my dad to catch fish. She was so nice, even when she was teased she took it in a good way, instead of getting angry."			
10GC	fishing					"People were catching walleye, jack, toulables, cropies in the bays. They seem to like the shallow water, the bass are there though and they don't come around when there is bass around."			
10GC	fishing	Ĩ				She remembers camping close to the river on the island, and her mother going fishing, but she does not know where. She does not remember anyone setting fishing nets right around the island except near the Norman Dam.			Γ
10GC	fishing					People use to fry jack fish while living on OFI. They used to also catch gold eyes, and her father-in-law use to catch sturgeon with hooks.			Γ
10GC	habitation	plant harvest				"We used to camp out here on this island here when we were picking blueberries up over there. Its rocky in there, and you know there were some houses in there too. Dan Kopenace used to live in there with his family. They had log cabins in there. They said that was their reserve."	22	45	
10GC	habitation	travel			0 00	"I must have been about 7 years old and my dad built that cabin around the Dalles when I was 8 or 9. we had no neighbours up there so I was so lonely. I missed my friends back at Wash Bay."			
10GC	habitation					She remembers living in a white canvas prospector tent that was around 10'x12'.			Г
10GC	hunting/trappin g					"We used to see lots of rabbits on the islands. They used to come right into our camp, and partridge too. We used to snare rabbits and hunt partridge."			
10GC	hunting/trappin 9					"My mother used to make gloves and moccasins and baby wraparounds. She used to go trapping and snaring. And that was around OFI."			ſ
10GC	plant harvest	travel				Her parents would pick blueberries near Ena, and her brother would baby sit her and her brother and sisters. They would play store and tell jokes about each other."			
10GC	plant harvest	habitation			· · · · · · · · · · · · · · · · · · ·	She remembers how her parents used to harvest their own rice, roast it in the fire, and how she and her sister used to help. "My sister and me used to roast [wild rice] and after it cooled off, the next day we would dance on it. I put the Elvis Presley record on and we would dance to that, Blue Hawaii and like that. I used to wear my wrap-arounds, those moccasins you fold around and tie laces around, so they were clean. You have to use clean things to dance on the rice and other people would come and watch me. They were happy."			
10GC	plant harvest					She does not remember much about plant harvesting on OFI or TI, "other than blueberries and Saskatoon berries. There were Saskatoon berries and wild plums right around our camp on OFI."	20		Ī
10GC	place name					"We used to call it 'Old Forest Island' (Old Fort Island)."			Г
10GC	place name	9			0.00	There was an Ojibway name for Old Forest Island, but she could not recall what it is.			Γ
10GC	place name	habitation				People used to camp on a little island by the flour mill, that they used to call it 'Squaw Island'.			Г
10GC	residential school					"A lot of my friends died of alcohol abuse. I think they couldn't take what happened in those residential schools. It was like a prison, that's how we felt. But I liked that it felt like a big family with all the girls, but a lot of bad things happenedI think I went in there when I was six or seven and left when I was twelve."			
10GC	residential school		,			"When my parents came to see us I gave them a hug, and she (one of the nuns) told me 'don't do that you're not a baby."			Γ
10GC	e col ogical knowledge					"We used to go around the island to watch deer on OFI. I just watched them but never hunted them, they were too beautiful."			
10GC	habitation					She spent most of her time on OFI and TI as a baby until she was seven years old. She commented that she "can remember from five years old. Mother always said I had a good memory."			Γ
10GC	settler relations	ecological knowledge				"We used to like listening to the big rapids, but then they built a powerhouse there. You could listen to it from far away on OFI, and then they built that power house and we couldn't here the rapids anymore. You know those rapids make a lot of oxygen all over and when they built that power house they killed it."			
10GC	settler relations					"I was thinking when they lost that paper mill, all of a sudden they would give us back our land, but they never paid a cent to us when building that power house. They stole that land and they owe us a lot of money. We were poor and still are."			
10GC	settler relations					"You know we used to drink the water from there (Rideout Bay). We didn't know it was polluted. No body told us what they were putting in there. I thought it was clean [but], we were at risk. The water still tastes better there than on LOW [though] because its moving more. You know the fish taste better on the Winnipeg River than on LOW too."			
10GC	settler relations					"It was so nice because there was not so many boats on the WPG river."			L
10GC	settler relations					"It was so nice to live there because it was like you were living in town because it was so close to town. Hove that OFI, Hike it there."			
10GC	travel					"That was before I even went to school, we used to go in the canoe from [Obashkaandagaang] to Treaty Island. It would take all day. We stayed there for three days, they had a big pow wow and a meeting, people from Shoal Lake, [Ochichagwebabigoinning], [Wauzuk Onigum] and [Obashkaandagaang]. My brother was doing the fancy dancing, you know with the loops. I was so happy."			
10GC	travel					"I married a guy from Minaki and I used to travel from Minaki to Kenora using a 20 horse, a boat from the camphe was working at. We used to camp on OFI on our way to Minaki [when I was married], staying in the same spots I did when I was young. [We did] not [stay there] as often as I went there with my parents [though], they used to be there all the time."			
10GC	travel				S 62	"We used to make a portage where they had the boat-lift, because we couldn't use the boat-lift. By where LOW flour mill used to be, by where Delart Manner is now."			

