Negotiating the Political Ecology of Aboriginal Resource Management: How Mi'kmaq Manage their Moose and Lobster Harvest in *Unama'ki*, Nova Scotia, Canada

By Bernard Huber

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Environment and Earth Sciences,
Victoria University of Wellington, New Zealand

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Abstract

Since the Supreme Court of Canada affirmed the fishing and hunting rights of the Mi'kmaq nation in 1985 and 1990, the government has failed to accommodate these in appropriate and effective resource management frameworks. In *Unama'ki*/Cape Breton Island, Nova Scotia, the subsistence harvest of lobster and moose by Mi'kmaq has therefore caused cross-cultural conflict and ecological concerns. Since 2006, the Lobster Management Plan (*Unama'kik Jakejue'ka'timk*) and the Moose Management Plan are being developed under Mi'kmaq leadership to manage the Mi'kmaq harvest communally.

These innovative management initiatives will serve as case studies for this thesis to explore how Mi'kmaq negotiate the political ecology of co-management in Nova Scotia and effectively assert Mi'kmaq rights to resource harvest and self-governance. Most notably, the management plans employ cultural principles of sustainability and pro-active approaches to cross-cultural communication. This research shows how Mi'kmaq communities have developed resource management capacities and frameworks that can also inspire the self-government aspirations of other aboriginal nations in Canada. Mi'kmaq strategies and experience suggests that aboriginal leadership and cultural principles are integral to the meaningful implementation of aboriginal resource rights.

Semi-structured interviews with Mi'kmaq and governmental resource managers illustrated diverse discourses of aboriginal resource rights, ecological knowledge and sustainability. Aiming to represent research insights appropriately, this thesis follows the decolonization agenda of aboriginal methodologies and features reflective discussions of the author's positionality within the Mi'kmaq research community. This also allows for a review of how the author came to terms with conflicting discourses and aboriginal ontologies of ecological knowledge, as well as the requirements for decolonizing research.

Supporting reflective insights, a framework of anthropological political ecology and poststructuralist arguments for ontological diversity explain the validity of aboriginal perspectives on ecological knowledge and resource rights, which is the premise of decolonization paradigms. A review of engaging with aboriginal culture both in theory and practice concludes that the practical experience is essential for an appreciation of aboriginal perspectives and thus integral to cross-cultural communication and co-management relationships.

Acknowledgements

This thesis leans on aboriginal epistemologies and research ethics. Reflecting on my research and learning process, I cannot claim that the knowledge and ideas presented in this thesis are my own. I rather want to acknowledge that many individuals have contributed to the understanding I have acquired and to the completion of this thesis.

In Nova Scotia, my research journey was very smooth and insightful thanks to Bill Hipwell's introductions and the genuine welcome by all research participants.

- Shelley Denny, Roger Hunka, Patrick Johnson, Tom Johnston, Tim Martin, Albert Marshall, Lindsay Marshall, Murdena Marshall, Clifford Paul and Kim Paul granted me much trust, time and a wealth of their knowledge and experience.
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- Many acquaintances in the Mi'kmaq communities of Eskasoni and Membertou contributed to my insights into Mi'kmaq culture and aboriginal ontologies.
- Patricia Doyle-Bedwell, Shelley Denny, Roger Hunka, Patrick Johnson and Tim Martin provided very helpful reviews of draft versions of this thesis.

At Victoria University of Wellington, Bill Hipwell was an outstanding source of inspiration and supervision and continued his support after leaving New Zealand. Jessica Hutchings took over primary supervision for the most of the writing journey and offered very helpful guidance and discussion. I am very grateful for the interest and support of both supervisors, as well as for their push for productivity.

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List of Acronyms

AFS: Aboriginal Fisheries Strategy
ATRA: Aboriginal and Treaty Rights Access
CBU: Cape Breton University
DFO: Department of Fisheries and Oceans
DNR: Department of Natural Resources
EFWC: Eskasoni Fish and Wildlife Commission
FA: Framework Agreement
FSC: Food, Social, and Ceremonial
INAC: Indian and Northern Affairs Canada
LFA: Lobster Fishing Area
LMP: Lobster Management Plan
Lo/TEK: Local/Traditional Ecological Knowledge
MAPC: Maritimes Aboriginal Peoples Council
MEK: Mi'kmaq Ecological Knowledge
MMP: Moose Management Plan
MMWG: Moose Management Working Group
MSAP: Mi'kmaq Science Advantage Program
NCNS: Native Council of Nova Scotia
SCC: Supreme Court of Canada
UINR: *Unama'ki* Institute of Natural Resources

Chapter I: Introduction

A. Historical Setting

The first Mi'kmaq people settled in what is today known as Nova Scotia around 10,500 years ago (NCNS, 2007). Nearly 10,000 years later, the European settlers, who the Mi'kmaq have since referred to as 'new-comers', arrived at the North American continent. There, the first contacts and treaties on the continent were made with the Mi'kmaq people. After a colonial era of assimilation and dispossession, the successive Canadian governments has been reluctant to acknowledge the hunting and fishing rights, which the British Crown granted the Mi'kmaq in the Peace and Friendship Treaties of the 1760s.

The Mi'kmaq had to fight legal battles at the Supreme Court of Canada (SCC), which only in the 1980s and 1990s affirmed aboriginal resource rights and a governmental 'fiduciary responsibility' for the welfare of the aboriginal peoples of Canada. Nevertheless, governmental resource management frameworks, industrial resource exploitation and non-native opposition have opposed Mi'kmaq resource access and their participation in resource management. In fact, Mi'kmaq resource rights are still highly contested in Nova Scotia, especially their harvest of lobster and moose.

B. Case Studies and Research Objectives

This thesis will document the socio-political landscape that the Mi'kmaq need to negotiate in order to assert and implement their fishing and hunting rights for food, social and ceremonial (FSC) purposes. This will be illustrated by a case study approach to two nascent management plans for the Mi'kmaq FSC harvest of lobster and moose. Specifically, a political ecology perspective will elucidate relevant aspects of the post-colonial, cross-cultural and ecological environment.

After being excluded from resource access and management under 'post-colonial' governmental leadership, Mi'kmaq now aspire to self-govern their FSC harvest. Both the Moose Management Plan (MMP) and the Lobster Management Plan (LMP, *Unama'kik Jakejue'ka'timk* in its Mi'kmaq title) have been developed under Mi'kmaq leadership and propose innovative frameworks to accommodate Mi'kmaq resource rights and knowledge. These initiatives aim to effectively decolonize the political ecology that marginalizes the Mi'kmaq FSC harvest.

The MMP is negotiated as a pilot project after the signing of the Framework Agreement between the Mi'kmaq, Nova Scotia and Federal governments, which aims to establish the terms for a new post-colonial partnership. Previous attempts to regulate the Mi'kmaq moose hunt have failed, largely due to the absence of regulations for Mi'kmaq has caused cross-cultural and ecological tensions. The MMP, though still in draft form, aims to resolve this with a co-management scheme under Mi'kmaq leadership (MMWG, 2007).

The LMP (UINR & Denny, 2007) consists of voluntary guidelines for the Mi'kmaq lobster harvest which make existing federal regulations more ecologically and culturally relevant. The LMP effectively integrates Mi'kmaq resource users and cultural principles, which is crucial for sustainable Mi'kmaq harvesting. The Mi'kmaq FSC lobster fisheries have been marginalized by extensive commercial lobster fisheries in Nova Scotia and recently affirmed Mi'kmaq fishing rights have triggered much conflict and confusion.

The research aim of this thesis is to explore how the MMP and LMP negotiate the political ecology of Mi'kmaq resource management in Nova Scotia and facilitate the sustainable and self-governed FSC harvest by Mi'kmaq. In order to address this aim, the research objectives are to show how the LMP and MMP:

- Incorporate universal[1] science, Mi'kmaq Ecological Knowledge (MEK) and *Netukulimk* (traditional Mi'kmaq harvesting ethic).
- Respond to Mi’kmaq abuses communal resource rights, and to non-native discourses of Mi’kmaq harvesting ethic.
- Enhance the sustainability of the Mi'kmaq harvest.

Following a decolonization paradigm, this research aims to support the Mi'kmaq efforts to establish self-governed and sustainable harvesting regimes. This may be achieved by critically discussing the management plans and highlighting risks and opportunities of the political ecology they operate in. The scholarly documentation will contextualize the challenges involved and provide an independent account of the Mi'kmaq strategies. Given the early stages of their implementation, both the LMP and MMP may benefit from an outside review.

The political ecology of Mi'kmaq resource harvest is troubled by similar inequalities to other aboriginal communities’ experiences across Canada and internationally. Although the Mi'kmaq initiatives are very case-specific, this research will suggest that they hold important lessons for the self-government[2] of aboriginal resource use and the meaningful accommodation of aboriginal people in co-management.

In a wider, scholarly context, this thesis will show that political ecology – especially with a poststructuralist perspective – is an effective conceptual framework to research case studies of aboriginal co-management, as it captures vital aspects of ontological difference and cross-cultural relations. Also, I will show that the methodology of decolonization can effectively complement and guide this research.

C. Content and Structure of Thesis

The remainder of the thesis is structured as follows: Chapter 2 will provide some vital background information on aboriginal governance and resource rights in Canada with a more detailed overview of the Mi'kmaq history of governance and resource management. This chapter will discuss the reserve system and the marginalization of aboriginal people in resource management. It will also highlight the marginalized position of the Native Council of Nova Scotia (NCNS), which represents Mi'kmaq living ‘off-reserve’.

Chapter 3 will discuss the methodological and ethical considerations for this research, and its representation in this thesis. Firstly, the evolution of postmodern and critical research methodologies in geography will be outlined in order to contextualize the research paradigm of decolonization adopted in this thesis. Secondly, I will reflect on my research journey and elaborate on the research design and the selection of case studies and research participants. The justification for this necessitates a careful discussion of my positionality in regards to aboriginal knowledge and my Mi'kmaq research community. I will introduce the Mi'kmaq Ethics Watch committee (*Mi'kmaw Eskinuapimk*) and outline the benefits of this

[1] I use the term ‘universal science’ to refer to ‘Western science’, which is not local (i.e. place-based) and claim universality (see Chapter 3).

[2] I use the term ‘self-government’ to refer to aboriginal aspirations to independent political representation, governance and resource management.

research. In regards to the analysis of my research findings, I will discuss some methodological issues of political ecology research and discuss the methods for data analysis and written representation in this thesis.

Chapter 4 will review several bodies of academic literature, which this thesis will engage with. I will review the evolution of political ecology research to show that this field can provide a conceptual framework for this thesis. Here, I will show that a poststructuralist perspective provides some helpful insight for the study of cross-cultural resource conflicts. A review of the critical literature of co-management will show that the ontological difference of aboriginal resource knowledge and harvesting ethic can be assimilated conventional co-management frameworks. Additionally, a review of the postcolonial perspectives will highlight the colonial subtext of conventional co-management discourses and capacity building initiatives. Finally, the scholarly literature on Mi'kmaq resource management will be reviewed in order to contextualize this thesis and further illustrate the political ecology of resource management in Nova Scotia.

Chapter 5 will explain the context of the two case studies and indicate the significance of the management plans for Mi'kmaq resource harvest. The legal nature of the Mi'kmaq hunting and fishing rights will be reviewed to explain their contestations and the need for new management schemes for Mi'kmaq lobster and moose harvest. Especially the implications of the 'Lobster Wars' over Mi'kmaq rights in commercial fisheries have created a confrontational cross-cultural environment, which the LMP needs to negotiate. The MMP operates in a competitive political landscape, as the NCNS is excluded by the Mi'kmaq Chiefs-in-Council.

Chapter 6 will represent relevant research findings from seven semi-structured interviews with Mi'kmaq and governmental resource managers. I will contrast different opinions regarding the significance of MEK, universal science and *Netukulimk* for Mi'kmaq, as well as their use in the LMP and MMP. Furthermore, I will illustrate Mi'kmaq notions of co-management, self-government and co-existence, as well as issues of Mi'kmaq capacity for resource management.

Chapter 7 will discuss my interview insights in reference to the literature reviewed and based on a political ecology framework following the work of Arturo Escobar (2006) and Fikret Berkes (2008). After specific attention to the case studies, the discussion will centre on thematic issues to describe the political ecology of knowledge, ontological difference, self-government and Mi'kmaq capacity. Finally, the exclusion of the NCNS from the MMP, and specifically its system of harvest management, will be discussed as a model for self-government.

Chapter 8 will review the research problem and objectives and discuss how the research findings and their significance. This will provide a basis to highlight areas for further research. I will conclude the thesis with a reflective account on my research design and my positionality as a research student, which will discuss the nexus of political ecology and decolonization methodologies.

D. Terminology and Concepts

This thesis will make reference to a number of terms and concepts that are endemic to either the Mi'kmaq language or Canadian aboriginal politics. These are briefly introduced below.

While the term 'indigenous' is common in the international literature and New Zealand discourses, it is here replaced with the term 'aboriginal', which is more appropriate in the Canadian context. Canadian aboriginal people encompass North

American Indian, Métis and Inuit peoples (see Chapter 2). Although the term ‘Indian’ has ironic colonial connotations, it is widely used in Canadian discourse and will be used here where appropriate.

In Chapter 4 I will review the contestations surrounding the use of the terms ‘nature’, ‘resource’ and ‘resource management’, but will use the term ‘resource management’ throughout this thesis. Alternatively to ‘resource use’ I will use the term ‘harvest’ which is common in Mi’kmaq discourse (Hunka, 2007).

Mi’kmaq names of places, concepts and institutions I will introduce where existent, but will refer to the English names throughout the rest of the thesis in order to aid the non-Mi’kmaq reader. I will make exceptions for the harvesting ethic of ‘*Netukulimk*’ and the Mi’kmaq name for Cape Breton Island: ‘*Unama’ki*’, since these terms will be used frequently.

Chapter II: Background

A. Introduction

The aboriginal peoples of Canada represent a vast diversity of cultures, with different ontologies, knowledges, languages and customs. The history of colonization has left a map of fragmented and marginalized nations, which have specific rights to resources and self-government. This chapter will introduce some facts and concepts that are central to aboriginal politics in Canada, which will provide the background for a closer discussion of Mi'kmaq politics in Nova Scotia. Finally, the impacts of colonization on Mi'kmaq resource management will be outlined.

B. Aboriginal Governance in Canada

The following brief statistics will provide a context for considering aboriginal governance in Canada. In the 2006 census, 1,172,790 people self-identified as having aboriginal identity, which constitutes 4 % of the Canadian population. The aboriginal population of Canada consists of the three ethnographic groups: North American Indian, Métis (European/aboriginal mixed-blood) and the Artic Inuit people, which constitute 64, 33 and 4 %, respectively (see Figure 1)[3]. The North American Indians (commonly referred to as 'First Nations people' or 'Indians') may be registered as 'status-Indians' in accordance with the Indian Act or may (choose to) remain 'non-status' Indians (Abele *et al.*, 2008; Statistics Canada, 2008).

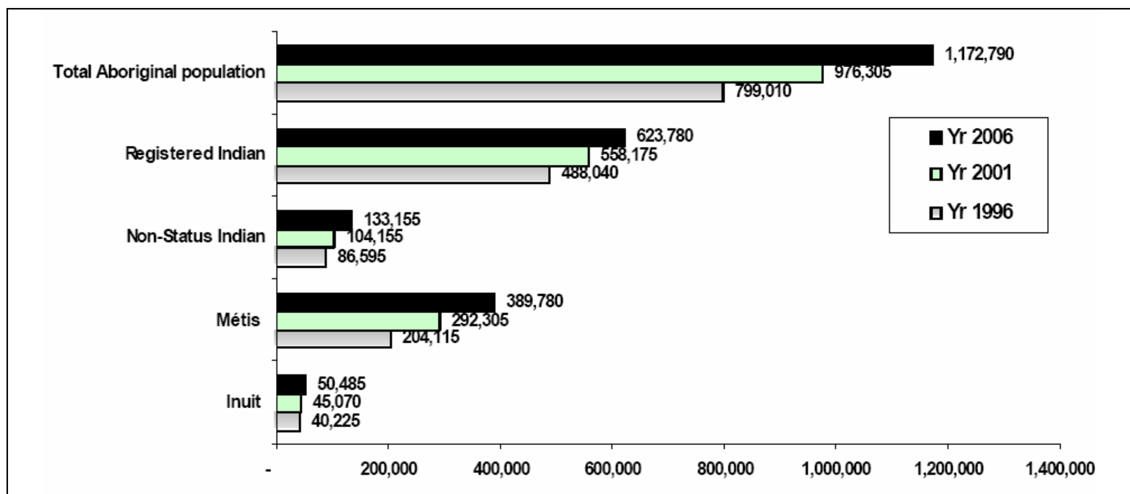

Figure 1: Aboriginal groups of Canada by population size; 1996, 2001 and 2006 census data. Source: (Abele et al., 2008)

The following two maps indicate the geographical distribution of aboriginal people in Canada. Roughly 40% of the First Nations people live on one of the 615 Indian reserves, which are marked on the map of Figure 2. Of the remaining 60%, the vast majority (76%) live in urban area, where they invariably constitute a minority, as Figure 3 indicates. Both maps suggest that only 2% (24,175 people) of them live in Nova Scotia (Statistics Canada, 2008), of which 48% (11,543 people) are status Mi'kmaq Indians (Coates, 2000:211). This thesis is largely concerned with the Mi'kmaq people of Nova Scotia and some attention will be paid to the different positions of status- and non-status Mi'kmaq.

[3]The population increase is in part due to increasing numbers of Indian reserves participating in the census.

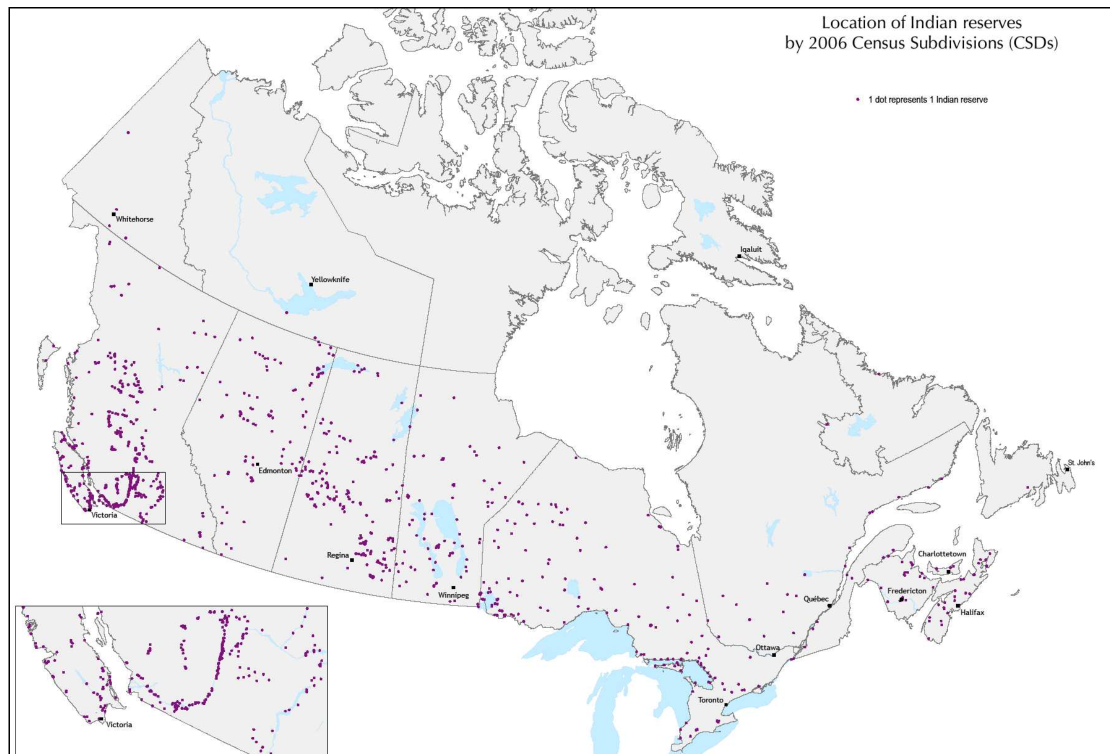

Figure 2: Location of Indian reserves; every dot represents one reserve. Source: (Statistics Canada, 2008)

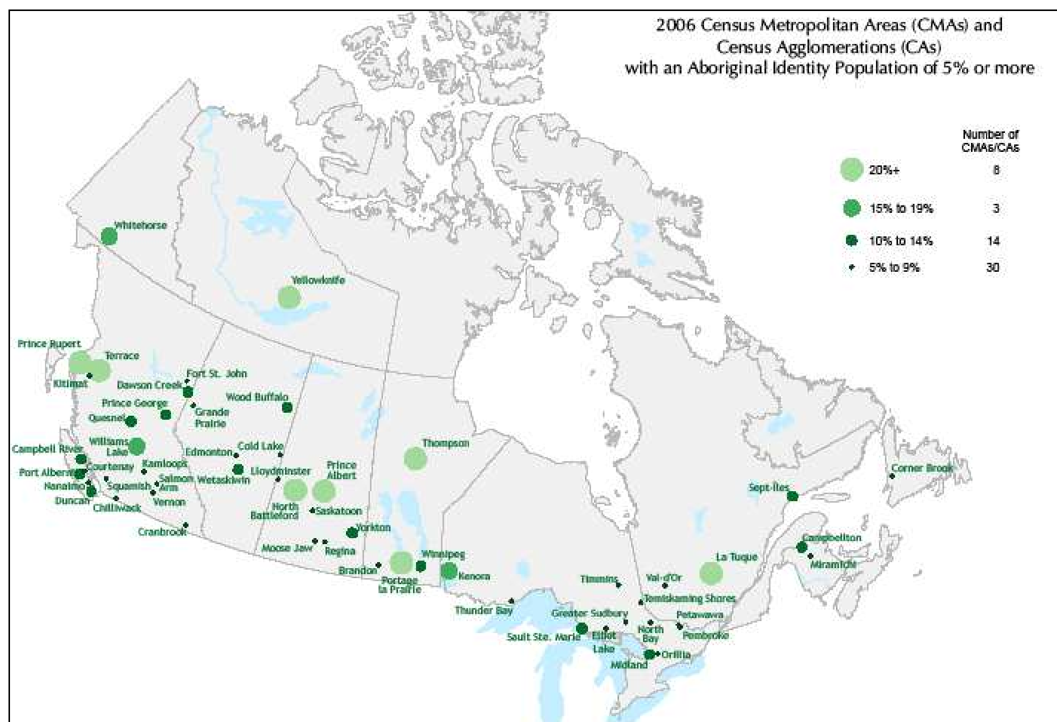

Figure 3: Urban areas (CMAs and CAs) with a population of Aboriginal Identity (First Nations, Métis and Inuit) of 5% or more. Source: (Statistics Canada, 2008)

In the 18th century, the aboriginal people outnumbered British and French settlers and were regarded by them as sovereign nations with rights to their territories. This was affirmed in a series of pre-confederation treaties, such as the Peace and Friendship Treaties in Atlantic Canada (1760 - 1761), and the Royal Proclamation of 1763. The latter forms a basis for the fiduciary responsibility that the Canadian government has today towards the aboriginal people (Nettheim *et al.*,

2002). However, increasing competition for land and resources soon led to an era of treaties that entailed the cession of vast aboriginal lands in return for self-governed reserves (Battiste, 1997; Nettheim *et al.*, 2002). In 1867, Confederation and the British North America Act established the British Crown as the executive government of the Dominion of Canada, while the Constitution Act authorized the federal parliament to govern the aboriginal people.

The Indian Act of 1876 established a colonial system of genealogy, which determined who is of Indian 'status' (Nettheim *et al.*, 2002). Most notably, this disadvantaged women, as an Indian woman lost her status if she married a non-status man; conversely, women who married a status Indian would gain status themselves. Although these provisions were removed in 1985 (NCNS, 2007), there are now many people of Indian identity who are non-status Indians and thus not eligible for reserve residence and many other services or benefits.

The Indian Act ("An Act Respecting Indians" in its full, original title) also formed the basis for policies of political oppression and cultural assimilation. Most prominently, off-reserve residential schools were established in all parts of Canada in the 1930s, which forcibly removed Indian children from their families and cultural roots (Comeau & Santin, 1990; Nettheim *et al.*, 2002). By the 1960s, these were abandoned and, in compensation, the government introduced welfare benefits on reserves, which brought material relief and more adequate living conditions (Comeau & Santin, 1990). With many further restrictions, the Indian Act has been detrimental to the development of aboriginal peoples. Its assimilative characteristics are commonly regarded as colonization and cultural genocide (Lee, 1992; Nettheim *et al.*, 2002; Richards, 2000).

In 1958 a system of reserve governance was imposed, which established a Band Council and a Chief-in-Council for each reserve (NCNS, 2007). In the 1980s, some Band Councils were granted a limited level of budgeting independence and have since developed capitalist revenue from resource development, service sectors, commerce and gambling (Comeau & Santin, 1990). This complements federal funding, which pays for all governance, education, social services, housing and resource management on reserves. Yet, services, sales and incomes on reserves are not subject to federal taxes. However, effective management and governance on reserves is often hampered by limited management capacities, nepotism and a lack of provisions for community accountability (Hipwell, 2001). This has driven many Band Councils into corruption, debt and negative publicity (Maaka & Fleras, 2005).

The lack of economic opportunities on reserves and the limited employability of aboriginal people off-reserve has lead to excessive unemployment and welfare dependency of up to 95% for reserve communities (Maaka & Fleras, 2005). Attracted by better opportunities and services and higher standards of living, 46% of Canada's First Nations people live urban areas (Comeau & Santin, 1990; Statistics Canada, 2008). However, status Indians living off-reserve do not receive all federal services, benefits or tax exemptions. They typically retain their aboriginal identity and cultural customs, as well as their resource rights. Politically, they are often aligned with Métis people in organizations of 'non-status Indians', such as the Native Council of Nova Scotia (NCNS). These organizations are often self-governed without the federal support that reserve-based initiatives enjoy. Consequently, a dichotomy between on-reserve and off-reserve communities emerges, which is characterized by competition for representation and benefits. Many reserve leaders hold that only status Indians are beneficiaries of aboriginal rights (Hunka, 2007), ironically endorsing an arbitrary, colonial system of identification.

Although the Indian Act entails this conflict in many First Nations of Canada, the positions of off-reserve and non-status aboriginal communities receive very little public, policy and academic interest. Part of this thesis will present a case study of the NCNS's position in regards to Mi'kmaq resource management.

C. Aboriginal Resource Rights in Canada

In a mainstream colonial mindset, aboriginal claims to resource rights are misconceived as an encroachment on governmental sovereignty to resource management or as a threat to non-native access and resource sustainability (Ladner, 2005; Maaka & Fleras, 2005). Therefore, aboriginal claims to rights to and participation in resource management have been challenged by the government in the court system. Since the 1980s, numerous court rulings have acknowledged aboriginal resource rights, which have reformed the political landscape of resource management in Canada. The most relevant SCC rulings for Mi'kmaq resource rights are those in favour of *Simon* (R. v. Simon, 1985), *Sparrow* (R. v. Sparrow, 1990) and *Marshall* (R. v. Marshall, 1999), which are briefly outlined in Chapter 5.

Aboriginal resource rights are either based on constitutionally affirmed Aboriginal Title, which applies to all aboriginal people in Canada, or specific Treaty Rights, where the SCC specifies the modern meaning of historical treaties. These rights are commonly implemented in co-management arrangements between Band Councils and governmental departments; where the federal department of Indian and Northern Affairs Canada (INAC) governs political issues, the federal Department of Fisheries and Oceans (DFO) administers ocean fisheries and the provincial Departments of Natural Resources (DNR) administer inland fisheries and other resource sectors, including forestry, wildlife and mining.

In its decisions, the SCC reminds the state of its fiduciary responsibility and recommends negotiations with aboriginal right-holders in good faith. Aboriginal leaders perceive this as an insult to their sovereignty to govern their traditional resources, which they never ceded in historical treaties. This 'culture of litigation' maintains an extensive legal sector of aboriginal governance, where aboriginal claims are negotiated in an inherently confrontational environment (Ladner, 2005). Arguably, "this impasse will continue until the myth of Crown sovereignty is revealed" (Ladner, 2005: 948). Furthermore, debates around the justifiability of aboriginal claims question whether the state-run legal system is an appropriate forum for aboriginal people to reclaim their rights, and seek justice for the legacy of colonialism.

