

Issues in the North



Volume I

Edited by Jill Oakes and Rick Riewe



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Preface

This collection of papers was presented at the **Issues in the North** lectures series in the winter session of 1995. This is an interdisciplinary and interuniversity lecture series which explores issues facing the daily lives of Northerners and Aboriginal peoples. The series was co-chaired by Jill Oakes and Rick Riewe at the University of Manitoba, and Elaine Maloney at the University of Alberta.

As with the earlier seminars in this series the speakers have very diverse backgrounds, professions and world views, however, they share one commonality — a profound concern for the Northern peoples and the environment. The papers in this volume have been written by elders, traditional healers, medical staff, political leaders, social workers, anthropologists, linguists, nutritionists, translators, literary scholars, lawyers, graduate students, wildlife biologists, and physical scientists. The variety of styles of papers in this volume which range from informal dialogues to peer reviewed papers reflects this diversity.

Section I with its six papers addresses several health and healing issues from Aboriginal and Western perspectives. The next two papers in section II explore the need to incorporate traditional Aboriginal ways of learning into the dominant educational system. Section III with six papers deals with the issues evolving around Northern research philosophies and appropriate field methodologies. Section IV with its four papers examines the impacts of colonization on aboriginal identity. The next three papers in section V deal with recent developments in Aboriginal self government, and the business of the Arctic Co-operative in the North. Section VI deals with resource management issues including wildlife, mining and climate change in Northern Canada. The final section, VII, addresses research policy issues.

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For additional information on future series contact the Canadian Circumpolar Institute at (403) 492-4512 or the Department of Native Studies (204) 474-9266. Many students and staff from all departments and faculties on the campuses in addition to individuals and organizations from off-campus participated in discussions at each seminar. This interdisciplinary input is gratefully acknowledged and is reflected in the following papers. Thea Stone, Department of Native Studies is sincerely thanked for retyping many of the manuscripts. Elaine Maloney, Canadian Circumpolar Institute is thanked for her long term contributions and support for this lecture series.

New Perspectives on Healing

Lyle Longclaws¹

Introduction: New Perspectives on Healing

Currently practitioners are challenged by the vast array of presenting problems faced by Aboriginal families seeking professional assistance. This article captures the essence of a presentation given by the author at the University of Manitoba during a lecture series entitled *Issues in the North* in which he addressed this challenge for practitioners as they work with Aboriginal families and children.

Good practice is grounded in sound theory. Effective clinicians and therapists practice what they believe and know to be true. For example, the past two decades have witnessed the acceptance and integration of theory and practice which reflects gender consideration. Similarly, present theory and practice require revisions in order to impact presenting problems affecting people of colour or, in this instance, Aboriginal people.

The author concentrated on four distinct areas that need to be examined by practitioners if they are to effectively deal with the presenting problems of Aboriginal clients, and these included the lack of an applicable paradigm, an unawareness or understanding of the diversity of Aboriginal families, the inapplicability of current assessment tools, and the resultant ineffectiveness of treatment approaches.

The Need for an Applicable Paradigm: Devalued Peoples' Framework

Practitioners who have consulted the author have acknowledged the lack of a paradigm, when they attempt to move Aboriginal clients to a healthier state, that explains the reality that is experienced by Aboriginal people. Thus, the lack of a paradigm that acknowledges Aboriginal people as devalued within society in turn fails to provide a framework that enables practitioners to understand this reality as experienced by Aboriginal clients. Additionally, the absence of an applicable framework can result in practitioners contributing to the unfortunate state in which Aboriginal families and their children find themselves.

S.W. Corrigan, and Barkwell *et al.* (1991) believe that within most paradigms, Aboriginal people are viewed as less than human, as members of untreatable families, and as residents of non-viable communities. Consequently, intervention in their lives is deemed necessary, acceptable and justified. The effects of this dehumanization process is evident in the fact that Aboriginal people are over-represented in all

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accessible social services. Since practitioners generally regard Aboriginal people as different from the norm due to historical factors too numerous for discussion within the context of this article but that include current realities such as genocide and racism, they experience low status within the mainstream society. Aboriginal people retain this low status unless they can access strength and support derived from traditional Aboriginal practices, shared spiritual resources, and strong family and community networks found within the context offered by Aboriginal languages and cultures.

Current interventions or approaches by practitioners do not incorporate such aforementioned aspects, therefore there is no attempt to counter balance this experienced low status. If Aboriginal people are low status and devalued they will experience rejection, negative imaging, low personal autonomy, and involuntary poverty. These four factors will lead to social interactions where devalued people will encounter psychological or physical brutality. The end results are frequently wasted lives, despite the various different types of interventions by practitioners.

The Need to Understand the Diversity Among Aboriginal Families

Based on practice wisdom shared by various Aboriginal practitioners in this field, a second area which contributes to the topic can be found when present clinicians and therapists fail to understand the diversity found among Aboriginal families and children. Within both rural and urban Aboriginal communities can be found a wide range of cultural groupings of which five are distinct. These include the traditionalist, transforming or new traditionalist, assimilated, universalist, and the anomic categories.

The traditionalist group is represented by Aboriginal people who have retained their links to the pre-invasion cultures of their ancestors and have not been christianized but rather who maintain strong values and beliefs grounded in indigenous frames of reference. In their philosophies, these members are similar to the universalists but in their social interactions will remain within their own cultural groups and/or Aboriginal communities.

The transforming or new traditionalists are those individuals or groups who have experienced a re-birth process with respect to their identity as Aboriginal people. This group is most often typified by their outwardly appearance which reflects the trappings of a Hollywood nature, may be quite racist in their outlook towards non-Aboriginal peoples, and are often young and angry.

The assimilated group is represented by Aboriginal people who have forsaken their identity as Aboriginal and who attempt to sever all ties with their Aboriginal community both physically and socially. These individuals find it most beneficial to deal with their Indianness by denying it and blending into the larger society at all costs.

The universalist group are those individuals who have relocated and or been raised within the mainstream society to a large extent, have been exposed to the ideas, lifestyles, and cultures of the world and have been able to integrate these with their Aboriginal culture so that a harmony is achieved. Individuals or groups in this category recognize the need for the cultures of the society to live together in order for the co-existence of all human beings and actively strive to achieve this reality in their lives.

The last group is the anomic individuals who are, unfortunately, the largest group within the five categories. Individuals in this group are the unhealthiest of all and are often totally disengaged from all avenues of help or hope. The values, beliefs, and lifestyles of these group members is often characterized by poverty, addictions, abuses,

and a feeling of hopelessness. Economically, socially, and spiritually, these individuals are bankrupt and in need of the assistance which practitioners are requested to provide.

Intervention with members from aforementioned categories must include a different approach given the diversity of outlined groups which is yet to be recognized by practitioners. Further, it is necessary for practitioners to understand that one Aboriginal family may include members from one or more of these separate groups and associated factors must be considered when assessing and treating the individual in need of assistance.

The Need for Culturally Appropriate Assessments

A third area preventing practitioners from effectively assisting Aboriginal clients is the lack of assessment tools that move beyond the limitations of current mainstream assessment and diagnostic approaches, which are generally viewed by Aboriginal practitioners as failing to describe the reality experienced by Aboriginal people. These limitations in current assessments relate to the impact of cultural differences, poverty, discrimination and acculturation issues. As a result, practitioners relying solely on mainstream assessments or evaluations are perceived by Aboriginal people as being culturally incompetent or culturally chauvinistic, an image that does not promote healing.

Many Aboriginal clients view current assessments as being insignificant because the interpretation of data and more specifically, interpretation of the relevance of data are biased and possibly incorrect. This is due to current assessments being seen as incomplete or as blurry snapshots of the present that fail to reflect cultural content related to the description of clients and their presenting problems. Aboriginal practitioners realize identity is extremely complex and that several key components related to identity are presently not included in most assessments. In other words, relevant assessments should reveal the “stories” of clients in order for these assessment tools to assist practitioners in understanding this complex identity, otherwise they run the risk of professionalising the problems of Aboriginal clients, without dealing with these problems. Relevant assessments should also include conclusions and recommendations as part and parcel of a comprehensive culturally appropriate plan that outlines a path for moving Aboriginal clients to a healthier state. Relevant assessments need to include the cultural components related to the identity of Aboriginal clients because such components comprise the crux of an individual’s self, to which all other aspects of identity that are relevant to self are connected.

In most cases, “out of cultural group” practitioners undertake assessments by completing a series of “in person” diagnostic interviews with “in cultural group” clients, and may be unaware that they are gathering incomplete data, frequently resulting in incorrect problem identification, thereby eventually, contributing to ineffective methods of treatment. This unacceptable situation can be remedied by integrating cultural components relevant to assessments involving Aboriginal clients, as long as the assessments are evaluations that are systemic, contextual and document the reality experienced by Aboriginal clients. Culturally appropriate assessments would then reveal a wide range of presenting problems and culturally relevant concerns encountered in treating Aboriginal clients, and for example, will often reflect the numerous social stressors of Aboriginal clients who for the most part represent the lower socioeconomic levels. Therefore, for such Aboriginal clients, the conclusions and

recommendations found in culturally appropriate assessments should counter balance and center devalued Aboriginal clients with low status.

The Need for Culturally Appropriate Treatment

Culturally appropriate treatment can commence with practitioners integrating a revised version of the New Zealand family group conference model with current methods of treatment as a vehicle to identify the presenting problems, or the reality affecting Aboriginal clients, and to formulate treatment plans. The family group conference is a model that provides a forum of encouragement and will empower the aforementioned different groups of Aboriginal families by enabling them to participate in a consensus decision-making process. Specifically, the family group conference is a meeting that assembles immediate and extended family members to hear presenting problems, to share the impact of these problems on the family and to agree on problem solving solutions by formulating treatment plans. The goals of the model are to deal with the concerns of Aboriginal clients within a traditional process by sharing the presenting problems, to minimize the effects of presenting problems, to increase involvement of the family, and to strengthen the assembled family by enabling them to be more involved with family members affected by presenting problems.

There are three phases to implementing the family group conference: the information sharing phase, the family deliberation in private phase, the agreement upon a family oriented plan phase.

Briefly, phase one involves practitioners, prior to the conference, assisting Aboriginal clients in determining who participates in the family group conference, to disseminate information, and to invite participants outside of the immediate and extended family group. During the actual assembly of family members, practitioners are expected to share information relevant to the conference such as the specific goals and objectives of the model and to respond to concerns. Practitioners are also encouraged to take this opportunity to establish a role equal to that of all participants, to relinquish control over clients and to forego manipulating strategies or levers of change that often appear deceitful to Aboriginal clients. In other words, one objective of phase one of the family group conference is to place practitioners on the "turf" of Aboriginal clients.

Phase two enables the immediate and extended family members to deliberate in private once the presenting problems have been shared. The objectives in this phase are to encourage family members to engage in a traditional forum to deal with the identified concerns related to the presenting problems and to explore realistic treatment plans that effectively deal with these problems. These plans often will contain components that recognize the strength of Aboriginal cultural practices, and these can be reflected in the treatment plans chosen by the family. Practitioners may be occasionally called upon by the family to assist with certain aspects of this phase of the model.

Phase three is the agreement upon and the implementation of family oriented plans, where practitioners attempt to reach an agreement among family members by consensus on specific decisions and treatment plans. Certain family members and practitioners will be expected to follow up and monitor these plans to ensure maximum benefits for clients.

Culturally appropriate treatment approaches integrate traditional Aboriginal healing practices with contemporary social work methods in order to balance and center clients. This can only be accomplished by practitioners providing opportunities for clients to learn to identify the reality being experienced and facilitating harmony between all parts

of self. The end result would be that Aboriginal clients would be healed within an environment that builds on familiar aspects important to their world.

Conclusion

In conclusion, the aforementioned recommendations would assist practitioners in revealing and better understanding the reality experienced by Aboriginal clients. Additionally, recommendations in regard to the previously mentioned four areas, can greatly increase the effective implementation of culturally appropriate solutions to deal with the reality known to Aboriginal clients. These recommendations are intended to encourage practitioners to have greater empathy and explore culturally appropriate approaches as viable solutions and supports for Aboriginal families rather than being ignorant of their reality and unknowingly contributing to their unfortunate state when Aboriginal clients encounter difficulties.

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An Ethnographic Study Exploring Quality of Worklife Issues of Outpost Nurses in Northern Manitoba

Donna Martin and David Gregory¹

Abstract

An ethnographic study, funded by the Canadian Nurses Foundation and the Manitoba Association of Registered Nurses, was implemented to identify quality of worklife (QWL) issues of outpost nurses in northern Manitoba. The "Model for Quality of Nursing Worklife" was used to guide the study as it provided a broad framework (O'Brien-Pallas and Baumann 1992). A nurse researcher travelled to four outpost stations in northern Manitoba where semi-structured interviews were conducted with five aboriginal and six non-aboriginal outpost nurses. The interviews were audio-taped, transcribed verbatim and detailed field notes were maintained. The transcripts and field notes underwent content analysis. The preliminary findings indicated that aboriginal and non-aboriginal outpost nurses voiced similar QWL issues such as: number of hours worked per week, working and living in the same environment, a sustained increased workload, lack of community health programming, and lack of mental health resources. Aboriginal nurses recognized their patients' spirituality and traditional healing beliefs and practices. In contrast to aboriginal outpost nurses, non-aboriginal nurses voiced concerns about re-integrating into urban life upon leaving northern communities.

Background to the Study

Several articles describe outpost nursing in northern Canada as challenging and rewarding (Kraiker *et al.* 1983, Morewood-Northrop 1994, Nanowski 1993). To function as an outpost nurse, recruits are advised to prepare for: practicing nursing in an expanded role, living in a community with a different culture, and concomitant social isolation (Gregory 1992, Morin 1984, Scott 1991, Smith 1983).

Three studies on northern nursing were located in which consequences of nursing in remote areas were explored (Canitz 1990, Government of Northwest Territories

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1990, Kirwan 1994). These researchers identified burnout, turnover and post traumatic stress disorders as effects of northern nursing.

Canitz (1990) used questionnaires (n=54) and interviews (n=16) to examine job satisfaction and burnout of outpost nurses in the Northwest Territories (NWT). Turnover was found to be related to loneliness, unrealistic job expectations, lack of continuing education, lack of professional support and cultural and community issues. Job retention was found to be positively influenced when nurses participated in the community, enjoyed the northern lifestyle, and experienced professional support.

In 1989, a survey was circulated to 557 members of the NWT Registered Nurses Association to find out why the nursing turnover rate was 70% (Morewood-Northrop 1994). The survey's response rate was 62.5%. Of the respondents, 77.6% were outpost nurses (Government of NWT 1990). Continuing education, job-sharing programs, and independent living quarters were suggested as measures to improve nursing retention (Government of NWT 1990).

Kirwan (1994) conducted a 2 year pilot project in northern Manitoba to address northern nurses' concerns about critical incidents or traumatic events. Kirwan (1994) interviewed 20 participants: nurses, nurse managers, occupational health nurses, and personnel consultants. Based on the findings of these interviews, questionnaires were constructed and mailed to 140 nurses employed in northern hospitals, health centres, and outpost stations. Eighty-eight nurses completed the questionnaires for a response rate of 63%. All respondents had been involved in at least one critical incident such as the death of a child, attempted assault or threat to a nurse, or a suicide attempt of a patient (Kirwan 1994). Nurses working in outpost stations were more likely to be exposed to violence than nurses working in northern health centres or hospitals (Kirwan 1994). A prevalence rate of 33% for diagnosable levels of post traumatic stress disorder among the northern nurses was reported (Kirwan 1994). This study was limited in that its questionnaire lacked reliability. Signs and symptoms of post traumatic stress disorder and sleep deprivation are similar. Outpost nurses often work a high number of hours per week causing fatigue. Similar signs and symptoms may have skewed the findings to reveal a high prevalence rate of post traumatic stress disorders. National recommendations such as initiating a northern critical incident stress program, eliminating the practice of placing only one nurse in a community, ensuring that preventative training in security be available to all nurses, and upgrading safety features of all nursing stations were made (Kirwan 1994).

Study's Purpose and Objectives

The purpose of this study was to explore quality of worklife (QWL) issues of outpost nurses in northern Manitoba. Two research objectives were developed:

1. Identify QWL issues of outpost nurses in northern Manitoba;
2. Compare and contrast aboriginal and non-aboriginal outpost nurses' perspectives of QWL.

Definition of Variables

1. Nurses' worklife — the practice of nursing in any setting. Factors that contribute to nurses' worklife fall under four broad categories: (a) homelife/worklife interplay, (b) work design or nature of the work, (c) work context or nature of the work environment, and (d) work world or the health care system (O'Brien-Pallas and Baumann 1992);

2. QWL issues — perceived elements of nurses' worklife that influence QWL;
3. Outpost nurse — registered nurse employed by Medical Services Branch (MSB), Health Canada in an outpost nursing station;
4. Northern Manitoba — a region of the province of Manitoba that lies north of the 54th parallel as recommended by the Northern Scientific Program, Canadian Association of Northern Universities.

Theoretical Framework

A model identifying the relationships between nursing worklife factors was developed by O'Brien-Pallas and Baumann (1992). Worklife factors were collapsed into four broad categories: (1) homelife/worklife interplay, (2) work design or the nature of the work, (3) work context or the nature of the work environment, and (4) work world or the entire health care system. Homelife/worklife interplay depicts the relationship between nurses' homelife and worklife. For example, availability of childcare would fall under this category. The second category, work design, includes nursing delivery models such as primary care nursing or team nursing, workplace policies, shiftwork, and technology. Work context is a term used to describe the environments in which nurses practice, including management techniques, communications systems, and physical layout of the workplace. The fourth category, work world, involves the overall health care system, and includes health care policies and nursing job markets. The model posits that worklife factors affect nurses and their patients (Villeneuve *et al.* 1993). Nursing worklife factors affect nurses in regards to job retention, satisfaction with employment, occupational health status, job-related stress, commitment, motivation, and quality care delivery (O'Brien-Pallas and Baumann 1992). Nursing worklife factors affect patients with respect to satisfaction with care delivery and improvement in health status (O'Brien-Pallas and Baumann 1992).

Ethnography

Since the aim of ethnographic research is to describe and understand the people being studied (Chuborn 1991), we decided that this approach would be appropriate in an exploration of outpost nurses' worklife. Ethnography was initially used by anthropologists studying different cultures (Chuborn 1991). In recent years, ethnography has been used to learn about groups within our own society (Chuborn 1991). Field (1983) described a "new ethnography" which asks, "How do members of a nursing culture actively construct their social world?" Rich descriptions are elicited through the use of probing questions or statements in face-to-face interviews (Field 1983). Additionally, detailed field notes supplement the interview data. Ethnography facilitates a description of the everyday lives of outpost nurses (Fetterman 1989).

Population

Nursing stations in Manitoba are administered by the provincial government, federal government, or First Nations People. The number of nurses employed at outpost stations administered by Manitoba Health is approximately eight (personal communication, J. Gow, June 17, 1994). The number of outpost nurses employed by MSB and/or First Nations People is approximately 145 (Kirwan 1994). Within Manitoba, just over 150 registered nurses are employed in outpost station settings.

Sample, Setting, Ethical Considerations and Data Collection

Chiefs and Councils were approached for permission to conduct the study in nine communities. Eight Chiefs and Councils supported the project.

Following approval from the Ethical Review Committee, Faculty of Nursing, University of Manitoba, outpost stations in the eight communities were sent faxes, inviting registered nurses to participate in the study. The nurses were asked to contact us by collect telephone call if they were interested in the study. Following their contact, we faxed a consent form, which described the methodology of the study and measures to be taken to ensure participants' anonymity. As recommended by Freeman (1993), names or the participants and identifying features of communities do not appear on any documents or presentations about the study.

Research grants for the study were provided by the Manitoba Association of Registered Nurses and the Canadian Nurses Foundation. Given the cost of transportation, funding secured for the study limited travel to four northern communities, but facilitated a 10 day field experience. During the researcher's experience in the four communities, detailed field notes were maintained regarding outpost nurses' worklife.

Five aboriginal and 6 non-aboriginal nurses volunteered to participate. The interviews lasted from one to two hours and were tape-recorded. A semi-structured interview guide based on the Model for Quality of Nursing Worklife was used. The tapes of the interviews were transcribed verbatim.

Of the 11 participants, eight were employed as indeterminate or full-time nurses, two were relief nurses, and one nurse was employed in a part-time/job-sharing position. All participants were women. Their ages ranged from 30 to 51 years, with a mean age of 39.5 years. Eight nurses held a diploma in nursing, while 3 nurses were baccalaureate prepared. The length of outpost nursing experience ranged from 1 to 14 years with a mean length of experience of 4.8 years.

Data Analysis

The interview transcripts and field notes were reviewed many times to facilitate content analysis. When reading the words, significant phrases were documented in the format of open codes. Open codes, describing similar concepts were grouped together to form categories and themes. Data were explored for similarities as well as differences. Member checks with all 11 participants will be performed to validate or refute these preliminary findings.

QWL of Aboriginal and Non-aboriginal Outpost Nurses, Expanded Nursing Role, Variety in Patients' Needs and Independence

Outpost nurses enjoyed an expanded nursing role, variety in patients' needs, and independent practice. Outpost nurses' scope of practice has been expanded to include conducting diagnostic tests such as X-rays, formulating medical diagnoses, prescribing and dispensing medications, and performing other physicians' functions.

I like the fact that we have an expanded nursing role up here and we do special things that we can't do down south (B0102, p. 5).

Outpost nurses expressed a sense of excitement and enjoyed challenges of being presented with a variety of patient needs. Northern residents were described as having a variety of needs, ranging from nutritional counselling for pregnant women to emergency management, stabilization, and transportation of trauma patients.

I like the independence...we do a lot of independent work...I like the variety...and it's a real challenge (B0301, p. 12).

Independent practice was perceived as another positive element of outpost nurses' worklife.

Working and Living in the Same Environment

Outpost nurses discussed their relationships with other nurses working at the station. In contrast to other settings, working and living with other people in the same environment strongly affected their QWL. If a relationship with another outpost nurse was positive, homelife/worklife was enjoyable and QWL was satisfactory. If a relationship with another outpost nurse was negative, homelife/worklife was not enjoyable and QWL was viewed as less than satisfactory.

Working and living with the same people — it's bound to affect your work if your living conditions after work aren't the best. You know, most of the time what determines that, is the people you're living with. Working with someone is one thing, living with them is another and that definitely can have an impact (B0201, p. 1).

Although one nurse acknowledged the establishment of close friendships, she noted that ordinarily and under southern conditions, she would not have chosen to socialize with her work colleagues. She expressed a sense of forced interaction and a need to socialize as a consequence of isolation.

You make very, very close friends as well. The people that you do become friends with, you probably wouldn't even dream of socializing with outside of here, just because you don't have common interests, but you have a lot in common just because you're here and you're isolated (B0101, p. 12).

Aboriginal and non-aboriginal outpost nurses voiced that their privacy and living space were valued parts of their lives. When asked what aspects of their worklife they would change, the nurses talked about having living quarters that were separate from the workplace.

I'd build over there, right by the lake, [number of] beautiful units. They could be together or they could be separate... And I'd have a great big deck in front which is screened in towards the middle so you don't have to share a room and have a cup of tea and look at the lake and watch the moon from there (A0302, p. 19).

I would change accommodations because I feel that it's really important that you have accommodations because when you're finished work, you want to just enjoy what you have. You want some space to do things...I want to make that home and I don't want to be closed in and think, "Oh God, these four walls, I've got to get out of here" and sit in a common area or something (B0301, p. 35).

Many non-aboriginal nurses did not participate or engage in community activities and therefore, wanted a place "to get away from it all". Within a context of isolation these nurses wanted to be alone.

Hours Worked

Outpost nurses worked 37.5 hours/week in a clinic setting at the station. In addition to this mandatory schedule, they were "on call" every second or third evening/night and

every second or third weekend. “On call” work was similar to work in a urban or rural hospital’s emergency or outpatient department. Nurses performed telephone triage and managed patients in acute phases of illnesses or injuries. The hours worked per week ranged from 24 (a part-time nurse) to 93.5 hours. The mean hours worked every week was 74, while the median was 75 hours. When asked about hours worked, outpost nurses readily stated, “37.5 hours in the clinic”. The hours worked “on call” required more probing from the researcher. The participants accepted working an 80 hour week as standard practice for outpost nursing.

Workload

Outpost nurses expressed feelings of job dissatisfaction and fatigue in times of a sustained, increased workload. According to the participants, the number of nurses employed in each station should be based on a ratio of one nurse for every 500 people. Using this criterion, three of the four stations were short-staffed by one to two nursing positions.

What I find dissatisfying is if we are short staffed and you have a pile of charts and you’re just putting people through, putting people through, and you’re seeing them, treating them, on your way, and there’s not really, because of the time element, there’s not time to give that added personal touch and at the end of the day with something like that, we’ve just put them through, put them through. At the end of the day, you’ve got these charts that you finish and you think, “What a shitty day!” because you’ve just herded them through like cattle (B0301, p. 25).

Last night I was [called in as back-up]...so I got to bed at 6 A.M. The night before, I was up several times during the night and I had to call [nurse] back for one client, and that was for an hour, so that interrupts her sleep. That interrupts my sleep, so you get tired (B0301, p. 9).

When stations were not appropriately staffed, nurses were required to increase the number of patients examined in the clinic during the day and had to work more evenings/nights “on call”.

Lack of Community Health Programming

Outpost nurses were concerned about not fulfilling MSB’s mandate of providing health promotion and illness prevention programs to the people in northern communities. They described the necessity to institute and maintain health education programs in northern communities.

We’re supposed to provide the community care work. We’re called community health nurses. I find the majority of what we do is not community health, like true public health...like so much of it is more acute, like I’m in the clinic most of the time (B0201, p. 4).

It all suffers...You really can’t do your programs properly because what you would like to see for community health nurses is to get out there and do a lot of teaching on prevention...and that’s great if you’re full-staffed, but I think it’s really important for people to realize and I think it’s often missed when people say, “This is what we’d like you to do — teach prevention” because that’s what you’re there for — you’re not there to do acute care (B0301, p. 11).

I want more public health...There's no time (A0401, p. 16).

Unfortunately, the outpost nurses were unable to initiate and continue community health programs because their time was spent providing acute health care services.

Lack of Mental Health Resources

Concerns were voiced about personal safety and lack of expertise in caring for people with mental health problems. The nurses were distressed about lack of mental health resources in northern Manitoba.

Like you never know when you're going to get a mental [patient] — that's scary. So you never know how to handle them (A0302, p. 9).

Some nurses talked about feeling uncomfortable working in the area of mental health. They expressed a lack of knowledge and skills in caring for people with mental health problems. A few nurses revealed a limited understanding about the people who were suicidal in their communities. For example, one nurse wondered what would "make them [people who attempt suicide] happy and forget their suicide attempt".

We have a high suicide rate...We don't have mental health workers. Provincial government workers are not there. We don't have any formal help.

Yes, I try to check them out...see if they need drug and alcohol treatment because they needed that...What do they do? What is it they're looking for to make them happy and forget their suicide attempt? That lack of service really dissatisfies me (A0401, p. 8).

The complex environmental, contextual, and historical factors that contribute to the alarming suicide rates on reserves were not voiced by the participants.

QWL of Aboriginal Outpost Nurses

Group and Community Activities

In contrast to the non-aboriginal nurses, the aboriginal nurses in this sample grew up in northern communities. They were more inclined to spend their time off work away from the workplace, participating in group and/or community activities.

I go out and visit some people...I go out and go for a ride, and I go to camp and I go to the things. I go to the festivals and I go to the gatherings...They have feasts and I go to that or some of the festivals that they have, we go. And when people invite us to their home, or if it's someone I haven't visited, then we try to go (A0402, p. 20).

The aboriginal nurses voiced a keen interest in learning about the northern community in which they worked. These nurses actively explored the northern community and interacted with the people in their homes and at community events.

Knowledge of Language and Culture

The aboriginal nurses perceived that their firsthand knowledge about the culture and language assisted them in performing more thorough assessments and prescribing more appropriate care for their patients. Aboriginal outpost nurses spoke about the importance of acknowledging patients' spirituality and the necessity of incorporating traditional healing into their nursing care plans.

There's quite a few people who deal with herbs and a lot of the medicine lodge people work with the medicine wheel, concentrating on the four aspects — body, mind, spirit, and emotional. That's the philosophy we really concentrate on — the spiritual healing of the patient without involving drugs (A0402, p. 3).

QWL of Non-aboriginal Outpost Nurses

Lack of Group and Community Activities

Non-aboriginal outpost nurses spent more of their time off work within the nursing station setting. They participated less in group/community activities.

We never have a lot of time to really get into things. We try to go to, like, I've been to the arena and watched hockey games and stuff like that. They have Indian Days with ... peanut races and stuff. I go to that or things over at the school. But other than that there hasn't been time to go to things. I've been to church a couple of times, but basically by the time Sunday morning rolls around I need my sleep. Just don't have the energy to go anywhere. Some people find that hard to understand — even other outsiders in the community. But the time we have on our own and to ourselves is very precious to us and we don't always want to share it with anybody else just to put on a show that we are involved (B0101, p. 28).

The northern experience, although greatly valued, was also viewed as temporary by the non-aboriginal outpost nurses, which may account for their lack of investment in the community, beyond token activities such as “Indian Days”.

Re-Integrating To Urban Life

Non-aboriginal nurses talked about feelings they experienced on return to urban settings.

I cried when I left the [northern] community, but I was also happy to be going home and it took me the longest time to feel comfortable...I felt that there should be some debriefing...I thought, come on, I'll handle it. Pull yourself up, don't be such a baby. Carry on. But I really felt that there should have been a debriefing period...something to warn me about what it was going to be like when I came out.... It's very strange to describe to someone who has never gone through it...The noise, the people, the congestion just really bothers me. You'd be going into a mall and all of a sudden you had to get out...I can imagine someone who has a mental illness, how they must feel in that situation (B0103, p. 17).

Living and working in isolation would likely contribute to a need for “debriefing”, upon leaving the north.

Conclusion

The preliminary findings of this study indicated that aboriginal and non-aboriginal outpost nurses voiced positive worklife factors such as satisfaction with an expanded nursing practice role, variety of patients' needs, and independent practice. They shared similar QWL concerns such as and living/working in the same environment, number of work hours, sustained heavy workload, lack of community health programming, and lack of mental health resources in the north. Aboriginal nurses spent more time off work participating in group or community activities. They appeared to connect and invest in their communities, unlike their non-aboriginal colleagues. Aboriginal nurses also

perceived that their firsthand knowledge of language and culture enhanced their ability to care for First Nations People. Non-aboriginal nurses spent their time off work in their living quarters located within the outpost station setting. This practice, instead of providing an opportunity to “get away” may actually contribute to a further sense of isolation for these nurses and negatively impact on their QWL.

These preliminary findings will be shared with the participants to facilitate validation. Once member checks are completed, the findings and subsequent recommendations will be shared with MSB, participating Chiefs and Councils, the Manitoba Association of Registered Nurses, and the Canadian Nurses Association.

Acknowledgements

The authors would like to extend their sincere gratitude to the outpost nurses who volunteered their time and effort to share their unique nursing worklife.

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A Determination of Reported Cases of Family Violence and Violence Against Women

Betty Thomlinson, Nellie Erickson and Richard Packo¹

Family violence and violence against women is a problem of ever increasing proportion with far reaching consequences for both victims and abusers (MacLeod 1992). The abuse of power that is demonstrated in violent acts may be perpetrated against women, children, and elders in all sectors of the population. It has been reported that one in four women will be assaulted in their lifetime with one in eight experiencing battering by their spouse or significant other. Current knowledge suggests that four per cent of seniors are victims of neglect or violence (Podnieks 1985). The Aboriginal Justice Inquiry found that one in three aboriginal women are abused by their partners (1991).

Violence against women and children has a long history which is now actively researched and presented in the literature. Using the term family violence suggests that all families fight, argue, hit; a private matter behind the doors of the home. Society has accepted and fostered the concept that fathers have the right to do as they will in the home and to determine the actions of the family. In the Aboriginal community men have been influenced by government, schools, and the churches to accept this perception. There is a pressing need to relearn the roles and responsibilities of men and women and to take equal partnership in society.

For many persons in the community exposure to mental, physical, and sexual abuse became the norm. The severity of this issue on the minds of the abusers and the victims have far reaching consequences. These effects of violence are exhibited in the potential for victims to become abusers, in drug and alcohol abuse, and in persons who have difficulty coping with daily living.

Many women and children are isolated by the abuser in an attempt to control them, to make them dependent; deprived of the support of family and friends. This control extends to depriving women of the opportunity for education and employment. If by chance a women does work outside the home, she is expected to account for all her earnings, as well as the time used getting to and from work. Additional stresses that

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compound the problems are crowded housing, unemployment, geographic isolation, and limited privacy.

Treatment and service facilities are located according to population to maximize assistance to the greatest numbers. This then requires that women seek aid outside their home community often at great distance. This further serves to isolate them from their support systems.

The Project

Members of the Swampy Cree Tribal Council recognize the significance of the problem and are beginning to take actions to address the needs of members who have been abused and who are abusing. Resolutions passed in September 1994 by the Tribal Council direct that statistics be gathered regarding child abuse and that a community approach to healing be initiated. This is an extensive issue complicated by many factors. To facilitate this undertaking questions that need to be addressed include:

1. What types of Family Violence exist in the region?
2. How much Family Violence is unreported?
3. Where does violence occur?
4. What can we do to help prevent Family Violence?
5. How is Family Violence affecting children and youth?

This proposal has been initiated by the staff, with the knowledge and consent, of the Board of the Cree Nation Tribal Health Centre (CNTHC). The purpose of the proposed study is to:

- 1) gather the statistics on reported cases of family violence and violence against persons found in multiple agency files. This preliminary step is necessary to provide a basis for future efforts toward assisting band members. The information sought will be pertinent to the seven nations of the Swampy Cree Tribal Council.
- 2) have volunteer community members develop a methodology that will seek to determine whether there are cases of unreported abuse and violence in the communities.

To this end, the Manitoba Centre on Family Violence and Violence Against Women was approached for funding for the data to be collected and collated in a research project to provide background material for the long term initiative. Ethical approval has been obtained through the Ethics Committee of the Faculty of Nursing University of Manitoba.

This statistical evidence of family violence within the seven member bands of the Swampy Cree Tribal Council is spread throughout a number of sources and is not readily available, nor separated from, data regarding other persons in the Parkland and Norman regions. To date there has been no concerted effort to accumulate the statistics regarding violence numbers for the Tribal Council communities.

While some of the agencies are under local control such as the child welfare agency (now Cree Nation Child Caring Agency, formerly Awasis), others are provincially administered. A research assistant from the Tribal Council region would be responsible for compiling all the statistics from each of the communities as well as those centrally located in The Pas and Swan River.

Data Collection

The research will include the compilation of *statistics* regarding family violence and violence within the communities. Information will be gathered from all agencies within the region coming in contact with victims and abusers. These agencies will include: (a) child and family service agencies, (b) crisis centres, (c) the justice system, (d) addictions services, (e) health care agencies, and (f) the school systems. No names or confidential information that could identify persons will be compiled. Statistics will be gathered from public documents.

It is recognized there will be overlap of members from families who have sought help or been referred to various agencies. Children may be in the child caring system, mothers may be seeking help from the crisis centre, fathers may be charged under the justice system, and other children may be acting out at school. The impact on the various agencies remains the same — the numbers requiring assistance are there regardless of whether they come from one family or a number of families.

Of major importance during this collection of data is the ongoing education of community members regarding the numbers of reported cases related to family violence which will ensue as the research assistant meets in the community. There is a general perception in the region that many cases of family violence are not being reported. Community members suggest that fears of how the judicial and family courts systems will affect those involved precludes reporting.

A pivotal portion of the project is to meet with community members to determine what method they believe could best be used to access what is believed to be a large number of unreported cases of abuse. This may be through the development of a questionnaire or through whatever other means the community decides is appropriate for them. It is imperative that community members assist in the development of the research tool. It is therefore essential the research assistant be Cree speaking, the first language of all the communities involved. The two sections of research will provide a more comprehensive picture of the present state of affairs.

Definitions

Information will be sought regarding the definitions of family violence and violence against women used by each of the agencies to analyze similarities and differences. Child caring agencies and the judicial system adhere to federal and provincial definitions.

It is recognized that other agencies may have developed their own definitions. These agencies will be asked to clearly state what they include within their definitions of violence; the actions will be clearly documented. It will be important to ascertain against whom the violence is perpetrated; themselves, teachers, other students, patients, nurses, other staff.

Additional Information

All agencies will be asked whether they are aware of other agencies to whom this same individual or family have been referred or from whom they have requested help. As well, the interaction between agencies regarding reported cases will be sought.

Unreported Cases

Volunteer members of each community potentially including the Health Administrators, Health Board members, staff of CNTHC, and community resource persons will

be asked to assist in developing a method to attempt to determine the extent of unreported abuse. It is acknowledged that only with the participation and the instigation of the local members would the development of a successful methodology be possible.

Benefits of the Project

A valid question is what benefits this research project will contribute to the community, and to research on family violence and violence against women in general. In the context of research that is relevant and applicable to policy and practice, this is a project that can serve both the local agency and other First Nations in the attempt to determine what is occurring in their communities. The project is expected to provide:

1. Cree Nation Tribal Health Centre and its board with a comprehensive picture of the *reported* cases of violence as is currently available from the multiple agencies and locations serving the population of the Swampy Cree Tribal Council region. Other regions may determine that such a compilation would provide them with a more thorough picture of violence in their communities.
2. The process of the collection of the data will continue to bring the issue of family violence to the forefront in the communities.
3. A summation of the types of information obtainable for each agency, the information not available from the agencies, and how the agencies share information will be accessible to the various agencies for their use.
4. The development of a methodology, created from within the communities, to seek information on violence that remains unreported will create a unique tool for other organizations, both aboriginal and non-aboriginal, to use. Cree Nation Tribal Health Centres, under the resolution by the Chiefs, intend to solicit this information to assist them in compiling background information necessary to determine the need for a regional treatment centre.

Data Dissemination

The compiled data will be presented to the Swampy Cree Tribal Council, the CNTHC Board, Cree Nation Child and Family Board and the local health boards by the community investigators. The data will be regionally grouped with no one community's statistics separated from the aggregate. The report will be available to all members of the communities and local newsletters will be used to spread the information.

This data may then serve as the basis for future research projects. The Tribal Council and CNTHC will be able to use the information as they seek resources and programs to combat the problems of violence and the associated long term results. The inquiry into Family Violence and Violence Against Women in the region is not for the benefit of the Tribal Council or the Cree Nation Tribal Health Centre but to identify the needs of the people. The purpose is to bring hope and healing to community members, to release guilt and shame, and to facilitate growth of the all community members to participate in a more confident, caring, and resourceful society.

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Would More Traditional Food Produce a Diet of Higher Nutrient Quality? An Example of Participatory Research in the Yukon

Eleanor Wein¹

Introduction

In order to work together, researchers and Aboriginal communities need a better understanding of each other's expectations from the research. For example, researchers need to know how the community expects to benefit from the research, and the community needs to understand the whole research process, not just the community aspect. The following paper describes how a traditional food study involving three Yukon First Nations and a university researcher was initiated, carried out, and the results disseminated. It points out in particular the role of community leaders in this project, and describes many steps in the research process which are not obvious at the community level.

A recent international workshop on 'Ethical Issues in Health Research among Circumpolar Indigenous Populations' (Inuvik, Canada, June 2-3, 1995) highlighted the need for a deeper understanding of the nature of the research process among indigenous communities, researchers, and funding agencies. Indigenous communities need greater understanding of the whole research process and the universal application of the research, not just the community aspect, in order to make decisions on participation: researchers need greater understanding of and sensitivity towards local community expectations of how they could benefit from research, in order to design their project appropriately. Funding agencies need an appreciation for both of these perspectives.

The ultimate goal in designing a research project is to create new knowledge. To design a project with a community, one draws upon two existing knowledge bases, one

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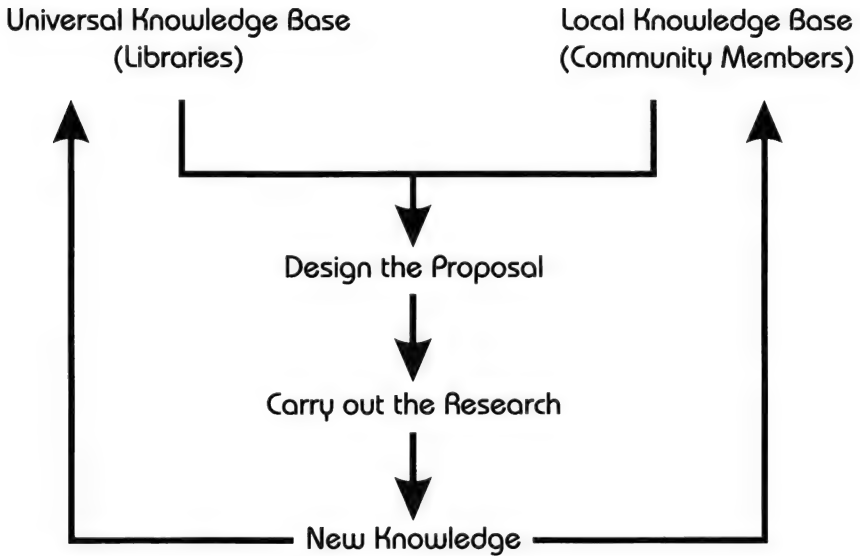


Figure 1. *Flow of knowledge in the research process.*

being a universal knowledge base, as represented by libraries, and the other being a local knowledge base, as represented by community members (Figure 1).

The researcher is familiar with that portion of the universal knowledge base which pertains to the proposed project. That is, he or she knows about similar kinds of studies done elsewhere, what other pertinent information already exists, what is lacking, and can explain how the project would contribute to the universal knowledge base. The community is aware of the kinds of knowledge present among its members, of community characteristics which may influence the study design, and of what kind of new knowledge they want from the proposed study. Researcher and community leaders together draw upon both knowledge bases to develop the proposal. In terms of the expected use of the study findings, the researcher is primarily interested in the universal application of the new knowledge, for example, is it typical of a wider range of people or situations than just those actually studied? And if so, what are the implications? The community is primarily interested in local application, to help solve a problem. Through the research papers and reports (written and oral), the new knowledge flows back to become part of the universal knowledge base and part of the local knowledge base (Figure 1).

The following paper provides an example of a traditional food study, where the project idea and early planning originated from the communities, but was carried out with the help of a university researcher. It fits well within the scale of four levels of community involvement ranging from 'conventional' (no community involvement other than to provide data) through 'fully participatory' (community involvement in all aspects) outlined by Masuzumi and Quirk (1993).

