ACCESS PROTOCOLS AND SOCIAL IDENTITY IN KWAKWAKA'WAKW CLAM MANAGEMENT: FROM COLONIALISM TO CULTURAL REVITALIZATION

by

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ABSTRACT

Recent decisions in Aboriginal law and the treaty negotiation process in British Columbia create avenues for First Nations and Canadian governments to co-manage natural resources. Common property theory, cultural and political ecology, and the co-management theory derived from them, suggest comanagement is more successful where indigenous institutions are articulated and incorporated. This study describes an indigenous system of clam management in the North Vancouver Island Straits of British Columbia, and considers the challenges of integrating this system for future co-management, including incorporating indigenous concepts of social identity.

Kwakwaka'wakw clam management is centred around a system of access protocols designed for stewardship of clams, and respecting indigenous authority. Historical forces of colonialism and current government policies influence complex and changing social identities at the community level, which in turn affect access protocol implementation. Concepts of social identity influence how community boundaries are defined and whose decision-making authority is considered legitimate.

Keywords: co-management; indigenous knowledge; common property theory; First Nations; colonialism; fisheries management; social identity; access rights; clams

Subject Terms: co-management – fisheries; Indigenous peoples – British Columbia; British Columbia – colonization

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iv

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TABLE OF CONTENTS

Approval	ii
Abstract	iii
Acknowledgements	iv
Table of Contents	vi
List of Figures	viii
List of Tables	ix
List of Acronyms	x
Glossary	xi
Chapter 1: Introduction	
 1.1 First Nations, Fisheries Management & Colonialism 1.2 Towards Co-management 1.3 Research Questions & Objectives 	
Chapter 2: Background & Case Study Description	7
 2.1 Introduction to the Community & Territory 2.2 Description of the Resource	
Chapter 3: Research Methods	20
 3.1 Qualitative Methods	21 23 23 24 24 26 26 26 27 29 29 29 30 31
o.o.o Edok of hopeat interviewing	

Chapter 4: Literature Review	. 32
 4.1 Clams as a Common Pool Resource 4.2 Frameworks for Describing Local Resource Management	. 32 . 33 . 36 . 38 . 39
Chapter 5: Historical Overview of Colonial Impact on Clam Management	. 42
Chapter 6: Describing Access Protocols	. 49
 6.1 Stewardship Protocols 6.2 Indigenous Authority Protocols 6.3 Order Protocols 6.4 Coordination of the Clam Fishery 6.5 Teaching Protocols to New Generations 	. 51 . 55 . 60 . 63 . 66
Chapter 7: Social Identity & Local Institutions	. 70
 7.1 Social Identity 7.2 Nature and Sources of Social Identity 7.3 Social Identity, Community Boundaries and Legitimate Authority 7.4 Negotiating Social Identities in the Context of Treaty 	. 70 . 71 . 79 . 86
Chapter 8: Recommendations & Conclusion 8.1 Recommendations 8.2 Conclusion	. 92 . 93 . 99
Reference List	101
Appendix 1: Interview Guide	108
Appendix 2: Letter of Introduction	111

LIST OF FIGURES

Figure 1. Ma	ap of Kwakwaka'wakw Territories	. 8
Figure 2. A c in i	chronological overview of the major colonial forces of change relation to Kwakwaka'wakw clam management	48
Figure 3. A r ba	representation of the indigenous social identity of one 'Namgis	77

LIST OF TABLES

Table 1. Clam stewardship protocols described by Kwakwaka'wakw elders and clam diggers.	52
Table 2. Indigenous authority protocols described by Kwakwaka'wakw elders and clam diggers.	57

LIST OF ACRONYMS

ACL	Aboriginal Commercial License
AFS	Aboriginal Fisheries Strategy
BC Packers	Anglo-British Columbia Packing Company, Limited
DFO	Department of Fisheries and Oceans
DIA	Department of Indian Affairs
FSC	Food, Social, Ceremonial
INAC	Indian and Northern Affairs Canada (formerly Department of Indian Affairs)
KTFC	Kwakiutl Territorial Fisheries Commission
MAFF	BC Ministry of Agriculture, Fisheries and Food
мттс	Musgamagw Tsawataineuk Tribal Council
PRCMC	Pacific Region Clam Management Committee
PSP	Paralytic Shellfish Poisoning
RCAP	Royal Commission on Aboriginal Peoples
UCS	U'mista Cultural Society

GLOSSARY

BC Treaty Process	A process to negotiate modern treaties between First Nations and Canadian governments in British Columbia.
Clam Management Area	A Department of Fisheries and Ocean's management unit. Commercial clam licenses are designated for specific management areas.
Clam Terrace	Human constructed boulder/cobble ridges with highly productive clam beds on the intertidal flats (Harper 1995). Also called culturally modified beaches.
Co-management	The formal or informal agreement to share power and share the right to manage resources (Pinkerton and Weinstein 1995)
Common Pool Resource	Resources that are characterized by difficulty of exclusion, and subtractibility.
Common Property Regime	Where a community of individuals has enforceable ways of limiting access and creating harvesting strategies to govern a common pool resource.
Cultural Ecology	The study of functional relationships between people and the environment, and people's perceptions of how they fit within environmental systems. Also, an ethnological approach that sees the modes of production of societies around the world as adaptations to their local environments (Berkes 1999: 47).
Depuration	A process in which shellfish product from contaminated beaches is sold to licensed processors who bathe the clams in tanks of flowing disinfected water for 48 hours, allowing them to purge themselves of harmful bacteria and viruses.
Exclusion	Preventing others from accessing and using a resource. Common pool resources are resources that are difficult to exclude people from.
Grounded	A qualitative research approach that seeks to develop theory

Theory	from data systematically gathered and analyzed.
Institutional Economics	A subfield of political economy, which focuses on how institutions shape the patterns of human interactions and the results that individuals achieve.
Namima	One or more extended family groups whose members claim descent from a common ancestor (Galois 1994).
Potlatch	A ceremony given by a chief and his group, as hosts, to guests composed of another chief or chiefs with their respective groups, at which the guests are given wealth goods (Drucker 1965). Some functions of the potlatch include validating the assumption of hereditary rights to titles and property, contributing to social solidarity of the basic social unit, and redistribution of wealth (Drucker 1965).
Subtractablility	One person's use of a resource substracts from another person's ability to use the same resource. Common pool resources are defined by their subtractability.
Traditional Ecological Knowledge	A cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment (Berkes 1999: 8). Also called Indigenous Ecological Knowledge.

CHAPTER 1: INTRODUCTION

1.1 First Nations, Fisheries Management & Colonialism

Before European contact, most aboriginal groups in what is now British Columbia (BC) practised some form of self-management in their use of resources (Pinkerton and Weinstein 1995). A common mechanism on the coast was the practice of exclusion of outsiders and the regulation of transfer of rights through inheritance rules (Pinkerton and Weinstein 1995). Since contact, local patterns of resource use and systems of self-management have been severely impacted by colonization. The loss of people due to the introduction of European disease, to which aboriginal people had no immunity, devastated communities. An estimated one-third of BC's aboriginal population died from European diseases (McMillan 1988). Except for the Douglas Treaties on Vancouver Island, land and resource appropriation in BC took place without signing treaties (Harris 2002). The removal from indigenous¹ territories to reserves alienated aboriginal people from the ability to engage in many cultural practices.

Denial of power to influence decisions (Notzke 1994), repression of indigenous governance systems, such as the Potlatch on the northwest coast (Culhane 1998), and the implementation of residential school policies, all

¹ A note on language: In this study, I have chosen to use the term "indigenous" in place of "traditional" in reference to practices, beliefs, institutions, territories and conventions of behaviour that are derived from historical experience and adapted to specific places. In doing so, I attempt to avoid the idea that tradition and change are contradictory concepts, where "traditional" suggests an inflexible adherence to the past ignoring the dynamic realities of culture (Berkes 1999).

contributed to further degradation of community knowledge regarding locally adapted stewardship practices. More recently, the industrialization, capitalization and globalization of resource industries such as fisheries, have further reduced access to resources (Newell 1999). For the coastal peoples of BC, marine resources have long been significant for food, social and ceremonial purposes, and subsistence economies. This importance has not changed, but the ability to access marine resources and participate in resource management has changed significantly (Newell 1999).

While the impacts of colonialism are immense, they continue to be met with great resistance. Resistance has been mounted in many ways including: maintaining and reproducing kinship-based communities and strong family bonds in everyday life; insuring personal and familial survival; continuing to hunt, fish, trap, and gather on the land; engaging in ritual and ceremony; negotiating with governments; litigating in courts; and participating in civil disobedience (Culhane 1998). While much has been lost, the resistance and resilience of aboriginal communities has also ensured much has remained. This study attempts to describe what knowledge and practice remains of an indigenous system of clam management in the North Island straits², and to consider the challenges and opportunities in re-conceptualizing this system for management today.

In the current context of fisheries management on the west coast of Canada, there are two systems of law at play. There is the indigenous law that

² This area includes the Broughton Archipelago, Northern Johnstone Strait, and Southern Queen Charlotte Strait, situated between northern Vancouver Island and the mainland of BC. Local people refer to this area as the Mainland Inlets or as a portion of the Kwakwaka'wakw Sea.

has governed the behaviour of aboriginal groups since long before European arrival. In addition, there are new laws, laws implemented by Canadian government departments such as Department of Fisheries and Oceans (DFO) and Indian and Northern Affairs Canada (INAC). This research is in part an attempt to bring to the surface the indigenous system of law as it relates to fisheries management, using a case study of Kwakwaka'wakw clam fisheries. In other words, it is an attempt to understand what rules were set up to govern peoples' behaviour in the past and how those rules and their implementation have changed and evolved through the period of colonial administration up until today. Finally, this study seeks to highlight some of the dilemmas and opportunities facing Kwakwaka'wakw communities in a time of negotiating the future direction for self-governance, including re-conceptualizing the role of indigenous management practices.

1.2 Towards Co-management

Co-management is the formal or informal agreement to share power and share the right to manage resources (Pinkerton and Weinstein 1995). This research assumes that through various policy changes³ or through the BC Treaty Process, First Nations in BC will establish fisheries co-management arrangements with Canadian governments. This has been true in the case of the Nisga'a Final Agreement in which a Joint Fisheries Management Committee has

³ Changes in policy directions that suggest a shift towards co-management of resources reflect recent trends in Supreme Court of Canada legal decisions on Aboriginal Rights and Title. New policy programs designed to address the law according to these recent decisions include the Aboriginal Aquatic Resources and Oceans Management (AAROM) program directed by the Department of Fisheries and Oceans, the "New Relationship" policy of the BC government, among others.

been developed for managing the Nass Watershed, and it is also true of the many northern communities in Canada that have now established comanagement boards to jointly govern resources. In the case of clam fisheries in the Kwakwaka'wakw Sea, local First Nations are currently pursuing two avenues for establishing co-management. First, the Musgamagw Tsawataineuk Tribal Council (MTTC) has proposed to set up a regional clam management committee in conjunction with DFO. Second, the 'Namgis First Nation, the largest Nation in the area, has moved to stage 4 of the BC Treaty Process, negotiation of an Agreement in Principle⁴. The current Fisheries Chapter of their draft treaty agreement includes the establishment of a Joint Fisheries Management Committee for the area fisheries. As one or both of these processes move forward towards co-management of clams, local First Nations face the challenge and the opportunity of re-interpreting and integrating indigenous conceptions and practices, including the nature of property and stewardship, into a modern management regime. This research finds its place within the theoretical framework of common property theory, cultural and political ecology, and traditional ecological knowledge studies that suggest co-management will be more successful where pre-existing self-organized resource management institutions are articulated and incorporated.

⁴ BC Treaty Commission: Six-stages: policies and procedures. Accessed Feb 13, 2008 from: http://www.bctreaty.net/files/sixstages.php

1.3 Research Questions & Objectives

The goal of this study is to describe elements of an indigenous system of management and to consider how this system has adapted and evolved through changing contexts. The overarching research questions are as follows:

- What past and present clam management practices exist?
- How has the management system changed over time?
- In what ways are indigenous systems and practices informing management today, and what challenges or dilemmas are present?

The central purpose of the research is to describe and frame theoretically a useful way to conceptualize clam management today as it relates to the past. Through grounded theory analysis, a more focused set of questions emerged narrowing in on the topic of access protocols, or rules governing access to clams. Questions on this topic developed through initial analysis and include:

- What protocols governed access rights in the past and today?
- How are they learned and communicated?
- How are they implemented?
- How have these protocols changed over time and adapted to new circumstances?

This research seeks to be relevant in both an applied and theoretical sense. In attempting to articulate access protocols and identify dilemmas and opportunities in re-conceptualizing indigenous clam management, I hope this research will be useful for Kwakwaka'wakw communities as they move forward in negotiating co-management. From a theoretical perspective, this research seeks to contribute to the call for more contextualized analysis in commons research that looks beyond institutional factors to consider the interaction between different conditions within the categories of resource, community, institution, governments and markets (Agrawal 2001, 2002; Dietz et al. 2003; Spaeder and Feit 2005). More specifically, I attempt to consider how the nature and sources of social identity (as aspects of community) relate to management institutions through the implementation of access protocols. I approach this relationship in the historical context of colonialism and the current context of treaty negotiations.

CHAPTER 2: BACKGROUND & CASE STUDY DESCRIPTION

2.1 Introduction to the Community & Territory

According to the U'mista Cultural Society (UCS)⁵, the Kwakwaka'wakw⁶ are people who speak Kwak'wala but who live in different places and have different names for their separate groups⁷. Kwak'wala is part of the Wakashan language family. For generations, the Kwakwaka'wakw Sea has provided for the physical and spiritual foundations of Kwakwaka'wakw culture (UCS 1998). The following map shows the indigenous territories of the different Kwakwaka'wakw tribes:

⁵ An organization dedicated to the survival of all aspects of the cultural heritage of the Kwakwaka'wakw. U'mista Cultural Society is based in Alert Bay, BC.

⁶ Early officials and ethnographers referred to all speakers of Kwak'wala as Kwakiutl (Powell 1994). However, Kwakiutl refers to only one of the Kwak'wala-speaking groups (Fort Rupert tribe).

⁷ U'mista Cultural Society, Alert Bay, British Columbia. Accessed September 7, 2007 from http://www.umista.ca/kwakwakawakw/index.php



Figure 1. Map of Kwakwaka'wakw Territories

© 1998 U'mista Cultural Society, Alert Bay, BC, reproduced by permission The geographical focus of this research project is northern Johnstone strait and southern Queen Charlotte strait and more specifically the extensive clam beaches that occupy the Broughton Archipelago⁸. Under DFO management labels, this is Clam Management Area G: Queen Charlotte Sound.

⁸ The Broughton Archipelago consists of dozens of islands and islets clustered off the northeast coast of Vancouver Island and in the inlets of the mainland. Locals refer to the Broughton Archipelago as the Mainland Inlets.

Only some of the Kwakwaka'wakw tribes in this area also have designation as Indian Bands⁹ under the *Indian Act* [1951]. The largest of these, with 1498 members, 800 of which live on reserve, is the 'Namgis First Nation, a member of the MTTC¹⁰. While today the 'Namgis First Nation is based in the village of Yalis (Alert Bay) on Cormorant Island, the 'Namgis indigenous territory encompasses the Nimpkish river valley on the northern part of Vancouver Island. The second largest First Nation in the MTTC is the Kwicksutaineuk/Ah-Kwaw-Ah-Mish First Nation. This Nation has 250 members of which 35 live on reserve at the village of Gwa'yasdams on Gilford Island in the Broughton Archipelago¹¹. The historical importance of clams to the local people here is evident from the village's situation on an ancient clam midden of indeterminate age and depth that is approximately 310 yards long and 100 yards wide (Rohner 1967).

Band members from these two First Nations participated in semistructured interviews as part of this research project. However, some of the interviewees consider themselves to hold dual memberships or identities, one as a band member and one as a member of a Kwakwaka'wakw tribe. Therefore, within this group of 'Namgis and Kwicksutaineuk-ah-kwa-mish band members I interviewed there were individuals who also consider themselves members of the following Kwakwaka'wakw tribes: Mamalilikala (Village Island), 'Namgis (Cheslakees), Tlawitsis (Turnour Island), Da'naxda'xw (New Vancouver),

⁹ Today, the term First Nation is used most often to refer to groups who were designated as "Indian Bands" under the Indian Act [1951].

¹⁰ Musgamagw Tsawataineuk Tribal Council. First Nation Members: Namgis. Accessed September 7, 2007 from: http://www.mttc.ca/namgis.asp

¹¹ Musgamagw Tsawataineuk Tribal Council. First Nation Members: Kwicksutaineuk-Ah-Kwaw-Ah-Mish. Accessed September 7, 2007 from: http://www.mttc.ca/kwick.asp.

Ma'amtagila (Estekin), Dzawada'enuxw (Kingcome Inlet), and Kwikwasutinux (Gilford Island)¹². The distinction between these two sources of social identity, band membership and tribal affiliation, their evolving and changing relative importance, and their integration into local management institutions, is a key topic of consideration in this study.

According to early anthropologists, kinship and rank are the major principles underlying Kwakwaka'wakw culture and society (Galois 1994). The two organizing structures of key importance are the namima¹³ and the tribe. The namima, defined as one or more extended family groups whose members claim descent from a common ancestor, is considered the fundamental unit of Kwakwaka'wakw society (Galois 1994). The potlatch, while essentially a means of putting events on public record before paid witnesses, was also a demonstration and validation of status (Powell and Cranmer-Webster 1994). As Cranmer-Webster and Powell (1994: 7) describe: "lands and places are associated with tribes and numayms [namima], which are always thought of as rank-ordered on the basis of status – a rank which receives full expression in the potlatch". I explore the role of social groupings such as the namima and tribe, and their connection with resource management in this study.

¹² Names and spelling of Kwakwaka'wakw tribes follows those used by the U'mista Cultural Society. (www.umista.ca)

¹³ The "namima" spelling chosen here follows that used by the 'Namgis First Nation. Other spellings include "numaym" or " nEme'm" or "numimot". "Namima" is used as both the singular and the plural.