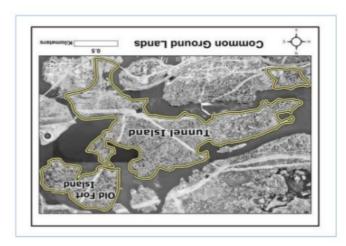
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ld	F_Type1	F_Type2	F_Type3	F_Type4	F_Type5	Comment	F_ID1	F_ID2	F_ID3
3C	travel	7.77	702200	1272000	8		100	1	
3C	habitation	, ,				"When it got dark they would make a big fire and cook their food under the stars and the moon, it was so nice."			
iC.	e col ogical knowledge	habitation				"We enjoyed the wild, the birds when they sing, and the loon is so nice when you hear it"			
GC	habitation					"My grandfather, when we were living at the log cabin, he used to sing with the drum. It was so nice, he had such a beautiful voice."			
GC	habitation	hunting/trappin g				"Don't kill for nothing, God wont like it and He wont bless you."			
S	travel					In 1937 their family started moving down to Minaki during the fall to guide moose hunters, and then to Dalles in the winter and spring months to cut pulp. During that time they would move out of the area to harvest sturgeon and blueberries every summer.			
S	travel			e:		Every June, from 1932 to about 1943, they would move from White Dog, and later from Dalles, to One Man Lake where they would harvest sturgeon until the middle of July.		6 6	
S	buy/sell/trade					Three times a day, nearly everyday, during the sturgeon harvest 3 big double-prop planes would come to pick up the previous day's catch. Each plane would hold about 4 or 5 sturgeons. Only the smaller sturgeons were eaten, as the larger ones were sold and flown out by airplane. The sturgeon harvest was a source of income as much as a source of food; it was a business.			
s	e col ogical knowledge					People would make large rock enclosures near the lake shore, where they would keep the live sturgeon until they were ready to be flown out. Other rock enclosures were made where sturgeon eggs were placed to hatch. These second type of enclosures had canvas wrapped around their outsides to prevent the eggs and small sturgeon fry from escaping. Once the small sturgeons were about 3 or 4 inches long they were released into the lake.			
S	future					It might be a good idea to bring the sturgeon back, but young people today do not know how to catch sturgeon, and if they did they probably wouldn't eat them anyways.			
S	fishing					The sturgeon meat was boiled along with the spinal chord, which tasted like garlic. They had never heard of anyone frying it though.			
S	physical					The meat was also stored in deep holes dug in the middle of their log home's floor in White Dog. The hole was dug deep enough, about 6 feet, so that the cold earth would keep the raw sturgeon from spoiling through the fall and into winter; no ice was needed.			
S	travel	fishing				Nearly the entire community from White Dog would move to One Man Lake for the sturgeon harvest. It was the only place they knew that people could harvest sturgeon so successfully.			
S	habitation	fishing				Families would work independently during the sturgeon harvest, but the older people would sometimes meet around the fire to coordinate efforts and discuss where everyone should try and harvest the sturgeon next.			
S	fishing	habitation				Before the sturgeon harvest would begin a ceremony would take place where the Elders would give thanks to the Creator and the sturgeon, and talk about needing to ask for a kind of forgiveness for what they were going to do. They would do this so that there would not be any trouble during the harvest. It was very important that anyone participating in the harvest be there. A little food was prepared and shared with everyone and offerings were placed in the water for the sturgeons, but it was not a big feast.			
С	buy/sell/trade	settler relations				He remembers carrying the fish for his dad to the old ladies' houses, who would buy their fish. He liked to go because they would give him cookies, or juice, or sweets. Sometimes they would pack him a bag with potato chips and sod a pop. He also remembers how so me of them used to have birds and animals living in their houses, and they would have gardens. Depending on the time of year, some of the old ladies would give them fresh vegetables, on top of what they paid for the fish. There was a good relationship between the people selling and buy fish.			
С	burial	habitation		8		He remembers his older brother's baby dying from 'crib death', and having to run out and yell to his mother, who was setting fishing nets, to tell them something bad had happened.		2 2	
c	habitation	place name				"On Pow Wow Island there were the Piconaquibs, Cherrys, and Henrys. They all had tents up there. The locals called it Pow Wow Island because they would sometimes hear the old people singing. There was a trail and big building over here on the mainland, and they used to walk up and down this area. The young people would just swim across this little area to get to town when the adults took the cances to town."			
C	habitation					"Where the green house is, where all the jack pines are, there used to be a camp site there all the way up the hill. There used to be a sand pit where that boat is now."			
C	habitation				1	"Thelma and Charlie Green used to camp [on OFI]."			
ic	plant harvest	ecological knowledge				"They never bothered anything when they were out here. They never bothered the big trees. That's what Moses told me, they never bothered the big trees, they just bothered the dry ones for firewood and stuff like that. Even for their lodges, they would never bother these green treeseven for their tent poles they would used dry wood and things."			
iC	story/legend					Water spirits called "Me Me Gwe Shig" look after the surrounding area and the people that travel through it. Offerings of tobacco, food, dothing, or anything else valued by the person making the offering are left at places of special cultural significance.			
C	place name					Mutany Island, sometimes refered to as Shoulder Blade Reef, also has an Anishinaabe name "Mi Ni Nuh Gun Mi Nis".			
ic ic	habitation plant harvest story/legend					area to get to town when the adults took the canoes to town." "Where the green house is, where all the jack pines are, there used to be a camp site there all the way up the hill. There used to be a sand pit where that boat is now." "Thelma and Charile Green used to camp [on OFI]." "They never bothered anything when they were out here. They never bothered the big trees. That's what Moses told me, they never bothered the big trees, they just bothered the dry ones for fire wood and stuff like that. Even for their lodges, they would never bother these green treeseven for their tent poles they would used dry wood and things." Water spirits called "Me Me Gwe Shig" look after the surrounding area and the people that travel through it. Offerings of tobacco, food, clothing, or anything else valued by the person making the offering are left at places of special cultural significance.			