In the Yukon, Aboriginal people comprise 23% of the population (Yukon Bureau of Statistics 1994) and competition from non-native hunters for game species, especially moose and salmon is keen. In 1991, as part of their land claim, Yukon Aboriginal leaders were negotiating the number of moose and salmon which each First Nation would be allowed to harvest. Three First Nations (Indian bands) requested a study of traditional food use to provide data to assist them in negotiations. In planning the study, several leaders expressed the belief that the contemporary diet was not ideal for health, and that more traditional food was needed. Hence one part of the study was designed to examine this belief, from a nutrient intake perspective. Furthermore, under land claim and self government proposals, Yukon Indian people would become responsible for health, education and social services in their communities. Thus information on food patterns and nutrient intakes could be useful in program planning. Hence assessment of nutrient intakes and examination of the perceived ideal diet would provide useful information for leaders. The purpose of the study which evolved was to document food consumption patterns (especially the use of traditional foods), nutrient intakes and the Aboriginal people's perception of the ideal diet for health among three Yukon First Nations living in four communities (each band's traditional territory plus Whitehorse, an urban centre where some members of each band lived). A detailed report (Wein 1994a) and four papers have been prepared (Wein 1994b, Wein 1995a, Wein and Freeman 1995, Wein 1996). The following article gives only an overview of the main findings, while describing in detail the participatory nature of this project. Others papers on conducting dietary research in Aboriginal communities are available (Campbell *et al.* 1994, Wein 1995b); however, the following paper emphasizes the role of community leaders, and makes explicit many steps which researchers use, but mention only briefly or not at all in reports, since they are considered common knowledge among researchers.

Methods

Proposal Development and Funding Applications

Indian leaders invited and sponsored travel to the Yukon for the investigator (a university researcher, EEW) to plan a study with them. Political leaders and elders from three bands which were meeting together to discuss land claims provided background information on the communities, the food species, and food customs. The leaders also discussed study objectives, design and methodology with the investigator, and assisted in developing the questionnaires. Later, the full written proposal and questionnaires were reviewed and approved by the Aboriginal leaders. Chiefs of the three First Nations provided a formal letter of invitation to the investigator to work in their communities on this research.

Since the study design had evolved into a larger project than the leaders originally anticipated funding on a contract basis, the investigator offered to search for funding through her university connections. She made clear very early in the discussions that in order to conduct any research (contract or grant funded) through the Canadian Circumpolar Institute of the University of Alberta, and to have the university name appear on the resulting report, certain conditions had to be met. There could be no exclusive control over ownership or use of the data. That is, in addition to being reported in full to the participating First Nations and funding agencies, the results must be used for academic purposes as well, for example, papers (research articles) arising from the same results must be submitted for peer review and publication in academic or professional journals. Advantages of this process to the First Nations were pointed out.

The peer review process serves as a check on the scientific soundness and interpretation of the results. Hence peer reviewed papers do not rely solely on the researcher's reputation, as does an unpublished report.

The investigator then applied through the university for external funding, specifically for a two-year post-doctoral fellowship from the National Institute of Nutrition, for a northern travel grant from the University of Alberta, for approval from the Ethics Committee of the Faculty of Arts of the University of Alberta, for accommodation at the health centres in the study communities, and for a research permit from the Yukon Territorial Government. Each of these applications required writing a separate version of the proposal, accompanied by a copy of the chiefs' invitation, and other letters of promises of support from the university such as provision of office space and academic supervision. Later the three First Nations applied to the Yukon government for grants to hire their interviewers, one to be chosen by each band. This preparation took about four months of full time work, spread over a year.

Local Assistants — Selection, Training, and Responsibilities

In each First Nation, a member of the band's land claim staff selected and hired a local person as research assistant and interviewer, based on criteria outlined by the investigator. The criteria were as follows: well-respected by the community; knows the community well; can be trusted by the community to keep information confidential; high school graduate with good English language and arithmetic skills; reliable; able to work with minimal supervision; experience in survey work desirable. With this person's help, a sampling frame of potential adult participants was developed from the band's membership list. Names of persons younger than 19 years, or not residing in the study area, or otherwise clearly unable to participate were removed. The remaining names were sorted according to residence stratum (i.e. the band's traditional community or Whitehorse). Within each stratum, the required number of names was selected at random; the interviewer physically drew numbers (corresponding to the names) from a bag, while the investigator recorded. Thus the interviewer fully understood the selection process, and was able to explain to potential participants that their names were 'drawn from a hat.'

Training involved discussing the purpose of the study, the importance of confidentiality and anonymity, explaining the questionnaires, and demonstrating the protocol by the investigator interviewing the research assistant (interviewer). Then the interviewer practised, interviewing first the investigator, and later staff members of the band office, whose names had not been drawn for the study proper. The investigator coached the interviewer as needed, and reviewed the data gathered with her, to ensure sufficient detail and clarity. For the study proper, from the list of randomly selected names, the interviewer was encouraged to approach first those she believed would be easy to interview, as a means of gaining self confidence.

The research assistants also trained the investigator informally in the customs of the community, such as suitable times to approach potential participants, where to find individuals, common food preparation methods and portion sizes. Often a comment or situation gave insight into specific cultural meanings of food items or preparation methods. The investigator accompanied the interviewer on her first 15 to 20 interviews, to those homes where this was acceptable. English is widely spoken in these communities and at the interviewers' recommendation all interviews except one (where an interpreter assisted) were conducted in English. Being present in homes allowed the

investigator to gain insight into food customs, to ensure standard interviewing protocol was being followed, and to answer questions from interviewer or participant.

In each community, the investigator worked closely with the interviewer for two weeks. The protocol called for four interviews per participant, one per season. The initial interview was the longest and most complex. It included a 24-hour recall of actual daily food consumption (all foods and beverages consumed yesterday, with amounts of each), a quantitative one day's description of a perceived ideal diet, and recalled estimates of the frequency of use of each traditional food species by season over the preceding year. The initial interview was conducted in the fall and within each community most of the 40 interviews were completed during the two weeks that the investigator was present. After the investigator moved to the next community, the interviewer finished the remaining interviews and forwarded the remaining data by mail.

In order to obtain a more accurate picture of actual daily food intakes, the participants were interviewed again by the same interviewer (in most cases) in winter, spring and summer for their 24-hour recall of daily food consumption. The investigator kept in touch by phone and fax, and completed forms were mailed to her.

Researcher Responsibilities

The investigator coded, entered and checked the four types of data from the 122 participants, namely annual traditional food frequency by species, total daily food recalls in each of four seasons, perceived ideal diet in one season, and demographic characteristics. She computed the daily nutrients in actual and perceived ideal diets, and did the statistical analyses, including: annual frequencies of traditional foods; traditional foods and daily nutrients in actual daily food recalls in four seasons; traditional foods and daily nutrients in perceived ideal diets compared to actual diets of the same season; demographic characteristics; and differences in these among bands, among communities, between men and women. She also calculated the proportion of individuals at risk of inadequate intakes of specific nutrients, and the proportion of daily nutrients which came from traditional foods. She wrote the draft report (102 pages, including 39 tables), made improvements for the final report, wrote the research papers, and revised them according to the reviewers' suggestions.

Results

Funding Sources

Funding came from many sources, and totaled \$89,259. Proportionate contribution of the various agencies is shown in Figure 2. The National Institute of Nutrition, a non-profit organization which strives to 'provide leadership in advancing the knowledge and practice of nutrition among Canadians' provided the largest proportion through the two year post-doctoral fellowship awarded to EEW. Yukon Health and Social Services provided the second largest amount, from their Health Investment Fund, as grants to each participating First Nation for payment of their interviewer. The bands paid expenses involved in developing the proposal, and the author's university provided through a grant competition a C/BAR (Circumpolar/ Boreal Alberta Research) grant for northern field work. In addition to those agencies in Figure 2, Medical Services Branch of Health and Welfare Canada provided support in kind, including accommodation for the investigator in the study communities.

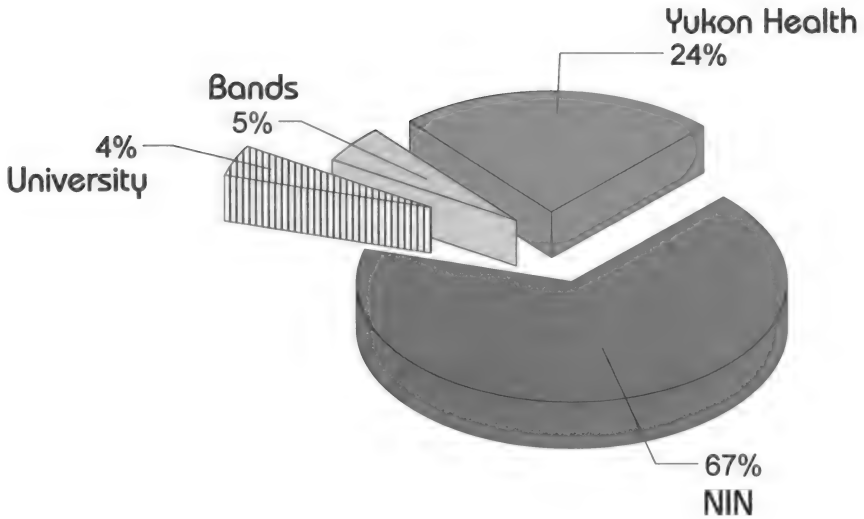


Figure 2. *Funding sources.*

Time Distribution among Contributors and Research Components

The whole project took the equivalent of about 36 months of full time work. Besides the researcher and interviewers, many others contributed time. Study participants contributed time on up to four occasions over the year (up to 3.5 hours each over the year). Band office staff in the communities provided helpful information and handled payment of interviewers. University advisors wrote letters of support for proposals, and later reviewed drafts of reports and papers. A university computing/statistical consultant provided about 15 hours of assistance. University staff administered the funds. Editors and anonymous reviewers in other research institutions provided detailed comments on the papers submitted to the journals. The estimated distribution of time among the groups of people involved is shown in Figure 3. For example, 66% of the total time was contributed by the researcher, 21% by all interviewers together, 8% by the 122 participants together, 5% by university advisors, including the statistical/computing consultant, and the editors and reviewers of the research papers, and 1% by local community leaders.

Time distribution (of all contributors together) on each major part of the research process is shown in Figure 4. Other than for a few days of discussions in the planning and reporting phases, the local community sees only the data collection phase. In this project, the data collection phase, including the time contributed by the participants and interviewers, accounted for about 37% of the total. The proposal writing and funding applications took about 12% of the total time, data entry and analysis each about 10%, report writing another 12%, and research paper writing about 17%, including that of editors and reviewers. Considering the researcher's time alone (not shown in Figure 4), the largest proportions were spent on writing proposals, data entry and analysis, writing reports, and writing research papers.

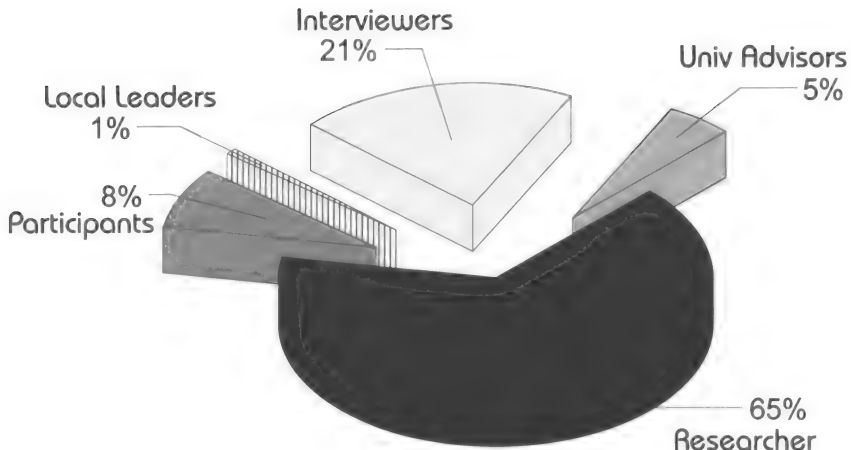


Figure 3. Time distribution among all contributors. (Total pie represents 36 months)

Highlights of the Findings

Briefly, a total of 122 adults participated, including 45 men and 77 women, from four communities (Haines Junction, Old Crow, Teslin and Whitehorse) ranging from a small remote northern village (Old Crow) to urban Whitehorse. Participants came from Southern Tutchone, Gwich'in and Inland Tlingit cultures. The Whitehorse sample included all three cultures, but had a majority of Southern Tutchone people.

Households estimates (N=122) of frequency showed that on average over a one year period households used traditional food species 409 times. Most frequent were moose (95 times per year on average) and caribou (71 times per year), followed by chinook salmon (22 times per year), Labrador tea (20 times per year) and three species of berries (low bush cranberries, crowberries, and blueberries, 14, 14, and 11 times respectively). Differences among locations were observed. Households in Old Crow used caribou, hare, ducks, broad whitefish, blueberries, and Labrador tea more often ($p < 0.05$) than the others, while Teslin households used moose, lake whitefish, lake trout, and several species of berries more often ($p < 0.05$) than the others (Wein 1994a, Wein and Freeman 1995).

In actual daily diets of individuals, averaged over four seasons, traditional foods appeared on average 1.14 times per day, but varied from an average of 2.07 times per day in Old Crow to 0.57 times per day in Whitehorse. Excluding marketed foods used in preparation (such as lard for frying, or macaroni and vegetables added to soups), traditional foods provided on average 17% of daily energy (caloric) intakes, but 58% of daily protein, and about 50% of daily iron, zinc, riboflavin and niacin. When nutrients in the total diet (traditional and marketed foods) were compared to recommended levels for health, most people had healthy intakes of those nutrients associated with lean meat,

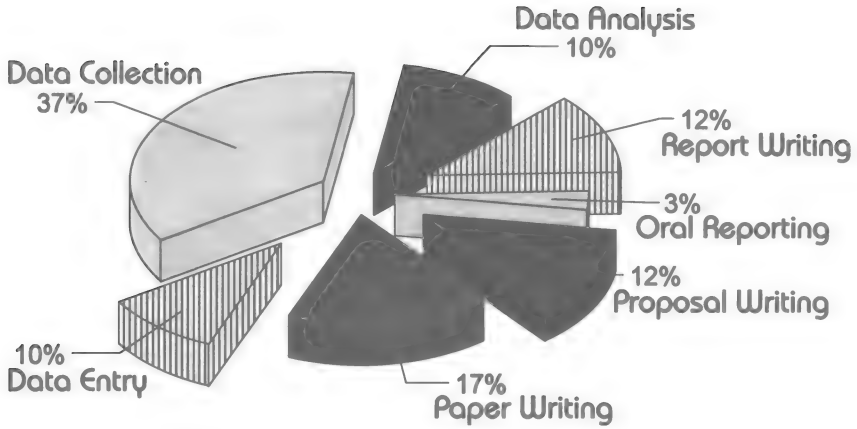


Figure 4. *Time among categories of research activities.*
 (Total pie represents 36 months)

such as protein, iron, vitamin B12, thiamin, and riboflavin. However, about 20% of persons were at risk of inadequate intakes of zinc and vitamin C, about 40% at risk of inadequate intakes of vitamins A and D, and 60% or more at risk of inadequate intakes of calcium and folate (Wein 1994a, Wein 1995a).

Compared to actual diets in the fall season, perceived ideal diets described in the same season contained traditional food items about twice as often, although portion sizes were similar. Perceived ideal diets contained on average 200 calories more than actual diets; however, energy intakes in both were low in comparison to average intakes of large population groups used for reference in the Recommended Nutrient Intakes for Canadians (Health and Welfare Canada 1990). Intakes of most nutrients were also higher (p) in perceived ideal diets, although the percentage of energy from fat remained the same. Thus in respect to certain nutrients, the average amount in the perceived ideal diet more closely approached recommendations for health than did the actual diet. This provides partial support for the belief that more traditional food would contribute to better health. Of 59 participants who offered comments on an ideal diet for health, 22 comments identified more or mostly traditional food or meat; 11 stressed variety; nine expressed concerns about chemicals in marketed food; two expressed concern about chemicals in marketed and traditional foods; six emphasized fruits, vegetables, and fibre; five mentioned milk; and one or two each mentioned reducing fat, eating in moderation, reducing sugar or coffee. Some rural and urban differences in mean nutrient levels and in types of foods selected were noted within perceived ideal diets. These findings have implications for nutrition education in Yukon communities (Wein 1994a, Wein 1996).

Reporting Results to the Communities and Others

A draft of the full report was sent to the land claim negotiator of each First Nation for review. The researcher also requested an opportunity to discuss the results in person at

a band council and/or community meeting, since funding for a return trip to the communities had been obtained as part of the original travel grant. The nature of the meetings varied with the community; in one, results were discussed at a large band council meeting with the help of slides, and later the land claim negotiator reviewed the report in detail with the investigator, pointing out several helpful corrections. In another community a very short oral presentation was made at a large public meeting, followed by lengthy individual meetings with the land claim negotiator and chief; in the third case, results were discussed with the land claim staff and chief, and at their request some data were graphed onto large posters for use with the larger community. In each community, about 10 copies of the summary were given to key people personally by the researcher and another 30-35 copies were left in the band office for further distribution. In Whitehorse, results were discussed with representatives of the Council for Yukon Indians and with health professionals. Careful review of the full draft report by Indian leaders led to more accurate interpretation and clarity in wording, especially in describing the food species and their locations. The final report was later sent to each participating First Nation, to the Council for Yukon Indians, to Yukon College, Yukon Archives, selected other northern libraries and research centres (Inuvik Research Centre, Canadian Circumpolar Institute Library of the University of Alberta, CINE of McGill University), and to the agencies which helped to fund, or provide logistic support for the study (National Institute of Nutrition, Yukon Department of Health and Social Services, Medical Services Branch Yukon Region). Later, research papers were sent to the Yukon Heritage Branch, which had issued the permit.

A seminar was given at the university and research papers (articles) based on various aspects of the project were submitted to academic and professional journals for review. Using the normal peer review process, the journal editor sent these manuscripts anonymously to other researchers in the same discipline for critical appraisal, then back to the investigator to revise according to their suggestions. After revisions are deemed satisfactory, the articles will appear in journals (e.g., Wein 1994b, Wein 1995, Wein 1995b, Wein and Freeman 1995, Wein 1996), which are subscribed to by university and research libraries across Canada. In this way the findings become available to all (including Aboriginal and non-Aboriginal students, present and future health professionals and researchers) who wish to learn about the Yukon. Copies of the published articles have also been sent to the bands and other interested persons.

As an extension of this research, two other small grants (not part of Figures 2-4) to develop a food and nutrition handbook for Yukon First Nation communities were applied for and received by the investigator. One covered travel and communication expenses; the other provided a stipend for a summer student (university food and nutrition major) to write and test the handbook. The student discussed her draft handbook and tested the proposed learning activities with 40 Yukon people, while the investigator reported the findings of the main research to the communities in July 1994. The handbook was revised, reviewed by several professionals, revised again, and is now available (Nardelli and Wein 1996).

Discussion

This project serves as an example of how Aboriginal communities and university researchers can work together to accomplish objectives important to both. In this case the idea for the project came from the communities; sometimes, however, the project idea may originate from the researcher. In this case, initial funding to develop the idea

(5%) came from the First Nations; further funding to actually carry out the research (95%) came from many sources; and Yukon First Nations people provided the data. Hence all are entitled to share the findings.

Yukon Indian leaders obtained a report with quantitative data to use for their purposes in negotiations or decision making. The local research assistants gained some insight into survey design and increased their interpersonal skills in interviewing. The handbook aims to increase understanding of healthy food choices using Yukon examples and thus it incorporates the findings into a broader educational tool for the communities at large. The researcher achieved her objectives of gaining research experience in a new cross-cultural setting and contributing to the collective body of knowledge in formal publications. The university which supported this work achieved its goal of ensuring that the data were available for academic use and that its research met accepted ethical and scientific standards through the review processes. The funding agencies received the report for their files as promised in the grant arrangements.

There are many other examples of collaborative or participatory research between universities and Aboriginal communities reported in the literature in various disciplines (Freeman 1993, Macaulay 1993, O'Neil *et al.* 1993). For example, a physician working long term in an Aboriginal community is concerned above all that any research be fully acceptable to the community so as not to tarnish the trust relationship between community and physician (Macaulay 1993). Also described is an example of how native medical interpreters in hospitals adopted an advocacy role for patients through participating in a research project; a second example of how a community member became a research associate within the university system; and a third example of how a native women's organization surveyed their members to advocate for changes in obstetric services (O'Neil *et al.* 1993). Some types of research are by their nature more suitable for community participation at all levels than others. Health promotion research where communities seek to take control of their own programs lend themselves especially well (Green *et al.* 1994). Other types, such as disease screening or new treatment approaches being tested on a national scale, must follow consistent procedures and protocol in all communities involved, and therefore could be modified only within certain limits by an individual community. The challenge remains to find ways to make other types of research on various topics truly participatory, scientifically sound, and workable for both communities and researchers.

Conclusions

With sufficient opportunity for consultation and discussion, and time to build trust, Aboriginal communities and researchers can work together to achieve related, if not identical, objectives. In the example described here, the initiative and initial funding provided by the Aboriginal community were crucial to beginning a meaningful dialogue; resources which could be accessed through the university were essential to carrying out the research; the commitment of the community helped to achieve an adequate participation rate; the peer review system helped ensure sound interpretation; and the library system in Canada will help in disseminating and maintaining access to the findings over the long term. Funding agencies should recognize the importance of in-depth personal discussion between researchers and communities in planning research, and allow seed money for travel to accomplish this.

Acknowledgements

Sincere appreciation is expressed to all the Yukon people who assisted in this study. To interviewers Vicki Josie, Rose Kushniruk, Angela Schafer, and Kim Smarch; to negotiators Lawrence Joe, Robert Lee Jackson, and Stanley Nijootli; and to the chiefs and staff of the Champagne-Aishihik, Teslin Tlingit and Vuntut Gwich'in First Nations. This work was supported by a National Institute of Nutrition Post-doctoral Fellowship, a northern travel grant from the University of Alberta, and by the Yukon Department of Health and Social Services. Medical Services Branch of Health Canada provided accommodation. The participating First Nations funded development of the proposal.

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The Athabasca Influenza Epidemic of 1835

Patricia McCormack¹

Introduction

Just as in the south, European diseases devastated northern Aboriginal populations through their transmission as virgin soil epidemics, those in which '...the populations at risk have had no previous contact with the diseases that strike them and are therefore immunologically almost defenseless' (Crosby 1976:289). Thanks to the excellent records kept by Hudson's Bay Company (HBC) officers, it has been possible to document the transmission and impact of some early diseases with considerable accuracy. Most published literature on this subject has considered broad patterns — disease writ large — not disease at the community level.² Examples include both publications that focus on disease, such as those by Shepherd Krech (1983; 1978), Arthur Ray (1976), June Helm (1980), and summary works about northern Dene, such as John Yerbury (1986) and Kerry Abel (1993). A recent paper by Ann Herring (1993) on the 1918-1919 influenza epidemic at Norway House, in northern Manitoba, reminds us of the complexity of any epidemic, including virgin soil epidemics, in its transmission process and rates of infection, mortality, and population recovery, which may be highly variable. Her analysis encourages us to look more closely, where we can, at earlier epidemics.

However, in virtually none of the literature related to disease is there any sense of the suffering and grief of those afflicted: scholars write about 'populations,' not 'people,' about demography and epidemiology (e.g., Dobyns 1993). From Renato Rosaldo's perspective, the voice of the anthropologist is typically one of dispassionate regard; the scholar distances himself from the business of emotion by transforming 'what for the bereaved are unique and devastating losses into routine happenings' (Rosaldo 1989:57); for example, 'mourning' becomes 'mortuary ritual.' He suggests that this is so because the life experiences of most anthropologists and other scholars, including the historians of disease, do not equip them to cope with devastating loss.

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1. Dr. Patricia A. McCormack is an Assistant Professor with the School of Native Studies (at the University of Alberta), and a Research Associate of the Canadian Circumpolar Institute.
 2. Few summary publications about post-contract North American disease include discussions about the subarctic regions. For instance, the recent review article by Dobyns (1993) does not cite a single author who has written on the subarctic, most notably Krech and Helm.

In this paper, I will present the details of a 19th century influenza epidemic that travelled with the Athabasca fur brigade from Norway House to Fort Chipewyan, in northern Alberta, in the fall of 1835. From Fort Chipewyan it spread to more distant communities that were part of the northern fur trade network. In short, it was a 19th century ‘virgin soil’ pandemic and an earlier equivalent to the Great Flu of the 20th century about which Herring writes. The transmission of this virgin soil epidemic and the nature of its impacts can be traced with some precision in the company journals and correspondence. By examining the documentary record carefully, and by drawing upon other accounts of Chipewyan and Cree culture and behaviour, we can gain some insight into the impacts of this epidemic on the residents of Fort Chipewyan and the surrounding region.

Because this epidemic has already been published, what is left to be learned about it? Without exception, the publications reflect the restricted perspective of the epidemiologist. There is another side, and hardly dispassionate. I read about this epidemic when reviewing Fort Chipewyan journals for another purpose. The journal included an obituary list, with names of people whose families I know. The discovery was stunning; these were distant relatives who had died in 1835 in a miserable and terrible fashion, and all knowledge of their passing, and of its manner, had been forgotten. The graphic details were available, yet none of the authors who had published about the epidemic had addressed its personal and social impacts, and none had drawn upon community oral traditions. This paper is the beginning of an attempt to provide a posthumous voice to these Aboriginal and non-Aboriginal people who suffered and died.

Origin of the Epidemic

While disease had often visited Fort Chipewyan and the Chipewyan and Cree peoples resident in the region in previous years, HBC records indicate that there was little or no illness during the winter of 1834-35 (HBCA B.39/1/30). On May 30 and June 4, 1835, four boats with their crews of about 28 men and Factor Edward Smith, who kept the journal, left Fort Chipewyan for the annual trip to Norway House (*ibid.*:fo. 43). The possibility that the boat crews were not well nourished is suggested by comments about their poor provisions (Sept. 13, 1835, HBCA B.39/a/32:fo. 12d), especially Smith’s remark on September 29 that the fresh meat they obtained was the best food they had had since May, before leaving for their journey to Norway House (HBCA B.39/a/32:fo.14). They also complained ‘...much of fatigue’ on the trip (*ibid.*:fo.2). Both nutritional inadequacies and fatigue contribute to impaired immunological status and may have affected the subsequent course of this epidemic.

The Athabasca brigade made its way from Fort Chipewyan to Norway House to deliver the season’s fur catches from the country of the Athabasca, Peace, Slave, and Mackenzie Rivers, and to pick-up the winter outfit of trade goods and supplies. The story of this epidemic begins on the south side of the Methye Portage. On July 1st, they passed boats heading for the Mackenzie District, containing people ‘...unwell of influenza [*sic*]’ (HBCA B.39/a/32:fo.4). However, it does not appear that they were the source of the epidemic at Fort Chipewyan, perhaps because they were there only briefly and because there was virtually no one at Fort Chipewyan during the summer, which was left in the charge of Mr. F. Butcher and a staff of four men (the blacksmith, a fisherman, and two ‘voyageurs,’ Le Gant and Grandbois [HBCA B.39/a/32:fo. 1-1d]) and, presumably, their families. The Chipewyan and Cree Indians spent the summer in

the bush, and the two Fort Hunters (HBCA B.39/a/32:fo. 1) would also have spent most of their time away from the post.

The brigade reached Cumberland House July 5th. A few days later, Smith reported that ‘The Indians here all sick of influenza — since Esperance passed — I am sorry to observe since Cumberland House the disease begins to make its appearance among the men of the Brigade’ (HBCA B.39/a/32:fo. 5-5d; compare with Ray 1976:145, where he says that the men arrived at Norway House ‘in good health’). Cumberland House was not, however, the centre of diffusion for this disease. It was Norway House that was pivotal, a crossroads for travel in the western interior (cf. Ray 1976), and the Athabasca brigade was heading right into an infected zone.

Jody Decker (1989:109) has speculated that this outbreak of influenza was a new strain of influenza A, considered the most virulent (cf. Herring 1993:81-82), possibly introduced by the Red River brigades to York Factory in the spring of 1835. Influenza persisted at Norway House throughout the summer and into the fall (Decker 1989:109-110, 113-116; Ray 1976:142-144). The incubation period was about 3-4 days (Decker 1989:115; Ray 1976:142), which matched the experience of the Athabasca brigade.

The Athabasca brigade arrived at Norway House July 12th. Smith wrote, ‘...the disease has been prevalent [*sic*] here for some time — some of the Athabaska Men now attacked with it. No Liquore issued to the Men on this account, at which there are some who are dissatisfied’ (HBCA B.39/a/32:fo. 5d). With neither doctor nor medicine available, they had to let ‘Nature...take its course’ (*ibid.*). Given the European treatments of the day, they were probably better off without medical attention. The men were too ill to repair their boats, and the Norway House carpenter had to help (*ibid.*). The men continued to catch the disease through July 17th, and not even Factor Smith escaped (*ibid.*:fo. 6). It appears that all or virtually all the 28 members of the brigade caught influenza within a period of 13 days. By July 18th their cargos and boats were ready, but the men were still too sick to travel (*ibid.*). Finally, on July 22nd, they left Norway House to return home (*ibid.*:fo. 6d), with 10 members of the brigade still too ill to work (Table 1). The following day, Factor Smith opened his medicine box and ‘gave a Purge to all those unwell’ (*ibid.*), which we can expect contributed to their weakened state. Smith commented on the condition of the brigade:

With the above number of men [ten] unable to labour we left Norway House — and passed a miserable night — the coughing of those unwell Keeped those that was able to labour from resting. As far as regards myself, the want of any nurishment I was able to eat rendered me weak and unable to render any assistance to those around me [HBCA B.39/a/32:fo. 6d].

They had an arduous journey home, due to the reduced numbers of fit workers (not all could row until after August 16 [letter from Smith to Hargrave, Dec. 28, 1835, in Glazebrook 1938:210]), the lack of additional Indian labour along the way (*ibid.*:211), the weakened condition of those who had been ill, and much low water (*ibid.*; various entries HBCA B.39/a/32).

Transmitting the Disease at Fort Chipewyan

The boats arrived at Fort Chipewyan on October 1 and Oct. 3 (HBCA B.39/a/32:fo. 14, 14d), having made remarkably good time considering their condition (78 days, or about two and one-half months). Smith remarked that there was ‘Nothing of influenza among the Indians on this side Portage la Loche’ (*ibid.*:fo. 14). Both Indians and traders were

Table 1: Men of the Athabasca Brigade III with Influenza

Thomas Hudson	Guide	On duty*	July 24
J. B. Tourangeau	Steersman		August 1
Louis Charbonneur	Steersman		July 24
John Dorion	Bowsman		July 24
J. B. Sylvester	Middleman		July 29
Thomas Hassal	Middleman		July 30
Emanuel Cornoyier	Middleman		July 30
Pierre Obichon	Middleman		July 30
Charles La Fleur	Middleman		August 12
Hebert Henrie	Middleman		July 26

*These dates are interpreted as indicating when the men were well enough to begin working again.
[Source: HBCA B.39/a/32:fo. 6d]

eagerly awaiting the arrival of the boats with the winter outfit of goods. The post journal noted that the Indians ‘...were now coming in from all quarters....[T]heir numbers is more than usual’ (*ibid.*:17a). In all, the factor counted 178 men and boys at Fort Chipewyan, 162 Chipewyans and 16 Crees (elsewhere, Smith refers to ‘160 Hunters Men and Boys’ [letter from Smith to Hargrave, Dec. 28, 1835, in Glazebrook 1938:210]), suggesting a total Indian population of about 356 people. They met groups of Indians at the forks of the little Athabasca River (HBCA B.39/a/32:fo. 13) as well as at Fort Chipewyan itself (*ibid.*:fo. 13d). These clusters of Natives presented an ideal opportunity for the transmission of the disease, and it was at this precise juncture that the influenza introduced by members of the brigade to Fort Chipewyan became a virgin soil epidemic or pandemic. It spread to the Natives of the region and residents of the post (cf. letter from F. Butcher to Hargrave, Dec. 28, 1835, in Glazebrook 1938:209), and on October 4th, it continued its journey further into the interior with the boats that left for the Peace River (HBCA B.39/a/32:fo. 14d) (Figure 1).

The Indians began to leave the post with their winter supplies on October 12th (HBCA B.39/a/32:fo. 17a). By this date, influenza had already broken out among the

...majority of the women and children in the Fort. The men that passed the summer inland are likewise unwell. ... There were sytoms [symptoms] of it among the Indians before they went off[f] and those here still have the disorder among them it must prove fatal to many [HBCA B.39/a/32:fo. 17ad].

The main European medicinal treatment available was the ever-trusty purging, given on Oct. 15 (HBCA B.39/a/32:fo. 17b and (probably) again on Oct. 26 (*ibid.*:fo. 18d)). The active agent may have been ipecac, effective as an emetic or cathartic. Ipecac was the chief ingredient in a remedy for influenza published February 1, 1837, by *The Shetland Journal* (Orkney Archives, Marwick Papers), and one that should have been

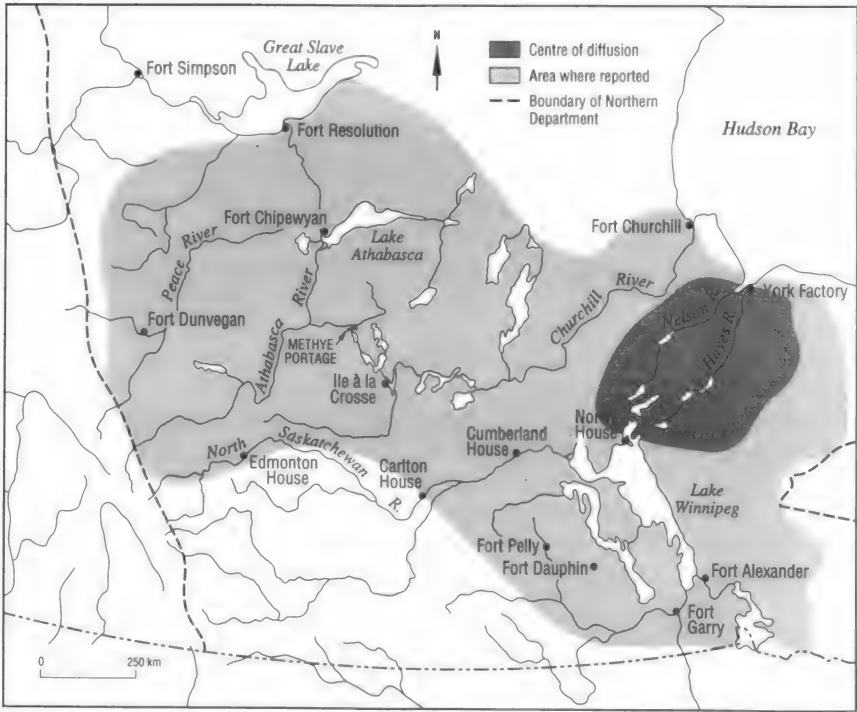


Figure 1. *Influenza Epidemic of 1835.*

(Source: Ray 1976: 144. Re-drafted by Wendy Johnson of Johnson Cartographics, Inc.)

known to Orcadians and others serving with the Hudson’s Bay Company. Today, purging would be considered harmful, not helpful, and we are not surprised when Smith observed, ‘This disease goes beyond our skill, anything we can do does not much relieve [relieve] the sick’ (Oct. 14, 1835, HBCA B.39/a/2:fo. 17a d). However, Francis Butcher, his second in command, used up his stock of sago or arrowroot, which Butcher reported ‘...was found to be very nice medicine’ (letter from Butcher to James Hargrave, Dec. 28, 1835, in Glazebrook 1938:210).³

We can only speculate about the herbal medicines and spiritual healing processes to which local people would have resorted in 1835; chief among them may have been rat root and balsam fir, both traditional herbal remedies in the community for upper respiratory and intestinal tract infections. We do not know whether they were part of the pharmacology of both Chipewyans and Crees at this time. The Aboriginal population at Fort Chipewyan in the early 1800s was overwhelmingly Chipewyan; however,

3. While Butcher apparently used ‘sago’ and ‘arrowroot’ interchangeably for the same remedy, in fact they are different plants. Sago is an East Indian palm (genus *Metroxylon*) or its dried, powdered pitch, which is used as a thickening agent in cooking (Funk and Wagnalls 1982:1183). Arrowroot is a tropical American plant (*Maranta arundinacea*) or its derivative starch, or ‘a similar starchy product from other tropical plants’ (*ibid.*:81).

it is Crees who have long enjoyed a reputation for their medicines. Both Chipewyan and Cree peoples believed that malevolent use of supernatural power caused illness, which was countered by shamanistic practices. More information on such treatments may be available through the oral traditions of Fort Chipewyan residents, if traditions from later periods can be distinguished from those of these early years.

Illness at the post was aggravated by the condition of the buildings, which were at that time roofed with bark, and in poor repair: 'Our dwelling being open all over every thing freezes in the weather' (Dec. 20, 1835, HBCA B.39/a/2:fo. 23d). Illness among the post's labour force, or among their relatives, impeded their ability to put up winter food, jeopardizing the winter food supply and limiting the surpluses available to help the Indians.

Despite the epidemic at the post, most of the Factor's comments concern the disease among the Indians. In October, as the disease began to spread, Smith expressed his concerns both for their lives and for the state of the trade: 'I fear that they have left us sick, and all the expense and trouble we have been at will be lost' (HBCA B.39/a/2:fo. 17ad). These fears were well founded. The winter was severe, with deep snow and intense cold (letter from Smith to Hargrave in Glazebrook 1938:239), which intensified the plight of the afflicted bands. Reports of Indians stricken with influenza occurred regularly, beginning on October 25th, when two men arrived from Grande Point (Big Point):

Their story of woe is afflicting — shortly after their leaving the Fort they were all attacked by influenza, and have been since unable to move to any distance. Gaining their livelihood the best way they could. Old English Chief is dead — 2 women and one child — three more still remains in the camp not expected to live. Those that have recovered are still so weak that they are unable to hunt or fish to procure food [HBCA B.39/a/32:fo. 18-18d].

Some Indians, desperate for help, joined the HBC workers at the fishery, '...all sick and half famished — are very troublesome to the men there' (Oct. 28, 1835, HBCA B.39/a/2:fo. 18d, 19). Many bands sent requests for provisions and additional supplies, especially ammunition, which the HBC met as best it could, although the Factor was concerned about the inadequate supply of provisions at his disposal to meet such demands (Nov. 1, 1835, HBCA B.39/a/2: fo. 19d). In another instance, Piche and his family camped by the Fort for assistance: '...without the timely assistance afforded must have all perished' (Dec. 22-31, 1835, HBCA B.39/a/32:fo. 24). Not surprisingly, no one was trapping:

The distress of the Indians in November had such an effect on their minds for the Winter — that all their study after was to procure the means of subsistence, forgetting their future wants — for the procuring victuals for their immediate necessities — In the way of Furs they have done nothing. Never at any future periode was the Athabaska returns at so low a scale [letter to Hargrave, May 15, 1836, in Glazebrook 1938:239].

By Nov. 1, every band was reported to have influenza (HBCA B.39/2/32:fo. 19d). Factor Smith summarized the disaster:

Table 2: Obituary: Fort Chipewyan Indians Winter 1835-36

Date	Name	Place	M	F	Ch.	Total	
10/20	Berthe,aze	Ft. Chip	1			1	
	English Chief	Gd. Point	1			1	
	Kaidzaig's wife	Gd. Point		1		1	
	Tarks son, infant	Gd. Point			1	1	
	Papin & Br's wives	Gd. Point		2		2	
11/10	Et,they,he	Atha. R.	1			1	
	Elderly woman	Atha. R.?		1		1 11/10,f.65	
11/16	Thoo,naghe aze	Ft. Chip.	1			1	
	E,gro,cut,he	Clear L.?	1			1	
11/22	Rat,sa,nah	Peace R.	1			1	
	Thoo geeshies Mo	Peace R.		1		1	
	Ekey yille's infant	Peace R.			1	1	
	Bay ah tell yea's '	Bark Mtn.			1	1	
	Foien's brother	Atha. R.	1	1	3	5	
	Ede yult neh's fam.	Atha. R.		1	2	3	
	Harrayouse	Lands	1			1	
	Chee coo nah	Lands	1			1	
	Cha,call,he arze's wives	Lands		2		2	
	Ca nad slane Mo&Si	Lands		2		2	
	Tooloo's wife	Lands		1		1	
	Tla,cuth,el,e,nes Mo	Lands		1		1	
	Edou el ne Fa	Lands	1			1	
	Chee na choo's wife	Lands		1		1	
	Den ne cau's wife	Lands		1		1	
	12/15	Men,women,children	?	5	9	9	2312/15f71d
	01/6	Bougon's relations	Clear L.		1	2	3
		Euonewize's wife	Salt Plains		1	1	2
		Chunayaze	Old Fort			1	1
		Youonalictinne's wi	Atha. R.		1		1
Yedlanaze		Old Fort			1	1	
Eay,ell,thill & So		Lands	2			2	
Sa,ka,puth's Mo		Clear L.		1		1	
Theeth tha & Mo		Mamawi L.	1	1		2	
Le Pis' Da		Hay R.			1	1	
Totals				18	29	23	70

[Source: HBCA B.39/a/31:fo. 87-88; also fo. 65 and 71d]

The demands on us from all Quarters for provisions is offensive — arising from the depressing situation of the Indians. Another loss will follow — the want of returns for the advances made them in October — the whole or nearly will be a dead loss. — loss of property is repairable [*sic*] — the loss of life never can be recovered — the Indians will remain long disorganised from the many deaths of this season among them — the History of their Country affords no parralel [*sic*] to the distresses of this season [Nov. 1?, 1835, HBCA B.39/a/32: fo. 20].

The present distressing situation of the Indians is without parralel during my 36th year residence among them [Dec. 15, 1835, HBCA B.39/a/31:fo. 71d].

The only people who did not contract this disease were Indians isolated from contact with Fort Chipewyan or the bands trading there. On Dec. 21, the post was visited by four Indians from the ‘Carriboux Lands,’ who ‘bring no bad news — have been absent since last April — have seen no strangers since, which accounts for their not being sick’ (HBCA B.39/a/32:fo. 23d).

While deaths were generally reported to have been caused by the disease, at least one man was reported to have died ‘...more from famine than from disease’ (HBCA B.39/a/32:fo. 22d) after being left behind by his relatives. Elsewhere, Smith reported that ‘...some have been abandoned by their relations and perished’ (letter to Hargrave, in Grazebrook 1938:211), presumably as their relatives tried to reach some place of safety or assistance. Because few people died at the post, where support services were available, it seems probable that the high mortality was due to the breakdown of support services for the Indians struggling with both incapacitating illness and a harsh winter (cf. Crosby 1976:295-6). One man, *E,gro,cut,he*, was reported to have committed suicide ‘...from the effects of the desease; rather a singular case among these Indians I believe’ (letter from Butcher to Hargrave, Dec. 28, 1835, in Glazebrook 1938:209; also HBCA B.39/a/31:fo. 87).