Regional councils¹⁴ of Kwakwaka'wakw First Nations have been in discussions with DFO about establishing a clam and/or shellfish management board since at least 2001¹⁵. In 2005, the MTTC drafted a Terms of Reference for a Shellfish Management Board with the following objectives:

- Maximizing the long-term social, cultural, and economic benefits from the comprehensive management and harvesting of these resources; and
- Exploring local management options to improve the management of these resources and increase the involvement of First Nations in management decision making.

Interest in a more locally based clam management system certainly derives from the long-standing importance of clams for food, social, ceremonial and economic purposes. However, local interest in clam management in the area has been further stimulated for several reasons. First, the discovery of over 350 culturally modified clam beaches or "clam terraces" in the area has revived interest in indigenous clam management practices. Clam terraces are boulder/cobble ridges with highly productive clam beds on the intertidal flats (Harper 1995). Second, First Nations knowledge and some scientific evidence have drawn attention to the possibility of impacts of salmon farming waste on clam beaches in the area (Heaslip 2008). Third, continued decline of salmon stocks in the area has led to increased pressure on other resources, including clams. Clams represent the last remaining marine resource to which

¹⁴ Initially the Kwakiutl Territorial Fisheries Commission (KTFC) began discussions with DFO in this regard. After this group disbanded, the Musgamagw Tsawataineuk Tribal Council (MTTC) began working towards a local clam management committee.

¹⁵ Pacific Regional Clam Management Committee. 2001. Meeting Notes. Department of Fisheries and Oceans, Nanaimo, BC. Accessed December 8, 2007 from: http://www-comm.pac.dfo-mpo.gc.ca/pages/consultations/calendar/calendar01/09-September_e.htm

impoverished First Nation members have commercial access. Finally, the Broughton Archipelago/Area G clam fishery provides a unique opportunity for local management because of the composition of clam license holders. For the past decades or so, Kwakwaka'wakw clam diggers have held nearly all Area G clam licenses.

2.2 Description of the Resource

In Area G commercial clam fisheries, only butter clams (*Saximodus giganteus*) and native littleneck clams (*Protothaca staminea*) are harvested. However, Kwakwaka'wakw past and present use of bivalves for food, social, ceremonial and trade purposes includes local mussels, cockles and horse clams, in addition to the native littleneck and butter clams (UCS 1998). The Manila clam (*Tapes philippinarum*), which does not grow in Kwakwaka'wakw waters, is the dominant species in the BC commercial clam fishery (Mitchell 1997). The native littleneck and manila are similar in size and appearance. The shell of the littleneck is oval to round, with distinct radial and concentric ribs and is white to brown in colour (Harbo 2002). Littlenecks are found buried to 10cm or more in gravel-sand-mud bottom, mid-intertidal to 10.3m (Harbo 2002). The littleneck is less abundant than butter clams and is used commercially as a steamer and for chowders (Harbo 2002). The minimum commercial harvest size is 38mm – a length achieved in five to six years in northern waters (Harbo 2002).

The butter clam, the most important shellfish for the Kwakwaka'wakw, grows up to 13cm in size. It typically has a white to grey oval to square shaped shell with a smooth but not glossy interior and large, deeply marked muscle scars

(Harbo 2002). The species forms abundant populations in the lower intertidal burying to 30cm in gravel-sand-mud of protected bays at mid to lower intertidal up to 40m. It grows to a minimum commercial harvest size of 63mm in approximately 8-9 years in northern areas (Harbo 2002). Butter clams are good for chowders but they were also dried and smoked (called Ku'matsi in Kwak'wala) and used as bait (UCS1999).

The clam beaches in Area G are unique from other areas, since they are mostly small, remote area "pocket beaches". There are a large number of these beaches in the area, many of which were culturally modified through the building of rock walls or terraces (Harper 1995). On-going rock moving during clam digging raised and levelled a larger portion of the naturally sloping beach (Williams 2006). Since butter clams grow only at the very lowest levels to which the tide drops, a larger area was then available more often and allowed for longer digging periods (Williams 2006).

2.3 Department of Fisheries and Oceans Clam Management

DFO involvement in managing the clam fishery began in 1951 with the introduction of mandatory catch reporting through sales slips (DFO 2004). Prior to this time, commercial clam fisheries occurred in some areas of the coasts even before turn of the century (DFO 2004). From the early 50s to the 80s, the only DFO management measures in place were size restrictions and closures due to sewage contamination or paralytic shellfish poisoning (PSP). An overall increase in participation in the commercial clam fishery, especially by new Canadians of Southeast Asian origin, occurred in the recession years of the early

80s, partly due to limited alternative employment opportunities (Mitchell 1997). In 1988, DFO reduced opening times due to increased numbers of harvesters, and staggered openings throughout the year in an attempt to maintain a continuous market supply (Mitchell 1997). In 1989, DFO introduced clam licenses (category Z2) and area management¹⁶. However, entry to the fishery was still open and anyone could apply for a clam license.

From 1992 to 1998, the intertidal clam fishery went through a consultative and rationalization process called "Clam Reform" (DFO 2004). DFO initiated a broad review and consultations in 1992 in conjunction with the BC Ministry of Agriculture, Fisheries and Food (MAFF). This resulted in several new policies including a licence limitation program, increased First Nations access through Aboriginal Commercial Licenses (ACLs), and opportunities for the development of clam management boards¹⁷ (DFO and MAFF 1993). Several more collaborative management processes have been established since including comanagement of beaches fronting some existing Reserves (part of the depuration fishery), and co-management agreements for the Haida razor clam fishery, and the Heiltsuk clam fishery.

¹⁶ Area management divided the coast into six areas at this time: Area A (North Coast Areas 1 to 10), Area B (Areas 11, 12, & 13), Area C (Sunshine Coast Areas 15, 16), Area D (Areas 14, 16-19 and 16-20), Area E (Areas 17, 18 & 19) and Area F (West Coast Vancouver Island Areas 21 to 26). Later, in 1992, Area G was created by removing Areas 11 and 12 from licence Area B, partly due to increasing conflicts in the area between local fishers and those living outside of the area.

¹⁷ When this strategy was initiated boards developed in two of the seven clam management areas, Area F and Area C, in 1994. According to DFO, "these initiatives have made the fishery more manageable and have increased individual economic benefits to the eligible harvesters" (DFO 2004). DFO has contributed between \$5000 and \$20000 annually to the operation of the Community Management Boards in Area F and the advisory committee in Area C (DFO 2004). This funding is temporary and may be removed in future years (DFO 2004). Today, Area F receives funding through the West Coast Vancouver Island Aquatic Management Board (ABM).

The criteria established to qualify for a commercial clam licence under the license limitation program was for an individual to have held a commercial clam licence in 5 of 6 license years between 1989 and 1994¹⁸. In area G, only 12 individuals gualified (all were local residents and at least half were First Nations). Under the umbrella of the Aboriginal Fisheries Strategy (AFS), DFO introduced ACLs to recognize and re-establish the historical First Nation representation in the clam fishery¹⁹. These ACLs are identical to regular "Z2" commercial clam licences except the chief and council can designate the licence holders annually (DFO 2004). In 1998, an interim agreement in Area G allowed for a total of 85 commercial clam licenses in the fishery through the issuance of ACLs. Therefore, there is the potential for 73 ACLs to be issued in addition to the 12 licenses held by individuals who qualified after license limitation. While the Area G license limit is 85, the number of active diggers in any one year is much lower. According to DFO, the average number of licenses issued for Area G from 1998-2006 was 54 (DFO 2007). Potential reasons why the number of active diggers is lower than the license limit include increased fees for licenses; increased costs of fuel; decreased access to boats; declining markets and prices for both butter and littleneck clams; decreased openings due to pollution and markets; and increased concerns about salmon farm impacts on clams and clam beaches.

¹⁸ This does not mean that only 12 individuals were digging between 1989 and 1994. Instead many more people held commercial clam licenses commercial in certain years during this period, but they did not hold licenses in at least 5 of these 6 years.

¹⁹ In Area G, the participation of First Nations in the commercial clam fishery has changed over the years due to changing participation in other commercial fisheries, changing access to boats, and moving away from home villages. This is discussed further in Chapter 5.

2.4 Market Aspects

In the overall pacific intertidal clam fishery, the commercial target species was initially butter clams. However, since 1971 littleneck and manila clams have dominated due to strong markets and higher prices, with manila clams the most widely sought after species (DFO 2004). However, in Area G only littleneck and butter clams are harvested. According to DFO, landings of butter clams have been low in recent years because of the high cost of processing and a shift in demand toward fresh steamer clams. There is increased interest in reactivating the butter clam fishery (DFO 2004). For instance, at the 2001 Pacific Regional Clam Management Committee (PRCMC) meeting one participant advised that there are good stocks of butter clams in Area G and was concerned as to why they did not dig more. Others advised that there is a seriously reduced market for butters because BC Ferries, a key buyer of butter clams, was no longer buying this product²⁰.

DFO suggests that competition for markets overall seems to be increasing resulting in lower prices, with increased production from clam farms, production from the depuration fishery, production from Washington state beaches and other countries such as Chile and Mexico where similar product is being produced (DFO 2004). In addition, the rising Canadian dollar, combined with large volumes

²⁰ Pacific Regional Clam Management Committee. 2001. Meeting Notes. Department of Fisheries and Oceans, Nanaimo, BC. Accessed December 8, 2007 from: http://www-comm.pac.dfo-mpo.gc.ca/pages/consultations/calendar/calendar01/09-September_e.htm

of American product sold at lower prices, has had a severe impact²¹. Most clams harvested in BC are exported to the US (DFO 2004). Average landings for Area G for the period from 1995 to 2004 were 139,535 lbs. littleneck clams and 147,063 lbs. butter clams (DFO 2004).

2.5 Commercial versus Food, Social, Ceremonial Fisheries

First Nations have harvested and managed clam fisheries on the coast long before DFO involvement. The subject of this study is to understand this indigenous management system and how it has evolved alongside DFO management. In the past, there was no separation between commercial (barter and trade) and food, social and ceremonial (FSC) uses of clams. This distinction between personal consumption and trade is a Canadian government "invention" that does not reflect First Nation's use of marine resources in the past or today (Schreiber 2003). In a survey of the Kwakiutl of northern Vancouver Island, Weinstein and Morrell (1994) found that although people operate in a mixed subsistence-commercial economy, their core understandings still revolve around the principles of subsistence production. Results presented in this paper suggest stewardship practices and protocols used to govern the subsistence clam fishery were applied to the management of early commercial clam fisheries, and are to an extent applied today.

²¹ Pacific Regional Clam Management Committee. 2004. Meeting Notes. Department of Fisheries and Oceans, Nanaimo, BC. Accessed June 28, 2006 from: http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/consultations/shellfishInvertebrates/clam/meetingrecords/PRCMC_min utesOct%206_04.doc

However, today DFO, in an effort to implement the *Sparrow* decision²² assuring the right of aboriginal people to fish for FSC purposes, has established communal licenses for what is now called the FSC fishery. The FSC fishery for intertidal clams is open 12 months per year subject to PSP or sanitary closures. Communal licences provide for a maximum daily quota of 75-100 pounds per day per person and there is no size limit for the FSC clam fishery. The chief and council can authorize additional catch if harvesting is for a special event. In Area G, closing commercial beaches for the purposes of protecting FSC access started in 1991 (DFO 2004). The level of harvest for FSC intertidal clam fishery is unknown and catch reporting structures for these fisheries are limited.

2.6 Management Issues

While loss of intertidal clam beaches due to the continued growth of the shellfish aquaculture industry²³ is perhaps the key issue in the wild clam fishery in most areas, the First Nations in Area G have successfully refused all proposals to move towards tenuring clam beaches in their indigenous territories. One of the concerns expressed by Area G representatives is the potential for ownership of local tenures to end up in non-local hands, a pattern that they witnessed with salmon farming tenures in the area. Area G representatives are also concerned that Aboriginal rights are being threatened by shellfish aquaculture development, particularly with the possibility that expansion could affect culturally modified

²² R. v. Sparrow, [1990] 1 S.C.R. 1075, 1990 CanLII 104 (S.C.C.).

²³ Under the mandate of the BC government's Shellfish Development Initiative.

beaches. Area G representatives have pointed out the need for a feasibility study around the issues of the wild commercial clam fishery versus aquaculture²⁴.

Other management issues identified by DFO in their most recent management plan include loss of clam beds due to pollution, control of illegal harvesting, fishery monitoring and landing reports, uncertain stock levels, and market considerations (DFO 2004). Local clam diggers and elders from the north island straits area echoed all of these issues. In addition, the primary concern emphasized by locals and not mentioned in the DFO 2004 – 2006 management plan, is the potential impacts of fish farm wastes on clams and clam beaches. In a separate research paper, I explore the potential for integrating Kwakwaka'wakw values, knowledge and stewardship practices into collaborative monitoring of fish farm wastes (Heaslip 2008).

²⁴ Pacific Regional Clam Management Committee. 2004. Meeting Notes. Department of Fisheries and Oceans, Nanaimo, BC. Accessed June 28, 2006 from: http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/consultations/shellfishInvertebrates/clam/meetingrecords/PRCMC_min utesOct%206_04.doc

CHAPTER 3: RESEARCH METHODS

Qualitative studies are effective for research that attempts to uncover complexities and processes and seeks to explore where and why policy and local knowledge and practice are at odds (Marshall and Rossman 2006). For research that is exploratory or descriptive and stresses the importance of context, setting and the participants' frames of reference, a case study is an effective research strategy (Marshall and Rossman 2006; Yin 2003). I chose qualitative approaches for this research, and the case study as an appropriate overall research strategy. Choosing a case study approach allows the researcher to engage with complex reality on the ground while seeking to select the most relevant outcomes and suggest how they might inform theory. Limitations of the case study method include constraints on the applicability of results beyond the specific case (Blaikie 2000).

While the case study is the overall research strategy, many methods are available as specific tools for conducting the exploration (Marshall and Rossman 2006). In this study, the array of methods included: semi-structured interviewing, document review, and participation in the setting. I used a quasi-grounded theory approach to analyse the data from these different methods.

3.1 Qualitative Methods

3.1.1 Semi-structured Interviews

McAvoy et al. (2000) suggest that the personal semi-structured interview is the social research method used most successfully in aboriginal communities because it reflects the epistemology of aboriginal people. Semi-structured interviews are also useful where the participants may not be comfortable with direct questions, or when the researcher cannot be sure how participants may interpret questions (Huntington 2000). A semi-structured interview is open-ended but follows an interview guide, which covers a list of topics. The interview guide helps to ensure reliable, comparable data, while retaining flexibility to follow leads (Bernard 2006). Charmaz (2006) argues that novices need more structure, and having an interview guide with well-planned questions and ready probes can increase your confidence and permit you to concentrate on what the person is saying.

The interview guide used for this study (Appendix 1) was organized around the "categories of fisheries management" outlined by Pinkerton and Weinstein in their book, *Fisheries that Work* (1995). While initially interviews followed closely the format and sequence in the interview guide, I learned with experience that a sequence organized through historical timeline and not topic area was a more natural format for discussion (see Section 3.2 *Reflections on Researcher Bias*). It was my initial intention to explore pre-contact periods to the present. However, the interviews ended up focusing mostly on the period from

1930s to present, with a few interviewees feeling comfortable recalling or speculating on an earlier system of management.

Interview Sampling Design

Bernard (2006) distinguishes between two types of data of interest to social scientists – individual attribute data and cultural data. Each kind of data requires different approaches to sampling design. Cultural data involves trying to understand a process – and asks experts for explanations about the cultural norms and about variation on that norm (Bernard 2006; Huntington 2000). Knowledge about past and present clam stewardship practices is a form of cultural data requiring non-probability sampling using expert informants, not randomly selected respondents.

In selecting interviewees, I initially sought advice from the 'Namgis First Nations fisheries coordinators, the MTTC local stewardship coordinator, the executive director of the UCS, and the Elder's Centre community health nurse. After identifying several key people, I began using chain referral sampling (or snowball sampling) to identify further interviewees. In chain referral sampling, each participant suggests the name or names of further experts, until eventually few new names come up (Huntington 2000). In addition, in order to inform the broader community about the study and to invite any interested participants who I may not have found through other means, the UCS published a small advertisement in their winter newsletter about the project and relevant contact information. In total, 23 interviews were completed, 17 in the community of Alert Bay/Yalis on Cormorant Island, 5 in the community of Gwa'yasdams on Gilford

Island, and 1 in Vancouver. The majority of those interviewed were older clam diggers and elders who had not been out digging for sometime; several were hereditary chiefs from different Kwakwaka'wakw tribes. I recorded interviews with participant's permission and transcribed where possible²⁵. For the most part, I conducted interviews in peoples' homes or at local restaurants. As a small token of my appreciation, I gave each participant a gift of homemade jam.

3.1.2 Participation in Setting

Overall, I spent 2 months in the community of Alert Bay/Yalis on Cormorant Island, spread over several visits. During this time, I attended community events including potlatches, a local soccer tournament, and several fundraising events. In addition, I had the opportunity to sit in on several resource management meetings including a workshop on the 'Namgis land use and occupancy mapping project, a couple of treaty meetings on fisheries issues, and an Area G Broughton Archipelago Clam Bed Impact meeting held in Nanaimo. The clam bed meeting brought First Nations, government, industry and academic representatives together to discuss potential fish farm impacts on clam beds in the Broughton Archipelago and was an excellent opportunity to hear the perspectives of a number of different stakeholders.

3.1.3 Document Review

Review of documents is an unobtrusive method often used to gain an understanding of the broader political, institutional, legal and social contexts. It

²⁵ I was able to transcribe 18 of 23 interviews in full. It was not possible to transcribe others due to lack of recording, or sound quality of the recording.

can also act as a useful form of crosschecking and triangulation for some of the outcomes of interviewing (Marshall and Rossman 2006). Key documents reviewed for this project include meeting records of the PRCMC (2000-2004) as well as policies, management plans, and regulations from DFO, BC MAFF, BC Ministry of Environment, BC Ministry of Agriculture and Lands, 'Namgis First Nation, and MTTC.