D. Aboriginal Governance in Nova Scotia

1. Mi'kmaq Governance

The traditional territory of the Mi'kmaq nation (*Mi'kma'ki*) covers today's provinces of Nova Scotia and Prince Edward Island (PEI), as well as parts of Quebec, New Brunswick and Newfoundland (as indicated in Figure 4). Of the 23,776 Mi'kmaq, 49% live in Nova Scotia; here 7759 Mi'kmaq live on one of the 13 reserves and 3,784 reside off-reserve, mostly in urban Halifax (Coates, 2000:211). Since 1975, off-reserve and non-status Mi'kmaq (as well as Métis people) are represented by the Native Council of Nova Scotia (NCNS), which determines its membership in reference to family lineage, rather than to Indian Act 'status'.

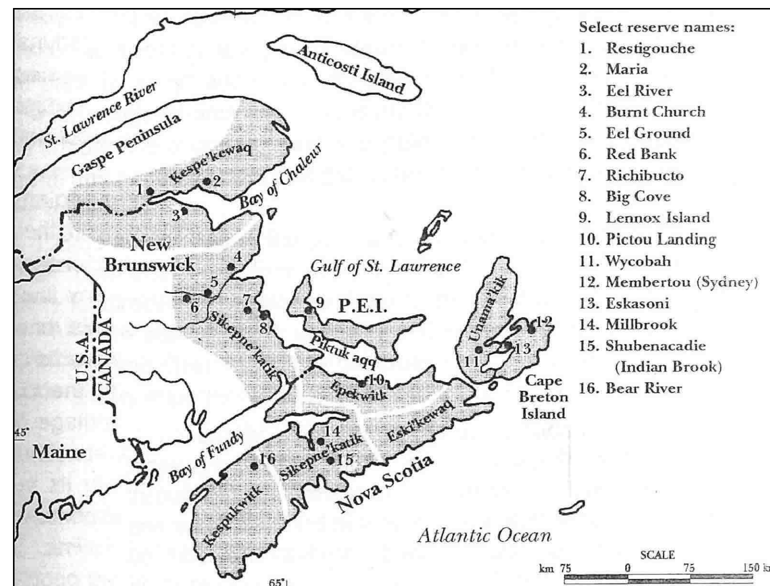

Figure 4: Map of traditional Mi'kmaq territory (shaded area) with location of selected reserves. Source: (Berneshawi, 1997)

Cape Breton Island (*Unama'ki* in Mi'kmaq language), just north of the main peninsula of Nova Scotia, is widely regarded as the heart of the Mi'kmaq nation and has been hosting the annual meeting of the Mi'kmaq Grand Council (*Sante' Mawio'mi*) since pre-colonial times. Traditionally, *Mi'kma'ki* was divided into seven semi-sovereign districts and the district chiefs would convene as the Grand Council for decisions of nation-wide importance (NCNS, 2007). These communities of *Unama'ki* have close linkages and substantial political cohesion and capacity, especially in regards to resource management (Marshall, 2007b).

The role of the Grand Council has been undermined by the Indian Act, which vests exclusive rights for governing and representing Mi'kmaq in the Band Councils and INAC. However, the Grand Council maintains a vital role in Mi'kmaq society, providing spiritual leadership as well as resource management (Battiste, 1997:136; Hipwell, 2001), which it aims to reclaim in both case studies. With recent aspirations of cultural revitalization and self-government, its unifying role in Mi'kmaq governance has become crucial (McMillan, 1997).

2. Mi'kmaq Politics and the NCNS

This thesis will address the role of the NCNS in Mi'kmaq resource management and government-Mi'kmaq relations. The following section will indicate the politics of the ongoing tripartite negotiations (between federal, provincial and Mi'kmaq representatives) in Nova Scotia, from which the NCNS is excluded.

One of the case studies, the Moose Management Plan (MMP), serves as a pilot project for the Framework Agreement (FA) negotiations, which aim to forge a new partnership between Mi'kmaq and governments in Nova Scotia. The FA was signed in February 2007 by the provincial Office of Aboriginal Affairs (OAA), the federal INAC and 11 of the 13 Nova Scotia Mi'kmaq chiefs with the Grand Chief of the Grand Council as a witness (Mi'kmaq Rights Initiative, 2008). The parties anticipate signing a Memorandum of Understanding in 2011, leading to a Final Agreement, which will outline principles of a mutual working relationship to implement Mi'kmaq rights. The Mi'kmaq Rights Initiative KMK (*Kwilmu'kw Maw-klusuaqn*) has been established to coordinate the negotiations; it is funded by INAC and directed by the Assembly of Nova Scotia Mi'kmaq Chiefs. Although this process

is intended to be inclusive of all Mi'kmaq, status or non-status, living on reserve or off-reserve, much emphasis is placed on getting all 13 chiefs involved {KMK, 2008 #43}. Meanwhile, the NCNS has been excluded by the chiefs (Martin, 2007).

This conflict between the political representatives of the Mi'kmaq nation emerged in 1985 with the formation of the Confederacy of Mainland Mi'kmaq (CMM). Until 1985, the 13 Bands were united in Union of Nova Scotia Indians (UNSI), which cooperated with the NCNS and the Mi'kmaq Grand Council in a Treaty Working Group (Martin, 2007). As some chiefs from mainland Nova Scotia did not feel equally represented by the *Unama'ki*-based UNSI, six of the eight mainland Bands formed the CMM. Therefore, the Union of Nova Scotia Indians (UNSI) now represent the five Bands of Cape Breton Island/*Unama'ki* (as well as two mainland Bands) (Coffin, 2003).

Furthermore, the CMM held that the presence of the NCNS would "water down" the financial and political standing of the Treaty Working Group. Although the Grand Council maintained that there is no distinction between on- and off-reserve Mi'kmaq (and neither between status and non-status), the opposition of the CMM initiated a divide between the Bands and the NCNS (Martin, 2007). This divide crept into the first tripartite forum (Coffin, 2003) that was held in 1991 to address racist injustices in the justice system in Nova Scotia (Mannette, 1990). At that time, the Mi'kmaq were represented by the UNSI and the CMM as well as the NCNS. However, the Assembly of Nova Scotia Chiefs walked out of these negotiations and subsequently signed, with the Grand Council's Grand Chief, a resolution stating that "the only legitimate representative of the Mi'kmaq of Nova Scotia, as a people and a nation, are the Chiefs of the thirteen Mi'kmaq First Nations" (Coffin, 2003). In response to this break-down, the government of Nova Scotia interestingly offered to engage in separate tripartite negotiations with the NCNS (Hunka, 2007); however, a change in government preceded this and left the NCNS abandoned by both governments and the rest of the Mi'kmaq nation.

Despite its marginalized position, the NCNS considers itself the "Self-governing Authority for the large community of Mi'kmaq/Aboriginal Peoples residing throughout traditional Mi'kmaq territory in Nova Scotia undisplaced to Indian Act reservations" (NCNS, 2006). The NCNS maintains strong linkages with other councils of non-status aboriginal people, such as the regional Maritimes Aboriginal Peoples Council (MAPC), and the Native Councils of the neighbouring provinces of Prince Edward Island and New Brunswick.

It remains to be seen if the ongoing FA negotiations will become inclusive of all Mi'kmaq and what the consequences of further exclusion of the NCNS will be. This thesis will not address the tripartite negotiations in further detail, but rather highlight the NCNS's role in the MMP and Mi'kmaq resource management.

E. Mi'kmaq Resource Management

1. Traditional Mi'kmaq Resource Use and Knowledge

In order to appreciate Mi'kmaq perspectives on contemporary debates about Mi'kmaq resource rights, an understanding of their history of resource management is important. I will here outline how the Mi'kmaq way of life has changed with European colonization and centralized reserve governance; this will also indicate the intricate Mi'kmaq ecological knowledge (MEK) and their traditional stewardship ethic of sustainable resource use. I will further illustrate the political dimensions of

contemporary Mi'kmaq resource management, which establishes the rationale for a political ecology perspective to my case studies.

Before the arrival of European settlers, the harsh seasons in Nova Scotia necessitated a semi-nomadic and communal way of life with fishing, hunting and gathering as the primary means of subsistence for the Mi'kmaq (Battiste, 1997). During the summer months they lived in coastal villages to harvest seafood and berries; during the winter they dispersed into smaller Bands and lived inland to hunt big game and fish in the rivers. The traditional moose hunting season commenced with the 9th lunar cycle; moose meat (preserved with berries) and hides provided vital resources for the winter. Figure 5 also indicates that food resources were scarce during the winter months of February and March, causing winter famines.

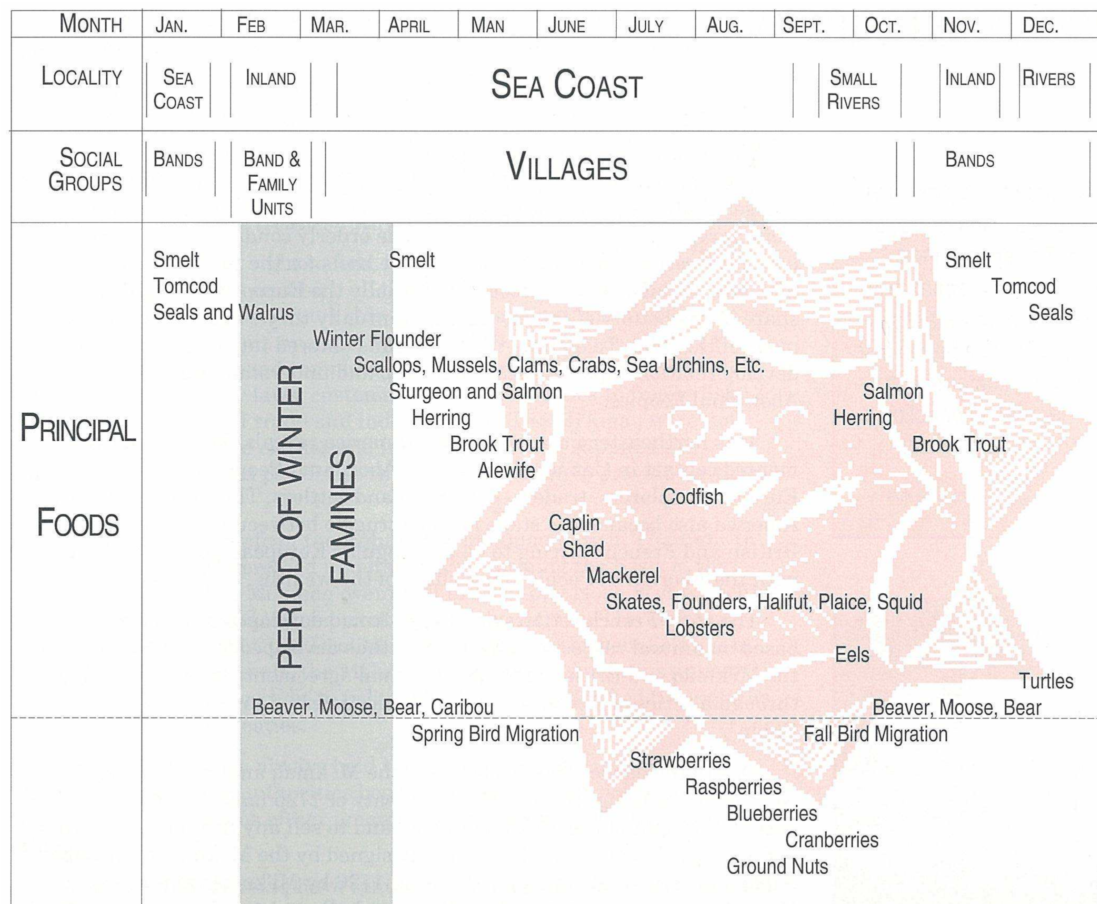

Figure 5: Calendar of traditional food resources of the nomadic Mi'kmaq in ancient times. Source: (NCNS, 1993)

Like other subsistence cultures around the world, communal life based on local resources led the Mi'kmaq to develop intricate systems of ecological ontology, knowledge, and harvesting ethic (Battiste, 1997), which were grounded in a holistic cosmology. Mi'kmaq resource use was guided by *Netukulimk*, a set of ethical guidelines for sustainable resource use; the Mi'kmaq ontology of the environment is based on Mi'kmaq spirituality (*Ktlamsitasuti*), which places humans, their ancestry and non-human species in reciprocal relationships. This allows for the personification of the natural world and its respectful usage by humans, who act as its guardians (NCNS, 2007). Mi'kmaq spirituality and ecological knowledge have been developed through oral transmission since their ancestors settled in Nova Scotia, which is thought to be 13,000 years ago (Marshall, 2007b).

2. Repression and Resurgence of Mi'kmaq Resource Harvest

The Mi'kmaq maintained their nomadic way of life during the early phases of European settlement and could also benefit from supplying the fur trade. Mutually beneficial relationships emerged, and the early settlements were compatible with the Mi'kmaq resource use patterns (Battiste, 1997; Nettheim *et al.*, 2002). However, Loyalist migration waves from the US in the 1780s and their agricultural expansions triggered increasing competition for resources (Nettheim *et al.*, 2002), which led to a breakdown of the Mi'kmaq way of life within a generation (Battiste, 1997). Mi'kmaq were forced to set up family farms on marginal lands, which later became 'reserved' for their usage; here, they survived on subsistence agriculture, crafts trade and seasonal labour (Battiste, 1997). From the 1930s, the establishment of the residential school in Shubenacadie and a program to relocate all Nova Scotia Mi'kmaq to two reserves (Eskasoni and Shubenacadie) further dislocated Mi'kmaq from their culture and resources.

Like many reserve communities in Canada, Mi'kmaq reserves are now dependant on limited economic opportunities, government benefits and imported, processed foods, as subsistence on local resources has become unfeasible. Modern resource management has favoured an industrial development of Nova Scotia's natural resources (especially its fisheries) and a marginalization of Mi'kmaq in resource management (Stiegman, 2003).

After Mi'kmaq rights to hunt and fish were affirmed by the SCC in 1985, 1990 and 1999, the Mi'kmaq have entered into commercial fisheries and are increasingly involved in fisheries and forestry management; especially in the watershed of the Bras d'Or Lakes, which is the central resource base of *Unama'ki* (Hipwell, 2001). Mi'kmaq have also successfully resisted potentially detrimental resource development proposals, most notably a gravel quarry at the sacred Mi'kmaq *Kluskap* mountain; (Hipwell, 2001, 2004c; Hornborg, 1994). Given their lack of resources and political leverage, their persistence and initiative in local resource management is remarkable.

3. Mi'kmaq Capacities for Resource Management in *Unama'ki*

With funding from government and industry, Mi'kmaq have developed two self-governed institutions for resource management and research, which are located on the Eskasoni reserve on *Unama'ki*, which is the largest Mi'kmaq reserve with 2792 inhabitants (Coates, 2000).

The Eskasoni Fish and Wildlife Commission (EFWC) manages the Mi'kmaq fisheries of the Bras d'Or Lakes and has been combining traditional and universal science very successfully. Over the past five years, EFWC has set up a self-governed management plan for the commercial Gaspereaux fishery. Currently, EFWC is undertaking collaborative research with local university departments to manage the MSX disease that has been killing the oyster population in the Bras d'Or Lakes.

The *Unama'ki* Institute for Natural Resources (UINR) is chaired by the five *Unama'ki* chiefs and aims to secure sustainable resource access for all Mi'kmaq of *Unama'ki*. In 1998 the UINR was instrumental in negotiating a mining agreement with Georgia Pacific for a Gypsum mine in Melford, *Unama'ki* and monitoring its compliance (Georgia-Pacific Canada and the *Unama'ki* Mi'kmaq Communities, 1998). UINR has since engaged in several collaborative research projects and plays a key role in developing both the Lobster and Moose Management Plan.

Mi'kmaq experts from the EFWC and UINR staff play leading roles in the Collaborative Environmental Planning Initiative (CEPI) for the Bras d'Or Lakes (CEPI, 2008), which was initiated by Mi'kmaq chiefs in 2003. CEPI brings together a host of different interest groups and aims to develop a management plan for the Bras d'Or Lakes watershed. A workshop held in 2006 to harness relevant MEK and discuss its accommodation in watershed management has been a core component of the CEPI (CEPI, 2006).

Both EFWC and UINR were initiated by the Grand Council and are predominantly staffed by local Mi'kmaq. In order to staff these institutions and expand Mi'kmaq involvement in resource management, there have been a number of education initiatives that aim to build capacities in Mi'kmaq communities to work in scientific resource management.

Apart from the resource management institutions in *Unama'ki*, the NCNS also has substantial resource management capacity, which is sustained with minimal governmental funding. The 'NCNS Natural Life Management Authority' *Netukulimkewe'l Commission* has managed the harvesting activities of its members since 1989 and annually issues Community Harvest Guidelines. These emphasize the traditional harvesting ethic of *Netukulimk* and brief harvesters on biology, ecology and health and safety issues. For most hunting, trapping and fishing activities, the NCNS maintains a system of tags and report cards, which collect details on the harvest and observations regarding the condition of the habitat. The NCNS thereby effectively harnesses the knowledge of experienced Mi'kmaq harvesters whilst also monitoring their harvest. Despite being independent from governmental funding, the NCNS voluntarily shares this data with DNR and DFO to complement their data bases.

In subsequent chapters the resource management capacity of the Mi'kmaq and the political dimensions of co-management of Mi'kmaq Food, Social and Ceremonial (FSC) harvest will be discussed. My case studies will illustrate how Mi'kmaq are implementing self-governed resource management and what methods they propose to use. Chapter 5 will provide extensive context to the case studies, introducing the roles EFWC, UINR and NCNS play and the specifics of both Mi'kmaq and non-native hunting and fishing rights.

Chapter III: Methodology

A. Introduction

Having provided the reader with some necessary background information, I will next present my positionality and methodology, which are of primary importance to aboriginal research methodologies (Absolon & Willett, 2005). To put my methodology into context, I will first introduce traditional methodologies of human geography and then discuss postmodern and decolonization methodologies in more detail. Drawing on the latter, I will then elaborate on my research ethics, discussing aspects of positionality, reflexivity and research relationships. Outlining my research journey, I will explain how I selected case studies and interview participants. Finally, political ecology will be introduced as the conceptual framework for the analysis of my research findings.

How humans conceptualize the natural world – how 'nature' is arguably culturally constructed – is a key aspect of the human worldview and an effective proxy for the comparative study of ontologies, epistemologies and research methodologies. The following introduction of geographical research methodologies will therefore hinge on their ecological ontology.

B. Western Research Methodologies in Geography

1. Positivist Traditions

Research in Human Geography has traditionally been shaped by positivist traditions and methodologies (Mansvelt & Berg, 2005). Positivist epistemologies hold that knowledge (ontologically part of a singular truth) can be found through observations, which also can be extrapolated across differing contexts (DeWalt, 1994). Here, insights are gained through a reductionist lens, which lets the researcher zoom into detail and thus out of context. Yet such knowledge and its creation is considered objective, as positivist methodologies require observations and experiments to be systematic, transferable and repeatable (Zammito, 2004); it follows that the researcher's position is neutral and does not bear any impact on the findings. This is also presumed for the study of complex systems such as society or ecology (Strega, 2005b). This empiricist approach was the premise of both quantitative and qualitative inquiries in human geography; the 'quantitative revolution' in the 1960s further marginalized qualitative research (Mansvelt & Berg, 2005).

Positivist research traditionally relies on Cartesian[4] ontologies, which emerged during the European Enlightenment and have since formed the Western paradigm for studies of human relations to their natural environment (Berkes, 2008; Suchet, 2002). According to this, the ability to think makes humans superior beings and places them apart from and above non-human species. This also gives them the mandate to explore and exploit the natural world, not only for survival but also for research, constructing ecological knowledge. In general, Cartesian ontologies are based on a number of binaries, such as mind/matter, human/non-human, nature/society, wild/tamed, etc (Benton & Craib, 2001; Suchet, 2002). While positivist methodologies have lead to much scientific insight, they are not always appropriate to research complex ecological or social systems.

[4] The term 'Cartesian' denotes an influence of the French Enlightenment philosopher René Descartes.

2. Post-positivist Approaches

Since the 1960s, postmodernist thought has profoundly influenced social science disciplines and has led to alternative research methodologies that challenge the hegemony of positivist approaches (Strega, 2005b). Postmodernism's attention to pluralism and context intellectually broadened the academic arena, allowing for post-positivist, and more specifically, poststructuralist and postcolonial theories to be developed. Furthermore, these advances made space for "critical" research agendas that address issues of gender, race and indigenous peoples (Denzin & Lincoln, 2008; Strega, 2005a).

Fundamental to post-positivist approaches is that they reject the doctrine of objectivity and neutrality. They acknowledge that both the researcher and the researched influence the research process and its findings. Therefore, all knowledge is situated in – and thus shaped by – a socio-cultural context and is thus constructed rather than essential (Ley, 2003). This constructivist perspective is a counterpoint to deterministic ontologies of realism and essentialism. I will briefly indicate the differences along this spectrum by illustrating implications of poststructuralist constructions of the natural world and a postcolonial perspective on history.

Poststructuralist theories insist that any human view of 'nature' is an ontological construct (Hipwell, 2004a; Robbins & Monroe Bishop, 2008) and therefore "what we perceive as natural is *also* cultural and social" (Escobar, 1999:2, emphasis added). Poststructuralists argue that this "antiessentialist" doctrine requires "the final decline of the modern ideology of naturalism, … [and thus] the existence of pristine Nature outside of history and human context" (Escobar, 1999:1). While this may not have infiltrated all fields of geography and resource management, this constructivist premise allows for cultural and socio-economic dimensions of human-environment interactions to receive their due attention. Here, poststructuralism pays critical attention to how cultural constructions of nature are formed; it further critically examines the distribution of the power and knowledge necessary to do so, as well as its political implications (Escobar, 1999:1). I will examine this in more detail in Chapter 4, where I discuss poststructuralist political ecology.

More generally, poststructuralist methodologies emphasize the political nature of all research and caution against simplistic representations and conclusions (Brown & Strega, 2005). Poststructuralists have thus deconstructed positivist ideas of knowledge, power and evidence in research. Consequently, the concept of anti-methodology has identified shortcomings of predetermined research methodologies, which necessitate conclusive outcomes and thus inhibit the fluidity of research process, positionalities and relationships (Doel, 1996; Law, 2004; Massumi, 1996). I will later suggest how a poststructuralist anti-methodology is in line with aboriginal expectation to research relationships, effectively 'decolonizing' them. My research will thus indicate how poststructuralist and aboriginal methodologies are complementary.

Post-colonialism pays critical attention to the legacy of colonial governance and research and reveals neo-colonial approaches and implications. With an eye for constructivism, Edward Said critiqued the dismissive nature of Western representation of other cultures (Barnett, 2006); here, his critique of Orientalism (Said, 1978) also exposes the roots of romanticized conceptions of indigenous peoples and cultures, which have grown out of Western cultural hegemony and ignorance (Nadasdy, 2005b; Willems-Braun, 1997). Post-colonialism therefore advocates a comprehensive and contextual understanding of other cultures and ethical representation thereof (Barnett, 2006).

3. On the Postmodern Bandwagon: Methodologies from the Margins

While the postmodern developments brought about fundamental challenges to mainstream research agendas and methodologies, they were largely developed within the Eurocentric academy and by Western, male academics (Weber-Pillwax, 2001). As their principal intent is to deconstruct inadequate conceptual frameworks, they are often criticized for revolving in the theoretical realm with little relevance to the lives of the people they advocate for (Weber-Pillwax, 2001). Also, their vantage point for deconstruction remains largely within Western epistemologies (Wilson, 2001).

Postmodern advances, however, made way for the emergence of a number of "critical" research methodologies[5], which I will briefly outline here to contextualize aboriginal resource agendas. Feminist and race theorists pay critical attention to the dynamics and inequalities of race and gender in society; furthermore, they more often have an agenda of social change than of mere deconstruction (Brown & Strega, 2005). They are also concerned that postmodern theories have been mostly advanced by white, male theorists and they do not see their voices or concerns represented. Such criticism often emanates from scholars who position themselves on the margins of Western (academic) societies; they argue that people are marginalized on account of their gender, race, ethnicity, sexuality, physicality or other differences (Denzin *et al.*, 2008; Strega, 2005a).

These critical methodologies have a comparable research agenda to indigenous methodologies. Scholars of both approaches are often conscious of their own marginalization but choose to harness their positionality to advocate for empowerment. Consequently, mutual methodological features and strategic alliances between critical and indigenous methodologies have been discussed, especially between indigenous scholars and (poststructuralist) feminists (Denzin & Lincoln, 2008; Strega, 2005b; Zohl dé, 2005)

C. Aboriginal Methodologies: towards Decolonization

1. Introduction

Section B above introduced different research methodologies with their philosophical underpinnings. With the methodological context in mind, this section will introduce the research paradigm[6] of decolonization. In Section D, I will elaborate on how this research will follow the guidelines of decolonization.

Apart from decolonization, my thesis will also be informed by Western notions of poststructuralism introduced above and will employ the Western conceptual framework of political ecology. When elaborating on my positionality below, I will identify myself as a member of the Western academic mainstream and thus outside of the margins mentioned above and outside of the Mi'kmaq research community.

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[5] Although my review of the literature cannot be extensive, other authors may agree with the notion that critical methodologies were established in the wake (or 'on the bandwagon') of the postmodernist tide; however, Strega (2005) contends that feminism laid the foundation for poststructuralism to develop. Nevertheless, for the purpose of this thesis it is futile to determine the genealogy or hierarchy of postmodern and critical methodologies and they have more recently developed in cross-fertilization.

[6] I will adopt the distinction between the term 'methodology', referring to an approach to research and 'method', a single technique to conduct research (Minichiello *et al.*, 2008:4; Smith, 1999; Swadener & Mutua, 2008:32). Further, a 'research agenda' implies a set of (ideological) aims and a 'research paradigm' refers to a political doctrine (Wilson, 2001).

2. Premise: Colonized Knowledges

As the experience of marginalization is central to the position of aboriginal scholars, I will firstly introduce the historical and personal battles aboriginal researchers bring to the academic arena.

Aboriginal peoples around the world share a common history of colonization during eras of imperial expansion and settler migration. As a minority in "settler societies" they continue to suffer from marginalization on socio-economic, political and cultural fronts. Therefore, aboriginal scholars are keen to conclude that colonization persists today in more subtle levels than in imperial times, which is evidenced by the reluctance of majority governments to honour aboriginal rights and fiduciary responsibilities.

I will briefly exemplify how aboriginal peoples have been objectified and effectively colonized by non-aboriginal researchers, often following positivist methodologies. Most blatantly, colonial explorers recorded racial parameters and socio-cultural practices to support their claims of aboriginal cultural inferiority and underdevelopment (Louis, 2007). More subtly, the systematic exploration of natural history and foreign ecosystems ignored indigenous inhabitants and did not acknowledge their knowledge or assistance in the imperial project (Johnson & Murton, 2007). As I will show later, any essentialist representation of nature – commonly employed to justify the development of natural resources – negates the connection aboriginal people may have to their land, reinforcing their colonial exclusion in resource management (Willems-Braun, 1997).

Contemporary research of indigenous flora and fauna has a more commercial than exploratory incentive, but criminal practices of biopiracy and biased IPR (Intellectual Property Rights) regulations have enabled the expropriation of collective knowledge of aboriginal peoples (Smith, 1999). In addition to geographers, researchers in archaeology, ethnography and, most notoriously (Louis, 2007; Sykes, 2005), anthropology have researched aboriginal peoples with exploitative methodologies and represented biased insights without any consideration of their positionality or of aboriginal views or values.

3. Paradigm: Reclaiming Research and Knowledge

Given this exploitative and unethical legacy of research on aboriginal peoples, Linda Tuhiwai Smith's seminal book *Decolonizing Methodologies* (1999) aims to "situate and conceptualize research within its wider genealogy of Western imperialist and colonialist processes" (Howard-Bobiwash, 2005:282). Smith justifies this postcolonial perspective with a critique of Western knowledge production and research based on Orientalist notions of aboriginal peoples, as here cited above. Well aware of this legacy, aboriginal people have developed an instinctual aversion to research, which is why "'research' is probably one of the dirtiest words in the indigenous world's vocabulary" (Smith, 1999:1).

Consequently, decolonizing methodologies seek to reclaim the research process and empower aboriginal researchers to conduct research following self-defined means and ends. Decolonization will therefore acknowledge the exploitative legacy of colonizing research and the validity of aboriginal knowledge systems. The following section will synthesize elements of the decolonization paradigm.