The disease was so prevalent that the usual New Years festivities were cancelled: ‘Being surrounded with some of the Natives half famished and in a year of such distress all rejoicing was postponed for the present’ (Jan. 1, 1836, HBCA B.39/a/32).

The epidemic waned after Christmas, and afterward some of the bands made good hunts for furs and provisions. Following the February 1836 entry, the Factor drew up a list of Indians who died in the epidemic (Table 2), with some additions based on the reports in the journals. The mortality rate can only be estimated in global terms. The journal entries probably under-report mortality among children, and they do not give us a total population figure. If 70 people died in a total of 365 individuals, the mortality rate was 19 per cent, or nearly a fifth of the regional population. This seems completely reasonable, and perhaps too low, given the difficulties of the winter.

Aftermath

Smith was philosophical about the impact of the epidemic on the trade. Essentially, he wrote off the 1835-56 season. In April he reported that:

The elders got all their usual spring gratuity [*sic*] — their want of success in hunting has not been from want [of] will — and we are now working for another year — trying to forget the past [April 26, 1836, HBCA B.39/a/32:fo. 36].

However, there was at least one group of Indians who were already planning for the future. They proposed '...not visiting the Fort till next spring' (May 18, 1836, HBCA B.39/a/32:fo. 38d), a strategy that showed considerable foresight.⁴

Most recently, a former Fort Chipewyan resident drew my attention to an oral tradition at Fort Chipewyan about early epidemics, possibly including this one. However, with the 1835 epidemic followed immediately by other influenza epidemics, as well as outbreaks of other diseases, it may be difficult to distinguish the illness of one year from that of another. Nevertheless, this story will not be completed until these traditions have been explored, and the story of this epidemic shared with the residents of Fort Chipewyan. It is their response to this personal and community tragedy, and to the obituary list that I found so profoundly moving when I discovered it long-forgotten in a HBC journal, that will add the human dimension to the history of this terrible epidemic.

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4. Their ability to live away from the post also tells us that in 1835 at least some Natives trading at Fort Chipewyan could still rely upon their own technology if necessary, rather than being dependent on imported manufactures.

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The Status Indian Health Utilization Database: A New Approach to Evaluation of Status Indian Health Services

Jeff Reading¹

Introduction and Purpose

Demographic studies indicate that the status Indian population in British Columbia is increasing, due to high a birthrate and increased longevity.² Moreover, a 1985 amendment to the Federal *Indian Act*, passed as Bill C-31, restored Indian status and band membership rights to individuals (and their children) who lost them because of discriminatory clauses of the *Indian Act*. Bill C-31 expanded the numbers of registered status Indians by modifying the membership criteria. Under the previous *Indian Act*, women and their children lost their Federal Indian status when they married a non-Indian; and others including men, lost their status or became 'disenfranchised' on joining the clergy, completing university, deciding to vote in Federal elections or joining the armed forces.³

Bill C-31 provisions notwithstanding, the *Indian Act*, by definition, legally separates those Aboriginal people who are registered with Federal 'status' from those who are not. Thus, communities and families can be split along these lines, with some members eligible for status and others not eligible according to the Federal legislation. Whereas being Aboriginal depends on self-identification, the legal definition of 'Indian' is defined by the Government of Canada. The Status Indian Health Utilization Database (SIHUD) is made possible by extracting data records for status Indians using Indian and Northern Affairs Canada records as a proxy for race or ethnicity. Thus, a limitation of SIHUD is that all those who might identify themselves as being Aboriginal are not contained in the database.

In 1990, Statistics Canada⁴ projected that some 30% of the overall population increase among the registered status Indians between 1986 and 2011 could be

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 2. Analysis of Status
 3. Implementation of the 1985 changes to the Indian Act. (1984) *Indian and Northern Affairs Canada, Report to Parliament*. Catalogue No. R32-83.
 4. Loh, Shirley. (1990) Population Projections of Registered Status Indians, 1986-2011. *Statistics Canada*. Minister of Supply and Services Canada.

attributed to the Bill C-31 registrants and their children, who live primarily off-reserve. Population projections for registered status Indians in British Columbia show a plateau of the on-reserve population percentage of 59, 56 and 56 for the years 1987, 1994 and 2001; respectively.⁵

The status Indian population living in British Columbia is geographically dispersed, culturally and politically diverse, and undergoing rapid social change. Although a comprehensive research study of the health and well-being of First Nations peoples in British Columbia has not yet been undertaken, vital statistics and epidemiological studies indicate that age-adjusted morbidity and mortality rates for status Indians living in British Columbia are significantly higher than the general population, particularly for preventable conditions including accidents and injury, suicide, and chronic conditions including diabetes, cardiovascular disease and certain types of cancer⁶.

Health status is particularly poor for First Nations people, however, health service utilization patterns for status Indians living in British Columbia have not yet been investigated in a detailed and thorough manner. The British Columbia Royal Commission on Health Care and Costs recommended that an information system be developed to measure the health determinants and health status of Native people⁷. To assist First Nations health planners, policy makers and communities in addressing serious health concerns, the Aboriginal Health Policy Branch of the British Columbia Ministry of Health developed a comprehensive database on the utilization of health care services by status Indians living in British Columbia. The purpose of this chapter is to describe the Status Indian Health Utilization Database (SIHUD). We envision that SIHUD will fill an important information gap in health service planning for First Nations people and communities in British Columbia.

5. *Ibid.* 3.

6. (a) *Ibid.* 1.

(b) Hagey, J., G. Larocque, and C. McBride. (1989) *Highlights of Aboriginal Conditions*. Working Paper Series, Indian and Northern Affairs Canada.

(c) Martin, J.D. and P. Bell. (1990) Diabetes mellitus in the native population of British Columbia, Canada. *Proceedings of the 8th International Congress on Circumpolar Health*. Whitehorse, Yukon.

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(f) *Report of the Interdisciplinary Working Group on Cardiovascular Disease and Native Peoples*. (1989) Promoting Heart Health in Canada — The Native Challenge. Medical Services Branch, Health and Welfare Canada.

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7. *Closer to Home: The report of the British Columbia Royal Commission on Health Care and Costs*. Volume 2. (1991) British Columbia: Province of British Columbia.

Methods

SIHUD was created using status Indian specific data obtained from Ministry of Health program areas by extracting status Indian records from each of the various Ministry of Health databases. The British Columbia CareCard personal health number was used to identify status Indians utilizing health services in the Province. A status verification file containing records of all status Indians registered in Canada, was obtained from the Federal Department of Indian and Northern Affairs, and used as an input file to the British Columbia Ministry of Health Client Registry's matching program to create the SIHUD master file.

The SIHUD master file was then used to extract status Indian records from specific Ministry of Health data files including Ambulance Services, Mental Health Services, Pharmacare, and Continuing Care databases using the CareCard number as the key field. Status Indian records were also extracted from the Medical Services Plan, Hospital Services and Alcohol and Drug Programs databases using their existing status Indian identification fields and verified using the SIHUD master file.

SIHUD now has the ability to sort information according to age, gender, geographic regions including place of residency or tribal affiliation, in- or out-of-province First Nation, provincial health region and health unit. Information released from SIHUD is legally governed by the *Freedom of Information and Protection of Privacy Act* (1992). This act ensures that the public has the right to access information about themselves, while preventing the unauthorized disclosure of personal information by the government.

Broad Policy Impacts

SIHUD information will be useful when examining health service concerns including, but not limited to:

1. the development of new community-specific prevention programs and services, by comparing health service utilization patterns to health status;
2. determining future health services needs, both on- and off-reserve, such as the development of a preventative family health clinic in a geographic area where utilization rates are particularly high;
3. the evaluation of current health programs and treatment services to avoid costly duplication, increase overall efficiency and ensure that health services are relevant to community needs;
4. address long-standing health service equity and access concerns by providing empirical data to support or refute anecdotal information;
5. provide a research capability to support negotiations/discussions concerning health service funding arrangements between First Nations health authorities and various health providers; and,
6. provide statistical support directly to First Nations communities involved in self-government discussions in the health sector, Federal health-transfer negotiations, and pre-treaty deliberations in health.

Economic Impact of SIHUD

Historically, and continuing to the present day, a special relationship exists between the Federal Government and status Indians living in British Columbia with respect to the provision of health care. Through the Indian and Northern Health section of the Medical Services Branch, the Government of Canada administers funds for the provi-

sion of community health programs and services, non-insured health benefits, and occupational and environmental services.

Actual contributions by the Federal Government for programs delivered by the British Columbia Ministry of Health include block health transfer payments to the Province, such as Canada Assistance Plan payments and Established Programs Financing. Cost-sharable programs such as Vocational Rehabilitation of Disabled Persons, and Alcohol and Drug Treatment and Rehabilitation are financed equally by Canada and British Columbia, while specific contracted services and premiums are paid annually by the Federal Government to the Province.

SIHUD will be used to obtain a more accurate profile of health services to calculate utilization rates by Ministry of Health program area. Once actual utilization profiles are obtained, appropriate cost estimates can be applied for each of the program areas. The actual health expenditures can then be aggregated to obtain an overall estimate for British Columbia.

SIHUD derived health care service cost estimates may indicate a mismatch between Federal Government health payments to British Columbia for the provision of health care services to status Indians living in the Province. Such a discrepancy would suggest that Federal/Provincial contribution formulae may be inadequate and should be re-examined in detail to more accurately reflect current health care expenditure profiles.

Given the special fiduciary relationship that exists between the Federal Government and status Indians for the provision of health services, it is important that the Province accurately examine health services delivered to status Indians. British Columbia should not participate in any process that could diminish the special fiduciary relationship between status Indians and Canada.

Unequal access to health services for status Indians is morally reprehensible and likely legally indefensible due to equity provisions contained in the *Canada Health Act* (1984). Thus, health services must be delivered on a fair and equitable basis to Canadians living in British Columbia, including status Indians. The Province should pursue a policy of full cost recovery from the Government of Canada for health services delivered by the Province to status Indians. Recovery estimates should be based on the best estimate of costs for services that should, in part, be determined by SIHUD.

If health costs are simply paid by the Province without recovery from Canada, the result would be twofold: first, the Federal Government transfers *de facto* responsibility for the provision of health services to British Columbia; and second, the fiduciary relationship between status Indians and the Federal government would be further diminished. This policy should only be contemplated with full cooperation and the informed consent of the First Nations people and their health representatives in British Columbia.

Developing Culturally Based Community Health Services

It needs to be stressed that health utilization patterns should not be used as indicators of health status, particularly when access to health services are not equitable. Using the BC Cancer Registry database, Band *et al.*⁸, showed that cervical cytology tests (PAP) were utilized less for status Indian women in British Columbia, while death rates due to cervical cancer were some 6 times higher when compared to the general population

8. *Ibid.* 6.

of the Province. This example illustrates that the interplay between the incidence of a preventable disease, and access to the screening test, is directly linked to a positive outcome like early detection and treatment, or a negative outcome such as advanced cervical cancer and even premature death. It seems that First Nations women do not access the PAP test to the extent that their non-native counterparts do, hence, the current unacceptable mortality rate due to cervical cancer.

The cost of not administering the PAP test could theoretically be reflected as higher morbidity and mortality rates due to a preventable cancer that could have been detected early and effectively treated. There are minimal costs associated with development of a cervical cytology test that is administered in a culturally sensitive way as part of an annual physical examination.

By definition, preventative health services can reduce total health costs. Clearly, this can only be accomplished by increasing accessibility to the health care system for those groups in society who, for whatever reason, appear to demonstrate a health service utilization pattern that is at odds with either morbidity or mortality rates. SIHUD will permit First Nations health planners to examine utilization patterns by specific region, either in relation to health status measures or outcome, with the goal of targeting future programs that ensure an equitable health system that aims to meet health service needs of First Nations people. Gudmundson⁹ (1993) used the Manitoba provincial health care database to compare urban health care service utilization patterns between status Indians living in Winnipeg and other Winnipeg residents, both in the inner city and the suburbs. He was able to compare the influence of poverty *versus* ethnicity to examine health utilization patterns and found that ethnicity (i.e. being status Indian) was a greater factor than poverty (i.e. living in the inner city) in predicting high health care service utilization in Winnipeg, Manitoba.

Geographic remoteness, a sparse distribution of health professionals, high transportation costs, cultural differences, language barriers, other poorly understood behavioral factors, and confusion over whether health care services are provided by Federal or Provincial health service agencies, all likely contribute to variances in utilization patterns by Aboriginal peoples.

Experience from the general Canadian population demonstrate that community based preventative measures have a significant impact on reducing both the human and financial cost associated with preventable disease, disability and death. Rachlis and Kushner¹⁰ argue that health is affected by poverty, unemployment, social stress, inadequate housing, unsafe working conditions, lack of education and other social and environmental hazards. Moreover, Young¹¹ suggests that adding more doctors, nurses and institution-based health treatment infrastructure will have a negligible effect on improving the health of First Nations people. Rather it is argued that community-spe-

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9. Gudmundson, B. (1993) Urban Aboriginal Health Care Utilization: A Comparative Study of Winnipeg Status Indians and Other Winnipeg Residents. *Thesis: Master of Social Work University of Manitoba.*
 10. Rachlis, M., and C. Kushner. (1989) *Second Opinion. What's Wrong with Canada's Health Care System and How to Fix it.* Harper Collins, Toronto, Canada.
 11. Young, T.K. (1988) *Health Care and Cultural Change. The Indian Experience in the Central Sub-Arctic.* University of Toronto Press.

cific problems are the source of ill health, and therein lies the solution to many of the health problems of First Nations people.

The negative impact of residential schools on Aboriginal families and communities, chronic unemployment, racism, lack of post-secondary education, inadequate housing and community infrastructure, and loss of traditional lifestyles have all contributed to poor health status. The long-term solutions to poor health status will not be found within the walls of a hospital or doctor's office, but must be determined by Aboriginal people working within their communities. Healthy public policy, with a shift away from high cost institution based health service delivery, to broad based community prevention is now seen as a primary means of improving health. Health planners should focus on extending the known benefits of preventative activities to First Nations people. SIHUD will be a useful tool to indicate where to begin to focus efforts to achieve this aim.

Over-utilization of costly institution based health services should be examined in detail because a community based approach may be a more effective long-term solution than treating a specific health problem. For example, treatment for diabetes for First Nations people is costly both in financial and human terms, accounting for some 20% of all hospital costs for the Federal Sioux Lookout Zone hospital in northern Ontario¹². Conversely, community based diabetes primary prevention initiatives have the potential for long-term behavioral change and perhaps an avoidance of diabetes¹³. A comprehensive strategy of multiple risk factor reduction will likely decrease the prevalence of diabetes, while exerting a positive influence over other chronic diseases such as ischemic cardiovascular disease, stroke and cancer as there is considerable overlap in risk factors for these chronic conditions.

Conclusion

Advances in information technology now make it possible to obtain detailed health utilization information to tailor health policy and program planning to the health care service needs of specific First Nations communities in British Columbia. Person-oriented records enable data linkage between databases and allow an examination of both the magnitude and scope of rapidly changing health utilization patterns. Examining health status, morbidity and mortality rates and SIHUD derived health utilization patterns could provide strong evidence to rationalize community based preventative programs for First Nations people in British Columbia.

The practice of comparing health service utilization patterns to outcome can now be employed to indicate whether certain treatments are cost-effective. While it is unlikely that the process of combing through vast databases will ever replace clinical trials, the methodology clearly is an important tool for examining the efficacy of various clinical procedures and interventions for the general population¹⁴.

The Aboriginal Health Policy Branch has applied this approach to each of the databases within the British Columbia Ministry of Health and produced health service utilization data that can be used to support anecdotal information regarding the health service utilization patterns of status Indians living in British Columbia. Whereas this methodology is particularly suitable for examining such health utilization patterns, it

12. Personal Communication, Dr. Stuart Harris, Medical Director, Sioux Lookout Zone Hospital.

13. Herrernan, C. and D. Martin. (1994 in review) NIDDM and the Haida.

14. Anderson, C. (1994) Measuring what works in health care. *Science* Vol.263 (25) 1080-1082.

may also be employed to elucidate health utilization data for other populations of interest to community health planners and policy makers. It must be stressed that SIHUD should not be used in isolation, but in conjunction with other statistical indicators of health including community health surveys and vital statistics data and any other relevant information.

Regional patterns of health service utilization combined with morbidity and mortality data and other sources of health status information, can provide a comprehensive empirical representation of the health concerns of status Indians living in British Columbia. First Nations health planners and policy makers can use these data to focus efforts on finding innovative community based solutions to pressing health concerns.



Role of the Elders: Yesterday and Today

Gary Raven and Betson Prince¹

Part One by Betson Prince

*Respect and Preserve
Earth
Water, Air, Fire*

*We shared
The more we gave the more they wanted*

*Gifts of Freedom
Taken and Strangled
Learn to give back out of Respect*

*Equality
We are equal with other humans
Maintain your Equality
Believe in Self and Creation*

*Stepping Stones
We are Stepping Stones of the little ones that we have
Our grandchildren
Our trees
Our green grass*

*We won't see it if we keep
Abusing
Cutting
Destroying*

1. Betson Prince is a healer from the Peguis First Nation, Manitoba. Gary Raven is an elder from Hollow Water First Nation, Manitoba.

*Respect and Preserve
Anishinaabee People
We are the first to walk the land
The Original People*

*Approach with Respect
Today we forget how to approach our elders
Offer Tobacco
Ask questions about your own life
What is my purpose in life?*

*Allow elders to guide you
Nothing is impossible
Respect and Preserve.*

Part Two by Gary Raven

Long ago
*Elders had control of communities
They respected everything
For example
We used everything when we shot a moose
First thing was to cut off the bag under the moose's neck
to offer Respect
by hanging the piece in a tree
So more moose would be there for others.*

Today
*New ideas come into the community
Self government
This has created a lot of problems
People in power are benefitting
Elders lose control
If we neglect our people they will end up in jail.*

Knowledge
*You are educating yourselves with theory
Only theories won't help you
You need practical knowledge too
Even though you are university students
You have to go out and talk to elders
Find out how to survive the practical way.*

*I wish one of those well paid leaders
would come out into the bush with me
Wonder if he would survive
Students and professors need to do this
We all need to tap into elder's practical knowledge*

*Combined with theoretical knowledge
Go Out and Learn
Reach for It.*

Mother Earth

*Beaver was part of our diet
Out of curiosity we dried some — it turned green
It shouldn't have so we took it to the University to find out why
We never got the study back from the University
It shouldn't have turned green.*

*If there is a problem
We have to figure it out ourselves
We have to help Mother Earth survive
With Knowledge, Respect, Elders.*

Dreams

*Remember your dreams
They tell you what you need to do
Ask elders what your dreams mean
You will learn more about
Choices
Meaning of Your Life
The contribution you should make.*

Women

*Long ago women had visions
Imagination
They were powerful
Women are regaining their power
Women have to play a leading role again
In our Family
In our Community
For our Children
For our Culture
For our Future
We are nothing without powerful women.*

Elders

*It is a long journey from your head
to your Heart
Elders listen
Listen with their hearts
Learn with sensitivity
Listen to Mother Earth
Listen to Souls.*

Prayers

*Back home a couple of elders stay
at the back of our meetings
When an elder stays back
Keeps quiet
Doesn't eat
They are praying for us
They have the knowledge
They can advise you on what you were meant to do
You were given a beautiful life
Find It
Ask the Elders.*

Integrating Traditional Aboriginal Teaching and Learning Approaches in Post-Secondary Settings

Ann Charter¹

Educational practice is rooted in various aspects of educational philosophy. Adult educators who are able to identify and apply a personal philosophy have a deeper understanding of the principles and practices of adult education (Hiemstra 1988, Knowles 1980, Selman 1991).

While I was researching for my thesis I identified that on a personal and professional level I have used a blend of traditional Aboriginal learning and teaching methods in conjunction with humanistic adult educational principles and methods which arose from these philosophical belief systems. This paper presents a synopsis of the principles and methods that I used while attempting to integrate them in a post-secondary setting.

Bridging Concepts

Important links between traditional Aboriginal teaching and learning approaches and humanistic adult education are found in co-operative learning concepts and the inclusion of affective factors in the learning experience. Patterson (1973), Bopp *et al.* (1988), and Lane (1992) discuss the importance of the learner's involvement in the learning experience being coupled with the inclusion of the emotions as a way of enhancing the learning experience.

Other principles which were primary guiding factors in my endeavors to bridge and integrate the philosophies are: freedom, trust, self-directed learning, autonomy, participation and co-operation. While I focus primarily on Aboriginal philosophies and practices I include aspects of humanistic adult education.

Philosophical Foundations of Traditional Aboriginal Education

A number of Aboriginal and non-Aboriginal adult educators and authors have extracted some of the important philosophical perspectives common to many Aboriginal peoples. These educators and authors include: Absalon 1993, Armstrong 1987, Bopp *et al.* 1992, Bopp *et al.* 1988, Bopp *et al.* 1984, Brandt 1990, Charter *et al.* 1993, Clarkson *et al.*

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1991, Indian Tribes of Manitoba 1971, Jordan 1986, Minor 1992, National Indian Brotherhood 1984, 1988, O'Brien and Pace 1988, Sealy and Kirkness 1973, and Tobias 1988.

Here I present some of these common ideas, most of which have been identified by at least several of the authors listed above. Where the idea may be particularly relevant to the research of one or only a few of the authors, I identify who espouses that perspective; otherwise I present the perspectives in a narrative with few interruptive citations.

The foundations of Aboriginal education arise from the diverse philosophical perspectives of Indigenous nations. Although identifying commonly held beliefs of diverse nations presents a danger of re-enforcing existing stereotypes (Hamilton and Sinclair 1991), outlining some of the common themes among Aboriginal peoples' philosophies is useful.

Hamilton and Sinclair (1991) and Brandt (1990) identify the cultural imperatives of non-interference, non-competitiveness, sharing, and emotional restraint as among the primary principles of Aboriginal peoples. They stress that these values may be expressed in different ways by different Aboriginal nations.

Darou (1987) cites commonly held values of Aboriginal peoples as: co-operation, concreteness, non-interference, respect for elders and for the land as animate. He also cautions against generalizations with respect to values when it comes to Aboriginal peoples.

Charter *et al.* (1993) and Couture (1987) agree with the need for consideration, understanding, and the application of Aboriginal principles and values by adult educators. They reinforce the need for caution when applying Aboriginal imperatives to individuals or specific groups by stating that the awareness of values and principles will provide a *broad conceptual base* from which to work. Couture states: 'these values are the roots to a number of characteristic behaviors, the understanding of which must be regarded as essential to educational planning and development' (p. 182). Based on these traditional Aboriginal principles and values, Aboriginal peoples have employed some distinct teaching and learning principles.

Aboriginal education is perceived as a whole-life experience; it encompasses all facets of a person's life, community, and society. Education should prepare people for total living and the advancement, development, and improvement of individual and community life. Included in this development are languages, values, customs, culture, politics, economics and spirituality.

Armstrong (1987) identifies the process of Aboriginal education as an integral factor in everyday living within the family or clan; education is integrated into daily experience throughout life. She cautions educators to be aware of the danger of separating learning from Indigenous philosophies. These concepts are inextricably interwoven with the traditional Aboriginal values of non-interference, non-competitiveness and sharing.

Bopp *et al.* (1992) state:

Learning is a transformational action that can lead us to internalize more life-preserving, life-enhancing habits. Learning can mean acquiring new knowledge, new attitudes and values, new behaviors, actions, and most importantly, a new perspective for interpreting meaning and purpose (p. 5).

Fundamental to Aboriginal teaching philosophy is the concept that each person in turn is both a teacher and a student. All persons in their lifetime must pass through four basic stages of development (childhood, adolescence, adulthood, and maturity) and in each stage there are specific learning tasks that need to be mastered. Life transitions are linked to seasons where there are observable transitions that can be connected to daily living. The life cycle is apparent through the reproductive, birth and death cycles of plants and animals.

Traditional Aboriginal peoples acknowledge everyone and everything that exists as a potential teacher. Every person has knowledge. An example of this would be a child teaching an adult how to play, laugh, or intently concentrate while learning a new task. Children, adolescents, adults, and elders can share new methods or concepts with each other by listening to the experiences of others or by observing, assessing, questioning, and testing new approaches. Observation and close scrutiny of the environment lead to learning experiences; for example the development of patience may be linked to a rock and its exposure to the elements.

Knowledge is meant to be shared — not owned and not imposed. It is expected that information or skills will be shared and given freely — if asked for. Advice is not normally offered unless it is requested because this would conflict with the value of non-interference and the individual's life choices and independence. Among some Aboriginal peoples it is considered improper to proffer either advice or instruction.

Individuals are acknowledged for their experiences and their knowledge. Elders are respected for their accumulation of knowledge and wisdom. However, an individual does not have to be elderly to be wise. Wisdom is acknowledged in all ages. This affirms individuals and enhances self-esteem among the learners and teachers of all ages.

All learning experiences have value. If a learning experience is not successful it is not considered to be a failure. What is important is that which can be learned from the experience or the experience itself. Frequently, humor is used when a task is not successful. Humor distances the individual from the experience and allows for new learning experiences.

The individual is an extension of the community and their knowledge and experiences may be used for the betterment of the community. The sharing of information leads into another important value, that of co-operation. The free exchange of ideas discourages competitiveness.

Traditional Aboriginal peoples identify and accept the fact that people cannot teach what they have not experienced and do not understand. Further, there is no shame associated with not having expertise in all areas of life. It is acceptable to have one or several skill areas and to be competent at those. All persons learn according to their specific needs at a particular time. This learning is linked to their previous history of learning and is influenced by their experiences or the needs of their families or communities.

Making Connections and Integrating the Learning Concepts

The vehicle that I used to make connections and integrate the learning concepts was the teaching of two sections of a course in social work practice with undergraduate social work students. The course was entitled 'Social work Practice and Aboriginal Peoples' at the University of Manitoba Faculty of Social Work. The courses were taught one year apart and each course was of 13 weeks duration.

As a result of my research, application of specific learning principles, reflection on the process and methodologies, and subsequent modification of methods for the second course, I was able to blend and integrate traditional Aboriginal teaching/learning approaches with humanistic adult education principles.

My personal teaching and learning styles became more apparent which confirmed the principle that one cannot teach what one does not know or understand. I recognized my learning as a whole life experience. I also recognized the responsibility of the learners to themselves and to humanity in general.

I was able to observe the influence of the group on an individual's learning experiences and the influence of the individual on the learning of the group. This indicated to me that an individual could respond to their community's needs. A result of the course assignments, which were determined to meet the learning needs of the individuals, there was minimal competition and a free exchange of information and skills. The inclusion of elders and other Aboriginal community role models enhanced the learning experiences of all of the group members and validated the teaching and learning experiences for everyone.

Elias and Merriam's (1980) definition of humanistic adult education includes the development of persons who are open to change and continued learning, who strive for self-actualization, and who can live together as fully functioning individuals — wherein the focus is upon the learner rather than the body of information. This definition is closely aligned with Aboriginal beliefs explained by Bopp *et al.* (1988) in that the mind, body, and spirit are included in the total learning experience.

In my efforts to facilitate an enhanced learning experience I consciously attempted to meet some of the goals of humanistic adult education, and some of the objectives of traditional Aboriginal teachings. My primary purpose was to blend the two approaches and integrate them in a post-secondary setting.

Teaching and Learning Approaches and Methods

The teaching and learning approaches and methods that I used to blend these two philosophical orientations were sharing circles, voluntary participation in ceremonies, group learning experiences, interaction with Aboriginal role models other than myself, and the inclusion of Elders and the incorporation of their knowledge and experiences in the group settings.

I allowed for individual learning and development by using as many mainstream learning methods as I could. For example, video tapes, field trips, mini-lectures, assigned related readings, learning journals, guest speakers, and structured learning experiences.

In the second course I altered assignments and included article critiques and annotated bibliographies and deleted journal writing. The article critiques and annotated bibliographies were areas where the students could choose the topic areas to be researched, according to their individual interest areas and field placements, as they related to social work practice by or with Aboriginal peoples.

As a result of the blend of methods, one of the students said that she would continue to 'learn for the rest of her life.' Other students stated that they were able to apply that knowledge to their individual lives, their family lives, and their professional lives. Yet other students commented that they were able to use methods from the classroom to discipline their children without guilt and to apply new awarenesses to the clients that

they were working with; they also reported that they had deeper understandings of their own values, biases, and strengths as social workers.

In both courses the students felt safe enough to express their emotions by either crying or laughing freely. The level of trust, however, had to be established first. I was able to detect that the level of trust in the classroom increased as I became more proficient in using humanistic methods and gained confidence in my application and integration of traditional Aboriginal methods. I fostered that trust by not making judgmental statements and by eliciting honest feedback from the group members. I learned to leave the room during some group learning activities. I also learned to admit when I did not have answers to questions and when I made mistakes in the classroom. Students responded by mentioning that they felt validated, trusted and appreciated. Students said that the classroom felt safe and that it was a place where real learning happened.

The linking of the humanistic adult educational concepts and the traditional Aboriginal teaching approaches has led to a positive learning experience for the majority of students and for myself. However, I attribute the success of my learning and that of the students to my acceptance of the wisdom of others.

My Acceptance of the Wisdom of Others

Fortunately, I was able to draw upon the teaching and learning experiences of other adult educators who were interested in developing culturally sensitive materials and methods. Also, I was able to draw upon the wisdom of the Aboriginal Elders. In this section I identify and discuss several concepts which proved to be useful in my learning as well as in the development and application of the two courses I delivered.

O'Brien and Pace's (1988) work was directly related to Aboriginal people and a social work program in a post-secondary setting. They credit adult education principles, Freirian precepts, and the involvement of Aboriginal students and community members as important components which led to the success of their program.

Although my project was different, I, too, applied adult educational principles in a formal classroom setting, and included Aboriginal and non-Aboriginal educators, community members, and social workers in the planning and delivery of the projects. I discovered that this combination of principles, methods, and people enhanced the learning experience for the students in the courses. As a result of the evaluative comments by the students in the first course, I was able to modify the methods and include Elders in the second course. After the second course, the students suggested that Elders be included in more classes because of the Elders' approach to sharing teachings and facilitating learning. Clarkson *et al.* (1991) and Darou (1987) concur with the need for recognition of the wisdom of the Elders and the need to incorporate the teachings of the Elders in teaching and learning situations since they are an integral component of daily life and learning.

Although I was not in a position to utilize community members in the same context as O'Brien and Pace (1988) I actively sought information and feedback from Aboriginal and non-Aboriginal students, colleagues, community members, and practising social workers in an effort to ensure community input and assessment of what I was attempting to do. I found that the active seeking out of the Elders and my participation in ceremonies provided me with new perspectives that I was able to apply directly and with the desired effect of enhancing both the students' and my learning experiences.

Sawyer and Green (1984, 1991) discuss how experiential learning and structured experiences can facilitate an enhanced cross-cultural or culturally sensitive learning experience in adult educational settings. I included in the course an activity based on students' feelings and personal experiences with stereotyping. This led to the students' acknowledgment of their biases and negative attitudes towards others. These awarenesses were then applied to their understanding of social work principles and Aboriginal peoples. Students identified that they had stereotypical attitudes about Aboriginal people. They were then able to challenge those stereotypes — for example, during visits to an Aboriginal social service agency and with Aboriginal role models and Elders in the classes. Student responses in the sharing circles, in class presentations, and on the written evaluation forms indicated that they changed their stereotyped attitudes as a result of those experiences.

Similarly, Fiddler (1990) credits the inclusion of Elders on faculty, Aboriginal faculty members, and the cultural camp component of the Saskatchewan Indian Federated College as critical elements leading to the graduation of Aboriginal social work students from the college. He identifies the element of positive self-esteem and a strong cultural self-identity as necessary to the successful completion of the social work program.

In this study the inclusion of Aboriginal role models in the courses not only enhanced the students' understanding of Aboriginal peoples' perspectives, it served to enhance the self-esteem of Aboriginal and non-Aboriginal students. For example, when the Elders thanked the students for their sharing of knowledge in the circle one of the students began to cry. She said that she felt validated as a person for the first time in her university career. Her remarks triggered similar responses from others in the circle. I was astounded that these adult learners had never been acknowledged for their wisdom or experiences. As a result of that incident I began to regularly convey my appreciation of what students shared in the classroom.

My acceptance of the students' experiences led to greater trust and sharing of information and a breakdown of reluctance to discuss failures or mistakes by the students and me. The importance of reciprocity and respect in learning situations are discussed by Brookfield (1986), Charter *et al.* (1993), and Hamilton and Sinclair (1991).

Summary

This study was undertaken in order to enable me to learn how to become a better facilitator of students' learning about Aboriginal peoples' perspectives. Much of the adult educational literature emphasizes a humanistic philosophy, in which the focus is on the learner and on choosing from a diversity of methods for facilitating in the learner an interest in the subject, both its content and its context. The diversity of methodologies allows an educator to be flexible. However, the literature emphasizes that an educator should also develop a personal philosophical approach. Some Aboriginal learning literature provides insight into the similarities between humanistic adult education and traditional Aboriginal teaching methods — such as non-competitiveness, experiential learning, and learning to solve a problem or satisfy a need.

To a large extent my learning was experiential and reflective. I pursued learning about Aboriginal teaching methods by participating in Aboriginal ceremonies and in consultations with Aboriginal Elders. I pursued learning about facilitative processes by developing and delivering two courses in which I consciously applied traditional Aboriginal approaches as well as humanistic adult educational methods. Two important

facilitation methods I undertook were sharing circles in the classroom and bringing Aboriginal Elders into the classroom as resource persons.

Conclusion

I believe these conclusions, although drawn only from two studies, may have relevance for other adult educators seeking to learn ways for improving their facilitation of Aboriginal peoples' perspectives among their students *via* the integration of traditional Aboriginal teaching methods and humanistic adult education principles.

It is important to identify a personal and professional ideology, because defining one's ideologies promotes an enhancement of one's own and other people's philosophical beliefs and practices. Further, that identification leads to a heightened awareness of one's own and other peoples' values, beliefs, and biases.

Humanistic adult educational methods and traditional Aboriginal approaches have areas of commonality that can lead to an enhanced understanding of Aboriginal peoples' perspectives among undergraduate social work students in a formal post-secondary setting. Humanistic adult education and andragogical principles foster self-directed learning among adult learners in formal post-secondary settings.

Individual and group experiential learning situations that are promoted by traditional Aboriginal teachers also allow for self-directed learning and incorporate the values of non-interference, non-competitiveness, sharing, and a sense of personal and community responsibility.

Mainstream educational ideologies, methods, and cultural perspectives were modified by incorporating traditional Aboriginal ideologies, methods and perspectives. The blending of the two ideologies and methodologies provided grading methods which met the identified objectives of the mainstream institution.

The traditional Aboriginal methods which enhanced the learning experience for the students were the experiential learning that resulted from participation in sharing circles, storytelling, and participation with the Elders. The mainstream methods which encouraged self-direction and met institutional guidelines were the annotated bibliographies, the article critiques, the field trip, and the class presentations of the field trip. These methods provided an avenue for the students to become self-directed and to incorporate the traditional Aboriginal concepts of non-interference and non-competitiveness.

Structured learning activities and sharing circles — which drew upon the personal life experiences and professional issues of the adult learners — led to a deeper understanding and a meaningful integration of theoretical concepts for the adult learners. Also, the structured learning experiences and the blended use of sharing circles led the adult learners to examine their personal values. In addition, the annotated bibliographies, article critiques, and field trips facilitated self-directed learning because these activities were flexible enough to allow the students to research areas of special personal interest to themselves, within the diversity of professional issues.

The traditional Aboriginal teaching approaches may be more effective when they are facilitated by Aboriginal teachers who understand and practice those approaches to learning. My role as an Aboriginal adult educator in the classroom may have fostered a clearer understanding and provided a role model for Aboriginal and non-Aboriginal students. Certainly, the field visits to Aboriginal social service organizations and the class presentations of those organizations resulted in the discussion and personal challenging of previously held stereotypes regarding Aboriginal peoples, Aboriginal

professionals, and Aboriginal helping practices among the Aboriginal and non-Aboriginal social work students.

Another insight arising from the projects was that Aboriginal perspectives and values were enhanced when Elders and other Aboriginal role models were included in the classroom situations. I believe that an Aboriginal facilitator can promote increased understanding of Aboriginal peoples' perspectives and enhance the learning process, but I also believe non-Aboriginals can also be effective — provided they first seek to enhance their own ideological understanding of Aboriginal peoples' and second incorporate Aboriginal resource persons into their learning activities. Based on these conclusions I offer the following recommendations.

Recommendations

These recommendations are directed to adult educators who are interested in facilitating an enhanced understanding of Aboriginal peoples' perspectives in formal post-secondary settings or to those adult educators who are searching for a blend of mainstream adult educational methods of facilitation and traditional Aboriginal teaching or learning approaches. The recommendations also may be of interest to adult educators who are searching for a means of defining a clearer understanding of how to facilitate their own learning experiences within their own cultures or in cross-cultural settings.

I suggest that adult educators consider how their own personal educational experiences, beliefs, and values may influence the adult learners they teach. I strongly suggest that adult educators identify their own personal and professional ideologies, because defining those philosophies may promote an examination of personal biases and potential ethical dilemmas or value conflicts between the adult educator, the adult students, colleagues, and the employing institution. This enhanced understanding can provide adult educators with increased confidence, which improves facilitation skills, and an appreciation of alternative methods of facilitating learning.

I suggest a blend of humanistic adult educational methods, self-directed learning concepts, and traditional Aboriginal teaching/learning approaches to develop an enhanced understanding of Aboriginal peoples' perspectives in formal post-secondary settings. In addition, I recommend that there be a focus on experiential learning activities to promote the integration of cognitive and affective learning among students.

I suggest the blend of structured learning activities and sharing circles to guide the adult learners examining their personal and professional biases in other-culture situations.

I suggest that other adult educators consider incorporating Aboriginal resource people, such as Elders, professionals, and community members, in courses which are intended to present an Aboriginal perspective to students in formal post-secondary educational settings. In addition, I recommend that Aboriginal faculty be hired to provide role models for Aboriginal and non-Aboriginal students.

Finally, I acknowledge the limitations of this study, and I recommend that other adult educators undertake similar studies to develop a broader base of empirical knowledge from which to facilitate an appreciation of other-cultures' teaching/learning approaches and that these approaches be incorporated into formal and informal teaching settings. There are many topics for further research. This study provides some insight into the facilitation of Aboriginal perspectives, but it also raises some unanswered questions.

Unanswered Questions and Ethical Implications

As a result of my thesis I have some unanswered questions which other adult educators may want to consider for further research. Although I have used a blend of teaching methods and approaches to facilitate learning in a formal post-secondary setting, I believe that traditional Aboriginal teaching and learning approaches have their own validity. For example: what can be done to foster traditional Aboriginal teaching approaches as a recognized, valued, and equal set of principles by mainstream educational institutions? Is it desirable to incorporate more of the traditional Aboriginal approaches into a formal setting? Will that incorporation demean those traditional Aboriginal approaches to learning or will they enhance the learning experiences for all students? Is the whole life and/or whole learning perspective an effective means of facilitating meaningful learning about other peoples' perspectives? Is it useful to establish more Aboriginal controlled elementary, secondary, or post-secondary institutions to ensure the preservation of Aboriginal perspectives, or could this lead to a segregationist approach to life and learning?

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Ácimowina ... Tales of Bush Experiences

Ida Bear, Gary Merasty, Rudy Okemaw,
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Introduction

... *akwáni mací awa wihtiko ká-otihínát anihi otiniya, kehcasocinehwáw otiniya, ká-mácoscewepinát esá ... áh, pimokanahcew itwew esá e-masináwihkasonit anihi otiniya...*

And then *wihtiko* grabbed that shoulder blade, *Kehcasocinehwáw*'s (One-who's-hat-gets-knocked-off) shoulder blade, and threw it into the fire.

'Ah, they are shooting [with arrows], they are shooting [with arrows]', he said, [reading] the cracks on the shoulder blade [from the heat].

This excerpt, taken from *Wihtiko* stories (I. Bear *et al.* Swampy Cree, Norway House) reveals elements of that particular world, the practice of divination through the use of scapulamancy. This story has been handed down at least six generations in my family. The text contains many grammatical structures, the palatalization of 't' in *macoscewepinát* and *pimokanahcew* diminutizes the actions of the *wihtiko*. Also, the protagonist, *kehcasocinehwáw*'s name is diminutized, perhaps to reveal the futile efforts of man to design or control their environment through malevolent actions.

At present there are no projects that do field work in documentation. There is an urgency to begin the work in this area before more elders pass on. There are still some oral traditionalists in the communities who have the knowledge and expertise in *ácimowina* and *ácanohkáná* (oral history and myths) who should be recorded, and their collections should be in all major university libraries for students to use in their studies. Gary Merasty and Rudy Okemaw are two of my students who have begun compiling this collection.

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Ácimowina

Tansi,

My name is Gary Merasty, I am a Cree from Brochet, Manitoba. In my language we refer to the geographic location of my community as *Atikosakanihk*. Translated to English, Caribou Lake. Another way of indicating the whereabouts of this community, when one is speaking with someone who is familiar with the community, is *Waskanihk*. The translation in Cree is where the houses are.

You may be wondering why Brochet, the official government name, is not prominent in Cree. This is probably because it is a French word meaning 'Jack Fish', or so I was told. In any case, to a Cree person, Jack Fish does not describe the geographical location or the character of the people or the community of people.

Atikosaskahikan is located on the migration route of the Caribou which is the main food staple of the people of that region. Up until several years ago, the people of that region had to travel many miles to reach the caribou when out hunting. Now the caribou are about a half-hour drive by snowmobile.

Since the caribou had not wintered in our area for approximately twenty years, the return of the herd has also brought the return of the fortunes of life with the abundance of the caribou. To the people who experience that way of life, the Cree stories are an important part of the people, caribou, and education.

Ácimowina is clearly the unmarked category, encompassing old and contemporary narratives, gossip, humorous stories, jokes, and serious tales of bush experiences and enigmatic encounters with non-Indians. Not all *ácimowina* are regarded as true; many are appreciated as humorous fabrications.

My father told of an old man who had a trapline near the town of Lynn Lake. He said that since he frequented the beer parlor in Lynn Lake, it was possible that I may have come across the old man. He said that this old man was well-known for his stories.