3.1.4 Ethical Considerations

I received approval from the Simon Fraser University Office of Research Ethics to conduct this research. Following this, I sought and was granted approval from the 'Namgis First Nation, the Kwicksutaineuk-ah-kwa-mish First Nation and the MTTC to undertake this research. At each interview, I sought informed verbal consent from the participant using a Letter of Introduction (Appendix 2). To ensure the privacy of participants, I stored all original field notes, tapes, and transcripts in a safe place with restricted access. Representatives from each First Nation have the opportunity to review all outcomes from this research prior to publication. Personal identities were not used in any of the reports unless specifically authorized by the individual.

3.1.5 Qualitative Data Analysis

Grounded theory is an inductive research approach. While recognizing that we begin our research from the vantage point of disciplinary perspectives, grounded theory emphasizes the need to remain as open as possible to let the data speak for themselves and avoid forcing preconceived ideas and theories
directly upon our data (Charmaz 2006). Types of research questions best suited to grounded theory are those relating to interactions between persons or among individuals and specific environments. I used a quasi-grounded theory approach most closely associated with the Glaserian approach²⁶ (Grbich 2007).

Two phases of coding were used to analyse interview transcripts and notes: an initial phase involving naming each segment of data (initial coding), followed by a focused, selective phase that used the most significant or frequent initial codes to sort, synthesize, integrated and organize the data (focused coding) (Charmaz 2007). During initial coding, I approached each segment of data by asking: What process(es) is at issue here? How can I define it?

To move from initial coding to focused coding required comparison between statements and incidents within and between interviews. This phase necessarily involved the evaluation of conflicting statements from different participants, which depends in part on the judgement of the researcher (Huntington 2006). Davis and Wagner (2003) reviewed recent social science literature on indigenous knowledge and suggest that researchers give insufficient attention both to reporting the methods employed and to employing systematic approaches, especially with regard to the critical issue of how they identified local experts and evaluated different sources of knowledge. While my personal judgements and perspectives have indeed affected this process, I have attempted to counter them by using some objective criteria. One criterion

²⁶ Glaserian grounded theory approach is closer to field based or hermeneutic qualitative approach with lesser emphasis on coding (Grbich 2007).

considered is the amount of peer recommendations made for a local knowledge expert (Davis and Wagner 2003). Another criterion is the level of detailed examples interviewees provided to support their statements. For example, Maurstad et al. (2007) suggest considering the level of detailed knowledge and "groundedness" of narratives in practical experiences can assist in evaluating the reliability and validity of fisher's knowledge. Finally, in the following section I attempt to bring to light my own biases and articulate how they may have influenced the research process.

3.2 Reflections on Researcher Perspective

3.2.1 Personal Background and Bias

Social science researchers must acknowledge that we are unable to disembody ourselves of our personal perspective through which data and experiences will be interpreted (Blaikie 2000). However, we hope through being aware of it we can at least present how we feel it has influenced our research, and in turn have more transparency about the research process. This should give audiences of our research a more realistic basis with which to evaluate, re-interpret and use our outcomes. The need for this type of openness could not be more relevant than in cross-cultural research involving indigenous knowledge. In an attempt to bring to the surface impacts of my own personal lens on the research, I will provide the reader some information about my background. Furthermore, I endeavour to be as explicit as possible about how I feel these biases may have affected my methods and process of analysis in the next section (Section 3.2.2 *Challenges*).

I am in the early stages of gathering research experience, and am an outsider in the research context. I see through the eyes of a young, white, university educated, middle-class woman working in a culture and geographic area that is unfamiliar. In addition, I have grown up and am currently a resident of a large urban centre. I developed my perspective on the world through very different experiences than many of the people I interviewed, possibly making it more difficult to establish a rapport and making my interpretations less reliable (Dowling 2000).

My undergraduate education was in biology and anthropology, and my interest in this research stems from the opportunity to apply, and further develop an interdisciplinary perspective. My training in anthropology did not focus heavily on First Nations cultures of the Northwest Pacific coast, and did not provide practical experience in cross-cultural communication. My interest in coastal First Nations indigenous knowledge research was stimulated through participation in a couple of short, applied research projects: one in community forestry, and another in watershed based fish sustainability planning. My supervisor suggested the particular topic, Kwakwaka'wakw clam management, since it relates to her research on clam fisheries on the west coast of Vancouver Island and there was an established connection with a key community member.

3.2.2 Challenges

My identity as a young female from an urban centre created some barriers and challenges to building rapport with the mostly older, male interviewees many of whom had spent their life in the rural setting. However, the more specific

knowledge I gained about the local ecology, clam management issues, and local perspectives, the easier it was to surmount these barriers. My young age in some cases was an advantage. I believe some people shared more, and showed a greater degree of patience, because I am a young person eager to learn.

Training in biology, in conjunction with an upbringing that emphasized a belief in science, has lead me to a way of knowing about the world that involves categorization and compartmentalization. Science engenders a type of thinking where people, animals, objects, ideas, beliefs, values, etc. must both fit in somewhere and have some function. While this is a useful tool for the purpose of organizing new thoughts, ideas and stimuli, it also runs the risk of oversimplifying things, thereby reducing their inherent complexity and interconnectedness. This bias likely affected both the way in which I approached designing an interview guide based on categories of fisheries management, and the organization of the results of my analysis.

The organization of the interview itself illuminated differences in cultural perspectives. Initially I approached the interviews by asking questions on a topicby-topic basis, hoping that interviewees would share experiences with clam stewardship practices throughout their lifetime. Instead, participants focused more on recent experiences even when prompted to discuss the past. Changing this approach to one that focused on discussing many topics within one historical time period and connecting this time period with personal life history proved to be a much more comfortable and stimulating approach.

In addition to my biases influencing how interviews are organized and questions categorized, my biases may also present themselves through information selection (e.g. deciding what is important), and information interpretation (e.g. potential for loss or distortion of meaning) (Karjala et al. 2004). Since the process of data analysis, by necessity, involves creativity and interpretation, I imposed my values, perspectives and personal epistemology on the data (Marshall and Rossman 2006). For example, I have undertaken a process of ranking or valuing the knowledge from different interviewees, or in other words, conducting a search for local "experts" on this topic. My biases could have affected this process in many ways. In order to minimize the affect I have attempted to be as conscious as possible about the process and criteria I am using to identify experts and value and weigh different knowledge. While the experience of undertaking this research has given me some insight into a worldview this is different from my own, it is a superficial understanding, at best. For this reason, I have attempted to enable the voices of participants to be heard through extensive direct quotes in Chapters 5 - 7.

3.3 Research Limitations

3.3.1 Lack of Triangulation and Participant Observation

Triangulation is the act of bringing more than one source of data to bear on a single point (Marshall and Rossman 2006). Studies in which multiple cases, multiple informants and more than one data gathering method is used are more rigorous and reliable. In this study, I triangulated interviews by reviewing key documents (such as meeting minutes) and through participation in the setting.

However, these data sources only enable triangulation of local perspectives on current management issues and not the knowledge of past and present management practices. In the case of the latter, this study would improve significantly with participant observation of clam diggers. Dependence on interviews as the sole way of gathering data on past and present stewardship practices means that this study can only report on this topic as far as the subjective view of participants' perspectives on events (Marshall and Rossman 2006).

3.3.2 Incomplete Representation

Ideally, this study would include participants from all Kwakwaka'wakw tribes with indigenous territories in the Broughton Archipelago. However, due to several factors, I was unable to achieve complete representation of all groups. For example, resources and logistics made it difficult to visit the Tsawataineuk village in Kingcome Inlet. In addition, the time and effort required to receive appropriate approval from First Nations organizations created a barrier to more diverse participation. Although I attempted to identify and interview women who participate in or are knowledgeable about clam fishery practices, it seems that women have become less and less involved in this fishery over the past several decades. Due to this, few people suggested women as potential interviewees and some of those recommended did not feel they had relevant knowledge to contribute. As a final total, I interviewed only two women.

3.3.3 Lack of Repeat Interviewing

Ideally, researchers using grounded theory look for ideas by studying data and then return to the field to gather additional more focused data to answer analytic questions and to fill conceptual gaps (Charmaz 2006). However, given both time and funding restraints and in an effort to scope the project to a manageable size, this study did not involve repeat interviews with participants, except in a few cases. This not only has an impact on the scope of the study but also the depth of analysis possible.

CHAPTER 4: LITERATURE REVIEW

4.1 Clams as a Common Pool Resource

Most natural resource systems used by multiple individuals can be classified as common pool resources (Ostrom 2001). Common pool resources are characterized by the difficulty of exclusion and the subtractability of one person's use from the quantity of resource units available to others (Ostrom et al. 1994). Both of these conditions, difficulty of exclusion and subtractability, apply to clams. Where common pool resources are concerned, in the absence of appropriate institutions, there is a tension between individual gain and the collective good that may lead to resource degradation (Burger et al. 2001). Hardin's classic article, "the Tragedy of the Commons" (1968) asserted that the solution to managing the commons was to impose some form of government or private ownership. However, commons scholars argue that Hardin confused common property regimes, where a community of individuals have enforceable ways of limiting access and create harvesting strategies, with "open access" situations, where no one can be excluded and no limits exist on harvesting strategies (Burger et al. 2001). A discussion paper written by DFO and MAFF (1993: 8) about problems in the intertidal clam fishery highlights the influence of the tragedy of the commons theory:

The wild clam fishery has been treated as common property shared by an unlimited number of licensed harvesters. The tragedy of this commons is that the harvesters are not willing or able to husband

the resource because they must compete with other harvesters for part of the harvest. The pressing issues in clam management are classic symptoms of common property management.

This quote confuses "classic symptoms of common property management" with classic symptoms of an open access situation, highlighting the often misused and misunderstood nature of common property regimes, and an ignorance to how they might contribute to solving open access problems that may lead to resource degradation.

There is much evidence to support the idea that prior to and concurrent with Canadian government management of fisheries on the Pacific Northwest coast, many First Nations had well-developed common property regimes to manage fisheries. Researchers have documented the resilience, adaptiveness, and effectiveness of these institutions (Trosper 1998, 2003; Walter et al. 2000; Weinstein 2000; Pinkerton and Weinstein 1995; Morrell 1989).

4.2 Frameworks for Describing Local Resource Management

Over the past several decades there has been an explosion of work on common property institutions and common pool resources (For example, McCay and Acheson 1987; Pinkerton 1989; Ostrom 1990; Anderson and Simmons 1993; Baland and Platteau 1996; Agrawal 2001, 2002; Burger et al. 2001; Pomeroy et al. 2001). Scholars of the commons from a multitude of disciplines have shown that resource users often create institutional arrangements and management regimes that are equitable, sustainable and efficient (Agrawal 2001). In this way they have identified alternatives to Hardin's (1968) argument that only state-

established institutional arrangements and private property provide solutions to the "tragedy of the commons". Through case studies, scholars have described these management regimes and considered the question: under what conditions are self-organized resource management institutions successful? Success is generally defined as lasting over time, constraining users to safeguard the resource, and producing fair outcomes (Agrawal 2001).

At the same time, research in Traditional Ecological Knowledge (TEK) has also contributed to the understanding of local systems of management. According to Kalland (2000) there are three levels of TEK: empirical or practical knowledge; "paradigmatic knowledge", or the interpretation of empirical observations to put them into a context; and "institutional knowledge", or knowledge embedded in social institutions. It is this third level of TEK, "institutional knowledge", that is the subject of this study. Research in TEK has contributed a great deal to understanding how local resource management systems function, and how they are adapted to local environments (Berkes 1999).

Frameworks for describing institutions, and identifying conditions for successful institution-building, have become increasingly relevant in the world of policy making and resource management. Governments are more regularly pursuing initiatives that devolve some control over resources to local users (Ribot 2004; Ribot et al. 2006) leading to various forms of decentralized environmental governance including co-management arrangements between local communities and the state (Carmen-Lemos and Agrawal 2006). Carmen-Lemos and Agrawal

(2006) suggest there are three distinct justifications for decentralization of environmental governance: it can produce greater efficiencies because of competition among sub-national units; it can bring decision-making closer to those affected by governance, thereby promoting higher participation and accountability; and finally, it can help decision makers take advantage of more precise time- and place-specific knowledge about natural resources. While these justifications are relevant to the current case study, in Canada, federal and provincial governments are also facing legal challenges to state controlled topdown resource management in the context of aboriginal rights. The push towards cooperating to share power in managing resources with First Nations is not just a question of effective environmental governance, but also one of legal obligations and of human rights.

While there are some diverging ideas about what conditions are needed for the successful devolution of management rights leading to co-management between state and local users, many scholars agree that institutional arrangements must include locally devised access and management rules (Baland and Platteau 1996; Pinkerton and Weinstein 1995; Ostrom 1990; Wade 1988). Co-management theory predicts directly that co-management will be more successful where pre-existing self-organized resource management institutions are articulated and incorporated (Pinkerton 1989). A key objective of this study is to describe the clam management system of the Kwakwaka'wakw peoples in the North Island straits area. Given this objective, a review of several of the more influential frameworks for characterizing local fisheries management institutions

is a useful place to start. Following this, I will consider recent critiques of commons research that suggest past approaches focus too much on institutional characteristics and not on other key factors, such as the nature of community, nature of the resource and nature of external factors such as the market and government policies (Agrawal 2001, 2002). These critiques also advocate for moving beyond listing conditions for success to considering how conditions interact with each other, and are inter-related with local historical impacts and present day political-economic strategies.

4.2.1 Institutional Economics & Common Property Regimes

Schlager and Ostrom (1993) emphasize the need for differentiation between "rights" and "rules" in describing common property regimes for managing resources. The use of these terms may create confusion since they have different meanings in common language, and are frequently used interchangeably in the context of natural resource management. Therefore, it is important to explain here how I distinguish between them.

"Rights" are the product of rules and refer to particular actions that are authorized, whereas "rules" refer to the prescriptions that create authorization (Schlager and Ostrom 1993). Rules are generally agreed-upon and enforced prescriptions that require, forbid, or permit specific action. Rules define how fishers within a group can exercise their rights in relation to each other and in relation to non-group members. In other words, rights are granted or recognized when certain rules are met, and therefore understanding and articulating the rules is a key part of understanding the management system. Without rule

definition, even given a more complete set of property rights, a group of fishers can utilize the resource inefficiently (Schlager and Ostrom 1993).

Schlager and Ostrom (1993: 14-16) use the following classification scheme to describe property rights related to fisheries. This classification scheme was derived from literature on property rights regimes and was evaluated using 30 in-depth coastal fishery case studies.

- **Access**: the right to enter a defined physical property
- Withdrawal: the right to obtain the "products" of a resource (e.g. catch fish, appropriate water, dig clams, etc)
- **Management**: the right to regulate internal use patterns and transform the resource by making improvements²⁷.
- **Exclusion**: the right to determine who will have an access rights, and how that right may be transferred²⁸.
- Alienation: the right to sell or lease either or both of the above rights (management & exclusion).

Schlager and Ostrom (1993) describe access and withdrawal rights as operational-level, whereas management, exclusion and alienation rights are considered collective-choice level. The difference between rights at an operational-level and rights at a collective-choice level is the difference between exercising a right and participating in the definition of future rights to be exercised (Schlager and Ostrom 1993). The rights of access, withdrawal, management, exclusion and alienation can also be characterized as either *de jure* or *de facto* rights. *De jure* rights are given lawful recognition by formal, legal

²⁷ I.e. the right to determine how, when and where harvesting from a resource may occur and whether and how the structure of a resource may be changed.

²⁸ I.e. the right to define the qualifications that individuals must meet in order to access a resource.

instrumentalities; whereas *de facto* rights originate among resource users. The characterization of rights as *de jure* or *de facto* provides important information about the origin of resource management systems and their relationship with the state. Schlager and Ostrom (1993) argue that the key condition necessary for successful local resource management is having a formal right to exclude others, therefore ensuring that those inside the community benefit from the efforts to manage the resource.

4.2.2 Cultural Ecology & Community-Based Management

While the new institutionalists approach to understanding property rights in the context of resource management has had a huge influence on theory, other researchers suggest that a further level of understanding is missing. Pinkerton and Weinstein (1995) use a cultural ecology approach to describe local resource management systems. Along with the new institutionalists approach, the cultural ecology approach argues that either formal or informal rights can lead to successful and sustainable community based management systems if certain conditions are met.

However, the cultural ecology approach goes beyond rights and rules to suggest that the "spirit of stewardship" element is also central to understanding local management systems. For example, Pinkerton and Weinstein (1995: 182) argue that "management systems based on stewardship focus as much on the *duty* of fishing communities to manage resources for future generations as they focus on the *right* of communities to manage." The difference between rights and duties is the time-period of concern: a right is oriented towards the benefit of

current users; a duty is oriented toward future generations (Pinkerton and Weinstein 1995). In cases where a strong stewardship ethic exists, communities exercise the management right in order to carry out their duty to steward the resource for their children (Pinkerton and Weinstein 1995). This approach goes beyond the rights-based framework to one that recognizes other culturally-based forces at play, such as cultural norms, values, and attitudes related to the environment, and the influence they have.

4.3 Beyond Institutional Factors

As theory on common pool resource governance evolves, several important literature reviews have begun to point out the need for more complex analysis (Agrawal 2001, 2002; Dietz et al. 2003; Spaeder and Feit 2005). Agrawal (2001) argues that existing studies have focused primarily on institutions around common pool resources, at the cost of neglecting other aspects of the resource system, and suggests four sets of variables need to be considered:

- characteristics of resources,
- nature of groups that depend on resources,
- particulars of institutional regimes through which resources are managed, and,
- nature of relationship between a group, and external forces and authorities such as markets, states and technologies.

In addition to looking beyond institutional factors, scholars of the commons are beginning to call for a move beyond listing conditions for success in local commons management to a consideration of the interaction between different conditions within the categories of resource, community, institution and external factors (Agrawal 2001, 2002; Dietz et al. 2003). In other words, there is a need to move towards a more complex study of precisely how, "environmental factors, political regimes, cultural traditions and power generate multi-scalar practices and institutions for resource governance" (Spaeder and Feit 2005: 148). While some recent literature on African and Asian cases has contributed to these gaps, there is generally little scholarship addressing these calls, especially in North America (Spaeder and Feit 2005)²⁹.