The agenda of decolonization is widely embraced by critical scholars of aboriginal education, governance and research methodologies (Battiste, 1998;

Denzin *et al.*, 2008; Gibson, 2006; Porter, 2005; Shaw *et al.*, 2006; Smith, 1999)[7]. While some scholars prefer the sound of an 'anti-colonial' premise, I will adopt the rhetoric of decolonization, as I appreciate its ambitious and "liberatory" premise (Denzin & Lincoln, 2008; Swadener & Mutua, 2008:38).

In turn, aboriginal scholars often object to the postmodern notion of a 'postcolonial' era, as the (ex-)colonial subjects can best decide when colonization is overcome (Battiste *et al.*, 2002b; Louis, 2007; Smith, 1999)[8]. Nevertheless, 'decolonizers' acknowledge the space postcolonial theory has made, but are also sceptical of postcolonial authorship (Smith, 1999), identifying it as exclusionary (Swadener & Mutua, 2008), but also as a "cacophony of subaltern voices" (Swadener & Mutua, 2008).

4. Research Ethics for Decolonization

Although its advocates agree that there is no formulaic approach to a decolonizing methodology (Battiste *et al.*, 2002b; Swadener & Mutua, 2008), I will here try to capture the essence and some common concerns and propositions of decolonization. After generations of aboriginal peoples being over-researched and disenfranchised from research processes and results, the research agenda of decolonization commonly asserts that aboriginal researchers "must reframe, reclaim and rename the research endeavour" (Steinhauer, 2002:70). Many scholars agree that making space for academic, aboriginal research necessitates a decolonization of the academy (Battiste *et al.*, 2002a), as such research "naturally challenges Western research paradigms" (Absolon & Willett, 2005; Louis, 2007:130). Therefore Shawn Wilson sees the need to not only articulate an aboriginal methodology, but indeed an "indigenous research paradigm", which can reframe research theory and practice according to four aspects: ontology, epistemology, methodology, and axiology (ethical guidelines) (Wilson, 2001:175). I will next characterize these four aspects and will thereby also indicate common properties of aboriginal cosmologies, which guide aboriginal research paradigms. This also explains the typical ontological difference of the Mi'kmaq cosmology, which was introduced in Chapter 2.

Aboriginal cultures maintain a holistic ontology of their environment, which allows for inclusive and reciprocal human-environment relationships (Grim, 2001). Holistic ontologies are constructivist in the sense that they allow for multiple realities according to interpretation, but also consider spiritual dimensions. Research then is a spiritual journey to make sense of reality (Louis, 2007). Holistic epistemologies therefore need to be "polyrhetorical" (Johnson & Murton, 2007) to explain the fluid and contextual ontologies they are based on. Importantly, knowledge in aboriginal societies is "not an individual identity" and therefore "cannot be owned or discovered"; it rather is relational, which means it exists to be shared with the rest of the community and in fact with all of creation (Wilson, 2001:176-177). This is also manifest in aboriginal languages, which convey "an epistemology where relationships are more important than reality" (Wilson, 2001:177). Fundamentally, aboriginal knowledge does not claim universality and is always situated in its local context, mutually nurturing local ontologies (Louis, 2007).

[7] As the cited authors are employed by universities in New Zealand, Australia Canada or the USA, an absence of aboriginal writers from non-Western countries has been observed (Denzin *et al.*, 2008).

[8] Notwithstanding this premise, Mi'kmaq scholar Marie Battiste likes to use the term postcolonial in aspiration of liberation (Battiste *et al.*, 2002b) and for Māori scholar Brad Coombes it "focuses on [rather than negates] the continuation of colonial practice" (Coombes, 2007:187). Both Battiste and Coombes therefore use the term postcolonial much in the spirit of decolonization.

I will explain methodology and ethic for decolonization in reference to the native Hawaiian scholar Renee Pualani Louis (2007). A methodology capable of researching and representing aboriginal realities needs to embrace the local, holistic epistemology and employ appropriate methods to let the culturally embedded knowledge surface; furthermore, it has to respect the local axiology. To the latter end, Louis expects research practice to fulfil "four unwavering principles: relational accountability; respectful representation; reciprocal appropriation; and rights and regulation" (Louis, 2007:133). I will discuss these here briefly and reinforce them with reference to other aboriginal scholars' expectations.

Relational accountability means that researchers are accountable not only to their research partners but to 'all their relations' (Louis, 2007; Wilson, 2001); this refers to aboriginal beliefs that humans, their ancestors and their environment are inextricably connected and related. From the researcher this requires respectful understanding of how the research community will perceive the research.

For respectful representation, researchers also have to account for their epistemological positionality, as this will colour the way they conduct and represent the research. Unethical claims of neutrality and objectivity are contradictory to aboriginal ways of knowing and representation. By locating themselves and their relations, researchers admit that their research encounters and representations are subjective (Absolon & Willett, 2005).

Reciprocal appropriation prohibits exploitative research relationships. Traditionally, an equivalent to research for aboriginal cultures may be the reciprocal exchange of knowledge. Today, research relationships with professional researchers may leave little room for the aboriginal partners to learn directly; if not, researchers need to ensure that the research is of wider benefit to their research community. A reciprocal research relationship also means that aboriginal partners are not employed as mere subjects or informants; they should be incorporated into every step of the research process, including the interpretation and publication of findings (Louis, 2007; Mi'kmaw Ethics Watch, 2007).

Rights and regulation require research partnerships to follow a protocol defined by the aboriginal partners that sets out guidelines to ensure that the ethical requirement of accountability, representation and reciprocity are fulfilled. It further details how and where the findings of the research will be presented and accessible to the aboriginal partners; it also ensures that these maintain the intellectual property rights of any knowledge they share during the research process.

D. My Research Agenda for Decolonization

1. Introduction

Most decolonization authors discuss their methodologies primarily with aboriginal researchers in mind. For non-aboriginal researchers, multiple issues of positionality and power relations need to be discussed. The literature has here transcended the simplistic typology of insider/outsider roles and fixed positionalities, acknowledging that research relationships are complex and evolve over time (Crang, 2003; Smith, 1999:137).

I will explain how I aimed to make my research process and representation collaborative, ethical, non-obtrusive and, essentially, decolonizing. This will entail a discussion of my positionality, research ethics, and methods for my analysis and representation within this thesis. I will also outline my ontological and epistemological foundation and reflect on my learning process; illustrating my

epistemological positionality, this will centre on how I got to appreciate and understand the Mi'kmaq ontology of ecological knowledge and harvesting ethic. Subsequently, I will discuss the methods I employed during research preparation, fieldwork and analysis.

2. My Background and Positionality

a) Positionality and Reflexivity

As outlined above, the guiding principles for decolonizing research assert that it is essential for researchers to position themselves within the research process (Absolon & Willett, 2005; Louis, 2007; Smith, 1999). Apart from ethical requirements for aboriginal research, human geographers (particularly feminist and postcolonial writers) commonly incorporate discussions of positionality and reflexivity[9]. Reflecting on their arguments and my research process, I am aware that my identity, presence and interpretation have shaped my research and representation in every inevitable way.

Authors from different methodological traditions have identified reflexivity as a strategy for researchers to effectively position themselves within the research process. Many feminist and poststructuralist geographers employ a ‘critical reflexivity’ to account for the partiality of their findings (Rose, 1997). While this may be implicit in non-conclusive aboriginal methodologies, aboriginal scholars also consider reflexivity as a viable strategy to fulfil their relational accountability to their research community and put their own relational positionality and interpretation into perspective (Absolon & Willett, 2005; Louis, 2007).

I have drawn from both postmodern and aboriginal strategies. Following Gillian Rose’s (1997) rationale, I aim to use reflexivity as a caution when negotiating the field of power relations that are implicitly negotiated between me and my research participants. I further hope that my reflective account and analysis will make my representation transparent and insightful to both the reader and my research partners.

To comprehensively discuss my positionality, I will conclude the following three sections of this chapter with a discussion of three dimensions of my positionality. Firstly, I will introduce my educational background in order to indicate my epistemological and cultural positionality[10]; with this I offer a reflective account of how I got to know and appreciate aboriginal epistemologies. After an elaboration of my research methods and ethical provisions, I will reflect on my relational positionality in the field; this will let me assess my research approach. Finally, after introducing my methods for analyzing and representing my insights, I will discuss my positionality within the writing process. This three-pronged approach should not decouple these related dimensions of my positionality, but will weave my reflective methodology into the structure of this chapter.

b) My Epistemological and Cultural Positionality

I grew up as a keen science student and studied analytical, reductionist environmental sciences at a German university for two years. Based on empiricist methodologies, ecological processes and complexities were studied as nutrient cycles

[9] In response to the prominence of positionality discourse, critical authors have also reflected on common shortcomings (Nagar & Ali, 2003; Salzman, 2002; Sidaway, 2000).

[10] I will provide some additional detail and context regarding my studies and career aspirations within the following three footnotes.

or computer model simulations. Humans were only considered part of the ecological picture in terms of their impacts on environmental processes. The primary aim was to understand ecological processes and human impacts to successfully manipulate them and circumvent anthropogenic degradation. This education was dogmatic insofar as it implied the universality of a reductionist knowledge system, while non-Western ways of knowing or conceiving the environment were not considered.

Outside of my formal education, my epistemological horizon was widened by my engagement with non-Western cultures during travel and work experiences in South Asia, West Africa and Latin America. I gained valuable insights during casual participant observation with a keen interest in how aboriginal people know and use their environment[11]. As I intended to immerse myself in foreign communities and relationships, my way of travelling may have been in line with Bronislav Malinowski's aims of participant observation (Sykes, 2005).

During three years of study in New Zealand I shifted my focus from physical to human geography and developed a strong interest for aboriginal peoples' knowledges and rights in resource management and international development[12]. Specifically, I was introduced to the holistic Māori cosmology and resource-use ethic (*Kaitiakitanga*) (Roberts *et al.*, 1995) and the development of provisions for cultural consideration in New Zealand within the Resource Management Act. More fundamentally, I gained an understanding of non-Western conceptions of human-environmental relationships; customary resource rights of aboriginal peoples; societal discourses concerned with aboriginal status and bicultural relations; and governmental challenges of colonial legacy and reconciliation.[13]

My studies of aboriginal resource management have substantially influenced my epistemological and ontological worldview. Since being a science student in Germany, my ontological position has developed from an essentially materialist standpoint to a more idealist view of reality. My epistemological location has thus broadened from an empiricist foundation to a more holistic appreciation of diverse, culturally (and politically) constructed ways of knowing the environment. I therefore now consider myself more apt to studying aboriginal resource management.

As the subsequent account of my field study in Mi'kmaq territory will illustrate, this made my understanding of aboriginal interests in resource management more tangible and contextual. My experience supports Marie Battiste's assertion that: "to acquire IK, one cannot merely read ... literature, or do field visits. Rather, one comes to know through extended conversations and experiences with elders, peoples and places of Canada" (Battiste, 2008:502). While I was very fortunate to acquire some insights into the Mi'kmaq experience and aspirations, my positionality and assignment naturally left vast areas of Mi'kmaq knowledge and views inaccessible to me. I therefore also agree with Battiste's opinion that non-

[11] Exposed to widespread poverty and inequality, my career goal to work in international development formed. I assumed that studying universal science in a Western institution would grant me the privileged position to know more about degraded environments than local resource users and be able to provide independent, scientific advice.

[12] More generally, my studies covered theories and histories of Western development interventions. This highlighted both the unsuccessful legacy of expert-led development and the potential of local participation and epistemological relativism. This understanding questioned my initial career goal of contributing to international development as an environmental scientist.

[13] Much of this learning, however, I gained from lectures and readings, with some emphasis placed on discursive engagement with indigenous epistemology, identity and politics. The practical relevance of this for New Zealand was reinforced by a Marae fieldtrip, Māori guest lecturers and engagement with public discourse on bicultural issues, both within and outside university.

aboriginal researchers need to learn the local language to fully understand an aboriginal worldview (Battiste, 2008). In Chapter 8 I will offer some final reflections on what I learned from the practical and theoretical aspects of this research journey.

3. Methods and Ethics of my Research journey

a) Selection of case studies and research participants

I arrived in Nova Scotia in December 2006 on a threefold mission. For one, I was involved with the organization of international workshops for the Aboriginal Sustainability Network (ASN)[14], which were hosted by two Mi'kmaq communities of *Unama'ki* in June 2007. Drawing on contacts and insights from this involvement, I conducted my field visits and interviews between May and June 2007. Thirdly, my son was born in March 2007 in Halifax, where my family in-law served as a home base during my time in Nova Scotia.

From preparation of my research and the ASN, I was well aware of the role that the *Unama'ki* communities, the Eskasoni Fish and Wildlife Commission (EFWC) and the *Unama'ki* Institute for Resource Management (UINR) play for Mi'kmaq resource management. My initial contacts with potential Mi'kmaq research partners were made through my supervisor Bill Hipwell[15]. My involvement in the ASN brought me into contact with further Mi'kmaq community members, elders and academics. I soon noticed that my selection of interviewees had to be opportunistic (Bradshaw & Stratford, 2005), as research partners referred me to further experts. This necessitated me to maintain some flexibility in the research focus, as I was continuously introduced to additional facets and perspectives. This approach proved to be very insightful and, in retrospect, essential to ensure that my research is of relevance to current issues of Mi'kmaq resource management. An opportunistic approach is also encouraged by the theory of anti-methodology, which further emphasises the serendipity this entails (Doel, 1996). Indeed, the insights I acquired during field visits were often profound and could not have been foreseen or planned.

My initial research interest was to explore how the institutionalization of Mi'kmaq resource management (through EFWC and UINR) has developed since an innovative agreement was signed with mining corporate Georgia-Pacific in 1998 (EFWC, 1999; Georgia-Pacific Canada and the *Unama'ki* Mi'kmaq Communities, 1998). I proposed that the Mi'kmaq experience could inform capacity-building programs for other aboriginal communities in Canada and abroad. My preliminary inquiry found evidence for the remarkable Mi'kmaq negotiation capacity, which may have made a scholarly documentation insightful. However, I soon realized that my analysis of the agreement is of little contemporary relevance for Mi'kmaq resource management. I then (April 2007) sought to explore how Mi'kmaq have since asserted their Lo/TEK in local resource management. I invited prospective research participants to guide my research questions and help me choose case studies that

[14] During the last two years of my studies my supervisor Dr William Hipwell employed me as a Research Assistant and Associate Investigator for the 'Aboriginal Sustainability Network'; this research project aims to facilitate the exchange of development knowledge and strategies between participating aboriginal communities from New Zealand, Australia, Taiwan and Canada (Hipwell *et al.*, 2008)

[15] Bill Hipwell knows several Mi'kmaq experts in resource management since his doctoral fieldwork on resource management of the Bras d'Or Lakes bioregion (Hipwell, 2001).

illustrate the accommodation of Mi'kmaq ecological knowledge (MEK) and where my research could potentially contribute to the development[16].

I was soon introduced to the Moose Management Plan (MMP), which was perceived as a landmark opportunity for Mi'kmaq to establish an equitable partnership with local governmental agencies for resource management and uphold their rights to customary resource harvest. Several weeks later, I was introduced to the Lobster Management Plan (LMP) that UINR was developing for the Food, Social and Ceremonial (FSC) fisheries in *Unama'ki*. I decided that a case study of the LMP would provide additional insight into Mi'kmaq proposals for accommodating MEK and regulating traditional resource harvest on a smaller, communal scale. As for Mi'kmaq benefits, the alternative concept of the LMP seemed promising and well worth a scholarly documentation. I hoped that insights from both case studies would complement each other and serve my research aim to explore the political ecology of Mi'kmaq resource management with attention to different scales and resource sectors[17].

In June 2007 I conducted semi-structured interviews with both governmental and Mi'kmaq members of the Moose Management Working Group. However, I neither managed to set up an interview with a representative from Parks Canada nor an enforcement officer from DNR[18]. To explore the LMP, I interviewed the leading biologist and fisheries manager from EFWC, as well as an aboriginal fisheries manager from the federal Department of Fisheries and Oceans (DFO). To explore further perspectives and issues, I also interviewed Mi'kmaq elders, academics and representatives of the off-reserve NCNS. All interviewees signed Informed Consent Forms (approved by Mi'kmaw Ethics Watch committee, see Appendix 3), which included an optional waiver of anonymity. I conducted all interviews in the interviewee's work or home environment and they lasted between one and one-and-a-half hours (apart from the one with NCNS representatives, which lasted in excess of four hours). All interviewees agreed for their interviews to be tape-recorded and I supplied them with transcripts for their review in August 2007[19]. The appended interview schedule (see Appendix 4) provides an overview of the interviewees with their affiliations.

In my application to Mi'kmaw Ethics Watch, I proposed to potentially follow up my interviews with an email questionnaire survey or with phone interviews if I would find further insights or clarification necessary. However, since the interviewees' positions and expertise were too diverse, I decided that a questionnaire would not yield further insight. Also, I felt that this would not be consistent with the relationships I had established with many of them. When analyzing my interview

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[16] At this stage (May 2007) I applied to Mi'kmaw Ethics Watch for ethical approval of my research proposal (see Appendix 1).

[17] As an alternative second case study, I considered the Collaborative Environmental Planning Initiative (CEPI), which brings diverse stakeholders together to manage the Bras d'Or Lakes (CEPI, 2008). While this may have provided an insightful follow-up from my supervisor's PhD research (Hipwell, 2001), its analysis would have lent itself less to my research interests of customary harvest rights and communal management initiatives. I also decided to document and discuss the LMP, as the CEPI initiative was receiving a lot of public attention and was subject to ongoing academic thesis research (Naug, 2007).

[18] These cases were due to the absence of the appropriate representative and recent personal changes, respectively.

[19] I also appended a 'transcript consent form' on which the interviewees could make changes to the transcript or their details of affiliation for identification in this thesis (in case they had waived their anonymity).

transcripts my research journal provided clarification where needed so that I did not have to request any phone interviews.

b) Beyond Research Design: Opportunities in the Field

Apart from the interviews detailed above, I had several fortunate opportunities to attend a range of meetings that all aimed to build capacities for Mi'kmaq participation in resource management; many insightful contacts, interviews and informal conversation with Mi'kmaq emerged from these events, which I will summarize here briefly.

Clifford Paul, coordinator of the Mi'kmaq community consultations for the MMP, invited me to a workshop at Cape Breton University, Sydney, (held on 26/05/2007) that presented a novel program for integrative science education (Institute for Integrative Science & Health, 2008). The workshop was followed by a sweat lodge ceremony to invite the diverse participants to experience Mi'kmaq ceremonial customs.

Shelley Denny (UINR biologist and coordinator of the LMP) invited me to a meeting of lobster fishers and community members in Eskasoni (held on 20/06/2007) to discuss the progress of the LMP. On this occasion I had several insightful conversations with Mi'kmaq fishers, elders and a Grand Council representative.

Roger Hunka (regional coordinator of the off-reserve Maritimes Aboriginal Peoples Council (MAPC)) invited me to the ARISES conference (held on 08-10/06/2007 in Sackville, New Brunswick), which brought together mostly off-reserve Mi'kmaq from three provinces to discuss the development of the nation-wide Species At Risk Act (SARA) and the incorporation of MEK. This conference was a great opportunity for me to better understand the collective Mi'kmaq experience of marginalization in resource management and the integration of MEK. During the three-day events I gained some valuable insight into identities of off-reserve Mi'kmaq and got into contact with aboriginal leaders and academics from other parts of Canada and conducted one interview.

Finally, the ASN workshops provided an excellent environment for me to learn about contemporary Mi'kmaq issues of governance, education, and resource management; importantly, they also brought me into closer contact with Mi'kmaq cultural customs and practices and let me build relationships with some of my research participants. Apart from Participatory Action Research (PAR) activities, the ASN workshops featured a number of presentations by Mi'kmaq political leaders and resource managers that illustrated Mi'kmaq interests in self-government and commercial fisheries.

c) Mi'kmaq Research Ethics Reclaimed

I will next document how I gained ethical approval for my research. Aboriginal scholars have raised concerns that established university ethics institutions are based on individualistic and possessive conceptions of knowledge (Brown & Strega, 2005). The collective, relational nature of aboriginal knowledges systems can thus be misappropriated and therefore requires specific ethical provisions for research to be decolonizing (Battiste, 2008).

Since 1999, the Mi'kmaq Grand Council oversees the Mi'kmaw Ethics Watch committee (*Mi'kmaw Eskinuapimk*), which reviews all proposed "Research With and/or Among Mi'kmaq people" according to its "Mi'kmaw Research Principles and Protocols" (Mi'kmaw Ethics Watch, 2007:1). In general, Mi'kmaw Ethics Watch emphasises the collective ownership of Mi'kmaw knowledge and culture, issues of

power and control in research relationships and the impetus of research benefiting Mi'kmaq communities. Specifically, their ethical guidelines require that researchers conduct themselves in culturally appropriate ways and use participatory methods to involve Mi'kmaq participants in the interpretation of research findings. Through this institutionalisation of self-defined research protocol, Mi'kmaq have successfully reclaimed the control of aboriginal research, which is essential for the protection of their knowledge and culture against appropriation and misrepresentation (Battiste, 2008).

To ensure that my research meets these requirements and my own expectations, I sought collaborative and mutual relationships with Mi'kmaq research partners, as indicated above. Since all potential research participants were fluent in English, I confirmed that there was no need to translate any forms or results into Mi'kmaq language.

The Mi'kmaw Ethics Watch guidelines enabled me to follow locally defined research protocols, which serve as essential instructions for outside researchers to conduct ethical fieldwork and contribute to decolonization. After my return to New Zealand, the Human Ethics Committee of my home university (Victoria University of Wellington, VUW) accepted my ethical approval from Mi'kmaw Ethics Watch after review of their ethical guidelines and approval letter (see Appendix 2). In response of concerns of aboriginal scholars with Western ethics committees (as indicated above), the approval by VUW is noteworthy as it supports the sovereignty of Mi'kmaq Ethics Watch to approve of research on Mi'kmaq territory.

When approaching potential research participants, my approval letter from Mi'kmaq Ethics Watch granted me some initial credibility. The following section will further reflect on how my relationship with Mi'kmaq research partners and my presence influenced the research process and discuss my positionality in my research community.

d) My Relational Positionality in the field

At the beginning of my research journey in Nova Scotia, I was familiar with the academic literature concerned with issues of positionality and power relations in cross-cultural research. I was also aware that I embodied what is there referred to as the "idealized graduate student: male, able-bodied, White, heterosexual, and middle class" (Brown & Strega, 2005:13). Nevertheless, when meeting Mi'kmaq research partners, I did not feel privileged and powerful, but was very conscious that I was a 'mere student' and a member of the Eurocentric mainstream.

Despite being an outsider, I was received respectfully and with trust in all my encounters, Mi'kmaq showed interest in my research and were happy to contribute. I often thought that this was partly due to my non-Canadian heritage. I thus cloaked myself in self-amnesia from colonial guilt, which let me talk with Mi'kmaq about non-native Canadians as a seemingly impartial outsider. While I felt comfortable making my solidarity with Mi'kmaq struggles explicit, a Canadian researcher may have had to express his or her 'post-colonial' positionality more carefully to feel justified. While this may not accurately reflect typical bicultural research relationships in Canada, I felt comfortable as an outsider researching the Mi'kmaq experience.

Towards my initial contacts, my positionality may have been that of my supervisor's ASN assistant. In order to meet new potential participants, I preferred not to introduce myself, but rather be introduced by other contacts, especially so for

meeting elders. The relational credibility earned of being introduced by community members has also been observed by other researchers (Weber-Pillwax, 2001).

I visited the reserve communities of *Membertou* and *Eskasoni* between five and ten times and met four out of nine interviewees there. Naturally, I became increasingly familiar with my key contacts, their agendas and the way of life on the reserves. My relations and confidence with Mi'kmaq people grew especially with non-research related activities I participated in, which included conferences, meetings, communal feasts, sweat lodge ceremonies, a Pow-Wow cultural festival, fishing trips and casual interactions in people's homes. However, as people became more familiar with me and aware of my research, I increasingly perceived the responsibility and relational accountability I carry as a researcher towards my research community (Weber-Pillwax, 2001).

e) Reciprocity and Mi'kmaq Benefits

Reciprocity and community benefits are crucial features of decolonizing research (Smith, 1999; Swadener & Mutua, 2008; Weber-Pillwax, 2001). As with my selection of case studies (as explained above), I have anticipated my research to be locally relevant and its documentation of lasting benefit to my Mi'kmaq research community. This has also required Mi'kmaq input into my interpretations and discussions of research findings, as expected by Mi'kmaw Ethics Watch (Mi'kmaw Ethics Watch, 2007). Following a collaborative research design, I supplied all interviewees with interview transcripts and sent a draft version of this thesis to seven research participants who had indicated their interest in reviewing it. The feedback was largely affirmative of my interpretations and added some detail, which has been incorporated in this thesis.

When I asked interviewees about potential benefits from my research, they mostly referred to: me providing an additional perspective; a scholarly documentation of Mi'kmaq advancement in resource management; and my role as an advocate for Mi'kmaq resource rights. I indeed see my role in researching and writing about Mi'kmaq resource rights as that of an advocate, rather than a researcher working for my own benefit.

In my initial proposal to Mi'kmaw Ethics Watch I indicated that my research would aim to contribute to the Framework Agreement negotiations by working towards an assessment of or protocols for Mi'kmaq inclusion in co-management relations. Although my research was endorsed by the Mi'kmaq Rights Initiative (which coordinates the negotiations), the confidentiality and the timeframe of the negotiations understandably precluded my involvement.

While a scholarly review of Mi'kmaq resource management seems timely (see Chapter 4), I trust that my discussion of the LMP and MMP will be insightful for the future development of resource management plans by Mi'kmaq. Since many challenges the Mi'kmaq face are endemic to the Canadian context, other First Nations that need to manage their traditional harvest may also benefit from learning about the Mi'kmaq experience.

I will provide concluding reflections on my positionality as a researcher, the benefit of my research and the application of political ecology and decolonization in the final chapter.

4. Methods and Ethics for Analysis and Writing

a) Introduction

While the preceding section covered issues pertaining to my research journey in the field, I will here introduce my conceptual perspective and appropriate methods for the analysis of my interview data. Finally, I will outline some ethical and methodological choices for the writing of this thesis.

I will here indicate that a political ecology perspective responds well to the methodological needs of both decolonization and aboriginal resource management. To further substantiate this, the following literature review chapter will contextualize the application of political ecology to my case studies and Chapter 7 will discuss the framework in more detail.

b) Political Ecology and Decolonization

As I showed above, decolonizing methodologies call for ethical representation from local, aboriginal perspectives and therefore have to acknowledge diverse ontologies. The following literature review will show how political ecology also argues for the validity of non-Western ontologies.

In regards to their research aims, both decolonization and political ecology share a radical research agenda, which aims to uncover oppressive structures and advocate for the position of research beneficiaries. However, the strictly academic nature of political ecology tends to occupy researchers more than their concerns for their research partners (Paulson *et al.*, 2003; Walker, 2007) and may prevent them from building reciprocal research relationships. What is missing then is a methodological agenda of reciprocity that grounds political ecology research in the field of the researched, rather than that of the researcher. Political ecology scholars are increasingly uncovering the ethical dimensions of their work, which is also the premise of a special issue of *Political Geography* (Bryant & Jarosz, 2004).

Consequently, the political ecology analysis of this thesis is grounded in a decolonizing methodology and this chapter has outlined my ethical provisions in reference to the decolonization literature and Mi'kmaq research protocols. Arguably, my ethical approach was also aided by my positionality as a student researcher, as I felt more dependent on my research participants' cooperation and less constrained by time and funding. I could therefore possibly afford to be more flexible and reciprocal than a professional consultant or researcher.

c) Methods for Analysis of Interview Data

Guided by a political ecology perspective, I have performed a latent content analysis of the interview transcripts (Dunn, 2005:100). This was facilitated by NVivo™, which allowed me to code the transcripts electronically. This process enabled me to maintain an overview over the diverse opinions and interests that my interviewees expressed and greatly facilitated representing them in the findings chapter.

The functionality of NVivo™ comes with the risk of chopping the narrative of an interview into decontextualized quotes and misrepresenting their meaning; this shortcoming is common to software-based analysis of qualitative data (Bryman, 2008). I minimized this risk by coding longer passages of text and adding annotations to quotes explaining their context. When presenting my findings I will rely on substantial quotes to give my interviewees adequate space to express their position in due context and detail. Especially in the analysis of my findings I will

complement the interview data with my observations and reflective insights. While this still entails the risk of my misinterpretation, the dissemination of draft versions of this thesis to voluntary reviewers gave them the opportunity to check my interpretations.