P_ld	F_Type1	F_Type2	F_Type3	F_Type4	F_Type5	Comment	F_ID1	F_ID2	F_ID3
12SC	residential school	Facilities 1				"We got picked up and taken away. [Children's Aid] took us to the local place where they used to keep kids. My parents were gone doing their shopping and things, and someone must of saw us and we got picked up. Me and my brother tried to jump out but they still dragged us back out in one of those old paddy wagons My sister was old enough to take care of us then but they still took us. I must have been about eight years old, or maybe seven years old. My sister must have been 40 or 15 years old. They took usthere were six of us. And they did that periodically. Some of them never came back Some of them they took them away to somewhere we didn't know. Those are the kids that were taken up north to some are as and given to families up there. Some of our people are still up there Some of them adapted to it pretty good but the majority of them you still hear complaints from them because I run into them in Winnipeg or in Kenora and they tell me they didn't feel like they belonged in those places. It was very rare they would run into a good family. They were abused and they didn't feel like they belonged in those communities. Always treated as an outsider. And INAC was part of the whole problem, and Children's Aid at the time. They thought they were doing something good because of their ignorance, they didn't really understand what they were doing to these families. Our family was affected, I still have two brothers up there. And one of them is trying to come back but they wouldn't let him back to my community. They transferred him out of there but then wouldn't let him transfer hereThat's some of the stuff that happened up and down this river and over in Rat Portage too, and the other communities around here, not just here."			
12SC	settler relations	buy/sell/trade				"Out here they probably felt like they were private and not having people coming in and out, like town people and stuff like that. That's probably why they parked out here on the island. It was easy to look after kids for the baby sitters while the adults were in town and doing their business and chores in town. Some of them might have had temporary jobs in town for local people."			
12SC	settler relations	travel	plant harvest			"On the way back from harvesting rice and blueberries [OFI] was one of the places we used to stop on our way back to Wash Bay, it was called Mackenzie."			
12SC	settler relations					He remembers his cousin's family were on OFI one summer, "that's when the police came and told people to leave this area. [Some time around] 1968, it was probably the RCMP. We don't know who ordered them to do that, maybe the paper mill, but we will have to figure that out later."			
12SC	settler relations					"We were running all over the place. Even the local kids in town, we used to play with them. Talk to them and they would go their own way. We didn't meet tup with them everyday but we did play with them every now and then. Kids from Keewatin we would meet them by the tracks."			
12SC	settler relations					The water control board, the three dams (Kenora, Norman, and White Dog), and the pollution from Kenora and the paper mill have all contributed to the sturgeon population being devastated in this area.			
12SC	travel	habitation				It was not unusual for people to get stranded on the mainland because all of the canoes were pulled up on the OFI, forcing them to holler over the water. "The strays that got left behind in town."			
12SC	travel				3 8	"That trail here goes right to the other side of the island. When we were kids we would take it and come out under that train bridge over there," where the past several spring and fall feasts have been held.	32		
12SC	medicine	fishing	buy/sell/trade			He remembers his mother always speaking of sturgeon as a sacred fish that they would see along the shoreline of the river, but never really catching them. She would tell them because of their great size and age sturgeon should be respected, similar to the way snapping turties would have been regarded as sacred. In their family sturgeon was only harvested for ceremonial and medicinal purposes, never to sell.			
12SC	fishing	habitation				When a sturge on was caught it was divided amongst the 2 or 3 families who were living together.			