The case study presented here seeks to contribute to this analytical gap by considering the connections and integration between changes in external factors and the nature of the community, and how these in turn create dilemmas and opportunities for re-conceptualizing indigenous management institutions for co-management today. More specifically, I attempt to consider how the nature and sources of social identity (as aspects of community) relate to resource management through establishing community boundaries and decision-making authority in applying and enforcing access protocols. I approach these concepts in the historical context of colonial imposition of organizational structures, and the current context of treaty negotiations, and through doing so explore the nature of community and the relations between community and external forces and authorities.

This research focus also seeks to address a call from the broader literature on decentralization in environmental governance for analysis of the "alterations of the subjective relationships of people with each other and with the

²⁹ Spaeder and Feit (2005) suggest that some of the notable exceptions are: Pinkerton (1989); Berkes et al. (1991); Usher (1995); Hoekema (1995); and Igoe (2004).

environment as part of changing relationships of power and governance (Carmen-Lemos and Agrawal 2006). Changing relationships of power and governance in the context of access to and management of resources is at the centre of the story of Kwakwaka'wakw clam management over the last century or more of colonization and moving into new periods of cultural revitalization, selfgovernance and government to government relations in an increasingly globalized economy. To begin this discussion, the next section attempts to briefly outline a historical time line of the impacts of colonization in relation to clam fishery management in the Kwakwaka'wakw Sea.

CHAPTER 5: HISTORICAL OVERVIEW OF COLONIAL IMPACT ON CLAM MANAGEMENT

The impacts of colonialism on First Nations culture, communities, livelihoods, and well-being are immense, and include impacts to local systems of governance. I attempt to provide a brief timeline of this history as it relates to clam management and from the perspective of those I interviewed. The intention of this overview is to provide a chronological framework within which to organize further discussion, and to bring to the forefront the colonial context in which this discussion is embedded. However, the description presented here is necessarily superficial and does not claim to be a comprehensive historical analysis of the colonial impacts on First Nations people³⁰.

Although I was hoping to learn about clam management during the pre and early contact periods, only a few interviewees felt comfortable stretching back that far. However, those that did referred to this time as the 'Early, Early days', a time when the Kwakwaka'wakw population was larger, a greater diversity of tribes and family lineages existed, and a much stricter system of governance was in force. While there were many impacts from early contact with Europeans, the most tragic was certainly the loss of people caused from the introduction of infectious diseases. Rohner (1967: 20) describes the population

³⁰ The report of the Royal Commission on Aboriginal Peoples (RCAP 1996) provides a comprehensive analysis of the policy direction pursued by colonial and then Canadian governments, and its impacts. I also recommend Diane Newell's *Tangled Webs of History* (1999) for an analysis of the colonial impact on First Nations use and management of fisheries resources on the west coast of Canada.

changes as follows: "from the time of the first European contacts to about 1890... a large part of the Indian population of BC was decimated; gradual population attrition continued from 1890 to about 1929 at which time a resurgence occurred among the Kwakiutl [Kwakwaka'wakw]".

The post-contact period was a period of flux in the number and organization of Kwakwaka'wakw groups (Boas 1966). For reasons such as reduction in numbers or for defence, amalgamations among namima and tribes occurred. At the same time, some communities experienced splits or divisions leading to new namima and tribes. Early native land policy in BC further affected social structure and organization through the dispossession of land from First Nations and the creation of Indian Reserves (Harris 2002). In 1881, the Kwawkwelth Indian Agency was established in Alert Bay. By this time, the alienation of lands and fishing locations was already well underway, and government commissions and agents began allotting the Kwakwaka'wakw to restricted reserves (Schrieber 2003). Drucker and Heizer (1967) also date the beginning of the entrance of Kwakiutl workers into the labour force to the summer of 1880 or 1881. Individuals were now able to create wealth from sources independent of the descent group, representing a profound break with indigenous practices (Lando 1988).

Also in the late 1800s, Canada introduced anti-potlatch laws. However these laws were more strictly enforced in the early 1900s (Newell 1999). One interviewee reflected on the impact of these laws on local governance:

...after the prohibition of potlatches we weren't allowed to hold them anymore so a lot of that governance was gone after that. It is just like closing the parliament down for 20 years imagine what would happen.

Many of those interviewed described the period in the early 1900s as the 'Early Days', and it was a time of their grandparents' youth.

The next major change in specific reference to use and management of clams was the introduction of a commercial fishery, which by most accounts began in the late 1930s. Canadian governments did not regulate this early commercial clam fishery. An important hereditary chief from the area initiated the commercial clam fishery through an agreement with The Anglo-British Columbia Packing Company Ltd, known as BC Packers. Also during this time, Department of Indian Affairs (DIA) placed Kwakwaka'wakw tribes under the *Indian Act* elective system and established Band Councils, adding an additional layer of complexity to the nature of power and authority in Kwakwaka'wakw governance (Lando 1988).

The early commercial fishing period lasted until some time in the 1950s and 1960s when further changes took place. Although St. Michael's residential school in Alert Bay had been operating since 1890, an amendment to the *Indian Act* [1920] made failing to attend residential schools a criminal act, and provided for legalized punishment of Native parents who refused to comply with church and government officials who demanded they turn their children over to their care (Tennant 1990). Residential schools were deliberately used to break the transmission of culture from one generation to another (RCAP 1996). In

combination with the residential school policy, Canada began to withdraw or withhold crucial services such as schools and healthcare facilities from remote communities and encouraged people to relocate to larger centres (Newell 1999). As a result, in the 1950s and 1960s most people living in the Broughton Archipelago islands and mainland inlets had to resettle in centres such as Alert Bay and Campbell River.

With people now living further from clam beaches, the 60s and early 70s became a period of commercial digging off larger boats alongside the introduction of DFO involvement in the commercial clam fishery through the enforcement of size restrictions and pollution closures. However, in the late 1960s, starting with the Davis Plan, Canadian government fisheries policy took a significant turn towards economic- based management, which advocated rationalizing the fleet through capitalization of a small number of large, highly equipped vessels (Newell 1999). Changes to standards set by DFO for acquiring a permanent fishing license³¹ and license buy-back policies led to a dissolving of much of the local fishing fleet in Alert Bay and remaining island villages, and with it, access to clam beaches for both subsistence and commercial purposes for many people.

A "clam reform" in the 1990s led to area based management and a limitation on the number of clam licenses. At the same time, DFO allocated the Area G license base almost exclusively to First Nations through the ACL

³¹ For more information on the changes to standards for acquiring new licenses see: Marchak et al. (Eds). 1987. Uncommon property: the fishing and fish- processing industries in British Columbia. Toronto: Metheun.

program, reflecting changes in DFO policy such as the introduction of the AFS. The AFS in turn reflects an attempt by DFO to meet the recent legal decisions coming out of the Supreme Court of Canada on aboriginal rights and title. Further changes in this period include the start of treaty negotiations or land claims, the formation of regional tribal councils such as KTFC and later MTTC, and a continued diminishing of economic opportunities, especially in the fishery with further fleet rationalization policies and declining resources.

The most recent impacts on the clam fishery include the declining populations and quality of clams and clam beaches, attributed by many local people to the intensification of fish farms and the far field and cumulative effects of fish farm waste on beaches. Many of those interviewed suggested significant negative changes have occurred to clam and beach quality in recent years. Impacts from fish farms were the most frequently suggested cause of these changes. However, pollution more broadly has resulted in increased beach closures in the last couple of decades. Market issues have also impacted commercial access. Commercial openings have been restricted due to declining markets for both butter and littleneck clams.

In terms of management, the present can be described as a period of negotiating the future. It is a period of treaty negotiations, negotiations with government agencies outside of treaty for management rights, and negotiations within and among communities about the role of indigenous institutions as different Kwakwaka'wakw groups re-assert jurisdiction over indigenous territories. The following figure (Figure 1) summarizes the time periods and key

forces of change in clam management identified from pre-contact to present. The purpose of this diagram is to facilitate an understanding of the context surrounding changes in the Kwakwaka'wakw clam management system, and the factors underlying some of these changes.

Figure 2. A chronological overview of the major colonial forces of change in relation to Kwakwaka'wakw clam management



The next chapter describes what appears to be at the centre of clam management in the Kwakwaka'wakw Sea – a system of access protocols based around stewardship of clams and clam beaches and respecting indigenous authority. While the use and application of these protocols has undergone significant change through the historical periods discussed above and at present, there remains a great deal of collective knowledge about these protocols.

CHAPTER 6: DESCRIBING ACCESS PROTOCOLS

Following Schlager and Ostrom (1993), "rights" are the product of rules and refer to particular actions that are authorized, whereas "rules" refer to the prescriptions that create authorization. Access rights are one level of property rights in the classification set out by Schlager & Ostrom (1993). However, I am using the term here somewhat differently than Schlager & Ostrom do by including both the right to access and withdraw clams from a beach as part of "access rights". In the case of indigenous clam management in the Kwakwaka'wakw Sea, access rights are granted when certain protocols (or rules) are met. Protocol is the term used in resource management meetings and among resource users in this particular case study. Questions about protocols, what they are, where they apply, and who has the right to enforce them, are at the forefront of current discussions about clam management and other fisheries management in the area.

Schlager and Ostrom (1993) describe rules governing how harvesting is to take place as authority and scope rules, the five most common types being: location rules, size rules, season rules, order rules and time-slot rules. The location rule is the most frequently used and determines the distribution of choice fishing spots among the user group (Schlager and Ostrom 1993). In addition to authority and scope rules, Schlager and Ostrom (1993) also describe boundary rules, which attempt to limit the number of fishers who can access fishing

grounds and the types of technology. The boundary rule most commonly used is the residency rule that require fishers to reside in a particular village to gain access to particular grounds (Schlager and Ostrom 1993).

Interviewees often initially described access protocols in vague or very broad terms. This may reflect the unspoken nature of many protocols used in the past. For example, interviewees often referred to these sets of rules as an "unspoken mutual understanding" or a "gentleman's agreement". However, underlying the generalized statements are much more complex sets of rules as well as the many factors that influence when, where, and to what extent they are applied. Some of the details of these protocols were revealed through descriptions of "how to behave properly" when digging in different places, giving the sense that following protocols was both part of establishing rights and fulfilling duties (Pinkerton and Weinstein 1995).

I have attempted to follow a grounded theory approach and derive categories for protocols from the data itself. I have called protocols related to acting as a steward of the resource when out digging "stewardship protocols" and those related to communicating with and showing respect for those who hold rights of management and exclusion, "indigenous authority protocols". Finally, interviewees also described two "order protocols" that dictate the order in which different users can access clams. The stewardship and order protocols loosely match Schlager and Ostrom's (1993) authority and scope rules, while the indigenous authority protocols are similar to boundary rules.

6.1 Stewardship Protocols

These protocols or sets of rules describe how to take care of the beaches and clams themselves in order to ensure healthy populations for future use. As one elder stated, "If you look after our beach, you are welcome to be here". Articulating stewardship protocols is an attempt to understand what it means to "look after our beach". Another elder suggested the underlying principle here is the concept *Miakula*:

Everybody says it means respect, but respect is just one aspect of that word, it means a way of life, where things are sacred. A walk of life that is sacred and you respect everything, we are all one.

Table 1 describes the stewardship protocols identified and provides example direct quotations, as well as the percentage of interviewees who mentioned each rule.

Stewardship Protocol	Example Direct Quote	% Interviewees Who Mentioned Protocol*
Leave some behind	We always ensure that there are enough left for them to reproduce.	
	Like I said, take care of it, don't go and clean it out and leave some behind for the next who need some. That was always the number one rule in any tribe at the time.	67%
Cultivate or "turn over" beaches through regular digging	Well the digging part is, it is like a farm, you got to keep digging them and the beaches seem to stay soft and clams come back all the time when it is, they look for soft spots and burry themselves like I say, it is like a farm, so you got to work at them.	61%
Alternate beaches	What we did is we always alternated beaches right, we would dig here one or two nights, then we'd see it slowly disappearing, slowly getting scarce, so we would leave it alone and go to another beach, so we won't kill the beaches. If you over-dig them, you wipe them out, so we used to alternate beaches.	56%
Leave clams alone when spawning	Leave them alone when they were spawning, let them multiply because in the winter time that is all we did, we practically lived on them.	39%
Leave time for regeneration between digging	And we figured out that, every two tides, you can go back to the beach again, that gave us an indicator of how long we could be at one beach, when we could go back, that was part of management.	39%
Leave small ones behind	Most of us did that. We only took the medium size and the large and left the little ones.	39%

Table 1. Clam stewardship protocols described by Kwakwaka'wakw elders and clam diggers.

* Only transcribed interviews were included as data to determine percentage of interviewees who mentioned protocol.

The percentage of interviewees who mentioned each protocol listed in Table 1 could act as a proxy for community consensus and understanding of the rule. However, I am cautious in making this claim since I did not specifically ask about each of these protocols in each interview, but rather identification of a protocol arose from the overall discussions about past and present clam management. Furthermore, these results represent the knowledge of mostly older clam diggers and elders whom community members recommended as participants due to their knowledge of the topic. One possibility for further research at the community level would be to conduct a survey using the above categories as a starting point. The most frequently described protocols were leave some behind (67%), cultivate or "turn-over" beaches through regular digging (61%), and alternate beaches (56%) (Table 1). It is relevant to note that DFO also enforces size restrictions on clams (see Section 2.2 and 2.3). However, in interview questions about size restrictions I asked interviewees to distinguish between DFO rules and those created and enforced at the community level.

Many participants are concerned about the lack of understanding and application of these protocols by the "new-age" or younger generation of clam diggers. Most frequently described are the "new-age" diggers' lack of alternating beaches, and following each other's lights so that they all end up digging at the same place at the same time. This in turn has the effect of leaving many beaches uncultivated. In addition, older diggers described the practices of new diggers as

"cleaning out" the beaches, instead of leaving some behind. For example, an

elder describes the changing respect of stewardship protocols:

...they knew when a beach had to be turned over and dug. Even today, there are a lot of older clam diggers who know that. Not the younger clam diggers, they will rape the whole beach and hardly leave anything and won't go to the small beaches and they need to be dug but they're not being turned over. It is quite a different generation now.

In addition to problems with younger generation diggers knowing about

and applying stewardship protocols, some interviewees suggest that DFO rules

and enforcement may interfere with some important practices. For example,

there is a concern that closure of beaches (due to contamination) means that the

clams are not being properly "turned over":

I told the fishery [DFO] about that a few times. If you leave that beach, if you are gonna close this down, you are gonna look at it the next year or two years from today and it's gonna be all spoiled. It is gonna spoil the beach because you got to keep going, keep digging it every year eh? I got that word from my father.

Others suggest the lack of cultivation might increase the severity or rate of

impact of fish farm wastes on the beaches:

Well... it's hard to say what is happening if they are not being cultivated and they are being contaminated by the fish farms. Who's to say that it's gonna accelerate, and the build up of the toxins coming out of the fish farms won't be moved.

Recent declines in the littleneck clam fishery have led to fewer openings in

Area G. Many people connect the changing digging practices of the "new-age"

diggers with the recent declines³². In turn, the changes in diggers' behaviour was

³² Changing digging practices of "new-age" diggers was the second most frequently mentioned reason for the littleneck declines, after potential impacts from fish farm contaminants.

attributed to the loss of opportunities to learn the appropriate protocols according to indigenous educational practices, and the principles such as *Miakula* upon which the protocols are based. While it is likely many factors have impacted littleneck declines³³, I have chosen to consider further the idea of loss of educational opportunities (explored in Section 6.5 *Teaching Protocols to New Generations*) since this explanation was repeatedly emphasized by interviewees and reflecting on its role in maintaining a viable management system fits the goals of this study.

Intertwined with the loss of educational opportunities, is the reality of the different nature of digging for food compared to digging for commercial purposes. It must be acknowledged that these two practices have inherently different limits. Digging for food is self-limiting whereas commercial digging is limited by the ability of the digger and the available markets to sell clams. This change in limits underlies the changing attitudes and behaviours of clam diggers, in addition to the loss of opportunities to learn about indigenous clam management.

6.2 Indigenous Authority Protocols

Two indigenous authority protocols emerged from the data: indicate or communicate your presence and intention, and reciprocate for privileges to use the resource. The following story from a Kwakwaka'wakw hereditary chief provides an excellent example of following these protocols in order to gain access rights to clam beaches:

³³ Such as cumulative impacts from fish farm wastes, other sources of pollution and potential impacts from climate change. Rates of recruitment in clam populations vary widely from year to year as a result of environmental, as well as harvesting factors (Mitchell 1997).

I went to visit a chief in Hopetown and I asked him permission to dig in his territory and he stopped me from talking and he changed the subject right away. So, he says were gonna go eat now he says. So we went to his house and he got his wife to cook for us and we talked for 4 hours. I left to get the grease for him, my dad said make sure you bring him a bottle of grease, so I brought him the eulachon grease. And he said to me just as I was leaving he said, you don't have to ask for permission... you come to say hello, but if I see you, you don't have to come say hello. I know you are here. I know you are going to go dig clams, you have my permission. If you see me in your territory, come say hi, or I'll come see you. Just to let you know what I'm doing.

According to many interviewees, a clam digger in the past (including during the early commercial period) was expected to satisfy the same stewardship protocols in many different contexts: whether in your territory or the territory of others, whether digging for food or commercial purposes³⁴. If a digger did not follow these protocols and take care of the beaches, he or she was at risk of loosing their access rights. However, protocols related to respecting indigenous authority were both more difficult to define and more fluid in their application in different contexts. Table 2 describes the indigenous authority protocols identified, and provides examples of direct quotations, as well as the percentage of interviewees who mentioned each rule.

³⁴ However, it is important to note the different limits to the food versus commercial harvests, and acknowledge the potential for this difference to impact the way stewardship protocols were followed.