Interview insights are naturally subject to debate about their reliability and objectivity (Gubrium & Holstein, 2003). This also applies to my data, especially as my interviewees represent opposing ideologies and express differing views. However, my non-conclusive framework will provide the necessary caution to the interpretation of my data and I will remind the reader of the inherent subjectivity of my insights and reflections.

d) My Positionality on paper: Ethical representation

In conclusion of this methodology chapter, I will now discuss important ethical and methodological considerations that apply to the written representation within this thesis. This will include a discussion of my positionality as the author and some explanations of my choice of language and writing style.

Since this thesis is my representation of a part of the Mi'kmaq reality, my relations with my wider research community continue throughout the writing process, regardless of their involvement in the research or reviewing process. Even though the research and writing process is a very insightful learning experience for me, I am aware that my comprehension of Mi'kmaq knowledge and worldview only scratches the surface of its ontological depth. For these reasons this thesis is merely my account of my interpretation and I do not claim to speak for or represent Mi'kmaq in any other way; as "to speak for them is to deny them the self-determination so essential to human justice and progress" (Battiste, 2008:504). More generally, an English thesis can only be a partial representation as "[r]esearchers cannot rely on colonial languages to define Aboriginal reality" (Battiste, 2008:504).

Despite these constraints I aim to respond to the requirements that decolonization, positionality and reflexivity pose to the written product and I have adopted two major semantic principles. In order to reflect of the inherent subjectivity in research and representation, I will maintain my presence in the writing by writing from a first person perspective; this is also required for a reflective account (Absolon & Willett, 2005; Mansvelt & Berg, 2005). In this spirit, I also avoid nominalisation and objective modality, which would further remove me from the text (Mansvelt & Berg, 2005); rather, I will adopt a narrative form and simple, descriptive language where appropriate. Essentially, I will let this thesis be a personal account of my research journey, rather than aiming to objectify my experience.

Chapter IV: Literature Review

A. Introduction

The following literature review will provide some scholarly context for theoretical discussions that the findings of this thesis will allow. It will hence contextualize my thesis both theoretically and thematically. I will first outline the evolution of the political ecology field to indicate that its recent thematic and methodological approaches are pertinent to my research questions of Mi'kmaq resource management. I will then briefly situate the field co-management within the literature of Environmental Governance to indicate parallel critiques of state- and expert-led resource management. In reference to critical literature from Canada and New Zealand, I will show how the integration of aboriginal knowledge into conventional co-management frameworks is potentially detrimental to aboriginal aspirations, due to ontological differences and colonial ignorance. Here I will start to identify shortcomings and thin areas of the literature, which this thesis will aim to respond to.

Finally, I will review scholarly accounts of Mi'kmaq resource management, which focus on fisheries management and resource ethics. Here, I will indicate the relevance of the literature to the findings and discussions of this thesis research. Building on this, I will conclude the literature review with a brief synthesis and outline how my discussions will build on the insights from this literature.

B. The evolving agenda of Political Ecology

1. From Piers Blaikie to Arturo Escobar

Although "Piers Blaikie has observed that political ecology has become so vast and sprawling that citation is largely a random affair" (Walker, 2007:364), a focus on Blaikie's methodology will here illustrate the theoretical evolution of political ecology. Piers Blaikie is the undisputed pioneer of political ecology (Bryant & Goodman, 2008; Forsyth, 2008; Rigg, 2006; Walker, 2007; Watts, 1997), which was most recently affirmed in a special issue of Geoforum dedicated to his life's work (Muldavin, 2008).

Blaikie's ground-breaking monograph *The Political Economy of Soil Erosion in Developing Countries* (Blaikie, 1985) called for attention to social, cultural and political root causes of environmental degradation. "Essentially the questions [that Blaikie tried to answer] boiled down to: what enables, encourages or compels people to mismanage their physical environment?" (Middleton, 1997:78). The subsequent edited volume *Land degradation and society* (Blaikie & Brookfield, 1987) was seminal in establishing political ecology as an innovative research agenda, which overcame the prevalence of apolitical, purely physical perspectives on environmental degradation (Bryant & Goodman, 2008; Forsyth, 2008; Hipwell, 2004b; Rigg, 2006).

Since natural scientists – by nature of their discipline – "have extracted the process of land degradation from its political, social and economic context", Blaikie argued that social scientists were better qualified to address the interdisciplinary nature of environmental problems (Rigg, 2006:36). His innovative approach and the proliferation of political ecology studies had profound impacts on international development (Walker, 2007) and environmental management institutions (Bryant & Wilson, 1998).

Thematically, political ecology aimed to uncover root causes of environmental problems that affected rural livelihoods (Bryant & Goodman, 2008; Bryant & Jarosz, 2004). Initially focussed on Third World development, political ecology was increasingly applied to global as well as regional studies in North America and Europe during the 1990s (Bryant & Goodman, 2008; Gibbs, 2005).

Theoretically, Blaikie's early political ecology was informed by "structural Marxism, cultural ecology and a very grounded connection between people and the resources they used" (Blaikie, 1997:79). Its neo-Marxist attention to the political economy of resource conflicts often identified the responsibility of state and market systems; in its consequent advocacy for change, political ecology has been "explicitly and unapologetically normative" (Forsyth, 2008; Robbins & Monroe Bishop, 2008; Walker, 2007:363).

Similar to other political ecologists (Paulson *et al.*, 2003), Blaikie adopted an ontology of "weak social constructivism", which allowed political ecology to follow a postmodernist "epistemological tide", which transformed many fields of human geography (Blaikie, 1999:144). This provided ground for a "second-generation political ecology" (Robbins & Monroe Bishop, 2008; Rocheleau, 2008), which expanded during the 1990s and privileged poststructuralist inquiries (Bryant & Goodman, 2008; Forsyth, 2008; Robbins & Monroe Bishop, 2008). More recently, political ecology frameworks have moved from Blaikie's structuralist "chains of explanation", which preferred linear and logic causalities, to "webs of relation", which acknowledge multiple relations and complexities (Rocheleau, 2008). It is widely acknowledged that poststructuralist attention has greatly enriched political ecology research and thus enabled a more nuanced and analytical critique (Blaikie, 1999; Hipwell, 2004b). "Reflecting this methodological strength, political ecologists have been major contributors of analyses that present resource-related conflicts in all their complexity" (Turner, 2004:884). The following section will indicate how this thesis will employ a poststructuralist political ecology perspective to discuss the research findings of case studies of Mi'kmaq resource management.

2. Poststructuralist Political Ecology

Arturo Escobar, an anthropologist by training, has been at the forefront of developing a poststructuralist political ecology by incorporating insights from constructivist theories and Environmental Justice. Basically, he asserts that "global capitalism", "reductionist science" and "dominant modernity" homogenize economic, ecological and cultural diversity, respectively (Escobar, 2006:12). Therefore, Escobar draws special attention to "cultural distribution conflicts … [that result from] the distributive effects of cultural dominance" (Escobar, 2006:10). Escobar contends that specifically resource management conflicts often boil down to conflicting cultural constructions of 'nature' and discourses of resource use (Escobar, 2006). He has called for an "antiessentialist political ecology" (Escobar, 1999) that acknowledges discursive and ontological dimensions of environmental conflicts and allows for ontological diversity and different conceptions of nature.

Importantly, this allows political ecology to counteract cultural marginalization, as the resources for constructing and representing ecological ontologies are unevenly distributed (Belsky, 2002; Escobar, 1999; Paulson *et al.*, 2003). In this vein, Willems-Braun (1997) has shown how environmental management discourses have normalized Western conceptions of forest use and marginalized aboriginal interests. Importantly, Escobar makes the right to hold cultural constructions of nature a matter of Environmental Justice (Escobar, 2006);

considering discursive aspects of ecological marginalization, he broadens the scope of Environmental Justice pioneer Joan Martinez-Alier.

In order to analyse resource management conflicts, Escobar devises a generic political ecology framework, which pays attention to ontological and discursive aspects. At the onset of Chapter 7, I will discuss this framework in reference to my research findings and base the discussions on it.

Apart from Escobar's framework, the political ecology literature offers little discussion of methodologies and research design (Doolittle, 2008). However, several writers of feminist political ecology have made their methodological choices explicit (Fortmann, 1996; Rocheleau, 1995). Their discussions of positionality and opportunistic research design (Rocheleau, 1995) have justified my methodology, since the political ecology literature rarely discusses relationships, reflexivity and reciprocity.

The diverse thematic and theoretical proliferation of political ecology may be partly responsible for a lack of methodological coherence that has been observed in political ecology studies (Blaikie, 1999). These often lack rigorous approaches and documentation of sample procedures and methods or fall back on simplistic, structuralist conclusions and recommendations. This is especially of concern for studies of local knowledge systems, where due attention needs to be paid to the identification of credible sources (Davis & Wagner, 2003). When dealing with foreign epistemologies, political ecologists may have to negotiate the "uneasy fit between epistemological relativism and normative belief or action" (Jasanoff, 1996: 412).

The discussions in this thesis will suggest that a poststructuralist political ecology can effectively resolve this methodological conundrum. Theoretically, poststructuralism allows for ontological diversity and epistemological relativism, but cautions of conclusive or normative methodologies. For the research of aboriginal knowledge systems, poststructuralist perspectives are therefore particularly effective for outside researchers; they effectively 'decolonize' conventional geographies of resource conflicts and account for their cultural and socio-political dimensions.

The ontology of many political ecology perspectives may be grounded in a Western worldview, but conceive of human-environment interactions in an integrated way (Bryant & Jarosz, 2004). Furthermore, poststructuralist perspectives consider the environment in its due complexity (Scoones, 1999) and allow for ontological diversity. Therefore, aboriginal ontologies and epistemologies may be reasonably represented by poststructuralist political ecology.

Leaning on these theoretical perspectives, this thesis will attempt to represent the Mi'kmaq interests and experience in cross-cultural resource management conflicts. Here, political ecology provides the framework – and the theoretical justification – to consider not only the biophysical reality of the environment, but also its diverse human conceptions. Therefore, this thesis will pay attention to political and socio-cultural dimensions of resource access for the Mi'kmaq people and will indicate that particularly in the context of aboriginal resource management the study of human-environment interaction benefits from a poststructuralist perspective.

To indicate what my analysis of the 'political ecology of aboriginal resource management' will make reference to, this chapter will next review the nature and challenges of co-management with specific attention to ontological difference; it will

conclude with a review of the literature concerned with political ecology aspects of Mi'kmaq resource management.

C. Resource Managerialism and Co-management

1. Decolonizing State-led Environmental Governance

The Environmental Governance literature discusses whether government, market or community actors are best suited to manage the practical challenges of resource management (Agrawal & Maria Carmen, 2007). Since criticism of the state as the traditional resource managing authority has been mounting on several fronts (Bäckstrand, 2004; Bryant & Wilson, 1998), models of co-governance with non-state actors are propagated (Agrawal & Maria Carmen, 2007). I will briefly synthesize this critique of state-led 'Resource Managerialism' to then discuss specifically, the participation of aboriginal actors in co-management.

Political ecologist Raymond Bryant (Bryant & Wilson, 1998) argues that "state-centric" resource management relies on reductionist methodologies for complex environmental problems and on authoritarian implementation of expert advice. Resource managerialism thus fails to consider socio-political dimensions of human-ecological challenges that political ecology reveals. Like his colleague Piers Blaikie, Bryant concludes that both non-state actors and social scientists (including political ecologists) should take on more active roles to more effectively manage and study the human use of natural resources (Bryant & Wilson, 1998).

Further criticism of the state comes from poststructuralist discussions of state-led 'eco-managerialism' (Luke, 1999), which identifies a governmental agenda that seeks to reify state sovereignty in resource management. This is evidenced by its reliance on universal science (Bäckstrand, 2004) and the deceiving state rhetoric of ecological modernization (Davidson & MacKendrick, 2004).

In Canada, the call to integrate local resource users in public policy is central to the rhetoric of participation, devolution and community involvement (Parson, 2000). As the benefits of local knowledge and participation had also become evident in international development projects, the 'integration' of Local/Traditional Ecological Knowledge (Lo/TEK)[20] became a "mantra" in development literature and policy (Briggs, 2005:99).

This diverse body of literature indicates that the status-quo of state-led resource management is under attack on multiple grounds. While this may further substantiate claims for the participation of aboriginal people and Lo/TEK, the paradigm of decolonization holds that aboriginal claims to co-management and self-government are substantial in their own right. While the literature on Environmental Governance questions the efficiency and agenda of state-led resource managerialism, aboriginal claims for co-management aim to decolonize a legacy of marginalization and affirm aboriginal resource rights. Accordingly, this thesis will primarily engage with the literature of co-management and explore some challenges of the implementation of aboriginal rights, which the following sections will introduce.

[20] In reference to Hipwell (2001), I will use the term Lo/TEK throughout this thesis to refer to non-Western, non-universal ecological knowledge. Throughout the literature the term TEK (Traditional Ecological Knowledge) is commonly used for the collective wisdom of aboriginal communities, despite the increasing awareness that aboriginal knowledge is not archaic or stagnant (Hipwell, 1998). The term Lo/TEK then denotes that aboriginal knowledge is not only traditional, but adaptive and applicable. Furthermore, the concept of Lo/TEK also acknowledges the local ecological knowledge that non-native settlers have developed in successive generations of settlement (Hipwell, 2001).

2. Postcolonial Integration in Co-management

In the quest to accommodate aboriginal actors in the governance of their natural resources, Claudia Notzke and Fikret Berkes were instrumental in developing the concept of co-management in Canada (Berkes, 1999; Berkes *et al.*, 1991; Notzke, 1994, 1995). Aiming to reconcile historical, epistemological and societal divides, co-management arrangements anticipate: an effective devolution of governance responsibilities to aboriginal representatives; an affirmation and implementation of aboriginal resource rights; a meaningful accommodation of aboriginal knowledge systems; as well as culturally appropriate forms of monitoring and enforcement (Natcher *et al.*, 2005).

Although the cultural diversity inherent in co-management could potentially entail a wealth of ecological knowledge, the historical burden of colonization paralyses many co-management relations (Natcher *et al.*, 2005). In Canada, the most successful co-management agreements have been implemented within comprehensive land claim settlements (Pomeroy & Berkes, 1997). Outside of such settlements, aboriginal right-holders may find themselves facing competing interests of other stakeholders (Stevenson, 2006). Examining the "state-community" duality in co-management discourse in New Zealand, Tipa and Welch (2006:1) similarly show how aboriginal actors can be subsumed as "just another stakeholder".

Nevertheless, aboriginal aspirations of self-government have been particularly pursued in the field of natural resource management (Natcher & Davis, 2007). Despite a governmental interest in devolving management responsibilities, experience from both Canada and abroad show aboriginal communities are often not endowed with the sufficient financial or human resources to take on their role as co-managers. Furthermore, Natcher (2003; Natcher & Davis, 2007) points out that there are institutional and ideological barriers to the implementation of aboriginal rights and management approaches. Therefore, effective devolution of power and resources may require changes to conventional management frameworks.

As a fundamental barrier to mutual co-management, scholars from New Zealand, Canada and Australia have identified ontological differences between aboriginal and non-aboriginal actors, which result in incommensurable approaches and agendas in resource management (Berkes, 2008; Hipwell, 2004a; Howitt & Suchet-Pearson, 2006; Nadasdy, 2005a; Roberts *et al.*, 1995). Building on Escobar's perspectives outlined above, the following two sections will provide some background on ontological differences to explore the co-management challenges of accommodating aboriginal knowledge and ethics.

D. The Ontologies of Aboriginal Knowledge and Ethics

1. Ontological difference in co-management

In order to understand the nature of aboriginal ecological knowledge and ethics, I will here introduce some common features of aboriginal ontologies and epistemologies. This will also illustrate that the common dichotomy between eco- and anthropocentric worldviews is arguably too simplistic to convey the ontological differences between Western and aboriginal cosmologies (Nadasdy, 2005b; Roberts *et al.*, 1995).

As exemplified for the Mi'kmaq in Chapter 2, Aboriginal peoples around the world have long histories of exploring and managing their environments and thereby have developed extensive and detailed knowledge of ecological dynamics and resource use (Berkes, 2008; Grim, 2001). In oral tradition, this knowledge is passed

through the generations and continuously adapted to evolving environmental conditions and human needs.

Aboriginal Lo/TEK and its epistemologies are often tied to holistic, eco-centric ontologies, which consider humans as an intricate part of the biosphere. In turn, Western environmental research and management assumes that humans are superior to non-humans and thus entitled to manage and manipulate their environment. This goes back to the Cartesian postulate of a human/nature dichotomy, which distinguishes humans as a consciously thinking species (Zammito, 2004). Escobar (2006) asserts that different ecological ontologies (i.e. 'constructions of nature' in poststructuralist terms) result in resource distribution conflict and thus represent a difficult challenge for co-management to negotiate. In addition, aboriginal cultures may have vastly different manifestations of knowledge and ethics, as discussed below.

Many aboriginal cultures allow for the maintenance of relationships between humans and non-humans as they attribute spiritual identity or personifications to natural phenomena and processes (Roberts *et al.*, 1995). Human resource harvest can therefore be considered as a reciprocal exchange that is often guided by culturally and spiritually embedded systems of resource-use ethic (Nadasdy, 2007). Yet, culturally constructed hunting ethics can justify very different relationships. For example, some Cree cultures in Yukon, Canada, believe that animals reincarnate and offer themselves to humans; failing to hunt them (effectively killing as many as possible) is therefore an affront to this relationship (Nadasdy, 2007). In turn, the Mi'kmaq concept of *Netukulimk* requires an arguably more sustainable approach, as it permits harvesters to "take only what they need" (Barsh, 2002; Doyle-Bedwell & Cohen, 2001). Similarly, the Māori of New Zealand maintain a reciprocal guardianship relationship with the natural world, which is guided by a genealogical concept of *Kaitiakitanga* (Roberts *et al.*, 1995). An antiessentialist perspective on aboriginal resource use thus suggests that ecological behaviour is neither a question of knowledge nor can it be assessed without its ontological context.

2. Ontological Colonization

As I indicated in my reviews of postmodern philosophies (Chapter 2) and of political ecology (above), constructivist theories hold that any representation of nature (and indeed of society) is constructed by cultural ontologies (Blaikie, 1999; Escobar, 1996). While the very term 'nature' is highly contested – and often used with an essentialist and normative undertone – the terms resource management and wildlife provide further intellectual battle ground.

Terms like 'nature' and 'wildlife' and 'resource' imply the Cartesian dualism of Western ontologies and their uncritical use in co-management arrangements may contribute to subduing aboriginal ontologies (Stevenson, 2006; Suchet, 2002). Likewise, the idea that humans 'manage' natural resources may be sacrilegious to aboriginal ontologies that posit humans as an equal part of 'nature'. Acknowledging aboriginal ontologies, Hipwell makes clear that what humans can manage is merely their use of natural resources; consequently, he prefers the use of the term "resource-use management" (Hipwell, 2004a).

The ideological use of language also colours Western accounts of aboriginal people's relationship to the land. Disregarding ontological differences, the narrative of the "ecologically noble Indian" (Nadasdy, 2005b), a reincarnation of the less respectful "Noble Savage" narrative (Smith, 2004), assumes that aboriginal people, regardless of their environments and livelihoods, hold a conservationist resource-use

ethic compatible with Western environmentalism. Such misconceptions have initiated alliances between environmentalist and aboriginal groups to rally for supposedly compatible interests; however, underlying cultural differences often lead to conflict (Hornborg, 1994; Nadasdy, 2005b).

On the other hand, aboriginal people are elsewhere portrayed as primitive, "rapacious" and incapable of managing their environments responsibly (MacDonald, 2005:282). This has justified dislocating aboriginal people in favour of "fortress conservation" in the form of exclusionary national parks (Siurua, 2006), which reveals a clash between environmentalist and aboriginal ideas of human-environmental interactions.

Suchet argues that both romanticizing and derogatory representations of aboriginal people are two sides of the same coin; both disregard aboriginal ontologies and are thus essentially colonial (Suchet, 2002)[21]. The following section will explore how the ontological differences are accommodated in co-management and will pay particular attention to the danger that "Eurocentric" representations "marginalize and trivialize" aboriginal ontologies (Howitt & Suchet-Pearson, 2006:1).

E. Accommodating Ontologies: Challenges of Co-management

The impetus on 'integrating' aboriginal knowledge in conventional co-management frameworks, environmental assessment processes and international development is challenged by incommensurable ontologies of the natural world and human resource use, as illustrated above.

The following section provides a review of the recently emerging literature that calls attention to the assimilative and disempowering potential of 'integrative' co-management. Consequently, the need for an integrated system is questioned and the importance of "ontological pluralism" and "ontological literacy" is emphasized for mutual co-management relations (Howitt & Suchet-Pearson, 2006). Furthermore, this literature suggests that unequal power relations and colonial grievances often make state-aboriginal relations confrontational and provide a rough terrain for co-operation and negotiation.

1. From Integration to Assimilation

After many years of advocacy for aboriginal Lo/TEK and its integration in conventional management frameworks, the 'TEK literature' has been increasingly pointing towards the "anti-politics of TEK" (Nadasdy, 2005a). Despite governmental discourses of aboriginal empowerment, many co-management initiatives in Canada merely attempt to inform existing processes, such as Environmental Impact Assessments, with insight gained from commissioned TEK studies (Fernandez-Gimenez *et al.*, 2006; Usher, 2003). The international literature has likewise identified a tendency to include Lo/TEK as decontextualized pieces of knowledge in an attempt to make conventional managerialism either politically correct or ecologically more comprehensive (Briggs, 2005; Nadasdy, 2005a).

"As a result [of this impetus on integration], co-management may actually be preventing rather than fostering" the meaningful contribution of aboriginal knowledge holders to resource management (Nadasdy, 2004:1). Such superficial co-operation has also been observed in the international development field. This may effectively result in co-optation rather than empowerment of the aboriginal

[21] Suchet-Pearson reminds us that ignorant, colonial representations pervade discourses of not only resource management, but also in the realms of science and tourism (Suchet, 2002).

representatives. Furthermore, "integration of IK [indigenous knowledge] divorces its ecological components from cultural practices, belief systems, and social context" (Coombes, 2007:186), effectively diluting its knowledge base (Fernandez-Gimenez *et al.*, 2006).

In order to study the complexities of co-management, the "political ecology of knowledge systems has emerged as a modish sub-discipline in recent years" (Coombes, 2007:187). This is especially the case, as there are both ontological and political barriers to the meaningful integration of aboriginal knowledge. While many TEK authors implicitly apply a political ecology perspective (Nadasdy, 2005a), TEK veteran Fikret Berkes makes the potential of a political ecology perspective explicit. Here, Berkes' "main argument is that the use of indigenous knowledge is *political* because it threatens to change the power relations between aboriginal groups and the dominant society" (Berkes, 2008:254, emphasis original). Therefore, Coombes (2007) contends that a postcolonial perspective is needed to capture the impact of colonial legacy and reality.

As indicated above, the political ecology analysis in this thesis will be guided by a decolonization methodology and a poststructuralist perspective to represent the Mi'kmaq strategies of co-management. The conceptual framework for the political ecology analysis of the research findings will be informed by Berkes' (1999) and Escobar's (2006) work and detailed in Chapter 7.

Given that the integration of aboriginal Lo/TEK is problematic and potentially detrimental to aboriginal interests, Stevenson (2006:176) calls for some radical "Mid-Course Correction" and questions the need for an integrative resource management framework. He proposes a dual system whereby both governmental and aboriginal actors pursue separate management systems, addressing non-native and aboriginal resource users in culturally appropriate ways. Stevenson uses the metaphor of the Two-Row Wampum to describe this coexistence; this refers to a belt that symbolized aboriginal-settler relations, depicting two rivers that are navigated by two canoes without one interfering with the other (Stevenson, 2006). While this may be an effective conceptual framework for mutual coexistence, Stevenson does not discuss how this may reconcile competing interests for common pool resources.

Although both Mi'kmaq management initiatives discussed in this thesis incorporate the traditional Mi'kmaq harvesting ethic of *Netukulimk*, the integration of aboriginal ethic principles into co-management arrangements is not discussed in the literature. This may reflect that traditional harvesting guidelines are today either irrelevant or ontologically 'too different'. Or it may mean that aboriginal interests cannot be 'integrated' in co-management and are better addressed in separate management frameworks, as Stevenson suggests. This research will respond to these concerns and discuss in what way the management plans proposed by Mi'kmaq resemble Stevenson's model of the Two-Row Wampum.

2. From Rhetoric to Literacy

A critical postcolonial analysis may conclude that conventional co-management is driven by a neo-colonial government agenda that is not inclined to facilitate meaningful participation of aboriginal actors. Although, the assimilative outcome of co-management could be due to either governmental intention or ignorance, this is not often discussed. Also, the agency and agenda of aboriginal actors is rarely examined with its implications. While the critical TEK literature assumes that aboriginal interests in co-management are based on cultural preservation, Stevenson is (2006:167) "admittedly somewhat perplexed by the …

wholesale adoption by many Aboriginal Canadians of concepts and language originating in the Western institution of environmental resource management". Arguably, these may be ignorant or intentional; aboriginal leaders may not consider the 'anti-politics' of subscribing to conventional frameworks, or may do so to maximize their profits from conventional resource development[22].

Apart from resource management frameworks, there are also educational programs that aim to build capacities of aboriginal people to participate in co-management, which are identified as governmental intent to co-opt them into Eurocentric ways (Howitt & Suchet-Pearson, 2006; Stevenson, 2006), effectively disabling their ontological difference (Escobar, 2006). As a result, this consolidates the assimilative and disempowering effect co-management can have on aboriginal communities (Stevenson, 2006). Stevenson thus recommends that aboriginal knowledge holders obtain a critical literacy of Western resource management frameworks to recognize the risks entailed in their participation.

In an analysis of Australian practice and international discourse, Howitt asserts that conventional resource management has imposed entirely alien ways of conceiving natural resources and their management on aboriginal peoples (Howitt, 2001; Howitt & Suchet-Pearson, 2006). Like his colleague Suchet-Pearson, he shows how the monolithic ontology and Eurocentric conceptions of environmental knowledge and management have alienated aboriginal participants from resource management politics and their traditional livelihoods. They call attention to the challenging need for resource managers to appreciate and understand aboriginal conceptions of wildlife, management and co-operation (Suchet, 2002). Therefore governmental resource managers need to obtain a level of "professional literacy" to gain an understanding of the ontological basis of aboriginal resource management views and values (Howitt, 2001).

If ontological literacy can help resource managers understand the profound ontological differences that troubles co-management, they may also understand how this is assimilative and detrimental to aboriginal cultures. Conceptually, Howitt and Suchet-Pearson (2006) call for "ontological pluralism", which will allow ontological differences to be enabled (in Escobar's terms) rather than assimilated. Essentially, ontological difference and colonial assimilation need to be reconciled in "landscapes in which multiple sovereignties, epistemological diversity and shifting identities coexist without descent into human rights abuse and environmental or social vandalism" (Howitt & Suchet-Pearson, 2006:332).

While Stevenson's proposal of the Two-Row Wampum may create such a landscape of co-existence, the authors do not give much practical advice on how ontological pluralism can be implemented. For researchers, they recommend a "situated engagement" with the aboriginal cultural context in order to gain an understanding of relevant local ontologies (Howitt & Suchet-Pearson, 2006; Suchet, 2002). Accordingly, the decolonization methodology that this thesis employs pays reflective attention to the field insights I gained into Mi'kmaq ontology when engaging with ceremonial and cultural practices, as Chapters 7 and 8 will discuss.

F. The political ecology of Mi'kmaq resource management

The following section will review the scholarly literature concerned with the position of the Mi'kmaq people in regards to the management of renewable resources

[22] While many Mi'kmaq have entered commercial fisheries following conventional, governmental regulations, my case study of the LMP will show how Mi'kmaq are reworking a governmental framework to include provisions for cultural revitalization.

in Nova Scotia; it will focus on fisheries resources, since the accommodation of Mi'kmaq resource rights has not received much attention in other resource sectors. This review indicates the importance of the SCC (Supreme Court of Canada) *Marshall* ruling in 1999 (R. v. Marshall, 1999) and then engages in some discussions of Mi'kmaq resource ethics and resistance today.