The old trapper had told a story to some people in the bar about one of his experiences. He said that it was getting close to Christmas and he was anxious to get to town, since he had been by himself for quite some time. He had lifted the last of his traps and retired early that night. The next morning he got up before sunrise. Even before sunrise he was all packed up and ready to go. He began to harness up his dogs. When he got to the last one, he could not find the dog where he had tied it. He remembered that during the night the dogs had been barking a lot, he now realized it was because this dog had gotten loose. Since it was still dark he could not see, so he began feeling around in the dark. Finally, he found the dog under a tree. He immediately began to wonder, where this dog used to be so lazy, it was now pulling him about with the strength of several dogs. It took a while, but he was able to harness the dog. He says he was also very amazed at the speed at which his dog-team took off. Soon afterwards, as he was crossing a lake, the day began to break, and he was studying the dog-team stretched out in front of him, he felt there was something strange. Soon, when there was enough daylight, he saw that he had mistakenly harnessed a young caribou.

notawe iki acimostawit peyak kisayinew ekote kisiwak papami Lynn Lake mana ikiwanihiket. kicak akwa tanipayamiyanowak, nahihkisow takiwet. kinowis etoke iki papami peyakot. ekwa ekwa iki nisi natokwiht wipac kawisimow. mowi isakastithik isa ki waniskaw.

mina kiyapic itipisktathik saysay isa ki kisi manew. maka witha i nanikisit itikwe oma, tapwe poko sipwe postamocikew. ispihk ekwa iskwanihk otima kawi postamoyat, namotha kimiskawew. kiyapic maka tipiskaw oma ka itakamikisit, namotha apo koyes nokwan kikwy. iyehkospihk itipiskak maka mistahi is kipitakosowohk amimwak. maka mina isa ikiapikothiht ekoni otima. papamin topicikew akwa ekota. kitatowe isa kamiskopitaht atamihk sithk. tansimina etwew, tapwe isa sohkipicikew awa atim, ekwa ithikohk mina ikikitimiht mana, itithitam awa kisayinew. akawac kaskitaw tapostamoyat. tapwe mina motha piyatak sipwetiwak atimwak ki itwew isa mina. ati pacamasis ispihk itikwe oma i ati asowaskohtcahikiht sakaykanihk ka ati sakastithik, koyas kinawapamew ka otakipisothit atimwa itwew, kati nistawinawat, acikosa is iki postamoyat.

The legends of *Wisahkecahk* were told in many literary forms of his adventures across Canada. Some of the adventures of *Wisahkecahk* in this paper will be discussed in interview form and other valuable sources will be included. The person who did the interviews is Rudy Okemaw. Rudy included his retelling of the story told to him by Thomas Okemaw. Walter Green, an elder telling his own story of *Wisahkecahk* in English and in Ojibwa, was a valuable source. The first storyteller is Thomas Okemaw. His performances took place in a little church in God's River, Manitoba. Thomas Okemaw was an appointed Minister of the United Church in 1960. Thomas stayed in God's River for ten years as a lay minister. He finally moved to God's Narrows, Manitoba, in 1970 and settled there permanently. Most Sunday afternoons the people in God's River spent many hours listening to this elder telling *Wisahkecahk* legends. The following legend was re-told by Rudy Okemaw, a student at the University of Manitoba. Rudy is from God's River, Manitoba. *Rudy Okemaw o Tachimowin*)

Wisahkecahk ka nimihinaniket (Wisahkecahk and the Ducks)

Haw oma ka wi achimak ... Wisahkecahk ... Wisahkecahk ka nimihinanikepan. Kayas e pimotepan Wisahkecahk ... E yachimihch e pimotepan. sahakanihk. Akwani ka wapamach awiyasisi e metawenit nipihk. Akona ka itehtank Wisahkecahk, (*Oh, boy*) tapwe ninoteyakatoson. Tante ke onchi michisoyan?', itwew ekwa itentam Wisahkecahk. Haw, tanika tanti ke onchi michisoyan?'

Asa maka ki wapamew anih awiyasisa e mate ka ko kinihch. awiyansisa oko e wi wapamach niska ekwa mina sisipa e matekakokinihch. Akwana ka kospipatach Wisahkecahk. Askia ki natam ... e mate astach akiya o pimawitanihk ekota e isi pitahahk o pimawitanihk. Akwani ka ihtetahk Wisahkecahk ni ka witamawawik o ki awiyasisak. 'Ni nikamona oho ka pi motatayan.' Atinatew sisipa, niska nete e mate metawechnik ... e ti natew kisiwak anih awiyasisa ka metawinich. Kisiwak asa ani tatew. 'Haw, ni chiwan ... ni chiwamak, tanisi kinawaw.

'Haw ni chiwam, Wisahkecahk, kekon anima ka mowateyan? Monataw Wisahkecahk itwew.

'Haw nichiwam, kekon anima ka pi mowateyan?' Monataw itwew Wisahkecahk. Kwani nistwa pakan.

'Wisahkecahk, kekon anima ka pi mowateyan?' Ka kosko panowoch Wisahkecahk.

'Oh, mona kekon ... Ni nakamona anih e wi nimananikeyan tipiskahk. Mwach e tike ki tetanawaw kistawaw ta pwetiteyan tipiskahk e wi nimananikeyan.'

'Haw,' sisipak e tewak. Ni minwentenan e nimananikeyan. Maskoch nistanan ni ka itotanan. Haw ositawak waskahikaniniw tanti ke tisi nimichik. Wisahkecahk itwew,

‘Waskahikan ta osi chikate ke tasi niminaniwahn.’ Asaw ki sitawak aniki ka waskehikchik waskehikewak. Asa ati pakisimon.

Asa ati kawachiwak e ti itotechik waskehikanik eta ka tasi niminanawahn. Asai nikamow Wisahkecahk ... ‘Ka pa sakwapisomonawaw osa nimiyek,’ e itach awiyasisa, sisipa, niska ... e kota wista e yach makwa.

Haw asai Wisahkecahk ... ante manow apow Wisahkecahk ka isi wanowwinaniwahn. Haw kakinaw eko mina ta waskasimoyek,’ Wisahkecahk itwew. Haw kakina aniki awiyasisak waskasimowak. Asa mana Wisahkecahk ki itwew ta pasakasimochik. Awiyasisak ka waskachimochik ... e kota anta Wisahkecahk sisipa nihkan ka ki pi newinach. Asaw mina wakasimowak. E kota kotakiya awiyasisa ka ati ki pinewenach niska. Asai iskoyach makwa ka pi misimoch e ki mosapich. Ki mosapow maka wina ... makwa ki mosapow. E kota ana ka kiskentahk Wisahkecahk ... Wisahkecahk asai kwantow e tahkamikisow.

‘Kakinaw osa ki ni pahikonan,’ itwew makwa.

O kakinaw asin ka sipweyamochik. Aspin ante iskwantemihk ka o tamochihk.

Wisahkecahk e nani pahach iskwayach makwa ka kaskichipitach ... ki chi sipitik e takiskatach makwahwa o chiskihk. Akwani makwa awa e ka kwayask ka ohci pi motek. Akwani piko ka wi tachimak WISAHKECAHK.

One day, *Wisahkecahk* was walking down along the lake. The lake was so beautiful and the water shining and glittering as the morning sun reached noon. Among the glittering of the lake the ducks, the geese and the loon were playing in the water. After seeing the birds *Wisahkecahk* got hungry. *Wisahkecahk* thought, ‘How would I get my dinner tonight’. But first he had to fool the birds in having the dance. So he went into the bush to get a pile of moss and put the moss into his bag. After he approached the birds by walking closely to the shore. The ducks asked, ‘*Wisahkecahk*, what do you got in your bag?’ But *Wisahkecahk* continued walking. The second time the ducks asked, ‘*Wisahkecahk*, what do you got in your bag?’ But *Wisahkecahk* continued walking. The third time the ducks asked loudly, ‘*Wisahkecahk*, WHAT DO YOU GOT IN YOUR BAG!’ This time *Wisahkecahk* was startled by the question. He said to the ducks, ‘I have song books in my bag. Would you like to come to the dance tonight?’ They agreed to build a dance hall. During the dance *Wisahkecahk* instructed the birds to shut their eyes as they danced in a circle. One by one *Wisahkecahk* killed the birds. But a loon cheated by opening his eye and saw what that *Wisahkecahk* was doing. The loon cried out, ‘*Wisahkecahk* is killing us!’ They all dashed for the door. But only the loon got away. While the loon was dashing for the door *Wisahkecahk* kicked his back so hard that the loon was not able to walk properly.

Wisahkecahk and the Muskrats

Another notable story-teller was interviewed from Berens River, Manitoba. This man can speak three languages: Cree, Ojibwa and English. His name is Walter Green and he is a respected elder from Berens River, Manitoba. This interview was done by Rudy Okemaw. Most of Walter Green’s interview was done in English. We agreed that there should be some documentation whenever legends were told. The following is an example of his stories he shared. (Walter Green *o Tachimowin*)

Walter Green started off by ...

... You know I used to visit the old people ... but ... I was just a little boy ... when I was in school ... I used to visit the old man by the name of old Jim Bear ... he used

to tell these stories to us. I used to go there and there used to be a lot of people listening. But ... you couldn't go there for nothing. You got to have a piece of tobacco and if you don't have any ... you can't go So I used to go there and listen to this old guy. He was telling about You know *Wisahkecahk* was a ... very kind man. He never did anything wrong to anybody ... was kind to everybody. He talked to anybody ... talked to anything ... rock, trees, birds, animals and everything. Then there was one time you know ... he was walking ... but he was going all the time ... there was time through the bush ... he came to ... a river ... he stopped and sat down for a while ... and that river ... wasn't very wide and there was a little lake close by. Well he stopped there ... he went around the point and there was a sandy bay on this side. So he sat there for a while. He wanted to go across. He was wishing to be on the other side. He couldn't go ... he couldn't make it ... somebody might see him ... cause in them days ... all the Indians ... what they did was ... travel around from place to place. Then he sat down on the ... he was sitting on this point and on his right ... he looked out ... on this big bay ... he looked around the bay ... sandy beach. There was a camp ... he saw a camp quite a ways out ... all the men were working ... skinning their furs. And the women were cooking around the big fire outside ... the women were working on the moose hide, scraping it, drying it. So he wanted to get across, wasn't very far a little bit of lake. All of a sudden when he was sitting on this point ... and on his left he heard something ... somebody was mourning, crying. So he looked around where it came from. There was a muskrat. This muskrat was crying ... the problem was the muskrat couldn't dive because his tail is too big and large, similar to the beaver tail. *Wisahkecahk* said, 'My little brother ... if you do something for me I will make that tail of yours ... light and small. So this muskrat was very glad because he had a promise from *Wisahkecahk* to make his tail smaller, thin and will be able to swim faster.

Wisahkecahk said, 'Come here. You see those people on the other side ... working on making paddles for their birch bark canoes?' Men and woman working around the fire. The woman working on the moose hide, scraping, drying ... and everybody was working. So he said, 'I want to go across this little lake. I am afraid if I swim the men see me and might come after me.' So he said, 'If you do this I will make your tail small.' The muskrat was glad. *Wisahkecahk* told the muskrat to chew off the paddles but careful not to break them ... chew off every paddles you see in that camp. So before the muskrat did what he was told *Wisahkecahk* made his tail smaller and the muskrat swam around very fast and happy. So the muskrat said, 'I will do the things you want me to do.' So the muskrat chewed off every paddle. After muskrat finished off the work he went back to *Wisahkecahk* ... he was sitting on the rock.

Wisahkecahk took a dead tree with roots pointing outwards like the moose antlers and he started swimming across the lake. The people on the other side could see a moose swimming across. They said to each other, 'Let's go and kill the moose.' The men started to paddle to the moose ... but as they were about to take a stroke their paddles broke off, every one of them. As *Wisahkecahk* landed on the shore. They noticed him, they had been tricked.

Communicating Inuit Perspectives on Research

Jill Oakes and Rick Riewe¹

Introduction

Since the tenth century, when Eric the Red explored the southwest coast of Greenland, European whalers, traders, explorers, and scientists have typically conducted their passage in the Arctic with colonial arrogance. Some men employed Inuit knowledge for navigation, clothing, dog handling skills, food, shelter, and tools; others scorned this source of knowledge. Those who embraced the Inuit knowledge survived, the remainder usually died with their ignorance and their arrogance.

Unfortunately, all too often the ignorance and arrogance of southerners has continued to this day. For example, in the 1940s, the Geological Survey of Canada began exploration in the North without consultation with the Inuit inhabitants. In the 1950s, the DEW line stations were built, again without consultation. In the 1960s, due to the discovery of oil in the western Arctic, northern research became popular with universities, government agencies, and industry. Scientists were crawling over the landscapes studying everything from permafrost to caribou.

In the 1970s, the native land claims were initiated (Coates 1992). The land use studies which were generated by these activities identified the lands that have been occupied by Aboriginal peoples for thousands of years. It was also recognized in 1973 that the government had been illegally exploiting the homelands of these peoples and that they had to be compensated. In the Canadian Western Arctic the final agreement of the Inuvialuit (COPE claim) was signed in 1984. In 1993 the Inuit of the Eastern Arctic settled their Nunavut claim. In the Northwest Territories the Inuit now have legal title to 18% of their traditional homeland. They also have major management controls over the remaining crown land in Nunavut and the COPE territory. In other words, the Inuit have a major say in how 1/5 of Canada is now managed, including research policy and procedures.

Inuit are extremely patient people, but they have become weary of being studied by southerners. They are tired of not being consulted by researchers who set up camps in

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their homelands. They are tired of their advice not being sought on subjects of which they have thousands of years of knowledge. As a result, Inuit are beginning to say that they have had enough of being studied by academics who show them a lack of respect.

The purpose of this paper is to make academics aware of Aboriginal peoples' concerns of research being conducted in their communities. Research concerns expressed by contemporary Inuit are the main focus of this paper; however, the same concerns are shared by Aboriginal peoples in other regions.

Ethical Guidelines to Northern Research

During the last couple of decades several associations, governmental agencies and NGOs around the world have established ethical guidelines for conducting research involving human subjects. At the *International Workshop on Ethical Issues in Health Research among Circumpolar Indigenous Populations* held in the summer of 1995 in Inuvik, Pekeles (1995) listed 19 such guidelines. Two of the guidelines had been formulated by international organizations (Council of International Organizations of Medical Sciences 1991, Inuit Circumpolar Conference — nd), nine by Canadian groups (National Council of Bioethics in Human Research 1995, Tri-Council Working Group 1994, Indian and Northern Affairs 1994, Health and Welfare Canada 1994, Medical Research Council of Canada 1994, Social Sciences and Humanities Research Council of Canada 1993, Royal Commission on Aboriginal Peoples 1993, Medical Research Council 1987, Association of Canadian Universities for Northern Studies 1982), five by organizations from the United States (American Indian Law Center, 1994; National Research Council, 1989, Society for Applied Anthropology, 1983; American Public Health Association, 1984; American Anthropological Association, 1971), two from Greenland (Commission for Scientific Research in Greenland 1995, NUNAMED'94, 1994), and one from Australia (National Health and Medical Research Council 1991). Some of these guidelines were designed specifically for the medical profession, but many of them are applicable to any field of research. Many research organizations have been forced to adopt ethical guidelines because Aboriginal groups, who are tired of being treated disrespectfully, have pressured them to do so.

The conduct of science in the North has been a highly visible, but often misunderstood process. Science in the North is not conducted within the confines of universities, labs, and research facilities, but rather in the field and in the communities. The comings and goings of scientists, and even who they are and what they are like, is often known in small northern communities. But what they do, why they do it, and what benefits their work might bring to the North, is often less well-known. Research, as currently perceived by aboriginal northerners, is a phenomenon of the last 25 years or so. It appeared in the context of colonial intrusion and of the sharp contrast between employment, income, and living conditions of aboriginal northerners on the one hand, and southern visitors on the other. It should, therefore, not be surprising that research, like many other southern initiatives, is often viewed with indifference, suspicion, and even hostility (Inuit Tapirisat of Canada 1993).

The Association of Canadian Universities for Northern Studies (1982) ethical guidelines (for a summary see Campbell, *et al.* in this volume) have been accepted by many Canadian universities. Most social scientists attempt to follow the spirit of these guidelines, but unfortunately many of the physical and natural scientists working in the

North are unaware that these guidelines have any bearing on their research activities. Until recently, scientists have only been morally obliged to follow these guidelines...

More recently, the settlement of aboriginal land claims has set out a new legal framework for research in the North. This is especially so in the Arctic. First, a substantial proportion of the land is no longer Crown land but Inuit land, that is, private lands (though extensive and unfenced) to which access is controlled. Secondly, some articles of these agreements place specific requirements on the conduct of research throughout the settlement area, whether on Crown lands or Inuit lands. This trend will continue with the creation of Nunavut, and the implementation of other forms of self-government in the North (Inuit Tapirisat of Canada 1993).

Moratoria on Northern Research

Aboriginal communities have become increasingly vocal and political in their stance to take control over research in their communities (Easton 1994). Over the past few decades many scientists have developed strong, collaborative relationships with certain communities; however, each year some scientists and community members disagree over research activities. Recently Aboriginal peoples have stood up for their rights to approve or disapprove specific research projects and have taken action by asking scientists to leave their communities. Last year the community of Pond Inlet on Northern Baffin Island put a moratorium on all research in their region. Resolute Bay on Cornwallis Island, likewise put a moratorium on seal research within an area surrounding their community. Some Baffin communities also have expressed their concerns about researchers and were considering initiating research moratoria (Rigby, pers. comm. 1994).

Physical and Social Scientists

Each year several hundred social and physical scientists, government researchers, and research consultants visit northern communities in the quest for knowledge (Peplinski, pers. comm. 1994). Social scientists have traditionally lived with Inuit families. This situation has fostered the classic definition of an Inuit family to include parents, children, grandparents, and an anthropologist. Historically, Inuit dealt with conflict and stress by avoiding difficult encounters whenever possible, and by patiently waiting until the problem disappeared. These cultural traits supported their reputation of being friendly and easy to get along with.

Inuit have also been generally tolerant of southern strangers invading their private lives (Briggs 1970). However, due to the increased numbers of scientists, tourists, and government officials travelling in the Arctic, combined with an increasing Inuit population, housing shortages, and the development of hotels and rental properties, social scientists are now often seeking alternative accommodations. Nonetheless, social scientists remain in close contact with community members and are aware of the issues and concerns of the community. Inuit often share their frustration and distrust of other scientists' behaviour with any scientist they can talk to; often these are the social scientists working in the community.

The nature of physical science often dictates that researchers study in areas remote from communities. These scientists may observe little or no sign of Aboriginal use in their study areas, especially when the scientists are working during the summer season in an area seldom utilized by Inuit in the summer. Inuit, however, have a different perception of space. From a hunter's perspective, a scientific field camp established

several hundred kilometres from the community on his hunting grounds is equivalent to a squatter moving into a scientist's urban backyard. As scientists, we may think our research is non-intrusive; however, everything we do in the field impinges upon the local culture.

All scientists need to show respect. Every summer there are gangs of people all over Baffin and out on the land — they need to show respect and change their attitudes towards Inuit.

Some invade our privacy... walk in with their cameras and take pictures through the doors and windows. Others impose what they want to do on Inuit. They need to ask what kind of research Inuit want done (Kilabuk 1994).

Inuit World View and Northern 'Experts'

Inuit hunters and their families have an intimate knowledge of the land which is passed down from one generation to the next. This knowledge is central to Inuit culture. Out of the need to reclaim management rights over their land, Inuit have sought land claims agreements with the federal government. However, land is still seen as belonging to the Inuit people collectively, rather than a privately owned possession. The concept of stewardship rather than ownership prevails in the Inuit world view.

If we didn't have conservation as part of our lives we wouldn't have survived for thousands of years in a northern climate that nobody else wanted to live in (Adams 1995).

Researchers are now exploring new perspectives by considering the Aboriginal world view in their research plans and implementation. Researchers also would benefit by keeping their own expertise in perspective:

At a multidisciplinary science meeting northern experts who had only been in the north for two to three summers provided "expert" information. There were no Inuit at the meeting to provide information. We need to change this now (Fehr 1994).

Intellectual Property Rights

Inuit repeatedly claim ownership of their traditional knowledge. They have willingly shared this knowledge with scientists in an effort to have it recorded for future generations and to provide scientists with additional information useful in providing a holistic view of a specific natural or social phenomenon. In contrast, scientists trained in the 'old school' strongly support the notion that any knowledge they collect belongs to them in the name of science. The idea of having Inuit review, edit, and add comments to research are usually rejected (Easton 1994) as they may alter or bias the results of the data. Having their research critiqued by community members who are untrained academically seems futile to many scientists since they consider only their academic peers to have the requisite expertise to do so.

Field data, acquired via technologically sophisticated equipment and statistically analysed, are all too often considered by physical scientists to be more valid than local knowledge. The validity and reliability of anecdotal evidence is questioned by many scientists. In order to build on current knowledge held by Inuit and southerners, scientists need to actively seek out the traditional knowledge of the Inuit.

Our knowledge is highly developed and needs to be respected, for example a scientist's polar bear guide uses knowledge and skills that have taken 1000s of years to develop. Inuit feel there is no reason to re-invent the wheel. Some of your projects "discover" information we already know. Please build on our knowledge so you will discover new information that will be of use to us (Arreak 1994).

Some scientists simply do not see the role of Aboriginal people in their field research. For example, the presenters of two separate research projects at a recent northern conference, one studying sea ice and the other caribou, didn't believe Inuit had any useful contribution to make to their studies. The scientists' rationales were that the sea ice study was conducted in an area seldom visited by Inuit, and the caribou study was conducted inland at a time when Inuit seldom travelled inland. Inuit scholars who were attending the conference left the presentations when they were exposed to these views. Afterwards the Inuit stated they were extremely frustrated to learn that their elders were not consulted. The work of the scientists appeared meaningless to them without providing the perspectives from the elders who they identified as 'the experts' in the field. The combination of Western and Aboriginal ways of knowing is critical in the pursuit of a greater understanding and respect between northern and southern experts.

People need to recognize that there are different kinds of knowledge, some people think that scientific knowledge is the only one that counts. You can't do scientific knowledge without Indigenous Knowledge. Try to educate biologists to consider our way of thinking and the meaning of our terminology. For example, the term "hunting", what does it mean to southerners? You get different images depending on your cultural background. Use of language is critical, for example, "harvest" *versus* "kill" or "hunt". We think we are getting the idea across but in actual fact we are not because of differences in terminology. Scientists need to know when to be quiet and listen (Kilabuk 1994).

... in the North, probably more than anywhere else, practicing scientists and the community in which they operate are engaged in debating the extent to which science should or can be democratized without compromising its goals (Easton 1994).

Hiring Local Residents

Inuit at all levels of government continuously stress the need to hire local residents in research projects.

Take time to see if you can hire local Inuit and to see if local Inuit are interested. Franklin is an example of someone who didn't take the time to use local knowledge...200 years later we're still looking for him (Arreak 1994).

Research assistant support is needed. You also need to pay for interviews if you want to get detailed information. If you are taping interviews in Inuktitut you need to have a translator and transcriber — they should be the same person (Phillip 1994).

Encourage Inuit students to enter field research projects (Evic-Twerdin 1994).

The primary focus should be to ensure northerners are able to participate in the research (Fehr 1994).

Written history needs to be corrected. Inuit researchers need to take a role in planning and implementing research (Suluk 1994).

Permits and Licences

Specific licences, permits, and policies have been developed to control research in specific topic areas including wildlife, parks, archaeology, and water resources. For example, according to Suluk (1994), the Heritage Trust will be providing research policy guidelines for archaeologists. Scientists lacking the required permits are now being asked to leave the communities. Phillip (1994) strongly recommended that scientists develop good rapport with the community before beginning their research.

We have made a lot of changes in our government structure and lifestyle. We have changed from dog teams to computers in 30 years. Today, scientists need all research approved by communities before it begins. Researchers should contact regional associations for support and information. Permits are needed if you are on Inuit-owned land or else you are trespassing (Arreak 1994).

The type of permission required varies depending on the research topic. All research must be approved by the Science Institute of the Northwest Territories and requires a letter of support from the mayor and council, as well as from any other interested community or regional Inuit organization. Permission is also required from individual participants in the research. Some individuals will want their name associated with the knowledge they share as one method of retaining their intellectual copyright of the knowledge. The community (collectively) owns the information shared by individuals. They have the right to control what information is removed from the community and published.

Community Review

Feedback to the community is critical to enable community members to correct misinterpretations, share information, and review the research prior to it being published. It ensures reliability, validity, and respect for original knowledge.

To communicate effectively scientists and Inuit need to show RESPECT, ACTION, WILL, and DIALOGUE. Our dialogue should be constructive and positive (Arreak 1994).

No matter what is being researched — people, land, water, etc. the knowledge belongs to Inuit. The question is how to give it back. Just sending the research paper back doesn't work. New technology makes it possible to use ATM to get text and photographs back on live T.V. using a discussion format. Northerners would like more scientific programs on T.V. We should use these and other creative ways to get the information back into the north (Stenbaek 1994).

Conclusions

If scientists wish to conduct research in the Inuit homeland, they must follow the procedures being established under the new legal framework of Nunavut. They must gain permission from the mayor and hamlet council, as well as any other Inuit organization which may have interest in the study, such as Pauktuutit (Inuit Women's Association), or the local Hunters and Trappers Associations. Scientists must show how they will hire Inuit, and how they will incorporate Inuit knowledge and perspectives within the research. The scientists must then obtain scientific research permits from the Science Institute of the Northwest Territories.

Some Inuit leaders are demanding that Inuit not only participate in the research design and methodology, and in the collection and analysis of the data, but that they have equal control over the dissemination of the research findings. Inuit leaders are also expressing their desire to have some control over the research funds. In other words, the Inuit are insisting on being treated as equals in the northern research agenda (Flaherty 1994). This includes research projects conducted by physical scientists residing in remote field camps, as well as social scientists residing in communities. However, for researchers possessing collaborative attitudes, there exist good opportunities for long term research collaborations between southerners (individuals and institutions) and northern communities.

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'Research as Praxis' in the Canadian Arctic; Thoughts of a Young Investigator

Shannon Ward¹

Introduction

Scientists currently working at the community-based level with Northern peoples are faced with the challenge of seeking methodologies for research which better reflect the applied aspects of their work. This has, in some disciplines such as applied Anthropology, resulted in a move away from positivist based approaches in research to 'post-positivist' approaches, which recognize the need for methodologies which seek to empower and elevate the 'researched' to participate in and steer the research process (Lather 1986, Maguire 1989, Ryan and Robinson 1990, Archibald and Crnkovich 1994). Some scientists who have adopted postpositivist approaches in their research have taken notice of or are adhering to a feminist school of research which uses a critical, praxis-oriented paradigm concerned with emancipating the researched (Lather 1986, p. 158). An important link which this feminist approach recognizes between theory and practice, is that the personal experience is in fact political; that our personal journeys through life shape our ideas, and these constructs are powerful tools through which to disseminate knowledge. Scientists working in the Canadian North who embrace specific aspects of feminist critical theory are looking at ways to create emancipatory research through a discussion of methodologies used when working with Northern communities (Ryan and Robinson 1990, Reimer 1993, Archibald and Crnkovich 1994).

In this article I will, from the perspective of a young student of Northern Studies and a feminist, examine how my personal experiences as a researcher working in a Northern setting have shaped the manner in which I would ideally like to approach community-based research. I have presented my ideas in two mediums; first through a presentation of my experiences as a researcher prior to my discovery of feminist discourse and the acute issues surrounding the politics of research in this area. Second, from an 'academic' perspective, I will present a short summary regarding the role which participatory action research (PAR) as a methodology is playing within the context of Northern Social Science.

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Part I: Discovering the Politics of Research and Participatory Approaches; A Personal Perspective

Personal experience has shaped the way in which I perceive my environment and construct ideas. The events outlined below describe the growth which I experienced and am still experiencing as a non-native feminist academic trying to make sense of my place in the university setting and in doing applied community-based research in the Canadian Eastern Arctic. In outlining my growth as a young investigator into the realities of academic research and working in an Inuit community for a limited time, I hope to show how personal experience has shaped the manner in which I hope to do community-based research in the future.

After completing a Bachelor of Arts degree in Human Geography and Northern Studies at McGill University, I had the fortunate opportunity to take part in a research project as a field assistant on community attitudes towards and perceptions of eco-tourism in the Baffin Island region. At that time, I was contemplating continuing in the field of Northern studies and Human Ecology at the Master's level and felt that field work would be a good experience, not only to help in getting to graduate school but also in figuring out whether I was comfortable with the idea of 'field work' as I understood it to exist in a traditional and positivist sense.

After spending one month in a small community on Baffin Island, I came south to take a year off from school and help write up the findings of the research project. As the year passed, I often thought about my experiences as a field assistant and felt a sense of unease about the manner in which I entered and left the community as an 'outsider' and the lack of opportunity for follow-up in the community.

The summer before I left from Ottawa to Winnipeg for graduate work at the University of Manitoba, I felt it would be useful to contact Pauktuutit (Inuit Women's Association) to inform them of my interest in the area of women's use of resources. I contacted Mary Crnkovich, a non-native lawyer who works for Pauktuutit, and told her of my intentions and interests. The process of contacting Mary was a pivotal point in my discovery of feminist theories, alternative methodologies in research as well as my investigation into the politics of research in the Canadian Arctic. Mary informed me that she was hesitant to talk to students, and explained that many individuals had taken the same steps in contacting Pauktuutit in the hopes of conducting research, but were rarely willing to work in collaboration with Inuit women representatives. She informed me that unless I was using a feminist participatory approach in my work and willing to contact the Inuit women first as opposed to herself (the non-native professional), she was not interested in discussing things further.

My discussion with Mary was a turning point with regards to locating myself in the process of learning with Inuit peoples. For the first time, my personal experiences and emotions surrounding the awkwardness and uncertainty regarding positivist methodological approaches in research had been contextualized. And although it was a difficult conversation, it acted as a catalytic tool through which I would become cognizant about the concerns of Inuit scientists, community workers and political figures regarding traditional approaches in research, and about the attempts being made by individuals to break down the barriers between northerners and the scientific community.

I began to read about the state of Anthropology, Canadian public policy and Native people (Dyck and Waldrum 1993), feminist approaches in research (Mies 1983, Lather 1986, Kirby and McKenna 1989, Archibald and Crnkovich 1994), and participatory action research (PAR) (Tandon 1988, Maguire 1989, Ryan and Robinson 1990, Warry

1990, Castleden 1992). My investigation into the current state of science in the Canadian Arctic and the role of participatory and collaborative approaches in research, were instrumental in my choosing to focus upon the feasibility of applying alternative methodological approaches in research in the Canadian northern context.

In retrospect, my personal experiences in participating in traditional applied social science research, and my exposure to northern attitudes towards specific types of research, have influenced my investigation into the state of northern science and the status of alternative methodologies in a Canadian Northern context. In presenting these experiences I hope to give the reader a wider understanding of what forces lie behind my choices to use a postpositivist approach, *vis-a-vis* a PAR methodology, in my research and work with people in the eastern Arctic. The primary aim of this work, then, is to help other students and young scientists interested in working with Northerners in adapting collaborative approaches in the process of doing research and in helping to create positive dialogue and partnerships in research between communities and scientists.

In the following sections I will present a formal analysis and outline some of the issues surrounding the state of Northern Science, highlighting the attempts being made by individuals working at the community and organizational level to work collaboratively with Northern people within the context of research. The PAR methodology will be outlined in terms of its origin as a research approach and defined in a Northern context, and briefly discussed in terms of its potential application in the eastern Arctic. I will then conclude, by summarizing the manner in which I have utilized PAR as a tool in setting up a research project with the community of Cape Dorset, NT.

Part II: Northern Science and Participatory Research

The State of Science in the Canadian Arctic

Since the inception of a neo-colonial administration in the Canadian Arctic, Inuit communities of the Baffin Island region have become increasingly concerned with the implications and effects of research on their physical and cultural environments (Cruikshank 1993, Reimer 1993, Flaherty 1995). In recent years, however, communities, associations and evolving Inuit governmental agencies of the Baffin region have begun to express politically their opposition to the current nature of southern academic research (Arreak 1994, Kilabuk 1994). The opposition has become so acute that the communities of Pond Inlet and Resolute Bay, NT placed complete moratoriums on both social and physical scientific research in 1994 (Alan Fehr, Science Institute of the NT, personal communication, Nov. 26, 1994). In this case, the assumption within the academic community of having the absolute right to conduct research under the pretense of scientific 'truth' was quashed.

In November 1994, at the Fourth National Students' Conference on Northern Studies held in Ottawa, a panel of northern politicians and scientists spoke to the question of Inuit involvement in scientific agendas in the North. Members of the Nunavut government, such as Meeka Kilabuk and Lazerus Arreak, addressed new protocols which scientists will be expected to adhere to regarding methodologies and research publication under Nunavut research initiatives. The Science Institute of the Northwest Territories (SINT) member, Alan Fehr spoke of new policy directions in research with regards to scientific licensing and scientific conduct that will change the manner in which science is practiced at the community level. Martha Flaherty, President of Pauktuutit, spoke critically of current practices in research and stated that the potential

that adopting participatory approaches heralds in theory is not often exemplified in reality. She warned researchers to be careful when jumping on the bandwagon of participatory research.

What is Participatory Research?

A methodological approach which has been applied in light of past criticisms of anthropology and other scientific practices in the north, is participatory action research. This is a methodology which seeks to empower community groups by facilitating participation in decision-making and developing 'partnerships' in the research process (Friere 1973, Maguire 1989). Unlike action, applied or advocacy anthropology, participatory research approaches go further to ensure that the goals or objectives of the research and control over the information is left in the hands of the community (Ryan and Robinson 1990, Legat 1994). Surprisingly, the application of this methodological approach in the Canadian Arctic has been relatively non-existent in relation to the immense volume of research occurring each year

The primary goal of PAR is empowerment of the community or social structure with which the researcher is working. According to Maguire, participatory research aims at three primary objectives: (1) to develop critical consciousness of both researcher and participant; (2) to improve the lives of participants in the research process; and (3) to transform fundamental societal structures and relationships (p.29).

The participatory action research (PAR) methodological approach has evolved from a wide variety of areas, most notably from adult education, literacy theory and international development theory. The origins of the method are linked to predominant social movements in the 1960s, and to theorists such as Frier (1970) and Hall (1975) in adult education, Gunder Frank (1973) in dependency theory, and Tandon (1985) in international development (Maguire 1987, p.32).

By the 1980s, the PAR approach was taken up within the applied and action anthropology literature, and has been defined in various capacities (Maguire 1987, Hall 1988, Tandon 1988, Tax 1988, McTaggart 1989, Ryan and Robinson 1990, Whyte *et al.* 1991). In more recent years, feminist theory, as outlined in the work of Maguire (1987), Ryan and Robinson (1990) and Kinniard and Hyma (1994), has shaped new variations of participatory research.

Feminist approaches to PAR address issues of gender and androcentrism within existing participatory research frameworks, and have been of particular relevance in research and planning objectives pertaining to women's issues and research conducted in cross-cultural environments. Outside of the traditional academic literature, grassroots organizations such as the Women's Research Group in Vancouver, B.C., are publishing invaluable literature for community groups pertaining to community-based research (Barnsley and Ellis 1992). Archibald and Crnkovich (1994) discuss the issues and challenges they face as 'intimate Outsiders' working from a feminist perspective for the Inuit organization of Pauktuutit. Issues of flexibility in theory and practice of feminism as well as double consciousness (addressing race and class in the research process) are discussed in the context of their work as non-native feminists working in a cross-cultural environment. They state that ethics and feminist research methodologies must be intertwined to be honourable and effective and that feminist orientations in research which discount the experiences and world view of Inuit women are apt to be as ineffective and self-serving as traditional research.

Participatory Approaches in Arctic Research

As a result of the increased politicization of northern intolerance for certain scientific practices, select researchers and communities are working to accept and address ways in which research can be approached in an ethical, equitable and practical manner which empowers communities to direct and conduct their own research (Ryan and Robinson 1990, Warry 1990, Cruickshank 1993, Hoare *et al.* 1993, Reimer 1993).

There has been little written on the process of using PAR as a praxis approach in research in the Canadian Arctic. Ryan and Robinson (1990) were instrumental in devising a PAR approach in the western Arctic and have extended their model to include feminist principles of empowerment, and principles of group dynamics. The primary objective of Ryan's work on the Gwich'in Language Project (1990) was to work with the community of Fort McPhearson NT, in helping to collect oral histories and record them in the Gwich'in language. The research was requested by the community, where Ryan acted as a facilitator and mediator in helping to initiate each stage of the project and to help explore ways of collecting, recording, organizing and analyzing data.

A Critique of PAR Approaches and the Future of PAR in the North

Participatory research was developed from an ethical and emancipatory perspective, however, if used without the correct ethical intentions (Archibald and Crnkovich 1994) or used in a hypersubjective manner (Lather 1986), this methodological approach has the potential to operate as unethical traditional research has done in the past. Participatory approaches in research take time and resources and must be done with the belief that local people have a vital role to play in the process. PAR is not a method which should be used as a result of the backlash against positivist based research; it must be used ethically and with the utmost respect for those whom the researcher seeks to work with at the community or organizational level. As Maguire states, 'It is not a method for the light at heart' (p.182).

Noting this, however, if PAR is done correctly and with genuine ethical intention, this methodological approach will have (and is already having), a tremendous impact on science in the Canadian North. I predict that this method will foster increased attention in the future from all streams of science and will be applied not only as an alternative to positivist methodologies, but because people in the North expect and demand this approach from outsiders engaged in community-based investigations. Hopefully this will lead to people in Nunavut taking a leadership role in community and land based scientific investigation as more local people take over the task of research.

Conclusion

My personal experience as a student struggling and still struggling with the process of doing research as an outsider in a cross-cultural setting, has led me to research the topics outlined in the preceding text. My personal experience has also led me to apply this new-found knowledge of feminist theory and alternative research methodologies to my own research project which is the focus of my Master's thesis at the University of Manitoba.

Upon investigating the state of northern science and the attitude of Northern peoples towards past experiences with outside researchers, I felt it would be a good idea to return to the community on Baffin Island where I conducted research during the summer of 1993. By returning to the community my primary purpose will be to follow up on the

conclusions and recommendations made by the McGill research team and to address any questions or concerns about the project and its contents.

Over the course of the last nine months I have been in regular contact with the community about the possibilities of returning to pursue a collaborative project on an area identified by the Hamlet Council. I informed the community that I would be interested in helping them develop a community-based research project and also wished to record the process of using a PAR methodology in research. The Community Development Committee approved the proposal and has shown interest in pursuing a small project on community attitudes towards Territorial Park development on Mallikjuaq Island. The scope of the research project will be developed in the community with the Community Development Committee and the research will be worked on by a team of local research trainees. Ownership of the research project will remain entirely with the community.

My objectives in initiating this investigation into the process of using collaborative and participatory methodologies in Northern community-based research are to learn more about the effectiveness of these approaches as well as their limitations. The short term goal of this investigation is to subject other researchers and communities to my experiences as an outsider attempting to work collaboratively with the community in the process of research. The long term objectives of work such as this are to encourage a wider use of participatory methodologies such that communities no longer need outsiders in addressing community-based research.

Acknowledgements

As young students, it is not often we are given written forums in which to share our ideas with a wide audience. I would like to thank Dr. Jill Oakes and Dr. Rick Riewe for giving me the opportunity to present this research and for constantly encouraging me in my pursuits. I would like to thank all the women at Pauktuutit and Mary Crnkovich, who introduced me to the idea of participatory research. Also, Dr. George Wenzel, Dr. Janice Ristock, Dr. Skip Koolage, Karen McSwain and Don Castleden for their ideas and support. And a final thanks to Andrew Preston, whose support, encouragement and patience was invaluable during the early stages of this research.

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Culture and Informed Consent: The Role of Aboriginal Interpreters in Patient Advocacy in Urban Hospitals

**Joseph Kaufert, Margaret Lavallée,
William Koolage and John O'Neil¹**

Abstract

This paper analyzes consent agreements within the broader sociopolitical and cultural context of clinical interaction and health advocacy for Aboriginal patients. We illustrate the problems of obtaining culturally valid consent agreement through a detailed case study of negotiations involving a physician, an Aboriginal patient and a language interpreter in a Winnipeg hospital. To establish meaningful communication the interpreter must mediate between the clinician's biomedical explanations of illness and proposed treatment and the culturally based framework which the Aboriginal patient uses to interpret their problem.

Introduction

Obtaining written consent agreements before surgery or other invasive medical procedures is a pivotal event in the development of trust between clinicians and patients. This paper analyzes consent within the broader sociopolitical and cultural experience of Aboriginal patients who receive care in Winnipeg hospitals. We examine the process of negotiation of consent agreements in cross-cultural encounters through the analysis of a case example of one patient's experience in negotiating consent.

Methods

Case study material on consent agreements within a cross-cultural context was collected during an observational study of the activities of medical interpreters in urban hospitals.² Case studies of medical interpretation were videotaped and participants interviewed by Cree, Ojibway, and Island Lake language-speaking research assistants to

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 2. Kaufert, J., and W. Koolage. 1984. Role Conflict among Culture Brokers: The Experience of Aboriginal Canadian Medical Interpreters. *Social Science and Medicine* 18(3): 283-86.

determine their personal interpretation of the information communicated. Our analysis documented the experience of a selected sample of patients who used the Native Services Department at the Health Sciences Centre to provide language interpretation and cultural advocacy.³ Problematic consent negotiations often occurred in situations where the linguistic interpretations of illness and treatment used by the clinician conflicted with the cultural expectations of Aboriginal clients. Although a total of 25 consent agreements for surgery or invasive diagnostic tests were observed and 12 were videotaped, a single illustrative case will be discussed in this article.

Consent in Cross-Cultural Communication

Legal and ethical analyses of consent decisions have not adequately considered situations in which clients and clinicians are from different cultural and language groups. Individual and shared group language and culture influence the interpretation of illness and treatment options. With minimal reference to the influence of language and culture, the legal and ethical literature emphasizes that for valid consent decisions to be achieved: (1) full information about risks, benefits and alternative treatments must be provided; (2) patient competency must be established; (3) patients must be able to understand the information presented; and (4) patients must be placed in situations in which they can act voluntarily.⁴

Despite the clarity of these criteria for valid consent agreements, situations involving cross-cultural exchanges of information about risks and benefits of treatment depend on accurate and culturally appropriate translation of medical and Aboriginal health concepts. To evaluate patient 'competence' and capacity to evaluate diagnostic and treatment information, it is often necessary to use an interpreter. However, using a language intermediary, such as medical interpreters, a family member or Aboriginal patient advocate, may also introduce the translator's personal explanatory framework and agenda into the consultation, without the awareness of either the client or clinician. The requirement that patients achieve a level of understanding before agreeing to proposed treatment ultimately may require intermediaries to reconcile fundamentally different, and sometimes incompatible, concepts of illness and healing. The legal expectation that patients will be placed in situations in which they are autonomous may also be hard to achieve in situations where patients are transported from northern communities without access to family support systems and without a knowledge of the workings of the urban health care system.