Indigenous Authority Protocol	Example Direct Quote	% Interviewees Who Mentioned Protocol*
Indicate or communicate your presence & intention	Yeah, like I say they just asked permission to go and dig, they dug, they were just kind of a very, there wasn't really kind of a formal thing it was just kind of an understanding.	78%
	You'd get permission. The head of the family, is the chief of the family. And you would have to ask.	
Reciprocate for privileges to use the resource	everyone respected each other, you would bring some clams, but it wouldn't be formal.	
	I understand the meaning of protocol. It was sort of bred into me like my grandmothers stories. Like you get and you give. It was just out of respect for allowing me into their territory to dig. So I thought one way to pay them back is to take them out in my boat.	61%

Table 2. Indigenous authority protocols described by Kwakwaka'wakw elders and clam diggers.

* Only transcribed interviews were included as data to determine percentage of interviewees who mentioned protocol.

While interviewees mentioned both indigenous authority protocols more frequently than most stewardship protocols, many different ideas were shared about how, when, and to what strength these protocols should be applied. The strictest application of "indicate or communicate your presence and intention" is to ask for formal permission to dig from the hereditary chief. In the most relaxed application of this protocol, a digger might mention to a relative where they are planning to dig or might somehow make their presence known in the area prior to digging. As for the second protocol, reciprocating for privileges to use a resource, one might bring an item to formally trade for the access right, or on the other hand, one might reciprocate very informally through an on-going family relationship. Two factors seem to affect application of indigenous authority

protocols in different contexts:

- Strength of family connections
- Scale of use

An increase in the strength of family connections decreases the need for formal

requests for permission to dig, as well as the need for an explicit trade or barter:

The protocol would be to come to the village and tell the people and go and find out if they did have something to trade with us. It was all done with trade, or good will, or if one of my family, say I had an aunt that married up there. If she had a family tie to that beach, then all they'd have to do is say, okay that is my nephew over there and he's coming to dig clams on my beach.

Another example suggests that with increased family connections indigenous

authority protocols were less formal. However, diggers are still expected to follow

stewardship protocols:

You always had relatives in every one of them [villages] so you were welcome to everything that they had too. Just look out for the beach, don't over do it, just take whatever you need.

However, people coming from a more distant place with no family connections

would be subject to a stricter requirement for identifying themselves and seeking

permission:

They [people from further north] would have to be granted permission...If there was a good place to go, we would let them know where it is.

In general, an increase in the scale of use requires a more formal

identification of intention and request for permission, and increases the need for

trade of resources or access rights. The larger the number of people wanting

access, the greater the need for an agreement between namima or tribes.

Adaptations to protocol for larger scale access in some cases involved a

seasonal exchange of access rights for available resources:

...like in the past when you look over at the Nimpkish valley there you see the mouth of the river and that is where the 'Namgis had control over the salmon, so in order for the mainland (inlets) natives to get their sockeye from the Nimpkish river they used to trade and barter. The 'Namgis were allowed to go into their territory to collect, that was a barter system and a protocol agreement that they had.... They would come here when there were loads of fish in the Nimpkish and then during the winter the 'Namgis would go into the mainland inlets and dig. It was just the system that through protocol was so great.

In this example, the communication of intention and formal exchange took place at the tribe level as opposed to via individual diggers approaching the appropriate chief. This arrangement allowed for the tribes to access resources which they were lacking in their own territories. Today, this system has broken down with the collapse of the salmon stocks in the Nimpkish River. However, the reciprocity has continued through key 'Namgis fishermen fishing passing Fraser stocks for food for the people living in Gilford and Kingcome villages.

These examples suggest the application of indigenous authority protocols depends on degree of family connections and the scale of use. In effect, these protocols are acting as boundary rules setting up who is in or out of a user community in particular contexts. Individuals derive membership in the user group through tribe affiliation in the immediate territory, through family connections to that tribe or through the exchange of goods or services. While hereditary chiefs hold the management right to grant or refuse permission, and to accept or refuse an offer of trade or exchange, they are also subject to some order protocols, which order the access rights of those in the user group.

6.3 Order Protocols

Interviewees suggested two order protocols, or rules that dictate the order in which different users can access clams. First, those who are immediate members of a tribe or namima have preference over those who may claim family connections to the immediate group. Shared residence within an indigenous territory may define immediate membership. As will be discussed further in Chapter 7, this system may reflect the indigenous functioning of namima in which individuals could hold membership in more than one namima. However, there tends to be a *dominant affiliation* dependent on residence (Boas 1966). In these terms, the order rules suggests those with a *dominant affiliation* to the group have priority to access resources over those with more secondary affiliations. The chief (of namima or tribe), in turn, applies the order protocol at his discretion with consideration of the resource availability and the need of the immediate group:

One of the things the chiefs always did was they worried about their membership first. Once they got theirs, everybody else was allowed to come in and get their share. It was just like the salmon with the Nimpkish. The Nimpkish had one chief, and he was the head of that river, and he would make sure that all the 'Namgis people got their fish and once the 'Namgis got their fish they would tell the other chiefs that they could come over and get their fish.

Some suggested this kind of order protocol is in use today. For example,

in Gilford, commercial clam digging is a key economic opportunity throughout the
winter months, and clam populations have been in decline. As a result, the elected chief and council are attempting to enforce stricter boundaries about who can access their territory to dig clams. Interviewees suggested the following:

Well, basically Gilford Island as you know, they are kind of tightening up on who can go in there.

Just because there are less and less every year, they are trying to make people stay in their own area.

While this resembles the idea of prioritizing access for those with a *dominant affiliation* to the group, in this case *dominant affiliation* may be defined by band membership, and the decision-making authority seems to sit with the elected chief and council, not hereditary chiefs. These changes in community boundaries and legitimate decision- making authority are considered in relation to changing concepts of social identity in Chapter 7.

The decision to restrict or refuse access is determined by both the degree of affiliation to the immediate group and the degree to which diggers follow the stewardship protocols outlined in Section 6.1. For example, several interviewees described a conflict with non-aboriginal diggers in the early 80s who attempted to use digging machines on local beaches. Interviewees relayed how these diggers were refused access by the chiefs of various villages due to their disrespect for the beaches:

Yeah, family chiefs from all the little villages, they all got together and discussed. And that is what they did, then we restricted priority... because they didn't care what they did, they just literally ruined the beaches. And that was really bad. One hereditary chief explains the strict refusal of those who are not from the community and fail to properly look after the beaches:

As long as you were maintaining the beach and not doing anything to harm the beach... but they were very strict about it. If you did something wrong, you couldn't go back there if you weren't from the community.

The second order protocol is a recent adaptation to the introduction of the

commercial clam fishery. When commercial clam digging began in the late

1930s, the chiefs and elders of each village came together to discuss the need to

protect the home clam beaches, those beaches in front of the villages accessed

regularly by elders for food. The chiefs communicated this decision to all of the

commercial diggers, as a new adaptation to the access protocols. An elder

recounts this adaptation:

But right in front of our houses where we lived it was all beaches, clam beaches, and we sort of kept that, we wouldn't let them sell that. We kept it for our own use. So you could just walk out of your door and walk down to the beach and take a bucket. We had meetings and stuff like that, we'd get together and hash it out and we told them just leave this be for our own use... We all decided just to keep it for our own use.

Another emphasizes the importance of ensuring elders have access to clams for

their own use:

They [clams] were not to be touched eh, because these were for our own use, for our family. Because the old people can't go out with their boats, so they go down on the beach and get a bucket for their supper or something.

This adaptation might be considered an addition of an order protocol, one based

around prioritizing access to food, especially for those less able to get out on

boats. This rule protecting "home beaches" for food uses only, was enforced by the local clam buyer (an important hereditary chief) through refusing to buy clams that came from home beaches, as described by one elder from Village Island,

They [buyer] tell us to leave it alone it is gonna be our own food eh. We'd have to go some place else to sell the clams.

In addition, everyone in the village was there to monitor who was using the beach and for what purpose,

Everybody knows where they are getting that [clams] and they tell us don't go there, that's just for food. Just get enough for yourself just for the night.

When people had moved away from most of the villages in the Broughton Archipelago in the 50s and 60s, the system of "home beaches" kept just for food fell apart with the difficulty of enforcement from a distance. However, in a few places, such as Gilford Island, DFO has recently labelled some of these beaches as FSC beaches, and officially closed them to commercial harvest (DFO 2004).

6.4 Coordination of the Clam Fishery

The application of the above categories to describe access protocols is a useful way to help organize thoughts on these topics. However, examples from interviews show that these two categories are not mutually exclusive. While respecting indigenous authority protocols serves to reinforce the importance of kinship and rank as the key organizing ideas for Kwakwaka'wakw culture (Galois 1994), these protocols also play a very important role in stewardship by allowing for communication and coordination of the harvest through the chief(s). For

example, identifying yourself and indicating your intention not only allows chiefs and elders in a community the opportunity to trace your family connection with the beach, it also allows them to keep track of who is going where and taking what:

They were to come to the chief and ask directly and where they were gonna go and they would let them know if it was alright to dig there. Because they knew if it was, if there was enough clams there to dig, abundance wise.

This type of monitoring and control of resource use by designated individuals, such as chiefs and heads of families within a given territory, is commonly described as part of management practices of other aboriginal groups in British Columbia (Turner et al. 2000). These designated individuals had the direct authority to manage specific resources, such as shellfish beds, and if they noted populations in jeopardy, they could pronounce a harvesting moratorium until the situation improved (Turner et al. 2000).

Today, many diggers describe a lack of communication and trust in the community. They argue that groups heading out to dig clams generally do not know where other groups are planning to go. The inexperienced end up heading to beaches where other groups' lights are visible. The result is increased pressure on a beach that is already under use, while leaving other beaches without cultivation. There is a need for coordination of the harvest, a role that, in the past, belonged to chiefs (of namima or tribe):

I was told you know in the olden days, in order for us to survive, all the clans people, to keep the clans in-tact we had to come to the chief, like you said a subchief, make sure, at least this is what I was told, we all don't go harvest the beach. In the same way as chiefs were coordinating who was going digging where, they were keeping track of the quantity harvested from particular areas:

I think, the only way we found out [how many clams] is that they come back here and see how many they got on board and they report to the chief, name of the beach...They'd give you the Indian name of the beach. In those days like I said they filled the canoe up that's all, we don't know how many sacs, how many boxes.

In this description, the names of beaches served as a means for more effective communication. As a result, there was greater understanding of the intensity and distribution of resource use in given territories. Today, only a few elders know some of the Kwak'wala names for beaches. Mapping and translating these beach names may be a very important step towards improving communication. The Kwak'wala naming system may provide a more detailed, specific understanding of local geography to allow for the effective use of the small, rocky pocket beaches that this area contains. Naming and knowing where these smaller beaches are on a map, may help to increase their use, and in turn reduce pressure on other larger beaches. Connected with the knowledge of Kwak'wala names of beaches is the changing opportunity for education about the indigenous clam management system, discussed in the following section (Section 6.5).

Coordination, leadership, and communication continued to play a big role in the management of the clam fishery as commercial digging began in the late 1930s. The hereditary chief of the Kwicksutaineuk from Gilford Island at the time initiated the commercial fishery in the area by making a deal with BC Packers to buy clams from the local diggers and deliver them to Vancouver. He coordinated

with the chiefs of every village about the start of a commercial fishery, and his role as the buyer. He was in charge of knowing where clams came from, and

who dug how many. As described by a commercial digger from this early period:

He was a chief and he managed the openings and closures...and how he managed it was, he used to be the clam buyer. So he would buy the clams, and he'd say okay, we've taken enough from here and we've taken enough from there.

The role of clam buyer was a natural adaptation from the hereditary chief role in which coordinating and communicating were major functions.

6.5 Teaching Protocols to New Generations

Many of the older clam diggers and elders I interviewed were concerned about the digging practices of younger generations. While many elders indicated that stewardship protocols were followed while digging for food and for commercial purposes in the early commercial digging period, there are clearly different limits to food versus commercial harvest. Digging for food purposes tends to be self-limiting, whereas potential commercial harvests are limited only by digging ability and markets. This difference in limits between food and commercial harvest and the influence of the cash economy can not be ignored as important drivers of changing clam digger behavior, including not following stewardship protocols.

However, some people also suggested that younger generations did not have the opportunity to learn protocols. For example:

The new-age people don't have the same upbringing and they are not aware of the rules and regulations that the old people, the unspoken law that is in place. There is nobody left to uphold that. The younger generation seem to have a free hand to do what they want to do and there is nobody taking a stand and saying you know you are not supposed to do it.

This experience of the loss of knowledge among younger generations is not

unique. Traditional knowledge in most indigenous groups has inevitably

diminished as assimilation and environmental change have escalated (Turner et

al. 2000). In earlier times, educational opportunities for learning about protocols

were part of early experiences as a child, digging with family members on a

beach just in front of their home village:

...Take care of it, don't go and clean it out and leave some behind for the next who need some. That was always the number one rule in any tribe at the time. I hear about it, but I was taught it when I was a kid. But I don't hear that said anymore now. Maybe because all the old people are gone now.

The kind of approach to teaching and learning used in these circumstances

emphasizes mimicking elders and learning by trial and error:

...we didn't have to be taught, we followed. When we were growing up we did what we had to. Learn from your mistakes they say.

Ross (1992) describes this as a modelling approach to education, which requires that one watch, and watch again. This approach reflects the difficulties of expressing in words, what has to be learned (Ross 1992). Instead, each person must immerse him or herself in the enterprise and develop their own skills (Ross 1992).

The residential school system and the move away from home villages left people without easy access to clam beaches, and in turn disrupted the ability to transmit knowledge according to indigenous educational methods. Those who have not had the opportunity to grow up near clam beaches have had little opportunity to learn about protocols. As Schreiber states with regard to fishing salmon, "when people are no longer engaged in fishing, they are unable to teach their children the things they know about salmon through their everyday involvement with the fish" (Schreiber 2003: 92). The loss of boats in Kwakwaka'wakw communities and the increase in pollution has further reduced involvement in the clam fishery (either food or commercial). In effect, it is not only the traditional knowledge itself that is threatened, but also the possibilities for continued expression and reproduction of this knowledge and the mode of production that it engenders (Turner et al. 2000).

Declining opportunities to transmit knowledge between generations according to indigenous modes of production, affects not only understanding of access protocols ("institutional" knowledge) but also specific ecological knowledge. Ecological knowledge of beaches includes type of species, abundance, and length of time you can expect to dig. For example, one man recalls his grandfather's knowledge of beaches where you could get access earlier and dig longer:

Only I know that my grandfather said that we can go to this beach because you can get access to the beach before the 3 foot tide. And that is what most of the rock, the clam terraces, were made to be above the tide at the 3-foot mark because the rock faces were built to a certain height and it was levelled off to go to most of these beaches. Once it gets down to the 3-foot mark you could start digging and dig longer and sooner. Because the beach wasn't sloped the way they usually are, you would have enough time on the beach. This is what my grandfather said, oh we'll go to this beach because it will get drier faster. And they know that back then. When you got a longer time to dig on the beaches and more level, easier to manage that way. More recently, some explicit attempts to teach protocols and share ecological

knowledge have taken place. An elder describes his experience when hired to

educate youth about clam digging:

I got hired by Kingcome last February to take the youth out to harvest seafood and they were all hyped up about it and they got aboard and we went to this beach and we all got off on this beach and these three young guys were just standing there not moving. Well... they didn't know what the clam fork was for. And so they dragged them along and showed them all the digging and that, but he forgot to tell them how big you can take. They dug, the size didn't matter to them. They didn't know. Everything that squirted and looked alive they threw in the bucket. And that's the way the youth are now today.

He suggested that more activities or events such as this should take place to

educate younger generations via direct experience. Furthermore, others suggest

that new ways of transmitting knowledge between generations are necessary

such as conferences and meetings with chiefs and elders.

The following chapter seeks to build upon this description of access

protocols, and the opportunities and challenges faced by Kwakwaka'wakw

communities in re-conceptualizing these institutions for management today.

Chapter 7 focuses specifically on how the complexities of social identity in

Kwakwaka'wakw communities today relate to local institution-building.

CHAPTER 7: SOCIAL IDENTITY & LOCAL INSTITUTIONS

7.1 Social Identity

Social identity can be described as, "that part of an individual's selfconcept which derives from one's knowledge of one's membership in a social group (or groups), together with the value and emotional significance attached to that membership" (Tajfel 1982: 2). In a direct way, it is the response one gives to the question, "who are you?" When individuals experience intercultural contact, the issue of who they are comes to the fore, and is part of the process of acculturation or culture change resulting from contact between two autonomous cultural groups (Berry 1999). A process of acculturation has massively influenced lives of contemporary First Nations, and one of the most important changes has been the disruption of social identity (Berry 1999).

This chapter attempts to consider how the complexities of social identity in Kwakwaka'wakw communities today relate to local resource management, and to the challenges and opportunities of revitalizing and implementing indigenous management institutions. I begin by considering Kwakwaka'wakw social organizations as sources of indigenous social identity, and then consider how the imposition of external administrative structures and group boundaries has affected indigenous social identities. I will then describe some of the social identities people give value and significance to today, as interpreted from interviewees.

I suggest there are two major aspects of how social identity interacts with local institutions. First, negotiating social identity affects the process of defining community boundaries through granting access rights and implementing management and exclusion rights. Second, the negotiation of social identity impacts the legitimacy of various authorities, in other words, who legitimately holds rights of management and exclusion. Finally, I consider briefly how negotiating social identities is affected by the BC treaty negotiation process as a means for achieving self-government.

7.2 Nature and Sources of Social Identity

Kwakwaka'wakw community members hold many types of social identities. However, in the context of local resource management institutions two types of identities interact with access, management and exclusion rights. The first source of social identity is band membership, which defines which Indian Band an individual is a member of as according to the *Indian Act [1951]*. As will be discussed further below, in the 20th century, the administrative units created by the DIA³⁵, came to bear significantly on Kwakwaka'wakw social organization (Lando 1988).