1. The Political Ecology of Mi'kmaq Fisheries

Even before the Canadian government made co-management part of its policy in 1981, local fishers were consulted in Nova Scotia in the 1980s and by the 1990s there were 28 advisory committees operating in the Scotia Fundy region alone, which also informed fisheries policy (Pomeroy & Berkes, 1997:473). The Mi'kmaq people, however, were not considered in these processes and their traditional resource access was marginalized by expanding commercial fisheries. Mi'kmaq access was only legitimized when the Supreme Court handed down the *Marshall* ruling in 1999 (see Chapter 5). When DFO (Department of Fisheries and Oceans) privatization policies increasingly marginalized small-scale fisheries in the Scotia Fundy region after the *Marshall* ruling; the early co-management advisory committees provided a forum for Mi'kmaq to forge alliances with their non-native counterparts to resist this state-led resource managerialism (Stiegman, 2003).

Two years before the *Marshall* ruling, Berneshawi suggested that Mi'kmaq involvement in resource management was negligible; however, she suggested that there was room for more participation (Berneshawi, 1997). Progressively for the time, Berneshawi proposed a co-management partnership in which Mi'kmaq worldviews, rights, knowledges and elders need to be granted a place beyond that of an advisory party. Furthermore, she indicated that this may best be achieved within a separate management framework specific to Mi'kmaq needs. Her early vision thus resembles the Two-Row Wampum model that Stevenson proposes in order to curb the assimilative potential of co-management and accommodate two parallel systems (Stevenson, 2006). With her account, Berneshawi provides the only peer-reviewed discussion of Mi'kmaq resource management before the *Marshall* decision, which serves as an interesting benchmark for the discussions of this thesis research.

The *Marshall* decision has provided ground for ample scholarly discussions, as it affirmed Mi'kmaq resource access rights and allowed Mi'kmaq to earn a "moderate livelihood" from commercial fisheries (Coates, 2000; Davis & Jentoft, 2001; McCallum, 2004; R. v. Marshall, 1999). More specific accounts discuss legal implications of this landmark ruling (McCallum, 2006; McEvoy, 2006) and subsequent changes in fisheries policy that the newly affirmed Mi'kmaq rights necessitated (Davis & Jentoft, 2001; McGaw, 2003). Davis & Jentoft (2001) criticizes DFO's response to the *Marshall* decision to regulate Mi'kmaq commercial fisheries within conventional regulations as paternalistic and unsustainable. Fox provides a compelling anthropological account of the transition into commercial fisheries, which divided Mi'kmaq communities between traditionalists and opportunists, evoking debates of aboriginal resource ethics (Fox, 2006a; Fox, 2006b). The accounts by both Davis and Fox provide important perspectives on the discussion of my findings regarding Mi'kmaq food resource access.

Given that both lobster fisheries and aboriginal rights are highly contested in Nova Scotia, the *Marshall* decision received a lot of media attention; this inevitably impacted societal discourses of Mi'kmaq fishing rights, which also surface in my research findings. Initial confrontations between Mi'kmaq lobster fishers and government enforcement officers (see Chapter 5) have also received much attention (Hipwell, 2000a, 2000b; Obeidi *et al.*, 2006). Unlike the public media, much of this

scholarly literature is affirmative of aboriginal rights and supportive of Mi'kmaq resistance.

2. Mi'kmaq Resource Ethics and Agency

Mi'kmaq resistance to governmental resource management successfully prevented the development of a granite quarry on the sacred *Kluskap* mountain in 1989 (Hornborg, 1994). While Hornborg asserts that such forms of resistance are inevitable in the face of modernist, industrial development (Hornborg, 1994:245), Hipwell shows how Mi'kmaq have since successfully asserted their resource rights and management capacities in multiple non-militant ways, effectively "deterritorializing" the government as the sovereign resource management entity (Hipwell, 2004c). The legal affirmation after the *Marshall* decision and the subsequent development of political confidence and economic opportunity enabled Mi'kmaq to assert their position and rights in resource management more broadly (Hipwell, 2001). Due to their intricate Lo/TEK, Mi'kmaq have been acutely aware of ecological threats, which have become increasingly alarming. Here, Hipwell contends that the legacy of governmental dislocation has ironically served to deepen the connection Mi'kmaq have to their land and has further fuelled their continued resistance and assertions of resource rights (Hipwell, 2001:238).

In his historical, quantitative analysis, Barsh argues that the ethical guidelines of *Netukulimk* have traditionally guided Mi'kmaq towards sustainable fishing patterns. However, commercial over-fishing has lead to resource depletion that now threatens Mi'kmaq food fisheries. Therefore, Barsh (2002) implies that contemporary fisheries co-management needs to contribute to reconciliation processes. However, Barsh is concerned that the Canadian government will not accept that "most of the historical growth of the Atlantic fishery was unlawful as well as unsustainable" and rather continue to blame the Mi'kmaq people for ecological decline (Barsh, 2002:34). Therefore, Barsh refers to critical discourses that are sceptical about the authenticity of aboriginal claims to traditional ethical harvesting practices in the following preface of his discussion of the contemporary role of *Netukulimk*:

> *How traditional is Netukulimk, and what exactly does it stand for today? Has it merely been deployed as a tool of modern-day political discourse, capitalizing on popular beliefs about Native Americans' environmental awareness, or does it represent a genuine difference in ethics and practices? (Barsh, 2002:17)*

Indeed, Mi'kmaq are faced with public notions that their harvesting activities threaten the depleted fish populations and that their traditional resource management capacity is dated (Davis & Jentoft, 2001). Both Doyle-Bedwell & Cohen (2001) and Barsh (2002) argue that Mi'kmaq will have to accept that traditional guidelines of *Netukulimk* are not sufficient in the face of modern resource stresses; therefore, Mi'kmaq will have to "accept responsibility for devising new forms of effective and transparent self-regulation rather than replicating ineffective DFO management models" (Barsh, 2002:35). Although Mi'kmaq have the capacities to govern their resources effectively, both authors emphasize that the onus is on the Canadian government to facilitate reconciliation and meaningful participation in resource management on Mi'kmaq territory (Barsh, 2002; Doyle-Bedwell & Cohen, 2001).

This research will explore the contemporary relevance of *Netukulimk*, as well as the nature of non-native discourses of Mi'kmaq resource rights, ethics and knowledge. Both case studies illustrate Mi'kmaq strategies to negotiate the political

ecology of Mi'kmaq resource management, which will be critically discussed in the context of the research findings.

G. Summary and Significance of the Literature

In concluding this literature review, I will outline how the insights gained here inform the analysis of my findings and how this thesis will thus engage with the literature reviewed.

Firstly, the review of the vast field of political ecology has showed that this field is conceptually relevant to this thesis and its research objectives. Especially the "second generation" of political ecology studies can address questions of power, knowledge and representation in resource management. More specifically, this thesis will draw on Arturo Escobar's poststructuralist perspective to consider ontological difference and "cultural distribution conflicts" in Mi'kmaq co-management (Escobar, 2006).

My introduction of co-management has suggested that while aboriginal claims for participation in co-management are not the only argument to decolonize state-led managerialism, they constitute a very distinct example. However, ontological differences often make aboriginal ecological knowledge and ethics incommensurable with Western approaches; conventional, integrative co-management inevitably "disables" aboriginal difference, in Escobar's terms (2006). My analysis will discuss the assimilative and colonial implications of co-management and non-native discourses in Nova Scotia and explore the applicability of Stevenson's (2006) model of the Tow-Row Wampum.

The limited literature on Mi'kmaq resource management holds some important references for the discussion of my research findings; these relate to governmental strategies to accommodate Mi'kmaq resource rights, the Mi'kmaq capacity for resource management and the contemporary relevance of *Netukulimk*. My discussions will also confirm that the recent development of Mi'kmaq strategies and capacities for resource management warrants further academic attention.

Chapter V: Context and Significance of Case studies

A. Introduction

This thesis has so far introduced some aspects of Canadian aboriginal politics (Chapter 2), discussed its methodology (Chapter 3) and reviewed relevant bodies of scholarly literature (Chapter 4). The remainder of this thesis will present research findings from two case studies and explore how the Moose Management Plan (MMP) and the Lobster Management Plan (LMP) negotiate the political ecology of Mi'kmaq resource harvest.

Both management plans regulate the implementation of Mi'kmaq hunting and fishing rights that have been affirmed by the SCC (Supreme Court of Canada) in 1985 and 1999. While these rights refer to a range of species, lobster and moose are favoured targets of both Mi'kmaq and non-native resource users. However, parts of the Mi'kmaq harvest of lobster and moose have not been effectively managed, which has caused some concerns amongst both non-native Mi'kmaq resource managers. Therefore, the MMP will govern the moose hunt by all Mi'kmaq in *Unama'ki* and the LMP complements existing fisheries agreements of the five Mi'kmaq communities of *Unama'ki*.

Building on the background information provided in Chapter 2, this chapter will outline the context of the case studies from a political ecology perspective and highlight themes that will receive further attention. This will indicate the significance of the case studies and research aims that will be addressed in the subsequent chapters.

B. Lobster Management

1. Background: Fishing Rights and Lobster Wars

Mi'kmaq food fisheries were largely undisturbed and uncontested until governmental licensing and managing systems were introduced in the 1960s (Barsh, 2002). This privileged commercial fisheries and marginalized Mi'kmaq resource access, as Mi'kmaq were not able or inclined to buy into such programs (Stiegman, 2003). In 1990, the SCC handed down the '*Sparrow* doctrine' (R. v. Sparrow, 1990), which established that all aboriginal people have fishing rights for FSC purposes (Nettheim *et al.*, 2002; Usher, 1991). To accommodate these newly affirmed aboriginal rights, DFO negotiated Aboriginal Fisheries Strategies (AFS) agreements with Band Councils (as well as with the NCNS); with these agreements, DFO committed to supply funds, gear and training for aboriginal communities to sustainably manage their food fisheries, which were regulated within the DFO framework. For a negotiated range of species, AFS agreements commonly stipulate fishing areas, seasons, catch limits, permitted fishing gear and prohibit any commercial sale, trade or barter of the catch (UINR & Denny, 2007). All five Band Councils of the *Unama'ki* communities have negotiated AFS agreements for lobster and other fish species with DFO (UINR & Denny, 2007).

While the LMP builds on these AFS agreements, the political ecology of Mi'kmaq FSC lobster fisheries is largely shaped by the commercial lobster fisheries. These were transformed, when the SCC interpreted the Mi'kmaq fishing rights from the Peace and Friendship Treaty of 1760-61 in its *Marshall* decision of 1999 (R. v. Marshall, 1999) and ruled that Mi'kmaq today have rights to participate in commercial fisheries to earn a "moderate livelihood" (Fox, 2006a; McCallum, 2004).

As after the *Sparrow* decision, the onus was on DFO to facilitate Mi'kmaq access to commercial fisheries. Since these were already pushing their ecological boundaries and could not support additional licenses, DFO was forced to buy back commercial fishing licenses that had been held by non-native families for generations. These were granted to Mi'kmaq communities that entered into 'Marshall Agreements', together with necessary boats, gear and training programs.

Enticed by the DFO offers, 30 of 34 Mi'kmaq communities signed interim Marshall Agreements in 2000, which cost DFO $150 million (Cdn) (Davis & Jentoft, 2001). When DFO aimed to renew the agreements for 3-5 years in 2001 with a budget of $500 million (Cdn), Mi'kmaq leadership increasingly called for long-term solutions to ensure Mi'kmaq participation in commercial fisheries (Davis & Jentoft, 2001). Today, there are several Mi'kmaq-run commercial fishing enterprises in Nova Scotia, most notably the Mime'j Seafoods Ltd., which is associated with the NCNS (NCNS, 2006), and Crane Cove Ltd. of Eskasoni (EFWC, 2008). Arguably, the entry of Mi'kmaq into commercial fisheries could have been facilitated in a more proactive and sustainable way if DFO would have negotiated commercial access with Mi'kmaq before being forced to do so by the court (G2, 2007; McCallum, 2004; McGaw, 2003).

The DFO's buy-back program and the entry of Mi'kmaq into the commercial lobster fisheries was perceived by many non-native fishing communities as unfairly distorting the market and threatening their livelihoods. The industrial lobster fishery is considered the most profitable species in Nova Scotia and yields over 2000 tons from 238,000 traps in its annual summer season (DFO, 2004). However, the Mi'kmaq commercial lobster fisheries yield less than 5% of the entire fishery and the FSC fishery less than 1% (Coates, 2000; Marshall, 2007b). As the case study of the LMP will show, the nature of Mi'kmaq rights to commercial and FSC fisheries has triggered much confusion and confrontation (Denny, 2007). Most notably in the Mi'kmaq community of *Esgenoopetitj* (Burnt Church, New Brunswick), which did not sign a Marshall agreement; nevertheless, parts of the community asserted their fishing rights and staged a protest fishery in 2000, which was met with harsh opposition from both DFO and non-native fishing communities (Hipwell, 2000a; Obeidi *et al.*, 2006). In 2006, non-native fishermen expressed their opposition to FSC lobster fishing activities by vandalizing Mi'kmaq fishing gear near St. Peters, *Unama'ki*. Mi'kmaq responded by putting more lobster traps in the water, which triggered further conflict (Denny, 2007).

This indicates that the Mi'kmaq FSC lobster fisheries are troubled by similar contestations than Mi'kmaq participation in commercial fisheries. The 'Lobster Wars' have contributed to confrontational cross-cultural relations, which are marked by non-native opposition to Mi'kmaq fishing rights and practice.

2. The Lobster Management Plan (LMP): Revitalizing Traditional Harvest

Inseparable from the 'Lobster Wars', the LMP (*Unama'kik Jakejue'ka'timk* in its Mi'kmaq title) will serve as a case study to discuss the political ecology of Mi'kmaq FSC fisheries access and illustrate Mi'kmaq strategies to sustainably self-govern their fisheries. In order to prevent further conflict and bring clarity to the Mi'kmaq lobster fisheries, the Grand Council advised UINR (*Unama'ki* Institute of Natural Resources) to devise a management plan for FSC lobster fisheries that applies to all *Unama'ki* Mi'kmaq communities (Denny, 2007). The Lobster Management Plan (LMP) (UINR & Denny, 2007) was developed by Shelley Denny (UINR fisheries biologist) in co-operation with the Mi'kmaq communities between

February and August 2007. The LMP came into effect with the 2008 fall fishery and will be reviewed after one year.

The LMP complements – and aims to eventually replace – the existing AFS agreements for FSC lobster fisheries, which are different for each community, with additional voluntary regulations and a culturally more appropriate management framework. Limiting the AFS agreements, the LMP proposes stricter fishing seasons and size limits (Denny, 2007). Adding provisions for community consultation and input to the AFS framework, the LMP will be directed by communal advisory committees of resource users.

Chapter 6 will represent some interview insights regarding Mi'kmaq fishing rights and ethics and different strategies to manage Mi'kmaq fisheries. This will prepare the discussion in Chapter 7 of the LMP as an innovative Mi'kmaq fisheries management framework that effectively incorporates Mi'kmaq concepts, responds to resource conflicts and arguably decolonizes Mi'kmaq FSC fisheries.

C. Moose Management

1. Hunting Rights and Regulations in *Unama'ki*

While the moose population in mainland Nova Scotia has been decimated for decades due to habitat fragmentation (DNR, 2007; Snaith, 2001), the highlands of *Unama'ki* feature an extensive habitat and a healthy population of 5000-6000 animals, which can sustain a regulated annual hunt (DNR, 2008). Since 1986, the moose hunt has been administered by DNR via a lottery system, where an annually determined number of licenses are issued for four Moose Management Zones (see Figure 6); in 2008, 10071 hunters from all over Nova Scotia applied for 363 licenses (DNR, 2008).[23]

[23] The hunt takes place during three week-long seasons in September, October and December (DNR, 2008)

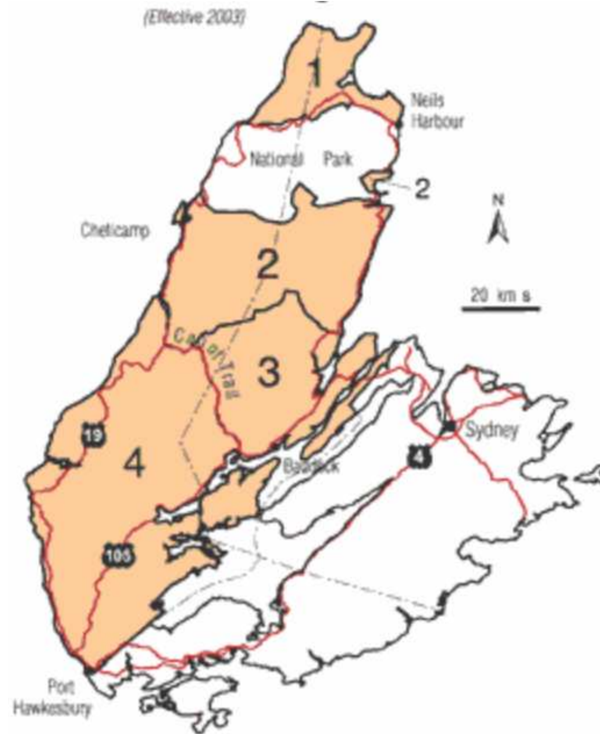

Figure 6: Map of Unama'ki with Moose Management Zones for the DNR-administered annual moose hunt, which exclude the area of the Cape Breton Highlands National Park. Source: (DNR, 2008)

While some Mi'kmaq have been participating in the DNR 'Moose Draw', many hold that they are entitled to hunt moose outside of provincial regulations. Indeed, in its 1985 *Simon* decision (R. v. Simon, 1985), the SCC affirmed their Treaty Rights according to the Peace and Friendship Treaty of 1752, which states that Mi'kmaq "shall not be hindered from, but have free liberty of hunting and fishing as usual" (Grand Chief Donald Marshall Sr, 1989:91). The Court ruled that historical treaties should be interpreted in "a fair, large and liberal construction in favour of the Indians" and may override provincial hunting regulations (R. v. Simon, 1985).

In anticipation to formalize their moose hunting right with the Province, the Mi'kmaq Grand Council passed a set of traditional *Netukulimk* hunting guidelines, which are still in effect (Grand Chief Donald Marshall Sr, 1989:93; Martin, 2007). Despite the clarity of the *Simon* ruling, the government of Nova Scotia did not acknowledge or implement Mi'kmaq hunting rights and continued to charge Mi'kmaq hunters who did not comply with provincial regulations. In protest, Mi'kmaq staged a traditional moose hunt in 1988 as a "commemorative reaffirmation of [their hunting] rights" (Hunka, 2007). This was barred by overwhelming police forces and 13 Mi'kmaq hunters got charged for possessing a firearm without a hunting license[24]. In 1989 and 1990 the DNR did negotiate hunting regulations with the NCNS and a number of Band Councils and two editions of interim conservation agreements were signed to regulate Mi'kmaq hunting practices. These, however, were not implemented (G1, 2007)[25], partly because DNR failed to supply Mi'kmaq with necessary funds and tags to implement the agreement (Martin, 2007). In absence of

24 In 1989, the Province of Nova Scotia eventually dropped these charges and (unprecedented in Canadian legal history) reimbursed legal costs of $150,000 (Cdn), which the NCNS and the UNSI had paid for the defense of the hunters (Martin, 2007).

25 G1 is the alphanumerical code assigned to an anonymous interviewee, who at the time of the interview was a governmental employer involved in the MMP.

regulations, concerns about the sustainability of the Mi'kmaq moose hunt have grown, as media reports of Mi'kmaq abusing their hunting rights have accumulated.

Since these co-management regimes failed, the NCNS has been managing its members' hunting activities with its *Netukulimkewe'l* Commission since 1989, as indicated in Chapter 2 (Martin, 2007). While the total Mi'kmaq moose hunt is not quantified, 275 of the 600 registered NCNS hunters applied for a moose tag in 2007 and between 70 and 80 successfully hunted one moose (Martin, 2007). The NCNS hunters submit a report card to the NCNS, as well as the moose jaw bone (which is used to age the animal), and the NCNS forwards this information to DNR to inform its assessments of moose population and habitat (G1, 2007; Martin, 2007).

While status Mi'kmaq carrying their INAC (Indian and Northern Affairs Canada) status-card can hunt under their Treaty Rights, NCNS hunters carry an Aboriginal and Treaty Rights Access (ATRA) Passport, which certifies their NCNS membership and their eligibility to Mi'kmaq resource rights. The DNR recognizes the ATRA Passport as equivalent to the INAC status card, which means that non-status Mi'kmaq who have proven their Mi'kmaq descent to the NCNS can exercise Mi'kmaq hunting rights. DNR and NCNS have collaboratively developed guidelines (DNR, 2002) to acknowledge ATRA passports under DNR enforcement.

2. The Moose Management Plan (MMP) and its Participants

While the NCNS may effectively control part of the Mi'kmaq moose hunt, the absence of hunting regulations for the majority of Mi'kmaq hunters allows for media reports and public concerns that some Mi'kmaq individuals abuse their communal hunting right. Furthermore, since the quantity of moose taken by Mi'kmaq hunters (other than NCNS members) is not documented, the cumulative extent and the sustainability of the Mi'kmaq moose hunt cannot be assessed. Given this uncertainty, the benefits of a regulated and monitored Mi'kmaq moose hunt were evident to both Mi'kmaq and DNR (Martin, 2007). The Moose Management Plan (MMP) thus became a priority within the Framework Agreement (FA) negotiations in July 2006. As a pilot project, the Moose Management Working Group (MMWG) was established with representatives of DNR, OAA (Office of Aboriginal Affairs of the government of Nova Scotia), Parks Canada (the federal agency for the management of National Parks), INAC and UINR. As indicated in Chapter 2, the Mi'kmaq Chiefs-in-Council were against the participation of the NCNS in the FA and the MMP, as they consider themselves the sole representatives of the Mi'kmaq nation and argue that non-status Mi'kmaq are not entitled to Mi'kmaq rights (Hunka, 2007).

Since negotiations began, the MMP activities have concentrated on gathering input from Mi'kmaq communities about their visions and expectations of a regulated Mi'kmaq moose hunt. To this end, Moose Management Coordinator Clifford Paul from UINR has consulted with all reserve and many off-reserve communities in Nova Scotia (Paul, 2007). I conducted my interviews towards the end of this consultation period and this thesis will therefore consider the development of the MMP up to the end of June 2007.

As per a draft document, the MMP aims to "resolve the un-managed moose harvest while moving toward an increased level of Mi'kmaq self-government and self-management" (MMWG, 2007). It aims to acknowledge the hunting rights of all Mi'kmaq (including non-status and off-reserve Mi'kmaq). UINR is expected to lead the research to devise sustainable harvest limits for Mi'kmaq and non-native hunters, as well as appropriate systems of monitoring and enforcement; for the latter end an alternative justice system is envisioned to be developed long term. To accommodate

these new elements of co-management, DNR is prepared to adapt existing legislation where necessary (MMWG, 2007).

The political ecology of Mi'kmaq moose harvest is therefore marked by an absence of governmental regulation, an uncertain ecological impact and conflicting access regimes for status and non-status Mi'kmaq and non-native hunters. The following chapter will review interview findings to show how the MMP aims to negotiate the apparent challenges and regulate the Mi'kmaq moose hunt. In reference to further interview insights, Chapter 7 will discuss the position of the NCNS in more detail.

Chapter VI: Research Findings

A. Introduction

This chapter will synthesize my interview insights, which I gained from seven Mi'kmaq interviewees and two interviews with governmental employees (see Interview Schedule, Appendix 4). As indicated in Chapter 2, my methodology allows me to represent the opinions of interviewees in substantial quotes. After coding the interview transcripts (of a total word count of over 36,000) with NVivo™, the findings presented here were selected as being pertinent to my research objectives and will form the basis of my discussions in the subsequent discussion chapter.

Firstly, I will present interview insights into the LMP that indicate how Mi'kmaq are adapting a DFO framework to better involve Mi'kmaq communities and address irresponsible Mi'kmaq harvesting practice and cross-cultural conflict. I will then present findings regarding the MMP, which reveal similar concerns and controversies regarding Mi'kmaq hunting practice. I will also indicate how the NCNS is responding to these issues in its management system and further expand on the position of the NCNS in the MMP. In order to substantiate or contextualize interview insights, I will complement them with my reflective accounts, where appropriate (see Chapter 3).

The third section of this chapter will present some more fundamental issues of Mi'kmaq resource management, which underlie both case studies; these include: Mi'kmaq aspirations of self-government; issues of capacity and education for Mi'kmaq knowledge and universal science; and some notions of co-existence and reconciliation. This section will be introduced in more detail below.

B. The Lobster Management Plan (LMP): Adding a "Mi'kmaq spin"

> *"I think it really had an impact on our people, when all those [commercial fishing] licenses came into effect [in the 1950s] and DFO started taking responsibility of the resources and saying: no, you can't fish here, this is government property. You need a license, but we'll not give it to you, we'll give it to someone else." (Denny, 2007)*

As explained in the preceding chapter, Mi'kmaq food fisheries were marginalized by commercial fisheries until the SCC rulings of *Sparrow* (in 1990) and *Marshall* (in 1999) affirmed the legal status of aboriginal resource rights. Consequently, DFO's AFS (Aboriginal Fisheries Strategy) initiative…

> *"…was the first program that brought a major change to the aboriginal people, where their right to fish for food, social and ceremonial purposes were affirmed. They weren't granted, they were affirmed." (G2, 2007)*[26]

The Band Councils of the five *Unama'ki* communities have been individually negotiating AFS agreements with DFO every year since 1992 (UINR & Denny, 2007). While Shelley Denny admits that "[s]ome people say we're selling our rights", she emphasizes that these agreements provide vital funds that sustain the EFWC in Eskasoni and fisheries related programs in other communities, which allow

[26] G2 refers to an anonymous governmental employee involved in aboriginal fisheries management.

Mi'kmaq to conduct self-directed fisheries management and research (Denny, 2007). In conversations with Mi'kmaq fishers and EFWC staff, I did not encounter any objections to the AFS agreements; rather, I was assured that their intent is to ensure resource sustainability, while DFO tries to accommodate Mi'kmaq interests (Denny, 2007; Johnson, 2007).

> *"[The AFS program] doesn't step on our toes so much that they impose a heck of a lot of regulations, they impose some things so that catching efforts are equivalent to the commercial industry, but they'll have us fish year round. So in some cases they're not strict enough." (Denny, 2007)*

Tom Johnson (Fisheries Manager at EFWC), who negotiates the AFS agreements for the Eskasoni community with DFO, makes clear that Mi'kmaq have agreed to very strict AFS regulations:

> *"These [AFS] fishing licenses are on stricter rules than what the non-natives are on. And why the stricter rules? We have enforced them upon ourselves within the AFS. And now the Lobster Management Plan is even stricter." (Johnson, 2007)*

Research conducted by UINR and EFWS, informed by both MEK and modern scientific methods, identified a degradation of lobster habitat and spawning population in the Bras d'Or Lakes and questioned the sustainability of the current lobster AFS agreements (Denny, 2007). Therefore, the LMP proposes two no-fishing seasons and stricter minimal and maximum carapace length (a proxy for the age of the lobster) to protect younger and larger (more fertile animals), respectively (Denny, 2007). These measures were informed by scientific data of the lobster stock structure obtained from DFO (Denny, 2007). Since sediment run-off has been "suffocating that near-shore [juvenile lobster] habitat and replacing the cobble-gravel areas with sand", the LMP further features three artificial lobster habitat structures (which are surrounded by no-fishing zones) in an attempt to let lobster populations in the Bras d'Or Lakes recover (Denny, 2007).

Apart from the careful management of their food fisheries, the *Unama'ki* communities have also voluntarily ceded their commercial lobster fishing activities within the Bras d'Or Lakes. Mi'kmaq FSC fisheries and the LMP therefore focus on the marine areas of eastern *Unama'ki* (LFA 27, 29, 30; see Figure 7).