The final significant problem in cross-cultural consent decisions involves cultural differences in patients' and health providers' understandings of the clinician/patient relationship. Relationships with healers in Aboriginal cultures emphasize generalized trust in the practitioners' guardianship of the patient, rather than the need for agreement about treatment details. A culturally valid expression of trust in a healer may not meet the current legal criteria for adequate information for informed decisions.

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3. Kaufert, J., and J. O'Neil. 1989. Biomedical Rituals and Informed Consent: Aboriginal Canadians and the Negotiation of Clinical Trust., pp. 41-63 In: G. Weisz (ed.), *Social Science Perspectives on Medical Ethics*, Dordrecht: Kluwer.
 4. Meisel, A., L. Roth, and C. Lidz. 1977. Toward a Model of the Legal Doctrine of Informed Consent. *American Journal of Psychiatry* 1(34): 3.

Current research has not systematically examined the effect which intermediaries, such as interpreters, family members or advocates, have upon consent negotiation. From our observational study of the work of Cree, Ojibway and Island Lake language-speaking interpreters, it is apparent that the negotiation of consent agreements provides a clear illustration of the impact of alternative linguistic and cultural reference frames. The cases also highlighted the differences in access to knowledge and power among clinicians and Aboriginal patients. In the video recordings of consent agreements we observed that most clinicians initially emphasized communication of biomedical information about illness and diagnostic or treatment options. The transcripts also clearly showed that medical interpreters played a significant role in establishing a framework for mutual understanding between clinicians and Aboriginal clients.⁵

Despite emphasis in the communication literature on the role of interpreters in 'objective' language translation, we observed that medical interpreters and family members sometimes introduced their personal explanatory frameworks. In Winnipeg hospitals, where clinicians knew little of patient's home environment, interpreters were a key source of information about the client's previous medical care, family and home community and migration experience. The interpreters' capacity to introduce contextual information on the client's background and current hospital experience was observed to influence the outcome of consent negotiations.

In our general research program we observed an expansion of advocacy roles among urban, hospital-based language interpreters who mediate consent agreements. We found that in some situations, language interpreters functioned as advocates for Aboriginal clients who wanted more information before making treatment decisions. Medical interpreters also worked actively to empower the patient by informing them of their right to consult other practitioners or to refuse treatment. For example, two cases were documented where patients asked clinicians to remove pace makers which were implanted in emergency situations. Interpreters explained that patients had refused the operation because they held traditional beliefs prohibiting the introduction of a foreign substance into their bodies.

Case Study of Interpreter Mediation of Consent

One case example of consent negotiation with an Aboriginal patient illustrates the process of interpreting both clients' and practitioners' models of illness and treatment. It involved the experience of a 46 year old Cree-speaking woman, referred from a community health centre in a northern Manitoba reserve for gastroscopic and colonoscopic examinations in Winnipeg. We recorded a series of diagnostic encounters in which a Cree-speaking medical interpreter explained the procedures and helped the physician negotiate consent for diagnostic procedures examining the stomach and large intestine.

The physician initially attempted to assess the patient's understanding of her own problem as he attempted to diagnose the probable cause of her anemia. The patient described her illness in terms of her feeling of 'increased physical weakness'. The physician attempted to introduce a more complex diagnostic explanation linking the loss of blood with the presence of lesions caused by anti-inflammatory medication. The

5. Kaufert, J., J. O'Neil, and W. Koolage. 1986. Culture Brokerage and Advocacy in Urban Hospitals: The Impact of Aboriginal Language Interpreters. *Santé, Culture, Health* 3(2): 2-9.

patient responded through the interpreter, that she did not understand the physician's questions about gastrointestinal symptomatology and darkened stools; commenting that the questions 'did not seem relevant' to her experience of decreased energy. Without asking for further elaboration of the diagnosis from the physician, the interpreter reinforced the need for colonoscopy. In her translation, the interpreter attempted to reconcile the patient's less specific understanding of the cause of her anemia with the physician's explanation of the possible sources of blood loss.

Following initial consent, colonoscopic and radiological examination of the lower intestine revealed a benign polyp. The physician stated that the polyp should be cauterized. A second set of procedures involving colonoscopy were proposed and the patient was asked to sign a second consent agreement. In the negotiation, the risks and benefits of the diagnosis and potential hazards of not removing the polyp were briefly discussed. However, the physician did not mention alternative treatment options, assuming that the patient would sign the consent form.

When the interpreter asked the patient directly (in Cree) whether she would consent to the procedure the woman initially refused. The interpreter immediately intervened by explaining that untreated polyps introduced increased risk of bowel cancer. Following the interpreter's intervention, the patient ultimately consented.

In the exchange, the interpreter elaborated on the physician's explanation of the procedure. Her explanation incorporated the interpreter's personal understanding of the risks of cancer associated with untreated polyps. In these exchanges, the interpreter did not always provide a literal translation of the physician's statements. The interpreter's explanation combined information from the physician with her experience with other cases and awareness of the patient's reservations about further diagnostic and treatment interventions. In working towards a final agreement, the interpreter acknowledged the influence of Cree cultural values emphasizing the maintenance of individual autonomy and personal responsibility. She ultimately emphasized the patient's right to make the final choice herself stating: 'It's all up to you to think about'.

In this case, agreement was eventually achieved by drawing on the trust relationship between the patient and interpreter. The interpreter's intervention as a culture broker introduced a third perspective which influenced the course of the decision. Her interpretation incorporated elements of both biomedical and Cree models of illness and introduced new information about treatment options. Her interventions as an advocate established well defined decision points where the patient could more fully exercise her option to consent.

Barriers to Informed Consent

This brief case example demonstrates the role of interpreter/advocate in redressing cultural and structural barriers for Aboriginal people in consent negotiations in urban hospitals. In some urban hospitals, interpreters perceive their role as extending beyond narrow language translation functions. Job descriptions have recently been extended to legitimate advocacy roles which empower the client through elaborating treatment options. They also stress the role of the interpreter in providing information about patient rights and about the culture of urban hospitals. Negotiation of informed consent in cross-cultural situations may be influenced by the extent to which the translator is able to function as a patient advocate. The expanded role of medical interpreters may not totally alter provider/client interaction in consent negotiation, however it may offer

additional prospects for advocacy and empowerment of both clients and health care workers.

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Conducting Dietary Surveys in Aboriginal Communities: Methodological Considerations

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Margaret Grunau and Judy Halladay¹**

Abstract

Food consumption surveys in aboriginal communities present special challenges to researchers. This paper reports the approaches taken in response to the challenges encountered in a dietary survey in three northern Manitoba Cree communities. Discussion focusses on community involvement, understanding local customs and food habits, working with local interviewers, logistical issues, and aspects of research design. By sharing their collective knowledge, a team of local interviewers, health practitioners, and researchers were able to find practical solutions to the challenges encountered in the design and implementation of a dietary survey. While solutions found in one community may not be appropriate elsewhere, it is hoped that sharing this information will help others, including aboriginal communities, plan more effective dietary surveys.

Introduction

Food consumption surveys in aboriginal communities present special challenges to researchers as the communities are often remote and the culture and local conditions may be unfamiliar. In addition, while considerable literature on the nutrition of Canadian aboriginal peoples now exists, there has been limited reporting of the challenges encountered and approaches taken in conducting these surveys, possibly because of space constraints in government reports and scientific publications.

This paper provides recommendations with respect to a number of technical aspects of dietary surveys based on the authors' experiences in a dietary survey in northern

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Manitoba (Campbell *et al.* 1992). Aspects discussed include community involvement, constructing sampling frames, hiring and training interviewers, pretesting, implementation and monitoring procedures, data analysis and standardization, and reporting back. While it is recognized that what works and does not work in any survey is influenced by the communities involved and the objectives of the study, it is hoped that sharing this information will help other communities plan dietary surveys. This is a timely issue as aboriginal communities are now beginning to assume more control over their health services and, in the process, conduct health needs assessments.

Overview of the Dietary Survey

The objective of the dietary survey was to describe the current eating patterns and nutrient intakes of preschool children, women of child-bearing age, and older adults in three Cree communities in northern Manitoba (Figure 1). God's River (GR), population 400, is accessible by air or by winter road from Cross Lake. South Indian Lake (SIL), population 845, can be reached by air or, in summer, by gravel road and ferry from Thompson, and in winter, by gravel road and winter road. Nelson House (NH), population 3000, is accessible year round by gravel road from Thompson. A more complete description of the communities, their food supply and other sociodemographic characteristics can be found in Campbell *et al.* (1992).

The survey investigated the following: food intake using a 24-hour recall; the seasonal availability of traditional native foods (i.e. wild game, birds, fish and berries) using a food frequency questionnaire; food preferences; and various factors influencing either the access to or consumption of traditional and marketed foods. Data were collected in the fall and winter.

Prior to beginning the dietary survey, discussions were held with other researchers who had experience conducting similar surveys in other aboriginal communities in Canada. The methods and procedures used in this study evolved from the work of these researchers and many other persons who knew the communities or had experience working in aboriginal communities (Kuhnlein 1984, 1989, Lawn 1989, Wein and Sabry 1988, Wein *et al.* 1989).

Community Involvement

A critical first step for the successful completion of the survey was obtaining the approval and cooperation of the local authority — the chief and council, tribal council, and health service providers employed by the government or the band. Time constraints associated with the funding arrangement prevented additional community involvement at the outset of the study. However, it is recognized that community involvement in the identification of needs and participation in all aspects of a study contributes to community action on recommendations resulting from the study. Frideres (1992) gives useful ideas on how to gain community involvement from a participatory research perspective. 'Ethical principles for the conduct of research in the North' (ACUNS 1982) is an essential guide.

Understanding Local Customs and Food Habits

Becoming familiar with local customs and food habits is a primary requirement for fieldworkers who are from outside the area or culture (Asselbergs and Sabry 1988). In the present study this was achieved through qualitative research conducted prior to the cross-sectional survey. Information obtained was used to guide the process of collecting the survey data, especially the development of the survey questionnaire, and to provide

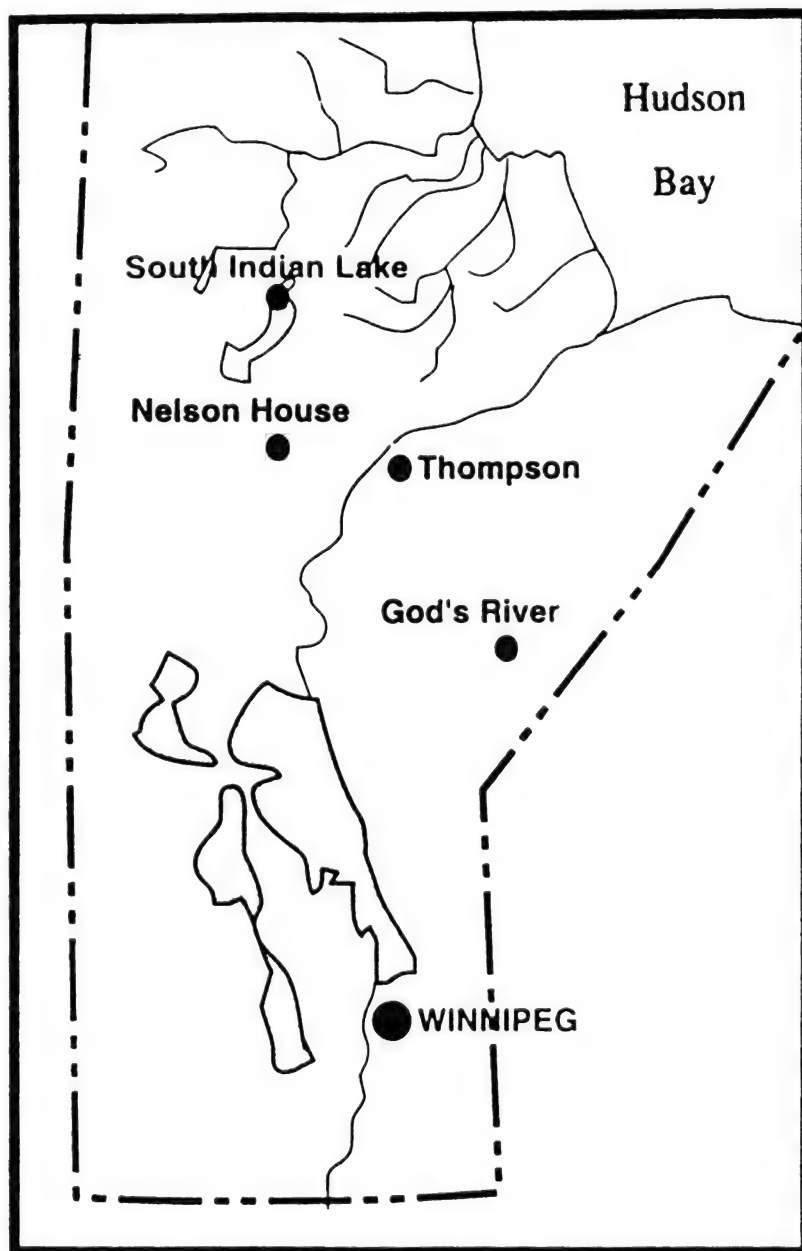


Figure 1. Map of Manitoba showing the location of communities.

an overall picture of the food supply, its context and potential influences. From the inception of the study, qualitative and quantitative research were viewed as complementary parts of a single research strategy (Van Esterik 1983).

The qualitative phase involved exploratory discussions with local people and others who knew the community well. The Medical Services Branch (MSB) nutritionist shared knowledge and introduced the researchers to each community. The researchers made a one-day visit to each community where the local people taught much about their communities and the food supply. In addition, a married couple living in Winnipeg, who had grown up in two of the communities, still visited frequently, and were working on another research project in the communities, showed the researchers during a three-day workshop how to adapt survey methods to community needs. This workshop focused on how to train community members to conduct a 24-hour recall of food intake, how to adapt food models to show usual portion sizes in the community, and how local foods are prepared. In the process the researchers increased their knowledge of the local culture prior to going to the field.

The preliminary qualitative phase also involved personal in-depth interviews with local fishermen, hunters and trappers (US Dept. Health and Human Services 1984) to provide information so that interviewers could be trained and data coded appropriately. The interviews explored the seasonal availability of traditional foods and the months in which to conduct the study; the extent of use of different parts of various animals, fish and birds in each community in order to develop the food frequency questionnaire; and the methods commonly used to preserve, prepare, and serve different traditional foods. One researcher spent a week in each community working with a local interviewer/translator to identify and interview key informants ($n=24$), using an interview guide and a tape recorder. On the advice of local people, interviews were conducted with individuals alone or with family members rather than in groups as Kuhnlein (1984) had done in her preliminary work with the Nuxalk.

Local hunters and trappers showed how wild game and birds were cut into portions for cooking. Schematic drawings of a rabbit, beaver, moose, etc. were presented and the hunters/trappers showed how each species would be cut. This information was used to train interviewers how to assess portions of food from different cuts from the various species. Fishermen were consulted about the usual size of local fish, because fish are generally larger from northern than from southern lakes. Shapes of fish (full size) were cut from paper according to specifications for fish size from Fisheries and Oceans Canada (1981). The fishermen indicated if the shape represented a small, medium or large fish. This information provided ideas for training interviewers in how to assess portions of different shaped pieces of fish. The fishermen also showed how the fish would be cooked and cut for eating.

This approach of listening to and learning from local people provided an excellent awareness of local food habits and sensitivity to customs and language. Although costly in time, it contributed to the successful design and implementation of the survey. Others have found it equally successful (Kuhnlein 1984, 1989, 1991, Lawn 1989, Wein *et al.* 1991, Wein and Freeman 1992).

Constructing a Sampling Frame

The construction of a sampling frame from which a representative sample could be selected presented another challenge (Lepkowski 1991, Kuhnlein 1989, Wein and Freeman 1992). Band lists and community lists were used to obtain data on population

size, but were not always up-to-date. For example, the band list in NH underrepresented the population of preschool children (13-48 months) in the community. It was augmented with information provided by the band office and nursing station. In addition, the band list in NH and the community lists used in GR and SIL overrepresented the population of 16-45 year old women in the community since many on the lists had left the community to attend school. The latter problem was not detected until data collection was underway.

This problem might have been prevented if a community committee had been consulted to update the lists for births, deaths, marriages and in- and out-migration due to hospitalization, school, etc. Committee members would be knowledgeable about the community and could ensure that the sampling frame neither overrepresented the target population by including people who were not in the community, nor underrepresented it by excluding people who actually were in the community.

Hiring and Training Interviewers

Choosing to use local interviewers who are not trained in nutrition instead of nutritionists who do not know the community involves certain trade-offs. In the present study, local interviewers were recruited from ads placed throughout the community. The researchers in consultation with the local employment office selected interviewers who knew their community, were bilingual (Cree and English), and were familiar with local food habits and customs. Using these criteria for selecting interviewers ensured their acceptance by the community, influenced cooperation, and resulted in high participation rates (Campbell *et al.* 1992, Kuhnlein 1984, 1989, Lawn 1989). Local interviewers were able to locate subjects in these communities where street numbers are not used and many subjects have the same surnames. Children's names were listed with the parents to aid identification. Sharing their knowledge of where subjects lived increased contact rates and helped organize the data collection strategy. The interviewers had networks that allowed them to know when people were in or out of town, which also increased contact rates. Thus local interviewers were instrumental in locating subjects and gaining their cooperation. As a further motivation to participate, subjects received a plastic mug with logo which proved to be very popular.

Most of these interviewers, however, had little or no experience in conducting interviews and had to be trained in the art of interviewing and questioning (Kuhnlein 1989, Lawn 1989) which required sufficient time for practice, especially for the 24-hour recall. To ensure that enough detail was collected to code the recalls, interviewers had to become knowledgeable about the purpose of the study and the food composition tables to be used in analysis.

The training sessions actually provided for an exchange of knowledge and skills — the researchers shared interviewing skills while the interviewers shared knowledge of local foods, portion sizes and ways to measure them, local terms for foods (e.g., cartoned milk), and the kinds of foods available in different seasons. The interviewers also identified commonly used eating utensils such as mayonnaise and peanut butter jars for cups for beverages; plastic margarine containers for soups, stews, and macaroni dishes; plastic disposable drinking cups; and tin mugs and pie plates used on the trapline and at camp. These items were included in a food models kit.

Interviewers from the various communities were trained together to ensure that survey procedures were implemented similarly across communities. Training occurred outside the communities to avoid interference from home obligations. Because the

training session occurred before the pretest, it was an opportunity for researchers and interviewers to share knowledge and achieve a consensus on how to conduct the pretest. This approach proved synergistic — interviewers felt a greater part of the project and procedures were improved by adapting them to local conditions.

Pretesting

In this study, the pretest was conducted to assess the suitability of the research instruments in terms of language and burden imposed on respondents; the interviewers' ability to collect accurate, reliable data; the time taken to complete an interview in relation to expectations; the ability to locate respondents; the likely response rate; the suitability of rates of pay for interviews completed; and the logistics of carrying out the survey.

The pretest was conducted in the study communities rather than in another community because logistical problems were expected to be unique to each community. The pretest used the same interviewers as in the final study, thus building the interviewers' role in the research team. The interviewers' comments on all aspects of the pretest were solicited during a group discussion which was audiotaped in the community at the end of the pretest and used to make changes for the final study.

The importance of a pretest to the overall success of a study cannot be overstressed. All steps in the research process should be pretested. In the present study, the data coding and analysis procedures were not pretested; consequently, the time and money required for this step were underestimated. It is important to allow sufficient time between the pretest and the final study to make adjustments in procedures based on the pretest results. Numerous problems surfaced in the pretest of the present study; however, solutions were found that led to a fairly smooth final study. The difficulties that did arise and the approaches taken to deal with them are discussed throughout this paper.

Implementing and Monitoring Study Protocols

During the pretest, one of the interviewers in each community was in charge of the work of the others. It was found that nutrition coordinators who were more experienced in research and nutrition were essential to meet the needs of the survey (Kuhnlein 1989, Lawn 1989). Nutrition coordinators monitored the work of the interviewers, provided retraining, and coded incoming data.

The nutrition coordinators, graduates in foods and nutrition, were from Winnipeg but lived in each community during data collection. They were hired, trained and monitored by the researchers. More coordinators were hired and trained than were needed immediately, in anticipation of drop-outs. Coordinators were hired on the basis of their sensitivity to local customs and their ability to live in a remote area for several weeks. To manage feelings of isolation, the coordinators had phone and FAX access to each other, to the researchers, and to their families. In addition, the coordinators returned home for a weekend at the mid-point of data collection. At this time they also met with the researchers to restandardize procedures across communities and to check that incoming data met research needs.

Logistical Issues

Many aspects of the traditional way of life in the communities were incorporated in the research design and implementation procedures. Because some families lived at fish camps in the summer, data were not collected during this season. Available resources

were insufficient to send interviewers to fish camps as was done by Kuhnlein (1991). Other residents who lived on the trapline for extended periods of time were interviewed when they returned to the community for supplies, but inevitably some were missed.

Day-to-day activities in the community also were taken into account. Twenty-four hour recalls were not conducted on Saturday and Sunday because of the difficulties involved in interviewing on those days. The omission of Friday and Saturday intakes limited the ability to generalize results to the entire week.

Language was another consideration. Some interviewers were concerned that their Cree was not as good as that of the elders they were to interview. To help standardize the language used by the interviewers, the questions on the questionnaire forms were recorded on audiotapes in Cree and these tapes were used for training. This approach proved successful whereas writing the questionnaires in Cree phonetics was not. Literacy levels of the respondents influenced the choice of methods. Since some of the older subjects could not read or write, questionnaires and consent forms were administered orally by the interviewers.

Maintaining the same interviewers throughout the study was another challenge. Of the 12 interviewers who were trained, four dropped out for personal reasons or received permanent employment. It is recommended that more interviewers be hired and trained than initially necessary, especially if the study is conducted over several months (Kuhnlein 1989, Lawn 1989).

An efficient method of paying local interviewers in cash was an important factor in maintaining morale. Because the communities had no banks, the nutrition coordinators were provided with travellers' cheques or, in some cases, large amounts of cash. When the local store had sufficient cash on hand, the nutrition coordinators could cash the travellers' cheques but, at times, they had to go to nearby larger communities to obtain cash. Interviewers were paid for each completed interview.

The study schedule allowed for delays in the transport of people and supplies. Snowstorms and heavy rains could make gravel roads and airstrips impassable. Transportation within the communities also had to be provided for the interviewers since the weather and distance between households made walking difficult. The type of transportation depended on the season (e.g. snowmobile, truck, car). Whatever the mode of transport, study equipment (e.g., food model kit) had to be lightweight and easy to carry.

Because none of the communities had hotels, finding accommodation for visiting research staff also took time. Local people helped find a variety of suitable accommodation for example, the teacherage, the home of local clergy, or the nursing station.

Transfer and storage of survey records was another consideration. Confidential data had to be kept in locked storage, which was often in short supply. In addition, transferring records from the community to the study analytical centre often involved several steps, which increased the chance of data loss. Doctors and dentists who frequently visit these communities were helpful carriers. In addition, padded envelopes with pre-paid postage speeded mailing and prevented data loss.

To document these and other logistical problems, the nutrition coordinators kept a journal, recording unusual events, observations and comments from interviewers. From the journal entries it was possible to see patterns developing. For example, it was noted that interviewing was disrupted on certain days — days when paychecks and welfare checks were received, bingos, Friday afternoons for shopping in one community, and days when the whole community was affected by an event such as a funeral or town hall meeting. It also became evident that morning was a good time to interview elderly

people but not younger women and that working women were hard to reach at any time due to busy schedules. Thus the journal was a valuable source for revealing logistical problems and explaining unusual data.

Data Analysis and Reporting Back to the Communities

Coding food intake data

Dietary recalls were coded in the field by the nutrition coordinators. Field coding had several advantages: (1) interviewers were available to clarify questions in the recalls; (2) weights of foods purchased in stores and ingredients in restaurant items were obtained readily; (3) local people could show the preparation of typical food mixtures for weighing; and (4) local fishermen, trappers and hunters could show the usual size of fish and various parts of wild game and birds (e.g., rabbit leg, beaver tail).

To standardize coding across communities, a list was made of all foods in the 24-hour recalls from the pretest and, during training, the nutrition coordinators achieved consensus on codes for each food. In addition, a more experienced coder was in charge of questions that arose in the field. Sufficient resources are essential for communication among coders in the field.

Food composition tables were found to represent inadequately the range of foods and methods of food preparation and preservation used in the communities. Many traditional foods were not in the Canadian Nutrient File (CNF) (Health and Welfare Canada 1988) and were substituted with foods of a similar composition (e.g., 'rabbit liver, boiled' was coded as 'chicken liver, simmered'; 'moose kidney, fried' was coded as 'beef kidney, simmered' and additional fat was coded). For other foods, values for the raw but not the cooked form were available. In addition, fish and wild game/birds often are boiled in these communities, and the boiled values for many of these are not in the CNF (e.g., boiled pickerel, lake trout, goose, beaver, moose). Boiled values for store-bought meats also are often missing in the CNF (e.g., boiled hamburger, round steak, etc.). In addition, values for some fish and wild game that are smoked and dried are not available (e.g., dried and smoked moosemeat and caribou; smoked lake trout and pike). Health and Welfare Canada provided calculated values for some boiled, dried and smoked meat and fish as a 'best estimate'. In addition, the bannock code in the CNF was not appropriate as calcium enriched flour was not commonly used in the three communities. Therefore nutrient values were calculated for a typical bannock recipe as prepared by a local person using locally-available regular flour.

Coding commonly-used mixed dishes (e.g., soups, stews, macaroni dishes) was difficult as written recipes are not generally used. In this case, subjects were asked to either list the amount of each ingredient in the total mixture and determine what proportion of the whole dish was eaten or to list the ingredients and estimate the amount of each ingredient eaten.

In short, before the study begins, the completeness of available food composition data must be assessed in relation to the particular needs of the study. The nutrient database must be checked for completeness in terms of its range of foods and their prepared and processed forms, as well as for missing nutrient values for individual foods. Decisions must be made, in advance, on how to handle missing values. Time and money must be available for fieldworkers to purchase, prepare and weigh foods in the field in order to obtain accurate food composition data. Additional resources would be required if chemical analysis of the nutrient content of local foods were to be done

(Kuhnlein 1991, Kuhnlein *et al.* 1991, Appavoo *et al.* 1991, Kuhnlein and Soucida 1992).

Data Management and Analysis

It is important that all members of the research team be aware of the steps involved in the analysis of the data and the approximate time required for each step. This will prevent frustrations from occurring when considerable time passes between data collection and the final report. In addition it is critical that sufficient resources be available for data analysis. In the present study, the pretest suggested the need for nutrition coordinators to support data collection in each community. Since the budget did not include these persons, money was diverted from data analysis for this purpose. This placed additional demands on the researchers themselves to undertake the completion of the analysis, resulting in inevitable delays in the final report.

Reporting Back to the Communities

The importance of reporting back to the community cannot be overstressed and is an ethical obligation (ACUNS 1982). In the present study, each participant received a letter between the fall and winter data collection periods. In addition, a comprehensive technical report and shorter summary report, in English, were presented to each community, and the study results were discussed in a visit to each community by the MSB nutritionist and one of the researchers. It is highly recommended that future studies allow sufficient time and money for translation of study results into the local language, possibly using audio cassette tapes in addition to written materials. It also may be useful to provide ongoing explanations of research findings to the community throughout the study so that comments from the people could be incorporated in the final report and recommendations. Clearly, sufficient time and money for reporting to the community must be included in the original research design and budget.

Conclusion

Numerous challenges arise in the design and implementation of dietary surveys in aboriginal communities. The essential first step is to establish that the community perceives a problem, wants help and is committed to acting on the results of the study. Once ownership of the survey is clearly established in the community, a team of local people, health practitioners, and researchers can share their collective knowledge and find practical solutions to the challenges that arise. However, solutions found in one community may not be appropriate elsewhere. Therefore, research plans must allow sufficient time and money for the research team to become familiar with local customs and food habits and adapt their methods to local needs.

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Appendix A

Ethical Principles for the Conduct of Research in the North

1. The research must respect the privacy and dignity of the people.
2. The research should take into account the knowledge and experience of the people.
3. The research should respect the language, traditions and standards of the community.
4. The person in charge of the research is accountable for all decisions on the project, including the decisions of subordinates.
5. No research should begin without the consent of those who might be affected.
7. In seeking informed consent, researchers should clearly identify sponsors, purposes of the research, sources of financial support, and investigators responsible for the research.
8. In seeking informed consent, researchers should explain the potential effects of the research on the community and the environment.
9. Informed consent should be obtained from each participant in research, as well as from the community at large.
10. Participants should be fully informed of any data gathering techniques to be used (tape and video recording, photos, physiological measures, etc.), and the use to which they will be put.
11. No undue pressure should be applied to get consent for participation in a research project.
12. Research subjects should remain anonymous unless they have agreed to be identified: if anonymity cannot be guaranteed, the subject must be informed of the possible consequences of this before becoming involved in the research.
13. If, during the research, the community decides that the research may be unacceptable to the community, the researcher and the sponsor should suspend the study.
14. On-going explanations of research objectives, methods, findings and their interpretation should be made available to the community, with the opportunity for the people to comment before publication; summaries should also be made available in the local language.
15. Subject to requirements for anonymity, descriptions of the data should be left on file in the communities from which it was gathered, along with descriptions of the methods used and the place of data storage.
16. All research reports should be sent to the communities involved.
17. All research publications should refer to informed consent and community participation.
18. Subject to requirements for anonymity, publications should give appropriate credit to everyone who contributes to the research.

Oral Histories: A Tool for Aboriginal Communities to Document Knowledge of Traditional Foodways

**Daniella DeMaré, Victoria Moose, Hilda Spence,
Marian Campbell and Ruth Diamant¹**

Introduction

The food system traditional to the northern Cree emphasizes plant and animal foods available in the immediate area. The evolution of the traditional dietary pattern has been influenced primarily by the ecology of the region. However, the use of locally available traditional foods has declined over the years. This has occurred because a variety of social, political, economic, and environmental circumstances has resulted in the replacement of many indigenous foods with marketed products, not always of equivalent nutritional value (Young 1988, Kuhnlein 1984).

Knowledge of methods to acquire, preserve, and prepare food traditionally was passed on from generation to generation in the Cree culture. However, contact with European society interrupted the process of enculturation. Generational differences now exist in the use of traditional foods and in knowledge of traditional foodways (Young 1988, Waldram 1985, 1988; Campbell *et al.* 1992, Kuhnlein 1984, Wein *et al.* 1989, 1991). Although elders still possess this knowledge, little has been written because the culture is based on oral tradition; thus, much will soon be lost. It is imperative that such knowledge be preserved through intensive study and documentation. The data gathered not only would add to Manitoba's historical record but also could be used for nutrition planning and health education in the communities. Furthermore, the study and promotion of traditional foods can increase pride in Cree cultural heritage and may improve nutritional status. Thus, traditional knowledge could be applied in a modern context.

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This paper will describe the steps taken to develop a community-based method to document traditional foodways in South Indian Lake, Manitoba. Community involvement was considered essential to the project in order to increase cultural awareness and a sense of pride and identity that would continue after the project. Although each community is unique, it is hoped this project will provide a stimulus for other communities to document knowledge of traditional foodways.

The Community

South Indian Lake (SIL), population 1000, is situated on an arm of Southern Indian Lake which joins South Bay to the main body of the lake. Approximately two-thirds of the residents are members of the Nelson House band. The townsite is about 130 air kilometres northwest of Thompson and 64 air kilometres east of Leaf Rapids. SIL can also be reached by winter road from Thompson and Leaf Rapids and in summer, by road and ferry. SIL was chosen for this project because the local people were interested in documenting their knowledge of traditional foodways and because the authors had previous experience working with the community (Campbell *et al.* 1994a, 1994b; Campbell *et al.* 1992).

Steps Taken

The Mayor and Council of SIL were first contacted with the idea of documenting the knowledge of traditional foodways that still existed in the community. Support for the idea was indicated and after funds were obtained to initiate the project, the first author (DD) was hired to work with SIL to develop a community-based approach to document traditional foodways knowledge.

Step I: Searching for Ideas/Information

The initial phase of the project involved a search for existing information about traditional foodways and the history of the community. The availability of information within the community was explored by checking the Council office and local school. One source that was discovered was the archival records of the churches in the community, particularly the journals kept by priests.

Several sources of information outside the community also were investigated. The Western Pictorial Index (University of Winnipeg) was examined as well as the archives of the Province of Manitoba and the Hudson's Bay Company.

Information from these sources was used to develop an historical timeline of major events that affected the community. This timeline was used to guide the interviews which occurred later with local informants, and to cross-validate the information provided.

A search also was made for possible approaches to document knowledge of traditional foodways. Literature on qualitative methodologies used in various disciplines was examined and individuals were consulted who had previous experience gathering information in aboriginal communities. It was concluded that the oral history technique was most appropriate because the culture is based on the oral transmission of knowledge and has a strong story-telling tradition. Nevertheless, the idea of the oral history technique was taken to the community to further explore its suitability.

Oral history is defined as 'A primary source material obtained by recording the spoken words — generally by means of planned, tape-recorded interviews — of persons deemed to harbor hitherto unavailable information worth preserving' (Dunaway and Baum 1984, p.4). Thus, oral histories are a means of learning about the experiences and

everyday lives of former generations, people whose experiences have not previously been recorded because they are 'plain folks' (Dunaway and Baum 1984). The most important feature of oral history is its ability to create source material where there is none (Reimer 1984).

Step II: Involving the Community

Community involvement in all aspects of the project was critical to ensure that the procedures used were culturally appropriate and community-based, and that follow-up would occur after the project. Prior to the start of the project, DD visited the community to meet the Mayor and Council and others in order to create interest in and build support for the project. In addition, an Advisory Committee was formed to direct the project. Community leaders (Mayor and Council) and DD jointly chose five Advisory Committee members from the community who possessed knowledge of traditional foodways and were interested in transmitting this knowledge. As well, two other community members were selected to work with DD to develop the procedures that would be used to gather traditional foodways knowledge and to conduct the interviews with local informants. The two selected were fluent in both Cree and English, demonstrated an enthusiasm for learning the traditional ways of the community, and possessed good interviewing and communication skills.

At the first meeting of the Advisory Committee, the concept of the oral history was discussed by the members and considered to be appropriate. As well, the Advisory Committee specified topics to be discussed in the oral history interviews and identified potential informants. The ultimate use of the data in the community also was discussed as well the storage and maintenance of the historical record. Subsequently, the research team (i.e., the interviewers and DD) worked together to translate the ideas generated by the Advisory Committee into a set of procedures that could be used in the oral history interviews.

Step III: Selecting Informants and Developing the Interview Guide and Interview Procedures

The research team took the Advisory Committee's recommendations and worked together to develop procedures to select informants and conduct the oral histories. Oral history procedures used by others served as a guide (McCracken 1974, Reimer 1984, Thompson 1988, Li 1985, Provincial Archives of Manitoba 1992).

A. Selecting Informants

The Advisory Committee developed a list of potential informants — Cree and Metis of Cree descent who lived in the SIL region before 1935. Subsequently, the research team pre-interviewed each informant, following oral history procedures (McCracken 1974). The purpose of the pre-interview was to explain the study and build rapport, obtain biographical (life history) information, and assess the informant's memory and ability to articulate and explain traditional foodways (Thompson 1988, McCracken 1974). Using the results of the pre-interview, the Advisory Committee and research team selected the informants who would be further interviewed. Approximately equal numbers of men and women were selected in order to capture gender differences related to traditional foodways. Although some people were less talkative in the pre-interview, they were interviewed because they were highly respected and the community valued preserving their voice.

B. Developing an Interview Guide

An interview guide was developed by the research team to encourage conversation flow during the oral history interviews. The guide outlined topic areas, written in the form of questions, to be discussed during the interviews (Reimer 1984). Although the interview guide contained a list of questions, it is not the intent of the oral history procedure to strictly adhere to the list of questions during the interview, but rather to use the list flexibly so that the testimony of the informant can be elicited in a nondirective manner (Reimer 1984).

The topics in the interview guide were developed from ideas generated by the Advisory Committee and the interviewers, and from the pre-interviews, the literature and archival search, and conversations with many others. Themes included the types of foods eaten; methods used to store, preserve and prepare foods; seasonal variations; gender and age-related food practices and avoidances; how knowledge was transmitted; factors influencing change in the use of traditional foods; feasting foods; and health beliefs and attitudes towards foods. The Advisory Committee reviewed the interview guide prior to its use to ensure that it was appropriate.

Step IV: Conducting the Interviews and Preparing Written Transcripts

A. Conducting the Interviews

The oral history interviews were conducted in Cree to preserve the language as well as the knowledge of traditional foodways. The interviews were carried out by one of the local interviewers and DD. The interviewer led the interview while DD managed the tape recorder and noted any nonverbal communication (hand gestures or facial expressions) and other distractions or circumstances that might be important for interpreting the interview; these were later added to the transcripts. Although the original approach was to have the interviewer translate from Cree to English throughout interview, this was abandoned as it interrupted the reminiscences of the people.

Identifying plants that were mentioned in the interviews was a particular challenge. Although books with photographs of plants specific to the geographic area were not found by the authors, some plants from the immediate area were shown in other books (Angier and Bradford 1974, Walker 1984, Zieba 1990, Gregory 1991). The pictures were enjoyed by the informants and helped provide the common English and scientific names for the plants, while the informant provided the Cree name. This procedure also was used by Wein and Freeman (1992) in the Northwest Territories.

As the interviews progressed it became apparent that other techniques could supplement the information obtained in the oral histories. The collection and identification of plant specimens was one consideration (Kuhnlein and Turner 1991). As well, since words could not describe the traditional methods of acquiring, preserving, and preparing foods as well as pictures, another consideration was videotaping and/or taking photographs.

Other challenges encountered during the interviews were those that occur in any interview situation. These included: striking a balance between keeping informants on topic and allowing a free flow of conversation, recognizing that much could be learned about food use and the meaning of food through a general discussion of day-to-day activities in the past (Ahenakew and Wolfart 1992); developing skill in listening carefully to what informants said and knowing what to ask or probe for next, in order to get a full and complete account; using strategies to focus the more talkative

informants and encourage the quieter ones to elaborate by having them tell stories or discuss something they felt important to pass on. For interviewers with experience doing quantitative research, where questions must be asked, as written, and in a specific order, another challenge was to become comfortable with the unstructured procedures of the oral history technique, where the interview guide is used as a checklist of topics, rather than a rigid list to be followed question by question, word for word.

To address these and other challenges that occurred, the written transcript of each interview (see Section IV.B.) was reviewed by the research team and procedures revised for the next interview. The transcript was examined line by line to identify which questions worked and which needed change, as well as to consider the type of probing statements that were most effective in eliciting the desired information. For example, when informants were asked if certain foods were avoided by different age, gender, or physiologic groups (e.g., pregnancy), the usual reply was that they 'ate everything'; however, some conversations revealed specific food avoidances. To prevent confusion, the question was reworded, beginning with an example of a food that was avoided and then asking if other foods were avoided by certain people or in specific situations. Thus, the interview guide was refined throughout the interviewing.

The interviews also were assessed to determine if the topics of interest to the Advisory Committee were adequately covered. It should be noted, however, that new themes, not originally mentioned by the Advisory Committee, also emerged from the interviews. This is an advantage of the oral history technique where unstructured questions allow informants to talk freely; this is in marked contrast to the use of fixed questions that direct conversation to specific topics and often do not generate new insights.

As a note of thanks for the interview, informants were given a copy of the audiotape, a photograph of him/herself taken immediately after the interview, and a small gift (work socks for the men, a basket of soaps for the women). The audiotapes were particularly appreciated. Several community members told the research team that they enjoyed listening to the audiotapes of their parents or grandparents. As well, the informant's children or grandchildren frequently would come into the room during the interviews to listen and, after the interview, comment on how they never knew any of the information they had heard about their parent/grandparent and wanted to learn more. The informants were very responsive. Only one refused to be interviewed. They enjoyed the company as well as telling about the old days.

B. Preparing Written Transcripts

After each interview, the audiotape was translated into English by one of the interviewers who assumed the role of translator because of previous experience. The written transcript was later entered into a computer file. The English transcript was important as the majority of children in the local school did not speak Cree fluently.

Time required to translate and transcribe the interviews varied with the length of the interviews (from 45 minutes to 2 hours) and other factors (e.g., voice level, clarity of voice, use of unfamiliar words, etc.). To translate and transcribe a one-hour audiotape took an average of 12 hours. It was also an exhausting process because of the level of concentration required. To check the translation, the audiotape was replayed and the transcript checked by the two interviewers and DD working together. This process stimulated much discussion and sharing about the meaning of the information obtained. The excitement generated by what had been learned provided a stimulus for the

interviewers to go on to the next interview and learn more. This enthusiasm was important in maintaining interviewer morale.

The Advisory Committee and others in the community played a critical role during this step by clarifying things that were not understood in the interviews. For example, plants and parts of animals often were described in the interviews but the name of the plant or animal part could not be given. The Advisory Committee and other community members, however, particularly the hunters and trappers and those who knew High Cree, were able to provide the Cree names.

C. Analysing Across Interviews

Obtaining the tapes and transcripts for each informant was one goal of the project. An additional goal was to prepare a written report that summarized what was learned from all the interviews about the foodways of the past, the meaning that food had for the people, and how this may have changed over the years. A draft of the report will be completed in the near future by DD with the aid of a computer program (Ethnograph) that helps organize qualitative data. The draft will be taken to the community so that the informants, interviewers, Advisory Committee, and Community Council can verify that the report is a true reflection of their remembrance of the past (Thompson 1988, Reimer 1984, Friedlander 1975). Since the informants' reports are a reconstruction of the past, the validity of the interviews will be examined by looking for consistency across all interviews (i.e., internal verification) as well as with other sources of information such as archival material (i.e., external verification) (Chenitz and Swanson 1986, Marshall and Rossman 1989).

Step V: Use of the Audiotapes and Transcripts by the Community

Storage and maintenance of the historical record (audiotapes, transcripts, and final report) is a primary concern for its long term use. The initial meeting of the Advisory Committee established where the historical record would be stored in the community and who would be responsible for its maintenance and use. The Provincial Archives of Manitoba also will store the tapes and transcripts. Although each informant initially signed a consent form to indicate that they agreed to have their audiotape left in the community collection, it is a courtesy to reconfirm this agreement before the tapes are made available to the entire community.

Since the project is still in progress, it is too soon to report how the historical record will be used by the community. However, the Advisory Committee identified several ways the historical record might be used. This included incorporating the tapes into the school curriculum, writing a book of stories based on the tapes, and including the materials in the community museum that is planned. The historical record also will be of interest to health professionals working in the community (CHR's, nurses, health educators, nutritionists, etc.) and others (e.g., historians, anthropologists, etc.).