The other source of identity could be called indigenous social identity (s), based on a complex set of relationships built upon ancestral lineages and marriages. Through the potlatch, indigenous social identities are shared with the wider Kwakwaka'wakw community and recorded in the memories of those who attend. The size of the audience who bear witness to the event secures the

³⁵ Today called Indian and Northern Affairs Canada (INAC).

legitimacy of these expressions of lineage, heritage, and identity, including passing on of names and positions and marriages linking families. A key difference between the two sources of identity is that taking membership in Bands requires an individual to hold a single identity whereas the indigenous system of identity allows one individual to hold multiple social identities, and express this complex of identities through the potlatch.

The namima in early times was the fundamental unit of social organization and property tenure for the Kwakwaka'wakw (Lando1988), and thus membership in a namima acted as a source of social identity and as a source of property rights to resources. Namima groups traced membership through bilateral descent, which in practice meant diversity in the composition of the namima and, considerable flexibility for individual members (Galois 1994). This fluidity increased during the historic period by the dramatic decline in population (Galois 1994). While an individual may share membership in more than one namima, there tends to be a *dominant affiliation* that is dependent on residence (Boas 1966). While it was desirable to have namima members external to the central lineage, the power to admit outsiders remained with the hereditary founders (Lando 1988).

By the end of the 19th century, the namima ceased to be regarded as the primary source of social organization and unit of property tenure (Lando 1998, Galois 1994). A new village unit composed of an association of namima linked through marriage and exchange relations emerged in the 19th century as a form of prestigious corporate association (Lando 1988). These independent village

groups comprised several namima united under one tribe's name (Lando 1988). The initial forum for the expression of the identity of these new units (tribes) was the potlatch (Lando 1988). Later, in the second half of the 19th century, as the pressures of under-population of village groups increased further, co-residence of under populated tribes took place (Lando 1988). While namima joined to form tribes, and later tribes joined to form confederacies, these amalgamations were likely strategies adopted to ensure the continuity of the namima legacies. However, they also led to confusion and the weakening of the namima as a cohesive unit of social organization (Lando 1988).

In the 20th century, when the DIA created administrative units (Indian Bands), which combined autonomous tribes, the Kwakwaka'wakw tribes lost much of their distinctiveness (Lando 1988). Membership in DIA bands acquired added significance as trust funds were established. Proceeds from trust fund accounts were administered on behalf of the DIA band rather than the indigenous property-holding units. The indigenous units of social organization (both namima and tribes) also lost their distinctiveness through the ban on potlatching, which acted as the means for celebrating the structure of the participating groups. Lando (1988) suggests that many tribes may have retained their corporate independence had they not been regarded as a single unit by the DIA and been deprived of the opportunity to potlatch in their respective names. He states, "As the DIA administrative units rose to prominence in the 20th century, the native units became obscured in their intrusive shadow" (Lando 1988: 123).

Starting in 1940, the DIA affected indigenous social organization further through the administrative reorganization of village groups. The 1950 amalgamation of the 'Namgis tribe with the remnants of other tribes living in Alert Bay exemplifies this DIA policy. To ensure that this amalgamation was integrated within the social organization of the village, the DIA insisted upon the election of a village council to manage local affairs. The DIA defined the electorate according to residence rather than tribal affiliation (Lando 1988). The council was to represent the interests of the village rather than the indigenous units of organization living there.

Furthermore, by establishing minimum population requirements for the funding of health clinics and schools, the DIA attempted to encourage the further amalgamation of administrative units. For example, centralization policies forced residents of villages in the Broughton Archipelago islands and inlets of the mainland to move to Alert Bay and take up membership in the 'Nimpkish Indian Band³⁶. By the mid 20th century, it was typical for people to refer to territories in terms of the DIA administrative units (Lando 1988). These new units of land tenure and social organization instituted by the DIA were simply convenient from an administrative perspective (Lando 1988). The new units of land tenure were based on Indian reserves, and excluded the larger traditional territory held by indigenous units of social organization. Today, Aboriginal rights and title beyond reserve boundaries have been recognized in the Canadian Constitution of 1982,

³⁶ Today known as the 'Namgis First Nation

and in a variety of legal decisions in the past few decades³⁷. Lando (1988: 127) summarizes the disconnection between indigenous social organization and DIA imposed units,

The settlement of the Northwest coast under a British colonial administration required that the indigenous inhabitants be accorded title or compensation for their indigenous territories. In order to administer this undertaking the colonial authority (followed by the Federal authority) designated certain population groups as tenured units. These units were not necessarily the residential groups created in response to the 19th century population crisis. They were certainly not the native property holding units. They were tribes, or groups of tribes, living within close proximity to each other.

While the above description relates to past conceptualizations of

indigenous social identity, and the impact of the imposition of alternate forms of social organization, how do local people describe indigenous social identity today? There appears to be many ways in which those I interviewed describe a social identity outside of band membership. One way to describe an indigenous social identity may be through affiliation with a "home village" tribe. For example of the 13 'Namgis First Nation members I interviewed, 3 identified their home village as Turnour Island (Lawitsis), 7 identified their home village as Village Island (Mamalilikala), 1 identified as Ma'amtagila and only 2 identified their home

³⁷ In 1973 the *Calde*r case, on the question of whether or not Nisga'a title to their homelands had been extinguished, made it to the Supreme Court of Canada. Although the judges were split and the Nisga'a finally lost on the basis of a technicality, within six months of the decision in *Calder* the federal government announced a new "cash for land" treaty policy. Only two years later in 1975 the James Bay Northern Quebec Agreement was signed the first modern treaty in a Canadian province. Seven years later Aboriginal rights were recognized and affirmed in the Canadian Constitution of 1982. More recently, important decisions regarding Aboriginal rights and title include: *R. v. Sparrow* [1990], *R. v. Delgamuukw* [1997], *Haida Nation v. British Columbia* [2004], *Taku River Tlingit First Nation v. British Columbia* [2004], *Tsilhqot'in Nation v. British Columbia* [2007].

village as Alert Bay³⁸ ('Namgis). Even this small sample suggest the heterogeneity of 'Namgis First Nation band membership, and perhaps indicates that the diversity of tribal affiliations within the 'Namgis First Nation is greater in those who dig clams. In other words, more of the 'Namgis First Nation members who dig clams also derive an indigenous social identity from the island villages of the Broughton Archipelago:

Now to understand the 'Namgis, a lot of people from the other tribes moved there and took membership there. Like people from Mamalilikala, Village Island, Turnour Island, I'm not sure if Gilford took membership in the 'Namgis tribe, and those are the people that are coming back [to dig clams].

While indigenous social identity may be constructed as membership in a

tribe and connected with a home village, there are also more complex aspects of

indigenous social identity. For example, membership in a tribe does not reflect

the family relations forged throughout a long history of inter-marriage between

tribes and families, which act as further sources of social identity. For example, a

father describes the multiple social identities of his son, traced through his

marriage:

And you know, if you look at the dowry that came over when I married my wife, my son is a chief in Kingcome inlet. He is registered with the Namgis band, but he is in Kingcome so high over there that what can I say, it came with my wife.

Figure 3 describes the complex lineage of one local man, which makes up his indigenous social identity, in other words, how he describes who he is.

³⁸ While today the 'Namgis "home village" is the village of Yalis or Alert Bay on Cormorant Island, their original village was Xwalkw (or Cheslakees) at the mouth of the Nimpkish River on Vancouver Island. The move to Alert Bay took place in the 1870s.



Figure 3. A representation of the indigenous social identity of one 'Namgis band member.

Notes: Corresponding Home Villages: Ma'amtagila (Estekin); 'Namgis (Cheslakees); Mamalilikala (Village Island); Tlawitsis (Turnour Island). This individual described an "Eagle Position" as the high-standing position a woman holds who has a chiefmanship³⁹ passed to her since chiefmanships can only be held by men.

Figure 3 shows the potential complexity of an indigenous social identity, which in

this case provides social affiliation in four different tribes, Ma'amtagila,

Mamalilikala, 'Namgis and Lawitsis, in addition to 'Namgis First Nation band

membership.

While the example in Figure 3 demonstrates a complex social identity

connected with many tribes, it does not distinguish particular namima affiliation.

Is there a role for namima as source of social identity today? Rohner (1967)

³⁹ "Chiefmanship" was the term used by several interviewees to refer to a hereditary chief position. In the anthropological literature the term "chieftainship" is used.

writes that most people in Gilford in the 1960s did not remember either the names of the namima or to which ones they belonged. Lando (1988) suggests the namima may have become a specialized concept shared by a few Kwakwaka'wakw elders, anthropologists and individuals involved in cultural revitalization.

However, today efforts towards cultural revitalization have broadened. For example, the 'Namgis First Nation is undertaking a research project to record the origin stories of the five namima of the 'Namgis tribe. The goal is to create a manual that will be provided free of charge to each 'Namgis household. These initiatives suggest an attempt to revive the knowledge base for namima structure and composition. As one interviewee states:

I mean, as a child I'd never even heard about clans. I mean, I never heard about that: that is just a recent thing. I mean our culture has boomed in this last 20 or so years.⁴⁰

While this suggests a renewed interest in indigenous social identities, the current 'Namgis First Nation project to record the origin stories of the five namima of the 'Namgis tribe does not consider the other Kwakwaka'wakw tribes that took membership in the 'Namgis First Nation and have their own unique namima history.

The cultural revitalization of indigenous social identities is playing out in many contexts, but especially in the renewal of potlatching traditions. Potlatching

⁴⁰ Several people use the word 'clan' to refer to namima, in that they are both subunits of a tribal grouping.

today and in the past is a way of communicating social identities. One man

suggests the time has come for his family to hold a potlatch:

It is time to let the people know just who and what we are, that it goes back. A lot of people don't think we know it, but it's ours. We own dances from Bella Bella, we own dances from Campbell, we own dance from other places. My grandfather was hereditary chief, my mothers side was hereditary chief.

The following section considers how social identity, an aspect of the nature of

community, connects to the institutional structures for managing local resources.

7.3 Social Identity, Community Boundaries and Legitimate Authority

In the past, indigenous social identity derived through family connections

with different groups (namima or tribe) has been the means for accessing

resources:

Family relations give us rights in different territories... because of the blood ties we had with people, they have a similar right to what I have here, regardless of what tribe they are from.

The importance of the knowledge of names reveals the tie between access and

indigenous social identities. To have the appropriate application of access

protocols, there is a need for an individual to reveal his/her social identity. How

one reveals an indigenous social identity, for example emphasizing different

affiliations, may depend on the territory in which one seeks access to resources:

I was trying to correlate the names that we have with the rights that we have in villages that we went to. They actually gave you rights to go get grease, to go get seals, clams, deer. Any of those things you had to have a right to go and that's where the names come in. That is why the names were so important. It was also the responsibility of the owner of those names to remember those names because sometimes they didn't know each other. So they would walk up to the other person and say "who are you" ... and if you were in their territory they should know your name because that is the name you used in their territory, because that will get you rights.

The names indicate the nature and status of your membership in a particular group. By revealing your social identity, essentially who you are, the holder of management and exclusion rights can determine what, if any, access you should have based on the strength of your affiliation, the amount you intend to harvest and what you may have to offer as a trade or reciprocation. While names tie you to different social identities which in turn provide access rights to resources in different territories, the management and exclusion rights remain with the chiefs of the tribe or namima in that territory. This system fits with the description of namima property tenures in that the power to admit outsiders remains with the hereditary founders (Lando 1988). So, while an individual might have multiple affiliations (to tribes or namima) that act as a source of access rights, the *dominant affiliation* is the social identity through which he/she gains management and exclusion rights. Applying Schlager and Ostrom's (1993) framework, affiliation through shared social identity is a source of operationallevel rights, whereas *dominant affiliation* is a source of collective-choice rights. In the past, *dominant affiliation* was based on residence. However, today given the externally imposed co-residence of many tribes in Alert Bay, an important question may be what constitutes the basis for *dominant affiliation*?

There is a major distinction between holding granted access rights and holding the rights of management and exclusion. This difference creates

confusion, especially in a case where an individual or group has been granted long-standing access rights. While the following story describes access rights to use songs and dances in the potlatch, it illustrates this challenge:

These young so-called hereditary chiefs, somebody else does their dance and uses their song, and he's standing there blood red saying you can use that that's mine that's ours, not realizing how it got there and how it is done. See like, if you married somebody in a different tribe, so you became one, and then either the woman's family gives you that song and that dance along with their daughter, gives you the *right to use it*. But these idiots of today, they say no that is ours, without looking into it. They have the right to use it.

There is a legal parallel between the distinction of having the "right to use it" versus having ownership (i.e. "that is ours"), which is the difference between aboriginal rights versus aboriginal title. Title implies ownership whereas rights allow for access for the purposes of using a resource. An example from day to day relationships with property might help explain this. For instance, a neighbor might say it is no problem for you to use their hammer whenever you need it. From then on you and the neighbor share the hammer. However, the difference is you have been granted long-standing access rights to the hammer whereas the neighbor is the owner of the hammer. The neighbor retains ownership and can make decisions regarding who, when, where and how much others use the hammer if necessary.

Making decisions about when, where, and how much of a resource is harvested can be referred to as exercising management rights. Making decisions about who can access a resource can be referred to as exercising exclusion rights. Implementing the system of protocols described in Chapter 6 is akin to

exercising the rights of management and exclusion. The hereditary chiefs of tribes or the chiefs of namima hold the authority to exercise these rights. In the case of namima chief authority over specific beaches, one ancestral lineage grouping would hold the management and exclusion rights for particular beaches and would make decisions about who could have access rights in particular circumstances. If ownership is defined as holding access, management and exclusion rights⁴¹, then the situation of namima chief authority amounts to family ownership of beaches. Most Kwakwaka'wakw individuals involved with contemporary ceremonialism regard the "family" as heir to the possessions once associated with the namima⁴² (Lando 1988).

A few elders referred to family ownership of clam beaches in the early, early days (pre and early contact). There is also evidence from archaeology that families lived right next to clam beaches throughout the winter and were likely enhancing the beaches through building rock walls (Williams 2006). One interviewee explains past family ownership of beaches:

But it all had a piece about it, especially about who owns it because a lot of these beaches were owned by families and they had to be handed down and everybody needed to know who owned it now and who runs it, that kind of thing.

⁴¹ While institutional economists describe ownership as a situation where access, withdrawal, management, exclusion and alienation rights are held (Schlager and Ostrom 1993), the cultural ecology approach highlights, that from the perspective of many First Nations, the concept of alienation of traditional property rights is culturally inappropriate. Instead, transfer of property rights is regulated through inheritance rules (Pinkerton and Weinstein 1995).

⁴² Lando (1988) suggest that the term "family" is currently used to denote a wide range of relations and should be considered the primary point of social reference within contemporary Kwakiutl social organization. Further study could determine the extent to which the contemporary Kwakiutl "family" resembles the namima (Lando 1988:151).

Many early ethnographers who studied the Kwakwaka'wakw considered territorial exclusivity as an integral part of the identity of the descent group or namima (Boas 1921; Drucker 1965; Codere 1950). A namima's territories included clam beaches that became the focus of harvesting energies after the salmon fishing season (Lando 1988).

However, other interviewees insisted that ownership of beaches was not part of management in the past or today. In the 1930s, Boas observed an example of discord between generations concerning the limits of the namima's territorial exclusivity (Boas 1934: 37). It may be that the knowledge of family ownership was lost through the changes associated with contact and colonial policies, or that the need for this type of regulation was less with a smaller population. One elder explains this idea:

You know when we were a population of 4000 it really mattered back then, but when the population declined, the beaches were so plentiful it could sustain the last little bit of people that were there. Part I'm telling you about with the family beaches, that was in the early, early days. In the early and late 1800s. Because there were so many people around then. And after Canada wide when the native people started dying off from small pox, that kind of system didn't need to be enforced anymore, because there were not the people.

Today, elements of this system of family ownership of beaches may still exist but in a much less salient form. For instance, several people suggested that there is a sort of "family familiarity" with certain beaches that may reflect upon a past system of family ownership. One man recalls how families would take their relatives from other villages to their beaches: Like, okay, when a family comes out of Kingcome, so I'm a Johnson say the Willie family comes out, well they got the Willie family down there and they go out with them to the beaches they want to go, they talk to the family, the household itself here tells them this is where we're gonna go and take so much out. That is what my dad told me anyway.

Elements of the past system of management, including family familiarity with beaches and respecting certain access protocols, are evident today. However, one of the challenges of applying indigenous institutions is the issue of who holds the rights to implement and enforce protocols today including exclusion of diggers from certain areas.

There are two sources of authority for exercising management and exclusion rights at the local level today, which relate to social identity. On the one hand, authority is available through elected status as a chief or councillor through the band membership, and on the other hand, recognition as a hereditary chief by your indigenous lineage, and the Kwakwaka'wakw community more broadly, is another source of authority. One man describes the complexity of holding a band membership identity that only partially overlaps with his indigenous identity, and the challenges of articulating his authority as a decision-maker in this context:

I keep reminding them that I'm a 'Namgis on paper but my heart is where I come from. They tell me I don't have a right and I say yes I do, I say look at the history of the chiefs from where I come from.

The question of who holds management authority within the community interweaves with questions of identity. Potlatching today acts as a means to expose and legitimate indigenous social identities. Along with exposing indigenous social identities, potlatches are a way to reveal and confirm property rights, such as those related to songs, dances and masks, which derive from those identities. Does this process extend to revealing how property rights over resources derive from indigenous social identities? Some suggest the Kwakwaka'wakw are moving in this direction, through defining hereditary chiefs and their roles:

That is something that we are working out right now. The portion of the management to the chiefs has been lost up until today. But what we are doing today is defining the chiefs.

One challenge that comes along with redefining the hereditary system of

authority and their role in management is negotiating the legitimacy of different

claims:

I mean that is the thing, you know, there are so many people that want to be chiefs today and everybody, you know, but they are not following the big house system that is the problem. Sometimes we have to be tough and say hey you are not a chief, unless you have a potlatch or a feast or anything like that, you know, you can't just say I'm a chief. We have a few of them in there that do that, but nobody speaks up because they don't want to cause friction. But in order to get your houses right, you've got to do it.