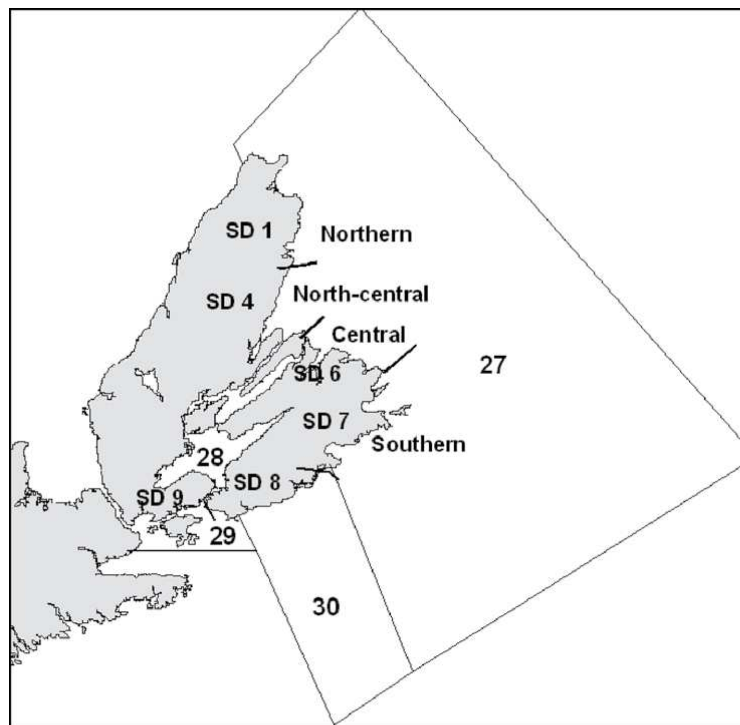

Figure 7: Map of Cape Breton illustrating DFO Lobster Fishing Areas (LFA) and Statistical Districts (SD). Source: (Tremblay & Reeves, 2004)

Although the Mi'kmaq FSC fishery yields less than 1% and the Mi'kmaq commercial fisheries less than 5% of the entire fishery (Coates, 2000; Marshall, 2007b), I often encountered the non-native narrative that Mi'kmaq fishing rights pose a threat to the lobster resource. While reliable data to quantify the Mi'kmaq FSC lobster fishery is hard to obtain with different AFS agreements and limited monitoring provisions, the collective LMP will monitor the FSC lobster fisheries. This will enable UINR to show that their actual extent does not pose a threat to the lobster resource. While this will likely subvert non-native narratives of Mi'kmaq over-fishing, the LMP may still face criticism, as it features a fall fishing season, which is prohibited in the commercial licenses (Denny, 2007).

> *"But yet, you ask a non-native fisherman why we fish in the fall, [they may say] 'they're taking it all'. What do you mean? You took a million [pounds in commercial lobster fisheries]. They need to see that. We will be open and transparent; we will communicate what we took. It's gossip that kills us; gossip amongst our people and gossip amongst the non-native community." (Denny, 2007)*

While the LMP basically follows the format of DFO fisheries agreement, it importantly adds "a Mi'kmaq spin" to it by incorporating Mi'kmaq communities and an emphasis on traditional Mi'kmaq resource ethic (*Netukulimk*: 'take only what you need') as a guiding principle. While the AFS agreements are negotiated between the Chief-in-Council (in Eskasoni by the EFWC) and DFO with limited community input (Denny, 2007), the LMP employs communal advisory committees to manage the FSC fisheries (UINR & Denny, 2007). The advisory committees consist of one elder, two lobster fishermen (one youth), and one Grand Council representative from each of the five *Unama'ki* communities and they are proposed to meet annually with the Grand Council to review the LMP.

With communal governance, the LMP also aims to revitalize aspects of *Netukulimk* and MEK, which traditionally guided sustainable resource harvest.

Several interviewees are concerned that this knowledge is lost today, which may let some Mi'kmaq engage in irresponsible and unsustainable fishing practices.

> *"We're in a position where we don't have that youth-elder interaction anymore. We lost some sense of conservation, Netukulimk, ideas in our culture. So we have people now that are out there fishing just to kill fish. That's not who we are, that's who that next generation is. We're trying to re-establish that." (Denny, 2007)*

In recalling her upbringing, Shelley Denny illustrates the essence of *Netukulimk* and the educational challenge the LMP faces in light of the knowledge and ethic especially youth Mi'kmaq hold today.

> *"[N]ow we have people saying 'I've got a right, I'll go fishing', but they haven't fished with their grandparents before and they go out and say: 'Here's a lobster, I'm sure it matures in six months, like a dog; so we'll take it.' We have a big gap now; we don't have that union anymore. I was raised by my grandmother. Whenever somebody fished, they would always bring something back to the elders. That's how we grew up: you go out and fish and share it with the community. We didn't have a recreational fishery really; when we saw fish running and didn't need the fish, we didn't catch the fish. We didn't think to make money off it. We've now got a different generation; people are working in different fields. We don't have many ties to the earth anymore. We're losing that, so we really have to educate the young people on science, biology and the environment. So we respect that and we always have. I see a really big education component coming up, and it's going to take a generation to effectively communicate this to everyone." (Denny, 2007)*

While the latter educational task refers to revitalizing *Netukulimk* within the Mi'kmaq community, Shelley Denny is also committed to sending a strong signal to the non-native fishing communities, which seem to be critical of both Mi'kmaq fishing rights and ethics.

> *"[The LMP] will be a communication document as well. It tells our story and what we want to do; and how we want to do it and why." (Denny, 2007)*

The apparent loss of *Netukulimk* and concerns about Mi'kmaq harvesting practice will be further addressed below and discussed in the subsequent chapter in the context of findings from both case studies. The following findings show that the MMP has to respond to similar non-native discourses of Mi'kmaq resource rights and harvesting ethics.

C. The Moose Management Plan (MMP): Claims for Rights and Representation

> *"The interpretation is that the Supreme Court [in its 1985* Simon *ruling] gave the Mi'kmaq a right to hunt moose, but the key word 'gave' is incorrect. That is the perception of the non-native world that the government or the Court is giving us something. But the actual fact is that our treaty rights have always existed and we have to use the Court, because you brought us here to prove that our rights still exist." (Paul, 2007)*

1. Regulating Mi'kmaq Hunting Ethics

When talking to Mi'kmaq about hunting or fishing rights, I often encountered the standpoint that Mi'kmaq resource rights are no privileges, but granted by the Creator and affirmed by the SCC, as echoed above by Clifford Paul (MMP coordinator, UINR). From non-native Nova Scotians I commonly heard that Mi'kmaq rights to hunt outside of provincial regulations was unfair, their practice unethical and their harvest unsustainable. These opinions are fuelled by reports of Mi'kmaq hunters hunting beyond communal needs, selling moose meat or taking non-natives hunting, which receive considerable media attention, including in *Eastern Woods & Waters* (Gourlay, 2006; Hamilton, 2007), a "Redneck" hunting magazine (Hamilton, 2007). My anonymous interviewee G1 (a governmental employee involved in the MMP) refers to these incidents and explains why they constitute an abuse of the Mi'kmaq communal right to hunt moose.

> *"[W]e are aware of reports of some [Mi'kmaq] individuals taking large numbers of animals far beyond what would be required for personal consumption. We know there are individuals who take the animals for economic gain – it is not going to the communities which it would be within the spirit and intent of aboriginal rights – it is a communal benefit, the benefits of the harvest should go to the community, so there are abuses taking place and non-native hunters are contributing to that as well." (G1, 2007)*

Eastern Woods & Waters cites a DNR enforcement officer, who suggests that "it's a rent-an-Indian kind of thing", which is common practice in *Unama'ki* (Gourlay, 2006: 21). This practice is condemned by the wider Mi'kmaq community (Hamilton, 2007) and Tim Martin portrayed this as selfish Mi'kmaq "prostituting themselves" to the detriment of the wider community (Hamilton, 2007).

Given that this practice negatively colours non-native perceptions of aboriginal rights and Mi'kmaq harvesting ethic, Clifford Paul reacted with frustration and insisted that Mi'kmaq mostly use their moose hunting rights to feed their communities. He also echoes critical perception of non-native resource ethic that I repeatedly heard from Mi'kmaq, commonly in reference to the nature of commercial or recreational resource use.

> *"When they say the Mi'kmaq are wholesale slaughters to the moose, it's only a very small percentage of Mi'kmaq hunters that are involved in that. It's the non-natives that are blind to their own actions. The actual fact is that we get the moose to feed ourselves, our families and our communities, but if a non-native person had our rights, they'd say: 'I'd be catching 20 trout a day and shooting moose all the time and I'd have nothing but blood on my hands.' That's what they think we have, blood on our hands, but we don't. A lot of the problem is public perception." (Paul, 2007)*

The above quotes indicate the conflict potential that the currently non-regulated Mi'kmaq moose hunt entails. Since much of this refers to Mi'kmaq individuals abusing the collective right to hunt, Mi'kmaq have aimed to co-manage their moose hunt with DNR since the *Simon* decision affirmed their right in 1985 (Martin, 2007); as indicated in Chapter 5, the two attempts in 1989 and 1990 remained unsuccessful. In 2006 the government of Nova Scotia finally agreed to negotiate Mi'kmaq hunting rights and prioritized the MMP as a pilot project within the FA (Framework Agreement) negotiations. Referring to the conflicts indicated above, G1 highlights some anticipated outcomes of the MMP:

> *"So having the Mi'kmaq involved as they must be in terms of managing and regulating their own hunters, will, in the longer term, we are hoping will lead to a more carefully managed resource and will contribute to more positive relations between native and non-native hunters. I think our objectives are better resource management and conservation on the long term and harmony between Mi'kmaq and non-Mi'kmaq users of the resource." (G1, 2007)*

Both government and Mi'kmaq representatives involved in the preparations of the MMP envision culturally acceptable monitoring and enforcement systems (G1, 2007; Marshall, 2007a; Paul, 2007). They agree that Mi'kmaq rights abusers could be more effectively addressed by Mi'kmaq enforcement officers ('Mi'kmaq Guardians') and an alternative justice system, which the Nova Scotian government envisions as part of the MMP (G1, 2007; MMWG, 2007).

My impression from interviewing both government and Mi'kmaq parties involved in the Moose Management Working Group (MMWG) is that they were content with the progress and prospect of the MMP negotiations and shared mutual interests in a regulated Mi'kmaq moose hunt.

2. The role of the NCNS: the Politics of Co-operation

Potentially withstanding the successful partnership between Mi'kmaq and the Nova Scotian government is the fact that the NCNS is excluded from both the tripartite Framework Agreement (FA) negotiations and from the MMP (as indicated in Chapter 2). As I conducted my first interview with off-reserve representatives Roger Hunka (MAPC Regional Coordinator) and Tim Martin (NCNS *Netukulimkewe'l* Commissioner), I questioned subsequent interviewees and Mi'kmaq acquaintances about the NCNS and found that they were to varying degrees aware of the position of the NCNS. Reserve-based Mi'kmaq often assumed that NCNS members were not 'real Indians' and rather claimed to be Mi'kmaq in order to benefit from Mi'kmaq rights. In turn, Lindsay Marshall (Associate Dean of the Mi'kmaq College Institute, Cape Breton University and former Chief-in-Council of the *Potlotek* community, *Unama'ki*) is well aware that "[t]here has always been this undertow of animosity between the on-reserve chiefs and off-reserve people" (Marshall, 2007b); he suggests that this often goes back to competition for federal benefit[27].

Roger Hunka and Tim Martin presented me with the NCNS perspective of their relations to both governments and on-reserve Chiefs-in-Council. They were frustrated to be excluded from the MMP, especially as they have been very effectively managing the harvesting activities of their members and maintaining a

[27] Governmental interviewee G2 confirms that similar conflicts also exist in neighboring New Brunswick:

> *Probably more severely than in Nova Scotia. If you talk to the CMM [Confederacy of Mainland Mi'kmaq], they'll say they've got no problem dealing with the off-reserve. It depends on the level; if cooperative working level or a political-philosophical level. (G2, 2007)*

Unfortunately, an interview I scheduled with a representative of the CMM did not eventuate. In turn, Tom Johnston was only remotely aware of the NCNS, which may reflect the fact that the off-reserve Mi'kmaq are politically more visible on mainland Nova Scotia

> *This lack of education of my part in regards to the Native Council; I really do not know their roles, their requirements. They say that they are of native blood. (Johnson, 2007)*

mutual working relationship with DNR. While G1 affirms this, he is also aware that the NCNS's wildlife management is entirely independent from other (on-reserve) Mi'kmaq initiatives.

> *"The Province has a working relationship with the Native Council on wildlife management so by policy, for example, the Province accepts that the card issued by the Native Council - the Aboriginal Treaty Rights Access Cards – is evidence that the individuals are entitled to hunt on the same basis as status Indians and we are supportive of their efforts to manage the hunt of their members. So we do have a relationship with them and that continues outside of negotiations and we continue to encourage harmonization [with on-reserve Mi'kmaq], but right now they do operate separately." (G1, 2007)*

G1 was concerned by this division, which effectively prohibits the FA and MMP negotiations to be conducted on an inclusive government-to-government level as anticipated (Mi'kmaq Rights Initiative, 2008). He was also keen to stress that provincial and federal governments would welcome the participation of the NCNS in the MMP but contended that it is up to the Mi'kmaq Chiefs-in-Council to choose the representatives of the Mi'kmaq nation. The negotiations are thus pursued despite a considerable risk that the resulting MMP may be legally challenged by the NCNS.

> *"[If the MMP] is not inclusive of non-status Indians it will probably be challenged in court and it will possibly not be implemented. I think that is what everybody understands that that is what the outcome will be if these issues are not addressed; so that is something that the Mi'kmaq are aware of and need to work on." (G1, 2007)*

In further conversation, G1 expresses his hopes that in near future all Mi'kmaq parties will agree to unite their capacities and interests to let the MMP negotiations be inclusive. My conversations with Roger Hunka, Tim Martin and Lindsay Marshall on the position of the NCNS offer further food for thought, which are not directly pertinent to the research objectives but illustrate the political ecology of Mi'kmaq resource management. Therefore, I will conclude the subsequent analysis chapter with a discussion of the NCNS's resource management capacity and the conflict between on-reserve and off-reserve Mi'kmaq representatives, which will further explain the exclusion of the NCNS from the MMP.

D. Fundamental Issues of Mi'kmaq Resource Management

After reviewing some key findings specific to each case study, this section will highlight common issues that have emerged as fundamental to Mi'kmaq resource management aspirations. In light of the apparent loss of *Netukulimk*, I will contrast some opinions regarding the need to regulate Mi'kmaq FSC harvest and introduce the latent agenda of Mi'kmaq self-government. Within this context, issues of Mi'kmaq capacity and education will be highlighted as important prerequisites for Mi'kmaq participation in resource management. Finally, some important notions regarding Mi'kmaq self-government and cross-cultural relations in Nova Scotia will be represented.

1. Co-management and Self-government

While Shelley Denny considers regulation of the FSC lobster fisheries necessary to curb irresponsible Mi'kmaq fishing activities, she is aware that Mi'kmaq traditionalists may oppose to this:

> *"People want to see enforcement, because they don't see it happening any other way. There are bad apples in every culture. There are people, who are there for economic benefit of a food fishery. And other people say "we've been here a long time and done a pretty good job; why don't they leave us alone?" There are two views and there are two reasons why they would want enforcement. It's just to keep the people who are the bad apples from abusing and wasting what is everybody's resource." (Denny, 2007)*

In several interviews I indeed encountered the notion that Mi'kmaq have managed their harvest sustainably before colonization and that the concept of *Netukulimk* is therefore sufficient to guide Mi'kmaq harvesting activities. Given that *Netukulimk* is an integral part of Mi'kmaq language and culture, some Mi'kmaq are offended by the pretext of the MMP that the Mi'kmaq moose hunt is currently "un-managed" (Hunka, 2007); especially as the NCNS maintains an effective management system that is based on traditional guidelines of *Netukulimk*.

While Clifford Paul stresses that *Netukulimk* is an inherent part of Mi'kmaq culture, he acknowledges that today's patterns of resource use require formal management plans for Mi'kmaq harvesting activities; he further indicates that these have to be negotiated across ontological divides, which I will discuss in the subsequent chapter.

> *"In modern terms, everybody wants a management plan, including our people. In the ancient ways it was already incorporated in the behaviour and language of our people. But to satisfy different worldviews, let's come up with a management plan that incorporates both Western science and TEK of our people." (Paul, 2007)*

Therefore, both Shelley Denny and Clifford Paul acknowledge that the Mi'kmaq FSC harvest needs to be formally regulated. Interviewee G2 acknowledges the traditional Mi'kmaq management capacity, but suggests that aboriginal people now readily co-operate with the governmental agencies to negotiate today's resource management challenges:

> *"I don't think that aboriginal people really believe that the aboriginal way of doing things can work alone, because so much has changed. I really think they want to work in co-operation with the federal government in a trusting environment." (G2, 2007)*

Both Denny and Paul acknowledge the capacities and methods of governmental agencies and 'integrate' them into the LMP and MMP. However, they both emphasized that the management of Mi'kmaq resource harvest should be done in culturally appropriate terms and governed by Mi'kmaq communities rather than by the government.

Essentially, both LMP and MMP are considered by Mi'kmaq as initiatives of self-government. Many Mi'kmaq I spoke with use the term 'self-government' frequently and in a broad sense. Synthesizing the responses from several interviewees, the following critical elements of self-governed FSC harvest were mentioned:

- Consultation of Mi'kmaq knowledge holder, resource users, community members and elders;
- Effective incorporation of MEK;
- *Netukulimk* as a guiding principle;

– Culturally appropriate enforcement by Mi'kmaq Guardians and alternative justice system.

Both LMP and MMP incorporate these self-government principles and are endorsed by governmental agencies. The government has an interest for Mi'kmaq to take responsibilities for Mi'kmaq FSC harvest management (G1, 2007) and to be "moving toward an increased level of Mi'kmaq self-government and self-management", as the MMP anticipates (MMWG, 2007). The relationships between Mi'kmaq and DNR and DFO regarding the LMP and MMP were portrayed as mutual from both sides. In the following chapter, I will discuss the nexus of co-management and self-government in more detail.

2. Knowledge and capacity for self-government

Relying on the potential of MEK and *Netukulimk*, Mi'kmaq traditionalists may remain sceptical of the use of modern science in resource management, as Tom Johnson indicates:

> *"I do not think they defend their traditional knowledge but they discourage Western science. Why should we rely on science … when it has not done any good in the past 100 years?" (Johnson, 2007)*

Both the LMP and MMP aim to revitalize *Netukulimk* as a guiding principle for Mi'kmaq harvesters, as there is common concern that MEK and *Netukulimk* are no longer cultivated in contemporary Mi'kmaq society. When identifying root causes for the apparent loss of *Netukulimk*, several Mi'kmaq interviewees identified the modern way of life, which does not nurture oral history and knowledge (Johnson, 2007; Marshall, 2007a).

> *"Today [MEK] is dying out due to technology. Technology in a way is great but it is also killing off a lot of opportunities; at one time, for example, an elder and a young person could sit down and talk about the old days, not so such defining it as resource management but essentially passing on the knowledge of resource management to the younger generation through conversation." (Johnson, 2007)*

The transition from traditional to modern ways of life has introduced a dichotomy in many aboriginal communities, as G2 has also observed:

> *"As the Chief of [the Mi'kmaq community of] Burt Church told me one day: 'everything we learnt, we learnt from the white man', meaning all good and bad things. I think there are two sides: there are the traditional people who take from Mother Earth what they need, but nothing else. The other segment that learnt from the white man: rape, pillage, take everything you can, maximize your profit, pocket the money and go on to something bigger and better. Part of the* Ikanawtiket[28] *thing is to bring back the conservation ethic that has skipped a generation right now; the elders have still got it and can pass it on to the youth. It's part of the process of rebuilding what used to be there and trying to undo some of the damage we did by teaching the aboriginal people to do things how the white man does it. A lot of people do that. When aboriginal people see an opportunity to make some money, the greed is there, because they got it from the white man." (G2, 2007)*

[28] *Ikanawtiket* is an ongoing initiative of MAPC (which includes the NCNS) to include aboriginal people in the development of the Species at Risk Act

While both MMP and LMP aim to address the apparent loss of traditional harvesting approaches, most formal capacity building initiatives for Mi'kmaq have been in universal science. These aim to prepare Mi'kmaq to work in conventional resource management, which responds to a common lack of aboriginal people who have the necessary skills (G2, 2007).

Cape Breton University (CBU), the only local post-secondary institution in *Unama'ki*, offers the Mi'kmaq Science Advantage Program (MSAP), which reaches out to Mi'kmaq communities to ease the entry of Mi'kmaq students into university science programs (Petten, 2002). There are also three annual scholarships that encourage Mi'kmaq students to study scientific resource management, which are funded by forestry trans-national Stora Enso, the mining cooperation Georgia Pacific and DFO[29].

For technical capacity, DFO has initiated numerous programs over the last 5-10 years to train Mi'kmaq fishermen as Guardians or technical assistants (G2, 2007). Until recently, CBU also offered a Native Guardian Program, which was discontinued due to low enrolment (Marshall, 2007b).

CBU has been more successful with its MSIT ("everything together" in Mi'kmaq language) science program, which is led by biology professor Cheryl Bartlett and guided by Mi'kmaq elders Albert and Murdena Marshall. Targeting both Mi'kmaq and non-native students, this offers a 'Two-eyed Seeing' approach to science education by illustrating the value of both MEK and universal science (Institute for Integrative Science & Health, 2008).

3. Co-existence in Nova Scotia

While the findings presented above mainly concern the specifics of resource management, I will conclude this chapter by representing some more political notions of co-management relationships and co-existence in Nova Scotia. Representing a very reconciliatory and proactive governmental position, G2 reminds us that accommodation of aboriginal interests goes beyond integration:

> *"We created the situation and we have to fix it. Accommodate means to go the extra mile. It goes way beyond the letter of the law and that's what people don't understand. You just don't do what the law says; you have to go way beyond that to accommodate. When you do that, the aboriginal people can see that you're really doing more than you have to and you're really trying to make a difference. ... Because they've been conforming to what we've been saying for years; now it's time for us to do a little bit of reciprocation." (G2, 2007)*

Indeed, Albert Marshall (Eskasoni community Elder) can already see much progress and considers this point in time a pivotal point in the history of Mi'kmaq–non-native relations.

> *"It would take a lot of patience and endurance to coexist with these newcomers, with different belief systems and values. So it has now taken close to 700 years before these newcomers are recognizing everything from another perspective. These aboriginal people must have something in place if they had been around here for 13,000*

[29] The former two each fund one Mi'kmaq student from the *Unama'ki* communities for studies in environmental management (Hipwell, 2001); the latter provides funding to a graduate student who proposes scientific research on the Bras d'Or Lakes and agrees to mentor a Mi'kmaq secondary or tertiary student (Dalhousie University, 2008).

> *years. So people are beginning to question their belief system; they are searching for something. It took that long until a complete turn-around occurred, which I think is now. Otherwise, why would you be here, if that consciousness is not evolving?" (Marshall, 2007a)*

While my research interest also reflects increasing academic attention to aboriginal perspectives, Lindsay Marshall is still "waiting for the day" when Canada wakes up to its colonial reality:

> *The two worlds can live, but is has to begin with understanding and respect for one another. Respect, traditionally, was demanded by the colonial side and respect for our culture was not acknowledged. ... [I]t's like waiting for the time when somebody will turn on the lights and they'll see: Oh, we stole all your land. We gave it away, oh my god. That's what everybody thinks we're waiting for. And so you are being excluded from the resource. (Marshall, 2007b)*

My reflective insights show that Mi'kmaq are keenly aware that they are the first peoples of Nova Scotia and that they have accommodated European settlers since their arrival. These final quotes and the underlying notions show that the colonial legacy is latent to co-management relations. Therefore, co-management arrangements have to reconcile more than ontological differences, but be proactive to forge postcolonial partnerships. This will be further addressed in discussions of Mi'kmaq self-government aspirations in the subsequent chapter.

4. Summary of Findings

The LMP is based on the AFS framework and aims to normalize the existing AFS agreements of the five Mi'kmaq communities of *Unama'ki*. Importantly, it adds a 'Mi'kmaq spin' to them and addresses an apparent loss of *Netukulimk* by emphasizing traditional principles and integrating Mi'kmaq communities into the management. The LMP also enhances cross-cultural communication to reduce friction and misconceptions.

The MMP aims to govern the *Unama'ki* moose hunt for all Nova Scotia Mi'kmaq, which is so far 'un-regulated' for reserve-based Mi'kmaq. This has made room for some Mi'kmaq to abuse their communal hunting rights, which is condemned by both Mi'kmaq and non-native hunters. Although, the MMP aims to be inclusive of all Mi'kmaq, the NCNS is excluded by the Mi'kmaq Chiefs-in-Council, which jeopardizes the success of the MMP.

The following analysis will discuss the objectives and methods of the management plans to show how they respond to the loss of *Netukulimk* and critical non-native discourses. This will necessitate a further discussion of contemporary *Netukulimk*, Mi'kmaq education and cross-cultural understanding.

Chapter VII: Analysis and Discussion

A. Introduction

This chapter will discuss the key themes that emerged from the research findings in more detail and refer to additional interview insights and the literature reviewed in Chapter 4. The political ecology framework and the research aim of this thesis were introduced in Chapters 3 and 4 and can here (in Section B) be explained in due detail and context, in the light of the specific details of the case studies presented in Chapters 5 and 6.

The discussion section (Section C) will follow the research objectives to explore how the LMP and MMP aim to negotiate the political ecology of the lobster and moose harvest. It will also discuss some underlying aspects of the Mi'kmaq harvest and resource management, which were introduced in the preceding chapter as "Fundamental Issues of Mi'kmaq Resource Management". The Chapter will conclude (in Section D) with a synthesis of the discussions.

B. Political Ecology Framework and Research Objectives

1. Political ecology after Berkes and Escobar

As discussed in Chapter 4, a political ecology perspective can be employed to effectively analyse case studies of aboriginal resource management. I reviewed the positions of Arturo Escobar (2006) and Fikret Berkes (2008) in more detail and will here devise my conceptual framework based on their approaches.

Berkes rejects the assimilative/traditionalist dichotomy and asserts that aboriginal people can define their own destiny in the modern world. In reference to the political ecology of Lo/TEK use in case studies from Canada and New Zealand, he emphasizes that aboriginal people can achieve both cultural revitalization and political empowerment in co-management. For both ends, the utilization of aboriginal Lo/TEK is crucial, but this requires renegotiating the conventional politics of resource management (Berkes, 2008).

For the analysis of case studies, Berkes (2008) suggests that first the "divisions among the actors" need to be identified; this refers to a typology of interest groups and their relations, which enables the analysis to account for their different interests. Building on Berkes' work, my analysis will show how the LMP and MMP aim to achieve both cultural revitalization and self-government. Following Berkes (2008), I first identify three divisions of actors:.

While Berkes acknowledges the complexities of power relations and different epistemologies inherent in co-management, his political ecology perspective does not sufficiently address the discursive and ontological aspects that are evident in my research findings. Therefore, my analysis will also lean on Escobar's poststructuralist political ecology framework to discuss "cultural distribution conflicts" in *Unama'ki*. In general, Escobar asserts that diversity among actors commonly triggers either their exclusion or assimilation, which is especially true for aboriginal peoples. Therefore, we need to ask how cultural or ontological difference between actors is "either enabled or denied" (Escobar, 2006:8) and explore the ontological and epistemological differences that underlie "cultural distribution conflicts" (Escobar, 2006:10). Escobar contends that differing socio-cultural constructions of nature and resource use are at the heart of resource management conflicts; these need to be negotiated for a sustainable and mutual political ecology.

Escobar's advocacy for ontological diversity and his attention to "cultural distribution conflicts" make his framework highly relevant to my case studies of Mi'kmaq resource management. This will let me discuss non-native discourses of Mi'kmaq resource rights and harvesting ethic, which emerged in both case studies as a source of cross-cultural conflict; I will explore the nature of this conflict below as the 'political ecology of ontological difference'.

2. Research Aims and Objectives

In general, this analysis will explore how the MMP and LMP negotiate the political ecology of Mi'kmaq resource harvest. Therefore, my objectives are to show how the LMP and MMP:

- Incorporate universal science, MEK and *Netukulimk*;
- Respond to Mi'kmaq abuses of communal resource rights, and to non-native discourses of Mi'kmaq harvesting ethic;
- Enhance the sustainability of the Mi'kmaq harvest.

My findings of both the LMP and MMP have indicated that these aspects are of critical importance to Mi'kmaq. To put the two case studies into perspective, I will discuss them in reference to the literature to the NCNS system of harvest management.

The aims of the analysis of my research findings are limited by the nature of my data and my methodology. The interview data primarily represents Mi'kmaq perspectives and is naturally of limited representative value (Gubrium & Holstein, 2003). However, the political ecology of the Mi'kmaq harvest is very controversial. Furthermore, the Mi'kmaq non-native discourses and ontologies that are represented are not categorical and merely indicative of the cultural differences that are at play. Both decolonization and poststructuralist methodologies caution of simplifying complex circumstances and offering unfounded conclusions. As indicated in Chapter 3, my analysis will therefore not aim to be a conclusive evaluation of the management plans or to offer recommendations of how the Mi'kmaq should manage their harvest, as "to speak for them is to deny them the self-determination so essential to human justice and progress" (Battiste, 2008:504)[30].