Conclusions

Although the project described in this paper is still in progress, work to date suggests that the approach used was successful in documenting knowledge of traditional foodways in SIL. While it is recognized that what works in one community may be unique to that community, it is hoped that the experience gained in this project will help other communities document the knowledge that still exists in their community about traditional foodways. A comprehensive approach is recommended that combines oral histories with the collection of plant specimens and videotapes and/or photographs of

procedures that were used to acquire, preserve, and prepare food in the past. There is a real sense of urgency to document traditional knowledge before it is lost. Thus, communities are encouraged to take steps to document the knowledge that remains and share the findings with others. Those interested are urged to contact the fourth author of this paper.

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When the Other Is Me: Native Writers Confronting Canadian Literature

Emma LaRocque¹

Introduction

The history of Canada is a history of the colonization of Aboriginal peoples. Frantz Fanon (*The Wretched of the Earth*, 1963) and Albert Memmi (*The Colonizer and The Colonized*, 1957) have convincingly shown that colonization is a pervasive structural and psychological relationship between the colonizer and the colonized and is ultimately reflected in the dominant institutions, policies and literatures of occupying powers.

Colonization has required rationalization which in turn has produced an overwhelming body of justification thought and literature. Canadian historiography and literature is replete with inflammatory writing against Aboriginal cultures, peoples and persons.

A quick survey of standard sources commonly used by scholars and producers of popular culture will glean much vehemence, slander and just plain racism. The following are some of the epithets ascribed to Native peoples: red devils, ogres, snarling beasts, snakes, wolves, dogs, cows, pigs, wild animals, brutes, bloodthirsty, fiendish, treacherous, ferocious, swimming savages, warmongers, cunning, shrewd, stupid, saucy, haughty, improvident, indolent, lazy, lascivious, liars, thieves, pernicious beggars, superstitious, conjuring sorcerers, pagans, heathens, barbarians and much, much more.²

It is actually fascinating how words, phrases and descriptions were tendentiously used with reference to Indians. Some common examples: Indians wander, Whites explore; Indians conjure, Whites pray, and so forth. Moreover, certain words were (and are) chosen to specifically indicate the ranking of Indians as less evolved, less developed and less ordered. Accordingly, Indian persons were depersonalized, Indian leaders or specialists were belittled and Indian social and political status and organization was inferiorized. Some popular classifications: Indian women were 'squaws', not simply women; Indian infants were 'papooses', not babies; young men were 'braves'; Indian fighters were 'warriors', not soldiers; Indian leaders were 'chiefs', or 'headmen', not

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2. For similar findings see James St. G. Walker, 'The Indian in Canadian Historical Writing', *Canadian Historical Association Papers*, 22, 1971.

kings or presidents; Indian specialists were 'shamans', 'conjurers' or 'medicine men', not doctors, priests, healers or counsellors. There were Indian 'villages', not towns or urban centres; Indians were 'tribles', not nations, and so forth.³

Undergirding all this is the colonial framework of interpretation I have come to call the 'civ/sav dichotomy'.⁴ This is the self-serving racist myth of Civilization meeting Savagery, an ingenious tool. Everything the Whiteman did was rationalized and justified by 'civilization' and everything Indians did was 'explained' by their supposed savagery. It all fit so neatly. A morality play in which the Cowboys finished what Columbus and the Conquistadores began. Cowboys moving west and killing Indians has been equated with moral and human progress.

Whether whites used violence (as in U.S.A.) or the gimmicks of legislation (as in Canada) to subjugate Native peoples, they have justified it by creating a layered fallacy that Indians were only a handful of savages who 'roamed' rather than 'inhabited' the 'virgin' land.⁵ Native resistance to white encroachment was always framed in terms of innate 'bloodthirstyness'. In turn, Indian violence was blamed for the destruction of Indians.

These justification myths did not come only from commercial or elementary sources, higher education has housed, archived and protected material that should qualify as hate literature. Sources include Exploration Literature, the Jesuit Relations and other missionary hagiography, Fur Trade journals, Captivity and Travel Narratives, Government material and the more serious work of history and literature proper.

There is a close relationship between early historical writings and literary productions. Fact and fiction have been interchangeable. Explorer and Fur Trade writing is well known for its denigrating and sensational presentations of 'Indians'. For instance, Alexander Henry the Elder (1739-1824) gives blood curdling accounts of what white historians call the Michilimackinac Massacre of 1763. Typically, these accounts provide neither context nor rationale behind the actions or anger of resistance fighters such as Pontiac. They focus on goriness presumed to be factual. The following is a graphic example: '...from the bodies of some, ripped open, their butchers were drinking the blood...quaffed amid shouts of rage and victory....'⁶ Literary historian Carl F. Klinck, suggests that John Richardson's novel *Wacousta* (1832) was based on Henry's adventures.⁷ *Wacousta* is peppered with dark savages treacherous in their stealth,

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3. This schema is presented in my unpublished paper, 'The Dichotomy of Civilization Versus Indian Savagery: Problems in Canadian Historiography' (towards my Ph.D.) 1984. Some parts of this treatment are published in my brief article 'On The Ethics of Publishing Historical Documents' in *The Orders of the Dreamed: George Nelson on Cree and Northern Ojibwa Religion and Myth, 1823'*, edited by Jennifer S.H. Brown and Robert Brightman, University of Manitoba Press, 1988.
 4. Outlined in my unpublished manuscript 'White Control of Indian Education' theses (paper towards an M.A. in History, University of Manitoba, 1978). My discussion of the civ/sav dichotomy first published in 'The Metis in English Canadian Literature', *Canadian Journal of Native Studies* (3, 1, 1983):85-94.
 5. Such layered fallacies are brilliantly dismantled in Francis Jennings, *The Invasion of America*, Chapel Hill: University of North Carolina Press, 1975.
 6. As quoted by Carl F. Klinck in his Introduction of Richardson's *Wacousta* (abridged edition, 1967), p. x.
 7. Major John Richardson, *Wacousta* (first published in 1832; reprinted in 1967 by McClelland and Stewart with an Introduction by Carl F. Klinck) p. x.

murderous in their 'sudden bursts' of 'mingled fury'. A very typical passage describes Indians as 'fearless devils...brandishing their gleaming tomahawks...ejaculating...a guttural "ugh"'. When finally their target, a 'noble, generous, self-devoted fellow' is killed, the 'fiendish murderer...held up the reeking scalp in triumph...'. Not satisfied with one scalp, the 'swimming savages' pursue the white party and 'the sinuous form of the first savage was raised above the gunwale, his grim face looking devilish...and his fierce eyes gleaming and rolling like fireballs in their sockets' (276-279).

Wacousta set the standard for at least a century.⁸ Ralph Connor played on the civilization/savagery theme rather strikingly. In *The Foreigner* (1909), one of Connor's characters is a Scot-Cree halfbreed whose name is Mackenzie.⁹ In one scene, a teenage boy, Kalman the 'foreigner', tries to dispossess Mackenzie of his whiskey. Mackenzie goes through a palpable transformation:

The change in Mackenzie was immediate and appalling. His smiling face became transformed with fury, his black eyes gleamed with the cunning malignity of the savage, he shed his soft Scotch voice with his genial manner, the very movements of his body became those of his Cree progenitors. Uttering hoarse guttural cries, with the quick crouching run of the Indian on the trail of his foe, he chased Kalman...there was something so fiendishly terrifying in the glimpses that Kalman caught of his face now and then that the boy was seized with an overpowering dread....(Connor, 233)

After some more chasing, Mackenzie's drunkard English master, Jack French, appears, and shouts at Mackenzie, 'Give me that gun, you dog.' Mackenzie submits '...the fiendish rage fading out of his face, the aboriginal blood lust dying in his eyes like the snuffing out of a candle. In a few moments he became once more a civilized man...'.(234)

In the event, one thinks such presentations 'are of the past', there are numerous contemporary works, historical, literary and popular, that are full of pejorative and dismal descriptions. In terms of literary productions for example, Mort Farer's *The Humback* (1969), Betty Wilson's *Andre Tom MacGregor* (1976), or even the more sympathetic Alan Fry's *How a People Die* (1970) steep Native characters in squalor, despair and sexual promiscuity. Even George Ryga's *Ecstasy of Rita Joe* is ultimately ghoulish.

The accumulative effect of all this is of course almost total distortion, misrepresentation, infantilization and falsification of Aboriginal persons, cultures and history. As Robert Berkhofer (1978) has established, the 'Indian' is a Whiteman's invention, and is a classic example of the social construction of reality. It is also a classic, pointed example of being 'othered', that is, of being objectified, and alienated, then ghettoized and marginalized from the mainstream canons of literary and popular traditions.

Perhaps for non-Native producers of knowledge and popular culture, these portrayals may seem benign (one wonders how) and continue to be rationalized as archival, as art or as recreational playthings 'of the past'. Using Indian motifs have certainly provided grist for more productions in kind: more movies (eg: 'Dances With Wolves'),

8. For other numerous examples see Leslie Monkman, *A Native Heritage: Images of the Indian in English Canadian Literature*, University of Toronto Press, 1981.

9. I have referred to *Wacousta* and Connor in a previous work *Three Conventional Approaches to Native People in Society and in Literature*, Saskatchewan Library Association, 1984.

more remakes of old movies ('The last of the Mohicans'), more comics, more tourist curios, more halloween masks, more play with stock themes of civilization *versus* savagery, of good versus evil, of light versus darkness, more hero-ification plots for a greater variety of genres....

For Native persons these (re)productions are not fun and games. Being 'othered' as an alien sub-species at the bottom of the human heap has had and continues to have devastating consequences. Not only do Native peoples continue to lose their lands, the very ground of their cultural beings, but they continue to lose their lives.¹⁰ Such on-going destruction is still being rationalized as 'progress' and 'development'. There is a connection between Columbus, Cowboys, Confederation, The Last Spike, The Last of the Mohicans, Ten Little Indians and the horrifying rates of suicide among Canada's Native youths.

Thousands have not survived the socio-political ramifications that the racist typology 'savage' has generated. As it has been brilliantly recorded by Native writers representing a cross-section of genres, eras, geographies and cultures, it has been difficult growing up Native in a country that has institutionalized the white-advancing myth of manifest destiny.

As Metis writer Howard Adams has put it: 'Even in solitary silence, I felt the word "savage" deep in my soul'. (*Prison of Grass*, 1975:11).

Those of us who have survived, and remarkably, there are also thousands of us who have, and particularly those of us who have become scholars, writers, commentators, poets, we stand here to say, we have endured and we are not 'the Other' of White invention but of real people, real human beings. We have been dispossessed, marginalized, censored and appropriated, yes, but the message is resistance.

Native Literature Resistance

Throughout the many phases of the colonization process, Native peoples were, of course, resisting, but because their resistance was framed in terms of 'civilization inevitably winning over savagery' it went not only unrecognized but subverted as infantile and as something less than human. Indians fighting to save their lands, as outlined above, was simply propagandized as irrational violence of aimlessly wandering bloodthirsty savages.

But once Native peoples are accorded humanity, we can find their voices of resistance from a variety of genres going back to the earliest encounters. The theme of resistance peppers the very records that sought to minimize Native humanity. That the Jesuits and other early European traders/explorers resorted to technical trickery when confronted with Native arguments on fine points of theology or some other claim to superiority is just one of countless instances of Native peoples engaging in cultural resistance.¹¹

In terms of Native-written resistance, it was the evangelical Christian movement of the mid-1800s in southern Ontario that first facilitated literacy in English among Native

10. There are numerous works documenting devastation. A substantial overview is to be found in Geoffrey York, *The Dispossessed*, Vintage U.K., 1989.

11. Examples of resorting to technical trickery can be found in the *Jesuit Relations*. For extensive commentary on a fur trader/explorer see Parker Duchemin, 'A Parcel of Whelps' Alexander Mackenzie Among The Indians' in *Canadian Literature*, #124-125 (Spring-Summer, 1990):47-74.

individuals. These individuals produced autobiographies, letters, reports, petitions, poetry and histories. Critical essays, letters and petitions especially served as forms of protest to government officials, missionaries and newspaper editors.¹²

The next significant Native resistance literature was produced by Metis poet, Pauline Johnson. Born in 1862 to an English mother and a Mohawk father on the Six Nations Indian Reserve, Johnson was to become a famous poet who defended Native people in her works. But she was a product of Victorian society and her defense was limited and defined by the strictures and prejudices of the times. Put in an impossible situation of having to use, if not internalize the colonizer's language and imagery, and having to play the role of a Pocahontus Princess when reciting, she nonetheless expressed outrage at the treatment of Native peoples and she did try to humanize the much dehumanized Indian. It was a mixed result as her poetry reveals.¹³

In western Canada, the signing of the treaties, the quashing of Metis resistance, the forcing of reserves and residential schools, and the splitting of Native peoples into scattered legislated units rendered the peoples powerless, and for a long and lonely century, Natives remained largely silent. They served only as shadowy themes in the morality plays of White Canadian cultural productions. They were even hardly in the periphery of mainstream Canadian consciousness. It was as if they had no history, no culture, no life.

Beginning in the late 1960's, Canadian Natives began to articulate their oppressed conditions reflecting a new political awakening in the Native community, an awakening that has never looked back. Much of this articulation came in the form of speech, maintaining the great oral traditions of the people. But it also came in the form of writing.

The 1970s was roared in by Harold Cardinal's *Unjust Society* (1969) in which, among other dearly held Canadian structures, the author incised the Department of Indian Affairs. Metis analyst Howard Adams challenged the historical treatment of Riel and shared the 'Native's' struggles with 'the White Ideal' (1975). Other social protest writers took on the media, the schools, the stealing of lands and resources, racism and other injustices.¹⁴

There were also autobiographies. Maria Campbell's *Halfbreed* received national attention. Less well-known but important work is by Jane Willis, *Geneish: An Indian Girlhood* (1973).

Also in the 1970's, poets like Sarain Stump (*There Is My People Sleeping*, 1971), Duke Redbird (*Red On White: The Biography of Duke Redbird*, ed. by Willie Dunn, 1971), George Kenny (*Indians Don't Cry*, 1977), and even the genteel, if not Hiawathian, Chief Dan George (*My Heart Soars*, 1974) produced protest prose and poetry.

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12. Penny Petrone, *Native Literature in Canada*, Toronto: Oxford University Press, 1990: Chapter 2.
 13. See especially her poems 'As Red Men Die', 'The Cattle Thief', 'A Cry From an Indian Wife', and 'The Indian Corn Planter' in E. Pauline Johnson, *Flint and Feather*, Toronto: Paperjacks Ltd., 1917, 1931, 1972, 1987.
 14. Other social protest writers of the era include George Manuel (1974), Wilfred Peltier (1969, 1971, 1973), Emma LaRoque (1975), Bruce Sealey and Verna Kirkness (1974), Waubegeeshig or Harvey McCue (1970), Douglas Cardinal.

Largely in response to uncomprehending publishers, critics and audiences, overt social protest writing was interspersed with 'soft-sell' literature in the mid-1970s. Personal narratives, ethnographic or tragic autobiographies, children's stories, legends, interviews with elders, arts and crafts how-to books and 'I remember' sorts of material emerged.¹⁵

This was followed in the 1980s, finally, by novels. Jeanette Armstrong's *Slash* (1985), Beatrice Culleton's *In Search of April Raintree* (1983), Ruby Slipperjack's *Honour the Sun* (1987), and Lee Maracle's *I Am Woman* (1988) became standard staple in Canadian Native Literature. Armstrong took the theme of colonization head-on through her main character Slash. Culleton spoke to the abuses of the Child and Welfare system which has had a disastrous impact on Native families. Slipperjack gently addressed community and family disintegration brought about by alcoholism and Maracle roared against male violence and organizational lethargy.¹⁶

After that and coming into the 1990s, more novels, more autobiographies, new and old poets, short stories and plays. Thomas King, Ruby Slipperjack and Lee Maracle lead the list as Native novelists of the 1990s. Poetry poured in from a host of writers, much of which is to be found in current anthologies on Native literature as well as in literary journals and periodicals.¹⁷

Published books of poetry include: Beth Cuthand (*Voices in the Waterfall*, 1989); Marie (Anaharte) Baker (*Being On The Moon*, 1990); Duncan Mercredi (*Spirit of the Wolf*, 1991), and Louise Halfe (*Bear Bones and Feathers*, 1994). *Brothers In Arms* (1989) is a collection of three short stories authored by CBC's 'North of 60' editor, Jordon Wheeler. And of course, plays by Thomson Highway have received international recognition. Another well-known playwright is humorist Drew Taylor.

At first glance, it may appear that not all Native works qualify as resistance literature. Protest may not be immediately apparent in works by Chief Dan George, Rita Joe, Thomas King, Ruby Slipperjack, or even Thomson Highway, but it can be argued that a simple assertion of one's (Native) humanity is a form of resistance given the magnitude of dehumanization over a span of 500 years. In this sense, every politically-aware Native teacher, scholar, writer, artist, filmmaker, poet or activist is ultimately a producer of resistance material.

There are resistance themes common to all these works irrespective of genre. These themes include the challenging of historical and cultural records, the exposing of destructive government policies and societal injustices, the recounting of cultural

15. For a discussion on white audience resistance see my 'Preface-Here Are Our Voices Who Will Hear?' in *Writing The Circle*, ed. by Perreault and Vance, 1990.

16. Considerable attention has been given to Armstrong, Culleton and Maracle on the coloniality/resistance of their work; see Jeanette Armstrong, ed. *Looking at the Words of our People*, 1994; see also Agnes Grant, 'Contemporary Native Women's Voices'; Noel Elizabeth Currie, 'Jeanette Armstrong and The Colonial Legacy'; Margery Fee, 'Upsetting Fake Ideas: Jeanette Armstrong's 'Slash' and Beatrice Culleton's 'April Raintree'; and Barbara Godard, 'The Politics of Representation: Some Native Canadian Women Writers' in *Canadian Literature* #124-125 (Spring-Summer) 1990.

17. Editors of such anthologies include Thomas King, 1990; Jeanne Perreault and Sylvia Vance, 1990; Agnes Grant, 1991; Heather Hodgson, 1990; Penny Petrone, 1990; W.H. New, 1990; Daniel David Moses and Terry Goldie, 1992; Hartmut Lutz, 1992. Well-known magazines such as *Border Crossings*, *Descant*, and *Prairie Fire* occasionally carry Native poetry.

fragmentation in the form of community and personal crises, reflections on the colonial process such as the internalization of colonial expectations and prejudices, and the resulting identity disorientation, and finally, the struggle for revitalization and self-determination.

The broader context to the term 'resistance' is to be found 'within the contemporary national liberation struggles and resistance movements against western imperialist domination of Africa, Central and South America and the Middle and Far East.' (Barbara Harlow, *Resistance Literature*, 1987:4) The term 'post-colonial' is also used but initially with reference to literatures produced by 'post colonial' countries, especially those colonized by the British. Currently, the term 'post-colonial' is inclusive: 'to cover all the cultures affected by the imperial process from the moment of colonization to the present day' (Ashcroft, Griffith, Tiffin, *The Empire Writes Back*, 1989:2).

To date, Black and Native writers of United States and Canada are not usually included in international post-colonial discourse, but they should be, as obviously they have been protesting their subjugated or colonized conditions within these countries.¹⁸ Themes common in post-colonial literatures are themes found in Canadian Native self-expression, as already outlined.

One of the main features of colonization has been the control over education, historical writing and language. These colonial forces have become systemic 'mediums through which a hierarchical structure of power is perpetuated, and the medium through which conceptions of "truth", "order" and "reality" become established.' (Ashcroft, *et al.* 7) They have also become mediums for propaganda and 'to the naturalizing of constructed values (e.g. civilization, humanity, etc.) which, conversely, established "savagery", "native", "primitive", as their antitheses ...' (*Ibid.*)

Along with the standardization of 'privileging norms', colonized peoples were rendered peripheral and marginal. In other words, they were 'othered'. It is these oppressive 'privileging norms' and the concomitant 'othering' that resistance writers are attempting to dethrone. When 'the other' is us, we must confront the Canadian canons.

Liberation resistance literature has provided the 'basis for a re-examination of literary critical methodologies and the definitions whereby a literary corpus is established'. (Harlow, 3) Western intellectual conventions with its 'canonical assumptions' of objectivity and its literary categories are being challenged, redesigned or outrightly rejected.

In Canada, Native writers and scholars have especially put to question the portrayal of Native cultures and peoples in historical, anthropological, literary and popular productions.

There has been though, slow, selective and inconsistent reception by the Canadian readership. In fact, it can be said that many Canadian intellectuals including the academic community have resisted the emerging Native voices.

18. It appears that this is in the process of changing. Native writers are being invited to present and submit papers to international conferences on post-colonial literatures. For example, Jeanette Armstrong was invited to a Conference on Post-Colonial and Commonwealth Literatures at Queen's University in 1992; I made a presentation at the 'Moving Words, Moving Worlds: Post-Colonial and Commonwealth Literatures' Conference at the University of Leeds in 1994.

In the late 1980s when some Native writers, led by Lenore Keeshig-Tobias, called on the literary community to stop appropriating Native cultures, they were met with quick and sharp counter-criticism of advocating censorship.¹⁹

Native writing has generally been met with skepticism and incomprehension. For example, the social protest writing of the 1970s, writing which challenged the 'Last Spike' version of Canadian nationalism, was, among other things, accused of bludgeoning society. There was little, if any understanding, that resistance literature is the history of decolonization and the struggle to rewrite history by those without a history.²⁰

Only very recently, and with the help of a growing collection of anthologies and a burst of Native writing have bookstores, libraries or professors begun to know how to correctly use, identify or categorize Native writing. While these works have facilitated the acknowledgement of the existence and genre of Native literature, there is yet little recognition that Native writing is in essence resistance literature within the terms of global post-colonial literatures.

To recognize Native writing as resistance, one must abandon pervasive notions that western historical and literary productions are somehow inherently innocent and neutral. This means one must dismantle the myth of civilization meeting savagery. And one must acknowledge that Canada was founded by imperial policies and notions which served to colonize Native peoples. Since writers will express the collective experience, it follows that Native writers are engaged in political dialogue with the Canadian 'privileged centre'. As written in *Writing The Circle* (Perreault and Vance, eds. 1990), 'Literature is political in that its linguistic and ideological transmission is defined by those in power.' (LaRocque, xvi) Native writers as the subaltern subjects are approaching the historical and cultural record' as an 'arena of struggle' (Harlow, 2, 7) in the journey for political, cultural and psychological liberation. They are exposing and 'talking back' to the bias inherent in the colonial presentations.

In other words, when Native historians expose the mistreatment of Native peoples in policies or in history books, they are not being anti-White, as so often labeled, they are simply doing what good scholars should do, correcting the record, a record whose prejudices have been ingeniously hidden by the deceptively aloof, patrician posturing so evident in Canadian historiography.

When Native analysts use 'their own voice', they are not assuming a confessional stance or falling prey to blind subjectivism, they are refuting Western notions of objectivity as well as reclaiming their own collective and personal histories.

When Native writers do share 'cultural tidbits', and White North Americans love to hunt and gather what I like to call 'cultural tidbits', they are not relegating themselves to ethnographic inspection, or to the museum, they are reframing cultural information, and significantly, they are staking their cultures as equal to anyone else's.

When Natives produce autobiographies, they are not assuming a 'victim' stance, they are often mirroring back to society its colonizer face.

19. See Lenore Keeshig-Tobias, 'Stop Stealing Native Stories', *Globe and Mail*, January 26, 1990:7. Also see Barbara Godard's discussion of this controversy in her article 'The Politics of Representation' in *Canadian Literature* #124-125 (Spring-Summer) 1990, W.H. New, ed.

20. See Barbara Godard's article in W.H. New, ed. 1990:199.

When Native writers use facts of biography, and most do, they are not being parochial or lacking in 'substantive research', they are in fact using such facts as instructional tools in their attempt to personalize the much depersonalized Indian.

Whatever Native writers produce, creative, scholarly or popular, they are at once attempting to remain true to their respective *and dynamic* cultural backgrounds, as well as confronting colonial forces and putting to question Western dominating practices and hegemonic canonical assumptions. Native writers, like other resistance writers, are imposing a review of what is understood as civilization, history or 'literature and literary studies.' (Harlow 4)

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Who are the Métis?

Fred Shore¹

Introduction

Recent negotiations for Métis self-government underscore the need for an acceptable definition of Métis identity. The process is not a simple undertaking and one reason for the difficulty lies in the historical identity of the Métis as 'a people between two worlds.' Another reason is that the original biological definition 'half-breed' remains fixed in the minds of the unenlightened and continues to contribute to the confusion. For their part, the Métis people have always known who they were, despite the lack of control they later experienced when others identified them for their purposes. Presently, there are several possible definitions which are intimately connected to the origins and history of the people being described. Of these, the origin definition process is the more crucial element, since it is the one which determines much of the contemporary debate.

The Métis had their beginnings in the St. Lawrence Valley French fur trade. As this system spread westwards, the roles of *voyageur* and *coureur de bois* created a process whereby an increasing number of French citizens married into, and remained with, Aboriginal nations. In the east, in what is now Quebec, the term and the people did not develop because of the cultural proximity of New France and the short distances required by the trade. By the time the French reached what is now Ontario, small groups of Métis had come into existence under the influence of the greater distances required and the need for depots to store and protect trade goods over the winter. As the French fur system distanced itself from its base in Quebec, the emergence of a 'new people' followed apace and, with the opportunity to stay over or to 'winter,' a unique Métis culture came into being. It should be noted that isolated and extremely locally-centred communities did not have the social, political and economic clout to develop nationhood.² This could only happen in an area, like Rupert's Land, where the Métis could find an economic base which allowed them to develop national self-determination.

While the Métis were creating a unique culture in Ontario and expanding into the Northwest, the Hudson Bay Company (HBC) and the French fur trade system came into conflict. The vast store of fur in the western and northern reaches of the continent was reason enough for the 'Pemmican Wars' which occupied the North West Company

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 2. The best analysis of this process is described in Part I, 'Métis Origins: Discovery and Interpretation,' in J. Peterson and J.S. Brown, Eds., *The New Peoples: Being and Becoming Métis in North America*, (Winnipeg, Manitoba: University of Manitoba Press, 1985): 19-94.

(NWC) and the HBC from 1780 to 1821. The Métis, who were the main strength of the NWC's transport and local trading system, were also involved with the HBC as suppliers of pemmican and labour. The Métis were pivotal in the final solution of the trade conflict and, during this process, they realized their nationhood and developed a secure economic base in the provisioning of the fur trade. The attendant buffalo hunts, in reality the large scale extraction of a local resource for profit, were the basis of Métis economic and political expansion. In the years after the war (1821), the Métis leadership congregated in the Red River Settlement and established themselves on riverlots without a great concern for the 'biological' quotient of their blood lines. They continued to trade, produce buffalo product on a large scale, and to develop their political and social systems. By 1868 they were prepared for the sudden Canadian intrusion into their homeland and, by July of 1870, they had created the Province of Manitoba and forced a Métis version of Confederation on Rupert's Land. The years after 1870 were a time when Canada and immigrant Canadians displaced and dispossessed the Métis, in effect, scattering them over the breadth of their former homeland.

During the Pemmican Wars, the term Métis became a publicly accepted word used to identify the 'New Nation' and its members. There were still many who preferred the term 'half-breed' but they were predominately English-speaking and employees of the HBC. In reality, the Métis were the descendants of French fur traders and Aboriginal women who had created their own unique culture and Nation. The confusion that still exists as to what group of people was identified by the use of the term 'Métis,' however, stems from the Confederation period and the forty years preceding that event and, more importantly, from non-Métis decisions. During this period, the largest single factor lending itself to confusion comes from the existence of the other 'half-breeds' in Red River.

The descendants of HBC employees and Aboriginal women were raised as expectant Englishmen, steeped in the values and traditions of the Empire. Inevitably, they expected that they could play a major role in the Company as equals but systemic racism in the HBC precluded any such participation. The HBC had, at first (*circa* 1670-1700), prohibited any kind of relationship between its employees and Aboriginal peoples. This proscription did not survive the realities of life in Rupert's Land and, by the time of the Pemmican Wars, there was a large body of individuals resident in the immediate environs of most HBC forts who could claim Aboriginal ancestry. These people were forcibly directed by their fathers, who were usually HBC employees or sons of these men, to acquire English values and habits. The attendant lack of acceptance as Englishmen by their employers and even by their fathers in some cases, put great stress on them.³ No commonly accepted term for these people ever developed, although 'English Half-breeds,' 'Rupertslanders,' and 'half-breed' predominated. The racism inherent in the British system of empire, which reached its epitome in the latter half of the nineteenth century, ensured that anyone who was not a pure-blooded Englishman would have one of these terms applied to them.

The Métis, who had their own term for themselves and who had more or less forced everyone to accept and use the term, were included in the biological definition

3. Sylvia Van Kirk, 'What If Mama Is an Indian?: The Cultural Ambivalence of the Alexander Ross Family,' in J. Peterson and J.S. Brown, Eds., *The New Peoples: Being and Becoming Métis in North America*, (Winnipeg, Manitoba: University of Manitoba Press, 1985): 207-220.

'half-breed' after 1870 as they lost political, economic and social cohesion. By 1890, the term 'half-breed' was universally applied to anyone who was not readily and visibly 'white.' Eventually, the term Métis came to be accepted by Canadians in general as the term to use when talking about or attempting to identify anyone who was not a Treaty or Registered Indian and who appeared to have Aboriginal features. The biological definition had become the norm and the Métis had, for all intents and purposes, lost control over their ability to name themselves. Somewhere in the years after the birth of Manitoba and the diaspora of the Métis, their name for themselves came to apply to everyone who looked Aboriginal and who was not a resident of a reserve.

When the process of Métis resurgence and rebirth began after 1950, the vast numbers of non-status Indians, Métis, descendants of Rupertslanders, children of Aboriginal people and new Canadians, and any others who were not visibly non-Aboriginal and not residents of Reserves, were referred to as 'Métis.' The original self-determined name and national expression had been marginalized and adopted by non-Métis as an appropriate term to use in place of 'half-breed.' A 'biological' definition had become the determining factor in naming people. More importantly, the choice as to who was a Métis was no longer the sole prerogative of the people involved: outside naming had become the norm.

The current debate revolves around the need to identify Métis peoples because of self-government. While government would like to limit the numbers involved, the temptation to involve the Métis in internecine struggles is also seen as beneficial, since Métis politicians can not argue their case favourably when they are preoccupied with the task of defining their terms of membership. In this case, inclusivity can become a valuable tool for government in weakening Métis cohesion. The Métis themselves also want to arrange their own rules for membership in their nation and this often impinges on the desires of those who have been 'added' to the Métis ranks by outsiders. The ability to refer to the historical record, based in large part on biological definitions, makes the case for those who are not Métis but who wish to stall Métis self-government, easier. Large numbers of academics and government officials, bolstered by the demands of the peoples added to the Métis identity since 1870, continue to confuse what is, in reality, a simple solution to a complex problem. In the long term, the final definition must remain with the Métis, since anything else would be a travesty of self-determination.

Oral History of the Michif/Métis People of the Northwest

Audreen Hourie¹

Introduction

The origins of the Michif people, their national identity, their ancestry, languages, land, and other aspects of collective identity hold mysteries for those who seek answers to the question, 'Who are the Métis?' To better understand the national identity of the Michif people one must think beyond the limits of today's Canada/United States boundaries. One must also reach beyond the limits of written history and be willing to respect and understand oral traditions.

To state simply that Michif (Métis) people are a product of intermarriage between white or European peoples and Indian nations is too simplistic. The origin of the Michif people is largely still unknown. So is the origin of the Michif languages (of which there are three main ones) as well as their music and dance. Part of the uncertainty of origins arises from the fact that the traditions are oral. It is difficult, but not impossible, to put the development of a people recorded by oral tradition into a context of written understanding.

Ancestral Background

The Michif people have ancestral background that includes Indian nations such as the Cree, Saukteaux, Sioux, Blackfoot, Chippewa and Chipewyan. The background also includes Scottish, Irish, Welsh, Orkney and French. This recorded ancestry is not conclusive or complete but these are known factors.

The Michif peoples live in a vast territory. Current Canadian boundaries of Manitoba, Northwestern Ontario, Saskatchewan, Alberta, parts of British Columbia, the North West Territories and the current United States boundaries of Montana, the Dakotas and Minnesota are historically established areas occupied by Michif. These boundaries expand when one examines the oral history and traditions of the Michif people.

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Languages

Michif languages are influenced by Cree, Saukteaux, French and Gaelic. Yet the overall patterns of the languages are anything but haphazard. Michif is a very specific combination of languages. The three known languages are identified as Michif French, Michif Cree, and Michif Saukteaux. The Michif people identify their languages simply as 'Michif'. One particular reference is '*en Cree*', and refers to Michif Cree.

Métis Traditional Music and Dance

Reference to 'Métis' traditional music and dance is understood to be to all the people involved. Métis fiddle music is unique, not 'like' Scottish, Irish, French-Canadian, Cajun or old-time fiddle music. The western part of Canada and the United States is where the Métis fiddle can be heard. The tradition is oral and has come down through the centuries from generation to generation. The Red River Jig is the main dance of the Métis. The actual origin of this dance is unknown, but by the mid-1800s, the dance existed from Alaska to James Bay. Métis dancers dance to the fiddle and this creates a unique style of dance unlike any other. It is said that since the Michif were such expert horsemen and had a love of music and dance, the Michif were the source of the musical ride of the Royal Canadian Mounted Police. This particular piece of oral research is not conclusively documented and is added for interest only.

The Michif Flag

The political and military identity of the Michif people is documented by the late 1700s and early 1800s. The national flag of the Métis was evident in 1816 in Red River. Although the Michif had many symbolic flags which evolved over time, the infinity flag has survived. This particular flag has a blue background and a white infinity sign which has two meanings; the joining of two cultures and the existence of a people forever. The blue infinity flag depicted the national, political and military force of the Métis as early as 1816. Military battles of the Métis included:

a) 1816 — The Battle of Seven Oaks

The Métis militarily challenged the Hudson's Bay Company and the newly arrived Selkirk settlers on the issue of Métis rights to hunt and trade freely, especially regarding the sale of pemmican which was among the economic mainstays of the Métis. On June 9, 1816, the two groups faced each other on Frog Plain at Seven Oaks (Winnipeg). The outcome was a Métis victory.

b) 1849 — The Sayer Trail

In the Spring of 1849, a young Métis named Guillaume Sayer of Red River was arrested for contravening the restrictions of the Hudson's Bay Company on free trade. The Métis, under the leadership of Louis Riel (Senior) again challenged the Company. The result was that trade was free for the first time.

c) 1851 — The Battle of Grand Coteau (between the Souris and Cheyenne Rivers in what is now North Dakota)

The greatest battle of the Métis was against the Sioux Nation in 1851. That year, the Métis from St. Francois Xavier (now west of Winnipeg) had gone on their usual buffalo hunt. On the morning of July 13, the Métis were surrounded by 2,000 to 2,500 Sioux warriors. The Métis numbered 67 in military strength. Using their skill to operate large

buffalo hunts and their ability to use rifle pits for protection, the Métis warded off three attacks by the Sioux warriors. The Sioux suffered large losses and eventually withdrew. The Sioux acknowledged the Métis as new 'Masters of the Plains'.

d) 1869 — The Red River Resistance

Louis Riel (Junior) was 24 years old when he led the people of Red River through the challenge by Canada from the east to take over the western territory, which was the Métis homeland. It was to be the first time the Métis would be challenged by an outside military force. To meet this political and military challenge, the Métis set up a provisional government and worked hard to bring the territory into Canadian Confederation as a province. This venture was successful. The Métis List of Rights (not the List of Métis Rights, as these rights were envisioned as being for all people) became the Manitoba Act of 1870 and the Province of Manitoba was founded. But not without extreme consequence for the Métis. Louis Riel was exiled to the United States and the Métis continued in an intensified struggle for survival as a people and a nation.

e) 1885 — The Battle of Batoche (located in what is now known as northern Saskatchewan)

The Battle of Batoche was the final clash between the Métis and an army composed of 8,000 Canadian troops under General Middleton and units from the militia and the North West Mounted Police. The actual Battle of Batoche was preceded by the Battles of Duck Lake and Fish Creek. The Métis were joined by Cree Chiefs Big Bear and Poundmaker to fend off the Canadian troops. The success of the Métis in the earlier battles was not to be the case in the final battle at Batoche. Chiefs Big Bear and Poundmaker arrived too late. The Métis were greatly outnumbered and without sufficient ammunition. After four days of battle, the Métis were militarily defeated.

Founder of Manitoba

Louis Riel, now aged 41, was taken to the Regina jail as were some of the leaders of his Indian allies. Others were taken to Stony Mountain Penitentiary (then a North West Mounted Police barracks). These were sentenced to jail terms for their involvement in the military battles. Riel was tried and hung for treason on November 16, 1885. He was brought back and buried in St. Boniface (Winnipeg). Here is a quote from Louis Riel's writings:

Yes, I have done my duty. During my life I have aimed at practical results. I hope that after my death my spirit will bring practical results. All that I have done and risked ... rested certainly on the conviction that I was called upon to do something for my country ... I know that through the grace of God I am the founder of Manitoba. (Louis Riel, July 4, 1885)

Conclusion

This article attempts to put a face on Métis people with the hope that it will be helpful to those who may not have knowledge about the Métis, the development of western Canada, and the unswerving aspirations of the Métis nation to remain with the Canadian Confederation. Most people are unaware that the Métis were encouraged to make their homeland part of the United States during these tumultuous years. The Métis met that challenge by becoming part of Canada. The Métis continue to advance their historic

vision which antedated Confederation itself. What is that vision? 'To create a Canada from sea to sea and to create a place where peoples from around the world could come and live in peace and harmony.'

Beadwork as an Expression of Métis Cultural Identity

Sharon Blady¹

Abstract

The Métis of the Red River Settlement were a unique and distinct cultural population. Their rich beadwork was an expression of this vibrant cultural identity. As a population that had both European and Amerindian heritage they were influenced by different cultural and aesthetic traditions. While their beadwork shows traits from these influencing sources, Métis beadwork is different from all of them. The ingenuity, adaptation and vibrancy that was part of their social and political culture is manifested in their artistic culture. Their beadwork shows a complexity of colour, motifs and composition that sets them apart from their Amerindian and European contemporaries. In examining art works held at the St. Boniface Museum, in Winnipeg, we can see how the 'flower beadwork people' of the Red River Settlement expressed their cultural distinctiveness in an art form that is complex, vibrant and understated in its beauty.

Introduction

In the nineteenth century the Métis were a distinct and recognizable population in the Red River Settlement. The floral beadwork style of the Red River Métis was an expression of their cultural identity, which experienced its classic or 'Golden Age' between 1844 and 1869. The use of the term 'Golden Age' does not imply that conditions for the Métis were ideal in every respect, but instead as a period where a number of conditions and influences brought the Métis culture to its most active, vibrant and influential level. Their beaded embroidery was a material representation of their cultural identity during the nineteenth century when they came into their own and came into conflict with the incoming Anglo-Canadian population. Beadwork was so much a part of their cultural identity that the Sioux referred to them as the 'flower beadwork people' (Duncan 1981:3, Brassier 1985:225).

In presenting a background for this period of cultural development certain issues will be introduced: reasons for their isolation as a distinct ethnic group, the racism they encountered and their economic role in the Settlement. These issues are what would shape their identity and their aesthetic choices from both Amerindian and European

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sources. Their dual heritage is significant in Métis identity, because of how they chose to identify with it, and how others chose to identify them because of it.

Born of Two Worlds

The ethnic background of the Red River Métis has its Amerindian roots in the Cree and Ojibwa Woodlands populations and its predominant European heritage coming from the French Canadian and Orkney fur trade population. The movement of the Cree and Ojibwa, from the Hudson's Bay and Great Lakes regions respectively, foreshadows the movement of the English and *Canadiens*.

The Métis were identified as distinct at Red River not only because of their partial Amerindian ancestry but also because of their European ethnicity and religion, company rank, level of education and degree of acculturation (Brown 1980, Pannekoek 1973, 1991). These distinctions were what kept Orkneymen and *Canadiens* in the lower company ranks as they lacked solid connections to the patrilineal system of either culture, through their physical isolation in the NorthWest and not being financially able to travel back to Europe to find wives (Brown 1980). As a result the connection to the wives' families acted as compensation for this lack of European familial connectedness (Brown 1980). The Métis, therefore, saw a significant part of their identity and unity coming from matrilineal associations in a way that was completely unheard of in the dominating Anglophone society (Lussier 1978). This pride is evident in the words of Louis Riel:

It is true that our savage origin is humble, but it is meet that we honour our mothers as well as our fathers. Why should we concern ourselves about what degree of mixture we possess of European or Indian blood? If we have ever so little of either gratitude or filial love, should we not be proud to say, "We are Métis!" (Howard 1952: 46)

The fact that the Métis took pride in both aspects of their background gave them political strength and unity and it shaped their beadwork. They, unlike recent European or Canadian settlers, were heirs to the NorthWest through both lines of descent, effectively *the* Canadian culture, a blending of two continents' cultures and into a new distinct indigenous culture. Their blending of cultures was not seen as a positive trait by many in the Settlement and they experienced racism throughout most of the nineteenth century.

Racism appeared with the arrival of Protestant clergy, European women and Governor George Simpson. Racial barriers that impeded advancement within the Company during the 1820's and 1830's eventually receded. The Métis also gained economic influence through the attainment of respected positions outside the Company and became more adamant in seeking out what they felt to be their rights, including freer trade with the United States (Brown 1980). Free trade meant that those Métis who had been shut out from company ranks, yet governed and exploited by its regulations now developed, for their own economic security, 'an adaptive, innovative response to economic opportunities' (Ens 1988, Brown 1980, Ross 1856, Pannekoek 1973). When the Métis came to dominate the population by sheer numbers in the 1840's the tensions at Red River rose between the Métis majority and the Anglo-Canadian newcomers (Ross 1856). These newcomers saw them as an impediment to their own economic and social 'progress' fueled by the desire to 'civilize' the region (Ross 1856). These tensions are indicative of the period and what shaped Métis identity and art at Red River.

The tensions and conflicts put on the Métis with the arrival of more Anglo-Canadians meant that they had to take their distinctive culture one step further. This period is marked by progressive acts of political and cultural activism, indicating the Métis strength of character. It is the time of the Sayer Trial, the Battle of Grand Couteau and the conflict with the Canadian government regarding annexation, culminating in Riel's Provisional government. The Métis would not bend to force or intimidation and would not acculturate in a manner that would mean the loss of half their culture. As a result, the tradition of beadwork and its contribution to the distinctive wardrobe of the Métis is one more element that set them apart, and which gave them pride.