The challenge of negotiating legitimacy of different claims to indigenous authority

is connected to the challenges of the population crisis suffered by the

Kwakwaka'wakw. As the population declined, legitimate heirs to lineage

possessions became increasingly scarce (Lando 1988). Kwakwaka'wakw

developed several strategies for the maintenance of the ranked structure of the

namima. The relaxation of inheritance requirements constituted one scheme, and

the concentration of several ranked names upon single individuals constituted

another (Lando 1988). The compiling of several ranked positions by individual nobles was a source of confusion in a period of rapid change. This situation compounded when an individual held ranked positions in more than one namima or tribe (Lando 1988).

It is a great challenge to negotiate the legitimacy of different claims to indigenous authority and to discuss and articulate the role of hereditary chiefs in relation to elected chiefs and council. Both these challenges are under further strain as the treaty process moves forward, as an external force creating power dynamics that directly affect the negotiation of social identities and legitimate authority.

7.4 Negotiating Social Identities in the Context of Treaty

The relevance of understanding the complexity of social identity and its' relationship to local resource management institutions is heightened when placed in the context of First Nations self-government, and treaty negotiations as a means for achieving self-government. Asante (2005: 2) writes, "Aboriginal self-government has become the political context within which a group of Canadians are being invited to negotiate their identities and regain access to social, economic and political resources of a society in which they have been marginalized". The obligation placed on Canadian governments by the Supreme Court of Canada is to negotiate with band councils (Asante 2005). Band Councils have become the legal identity or empowered unit that is recognized under Canadian law. Therefore, the social identity that is most salient, in the eyes of power and politics, both within communities and in Canadian society at large, is

that of band membership. As a result, the complex indigenous social identities that tied tribes and families together are de-emphasized along with the access rights that derive from these ties. Elders especially express concern about the impacts of the treaty process on the way in which families share access to resources.

Along with claiming rights and title, treaty negotiations involve claims about categories of individuals who share a given identity. This process can be described as "identity politics" and allows for a kind of abstraction from the social relationships within which identities are constantly renegotiated, in which individual's present one identity as more salient than another, and obtain some sort of continuity and balance among their various sorts of identities (Asante 2005). Treaty negotiations create imbalances of resources between First Nations who choose to work inside the Treaty process and those who choose to stay outside. Furthermore, engagement in the Treaty process or in legal actions (whether claims or defences) requires a First Nations group to proceed with certain identity acceptances. For instance, Treaty process rules limit individuals to a single band membership and legal identity, which is in contrast to the conceptions of many individuals who identify with multiple indigenous tribes through different types of affiliations.

The legitimacy of those who hold authority through elected means versus those who hold authority based on an indigenous system is impacted by the influx of power and resources to the elected chief and council as part of the Treaty process. Along with elected chief and council status comes sources of

power that the indigenous system does not have equal access to – the power to be heard at a negotiation table with provincial and federal governments or with third party investors, and the power to be seen and heard as a legal entity within Canada. These powers have a huge source of influence on the way in which authorities are recognized and social identities negotiated.

In the same way, as the Treaty process has defined the social-political group as those who share band membership and as power and resources are directed through these community boundaries, it is increasingly difficult to negotiate the salience of different social identities without feeling this influence. As Michel Foucault (1980) has suggested, power turns people into subjects – it tells people who they are in relation to each other and the material world. In other words, group boundaries, as well as the meanings associated with being a part of the group or outside the group, are shaped by differences in access to political, social and economic resources and decision-making power. According to Shulz (1998), differential access to resources influences the extent to which individual actors are able to create chosen identities and the meanings associates with these identities. Beyond this, the ability to chose identities influences the ability to enact indigenous governance systems, including the rules used to determine property rights, which are based within indigenous concepts of social identity.

As the treaty process pushes forward for the 'Namgis First Nation, and not for several other nations, the need for continued dialogue on the topics of social identity, community boundaries, legitimate authority and differential property

rights becomes ever more crucial. While negotiators at the tri-partite treaty table describe local First Nations as sharing overlapping resource use areas, the use of "sharing" masques the key distinction between ownership of resources and holding granted access rights to use resources. While some argue for the revitalization of indigenous social identities as a source of property rights, others suggest there has been so much overlap and inter-marriage, a more appropriate community boundary might be based on social identity as Kwakwaka'wakw. While the treaty process, as a source of "identity politics" and as an external force of influence, creates challenges to negotiating social identity in a time of cultural revitalization, some suggest the opportunity lies in the treaty process to re-establish management authority of hereditary chiefs on a regional scale:

All of the Namgis chiefs right now are working on, and what we're trying to do, as you know, we are going through treaty, what we're doing now is we have to recognize the chiefs and give them the standing that they need and give them back the control that they had in the past and bringing back that management portion from their side. From there we are going to expand out and do a protocol agreement with Kingcome and Gilford, the Kwakwaka'wakaw chiefs, we are going to call a big meeting and say hey it is time to take over the management again. In the past before this invisible line came in front of us saying this is yours, this is yours, we owned it all, but you know, we fell into that trap, we are fighting over it now. All we need to do is sit down and say hey we are going to protect the Kwakwakawakw sea, from the top end of Vancouver Island right down to Comox... that is what we are going to manage through protocol agreements.

Key in this process of establishing regional management through protocol

agreements, and perhaps within the negotiated tri-partite treaties, may be to

bring to the forefront of discussion the complexity of social identities and the roles

derived from these identities. For example, hereditary chiefs who are members of

the 'Namgis First Nation, are not necessarily hereditary chiefs from the 'Namgis tribe, but instead may hold cheifmanships in a number of other tribes. Some of these tribes have no *Indian Act* mandated source of social identity with which to access resources and power. In re-conceptualizing indigenous management institutions for today, a key question is what role should these hereditary chiefs play in clam management? How are the members of these Kwakwaka'wakw tribes of the Broughton Archipelago and mainland inlets represented in decision-making processes for moving forward with regional clam management?

In effect while the treaty negotiations will establish relationships of power sharing between Canadian governments and First Nations governments, a further process of negotiation is necessary to establish co-ordination and cooperation between local groups. It is in this context of negotiations between local groups that the greatest opportunity exists to respect and revive the role of indigenous social identities and institutions. For example, the fisheries chapter of the 'Namgis Final Agreement will likely include a provision to establish a Joint Fisheries Management Committee between the 'Namgis First Nation and Canadian governments. This Joint Fisheries Management Committee would have management authority within the 'Namgis Fishing Area, an area that encompasses and overlaps with the indigenous territories of many other tribes. However, the opportunity exists for the 'Namgis First Nation leadership and federal and provincial parties to interpret this "management authority" from various perspectives, including one that acknowledges the multiple tribes and

hereditary chiefs that indigenously governed this region through access protocols and in accordance with indigenous social identities.

While it is difficult to assess how the lessons from any one case study may apply more broadly, literature in other social science disciplines suggest that in a post-colonial world of globalization of resources and cultures, the question of social identity has come to the forefront. For instance, a recent review of anthropological literature in North America suggests that sovereignty, the politics of identity, and the federal recognition and acknowledgement processes have emerged as central themes for study (Strong 2005). Theory and research on the commons may benefit from drawing on this broader literature on changing communities and specifically on the topic of identity.

CHAPTER 8: RECOMMENDATIONS & CONCLUSION

Through strategies of resistance, Kwakwaka'wakw people have demonstrated an incredible resilience. Today, despite many impacts, Kwakwaka'wakw communities retain a great deal of knowledge about indigenous systems of governance. Furthermore, aspects of these systems are still in practice today. At the centre of Kwakwaka'wakw clam management is a system of access protocols based around stewardship of clams and clam beaches, and respecting indigenous authority. While knowledge of these systems exists, implementing them in today's context presents a number of challenges and dilemmas.

At the core of these challenges are the realities of change in Kwakwaka'wakw communities – from colonialism, to cultural revitalization, to changing socio-political dynamics of aboriginal rights and treaty negotiations, to changing economic realities of globalization and neo-liberalism, to the changing environmental conditions of marine environments. As Dietz et al. (2003) suggest, effective commons governance is easier to achieve when rates of change in resources, resource-user populations, technology and economic and social conditions are moderate. In the case of the clam fishery in the north island straits all but technology are changing rapidly. Of these changing contexts, this research focused on the changing nature of Kwakwaka'wakw communities, in relation to the external forces of colonialism, and current politics of self-

government and treaty negotiations. The aim of this chapter is to summarize recommendations, challenges and opportunities in hopes that this may provide a useful basis for discussion in the context of future co-management of clams in the Kwakwaka'wakw Sea.

8.1 Recommendations

Build community consensus about stewardship protocols

The stewardship protocols described in this research are articulated rules about how to behave properly while digging clams following the underlying principle of *Miakula*. Although not all protocols were mentioned by each interviewee, there is agreement among elders and clam diggers about the importance of acting as stewards of the clam resource. Conducting a community survey is one way to both further articulate stewardship protocols and develop community consensus. Direct involvement of clam diggers in this process could help establish the necessity and legitimacy of the rules (Schlager and Ostrom 1993).

Stewardship protocols in the past applied to both food and commercial clam digging, and on all beaches regardless of territory. Therefore, implementing a set of stewardship protocols, through input from local clam diggers, may be an acceptable first step for all groups interested in reviving local Kwakwaka'wakw clam management. Ostrom (2001) suggests that initially adopting small changes before trying to make major institutional changes may be a good way to build trust.

Create new opportunities for the transmission of knowledge

Opportunities for learning about protocols in a traditional form of education have diminished for many reasons. Both youth and today's new generation of clam diggers have less knowledge about how their ancestors took care of beaches and respected each other's authority over certain areas. Interviewees suggested new opportunities for educating diggers and youth about protocols such as taking groups of youth out to experience clam digging, and holding conferences and/or meetings with all diggers to communicate protocols directly. Establishing regular forums for discussion may help maintain frequent face-toface communication among clam diggers, resource managers, chiefs and elders, increasing the potential for trust (Dietz et al. 2003).

Re-establishing resource use coordination

Upon reviewing different community-based fisheries management systems from around the world, Pinkerton and Weinstein (1995) include "resource use coordination" as a key management function. Through the indigenous authority protocol – indicate or communicate your presence and intention – hereditary chiefs of tribes or namima are able to keep track of who is harvesting where, and how much. By holding the right of exclusion, chiefs are able to ensure that when a resource is under pressure, they can moderate both where people go to dig and how many people gain access. Implementing order protocols serves as one way to restrict access. Through these functions, the leadership of chiefs ensures a sustainably managed clam fishery.

Today, however, there is significant concern about the lack of coordination and internal communication about the clam harvest. There is a need to reestablishing resource use coordination of the clam fishery in the Kwakwaka'wakw Sea. One aspect of re-establishing coordination is to re-implement the indigenous authority protocol – indicate or communicate your presence and intention. In other words, clam diggers should be required to communicate where it is they are intending to dig and report what quantities they have taken from particular beaches.

Continue dialogue about who holds authority to implement and enforce protocols

Re-establishing coordination of the clam fishery requires considering the following question – to whom should clam diggers identify their intention and report their harvest today? In other words, who holds the authority to implement and enforce protocols? These questions highlight some of the current challenges occurring in Kwakwaka'wakw communities as they move towards re-establishing self-governance:

- Negotiating a role for both elected and hereditary systems of authority;
- Negotiating legitimacy of different claims to chiefmanships;
- Negotiating legitimacy of different claims to territory; and
- Negotiating community boundaries in the context of the "identity politics" associated with the power and resources allocated through Treaty negotiations.

These negotiations are at the forefront of community politics, cultural revitalization efforts, and negotiations with Canadian governments. Chapter 7

attempted to provide some insight into how these negotiations are playing out at the community level, and how they relate specifically to clam management. One aspect to highlight is the heterogeneity, according to indigenous social identities, of both clam diggers and those who claim some authority over the clam beaches of the Broughton Archipelago. Within the 'Namgis First Nation membership, several other indigenous tribes are represented, along with their hereditary chiefs. One question to consider in re-conceptualizing indigenous institutions for clam management is what role should the hereditary chiefs from the mainland inlets and islands of the Broughton Archipelago play in managing the clam fishery?

Consider creating a clam management board that reflects the diversity of indigenous tribes that are involved in clam-digging

This recommendation suggests a starting direction for answering the question posed above. Theory in multi-stakeholder collaborative planning suggests that all those who have a stake in an issue or decision should be represented at the table (Gray 1989; Wondolleck and Yaffee 2000). Following this thinking, each of the indigenous tribes whose members are currently active in the clam fishery (either for food or commercial purposes) should have someone representing their voice and their traditional territories in decision-making processes. Representatives of indigenous tribes could sit at the table in addition to the elected representatives from the First Nations bands. In each case, the representative should be clear about whom they are representing and how they are accountable to this group. The diggers themselves might also have
a representative at the table. Others that might be involved in a communication network include band or tribal council technicians, DFO and possibly the province.

In the case of clam management in the North Island straits area, a management board should have at least a representative from each of the following tribes : 'Namgis, Mamalilikala, Tlawitsis , Da'naxda'xw, Ma'amtagila, Dzawada'enuxw, and Kwikwasutinux, and Gwawa'enux⁴³. With the exception of the 'Namgis, all of these tribes have clam beds in their traditional territory. However, the 'Namgis in the past gained access to clams through a reciprocal relationship with Gilford island tribes (see Section 6.3). Today, this reciprocity has continued in an adapted form through key 'Namgis fishermen fishing passing Fraser salmon stocks for food for folks from Gilford and Kingcome. A key question to consider is whether management regimes and roles should have some way of acknowledging the differences between clam beach owners and those who have been granted long-standing access rights, and if so, how could this be done?

Ostrom (2001) suggest a key condition for successful local institution building is prior organizational experience and local leadership. In the establishment of the early commercial clam fishery, elders and hereditary chiefs collaborated to establish a source of winter income for their communities and to protect their home beaches for personal use. This not only suggests the capacity exists among these communities to cooperate for mutual benefit, but also that

⁴³ Names and spelling of Kwakwaka'wakw tribes follows those used by the U'mista Cultural Society (www.umista.ca)

this cooperation took place during a time of significant change. An opportunity exists to:

• Draw upon past experience of leadership and coordination of early commercial clam fishery

Key to establishing the commercial clam fishery was resolving the conflict between commercial and home use. Several elders suggested that when the commercial clam fishery was first initiated, all of the chiefs and elders from each village got together and discussed this issue until it was resolved. No one was allowed to leave until a decision had been made. This form of conflict resolution and consensus-building could serve as a model and source of inspiration for dealing with conflict in today's context. At the centre of the approach is the need for dialogue between all those who have a stake in the issue.

Work towards creating a map of the Kwak'wala names for clam beaches

Given the importance of knowing where diggers are harvesting in order to allow for effective coordination of the harvest, a method for communicating specific beach locations is necessary. A map of Kwak'wala names for clam beaches with English translations could provide a tool for coordinating resource use and at the same time for exchanging ecological knowledge about beaches in Kwakwaka'wakw territory, such as the height of tides at different beaches, the condition of beaches, and the abundance levels of clams and other species.

98

Collaborative research on the role of "cultivation" in maintaining healthy clam populations and beaches

The importance of cultivating or "turning over" beaches in order to maintain healthy clam populations was a key aspect of stewardship mentioned by 61% of those interviewed. The importance of this stewardship practice is in contrast to the DFO practice of closing beaches and many clam diggers' failure to alternate beaches. A joint research project between local First Nations and DFO on the effects of cultivating beaches⁴⁴ on the health of clam populations and beach ecosystems may be a useful way to start a dialogue, establish rapport, and build trust. Strong collaborative research is an effective means for initiating dialogue and partnership building (Kaplan and McCay 2004; Lyver 2005), and is often considered a good starting point for leading towards other co-management activities.

8.2 Conclusion

Research on social and cultural aspects of fishing communities has emphasized the need to be aware of micro-level dynamics related to intracommunity heterogeneity (Agrawal 2001; Sepez et al. 2006). This case study has re-enforced this need. In the context of the current push towards decentralization in resource management in many parts of the world (Ribot 2004; Ribot et al. 2006), local institution-building may need to grapple more deeply with the

⁴⁴ One factor to keep in mind is the difference in ecology between littleneck and butter clams. In most cases, the importance of cultivation was highlighted in reference to butter clams, and differences in habitat between the two species could mean that cultivation has a different impact on one versus the other.

realities of cultural change, processes of de-colonization, and negotiating social identities at the community level.

Recent critiques in the commons literature argue for a more complex analysis of the interactions between different conditions within the categories of resource, community, institution, governments and markets (Agrawal 2001, 2002; Dietz et al. 2001; Spaeder and Feit 2005). This case study has highlighted social identity as important to understanding the nature of community. The historical forces of colonialism and current government policies influence complex and changing social identity at the community level. Social identity, in turn, affects how community boundaries are defined, whose decision-making authority is considered legitimate, and how the balance between indigenous protocols and institutions, and colonially imposed rules and governance structures, is negotiated.

REFERENCE LIST

- Agrawal, A. (2001). Common property institutions and sustainable governance of resources. *World Development, 29*(10), 1648 1672.
- Agrawal, A. (2002). Common resources and institutional sustainability. In, E. Ostrom, T. Dietz, N. Dolsak, P.C. Stern, S. Stonich, E.U. Weber (Eds.), *The Drama of the Commons* (pp. 41). Washington, DC: National Academy Press.
- Anderson, T. L., & Simmons, R. T. (Eds.). (1993). The political economy of customs and culture: Informal solutions to the commons problem. Savage, MD: Rowman & Littlefield Publishers, Inc.
- Asante, E. A. (2005). Negotiating identity: Aboriginal women and the politics of self-government. *Canadian Journal of Native Studies, XXV*(1), 1-34.
- Baland, J. M., & Platteau, J. P. (1996). *Halting degradation of natural resources: Is there a role for rural communities?*. Oxford, UK: Clarendon Press.
- Berkes, F. (1999). Sacred ecology: Traditional ecological knowledge and resource management. Philadelphia, PA: Taylor & Francis.
- Berkes, F., George, P., & Preston, R. J. (1991). Co-management: The evolution of the theory and practice of the joint administration of living resources. *Alternatives*, *18*(2), 12 18.
- Bernard, H. R. (2006). *Research methods in anthropology: Qualitative and quantitative approaches* (4th ed.). Lanham, MD: AltaMira Press.
- Berry, J. W. (1999). Aboriginal cultural identity. *Canadian Journal of Native Studies, XIX*(1), 1-36.
- Blaikie, N. (2000). *Designing social research: The logic of anticipation*. Cambridge; Malden, MA: Polity Press.
- Boas, F. (1921). *Ethnology of the Kwakiutl* (Bureau of American Ethnology Annual Report No. 35 (part 1 and 2)). Washington, DC: Smithsonian Institution.
- Boas, F. (1934). *Geographical names of the Kwakiutl indians*. New York, NY: Columbia University Press.
- Boas, F. (1966). In Codere H. (Ed.), *Kwakiutl ethnography*. Chicago, IL.: University of Chicago Press.