However, the subsequent analysis will achieve the research aim, but will present just one perspective on resource conflicts and cross-cultural relations in Nova Scotia. I will also indicate the significance of my findings in the wider context of the Canadian political landscape in conclusion of this chapter. I will discuss the value of this research for the Mi'kmaq research community in Chapter 8.

C. Political Ecology Analysis

1. Introduction

When presenting the context and findings of my case studies (Chapters 5 and 6) I introduced a number of parties and interest groups of the MMP and LMP. Following Berkes' recommendation, I will frame my analysis by drawing three

[30] In Chapter 3, I outlined how my opportunistic approach during field work enabled me to effectively respond to guidance from Mi'kmaq participants and fulfill the ethical requirements of a decolonization methodology; I indicated that this flexible approach is also a core element of the poststructuralist concept of anti-methodology (Doel, 1996; Law, 2004). In regards to the analysis of my research findings here, the cautionary approach to not reify subjective insights is also in line with both decolonization and anti-methodology.

"divisions of actors" (Berkes, 2008:254), along which differing interests and approaches will be evident.

Following the research objectives, I will then discuss the context, objectives and methods of the LMP, which will require attention to multiple circumstances. More briefly, I will discuss context, objectives and methods of the MMP to then synthesize some common aspects of both case studies.

Going beyond the research objectives to address fundamental issues of Mi'kmaq resource management, I will also discuss some aspects of self-government, ontological difference and Mi'kmaq capacity for resource management. Finally, I will analyse the position of the NCNS in order to explain its exclusion from the MMP and its implications.

2. Division of Actors

My findings suggest that divisions are most evident between (i) Mi'kmaq and provincial/federal governmental agencies; (ii) Mi'kmaq and non-native resource users; and (iii) on- and off-reserve Mi'kmaq, as represented by Chiefs-in-Council and the NCNS. In my findings these divisions are exemplified by, respectively: a legacy of struggles over resource management sovereignty; different resource rights and conceptions of resource use; and competition over political representation and governmental benefits. Although I found that considerable tension emanates from these divisions and around these topics, a poststructuralist perspective cautions that such a categorization may simplify relations and conflate their subtleties and complexities, as indicated above. Nevertheless, I contend that such divisions will illustrate my analysis and will therefore refer to these where needed.

3. Political Ecology of the Mi'kmaq Lobster and Moose Harvest

a) DFO Frameworks for Aboriginal Rights

Complementing existing AFS agreements, the LMP proposes a more culturally appropriate framework for the management of FSC lobster fisheries on *Unama'ki*. In order to appreciate how proactive the LMP is, a discussion of the DFO models for aboriginal fisheries management is insightful.

In Mi'kmaq society, there is no distinction between commercial and FSC fisheries (Ladner, 2005), which was introduced by DFO to accommodate newly affirmed aboriginal fishing rights within its conventional management frameworks and paradigms (Davis & Jentoft, 2001). DFO has been negotiating AFS agreements to regulate FSC fishing rights, which were affirmed for all aboriginal people by the SCC in the *Sparrow* decision of 1990. The fact that DFO did not consider community-based, self-regulated or aboriginal systems of fisheries management, has been criticized as colonial and "paternalistic" (Davis & Jentoft, 2001); in this vein, Hipwell contends that DFO imposed its control on aboriginal fisheries "without dealing head on with the sovereignty question" (Hipwell, 2001:286). In support of these arguments, research findings indicated that some Mi'kmaq hold that Mi'kmaq leaders are selling their collective rights in AFS agreements (Denny, 2007).

To accommodate Mi'kmaq in commercial fisheries after the *Marshall* decision of 1999, DFO similarly imposed its conventional management framework and transferred commercial licenses to Mi'kmaq. While this caused much unrest in non-native fishing communities, others again argued that Mi'kmaq were selling their rights and subscribing to DFO control, rather than asserting their rights to self-government (Davis & Jentoft, 2001).

However, since the AFS and Marshall agreements also fund equipment, training and management for aboriginal fisheries, 30 of 34 Mi'kmaq communities have entered commercial fisheries on DFO terms and all *Unama'ki* Mi'kmaq Bands renegotiate their AFS agreements annually. In light of this, I will next discuss how the innovative model of the LMP proposes FSC fisheries management on Mi'kmaq terms and, as I will argue, effectively decolonizes the Mi'kmaq FSC lobster harvest.

b) Management objectives and methods for the LMP

The DFO frameworks primarily aim to ensure the sustainability of aboriginal fisheries. In turn, the LMP more specifically has to respond to irresponsible Mi'kmaq fishing practices, as well as confusion and contestation regarding FSC and commercial fishing rights. It therefore proposes a more culturally effective management framework, which incorporates Mi'kmaq communities and revitalizes MEK and *Netukulimk*.

In terms of its methods, the LMP aims to revitalize Mi'kmaq knowledge and *Netukulimk*, but also builds on scientific research of UINR, EFWC and DFO. As a Mi'kmaq-led framework, the LMP employs communal advisory committees, Mi'kmaq Guardians, Grand Council representatives and traditional guidelines of *Netukulimk*. None of these provisions are part of the AFS agreements, which are negotiated between Chief-in-Council and DFO.

To respond to the uncertainties of the Mi'kmaq lobster fisheries, the LMP implements a reporting and monitoring system for FSC lobster fisheries, which is facilitated by Mi'kmaq Guardians in every community. Since there is no monitoring component in the AFS agreements, Shelley Denny is also committed to supplying resulting data to DFO; this will allow more accurate assessments of the sustainability of the FSC lobster fisheries and of different fishing patterns.

Mi'kmaq entry into the profitable commercial fisheries divided some Mi'kmaq communities between traditionalists and capitalist resource ethics (Fox, 2006b). Shelley Denny indicated that some Mi'kmaq approaches to fisheries resources have changed since it is shared with the commercial industry: "We didn't think to make money off it. We've now got a different generation; people are working in different fields. We don't have many ties to the earth anymore." (Denny, 2007). This may have contributed to the loss of *Netukulimk*, which has been observed by Mi'kmaq elders with a change to modern ways of life. "So we have people now that are out there fishing just to kill fish. That's not who we are, that's who that next generation is." (Denny, 2007).

c) The LMP as Decolonization

The political ecology of the Mi'kmaq lobster harvest entails multiple management objectives, as indicated above, which are naturally interconnected. Therefore, non-native concerns are fuelled by a lack of monitoring as well as irresponsible Mi'kmaq fishing practices, which are indicative of a loss of *Netukulimk*. Acknowledging the challenges Mi'kmaq fisheries management represents today, Barsh suggests that

> *"Mi'kmaq would have to concede that the preconditions for traditional self-regulation have disappeared and accept responsibility for devising new forms of effective and transparent self-regulation rather than replicating ineffective DFO management models" (Barsh, 2002:35)*

Shelly Denny expressed some concern that the LMP is based too much on the conventional DFO framework (as it adopts DFO regulations for lobster traps and size, for example) and features too little “Mi'kmaq spin” (Denny, 2007). Nevertheless, my discussions above show that the LMP overcomes traditionalist positions and represents an innovative mix of quantitative monitoring methods and traditional guidelines of *Netukulimk*. Furthermore, the advisory committees empower Mi'kmaq knowledge holders and employ the Grand Council to oversee Mi'kmaq FSC fisheries management.

As a “communication document” (Denny, 2007), the LMP aims to communicate a renewed Mi'kmaq commitment to sustainability and stewardship to the non-native public. Given that the ‘Lobster Wars’ over the commercial lobster fishery have lately divided Nova Scotia over Mi’kmaq fishing rights and ethics, cross-cultural communication is a pertinent component of self-governed lobster management in *Unama’ki*.

While the LMP guidelines are innovative, they so far only represent a voluntary commitment to Mi'kmaq-led fisheries management. They complement AFS agreements, which primarily cover ecological guidelines and supply Mi'kmaq with funds to manage their FSC fisheries sustainably. However, I would suggest that following the LMP guidelines, effectively asserts collective rights to self-government and decolonizes Mi'kmaq lobster fisheries from DFO frameworks and non-native discourses. If the implementation of the LMP is successful, it may form the basis of Mi'kmaq-led co-management with DFO and replace the AFS agreements, as Shelley Denny anticipates (Denny, 2007).

d) Management Objectives and Methods for the MMP

Given that non-native hunters are prohibited to hunt moose for 49 weeks of the year and in the DNR “Moose Draw” lottery have a chance of 3.6 % of winning a license to hunt one moose[31], the absence of provincial regulations for Mi'kmaq may cause conflict and concern. The reports of Mi'kmaq taking multiple animals, selling their harvest or their communal rights to non-native people inevitably fans the fire. Fuelled by sensationalizing media reports (Gourlay, 2006), some non-native discourses in Nova Scotia perceive Mi'kmaq hunters as wasteful and irresponsible, and also consider Mi'kmaq hunting rights as a threat to the common resource.

However, since the Cape Breton Highlands support a healthy moose population, the sustainability of the Mi'kmaq moose hunt is of no immediate concern[32] (G1, 2007). Primarily, the MMP aims to facilitate “harmony between Mi’kmaq and non-Mi’kmaq users of the resource” (G1, 2007) by “resolv[ing] the current un-managed moose harvest” (MMWG, 2007). Since this has allowed some irresponsible hunting by Mi'kmaq, the management methods of the MMP “may include a tagging/licensing system for Mi'kmaq harvesters” (MMWG, 2007). The UINR is expected to take a lead role in the MMP and has extensive experience employing both MEK and universal science. It is hoped that a balance of traditional and modern knowledge will revitalize traditional harvesting approaches of *Netukulimk* and manage the moose hunt sustainably. The draft MMP principles also feature enforcement by Mi'kmaq Guardians and an alternative justice system for Mi'kmaq rights abusers (MMWG, 2007). In summary, the MMP aims to counteract

[31] In 2008, 10,071 hunters from all over Nova Scotia applied for 363 licenses (DNR).
[32] Although G1 indicated that the Mi'kmaq moose hunt could pose a threat in future if no monitoring is in place.

irresponsible Mi'kmaq hunting by culturally appropriate regulations, monitoring and enforcement.

The MMP is intended as to manage the Mi'kmaq moose harvest on Mi'kmaq terms and independently from the DNR system for non-native hunters. The MMP was initiated by the Grand Council, which mandated UINR to consult with all Mi'kmaq communities of Nova Scotia to gather community input. Although the terms and methods of the MMP have not been finalized, the DNR appears very open to accommodate a new system for Mi'kmaq hunters. The development of the MMP is therefore a cooperative effort, but largely self-governed by Mi'kmaq.

While a regulated moose hunt will be new to most Mi'kmaq hunters, the NCNS has been maintaining a self-governed system to manage and monitor its members' harvesting activities, which also features an extensive system of tagging and reporting. The final section of this chapter will discuss the exclusion of the NCNS from the MMP and the NCNS's system as a model for self-governed Mi'kmaq resource management.

e) The political ecology of LMP and MMP

The literature suggests that 'state-led' co-management arrangements risk assimilating aboriginal Lo/TEK, which is incommensurable with conventional resource management frameworks. The discussions above show that both LMP and MMP propose innovative management frameworks that intend to revitalize MEK and *Netukulimk*, while also employing Western, quantitative methods. This research therefore suggests that aboriginal leadership is essential to implementing aboriginal Lo/TEK in effective and appropriate ways. Mi'kmaq leadership in EFWC and UINR has been showing for a number of years that Western science and TEK can be effectively combined.

Both case studies also found that Mi'kmaq resource managers were concerned that traditional *Netukulimk* has been lost. This has contributed to irresponsible Mi'kmaq harvesting practices, which have also irritated non-native fishers and hunters. The combination of culturally appropriate guidelines (based on *Netukulimk*) and enforcement (by Mi'kmaq Guardians) is hoped to encourage responsible Mi'kmaq harvest in the spirit of communal FSC resource rights. This suggests that *Netukulimk* is essential to guide Mi'kmaq to responsible harvest, which may calm Barsh's concern that *Netukulimk* has lost its traditional significance and is merely "deployed as a tool of modern-day political discourse" (2002:17).

Despite the importance of *Netukulimk* for Mi'kmaq, Mi'kmaq resource managers agree (some reluctantly) that it is not sufficient to manage today's political ecology of fragile ecosystems, commercial resource use, and multiple resource users with competing interests. Therefore, both LMP and MMP employ quantitative methods to monitor and sustain the Mi'kmaq harvest. Furthermore, this will likely calm non-native concerns about the sustainability of the FSC harvest, regardless of how accurate or fair non-native representations of Mi'kmaq resource use are. With their strategic use of quantitative methods, Mi'kmaq are employing non-traditional methods to communicate their capacity and commitment to manage their FSC harvest responsibly. This is proactive and innovative, as the literature does not discuss the use of Western methods under aboriginal leadership.

The Mi'kmaq initiatives show that the use of quantitative methods can effectively bring clarity to Mi'kmaq harvesting patterns and counter critical non-native discourses, while the revitalization of traditional knowledge and *Netukulimk*

aims to provide Mi'kmaq with culturally appropriate guidelines for sustainable and ethical FSC harvest.

Nevertheless, Tim Martin indicated that quantitative reporting and monitoring in the NCNS system primarily serves non-native and governmental expectations and standards of resource management (Martin, 2007). He suggested that the guidelines of *Netukulimk* were more important to encourage responsible and respectful hunting by Mi'kmaq. Martin also indicated that some Mi'kmaq harvesters may not support regulations that lack culturally appropriate guidelines. This was part of the reason why the attempts to co-manage Mi'kmaq FSC harvesting in 1989 and 1990 failed (Martin, 2007).

The above discussions show that the political ecology of Mi'kmaq lobster and moose harvest is complicated by more political than ecological factors. While the natural environment can accommodate Mi'kmaq harvest of lobster and moose for FSC purposes, Mi'kmaq rights, management methods and ontologies are neither accommodated in conventional management frameworks nor in non-native discourses. The LMP and MMP have been developed under Mi'kmaq leadership and constitute innovative frameworks that effectively respond to the political ecology of the Mi'kmaq lobster and moose harvest. The following section will discuss how they are supported by the government, while also providing frameworks for the self-governed management of the Mi'kmaq FSC harvest.

4. The LMP and MMP as Self-Governed Co-Management

Responding to the research objectives, the above sections discussed the political ecology of the Mi'kmaq harvest and how the LMP and MMP respond to its challenges. This section will discuss the LMP and MMP with reference to the Mi'kmaq agenda of self-government, which underlies Mi'kmaq aspirations in resource management.

Both case studies show that Mi'kmaq leadership and cultural principles are essential to effectively and sustainably manage the Mi'kmaq FSC harvest. Mi'kmaq maintain leadership in developing, monitoring and enforcing the management plans and are supported with some cooperation and funds from governmental agencies. Furthermore, both LMP and MMP were initiated and will be overseen by the Grand Council, which is effectively reclaiming its traditional leadership role in Mi'kmaq resource management (Battiste, 1997; Hipwell, 2001). Therefore, I will characterize the LMP and MMP as cases of 'self-governed co-management'.

This also transcends the dichotomy of co-management and self-government of the Mi'kmaq harvest that the findings revealed in Mi'kmaq discourses. On the one hand, traditionalist Mi'kmaq call for self-government and are sceptical of engaging in co-management relations that employ non-traditional science and methods; on the other hand, modern Mi'kmaq resource managers seek mutual relationships with DNR and DFO and complement traditional principles with modern methods. Both LMP and MMP follow the latter path, which may reflect a progressive agenda of the self-governed Grand Council.

In any case, since these co-management initiatives are the first in Nova Scotia to devolve substantial responsibilities to Mi'kmaq and advance their agenda of self-government, the position of Mi'kmaq has greatly advanced since 1997, when Berneshawi suggested that Mi'kmaq participation in co-management was still out of reach (Berneshawi, 1997). As discussed in Chapter 4, Berneshawi did indicate that a Mi'kmaq-governed independent system of resource management would best accommodate Mi'kmaq needs. This is in line with the more recent concerns in the

literature of the assimilative potential of integrative co-management and Stevenson's response of the Two-Row Wampum model (2006), which asserts that aboriginal and non-native harvest are best managed in two parallel management systems. Both the LMP and MMP operate independently of regulations for non-native resource users and do not attempt to integrate Mi'kmaq interests in conventional frameworks. Therefore, both LMP and MMP follow Berneshawi's (1997) advice and essentially Stevenson's model of the Two-Row Wampum.

Given the legacy of marginalization of Mi'kmaq interests in resource management in Nova Scotia, Barsh (2002), Doyle-Bedwell & Cohen (2001) and governmental interviewee G2 (G2, 2007) insist that the onus of reconciliation is now on the side of the government. This research suggests that both provincial and federal governments (represented in the LMP and MMP primarily by DFO and DNR, respectively) acknowledge that the Mi'kmaq initiatives are more appropriate and effective than conventional frameworks and support them. Neither my interview findings nor my observations indicate that governmental control is being imposed on Mi'kmaq harvest, as it has been argued for the AFS agreements (Davis & Jentoft, 2001; Hipwell, 2001). Rather, both Shelley Denny and G1 indicated that an enhanced level of Mi'kmaq self-government and a more equitable share of responsibilities is in the government's interest (Denny, 2007; G1, 2007), which is also expressed in the draft MMP (MMWG, 2007). As indicated in the discussion of the LMP, self-governed resource management frameworks on Mi'kmaq terms can effectively decolonize Mi'kmaq harvest from governmental control and reconcile postcolonial and cross-cultural relations. Driven by Mi'kmaq aspirations of self-government, both initiatives rely on mutual Mi'kmaq-government relations, which may point the way towards a new partnership, which the ongoing Framework Agreement negotiations also anticipate.

5. Political Ecology of Ontological Difference

This section will discuss some of the underlying discursive aspects of Mi'kmaq resource rights, knowledge, ethics and cross-cultural differences, which both the LMP and MMP need to negotiate. In reference to Escobar (2006), I will argue that these cross-cultural confrontations and misconceptions are essentially due to different cultural constructions of resource use; however, different views on colonization and co-existence in regards to Mi'kmaq rights will also be highlighted. This discussion will draw on Escobar's poststructuralist framework and his concept of "cultural distribution conflicts" (Escobar, 2006).

Several scholars have pointed out that the resources to construct and legitimize different ideas of resource use are unevenly distributed among actors (Belsky, 2002; Escobar, 2006; Paulson *et al.*, 2003). Consequently, decision making power in the management of aboriginal resources can be executed by privileging Western constructions of nature and marginalizing aboriginal ontologies (Howitt & Suchet-Pearson, 2006; Suchet, 2002; Willems-Braun, 1997)

a) Cross-Cultural Understanding of Ethics, Knowledge and Rights

The literature reviewed in Chapter 4 agrees that co-management is challenged by fundamentally incommensurable ontologies of natural resources and human resource use (Escobar, 2006; Suchet, 2002). The ontological difference between Mi'kmaq and non-native ways of resource use are illustrated in the case studies in regards to Mi'kmaq knowledge, *Netukulimk* and resource rights. Since conventional frameworks of resource management do not accommodate the Mi'kmaq ontology, Mi'kmaq claims to knowledge, ethics and rights are misconceived.

Mi'kmaq concepts of MEK and *Netukulimk* are grounded in a holistic worldview, where humans maintain intricate and reciprocal relations to their environment. Since non-native ontologies allow for human domination of their environment, they do not accommodate Mi'kmaq concepts, which may contribute to non-native distrust of Mi'kmaq resource management capacity based on MEK and *Netukulimk*.

In turn, some Mi'kmaq I spoke to objected to the nature of non-native commercial and recreational resource harvest and doubted that non-natives have respectful and ethical ways of resource management. This is reflected by Clifford Paul's statement that "if a non-native person had our rights, they'd … have nothing but blood on [their] hands" (Paul, 2007). Likewise, some Mi'kmaq do not trust that universal science can sufficiently manage ecological systems and resource harvest. Tom Johnson refers to these notions when he asks: "Why should we rely on science … when it has not done any good in the past 100 years?" (Johnson, 2007). Indeed, the demise of the Atlantic ground fishery in the 1990s is the most prominent local case for scientific mis-management. The fact that warning signs of changing spawning patterns in the Bras d'Or Lakes were observed by MEK, but disregarded by DFO (Hipwell, 2001), may have contributed to Mi'kmaq scepticism towards universal science in resource management.

While misconceptions and distrust of MEK and *Netukulimk* are due to ontological difference or nature and harvest, Mi'kmaq and non-native conceptions of Mi'kmaq resource rights are due to different views on colonization and co-existence. Although my research did not address this explicitly, different understandings and premises of resource rights often became evident in the shortcomings of cross-cultural communication, which contributes to the controversy and confrontation around the Mi'kmaq FSC harvest. Not considering the legacy of colonization, non-native discourses may portray Mi'kmaq rights to priority access as unfair and rather call for equal resource access. In reference to aboriginal claims, I often heard non-native claims of customary resource use over successive generations, even if this has relied on colonial marginalization of Mi'kmaq access. In turn, Mi'kmaq hold that their recently affirmed rights are but remnants reclaimed from colonial dispossession.

b) Negotiating Ontological Difference

Both LMP and MMP need to negotiate non-native misconceptions of Mi'kmaq knowledge, ethics and rights, which shows that ontological difference and cross-cultural representations shape resource management decisions. These discursive aspects are thus integral to the political ecology of aboriginal resource access.

In Escobar's terms, Mi'kmaq do not hold the "resources to construct" and justify ontological and cultural dimensions of their FSC harvest. The "cultural distribution conflict" in Nova Scotia means that Mi'kmaq ways are "denied" in the face of mainstream non-native values and frameworks (Escobar, 2006:10).

Limited cross-cultural communication and understanding of ontological difference are partly responsible for non-native discourses that dismiss Mi'kmaq concepts of MEK, *Netukulimk* or resource rights. The objective of the LMP to enhance cross-cultural communication of Mi'kmaq resource management is therefore a very proactive attempt to reconcile these 'cultural distribution conflicts'. In turn, Tom Johnson (EFWC) questions the need for reconciliation:

“Have non-native accusations in regards to First Nation resource management and rights to resources affected our ability to operate?” (Johnson, 2007)

In any case, the case studies show that ontological differences are at the heart of cross-cultural debates concerning Mi'kmaq FSC harvest. While Mi'kmaq are trying to bridge this lack of understanding, non-native discourses and representations do not acknowledge the distinct cultural context of Mi'kmaq harvest, ethics and rights. In this context, the case studies of self-governed, culturally appropriate resource management need to be considered as substantial steps decolonizing cross-cultural misconceptions.

6. Ontological Literacy and Capacity for Self-Government

This section will briefly discuss Mi'kmaq options for environmental education in *Unama’ki* in the light of the apparent the loss of *Netukulimk* in Mi'kmaq communities. A further discussion of Mi'kmaq capacity for resource management will respond to the cross-cultural misconceptions and ontological differences indicated above.

Although my findings have highlighted a loss in traditional harvesting approaches, most formal capacity building initiatives for Mi'kmaq (as listed in Chapter 5) have been in the field of scientific resource management. However, as there are limited education options for reserve communities in *Unama’ki*, Mi'kmaq interviewees were very positive about a growing trend of Mi'kmaq science students. Although this was not a focus of my inquiry, my findings do not indicate any assimilative potential of education options in *Unama’ki*. Rather, the Integrative Science Program MSIT at CBU, which is guided by Mi'kmaq elders, is very proactive and promising to educate both Mi'kmaq and non-native students in ‘Two-Eyed Seeing’ (Institute for Integrative Science & Health, 2008). This suggests that Mi'kmaq guidance may help safeguard Mi'kmaq education and help to accommodate Mi'kmaq knowledge in formal education initiatives.

Stevenson has raised concerns that many capacity building initiatives for aboriginal employability in modern resource management inevitably (and potentially intentionally) co-opt aboriginal people into conventional resource management frameworks (Stevenson, 2006); ontological difference and cultural contexts are thus ‘denied’, as is the case in assimilative co-management.

To fully understand the risks of co-optation in capacity building, several authors point out that aboriginal people must obtain critical ‘literacy’ of Western ontologies of resource management (Howitt & Suchet-Pearson, 2006; Stevenson, 2006). On the other hand, for co-management relations to be mutually comprehensive, Howitt also suggests that non-native resource managers need to obtain some “professional literacy” of aboriginal ontologies, which will let them understand the interests and rights of aboriginal people in their vital cultural context (Howitt, 2001).

For the latter end, the NCNS has been proactive in devising co-operative enforcement guidelines with DNR (DNR, 2002) and holding workshops with governmental agents to explain the cultural specifics of Mi'kmaq interests in resource management (Martin, 2007). This further illustrates the significant role of the NCNS in Mi'kmaq resource management, and thus will be discussed in the following section.

7. Self-Government by the NCNS

a) Introduction

After indicating throughout this thesis that the NCNS has a successful system of harvesting management, I now want to suggest that the NCNS system is an effective model for self-governed co-management. By referring to additional interview insights, I will also discuss some underlying aspects of the wider political landscape of Mi'kmaq resource management in Nova Scotia; namely, the reserve system and tensions between on- and off-reserve Mi'kmaq.

b) The Conflict between the NCNS and the Chiefs-in-Council

The exclusion of the NCNS from the MMP illustrates the political divide within the Mi'kmaq nation[33]. In order to explain the exclusion, the underlying conflict between the Chiefs-in-Council and the NCNS may be explored in more depth, which will indicate the significance of this divide for future Mi'kmaq resource management.

The leadership of the off-reserve Mi'kmaq community portrays the Chiefs-in-Council as mere puppets for the federal INAC (Indian and Northern Affairs Canada), which operate in a non-traditional, dysfunctional system of Indian Act governance (Hunka, 2007). Subjected to neo-colonial governance, reserve-based Mi'kmaq have been marginalized within their ancestral homeland, and depend on federal services to maintain a life on reserve (Hunka, 2007). Nevertheless, my observations in Mi'kmaq reserve communities suggest that reserve-based Mi'kmaq identity discourses consider NCNS members as not 'real Indians'.

Rather, reserve-based Mi'kmaq may hold a "mentality of how the reserve, in their acceptance of the Indian act [is] the determination of their identity" (Hunka, 2007). When I asked Marshall about how Mi'kmaq identities are tied to a life on reserve, he adds:

> *"[I]f they understand that you can leave a reserve and stay an Indian, you've won the battle, but if you think the only way you can be an Indian is to stay on reserve, then you are condemned to be on that reserve. … A reserve does not make an Indian. Write that down! A reserve does not make an Indian." (Marshall, 2007b)*

In response to my subsequent question if the NCNS members – which have to prove their Mi'kmaq family lineage to gain membership – subvert the racist categories of Indian 'status' and the perils of reserve life, which are prescribed by the Indian Act, Marshall is quick to agree:

> *"They are actually! And this is maybe sacrilegious, but I think that's actually a better model to look at. These are our Palestinians, these are our people, who have moved away, but they are still functioning. And they still have their Mi'kmaq mentality, the Mi'kmaq belief system, so they are no less Mi'kmaq than I am, I think." (Marshall, 2007b)*

The NCNS considers itself the "Self-governing Authority for the large community of Mi'kmaq/Aboriginal Peoples residing throughout traditional Mi'kmaq territory in Nova Scotia undisplaced to Indian Act reservations" (NCNS, 2006).

[33] A discussion of the role of the NCNS in regards to the LMP is not relevant, since the LMP governs the lobster fisheries of the five *Unama'ki* reserve communities; the NCNS has negotiated its own AFS agreement with DFO to regulate the FSC fisheries of its members (Martin, 2007).

Encouraged by Marshall's comments above, I will suggest that the NCNS effectively decolonizes the off-reserve Mi'kmaq community. As Hipwell shows how Mi'kmaq assertions of resource rights effectively reterritorialize the Mi'kmaq nation (Hipwell, 2004a), the NCNS may hold a special role in maintaining the Mi'kmaq stake "throughout traditional Mi'kmaq territory" (NCNS, 2006).