Influence and Choice in Métis Beadwork

Significant documentation exists to indicate that the Métis were unique in their beadwork and how influences and choices shaped this art form. This documentation includes the examination of their purchases related to beading. The analysis of purchases at the Company store cross tabulated to censuses, confirms preferences and cultural traits in Red River clothing and the tendency for beadwork to be done by those Métis of French and Catholic descent. Two areas that are directly related to the production of beadwork and clothing by Métis are the purchases of woolen dry goods and beading materials themselves. Both were most popular with, and almost exclusive to, the Catholic-Métis, in the form of stroud for beading, leggings and capotes (McKinnon 1992: 35). Also the distinctive tassels found on capotes were purchased only by the Catholic-Métis as were 91.9% of all beads in this time period (McKinnon 1992:35-38, Brasser 1976). From this we can see that the Catholic-Métis of Red River would be the primary, if not sole, producers of beadwork.

This limiting of beadwork to predominantly Catholic-Métis also has an effect on the nature and style of the works produced. The Protestant women's influence would have been more by sight than by teaching, as the Country-born were culturally transformed to English-Protestant standards (Foster 1983). The arrival of the Oblates in the early 1800's caused a change from geometric patterns to 'intricate and colourful patterns of flowers, tendrils, hearts and stars' (Morier 1979:29). This influence is reinforced by the arrival of the Grey Nuns and their embroidery for vestments and other church articles as well as teaching both educational core subjects and household arts to the Métis and Amerindian girls of the area (Morier 1979:29). The Grey Nuns also decorated the interior of the Cathedral and the Mother Superior's journal states that 'native women' came to copy these designs for their bead and silk embroidered work (Morier 1979:29, Harrison 1985, Mitchell 1987). However, the only extant documentation of the Grey Nuns' embroidery influence is a Parisian embroidery pattern book (de Dillmeont n.d.). These patterns do contain many floral motifs that are found in Métis beadwork. The composition of these motifs within Métis designs is, however, much more complex and non-symmetrical and organic than those patterns found within the book.

While the presence of the Oblate priests, and later the Grey Nuns, are generally accepted as being influential to the embroidered arts of the Métis at Red River (Morier 1979, Brasser 1975, 1976, 1978, 1985, 1987, Thompson 1983, Duncan 1981, 1989, Duncan and Carney 1988, Hail and Duncan 1989, Harrison 1985), there is also more to the floral motifs than passive absorption of Christian decorative elements. David Penney's (1991) study of floral decoration and its reflection of culture change and artistic motivations, is very valuable in this regard. It reinforces the argument that the strong and independent nature of the Métis culture was represented in their artistic

styles. He establishes that motifs were selected at a particular time and for specific reasons (Penney 1991: 55-56), which are not understood as the dynamics of Amerindian and Euro-American have been erroneously characterized with Amerindian passivity to influence (Penney 1991:59).

It is his reference to choice in the adoption and use of floral motifs that is important in examining the art of the Métis. That floral decorations operate on two levels, the mimetic (representational) and semiotic (meaning and intention) is significant. As is the fact that the latter are 'particularly sensitive to issues of social dominance or deference... It is possible to analyze the semiotic capacities of signs in terms of expressions of solidarity or difference' (Penney 1991:60). The expression of solidarity or difference was evident in the nineteenth century in North America, resulting in, 'a new dialectical categorization of clothing: Indian or white...either/or... that pitted the 'progress' of 'civilization' against 'savagery.' From an Indian point of view, of course, Indian dress signified cultural integrity and resistance to the domination of whites' (Penney 1991:61). The signification of cultural identity and resistance to the domination of 'whites' is exactly what the Métis art and attitude of the times would reflect in view of the historical and cultural context presented.

This means floral imagery for the Métis was the deflection of institutional symbols of authority and power back upon themselves by means of extracting them from their habitual associations and 'reassigning them to entirely new purposes' (Penney 1991:71). While the images were from Catholic sources, it is less likely the Métis were 'deflecting back' images against the priests and church, as it was that they were deflecting back images associated with Victorian propriety and civilization, to Anglo-Canadians and Europeans who sought to assimilate them. The Métis held their Catholic faith truly and firmly, even before the arrival of the Oblates and the Grey Nuns, however there was no love lost with the HBC and the Anglo-Canadians and British arriving *via* Upper Canada.

When looking at the evolution of beadwork styles, especially where floral designs are concerned, it is too easy to concern oneself with the arrival of the Europeans and their relation to the appearance of floral patterns. The art of beadworking itself was most likely to be passed from mother to daughter rather than from nun to pupil. While nuns, or other European women, may have taught embroidery with silk floss or other arts 'appropriate for young women' the art of beadworking was present before their arrival, as a more recent extension to a long standing and evolving tradition. This means that the influences came from designs used in other embroidery and arts, or those items like the vestments and paintings at the Cathedral, rather than nuns actually teaching Métis and Amerindian girls beading.

In examining traits from Amerindian influences there is difficulty in isolating traits that are clearly from the period previous to Métis influence on them. Even the most comprehensive works are ambiguous in their dating (Coleman 1947, Lyford 1982). From the information that is available and comparisons that I have done since completing my thesis research certain traits are evident. The Ojibwa art of the period is more geometric than floral, and the floral designs that are present are conventionalized, simple in construction and detailing (Coleman 1947, 108). The Cree present a similar problem, with the work of Kate Duncan and Barbara Hail (1989) providing one of the few comprehensive sources. They acknowledge the influence of the Métis and identification of works is often complicated by the designation 'Cree or Cree-Métis type.' What can be seen from comparative analysis is that, until a period after the Métis

Rebellions, floral decoration is limited to symmetrical designs with limited structured and colour usage. Despite the poverty of information regarding the traditions of their mothers', Métis women were known for the high quality of work they produced. Harrison feels this was due to the 'Métis competitive spirit, as well as pride in their skill and a sense of tradition' (Harrison 1985, 71-2). This high quality of work allowed women to supplement household incomes through the manufacture and sale of beaded objects. The trading lifestyle that is distinctive of the Métis generally is evidenced in this form of self-employment.

The Métis are also known for their distinctiveness in costume and dress, taking the best from each of their cultural traditions. The Red River Métis show the fusion of their native and European heritage in the pictures of artists like F. B. Mayer. These drawings are supplemented with contemporary descriptions of métis costume and accessories:

All were dressed in bright colors, semi-European, semi-Indian in style — tobacco pouches, girdles, knife cases, saddles, shoes and whips were elaborately decorated with glass beads, porcupine quills, feather quills, etc., in artistic work done by their wives and sweethearts, but their clothes were of European rather than western cut (Brasser 1985:224).

The fusion of diverse native and non-native traditions was evidenced when 'decorative art style emerged that made an elaborate use of a large number of small design elements in a wide range of colours' (Brasser 1985:225). The elaborate nature of Métis clothing is also described by Harrison noting the multi-coloured patterning and that, 'their designs also had a distinctive fluidity, and few elements stand alone without some line or connection to another part of the pattern. Their vibrant attitude towards life is reflected in the design elements and patterning' (1985:31). A description that best summarizes the beadwork of the Métis has been given by Ted Brasser:

Frequently emerging from hearts or discs, the bilaterally symmetrical plant designs consisted of fine, curving stems and sparsely distributed delicate leaves. Three such leaves together usually took the place of flowers at the extremities of the stems. Another characteristic feature was a large number of different colours used in a single composition without being garish. The impression of the style is that of a sparkling delicacy (1976:47).

Sparkling Delicacy

Three examples of the style of beadwork which embodied the traits of 'sparkling delicacy' and reflected the vibrant character of the Métis are held in the St. Boniface Museum in Winnipeg. These pieces are from the family collections of the Lagimodière and Nault-Carrières. Each is highly refined in colour usage, design element composition and in displaying the vibrancy of Métis culture. The first two pieces are a pair of leggings and a watch pocket from the Lagimodière family. The piece from the Nault-Carrière family is a large black velvet pillow. A brief analysis of each follows, including information about the women who probably made them, collected from the Museum records and La Société Historique de St.-Boniface.

The embroidered leggings (Figure 1) were donated by Thérèse Lagimodière, who said that they were made by her paternal grandmother Eléanore Lagimodière (née Ducharme), wife of Modeste Lagimodière. Modeste was the grandson of Jean-Baptiste Lagimodière. In looking into the genealogical records there is no record of an Eléanore Ducharme, but that a woman listed as Elizabeth or Isabelle Ducharme born in 1847 and

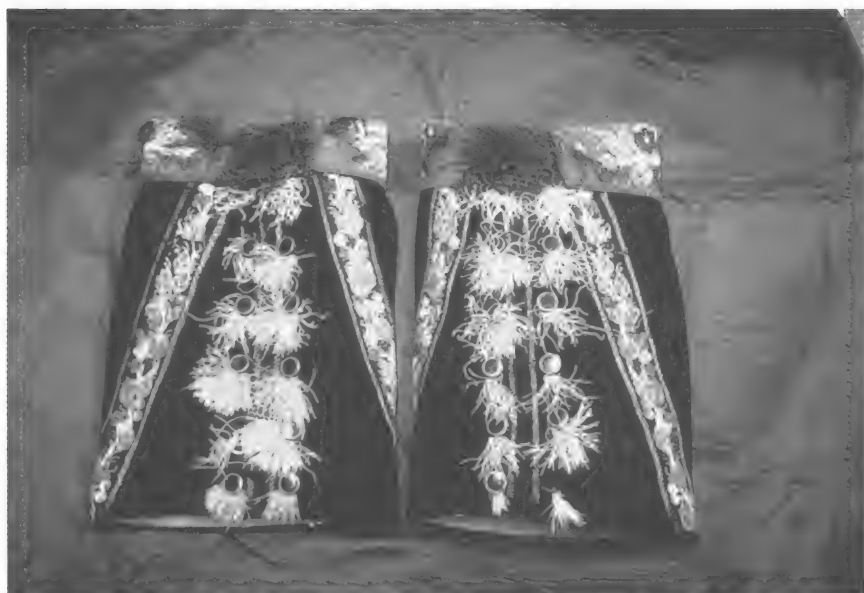


Figure 1. *Leggings. Lagimodière. (Front A & B)*
Le Musée de St. Boniface. Cat. No. EE 153

married to Modeste, who was five years her senior, in 1870. It seems that the leggings were probably Modeste's and made for him by his wife, as a courtship or wedding gift.

The motifs and flower forms on the leggings are similar to those found in the sources cited as possibly influencing the Métis women of the period. These include the vestments, embroidery patternbooks the more complicated floral patterns that are identified as Cree or Cree-Métis. What is interesting to observe is that the composition has an overall organic and flowing quality that has not been observed to the same degree in these sources. While there are Amerindian examples with floral and curvilinear elements in their beadworked designs, they have a more precise or measured tendency. While often complex, these designs also do not seem to match the compressed and energetic quality of the leggings. Due to the repetition and complexity of composition in the leggings this design must have been plotted out, but is still more free-form and organic in style and appearance than works from any of the influencing sources.

These leggings use a complex process of motif repetition and colour alternation as well as an extensive palette. The control and organization of these elements, coupled with the small scale and compressed nature of the pattern, mean that the woman who made them was highly skilled with an eye for colour, balance and composition. This is the type of ornate decoration that has been described earlier as containing numerous colours and forms in fanciful combinations without appearing garish.

The free form composition and complex colour usage characteristics seem to be the most distinct in separating the Métis piece from either Ojibwa, Cree, or European examples. There is an overall repetitive element found in the patternbook designs, and a symmetrical and rigid quality to those pieces made by Ojibwa and Cree artists. The complex and non-symmetrical composition of the elements therefore seems to be a trait

that might be identifiable as Métis from this period. The leggings display this trait in both panel pairs and the knee cuffs and the recognition of the subtlety of this trait came only after thorough examination of the piece and each floral motif within it.

Similar traits are found in the delicate design of the watch pocket (Figure 2). It is documented as having been owned and used by Jean-Baptiste Lagimodière dit La Prairie, the son of Jean-Baptiste Lagimodière. As this seems to be a small and precious item (10.5 cm in length), and worked in tanned moose hide rather than in commercial cloth, it would likely have been made by a family member, possibly his wife Marie, or one of four daughters. This piece, despite its small size, has a number of interesting qualities that merit discussion including: the selection of beads, the motifs used and the activity and balance within the composition, while lacking a symmetrical composition. Again like the leggings this piece indicates a highly skilled artist, with an eye for colour, texture and composition as well as skill in beadwork on hide and at a small scale with precision.

An interesting effect occurs with the opal finish of the beads. Despite the use of one type of bead in places, there is a texture to the rose that may at first appearance indicate that more than one bead type or colour was used. Unlike the flat or solid colours that are more commonly seen in Amerindian pieces of the period, these provide a more textured and subtle shading to the flower, which adds an overall elegance and refinement to the piece. The use of two dark red tones of these opal beads on the rose on the



Figure 2. *Watch pouch. Lagimodière.*
Le Musée de St. Boniface. Cat. No. DA 247

right of the lower design enhances this subtlety and delicacy of texture by expanding its range through effective integration. The same quality of bead was used in the leggings and often made colour identification and description difficult due to the subtlety of colour differentiation. The subtlety of the bead selection again reflects a highly trained eye, and the ability to blend colours in this manner is not an easy task in beadwork of this nature, and so is not commonly seen.

The motifs used on this piece again bear resemblance to those identified as Cree or Cree-Métis. Again lacking comparable works for comparison, is the complexity of the composition. Also unique is the stark difference of the beaded iris from the roses in colour and form. The iris, despite this difference, is still harmoniously integrated into this composition. This iris form also seems to be somewhat unusual and I have not been able to locate another piece with a similar flower for comparison. Another reason for finding this flower selection fascinating is that the iris is also known in as the *fleur de lis*, a flower and emblem commonly associated with patriotism, or unity among French or french-speaking populations. While it may be mere coincidence, the uniqueness of this flower does make one question its use on strictly aesthetic grounds.

This piece, like the leggings, indicates there would have been influence from other traditions, whether Amerindian beading or European symbolism. There is, however, an evolution that separates it from either. Again this separation comes at the level of composition. Pieces that have similar composition in relation to the harmonious, naturalistic and non-symmetrical traits have not been located for comparison. Most extant works that have been found have tended towards symmetrical or repetitive composition. This would again lead me to believe that composition was a distinguishing element between Métis art and other contemporary art by Amerindian and Euro-Canadian women.

The pillow also reflects the high degree of complexity in composition that seems to be characteristic of Métis design (Figure 3). The pillow was donated by a Mr. Ducharme, who received it from Alexandre and Mathilde Nault. Mrs. Nault said these pieces belonged to her parents, Mr. and Mrs. Damase Carrière. Mathilde Nault was the daughter of Marie Pélagie Parenteau and Damase Carrière and related to Gabriel Dumont by descent. Alexandre Nault was the son of André and Anastasie Nault and the great grandson of Jean-Baptiste Lagimodière and Marie-Anne Gaboury. In the records of the Museum it is catalogued as part of the Nault family collection. However, the pillow was most likely made by Marie Carrière (née Parenteau) and because it passed from the Carrière family into the Nault family with Mathilde's marriage to Alexandre the hyphenated name is used here to give credit to the matrilineal nature of its inheritance.

This pillow is an excellent example of the repetition and variation of motifs and colours in Métis composition. This pillow shows the repetition of six elements: three row stem, single leaf in one or two tones, five tipped leaf with contrasting vein, three leaf and bud combination, four heart petalled flower with two sweeping leaves, and the corner motif of three leaves and two teardrop buds. These motifs are repeated using fourteen colours: white, yellow, grey, pastel pink, maroon, wine, pastel blue, dusty blue, dark dusty blue, royal blue, mid-range green, dark green, forest green and metallic accent beads. The consistency in elements and their repetition is seen in comparing the design and the balance of elements with in it.

The pillow's design is balanced but not symmetrical. Also the near symmetry is on the diametrical axes as well as the horizontal or vertical axes. The elements of the upper



Figure 3. *Large Cushion. Nault-Carrière.*
Le Musée de St. Boniface. Cat. No. EE 119

and lower side around the central stem also balance each other not only in the pairs of each side but when the pairs are compared across the horizontal axis. The mirroring and balancing of the corner motifs is a further example of the complex balance and construction of the piece. Each side is also a complete, balanced yet non-symmetrical composition which moves from the outer corners towards an element which is slightly off-centre. This lack of symmetry is carefully measured when looking at the composition of the sides and the overall pattern. It is not an accident of carelessness or technical weakness, but instead a crucial element in maintaining the design axes mentioned previously.

This piece shows similarities to each of the major influences that have been cited here, but with enough difference and mixture of these similarities to indicate that their use is by Métis rather than Cree or Ojibwa artists. The similarity seen between this piece and Ojibwa sources is with the use of leaf elements where the beading style implies the veins of the leaf and in some of the floral elements. But there are differences in the use of these elements with motifs non-Ojibwa in nature. These tend to be the Cree-like elements found in those like the three-leaf and bud combination and the corner motifs. While this piece uses a reasonable number of motifs repetitively, as is seen in examples cited as being of Cree or Cree-Métis origin, and has metallic bead accenting similar to that on some of these works, this piece still has many significant differences.

As seen before, the major difference is in complexity of composition, the non-symmetrical nature of the composition and the complex placement of colours within these motifs. The use of motifs and colours with regularity is different in that the colour placement within two identical motifs is often different as seen in the different combinations for the tipped leaf, heart petals and three-leaf and bud combinations. The

selection tends to be within a certain possible palette for each motif, but allows enough flexibility for each to be unique and yet remain harmonious in nature to the rest of the identical motifs. The only example of variation in the non-Métis sources is when a Cree motif has multiple colour variations but the variations are limited and used repeatedly, i.e. a bud motif which has a pink version, a rose version and a white version, but the placement and use of these buds is still in a repetitive or symmetrical pattern not in counterpoint as seen in this Métis example.

The influence of the vestments and patternbooks are seen more in the nature of the stem and the framing of an object in a border, seen in both quite frequently, as the purpose of such embroidery was for border decoration. Again the difference is that the influence and its rules have been altered to give a unique combination of forms and composition. The dominance of Amerindian forms with composition and usage more similar to Euro-Canadian sources might indicate something about the nature of influence. The repetition of those familiar motifs, learned at one's mother's knee, being employed in a manner found in Euro-Canadian items or garments, indicates the 'adopt and adapt' tendency characteristic of the Métis culture.

Conclusions

The art work itself that has been examined here is generally of high quality and a uniformity can be seen throughout. What was indicated in the analysis repeatedly was the complexity of the pieces and its difference from the examples representative of the cultures isolated for their influence. What is seen repeatedly is the use and adaptation of motifs from Cree, Ojibwa and religious sources yet these motifs are not presented or arranged in composition the way they would have been in their original context. The Amerindian sources that have been compared tend to be static, even with their floral and curvilinear qualities, when compared to the Métis examples. The lack of symmetry in the Métis works cannot be overlooked. The leggings show symmetry in their physical construction but the individual elaborately beaded panels do not. Even in comparison with the examples both cited and observed in religious garments, there tends as well to be a certain degree of uniformity and symmetry in composition. Therefore, the most obvious distinguishing factor seems to be not so much the individual motifs, but how they are composed both individually and within the larger pattern.

Repeatedly the same motifs, leaf and flower forms for example, have been used within a piece, but with variations between them. This repetition with variation does not indicate chaotic or poor skills but again reflects a highly trained eye. To manipulate the colour selection within a given set of motifs to allow for this visual balance takes skill and some experience. To, in turn, manipulate the composition so that motifs are not always balanced by the symmetrical placement of a similar motif is also an indicator of skill and a refined aesthetic sense. The interplay of elements used the rotation of colours through consistent motifs and the rotation of motifs through consistent composition.

The adaptability, perseverance and ingenuity of the Métis people is seen in the elaborate and delicate beadwork they produced. At a time when their cultural identity and future was threatened, they remained unified and vocal. It is not surprising that during this time their floral beadwork tradition was valued as an expression of their cultural identity and that it developed to such a refined level. Placing the art works from the Lagimodière and Nault-Carrière within this vibrant period in the history of the Métis, we can appreciate not only their inherent beauty, but also their cultural signifi-

cance. Their elaborate and unique compositions reflect the complex and innovative character of the Red River Métis as they adapted to encroaching Anglo-Canadian populations. The floral beadwork of the Métis is not only refined and understated in its aesthetic characteristics, but also as a medium of cultural expression and unity.

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*Dismantling and Restoring Jurisdiction*¹

Philip Fontaine²

*Historic Agreement Announced to Begin Dismantling Regional Operations in Manitoba*³

An unprecedented and comprehensive agreement that will fundamentally change the relationship of Canada and First Nations in Manitoba was announced today by Minister Ronald A. Irwin. The Framework Agreement sets out the process to dismantle DIAND regional operations and empower First Nations governments in Manitoba to exercise the authorities required to meet the needs of First Nations people.

Over the past year, First Nations in Manitoba have made dismantling and the related restoration of jurisdictions their priority. 'Throughout the course of the negotiations, the Manitoba First Nation leaders have shown great initiative and perseverance, which directly contributed to the successful negotiation of the Framework Agreement,' said Minister Irwin. *Creating Opportunity—The Liberal Plan for Canada* established the goal of gradually winding down DIAND at a pace agreed upon by First Nations, while maintaining a federal fiduciary responsibility. Workplans and timetables to complete the dismantling initiative will be jointly determined with the full participation and endorsement of Manitoba First Nations. This initiative will result in Aboriginal people in Manitoba taking control of their lives through the determination of their own economic, social and cultural priorities.

'The Framework Agreement will clearly demonstrate to First Nations in Manitoba a fundamental and historic change in Canada's relationship with Aboriginal peoples, based on trust, mutual respect and participation in the decision-making process,' Minister Irwin said. 'This initiative will help restore authority, responsibility, and accountability to their leaders to govern their own affairs.'

The scope of the Framework Agreement will include services and programs of DIAND and other federal departments as these programs and services directly affect First Nations. The Government of Canada will also ensure Manitoba's participation in negotiations involving any matters of provincial jurisdiction and will encourage the Province of Manitoba to pursue similar dismantling initiatives.

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1. These historic documents have been provided by Grand Chief Fontaine.
 2. Philip Fontaine is serving his 3rd term as the Grand Chief of the Assembly of Manitoba Chiefs.
 3. News Release Communiqué, Government of Canada, Winnipeg, December 7, 1994.

Extensive communications and consultations will take place with all Manitoba First Nations communities at every stage in the dismantling process, to ensure that the First Nations people of Manitoba are fully informed and have every opportunity to give their views on all aspects of the initiative.

While regional operations are being dismantled, DIAND will maintain business as usual with Manitoba First Nations. Existing program funding to First Nations will not be reduced as result of the process. To ensure early successes and practical and tangible results, immediate action will begin to transfer responsibility for education, fire protection, and capital management.

Departmental staff affected by the dismantling will be covered by the workforce adjustment policy.

'I am very proud that the Assembly of Manitoba Chiefs have agreed to undertake this initiative. I am confident it will enable Manitoba First Nations to build and sustain vibrant and strong communities,' said Mr. Irwin.

Backgrounder

Creating Opportunity—The Liberal Plan for Canada established the goal of gradually winding down DIAND, at a pace agreed upon by First Nations. In December, 1993, Manitoba First Nations' Chiefs adopted a resolution supporting the creation of a joint working group to examine possibilities for dismantling DIAND's regional operations in Manitoba. At that time, their resolution received support and commitment from DIAND Minister Ronald A. Irwin. After this endorsement, the Chiefs developed a general proposal for dismantling regional operations.

On March 9, 1994, in the House of Commons, the Minister announced that winding down the department would begin in Manitoba. Shortly after, the Assembly of Manitoba Chiefs (AMC) tabled a comprehensive approach for planning the dismantling and transferring jurisdictions to First Nations' governments. The AMC proposal has served as the basis for discussions with DIAND over the last six months.

On April 20, 1994, at a General Assembly of the Manitoba Chiefs, Minister Ronald A. Irwin and Grand Chief Phil Fontaine signed a Memorandum of Understanding (MOU), giving general endorsement of the initiative and committing both parties to negotiate a Framework Agreement (FA) that would guide the dismantling process. The MOU provided assurances on continuity of DIAND services during dismantling, adequate resources for the initiative, adherence to Treaty, Aboriginal rights and Crown fiduciary obligation, and restoration of First Nation jurisdiction consistent with the inherent right of self-government.

The FA begins the process of dismantling the Department of Indian Affairs and Northern Development. The Agreement itself is not a new Treaty. However, it is a legally binding commitment, enforced through negotiated agreements and community ratification.

While it is a bilateral agreement between DIAND and the Manitoba First Nations, the FA provides for the Province to be invited to participate in negotiations to any agreement affecting its jurisdiction. Manitoba has already agreed to begin work with the AMC and DIAND on transferring authority for Indian child welfare and family services.

This framework document also provides for the negotiation of transferring jurisdiction held by other federal governments to First Nations control. These departments will negotiate those aspects currently within their control.

At present, incremental resources have been identified to cover the initial phase of the project for the next two years, totalling \$4.3 million in 1995-1996. A review of resource requirements for the remaining phases will be carried out in 1995-1996.

The bulk of funding, approximately \$3.8 million, will allow Manitoba First Nations to carry out research and analysis, develop options for how Manitoba First Nations' governments could manage the programs, develop proposals for new Manitoba First Nations' government structures, pursue negotiations, and implement a sustained communications strategy in support of extensive consultations with Manitoba First Nations communities and membership planned to take place at every stage of the process.

As part of the incremental process, \$0.5 million in DIAND's budget has been allocated to salary costs to representatives of Manitoba First Nations to work alongside senior departmental staff to gain experience and insight while assisting with the day-to-day operations of the department. This initiative is a cost-effective means of preparing for the practical implementation of the inherent right of self-government. In addition to the incremental funds, approximately \$1.2 million will be spent for previously budgeted and scheduled work to pursue the transfer of three expedited projects, education, capital management, and fire protection, expected to yield tangible and practical results in the short and medium term.

Currently, the administration of more than 80 percent of the \$3.5 billion Indian and Inuit Affairs Program annual budget is controlled to varying degrees by First Nations. As a result of DIAND's changing roles over the last ten years, it is now primarily a funding agency providing transfer payments with varying forms of accountability to allow First Nations to deliver community services more suitable to their memberships. The FA will continue to build on this process, transferring jurisdictions associated with federal programs.

The department's Manitoba regional operations consist of a complement of 194 people and an annual budget of \$530 million. Staff affected by the dismantling and the department winding down will be covered by approved policy on workforce adjustment. Sustained communications with employee unions will take place at every phase of the initiative.

The dismantling process will be closely monitored on an on-going basis, to ensure that it is responsive to the interests and concerns of all Canadians. It is designed to yield a new relationship with First Nations in Manitoba, based on trust, respect and accountability. Under the FA, the Minister of DIAND is required to report on a regular basis to Cabinet on progress.

Manitoba Dismantling — Framework Agreement Highlights Context and Objectives

The Framework Agreement (FA) on the dismantling of the Department of Indian Affairs and Northern Development (DIAND) establishes a process that will lead First Nations in Manitoba and Canada into a new relationship which is based on mutual respect and the recognition of First Nations' rights of government, management and control of their own lives, consistent with the inherent right of First Nations to self-government.

The process established by the FA has three objectives:

- dismantle DIAND as it affects First Nations in Manitoba;
- develop and recognize Manitoba First Nations governments' authorities and institutions;

- restore to Manitoba First Nations governments the jurisdictions currently held by DIAND and other federal departments.

The objectives will be realized on the basis of a comprehensive set of principles and mutual commitments. Implementation will occur after thorough consultation, community ratification and mutual decisions and agreements made by Canada and First Nations in Manitoba.

The achievement of the objectives is not finite as to term, and will endure until they have been achieved on a mutually agreeable basis. The other terms of the Framework Agreement will be in force until achievement of the objectives or 10 years, whichever comes earlier, or such longer period as may be subsequently agreed upon.

Principles and Mutual Commitments

Key principles and mutual commitments of the FA include:

- protection of First Nations rights;
- in the dismantling process, Treaty rights will be given an interpretation, to be agreed upon by Canada and First Nations, in contemporary terms while giving full recognition to their original spirit and intent;
- the primary locus of First Nation governments will be the individual First Nation. There may be functions carried out at aggregated levels as determined by First Nations;
- the Indian Act will be amended or repealed to give effect to the new relationships in Manitoba;
- resourcing of First Nations governments will be determined by balancing a number of factors, including the needs of First Nations communities and peoples and the federal fiscal and budgetary requirements;
- liabilities arising out of the exercise of decision-making powers and authorities by First Nations governments in Manitoba, unfettered by the involvement of the Minister, will rest thereafter with the First Nations governments;
- the work will proceed in a timely manner and at a pace that conforms to the needs of First Nations for consultation and deliberation.

Approach

The Project's jointly developed Workplan sets out activities and expected outputs. Key activities are consultation, communications, research, analysis, option development and negotiations.

There are three expedited projects designed to provide progress in the short term: (1) Education Program, (2) Fire Safety Program, and (3) Capital Program.

At mutually agreed upon times and terms and on mutually agreed upon issues, such as those dealing with provincial jurisdictions, the Province of Manitoba will be invited to participate in the Project.

A total of \$4.3 million in incremental funds will be provided in 1995. In addition, \$1.2 million will be spent for previously scheduled and budgeted work to pursue expedited projects which will be completed in the 1994-1995 and 1995-1996 fiscal years.

Appendix A

Memorandum of Understanding

Between The Minister of Indian Affairs Canada
 (Representing the Government of Canada)
 -and-
 The Grand Chief of the Assembly of Manitoba Chiefs
 (Representing the First Nations in Manitoba)

WHEREAS there have been numerous discussions between the Minister and the Grand Chief, their respective officials and advisors; and

WHEREAS all parties are working towards an effective process designed to accomplish their mutual goal of ending 150 years of injustice inflicted on First Nations' peoples; and

WHEREAS the basic process is outlined in draft form in the AMC document of 14 March, 1994, as amended tentatively but not yet formalized in meetings of officials; and

WHEREAS that process, and discussions to date, has been put into context by the exchange of correspondence between the Grand Chief and the Minister dated 14 April, 1994, 18 April, 1994 and 19 April, 1994; and


WHEREAS the Chiefs of Manitoba, meeting in Assembly at The Pas, Manitoba on 19-21, 1994, have expressed concerns on a number of matters, some of which require immediate Ministerial concurrence;

NOW THEREFORE, in order to assure the Chiefs of the integrity of the process and to facilitate their participation in it, the Minister and the Grand Chief, for their respective governments, hereby agree:

1. That during the continuation of the process, a relationship of 'business as usual' shall continue to exist between DIAND and First Nations, with no reductions, disruption or delay in funding, programs, initiatives or services resulting from the process;
2. Additionally, the process will be adequately resourced, on a mutually agreeable basis, in a manner designed to achieve success. Both First Nations and Canada will exercise best efforts to ensure the success of the process in an efficient and most effective manner possible based on the principle of a mutually respectful partnership conducted on a level playing field; furthermore, the funding for this process will not impair, dilute nor prejudice the levels of funding for all other matters that impact on First Nations in Manitoba; and
3. Treaty and aboriginal rights, and the Crown's fiduciary duty, continue to be guaranteed in every way; and
4. Within a short time, a more extensive framework agreement to guide the process will be signed once current negotiations between officials are successfully completed and approved.

5. The process will proceed with a view to transferring not only programs and services but also restoring jurisdictions from Canada to First Nations in Manitoba.
6. The process will allow for a communication strategy that will allow First Nation members to be fully apprised of the goal of dismantling.
7. The process will proceed in a manner consistent with the inherent right of self government.

This Memorandum of Agreement, is signed this 20th day of April 1994, by the Grand Chief and the Minister on behalf of their respective governments, on the territory of the Opaskwayak Cree Nation, in the spirit of mutual respect and with a view to accomplishing a truly historic task.



Phil Fontaine, Grand Chief
Assembly of Manitoba Chiefs



Witness: Brenda Kustra
Regional Director



Honourable Ron Irwin, P.C., M.P.
Minister of Indian Affairs Canada



Self-government on Alberta's Metis Settlements: A Unique Solution to a Constitutional Dilemma

Catherine Bell¹

Introduction

On November 1, 1990, the government of Alberta enacted the *Metis Settlements Land Protection Act*, *Metis Settlements Act* ('M.S.A.'), *Metis Settlements Accord Implementation Act*, and the *Constitution of Alberta Amendment Act*.² This legislation provides for protection of a collective land base for settlement members, development of local Metis government, and a financial commitment of 310 million dollars. As part of the final agreement leading to the legislation, the Federation of Metis Settlements ('Federation') agreed to stay a 21-year-old law suit against Alberta which alleged that the province withheld and mismanaged funds arising from the sale of oil and gas from settlement areas.³

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1. Catherine Bell is an Associate Professor of Law at the University of Alberta. Her current research and teaching subjects include Aboriginal peoples and the law, Métis and First Nations government, poverty law and property law.
 2. S.A. 1990, c.M-14.8; S.A. 1990, c.M-14.3; S.A. 1990, c.M-14.5; and S.A. 1990, c.22.2.
 3. The *Metis Population Betterment Act*, S.A. 1938, c.6 as am. S.A. 1940, c.6, s. 8(j) provided that with the approval of the Lieutenant Governor-in-Council, the Minister could by Order make regulations which have for their purpose 'the advancement and betterment of any Settlement Association, or any members thereof, or the administration of the affairs of any Settlement Association' Pursuant to this provision, Order-in Council 1785/43 was promulgated providing for the creation of the Metis Population Betterment Trust Account. This and subsequent regulations provided that various resource revenues were to be paid into the account and administered by the Minister for the benefit of the Settlement Associations. In 1969 the Settlements sued the government for wrongly depositing monies accruing from the sale of natural resources, including petroleum and natural gas, into the provincial treasury but this lawsuit was dismissed on a procedural point. See, *Poitras v. A.G. for Alberta* (1969), 68 W.W.R. 224 (Alta. S.C.). The law suit was renewed in 1974 but had yet to go to trial at the time of the Settlement Legislation negotiations. The province maintained that any rights created under Orders-in-Council setting aside settlement areas were limited to the use of the surface, the province did not divest itself of interest in natural resources in the settlement areas, settlement entitlement to resources and proceeds thereof was limited to surface resources only, in the alternative, if the province did divest itself of interests in

Alberta's initiative in this area raises several important constitutional issues. Of particular concern is whether the legislation exceeds the constitutional powers of the provincial legislature. Other issues include the validity and effect of the process adopted to protect the Metis land base and whether the legislation comprises a modern land claims agreement. The Federation and the province were aware of the potential constitutional difficulties arising from the characterization and implementation of the legislation. However, both parties, disillusioned with the national constitutional conferences on Aboriginal rights, settled on a pragmatic result-oriented approach. Rather than focusing on legal rights, the parties to the negotiations focused on results.⁴

This paper provides a brief overview of the settlement legislation and the negotiation process through which Metis people in Alberta avoided the quagmire of the national constitutional process. It concludes by raising the broader constitutional issues generated by the provincial process. As the legislation is a culmination of negotiation and legislative reform dating back to 1938, the paper begins with a brief history of the Metis settlements legislation.⁵

History of the Metis Settlements Legislation

As a result of federal policy adopted in the late 1800's, Metis in what are now Saskatchewan, Manitoba and Alberta were offered treaty if they lived among and were accepted by Indian communities. Others were offered scrip, a certificate issued to individual Metis redeemable for land or money.⁶ Scrip distribution proved to be an inadequate procedure for settling Metis grievances and providing for the welfare of Metis communities. As a result, many Metis were left impoverished and Metis communities throughout the prairie lost their lands.⁷

In 1895, the colony of St. Paul des Metis was established by the government of Canada in northern Alberta to assist destitute Metis peoples. However, after ten years of operation and without consulting the Metis, the managing board declared the colony a failure and it was opened for public homesteading. Some of the Metis dispossessed by the opening of St. Paul des Metis settled on unoccupied Crown lands in the Fishing Lake area.⁸ Other northern communities were established, composed of descendants of the Metis Nation for whom the scrip system had failed to provide a land base or adequate

the settlement area, the disposition excluded mines and minerals. See, *Statement of Defence to Fourth Amended Statement of Claim*, filed in action 83520, Court of Queen's Bench, Judicial District of Edmonton.

4. F. Martin, 'Federal and Provincial Responsibility in the Metis Settlements of Alberta' in D. Hawkes, ed., *Aboriginal Peoples and Government Responsibility: Exploring federal and Provincial Roles* (Ottawa: Carleton University Press, 1989) 243 at 245-246.
5. For a more detailed discussion see, C. Bell, *Alberta's Metis Settlements Legislation: An Overview of Ownership and Management of Settlement Lands* (Regina: Canadian Plains Research Center, 1994).
6. Scrip distribution was authorized under the *Manitoba Act*, S.C.1870, c.3, s.31 and the *Dominion Lands Acts*, S.C.1879, c.31, s.125(e) and S.C.1883, c.17, s.81(e) and 83.
7. The issue of whether the scrip distribution system was constitutionally valid and justly compensated the Metis for the loss of their lands is the subject of substantial academic commentary and is currently the subject of litigation. See, *Dumont et al. v. A.G. of Canada* (1988) 53 D.L.R. (4th) 25 (Man. C.A.).
8. D. Purich, *The Metis* (Toronto: James Lorimer, 1988) at 133-134. note 5 at 133-134.

means of support, and converted status Indians who surrendered their entitlements under federal Indian legislation in exchange for scrip.⁹

In the 1930s, these communities were suffering as a result of the depression, illness and the threat of losing their land and way of life to settlers migrating to the northern areas of Alberta from the plains. During this period, Joseph Dion petitioned the provincial government on behalf of the Metis for assistance and shortly thereafter the Metis Association of Alberta was formed. The efforts of Metis political leaders resulted in the appointment of a Royal Commission with a mandate to investigate the health, education, relief and general welfare of the Metis population of the province. Although invited to participate in the inquiry, the federal government refused on the basis that 'half-breeds' are not a federal responsibility.¹⁰

The Ewing Commission held hearings throughout Alberta for approximately one year and submitted its report in February of 1936. The Commission concluded that if Metis had special rights arising from Aboriginal ancestry, such rights were extinguished through the distribution of scrip.¹¹ However, the Commission recognized the desperate situation of the Metis and recommended allotment of Crown land for their use and occupation as farm colonies. The Commission also developed proposals for the supervision of settlement activities. Following upon the recommendations of the Ewing Commission the province of Alberta enacted the *Metis Population Betterment Act*.¹² A joint Metis/government committee selected lands to be set aside as settlement areas. Of the initial settlement areas set aside, eight remain which have a combined total area of 1.25 million acres. The settlements are currently home to approximately 5,000 Metis.

Under the original legislation the Minister was deemed responsible for the economic and social development of the settlements. However for 'all practical purposes, the local Supervisor, an employee of the provincial Department of Welfare, was the final authority on the settlement.'¹³ During this period three key developments created friction between the settlement Metis and the provincial government. First, in the 1960's, four Metis settlements were unilaterally disestablished and removed from the settlement regime. Second, settlement members began to question the allocation of revenues generated from the development of natural resources on settlement lands. According to the legislation, resource revenues were to be paid into a trust account administered by the Minister for the betterment of the Metis settlements. In 1969, the settlements launched a lawsuit against the provincial government for wrongly depositing monies accrued from Metis resources into the provincial treasury.¹⁴ Third, defacto self-government was evolving through the informal delegation of control over local settlement affairs to settlement associations. The legal status of the settlement associa-

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9. D. Sanders, *A Legal Analysis of the Ewing Commission and the Metis Colony System in Alberta* (Faculty of Law, University of British Columbia, 1978) [unpublished] at 19 and Alberta Federation of Metis Settlements, *Metisism* (Edmonton: Alberta Federation of Metis Settlements, 1982) at 5.
 10. Sanders, *ibid.* at 188-190; F. Martin, *supra* note 3 at 255.
 11. Alberta, *Report of the Ewing Commission* (Commissioner: Honourable A.F. Ewing) in Native Affairs Secretariat, *Alberta's Metis Settlements: A Compendium of Background Documents* (Alberta: Policy and Planning Division, 1984), section 3 at 3.
 12. *The Metis Population Betterment Act*, is cited as *The Betterment Act*, S.A. 1938, c.6.
 13. F. Martin, 'Self-Government and the Metis Settlements' paper (Faculty of Law 20/20 Celebration, 18 September 1992) [unpublished].
 14. *Supra* note 2.

tions became increasingly uncertain and the powers they exercised remained subject to the goodwill of the Minister.

As a result of these developments, a provincial Task Force was struck in 1972 to examine the legislation. The Task Force recommended that the Metis settlements move toward a form of local self-government and that the setting aside of lands for the Metis be a perpetual commitment.¹⁵ The report resulted in the devolution of further responsibility to the settlements. By 1979, most Settlement Councils had assumed responsibility for the delivery of local housing, education, economic, and cultural programs. These events, coupled with government seizure of Metis files from settlement offices during the natural resources litigation, fuelled even greater political organization and lobbying by settlement Metis for a new deal.¹⁶ The seizure also led to an investigation by the provincial Ombudsman who recommended that a joint Metis-government commission be formed to review the administration of the *Metis Betterment Act*.

The McEwan Committee engaged in a series of consultations with settlement members and completed its report in July, 1984. The unanimous recommendations of the Committee included securing a permanent land base for the settlement Metis, local government over settlement lands and greater control by settlements over economic and social development. In particular, the Committee proposed the repeal of the *Metis Betterment Act* and the introduction of new legislation.¹⁷ Many of the details of the recommendations of the Commission are reflected in the 1990 Metis settlements legislation.