- Burger, J., Ostrom, E., Norgaard, R. B., Policansky, D., & Goldstein, B. D. (Eds.). (2001). Protecting the commons: A framework for resource management in the americas. Washington, DC: Island Press.
- Carmen-Lemos, M., & Agrawal, A. (2006). Environmental governance. Annual Review of Environment and Resources, 31, 297 325.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Thousand Oaks, CA: Sage Publications.
- Codere, H. (1950). *Fighting with property: A study of Kwakiutl potlatching and warfare 1792 1930.* Seattle, WA: University of Washington Press.
- Cranmer-Webster, G., & Powell, J. (1994). Geography, ethnogeography, and the perspective of the Kwakwaka'wakw. In R. Galois (Ed.), *Kwakwaka'wakw* settlements, 1775 1920: A geographical analysis and gazetteer (pp. 4). Vancouver, BC: UBC Press.
- Culhane, D. (1998). *The pleasure of the crown: Anthropology, law and First Nations*. Burnaby, BC: Talon Books Ltd.
- Davis, A., & Wagner, J. R. (2003). Who knows? On the importance of identifying "experts" when researching local ecological knowledge. *Human Ecology*, *31*(3), 463-489.
- Department of Fisheries and Oceans. (2004). *Pacific region integrated fisheries management plan: Intertidal clams, 2004 - 2006.* Nanaimo, BC: Department of Fisheries and Oceans.
- Department of Fisheries and Oceans. (2007). *Pacific region integrated fisheries management plan: Intertidal clams, 2007-2009.* Nanaimo, BC: Department of Fisheries and Oceans.
- Department of Fisheries and Oceans, & BC Ministry of Agriculture, Fisheries and Food. (1993). *The BC intertidal clam fishery: Options and opportunities*. Vancouver, BC: Department of Fisheries and Oceans.
- Dietz, T., Ostrom, E., & Stern, P. C. (2003). The struggle to govern the commons. *Science, 302*, 1907 1912.
- Dowling, R. (2000). Power, subjectivity and ethics in qualitative research. In I. Hay (Ed.), *Qualitative research methods in human geography* (). Oxford, UK: Oxford University Press.
- Drucker, P. (1965). *Cultures of the north pacific coast*. Scranton, PA: Chandler Publishing Company.
- Drucker, P., & Heizer, R. F. (1967). *To make my name good*. Los Angeles, CA: University of California Press.

- Foucault, M. (1980). In Gordon C. (Ed.), *Power/Knowledge: Selected interviews* and other writings 1972-1977. New York, NY: Pantheon.
- Galois, R. (1994). *Kwakwaka'wakw settlements, 1975 1920: A geographical analysis and gazetteer.* Vancouver, BC: UBC Press.
- Gray, B. (1989). *Collaborating: finding common ground for multiparty problems.* San Francisco , CA: Jossey-Bass.
- Grbich, C. (2007). *Qualitative data analysis: An introduction*. London; Thousand Oaks, CA: Sage Publications.
- Harbo, R. M. (2002). *Whelks to whales: Coastal marine life of the pacific northwest*. Madeira Park, BC: Harbour Publishing.
- Hardin, G. (1968). The tragedy of the commons. *Science, 162*(3859), 1243 1248.
- Harper, J. R. (1995). *Broughton archipelago clam terrace survey: Final report*. Sidney, BC: Coastal & Oceans Resources, Inc.
- Harris, C. (2002). *Making Native Spaces: Colonialism, resistance, and reserves in British Columbia*. Vancouver, BC: University of British Columbia Press.
- Heaslip, R. (2008). Monitoring salmon aquaculture waste: the contribution of First Nation's rights, knowledge and practices in British Columbia, Canada. *Marine Policy*: in press.
- Hoekema, A. (1995). Do joint decision-making boards enhance chances for a new partnership between the state and indigenous peoples? *Indigenous Affairs*, *1*, 4-10.
- Huntington, H. P. (2000). Using traditional ecological knowledge in science: Methods and applications. *Ecological Applications, 10*, 1270-1274.
- Huntington, H. P. (2006). Who are the "authors" when traditional knowledge is documented? *Arctic, 59*(3), III-IV.
- Igoe, J. (2004). *Conservation and globalization: A study of national parks and indigenous communities from East Africa to South Dakota*. Belmont, CA: Thompson, Wadsworth.
- Kalland, A. (2000). Indigenous knowledge: Prospects and limitations. In R. Ellen,
 P. Parkes & A. Bicker (Eds.), *Indigenous environmental knowledge and its* transformations: Critical anthropological perspectives (pp. 319-331).
 Amsterdam, NL: Harwood Academic.
- Kaplan, I. M., & McCay, B. J. (2004). Cooperative research, co-management and the social dimension of fisheries science and management. *Marine Policy*, 28, 257-258.

- Karjala, M. K., Sherry, E. E., & Dewhurst, S. M. (2004). Criteria and indicators for sustainable forest planning: A framework for recording aboriginal resource and social values. *Forest Policy and Economics*, 6(2), 95-110.
- Lando, P. L. (1988). The socio-history of the units of Kwakiutl property tenure. (Master of Arts, University of British Columbia).
- Lyver, P. O. B. (2005). Co-managing environmental research: Lessons from two cross-cultural research partnerships in New Zealand. *Environmental Conservation, 32*(4), 365-370.
- Marchak, P., Guppy, N., & McMullan, J. 1987. *Uncommon property: the fishing* and fish- processing industries in British Columbia. Toronto, ON: Metheun.
- Marshall, C., & Rossman, G. B. (2006). *Designing qualitative research* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Maurstad, A., Dale, T., & Bjorn, P.A. (2007) You wouldn't spawn in a septic tank, would you? *Human Ecology* 35: 601-610.
- McAvoy, L., Winter, P. L., Outley, C. W., McDonald, D., & Chavez, D. J. (2000). Conducting research with communities of color. *Society & Natural Resources, 13*(5), 479-488.
- McCay, B. J., & Acheson, J. M. (Eds.). (1987). *The question of the commons: The culture and ecology of communal resources*. Tuscan, AZ: University of Arizona Press.
- McMillan, A. D. (1988). *Native peoples and cultures of Canada*. Vancouver, BC: Douglas & McIntyre Ltd.
- Mitchell, D. A. (1997). Sustainable by design: How to build better institutions for fisheries management in British Columbia. (Doctor of Philosophy, University of Victoria: School of Public Administration).
- Morrell, M. (1989). The struggle to integrate traditional Indian systems and state management in the salmon fisheries of the Skeena River, British Columbia. In E. Pinkerton (Ed.), *Cooperative management of local fisheries* (). Vancouver, BC: University of British Columbia Press.
- Musgamagw Tsawataineuk Tribal Council. (2005). *Shellfish management board*. Alert Bay, BC: Musgamagw Tsawataineuk Tribal Council.
- Newell, D. (1999). *Tangled webs of history: Indians and the law in Canada's pacific coast fisheries*. Toronto, CA: University of Toronto Press.
- Notzke, C. (1994). *Aboriginal peoples and natural resources in Canada*. North York, ON: Captus University Publications.
- Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action.* Cambridge, UK: Cambridge University Press.

- Ostrom, E. (2001). Reformulating the commons. In J. Burger, E. Ostrom, R. B. Norgaard, D. Policanskty & B. D. Goldstein (Eds.), *Protecting the commons: A framework for resource management in the americas* (pp. 17). Washington, DC: Island Press.
- Ostrom, E., Gardner, R., & Walker, J. (1994). *Rules, games and common-pool resources*. Ann Arbor, MI: University of Michigan Press.
- Pinkerton, E. (Ed.). (1989). *Cooperative management of local fisheries: new directions for improved management and community development.* Vancouver, BC: University of British Columbia Press.
- Pinkerton, E., & Weinstein, M. (1995). *Fisheries that work: Sustainability through community-based management*. Vancouver, BC: David Suzuki Foundation.
- Pomeroy, R. S., Katon, B. M., & Harkes, I. (2001). Conditions affecting the success of fisheries co-management: Lessons from Asia. *Marine Policy*, 25(3), 197-208.
- Powell, J. (1994). The Kwak'wala language. In R. Galois (Ed.), *Kwakwaka'wakw* settlements, 1775 1920: A geographical analysis and gazetteer (pp. 12). Vancouver, BC: UBC Press.
- Ribot, J. C. (2004). *Waiting for democracy: The politics of choice in natural resource decentralization*. Washington, DC: World Resources Institute.
- Ribot, J. C., Agrawal, A., & Larson, A. M. (2006). Recentralizing while decentralizing: How national governments reappropriate forest resources. *World Development, 34*(11), 1864-1886.
- Rohner, R. P. (1967). *The people of Gilford: A contemporary Kwakiutl village*. Ottawa, CA: The Queen's Printer.
- Ross, R. (1992). *Dancing with a ghost: exploring Indian reality*. Markham, ON: Octopus Books.
- Royal Commission on Aboriginal Peoples. (1996). People to people, nation to nation: Highlights from the report of the Royal Commission on Aboriginal Peoples. Ottawa, CA: Canada: Ministry of Supply and Services.
- Schlager, E., & Ostrom, E. (1993). Property-rights regimes and coastal fisheries: An empirical analysis. In T. L. Anderson, & R. T. Simmons (Eds.), *The political economy of customs and culture: Informal solutions to the commons problem* (pp. 13). Savage, MD: Rowman & Littlefield Publishers, Inc.
- Schreiber, D. (2003). Salmon farming and salmon people: Identity and environment in the Leggatt inquiry. *American Indian Culture and Research Journal*, 27(4), 79-103.

- Sepez, J., Karma, N., Poole, A., & Tilt, B. (2006). Fish scales: Scale and method in social science research for north pacific and west coast fishing communities. *Human organization*, 65(3), 280-293.
- Shultz, A. (1998). Navajo women and political identity. *Social Problems, 45*(3), 336-355.
- Spaeder, J. J., & Feit, H. A. (2005). Co-management and indigenous communities: Barriers and bridges to decentralized resource management. *Anthropologica (New Series), 47*(2), 147-63.
- Strong, P. T. (2005). Recent ethnographic research on North American indigenous peoples. *Annual Review of Anthropology, 34*, 253-268.
- Tajfel, H. (Ed.). (1982). *Social identity and intergroup relations*. New York, NY: Cambridge University Press.
- Tennant, P. (1990). *Aboriginal people and politics: The Indian land question in British Columbia, 1849 - 1989.* Vancouver, BC: University of British Columbia Press.
- Trosper, R. L. (1998). Incentive systems that support sustainability: A First Nations example. *Conservation Ecology*, *2*(2), 11-23.
- Trosper, R. L. (2003). Resilience in pre-contact pacific northwest social ecological systems. *Conservation Ecology*, *7*(3), 6-17.
- Turner, N. J., Ignace, M. B., & Ignace, R. (2000). Traditional ecological knowledge and wisdom of aboriginal peoples in British Columbia. *Ecological Applications*, 10(5), 1275-1287.
- U'mista Cultural Society. (1998). *The living world: Plants and animals of the Kwakwaka'wakw*. Alert Bay, BC: U'mista Cultural Society.
- Usher, P. J. (1995). Co-management of natural resources: Some aspects of Canadian experience. In D. L. Peterson, & D. R. Johnson (Eds.), *Human ecology and climate change: People and resources in the far north* (pp. 197-206). Washington, DC: Taylor and Francis.
- Wade, R. (1988). Village republics: Economic conditions for collective action in South India. Oakland, CA: ICS Press.
- Walter, E., M'Gonigle, M., & McKay, C. (2000). Fishing Around the Law: The Pacific Salmon Management System as a "Structural Infringement" of Aboriginal Rights. *McGill Law Journal* 45: 263-314.
- Weinstein, M. (2000). Pieces of the puzzle: Solutions for community-based fisheries management from Native Canadians, Japanese cooperatives, and common property researchers. *The Georgetown International Environmental Law Review*, 12, 375-412.

- Weinstein, M., & Morrell, M. (1994). *Need is not a number: Report to the Kwakiutl marine food fisheries reconnaissance survey*. Campbell River, BC: Kwakiutl Territorial Fisheries Commission.
- Williams, J. (2006). *Clam gardens: Aboriginal mariculture on Canada's west coast*. Vancouver, BC: New Star Books.
- Wondolleck, J.M. & Yaffee, S.L. (2000). *Making collaboration work: lessons from innovation in natural resource management.* Washington, D.C.: Island Press.
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.

APPENDIX 1: INTERVIEW GUIDE

Section 1: Significance of Resource

- Are clams considered an important cultural resource? If so, why?
- Rate the importance of clams on a scale of 1 to 10 (in winter vs. in summer)
- Do you use clams? If so, for what purposes food, commercial exchange, trade, social and ceremonial?
- What do other members of the community use clams for?
- Has the value or importance of clams changed over time?

Section 2: Ensuring productive capacity of the resource (monitoring habitat, enhancing/restoring habitat, enhancing stocks)

- Does anyone in the community monitor or watch for changes in the clam habitat, such as beaches where clams are commonly found?
- If so who, what do they look for, and what do they do with the information they gather?
- How does this compare to the way clam habitat was monitored in the past? Is there a system for watching and reporting changes in clam beaches?
- Has anyone in the community taken any actions to improve or restore clam beaches or clam populations? If so, who and what actions?
- Are you aware of any indigenous practices to enhance or restore clam beaches or clam populations that were used in the past?

Section 3: Regulating fishery access (membership or exclusion, transfer of membership, allocation of harvest)

• How are decisions made about who can access clam beaches for harvesting purposes?

- How does this system compare to how access decisions were made in the past?
- If someone has access rights to harvest clams, can they share or transfer their access rights?
- Once clams are harvested, how is the catch distributed? Who do clamdiggers share the catch with or sell the catch to?
- Indigenously, how were decisions about distribution made?

Section 4: Regulating fishery harvest (stock assessment, harvest planning, harvest monitoring)

- When clam-diggers have rights to harvest on clam beaches, how many clams are they allowed to harvest? How is this determined?
- What size of clams are harvested? Under what conditions would you choose not to harvest a clam(s)?
- Are these DFO rules or community rules?
- Is there any monitoring of their catch? Is there any other way of knowing if clam-diggers are harvesting too many clams?
- How does this system compare to clam harvesting in the past?

Section 5: Enforcing or implementing rules

- How are rules enforced (for example, when a clam-digger harvests too many clams, or when someone harvests on a beach they do not have access rights to)?
- What are the consequences for breaking the rules regarding clam harvesting and allocation?
- How does the present-day enforcement compare to a more indigenous enforcement system?

Section 6: Coordinating potentially conflicting resource uses and management activities (sport, commercial, and subsistence fisheries; harvesting and enforcement)

- Can you recall any instances where conflict occurred over clams (use, access rights, harvesting levels, monitoring, etc)? How were these conflicts dealt with?
- How does the resolution of conflicts today differ from in a indigenous clam management system?

Section 7: Policy-making and evaluation (scoping problems, long-term objectives, research, education)

- In your opinion are clam beaches and clam populations in good health today?
- If not, how would you describe the condition of clam beaches and clam populations? What do you think the causes are?
- How well do you think the current clam-management system functions?
 What, if any, problems do you think are the most important? Rate on scale of importance.
- Do you think some of the components of a more indigenous clam management system could be revived and adapted to address some of these problems?

APPENDIX 2: LETTER OF INTRODUCTION

Letter of Introduction – Interview

Robyn Heaslip: rheaslip@sfu.ca School of Resource and Environmental Management Simon Fraser University 8888 University Drive Burnaby, B.C. V5A 1S6 604-215-4335 Cell: 250-527-0361

To Whom It May Concern:

I am a graduate student in the School of Resource and Environmental Management at Simon Fraser University. To complete my graduate requirements I am conducting a research project entitled, "Sharing and discussing knowledge of a traditional management system: a case study of clam fisheries in the North Island Straits", which will take place between August 2006 and December 2007. The aim of this research project is to document how the Area G clam fishery was managed indigenously and up to the current times under DFO rules. Among other things, the study will document rules about: who has access to clam beaches; how much can be harvested; how beaches and stocks are monitored; enforcement; how conflicts are dealt with; and, how management decisions are made. The research will examine how indigenous clam management rules might be adapted to today's clam problems and issues. I have sought and been granted support from the Musgamagw Tsawataineuk Tribal Council, Kwicksutaineuk/Ah-Kwaw-Ah-Mish Band Council, and the 'Namgis Band Council to conduct this research.

I hope that you will contribute your perspective to this research by consenting to an interview. This interview will be approximately 1 hour. You are not obligated to answer any questions you choose not to, and you may end the interview at any point.

My personal ethics require that I respect your confidentiality hence all content of the interviews will remain confidential such that your name will not be cited in any products of this project. Following the completion of the project, the report will be available to you upon your request by mailing or writing to me at the address provided above. Copies will also be sent to the Musgamagw Tsawataineuk Tribal Council, Kwicksutaineuk/Ah-Kwaw-Ah-Mish Band Council, and 'Namgis Band Council. Any concerns can be addressed to the chair of the School of Resource and Environmental Management, William de la Mare (delamare@sfu.ca), or my supervisor Evelyn Pinkerton (epinkert@sfu.ca). Should you require any further information, please contact me.

Sincerely,

Robyn Heaslip.