APPENDIX B:

Common Ground Mapping Initiative Information Brochure





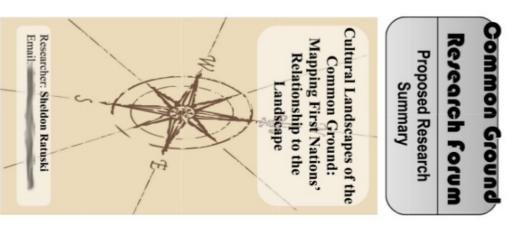
Ground initiative.

the City of Kenora to the Common 162ha of undeveloped land within AbitibiBowater donated nearly

and building capacity "...understanding for cross-cultural

collaboration ..."

August 2009





What are cultural landscapes?

Cultural landscapes are made up of the physical and psychological connections a culture or community has to its environment. These connections are expressed through the naming of places, the use of land and natural resources, and in the recognition of special or spiritual places.

What is the Rat Portage Common Ground Conservation Organization?

The Rat Portage Common Ground Conservation Organization (RPCGCO) is an initiative involving the City of Kenora, the Grand Council Treaty #3, Wauzhushk Onigum First Nation, Ochiichagwe'Babigo'-Ining First Nation, and Obashkaandagaang First Nation. The group's main goal is to manage three large parcels of land within Kenora for the mutual benefit of all local residents, and to do it in a sustainable way.

What is the Common Ground Research Forum?

The Common Ground Research Forum is a partnership between the City of Kenora, Grand Council Treaty #3, the University of Winnipeg, and the University of Manitoba. The purpose of the forum is to assist the RPCGCO in understanding and building its capacity for cross-cultural collaboration.



What is the purpose of this research project?

This is the first project being proposed by the Common Ground Research Forum. Its purpose is to use locally produced maps to help share the cultural landscape values of local First Nation residents with members of the RPCGCO. Identifying and communicating these values will be essential in accomplishing the RPCGCO's goal of collaborative and sustainable management of the Common Ground lands.

Who will be invited to participate in this research project?

A number of members from each of the RPCGCO's three partnering First Nations will be invited to participate in this proposed research project.

What will the final products of the proposed research project?

The goal of the project is to produce a cultural landscape atlas illustrating the relationships of the participants and their communities with their local landscape.



How will community participants contribute to the proposed

research?

Participants will be asked to participate in two full-day workshops, and two half-day individual interview sessions. During this process, participants will...

- help decide what topics and geographic areas will be focused on
- identify past and present locations of travel, land use activities, and occupation
- share community stories and personal experiences related to the activities and locations identified
- validate the research by helping to develop the final maps that are produced

How will the information from the research be used?

The RPCGCO will use the maps produced by this project in several ways, including environmental and cross-cultural education programs. As well, each First Nation will receive copies for use in their own community projects.