While this thesis does not aim to investigate issues of Mi'kmaq identities, governance, or territorial integrity; as the following sections will suggest, the conflict between on- and off-reserve Mi'kmaq is integral to the political ecology of the MMP and aspirations of Mi'kmaq self-government.

c) Self-governed resource management by the NCNS

Apart from decolonizing governance, my findings in Chapter 5 show that the NCNS has been maintaining a very successful system to manage its members' FSC harvesting activities. Tim Martin (NCNS *Netukulimkewe'l* Commissioner) is very confident about the NCNS management system. In response to Chiefs-in-Council requesting federal funds to manage harvesting activities he said: "We can set up a management system for any of these reserves instantly; and we can probably do it for no money." (Martin, 2007). Emphasizing the good relationship between NCNS and DNR, Martin further asserts that the initiative of the NCNS undermines the status and capacity of Chiefs-in-Council or reserve governance:

> *"We got letters from the DNR's minister over the years, because we compile this information and as a courtesy we send it off to the DNR minister saying: 'This is what we harvested last year. Please turn this into information for your biologists.' And they send us back a letter saying: 'Thank you very much. It's amazing that you can do this and it's very responsible to do this. We wish your brothers and sisters on the reserve would follow your lead.' [Laughter] But see, it drives a nail into the chief's coffin again." (Martin, 2007)*

Here, Martin asserts that Mi'kmaq Chiefs-in-Council do not appreciate the NCNS initiative, as it suggests their incompetence and inefficiency. Interestingly, Lindsay Marshall (ex-Chief-in-Council and Mi'kmaq academic leader) agrees and the NCNS makes better use of its funds than reserve councils:

> *"I mean the NC [Native Council] should be given a lot of credit for sustaining themselves, where their funding has been chopped or dropped or not as intense as the reserves', but they're still managing to get by. Whereas the chiefs in their communities – this is getting critical – some of them have squandered a lot of resources and so the communities are continuously paying for the mistakes of the leadership." (Marshall, 2007b)*

Marshall makes clear that this is due to the Indian Act, which has installed systems of reserve governance that have limited accountability to the community and foster self-interest and corruption within the Band Councils.

Independent of the problems that surround reserve governance, I will suggest that the NCNS system of FSC harvest management fulfils some of the central objectives of self-governed resource management. Supported by my findings, this may be evidenced by: the self-governed membership registry; the ATRA (Aboriginal and Treaty Rights Access) passport system that enables non-status Mi'kmaq to access Mi'kmaq harvesting rights; and the effective management of all FSC harvesting activities without government interference.

The NCNS-DNR relationship features some co-operative elements[34] and does not seem to suffer from the power imbalances that the co-management literature warns of. This may be in part due to the fact that the government does not devolve any funds to the NCNS and supports its initiative; all together, the NCNS operates outside the controversial government-funded reserve system, to which struggles for funding and sovereignty are latent.

d) The political ecology of NCNS exclusion

The discussions above have illustrated some aspects of the conflict between the NCNS and Chiefs-in-Council, as well as the NCNS system of resource management. Most importantly, this discussion explains that the fundamental differences between the NCNS and the reserve system do not facilitate joint approaches to resource management, but rather foster competition and jealousy. This conflict may not be reconciled within the MMP and interviewee G1 warned that "[if the MMP] is not inclusive of non-status Indians it will probably be challenged in court and it will possibly not be implemented" (G1, 2007). Given that the MMP is a pilot project of the more extensive Framework Agreement negotiations that aim to set the agenda for a postcolonial Mi'kmaq-government partnership in Nova Scotia, the conflict between on- and off-reserve Mi'kmaq needs to be addressed at some stage. For now, the political ecology of the exclusion of the NCNS is marked by issues of power and representation, despite the common interest of all Mi'kmaq to have sustainable and self-governed access to FSC resources.

However, it is not the intent of my thesis, nor the focus of my insights to discuss this particular matter any further. In regards to the research objectives of exploring Mi'kmaq approaches to resource management and self-government, the NCNS experience does give some significant insight into the politics of Mi'kmaq resource rights and co-management.

As I indicated in my methodology chapter, my research progress – and arguably this representation – was influenced by my insightful encounters with the NCNS and subsequent discussions of their role in Mi'kmaq resource management. I will conclude on my positionality in regards to my NCNS discussion in the final chapter.

My wider discussion of the differences between on- and off-reserve governance show that the conflict between NCNS and Chiefs-in-Council is persistent and will possibly not be reconciled by the Chiefs-in-Council, who rely on the status that the Indian Act grants them. This shows that the Indian Act has divided the Mi'kmaq nation and neither actor has both the interest and the political leverage to decolonize the Mi'kmaq nation. Here it is significant that the Mi'kmaq Grand Council is reclaiming its position in resource management and as a unifying representative body of the Mi'kmaq nation. Given that the NCNS is also excluded from the tripartite Framework Agreement negotiations, it remains to be seen if either Mi'kmaq Chiefs-in-Council, governmental agencies or the Mi'kmaq Grand Council will advocate reconciling the postcolonial divide of the Mi'kmaq nation.

[34] This may be evidenced by the fact that the NCNS voluntarily feeds its harvesters' reporting data back to DNR, as indicated above. Also, the NCNS obtained conservation guidelines from DFO experts for all fish species in Nova Scotia to ensure that its members' fishing activities do not pose a threat to the resource (Martin, 2007).

D. Summary: Difference and Reconciliation

In reference to both the literature and research findings, this chapter has discussed the challenging political ecology of the Mi'kmaq lobster and moose harvest and has shown how the LMP and MMP aim to negotiate this. I have argued that both management plans are based on innovative frameworks of co-management, which effectively integrate Mi'kmaq knowledge holders and cultural guidelines of *Netukulimk*, while also incorporating modern, scientific methods. Both plans employ culturally appropriate monitoring and enforcement tools, which promise to revitalize traditional principles of sustainable resource use. As a 'communication document', the LMP has an explicit objective to showcase Mi'kmaq commitment to sustainable and respectful harvesting, this aims to enhance cross-cultural communication and erode non-native concerns that the Mi'kmaq harvest is unsustainable. Both plans complement traditional guidelines with quantitative monitoring, which can ensure that the Mi'kmaq harvest is within its ecological limits. Importantly, the findings show that Mi'kmaq leadership and cultural principles can effectively guide Mi'kmaq harvesting as well as co-management arrangements.

While my discussions above directly respond to my research objectives, I also discussed some fundamental issues of Mi'kmaq resource management. Responding to the dichotomy of Mi'kmaq discourses advocating either traditionalist self-government or co-management, my analysis suggests that both LMP and MMP embrace Mi'kmaq aspirations of self-government, but also the benefits of governmental co-operation. I have therefore described them as cases of self-governed co-management and indicated that this empowering sharing of responsibilities is in the government's interest.

Furthermore, both LMP and MMP operate largely independently from regulations for non-native resource users and therefore resemble Stevenson's model of the Two-Row Wampum (2006). In reference to the assimilative potential of integrative co-management, Stevenson suggests that aboriginal resource access should be managed by separate, culturally appropriate frameworks, which co-exist with a non-native system (Stevenson, 2006). In response to my concerns (as noted in Chapter 4) that this may not reconcile competing interests for common resources, both management plans monitor and communicate the extent of the Mi'kmaq harvest to enhance its sustainability and transparency.

As another fundamental issue, I explored some root causes for critical non-native discourses of Mi'kmaq resource management. Because Mi'kmaq and non-native ontologies conceive of resource knowledge, ethics and rights very differently, non-native discourses cannot consider MEK, *Netukulimk* and Mi'kmaq resource rights in their vital cultural contexts. Faced by this colonial dominance of Western ontologies, Mi'kmaq do not have the resources to contextualize their harvest and decolonize mainstream representations. Therefore, this "cultural distribution conflict" (Escobar, 2006) underlies the Mi'kmaq harvest regardless of its sustainability. The political ecology of ontological difference is thus marked by incommensurable approaches to resource harvest and a communication gap that perpetuates cross-cultural misconceptions. Consequently, I portrayed the objective of the LMP to enhance cross-cultural communication of Mi'kmaq ontologies as very pro-active and pertinent.

Given these differences, non-native resource managers need to better understand Mi'kmaq ontologies, as this is an aspect of their "professional literacy" (Howitt, 2001). In terms of Mi'kmaq capacity building needs, I suggested that Mi'kmaq could become critically literate of the risks inherent in conventional

resource management frameworks and the use of Western science, in order to develop pro-active strategies for self-governed co-management. In my review of current capacity building initiatives, I indicated the need to enhance and potentially institutionalize the learning of traditional Lo/TEK and *Netukulimk* to sustain its revitalization.

Apart from cross-cultural differences, my findings also indicated a 'division of actors' between the NCNS and the Chiefs-in-Council. I discussed fundamental differences and tensions between the NCNS and reserve governance in order to explain the exclusion of the NCNS from the MMP. I showed that this conflict is an inherent phenomenon of the Canadian political landscape and suggested that the self-government of the NCNS effectively decolonizes the off-reserve community from the Indian Act.

Chapter VIII: Conclusion

This final chapter will reconsider the research problem and objectives that this thesis addressed. The research findings and their significance will be reviewed and areas of further research will be indicated by posing research questions that this research encountered. I will conclude with a reflection on my positionality as a political agent of the NCNS and as a research student of aboriginal and poststructuralist methodologies.

A. Research Problem and Objectives Revisited

The aim of this thesis has been to explore how the nascent Lobster Management Plan (LMP) and Moose Management Plan (MMP) negotiate the political ecology of Mi'kmaq resource management and guide the sustainable and self-governed lobster and moose harvest by Mi'kmaq.

Ecologically, the Mi'kmaq harvest takes place in fragile ecosystems, where industrial resource exploitation has marginalized customary Mi'kmaq resource use. Furthermore, the political ecology of the Mi'kmaq harvest is marked by political and cross-cultural tensions, as well as competition between Mi'kmaq communities.

The research problem, which makes these management plans necessary and justifies the research aim of this thesis, is that a lack of effective and appropriate regulation has led to cross-cultural conflict and an uncertain ecological impact of the Mi'kmaq lobster and moose harvest. Without the MMP, the majority of the Mi'kmaq moose harvest is neither regulated nor monitored; this has caused opposition within the non-native hunting community and has also allowed for some excessive hunting by Mi'kmaq. Prior to the LMP, the Mi'kmaq Food, Social and Ceremonial (FSC) fisheries of lobster were regulated by the partly ineffective federal AFS agreements and some Mi'kmaq have engaged in irresponsible and unsustainable fishing practices. As in the case of the Mi'kmaq moose hunt, this has led to much concern amongst both Mi'kmaq and non-native resource managers.

While Mi'kmaq have traditionally managed their harvest without formal, governmental regulations, a lack of traditional resource knowledge and harvesting ethics (*Netukulimk*) has been observed within the Mi'kmaq community. Although irresponsible fishing and hunting may be the exception, the apparent absence of both traditional and governmental regulations for the Mi'kmaq harvest has fuelled non-native discourses of the "rapacious Native" (MacDonald, 2005:282), which are critical of Mi'kmaq resource rights and harvesting practice.

Politically, the government of Canada had to be advised by the Supreme Court of Canada (SCC) to acknowledge Mi'kmaq resource rights and negotiate with Mi'kmaq in good faith. However, the government has largely attempted to manage Mi'kmaq fisheries with conventional resource management frameworks. According to the literature, these bear the risk that 'integrated' aboriginal Lo/TEK is assimilated and aboriginal stakeholders effectively colonized.

Given the research aim in this problematic political ecology context, the research objectives of this thesis have been to explore how the LMP and MMP:

- Incorporate universal science, Mi'kmaq Ecological Knowledge (MEK) and *Netukulimk* (traditional Mi'kmaq harvesting ethic);
- Respond to Mi'kmaq abuses of communal resource rights, and to non-native discourses of Mi'kmaq harvesting ethic;

– Enhance the sustainability of the Mi'kmaq harvest.

B. Research Findings and Significance

1. Synthesis of Research Findings

Discussing the LMP and MMP as well as their political ecology context, this thesis has documented a number of findings, which illustrate Mi'kmaq strategies to self-govern their FSC harvest of lobster and moose. I argue that both case studies illustrate innovative management frameworks and operate as self-governed co-management arrangements under Mi'kmaq leadership. To effectively address Mi'kmaq harvesters, both management plans emphasize and revitalize the traditional ethical guidelines of *Netukulimk* and integrate Mi'kmaq communities into the management. To ensure the sustainability of the harvest, they also employ scientific methods to monitor Mi'kmaq harvesting activities.

While the Mi'kmaq lobster and moose harvest is challenged by critical non-native discourses, the LMP and MMP will likely contribute to cross-cultural reconciliation by implementing formal harvesting regulations and new co-management partnerships. To illustrate the root causes of cross-cultural conflicts, I showed how ontological differences of resource use preclude holistic understanding of Mi'kmaq ecological ethics and knowledge. In addition, Mi'kmaq resource rights are contested due to different Mi'kmaq and non-native discourses of colonization and co-existence. Therefore, this research suggests that non-native representations of Mi'kmaq resource knowledge, ethics and rights are responsible for the cross-cultural tensions that mark the political ecology of Mi'kmaq resource management. Consequently, I portrayed the aim of the LMP to contribute to cross-cultural communication as a pro-active Mi'kmaq strategy, given the need for non-native resource managers to obtain 'ontological literacy' of aboriginal knowledge, ethics and rights.

Apart from the LMP and MMP, this research also encountered the management system of the NCNS, which implements the resource rights of off-reserve and non-status Mi'kmaq. I showed that the NCNS framework successfully incorporates some elements of cultural revitalization and self-government, which the LMP and MMP anticipate. Despite their proven management capacity, the NCNS is excluded from the MMP by the Mi'kmaq Chiefs-in-Council; this is due to a lasting conflict between the on-reserve and off-reserve Mi'kmaq communities and competition over resource rights. My discussion of this conflict explains the exclusion of the NCNS and indicates its significance for future endeavours of co-management and self-government. I show how colonial implications of the Indian Act are responsible for this divide and argue that the NCNS in part decolonizes the Mi'kmaq nation.

2. Practical Significance of Research Findings

I will next indicate the significance of this research to the wider Mi'kmaq research community. This will lay a foundation for my subsequent recommendations for further research.

The Mi'kmaq right to harvest moose and lobster was only affirmed by the SCC in 1985 and 1990, respectively, and the Mi'kmaq had until more recently not been accommodated in resource management in Nova Scotia (Berneshawi, 1997). Some Mi'kmaq interviewees hope that the LMP and MMP mark a turn of the tides, which will let Mi'kmaq establish self-governed systems of resource management. Importantly, this research reveals a significant development of Mi'kmaq capacity and

leadership, as well as governmental support for transitions towards Mi'kmaq-led co-management. Given the pivotal point in time and the fact that scholarly discussions of Mi'kmaq resource management and self-government have been sparse, this thesis represents a timely documentation and discussion.

My discussion of the challenges and Mi'kmaq strategies involved may provide some insight for the ongoing development of the LMP and MMP, while the political ecology context is relevant to future negotiations of co-management and self-government in Nova Scotia. This thesis can potentially enhance the public awareness and credibility of the Mi'kmaq capacity to manage their FSC harvest sustainably. More specifically, I have aimed to clarify cross-cultural misconceptions by illustrating the underlying ontological differences. Here, the Mi'kmaq community could benefit from an independent academic discussion, as Mi'kmaq have limited resources to promote the cultural significance of their harvest themselves.

Given the political ecology context, the Mi'kmaq position in resource management is similar to that of other aboriginal communities in Canada and internationally. My documentation of Mi'kmaq strategies for self-government and cultural revitalization may be inspirational or instructive for the development of other aboriginal communities.

While my research interest for the position of the NCNS was controversial and atypical in Nova Scotia, I argued that it is integral for the success of the MMP to address this. Since the NCNS is politically marginalized in Nova Scotia, my discussion of their position is arguably particularly significant and remains one of few scholarly accounts of the work of the NCNS. I will discuss my positionality as a political agent for the NCNS in my concluding reflections at the end of this chapter.

C. Recommendations for Further Research

This research has provided some significant insights into the development of the LMP and MMP and has indicated their strategies and prospects. However, this thesis cannot conclude with specific recommendations as the LMP is only in its trial period and the MMP is still under negotiation. Furtermore, this is arguably not within my methodology or positionality. Nevertheless, my insights from the case studies and discussions of the political ecology context enable me to conclude here with some recommendations for further research, which I will indicate in the form of research questions in three areas: off-reserve aboriginal communities, cross-cultural relations, and co-management.

I have indicated that the conflict between the NCNS and Mi'kmaq Chiefs-in-Council is inherent in the Indian Act and apparent in other aboriginal communities in Canada. Nevertheless, the situation of off-reserve aboriginal people and their position in aboriginal (self-)governance and resource management does not receive much academic attention. I suggest that this field represents a host of pertinent research questions, which may include the following:

- How can the latent conflict between reserve and off-reserve communities be reconciled and what is the role of the government in this process?
- In the context of aboriginal aspirations for self-government and decolonization, what significance do traditional governance systems have?
- What can reserve communities learn from the experience of off-reserve communities and vice versa; and how can this exchange be facilitated?

- How are aboriginal identities expressed and sustained in reserve and off-reserve communities?
- Are reserves perceived as places of marginalization and limited opportunity or as enclaves for cultural revitalisation and self-government?

This thesis has suggested that the controversial cross-cultural relations that are evident in both case studies are partly due to ontological differences and misconceptions of aboriginal knowledge and resource rights. To further explore these insights, I will suggest two broad research areas:

- How are non-native discourses of aboriginal resource rights and harvesting ethics affected by ontological and cultural differences of resource use? While this thesis addressed this question in regards to customary Mi'kmaq FSC harvest, an exploration of non-traditional resource sectors, such as commercial fisheries, forestry or mining, may be insightful.
- What are the responsibilities of aboriginal, governmental and non-native actors to advance cross-cultural communication and reconciliation?

Although the literature of co-management and aboriginal Lo/TEK has discussed a host of both theoretical and practical aspects, this research has revealed further research questions that are underrepresented and warrant further exploration. These may include the following:

- How can aboriginal leadership safeguard the use of aboriginal Lo/TEK in co-management arrangements?
- What role do cultural principles for aboriginal resource harvest play in the development of co-managed and self-governed harvest regimes?
- How can lessons from the study of aboriginal FSC harvest inform aboriginal capacity building for commercial resource development and cultural revitalization?
- What is the interest and role of governmental agencies in the development of self-governed resource management regimes for aboriginal communities?

D. Reflections on Methodology and Analysis

This section concludes the thesis with some reflections on the application of my decolonization methodology and political ecology framework, as well as on my positionality as a student researcher.

1. The Ethical Conundrum of Decolonizing research

Attempting to undertake decolonizing research, I have followed Mi'kmaq ethical guidelines and integrated Mi'kmaq research participants into the research and writing process. Furthermore, the decolonization paradigm has encouraged me to advocate – albeit mostly implicitly – for Mi'kmaq aspirations of self-governed resource access. Here, I did encounter an ethical conundrum when researching and representing the confrontational relations between the Mi'kmaq reserve and off-reserve communities.

After being introduced to the position of the NCNS and its systems of governance and resource management, I made the NCNS a part of my inquiry in Mi'kmaq reserve communities. My interest in the NCNS was questioned by some research participants and I justified it in reference to my interview insights. As this

implied a justification of the legitimacy of the NCNS, I inevitably became a political agent of the NCNS.

Unfortunately, I may be stepping on the toes of some reserve-based Mi'kmaq friends, when I discuss the position of the NCNS. Nevertheless, since I observed that the position and capacity of the NCNS is often overlooked in Nova Scotia – especially on Mi'kmaq reserves – I hold that advocacy for the position of the NCNS is necessary and may be initiated by independent researchers such as myself. Although I could only gain limited insight into this subject matter, I have sought to highlight the nature of the conflict between on- and off-reserve Mi'kmaq and indicate its relevance for co-management in Nova Scotia and Canadian aboriginal politics.

2. Political Ecology for Decolonization

Rather than attempting to decolonize the Mi'kmaq nation by embracing the self-government of the NCNS, this research aimed to decolonize conventional resource management frameworks and cross-cultural relations by showing how aboriginal ontologies are marginalized.

The decolonization paradigm has as its premise the fact that aboriginal knowledge is valid but marginalized by epistemological hegemony. Nevertheless, I made an additional theoretical argument[35] for the ontological validity of Mi'kmaq concepts of resource knowledge, rights and ethics; I advocated ontological difference and discovered colonial 'cultural distribution conflicts' in Nova Scotia (when discussing the 'Political Ecology of Ontological Difference', Chapter 7).

Therefore, I argue that my theoretical framework contributed to my decolonizing approach (as I anticipated when devising the framework (see Chapter 7)). Given that the poststructuralist argument may be more compelling for non-native readers than the paradigms of an aboriginal methodology, this thesis is a discursive attempt to further cross-cultural communication of aboriginal ontologies; this is both in the spirit of decolonization and the pursuit of 'ontological literacy'.

Personally, poststructuralist theories did sharpen my attention to ontological difference and its colonial implications, which required me to question my understanding of aboriginal knowledge and my representation of aboriginal ontologies. Reflecting on this process, I can now indicate how I negotiated the "uneasy fit between epistemological relativism and normative belief" (Jasanoff, 1996:412), which the premise of decolonization may require from non-native readers and researchers. Here, my ontological positionality is that of a former science student, who has only recently learnt to appreciate aboriginal epistemologies (see Chapter 2). My participation in Mi'kmaq communal life and cultural practice under Mi'kmaq leadership introduced me to the ontological difference in its relative cultural context. I have thus gained a level of 'ontological literacy' that has let me appreciate Mi'kmaq knowledge and erode my normative belief in the superiority of Western epistemologies.

My engagement with Mi'kmaq perspectives has also furthered my understanding of aboriginal aspirations of resource rights and self-government. In my subsequent engagement with academic literature, my insights into the Mi'kmaq ontology have let me better understand Western theories of constructivism, poststructuralism and postcolonialism.

[35] In the spirit of decolonization, it may be superfluous to employ a Western theoretical framework to prove the validity of aboriginal culture; moreover, this is arguably methodologically colonizing, as Western frameworks and researchers cannot sufficiently convey the essential cosmological context and aboriginal perspectives.

For decolonizing research and reconciliation, this thesis has highlighted the need for cross-cultural communication and 'ontologial literacy' of non-native researchers. In this context, my research journey confirms that "one comes to know through extended conversations and experiences with elders, peoples and places of Canada" (Battiste, 2008:502).

Appendices

Appendix 1: *Letter confirming ethical approval from the* Mi'kmaw Ethics Watch *committee*

CAPE BRETON
UNIVERSITY

May 23, 2007

Bernard Huber
6 Yerevan Drive
Lower Sackville, N.S.
B4C 4A9

Dear Mr. Huber:

I wish to inform you that the Mi'kmaw Ethics Watch committee has reviewed and approved your ethics application, "Indigenous Perspectives on the Role of Local/Traditional Ecological Knowledge (LoTEK) in Development: The Participation of Mi'kmaq in Resource Management in Unama'ki/Cape Breton, Canada".

This enables you to move forward with your project.

We would be pleased or appreciative if and when the study is completed that it be provided so as to allow our students to build further academic foundations and a better understanding of Indigenous knowledge.

If you have any questions concerning same, please do not hesitate to contact us.

Sincerely,

Lindsay Marshall
Associate Dean
Mi'kmaq College Institute

LM/vl

PO Box 5300 1250 Grand Lake Road Sydney NS B1P 6L2

Appendix 2: Email message from Victoria University of Wellington (VUW) Human Ethics Committee (HEC), confirming acceptance of my prior ethical approval by the Mi'kmaw Ethics Watch committee

Bernard Huber

From: Allison Kirkman

Sent: Thursday, 23 October 2008 10:27 a.m.

To: Bernard Huber

Subject: RE: HEC approval of research untertaken in 2007, prior to VUW enrollment

Dear Bernard

We will accept your prior approval as sufficient and will keep this material in our records with this notation. We do not give approval from the VUW HEC but rather note and accept your prior approval.

Best regards

Allison Kirkman
Convener, HEC

Dr Allison Kirkman
Deputy Dean
Faculty of Humanities & Social Sciences
Victoria University of Wellington
Te Whare Wananga o te Upoko o te Ika a Maui
Box 600, Wellington
Ph 463 5676, Fax 463 5209
http://www.vuw.ac.nz/fhss

Appendix 3: Informed Consent Form that was signed by all interviewees

INFORMED CONSENT FORM

for participation in the student research project with the working title:

"The Participation of Mi'kmaq in Resource Management in Unama'ki/Cape Breton, Canada: Insights from the Lobster Management Plan and Moose Management Plan"

Conducted by:

Student researcher:	***Supervisor:***
Bernard Huber	*Dr. William Hipwell*
[contact details]	*[contact details]*

Introduction

You have been invited to participate in this student research project. The findings from this research will be published within a Master thesis (Master of Geography) at Victoria University of Wellington (VUW), New Zealand. The Mi'kmaw Ethics Watch committee has approved of this research.

This "Informed Consent Form" has been designed in accordance with their requirements and outlines the purpose and methods of this research as well as your rights as participant. Please do not hesitate to contact me with any questions or concerns before, during or after your participation in the research.

Purpose of the research

To set the context for my case study, my research will briefly explore the political ecology of resource management in *Unama'ki*/Cape Breton. The origin and the ongoing work of the Moose Management Working Group, as well as the proposed Lobster Management Plan will be discussed to illustrate the current challenges for Mi'kmaq in Resource Management.

In a collaborative approach, I will invite the voluntary input from interested participants into the research design as well as the interpretation of the findings. This will ensure that the research is comprehensive, relevant and will potentially inform the ongoing work of the Moose Management Working Group. The experiences from the Working Group so far will further be discussed in the light of rights negotiations and co-management arrangements following the Framework Agreement.

Research Methods

You may be asked to participate in a semi-structured, open-ended interview, a focus group or complete a questionnaire. I may assume that your participation will entail no risks for you or your community, but hope that you will advise me if you have any concerns.

Subject to your permission, an audio recording and/or notes will be taken during the interview. If indicated below, you will be supplied with a written transcript of the interview, which you may modify to clarify or omit statements you made during the interview.

Anonymity/Confidentiality

This research is conducted anonymously. A letter-number code will be used to code interview recordings, transcripts and questionnaires and I will treat the names of each participant confidentially. However, either below or after review of the interview transcript, you may grant me permission to reveal your name and use your quotes in subsequent publications.

Right of Withdrawal

Prior to the interview I will review the nature of the research and the content of this "Informed Consent Form" with every participant. Your participation in this research is entirely voluntary and you may choose not to respond to any questions without being disadvantaged in any way. At any time during, and up to 30 days after receiving the interview transcript, you will have the right to withdraw from the project, have any statements from your transcript or questionnaire omitted or insist on your anonymity.

Public Access to Research Results

In order to facilitate access to and interpretation of the research findings by all participants, a Summary of findings will be sent out to all participants, to which feedback will be invited. A copy of the thesis based on these collaborative findings will be supplied to the Mi'kmaq College Institute and other institutions if desired. This will make the thesis accessible to the wider public.

Signatures

Participant:

I have been informed about my rights as a participant in the above-described research, and agree to participate in the study.

Name: ___________________________

Signature:_________________________

Date: ___________________________

Preferred contact: ___________________

____

☐ You have my permission to use my name and quotes from the questionnaire/ interview in published research results.

☐ I would like to review a transcript of our interview, which I may modify.

Researcher:

I certify that this form provides an accurate description of the processes of this research project. I will take due care to guard the rights of my research participants.

Thank you very much for your interest and participation.

Name: Bernard Huber

Signature:_________________________

Date: ___________________________

Appendix 4: Interview schedule

Date	Place	Name	Position
04/06/2007 (Group interview on one transcript)	Truro	Tim Martin	NCNS *Netukulimkewe'l* Commissioner
	Truro	Roger Hunka	MAPC (Maritimes Aboriginal Peoples Council) Regional Coordinator
05/06/2007	Halifax	G1	An anonymous governmental employer involved in the MMP
10/06/2007	Sackville, New Brunswick	G2	An anonymous governmental employee involved in aboriginal fisheries management
21/06/2007	Sydney	Lindsay Marshall	Associate Dean of the Mi'kmaq College Institute, Cape Breton University
22/06/2007	Eskasoni	Shelley Denny	UINR (*Unama'ki* Institute of Natural Resources) Biologist
22/06/2007	Eskasoni	Tom Johnson	EFWC (Eskasoni Fish and Wildlife Commission) Fisheries Manager
22/06/2007 (Group interview on one transcript)	Eskasoni	Albert Marshall	Eskasoni community Elder
	Eskasoni	Clifford Paul	UINR Moose Management Coordinator

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