Avoiding the National Forum

During the McEwan investigations, and following the tabling of the report, both the province and the Federation were also participating in the first ministers' conferences on Aboriginal rights. Much of the 1984 conference was devoted to Metis issues including definition of the Metis people, jurisdiction over Metis people and the existence of Metis Aboriginal rights. Some argued that Metis were included in the definition of Aboriginal peoples as a matter of political expediency. Others argued Metis rights were effectively extinguished by the scrip distribution system. Most provinces maintained that the Metis, as an Aboriginal people, fell under federal jurisdiction and were not the responsibility of the provincial governments.¹⁸ The federal

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15. 'The Report of the Metis Task Force Upon *The Metis Betterment Act*, Metis Settlements and the Metis Rehabilitation Branch' (Chair: T.F. Roach), in *Alberta's Metis Settlements*, *supra* note 10 at 9.
 16. *Supra* note 3 at 269-271.
 17. Alberta, *Foundations For the Future of Alberta's Metis Settlements: Report of the McEwan Joint Committee on the Metis Betterment Act and Regulations* (Chair: Dr. G. MacEwan) (Edmonton: 1984).
 18. For a discussion of the position of the provincial governments during the First Ministers' Conferences on Aboriginal Constitutional Matters see, R. Dalon, 'An Alberta Perspective on Aboriginal Peoples and the Constitution,' in M. Boldt and J.A. Long, *The Quest For Justice: Aboriginal Peoples and Aboriginal Rights* (Toronto: University of Toronto Press, 1985) at 111. Some provinces have indicated willingness to negotiate with the Metis on areas of provincial jurisdiction. For example, on the eve of the 1987 constitutional conferences, Premier Grant Devine of Saskatchewan indicated his willingness to transfer title to remaining farm colonies to Metis and non-status Indians. More recently, Saskatchewan and Manitoba entered negotiations for devolution

government asserted that the Metis were under provincial jurisdiction but indicated a willingness to assume 'a measure of responsibility for them as disadvantaged peoples.'¹⁹

It soon became clear that the provinces and other Aboriginal groups represented at the conferences would not agree on these issues. Further, although the Federation recognized the jurisdictional problems associated with bilateral provincial/Metis negotiations, they maintained a preference for working with the province which they believed was more responsive to needs and aspirations of Metis settlers than a distant federal government. The province of Alberta also agreed that local Metis issues should be resolved through provincial initiatives. Alberta did not recognize a special legal relationship with the Metis in a constitutional sense different from their relationship with other citizens of the province. However, Premier Lougheed was prepared to negotiate with the Metis because of their unique historical relationship with the provincial government. Alberta maintained that the province had jurisdiction to negotiate with the Metis and enact legislation affecting Metis and Metis lands under sections 92(8) and 92(13) of the *Constitution Act, 1867* which provide provincial jurisdiction in respect to local government, property and civil rights.²⁰ Further, Alberta argued even if the Metis fell within federal jurisdiction, this conclusion would not solve anything as the federal government's decision to assume responsibility under s.91(24) is discretionary and would likely not be exercised.²¹

One of the central concerns of the Federation was to find a way to protect the settlement land base from further expropriations. In 1985, the Federation and former Premier Lougheed agreed to find a way to give the land base constitutional protection without getting blockaded by the national debates. Specifically, the Premier promised to find a method to protect settlement lands through an amendment to the *Alberta Act*.²² The agreement was conditional upon the settlements developing fair and democratic procedures for membership and land allocations. This framework, subsequently labelled the 'made in Alberta' approach, was incorporated in a unanimous resolution of the Alberta legislature on June 3, 1985 ('Resolution 18').²³

The bare-bones legislation proposed by the MacEwan Committee and the response of the Metis to Resolution 18 were the basis for further negotiations. These negotiations were informed by four central principles:

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- of administrative control over provincial services such as education and child welfare. See, Purich, *The Metis*, supra note 7 at 200.
19. B. Schwartz, *First Principles: Constitutional Reform with Respect to the Aboriginal Peoples of Canada, 1982-1984* (Kinepton, Queen's University Institute of Intergovernmental Relations, 1985) at 184.
 20. C. Henry, 'Resolution 18 and Community Self-Government Negotiations' [unpublished] Mr. Henry was one of the negotiators acting on behalf of the province of Alberta.
 21. R. Dalon, supra note 17 at 91, 106 and 111.
 22. Originally *The Alberta Act, 1905*, 4-5 Edw.VII, c.3 now identified as part of the Constitution of Canada by s. 52(2)b of the *Constitution Act, 1982* (U.K.), 1982, c.11.
 23. Alberta, Legislative Assembly, *A Resolution Concerning an Amendment to the Alberta Act*, No. 18 (3 June 1985) in Alberta, *Implementation of Resolution 18 (A Resolution Concerning an Amendment to the Alberta Act)* (Edmonton: Alberta Municipal Affairs) at 2-4.

1. The parties would attempt to seek agreement on a desirable outcome and determine the best way that the outcome would be achieved, rather than focus on the definition of legal rights and the actions required to recognize those rights.
2. Negotiations would be conducted without prejudice to Aboriginal and treaty rights.
3. Local government would be achieved through delegation of provincial power within the existing constitutional framework. This meant that relevant federal law and the *Charter of Rights and Freedoms* would apply to settlement lands.²⁴ Also, provincial law would continue to apply unless specifically excluded by the legislation.
4. The Federation would consult with settlement members throughout negotiations.²⁵

In 1989 the Federation and former Premier Getty signed the Alberta-Metis Settlements Accord which set out the framework for self-government and the process for protecting the land base. The Accord gave rise to the introduction of four new Bills to the Legislative Assembly (33, 34, 35 and 36)²⁶ and the eventual enactment of the *Metis Settlements Accord Implementation Act*, *Metis Settlements Land Protection Act*, *Metis Settlements Act* ('M.S.A.'), and the *Constitution of Alberta Amendment Act*, 1990.²⁷ This legislation has four major components: local government, settlement membership, land allocation and protection and financial commitments.

Key Features of the Settlements Legislation

The M.S.A. creates four institutions of Metis government and sets out the rules that these institutions must follow. These institutions are Settlement Councils, General Council, the Minister and the Metis Settlements Appeal Tribunal.²⁸ Each settlement has a council with the rights, powers and privileges of a natural person. Councils are comprised of 5 councillors elected from members of the settlement. Settlement Councils also have powers analogous to those of a municipality. By-law authority includes the power to enact by-laws concerning matters of internal management, health, safety, welfare, public order, safety, fire protection, nuisance, pests, animals, airports, advertising, refuse disposal, parks, recreation, control of business, installation of water and sewage connections, sewerage fees, development levies, land use planning and development and other miscellaneous matters.²⁹ All by-laws must be given three separate readings at a meeting of the Settlement Council and, after the second reading, must be presented at a public meeting and approved by a majority vote of the settlement members present at the meeting.³⁰ Settlement Councils also have authority to make decisions on membership and land allocation. These decisions may be appealed to the Metis Settlements Appeal Tribunal (discussed below). By-laws, membership and land

24. For example, the *Migratory Birds Convention Act*, R.S.C. 1985, c.M-7 applies to settlement lands.

25. See, *supra* note 12 at 5-7 and *supra* note 19.

26. 2d. Sess., 22nd Leg. Alta., 1990.

27. *Supra* note 1.

28. Minister is defined in the Act as the member of Executive Council responsible for the administration of the Act. For a detailed discussion of settlement government see T. Pocklington, *The Government and Politics of the Alberta Metis Settlements* (Regina: Canadian Plains Research Centre, 1991).

29. By-law authority is specified in Schedule 1 of the *Metis Settlements Act*, *supra* note 1.

30. *Ibid.* ss. 52-55.

allocation decisions must also conform with provincial legislation and General Council policy.

The General Council is a representative corporate body composed of four elected officers and all of the settlement councillors. It holds collective title to settlement lands, makes policies affecting collective interests, and manages the consolidated fund (former trust fund). Policy areas include membership, land development, surface access, finance, hunting, fishing and trapping. These policies require varying degrees of settlement approval depending on the subject matter of the policy.³¹

The Minister of social services continues to have a role under the new legislation. All General Council policies must be approved or vetoed by the Minister within ninety days. The Minister may also make regulations at the request of General Council including regulations specifying that particular policies, amendments or repeals are not subject to Ministerial approval. Unless otherwise provided by legislation, General Council policies inconsistent with provincial legislation are of no effect to the extent of the inconsistency. Policies relating to hunting, trapping and gathering are given priority over provincial legislation if these policies are approved by all settlements and the Lieutenant Governor in Council.³²

The M.S.A. also establishes the Metis Settlements Appeal Tribunal. The Tribunal is a quasi-judicial body established to settle disputes relating to membership, land dealings, surface rights, and any other local matter if the parties involved agree to submit to the Tribunal's jurisdiction. It has broad remedial and alternative dispute resolution powers. Its composition of government and settlement appointees allows for the incorporation of a common sense and cultural perspective rooted in the experience of settlement living. Decisions of the Appeal Tribunal may, with leave of the Alberta Court of Queen's Bench, be enforced in the same manner as a judgment or order of the Court. Appeals from a decision of the Appeal Tribunal on a question of law or jurisdiction may be made to the Alberta Court of Appeal.³³

Another major component of the settlements legislation concerns membership.³⁴ Metis persons are identified as people of Aboriginal ancestry who identify with Metis history and culture.³⁵ Settlement Councils are given the authority to accept or reject applications for membership subject to the Membership Regulation and conditions relating to age, residence, and proof of Metis identity. Settlement Councils also have the authority to terminate memberships and allocate land to settlement members.³⁶

The legislation also clarifies land ownership and establishes a mechanism for the protection of the Metis land base. Under the Accord, fee simple title to the surface of Metis lands is issued to General Council.³⁷ Title to water and subsurface resources in the settlement area is retained by the province, but entry on settlement lands is prohibited without the consent of General Council and the affected Settlement Council

31. *Ibid.* ss.214-232. All policies are published in the *Alberta Gazette*.

32. *Ibid.* s.226. If the Minister does not approve or disapprove a policy within 90 days the policy becomes law.

33. *Ibid.* ss.180-213.

34. Along with the legislation, a *Transitional Membership Regulation* ('Membership Regulation') was enacted for the purpose of clarifying the status of former members. Alta. Reg. 337/90.

35. *Metis Settlements Act*, *supra* note 1, s.1(j).

36. *Ibid.* ss.74-98.

37. Fee simple title is the greatest interest a person can acquire in land.

in accordance with the terms of a Co-Management Agreement.³⁸ The Co-Management Agreement addresses issues of access, compatibility of development schemes with Metis land use, the establishment of settlements committees with powers to deny or set conditions of access, and Metis economic development rights. It also enables General Council to approve and negotiate interests in mineral development agreements entered between third parties and the Crown.

General Council may also make policies in consultation with the Minister concerning a number of land-related matters including the creation, termination, disposition, and devolution of interests in settlement lands.³⁹ Pursuant to this policy, General Council has prepared a policy which sets out a unique system of individual Metis land interests.⁴⁰ Three distinct Metis interests in settlement land are created: Metis title (held by the settlement or settlement members), provisional Metis title (conditional title issued to new members) and allotments. The policy also provides for the creation and transfer of lesser interests such as easements, leases and licences to settlement and non-settlement members. A unique feature of the policy is the attempt to balance the collective rights of the settlement with the individual rights of members through mechanisms such as limitations on the right to transfer interests to non-members and the inability to take security against member interests.

One of the main concerns of settlement members throughout negotiations was to protect this land. The *Metis Settlements Land Protection Act* was passed to meet this objective. This Act confirms the terms of the land grant and places limits on disposition. Of particular significance is the prohibition against alienation of settlement land without consent of the Crown, General Council, the majority of the members of the affected settlement and the majority of all settlement members. This Act and the *MSA* also place severe restrictions on provincial powers of expropriation and security interests in Metis lands.

The most unique step taken to protect the land base is the enactment of the *Constitution of Alberta Amendment Act* ('*Amendment Act*'). Section 45 of the Canadian constitution allows a province to amend its constitution (*Alberta Act*) through ordinary provincial legislation. Provincial constitutions are also contained in instruments which form part of the Canadian constitution. In order to have instruments forming part of the Canadian constitution amended, it was felt that federal involvement was necessary. Also, federal involvement would make it more difficult for the province to subsequently alter or repeal changes to its constitution. Despite these issues, the federal government refused to participate in the amending process. Consequently the province had to act on its own to amend the provincial constitution, but undertook to continue efforts to have the Canadian constitution amended. The *Amendment Act* amends the *Alberta Act* by confirming the terms of the land grant to the Metis; prohibiting provincial expropriation; and preventing alterations to the land grant, amendments to the *M.S.A.* or changes to General Council without consent of General Council. Of particular interest is section 7 of the *Amendment Act* which provides that the *Amendment Act* can only be

38. Appended as Schedule 3 to the *Metis Settlements Act*, *supra* note 1.

39. *Ibid.* s.99 and 222. Note that the *Land Titles Act*, R.S.A. 1980, c.L-5 does not apply to the settlement area unless expressly incorporated. See *Metis Settlements Land Registry Regulation*, Alberta Regulation 361/91.

40. *Metis Settlements General Council Land Policy* (G.C.P. 90003), *Alberta Gazette*, 1992, I.2592.

amended or repealed after a plebescite of settlement members where a majority of the members of each settlement vote in favour of the proposed change.⁴¹

It is of course impossible to run a government or maintain viable communities without money. The *M.S.A.* creates a two part Consolidated Fund administered by the General Council. The main source of payment into this fund are surface revenues and monies generated by co-management of subsurface resources.⁴² The *Metis Settlements Accord Implementation Act* also establishes a Transition Fund and the Metis Settlement Transition Commission as a temporary mechanism to assist in implementing self-government. Transitional funding is provided through annual conditional grants of 25 million dollars over a period of seven years to be used for capital projects, operations and maintenance (e.g. administration, protective services, environment, utilities, community service, land development, transportation, housing). The annual sum of five million dollars is also to be held by the Commissioner or deposited in part two of the Consolidated Fund over a term of seven years. The General Council is also to be paid annual payments of ten million dollars a year over a period of ten years for the benefit of the settlement and its members. In total, the transitional financing amounts to the payment of 310 million dollars for the benefit of the Metis over a period of 17 years. At the expiration of 17 years, it is hoped that 'the Settlements will have developed economically to the point where they will function financially in the same way as other local governments.'⁴³

Constitutional Issues

This initiative by the provincial government of Alberta is the first of its kind and raises many unanswered legal questions. Three will be highlighted to conclude this discussion:

1. Is the legislation *ultra vires* the jurisdiction of the provincial government and, if so, what are the possible consequences?
2. Is this purely a provincial matter?
3. Can one provincial legislature effectively bind a future legislature?

The issue of constitutional jurisdiction over Metis peoples is the subject of substantial academic and legal debate. Section 91(24) of the *Constitution Act, 1867* grants jurisdiction over 'Indians and lands reserved for Indians' to the federal government.⁴⁴ The courts have clearly stated that the reference to 'Indians' in 9(24) includes Inuit peoples.⁴⁵ However, the issue of the inclusion of Metis peoples has never been raised before the courts. An examination of historical records, pre- and post-Confederation statutes, federal political practice and case law can be used to support two contradictory conclusions: all Metis are s.91(24) Indians or only those who lived the way of life of the Indians and with the Indians are s.91(24) Indians. The former interpretation gains

41. Notwithstanding s.7, the *Amendment Act*, can be repealed if Metis land base is ever protected by the Canadian Constitution.

42. Payments of money out of part two of the Consolidated fund is severely restricted and is not subject to payment out in accordance with General Council Policy until April 1, 2007. In essence, part two operates a secure reserve fund for the settlements. See, *Metis Settlements Act*, *supra* note 1 s.142(2).

43. Government of Alberta News Release (1 November, 1990) quoted in L. MacLaclan, 'The 1990 Alberta Metis Settlements Legislation: An Overview' *Resources* (winter 1991).

44. (U.K.), 30 & 31 Vict., c.3.*Supra* note 7.

45. *Re Eskimo* [1939] S.C.R. 104.

greater credibility if one also considers rules of constitutional interpretation. For example, one can argue that 91(24) is to be interpreted in a flexible and contemporary manner. This position is supported by *Re Eskimo* which defines Indians as 'all present and future Aboriginal native subjects of the proposed confederation of British North America'⁴⁶; the *Sparrow* case, which suggests that a generous and liberal interpretation of constitutional provisions is demanded;⁴⁷ and s.35(2) of the *Constitution Act, 1982*, which includes Metis in the definition of Aboriginal peoples of Canada.

If the Metis are s.91(24) Indians, Alberta's Metis legislation could exceed the constitutional powers of the provincial legislature. Section 91(24) prevents provinces from passing legislation that singles out Indians for special treatment.⁴⁸ The Metis settlements legislation is aimed specifically at Metis peoples as a distinct class of people. The fact that the federal government has historically denied jurisdiction for Metis people does not resolve the legal issue. Parliament can not alter the constitution by legislation or policy.⁴⁹

The complexity of this issue was recognized in the negotiations and drafts of the Charlottetown Accord. In order to settle the debate once and for all the federal government agreed to the following amendment to the Canadian constitution:

91A. For greater certainty, class 24 of section 91 applies, except as provided in section 95E, in relation to all Aboriginal peoples of Canada.

One of the effects of this amendment was to clarify that only the federal government has the authority to make laws respecting Metis and lands reserved for Metis. Thus a second amendment headed 'Metis and Metis Settlement Lands in Alberta' provided:

95E. In the context of 91A, the legislature of Alberta may make laws, and the Parliament of Canada may make laws, in relation to the Metis in Alberta and to Metis settlement lands in Alberta and, where such a law of Alberta and a law of Parliament conflict, the law of Parliament prevails to the extent of the conflict.

The Charlottetown Accord failed when put to a national referendum. What does this mean to Alberta's Metis settlements? The answer is not clear. It might be argued that provincial legislation is not invalid if it has a beneficial rather than detrimental effect on Aboriginal people.⁵⁰ Further, if challenged it is unlikely that the federal government will sit idle and watch the dismantling of a scheme it has accepted as valid and beneficial. Rather, the federal government is more likely to endorse the provincial scheme through the enactment of supporting federal legislation. Nevertheless, the issue remains important as questions might arise relating to the benefit of the settlement scheme. It continues to be of particular concern to other provinces which do not want responsibility because of significant Metis populations and limited resources.

46. *Ibid.* at 118, 119 and 121.

47. (1990), 70 D.L.R. 385 (S.C.C.).

48. *R. v. Dick* [1985] S.C.R. 309.

49. K. Lysyk, 'The Unique Constitutional Position of the Indians' (1967) 45 *Canadian Bar Review* 513 at 515.

50. See eg. A. Pratt, 'Federalism in the era of Aboriginal self-government' in D. Hawkes, *supra* note 3 at 53.

Another unresolved issue is the efficacy and legitimacy of the process adopted to entrench the Metis land base in Alberta's constitution. The *Constitution of Alberta Amendment Act* seeks to protect changes to Alberta's constitution affecting Metis settlements by establishing a procedure which must be followed by present and future governments of Alberta before the amendments to the *Alberta Act* can be altered or repealed. This raises the issue of whether the Getty government had the power to bind future provincial governments. The traditional approach to this question emphasizes the freedom of provincial legislatures to enact or repeal provincial legislation. Adopting this approach, a court might conclude that future governments cannot be bound, leaving the Metis land base vulnerable to the political whims of future provincial governments. More contemporary academic opinion argues that a distinction has to be drawn between substance and procedure. Attempts to bind successor governments on matters of substantive policy are not effective, but arguably attempts to bind successors as to the procedures by which, or manner and form in which, future legislation is to be enacted, amended or repealed is effective.⁵¹

The validity of the process adopted to amend the constitution of Alberta is also open for debate. The process was one which assumed that the protection of Metis lands is a purely provincial matter. An argument can be made that the definition and protection of Metis rights is not purely provincial in nature because this could affect the definition of Aboriginal rights under s.35 of the Canadian constitution. Thus, recognition and protection of a Metis land base are properly dealt with through a national process involving the other provinces.⁵² Indeed, Aboriginal rights language was intentionally avoided to prevent other governments and Aboriginal groups from challenging the provincial initiative.

The problem that arises is whether the intent of the parties and the absence of Aboriginal rights language in the legislation is sufficient to avoid the problem of having the legislation classified as legislation concerned with Aboriginal peoples and Aboriginal rights. Given that the Metis are recognized as an Aboriginal people in the *Constitution Act, 1982*, land entitlement is an Aboriginal right, and self-government an Aboriginal right; it may be that the lack of express intent and 'buzz' words is irrelevant in the classification of the legislation.⁵³ The real issue is whether the Metis have existing Aboriginal rights. The author supports the position that they do, but an examination of this complex issue is beyond the scope of this paper. If Settlement Metis have existing Aboriginal rights, the absence of Aboriginal rights language may not be an issue in determining the nature of the agreement.

Conclusion

The Metis settlements legislation represents a significant accomplishment in the resolution of historical grievances between the Settlement Metis and the Alberta government. Many of the specific problems arising from the administration of the *Metis*

51. For a further discussion see R. Elliott, 'Rethinking Manner and Form: From Parliamentary Sovereignty to Constitutional Values.' (1991) 29 *Osgoode Hall Law Journal* 215.

52. *Supra* note 3 at 278-279.

53. It should be noted that a condition for the entrenchment of the land base in the Accord (which led to the legislative package) is that the natural resources trust litigation and any issues raised in it would be resolved. The pleadings in the natural resources litigation were amended to include an Aboriginal rights claim prior to the signing of Accord.

Betterment Act have been resolved through the good will of the province and the Metis and the desire to achieve a practical resolution to Metis grievances. The entrenchment of the land base, establishment of the Appeal Tribunal and the Co-Management Agreement place significant control over Metis lands in the Metis people, a form of control that many Indian peoples have yet to acquire. The system of government is a system of a cooperative delegation which may serve as a model for other Aboriginal groups who accept delegated government, want greater powers than those under the existing *Indian Act* and are able to place trust in the parties with whom they are negotiating.

Sharing the Business Wealth — Inuit Style

Bill Lyall¹

Introduction

Two points in the title that I'd like to expand on are the words 'Inuit Style' and the words 'sharing the wealth'. I'm going to deal with this as 'Northwest Territory (NWT style' — not 'Inuit style'. Why? Because Co-ops are Aboriginal organizations that span all regions and cover Inuit, Dene and Metis. The following is very important. It's the only organization that has allowed us to work together: government has not divided us; land claims and separation of the territories have not divided us; we talk about this as a source of pride and strength. To understand why this is a source of pride you have to understand the area we work in: Co-ops in NWT cover and serve a population of 50,000; are spread over 1/3 land mass of Canada in small isolated communities [average size of 800], and serve Inuit, Dene, Metis and non-Aboriginal members. This is an amazing accomplishment.

Sharing the Wealth

This wording reflects the typical big business or big government approach to development. For these groups, sharing the wealth means providing investment opportunities that provide a return, but stop at any meaningful input and control by our people. Co-ops provide much more than 'sharing the wealth'. In the words of our mission statement, Co-ops 'develop and safeguard the participation of the northern people in the business and commerce of their country, to assure control over their own destiny'. Co-ops have been the leaders in enabling our people to participate meaningfully in their community economy — in the decision-making and control, as well as in the financial benefits. So I'd like to change the title for my presentation to: *NWT Economic Development — the Co-op Success Story*. To understand why we are successful you need to understand how we operate.

The Co-op Success Story

Co-ops are like other businesses in two ways: first and foremost, the bottom line must be there to succeed as a Co-op. Secondly, they are owned by shareholders who invest in their Co-op. That's where the similarity ends. In addition to these points in Co-ops,

1. Bill Lyall is President of Arctic Cooperatives Ltd. and lives in Cambridge Bay, NWT.

the shareholders are community residents. They can't sell their shares to outside individuals or groups. The shareholders all have one vote in decision making, and elect a board from their group. This means the ordinary person in the community can and does get elected to direct the business affairs. You don't get a 'return on investment'. You get a 'return on patronage'. This means you get a return on the profits based on how much business you did with the Co-op that year. If you don't use the services, you don't get a return. It is this structure that has made local Co-ops leaders in ensuring local control over community economic activities.

This structure in itself will not build a long-term successful business. Co-ops recognized that they were competing against some big businesses with expertise and capital that Co-ops didn't have as small community businesses. To make sure they could succeed, they formed two organizations that they invest in, own, control, and provide services to: the Arctic Co-operatives Limited (ACL), and the NWT Cooperative Business Development Fund (CBDF). ACL provides purchasing, marketing and business development services, and the CBDF acts as the financial arm, pooling the financial resources of the system.

The Co-ops of the NWT, working together in a Co-operative manner through their two service organizations, have built up the most successful, Aboriginally-controlled group of community businesses in Canada. Residents in the NWT now own businesses that have combined revenues of over \$65 million; annual consolidated savings in 1994 of over \$2.5 million; combined assets of \$60 million; and equity, that money that the members have invested and built up through savings, of over \$18 million. These same Co-ops provide services in 32 retail stores, 21 hotels, 10 cable TV networks, and 22 communities in the petroleum service sector. They have arts and crafts sales of over \$2 million, and own rental housing and commercial rental space. These Co-ops provide opportunities to over 250 northerners to participate in directing these businesses by sitting on the Boards of Directors, provide employment to over 650 people in the north, and provide annual wages of over \$10 million to northern residents.

What are the challenges that face us in the future? — Competition from the 'Big Companies'. North West is our major competitor in the retail field. They are well-capitalized and have minimal competition, other than the NWT Co-ops, in most of their market area — which also happens to be the majority of Aboriginal communities. They have taken an increasingly aggressive approach in the NWT market, the only market with competition. Another competitor is NorthwesTel, a subsidiary of BCE Inc. They have recognized the potential of the cable TV market in terms of the future, and are aggressively competing with the Co-ops for control of the NWT cable TV network.

Land Claims and Regionalization

One of the main expectations people have with land claims settlements is increased economic activity. Communities in the NWT have limited potential in this area. A danger exists for Aboriginal investment groups investing in developments that could be detrimental to existing Aboriginal businesses. The tendency for people to focus on local and regional interests without looking at the larger benefits generated from cooperation across boundaries grows with the increasing regionalization of the NWT. Where are Co-ops focusing for the future?

1. Communications technology. We see a great future in the cable TV systems evolving into key components for the Information Highway and communica-

tions systems in the future. We intend to become major players in the NWT in this field.

2. Tourism development. We see a need to maximize the use of our hotels through attracting increased awareness and interest in ecotourism and cultural tourism activities.
3. Other Aboriginal markets. We see a growing interest by First Nations groups throughout southern Canada, increasing ownership participation of the retail trade. We are working with various southern groups to extend our services beyond the NWT Co-op structure.

Conclusion

The Co-ops are a success story for the Aboriginal people of the NWT. Their success comes from the fact that they not only have 'shared the wealth', but have played a significant role in Aboriginal-owned economic endeavours. NWT Co-ops have developed stable and effective central organizations that enable Aboriginal and non-Aboriginal people from across the NWT to accomplish community growth while retaining local control and ownership. Co-ops provided a way of ensuring permanent, long-term community control of economic development activities. They have built a strong economic base for northerners before all of the good business opportunities were taken by outside interests. Finally Co-ops have provided employment income and financial return on the profits generated, to local people. Northern local economies are really limited in what they can generate in jobs and income, therefore, this last point is really critical for our members.



The Significance of First Nations' Access to Natural Resources and Economic Development

Harvey Payne and Chief Harvey Nepinak¹

Evolving First Nations governments require a large measure of economic development and support to achieve self-government community goals and ambitions. An economic base for First Nations is imperative. It is illusionary and misleading to talk about self-government in the absence of these pre-requisites: an economic base and development of its potential. For most First Nations the economic base is in the natural resources.

Although sustainable development in its contemporary context has a relatively recent origin with The Brundtland Commission, the notion has a long-standing tradition throughout the indigenous cultures of the world. In this context, the indigenous cultures of Canada are no exception, and it would be logical and appropriate for Aboriginal Peoples to provide leadership in natural resources renewal and sustainable development. The focus of our paper is on natural resources and their legitimate sustainable development through a liberal, but nonetheless rational, understanding of treaty and aboriginal rights.

The Canadian paradigm in natural resources management and development has resulted in poverty in Aboriginal populations and severely restricted the development of viable First Nations economies and communities. Aboriginal Peoples were last treated as equal partners in natural resources use and management at the beginning of the fur trade, when a system comparable to the contemporary notion of co-management of resources was in effect. At that time the Aboriginal Peoples hunted, fished and trapped and bartered or sold the products of their work to the traders. Gradually, and especially after World War II, the Canadian provincial governments began to exert control on the manner in which Aboriginal people could hunt and fish and the fashion whereby they could dispose of their products of the land. The sale of wildlife became restricted in the case of some species and prohibited in the case of others. Aboriginal Peoples lost their commercial enterprises and the opportunity to develop their econo-

1. Dr. Harvey Payne is a biological consultant working with the Manitoba First Nations. Chief Harvey Nepinak is the chief of the Waterhen First Nation.

mies in the fashion of the times. Aboriginal Peoples were subjected to hunting and trapping laws which were based on the wildlife values of Euro-Canadians.

There is a significant array of natural resources issues that are of considerable importance and concern to Aboriginal people in Manitoba. There are three major aspects to these concerns: the infringement by federal and provincial policies and legislation on the exercise of Aboriginal and treaty rights by Aboriginal people; the negative repercussions for them produced by large-scale exploitation of renewable resources; and the ongoing disputes regarding the exact scope of constitutionally protected rights and their practical import for the decision-making process on the management of natural resources. 'Aboriginal people were to have been partners in the new arrangement [following treaty], with an equal say in defining their on-going relationship with the Crown. They have been denied that.' (The Report of the Aboriginal Justice Inquiry of Manitoba 1991). Aboriginal Peoples in Canada and Manitoba in particular, have been alienated from their traditional use and access to natural resources by the treaties and subsequent federal and provincial laws and policies. The problem is global in nature and has substantially contributed to global poverty and urban slums. We believe that the solutions to the Canadian problems are the same as those prescribed for global sustainable development. Global environmental quality depends, in large degree, on the elimination of poverty. We believe that sustainable development in Canada also relies on the elimination of poverty in Aboriginal communities and the rational development of natural resources in a fashion that sustains the rural economies. Today, we will illustrate how a beginning can be made to restore Canada's diminished wealth of natural resources and how some natural resources can be re-developed in a more sustainable fashion. Widespread rural and Aboriginal poverty can be eliminated. Aboriginal and treaty rights to natural resources can be honoured through developing wealth generating industries.

All over the developing world the cultures and continued existence of patterns of behaviour and living of Aboriginal Peoples are threatened by global economics and, in particular, the corporate development of land and resources to assist developing countries repay national debts they owe to developed nations. The situation in Manitoba is similar, an example being the dislocation and disruption of Aboriginal Peoples and their communities in northern Manitoba to accommodate the Manitoba-Hydro developments, starting in the seventies, continuing to the present and projected into the future.

Aboriginal Peoples are a powerful force on the Canadian political landscape and may lead the world in the assertion of indigenous rights within a western society and economy. Regrettably, the political and legal successes have not been transformed into developments which improve the lives and well-being of Aboriginal Peoples. Practical import of the principles of the legal successes of Aboriginal Peoples into their daily lives and incorporation in development programming is the only way Aboriginal communities can achieve sustainable social and economic goals consistent with the mainstream of Canadian society.

There are other opportunities, aside from corporate developments, which are often overlooked, that can be attained through local involvement in natural resources management and development. For example, there is a possibility for the restoration of flourishing wildlife populations through new regimes that manage the land base in an integrated fashion. Such development may mean local modification of current resource development activities, which are largely driven on a provincial or regional basis. Newly restored wildlife populations could be managed to generate both wealth and jobs

for local communities, through development of new industries and management institutions in tourism, exotic meats, hunting safari expeditions, educational seminars and ecological tourism. Sustainable development is the essence of these proposals and appropriate technologies and public interest and sentiment may provide the energy and force that will drive the development of these new industries. Large herds of animals can be managed and cropped for trophies or exotic meat production for local and export use. Few of these ambitions can be achieved through centralized management systems, such as the systems that are in place today.

Forestry issues and Aboriginal rights have received little attention in Canadian courts, yet they constitute some of the most controversial matters. The issues are becoming increasingly topical. According to the Aboriginal Justice Inquiry (AJI): It is clear that large-scale forestry operations can have negative effects upon the exercise of Aboriginal and treaty rights in relation to land usage and wildlife harvesting. Aboriginal Peoples have a constitutional interest in off-reserve forests that must be respected. Forestry management could perhaps be better realized, through co-management agreements between the Province and the Aboriginal groups affected.

Tourism is often considered to be the world's fastest growing industry. There are more wealthy travellers than ever before and they seek more from their experience than did the average tourist of the past. The contemporary traveller often seeks an interactive experience with local people and the land. This aspect of tourism is not well developed in rural Manitoba nor with Aboriginal Peoples. Tour guides will require good knowledge of local history, the culture of local people, the natural history of local plants and animals and the overall ecology of the region.

Aboriginal Peoples have the right to a share of the natural resources in their region and we believe that it includes the authority to develop the resources in a contemporary fashion. At present, First Nations have only a limited economic future. The provincial government proposes large-scale resource development projects wherever possible: these projects do not provide for the needs of Aboriginal Peoples or local economies in general and serve to heighten the conflict between the provincial government and Aboriginal Peoples. Invariably, jobs are promised but rarely do the developments provide more than a few temporary jobs. The forest industry requires fewer and fewer people to harvest and process a given volume of wood. This technological trend will continue, while the volume harvested will probably decrease, further reducing the number of jobs created. The forest industry will never provide for the needs of Aboriginal communities within the forest region.

In those parts of the Province that are removed from the agricultural zone, many people in the First Nations continue to eke out subsistence from the natural environment. This economy has become diminished in recent times, as a result of immense changes in the economies of First Nations communities. The changes have been occasioned by large-scale developments, social assistance, and in large measure by government policies which failed to recognize the value of the domestic extant economy. On the contrary, the government encouraged and promoted the wage economy — with a disastrous failure rate — and thereby largely through neglect allowed the extant economy to fall into disrepair and collapse. Despite the unfavourable pressures toward abandoning the traditional economy, it continues to varying degrees in First Nations. It is contended that new economies will be best built on the old economy, and that the right to do so is an Aboriginal right.

Aboriginal rights to resources should not be restricted to the right to hunt for food for as long as wildlife continues to exist with conflicting activities on the landscape. Nor can the province be permitted to restrict or curtail Aboriginal rights through large-scale developments: curtailments which they lack the authority to legislate directly. Social and economic justice must prevail if we are to promote the common interest on which sustainable development is hinged. Aboriginal Peoples must enjoy contemporary access to natural resources for development of vibrant economies based on sustainable development of natural resources. Institutional reform is required to enable Aboriginal Peoples to define and execute an effective role in natural resource use and development.

We believe that the gains made in the recognition of Aboriginal rights in the Canadian courts, transformed into an economic development strategy based on the contemporary development of the traditional economy in natural resources will not only relieve the poverty conditions in Aboriginal communities, but will also result in environmentally sustainable developments.

In Canada, we cannot even hope to maintain a healthy environment through constraints on industrialization, while the economic forces of international corporations control landscape development and rural de-population. The present balance of power between the corporations and governments with respect to environment serves neither the rural population or the environment. The Crown land management systems and provincial policies which control the use of most of the rural land base in Canada and Manitoba in particular, are non-functional in terms of addressing the needs and aspirations of rural Canadians and Aboriginal Peoples or the environment.

Jeannette Armstrong is an Okanagan writer. She is fluent in English and Okanagan. In her essay 'Speaking for the Generations' she discusses how the land permeates her writing and her native language. She contrasts expression in English and Okanagan. Her writing affirms the wholeness, rather than the contrast or conflict, of people and environment in Okanagan language and culture. She wrote:

Language, as I understand it from my ancestors, was given to us by the land we live within. The land constantly speaks. It is constantly communicating. We survived and thrived by listening intently to its language and retelling its stories to our succeeding generations. Jeannette Armstrong *Talking Stick Magazine* v1 n4 p9.

For Aboriginal Peoples, the land is part of their identity as a people. The earth was their Mother, the animals were their spiritual kin and all were part of the greater whole, which was life. Their cultures were grounded in nature. The thinking of Aboriginal Peoples was cyclical, in accord with the natural environment, rather than linear like that of the Europeans. Everything was thought of in terms of its relation to the whole, not as individual bits of information to be compared one with the other. Aboriginal philosophy was holistic, and did not lend itself readily to dichotomies or categories as did European philosophy. This description of aboriginal life and thought is a summary of that provided in the Report of the Aboriginal Justice Inquiry of Manitoba (AJI).

In advertising material and therefore in layman's terms the International Institute for Sustainable Development (IISD) offers the following descriptive definition of sustainable development.

Sustainable development implies a revolution in the way we do business. It means reharnessing the market in ways that support the environment and the economy, and that benefit people, especially the poor. It means living off the interest of our natural resource capital, while safe-guarding and rebuilding that capital. IISD

Aboriginal Peoples are culturally set-up to achieve the goals of sustainable development. Given the opportunity for meaningful expression through program development, implementation and management, indigenous cultures may prove to be the guiding light for more highly developed western states. Attaining sustainable development is a matter of regaining unity between people and environment: Aboriginal peoples are culturally attuned to this conceptual relationship.

Aboriginal Peoples have been largely alienated from natural resource use. This has been a significant contributing factor to the development of poverty in aboriginal communities. Natural resources were the mainstay and raw material for the vocations and industry of Aboriginal Peoples when the Europeans first arrived. Natural resources formed the basis of primary production, manufacturing, trade and commerce. It was this elaborate industrialization and network for trade and commerce that enabled the fur trade to develop so rapidly and effectively. Treaties and subsequent federal and provincial laws and policies halted the rational development (from an Aboriginal perspective) of natural resources, already in effect by Aboriginal Peoples and all but completely alienated them from their rights of access to use and development of natural resources. Aboriginal rights are violated if the traditional economy of an Aboriginal group is disrupted severely or damaged by the encroachments of a civilization that exploits or abuses natural resources on a large scale, such as a hydro-electric projects or forest harvesting that ignores the uses of the forest by Aboriginal Peoples. Furthermore, the right to self-determination and the inherent right to self-government implies the right to take charge of ones' own affairs so as to ensure effectively that aboriginal identity and culture will be respected in the political sphere. These are the Aboriginal rights of the indigenous people of Canada, according to the AJI.

The Brundtland Commission (The Report of the World Commission on Environment and Development) develops the notion of sustainable development. Not restricted in application to the development of third world nations, its message to the developed western states is unclouded. A section of the report titled 'Empowering Vulnerable Groups' has particular application to this discussion. When development takes place, local communities usually become integrated in the new social and economic order. However, in some cases certain groups of people may become isolated, for various reasons: with few exceptions, such is the case with Aboriginal Peoples in Canada.

For a time, the isolation meant the preservation of a way of life, preservation of invaluable ecological knowledge on which the community depended for survival. Later, communities often became dispossessed and marginalized and began to lose their traditional ways. The vast accumulations of traditional knowledge began to get lost and cultural extinction began to take hold. Excluded from the economic mainstream and supported by social assistance, a new culture — a culture rooted in poverty — began to emerge. In Canada, unlike most of the Third World, Aboriginal rights are well recognized in the legal code. Constitutional recognition is the highest possible order of legal recognition. However, the land and resources on which these rights depend for execution are neither preserved or reserved for Aboriginal Peoples. A regrettable dichotomy exists whereby the responsibility for Aboriginal Peoples resides with the

federal government whereas responsibility for natural resources allocation, management and development resides with provincial governments. Sustainable development demands policies that recognize rights to land and resources, even though these policies may not fit into the standard legal systems. Social factors are as much considerations in these matters as are the environmental and economic factors.

Clearly recognised at the outset of the Earth Summit and in accord with 'Our Common Future: The Report of the World Commission on Environment and Development', is the fact that environmental concern must come to terms with one of its root causes: poverty and the growing disparity between rich and poor, between and within nations. The preamble to Agenda 21 in part states:

We are confronted with a perpetuation of disparities between and within nations, a worsening of poverty, hunger, ill-health and illiteracy, and the continuing deterioration of the ecosystems on which we depend for our well-being. However, integration of environment and development concerns and greater attention to them will lead to the fulfilment of basic needs, improved living standards for all, better protected and managed ecosystems and a safer, more prosperous future.

Aboriginal Peoples are reflecting on traditional values, which are based on respect for environment and natural law, to provide insight and direction into environmental, natural resource and demographic issues presently facing Aboriginal Peoples and the world. It is worthwhile to reflect on the notion that the problems facing Aboriginal Peoples in Canada, fairly accurately reflect the problems facing approximately 70% of the world's population: poor housing, overpopulated conditions, insufficient resources, lack of education, etc.

The new paradigm includes a demand for inclusion in plans for the development of resources and Crown land. Aboriginal Peoples are insisting that development will not exclude them again as it has persistently done in the past. The barriers to past exclusion from decision-making and relegation to menial labour orientated tasks (or social assistance which has even more devastating effects) must be removed. Aboriginal Peoples must be empowered to participate as equals with other Canadians as we all determine the future of our lands, resources and environments resplendent in their full complement of animal and plant species.

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Polar Bears and Whales: Contrasts in International Wildlife Regimes

Milton Freeman¹

Introduction

This paper examines the management and use of certain marine mammals in the nearshore areas in northern regions, where for many years the traditional use and commercial trade of marine mammals has sustained the health and vitality of both aboriginal and non-aboriginal communities and their distinctive cultures.

To assist in examining the issue of sustainable and equitable resource use and management, two quite different marine mammal management regimes will be briefly described and their performance analyzed. These two management bodies are the International Whaling Commission (IWC) and the International Agreement on the Conservation of Polar Bears.

One very important distinction between these two management regimes is the different understanding each holds of the role of people in wildlife and fisheries management. In these two perspectives, the reactionary position characterizing the whaling regime is strongly contrasted with a quite progressive view represented by the polar bear regime.

New Directions in Wildlife Management

The Role of People

It appears to be increasingly well understood that people are indeed part of natural ecosystems. One result of the increasing support for a 'man in the biosphere' orientation to the environment is the growing recognition that among the various stakeholders with concern and useful knowledge about wildlife, people *using* the wildlife are an indispensable part of rational conservation strategies (e.g. McNeely and Pitt 1985, Gadgil *et al.* 1993, Freeman and Kreuter 1994). The term conservation implies wise [i.e. sustainable and equitable] use, and within many traditional societies the means to ensure this wise use is encoded within the cultural norms and social institutions that have evolved over time.

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Ethical Concerns

A more humanistic dimension has begun to be introduced into living resources' management decisions as a result of both the general public and local resource users insistence on being involved in management discussions.

Hunters, as well as various non-local but politically-active groups, may also have ethical concerns about the animals that are hunted. In the case of whalers and sealers for example, these concerns range from the purely pragmatic (e.g., that the kill be clean and the meat handled properly) to deeper concerns about respect for animal life and maintenance of traditional relationships between hunters and the animals they hunt. Such concerns are noted, e.g. among Inuit hunters (Freeman *et al.* 1992, Lynge 1992), or among whalers in Japan today (Akimichi *et al.* 1988:53-65, Higuchi 1992).

Ethical issues certainly have a place in wildlife management (e.g. Causey 1989, Jonsson 1992), but it is important to stress that those killing and eating the animals, as well as those opposing the hunts, are aware of, and seek to address, these concerns in culturally appropriate ways.

The Issue of Equity

The importance of equity has been recognized in recent discussions about rational wildlife management. For example, the World Conservation Union (IUCN), recognizing that social and economic benefits derived from sustainable wildlife use may provide powerful incentives to conserve wildlife, urge that those using the resources derive economic benefit from such use (IUCN 1993).

In the past it was common for wildlife users to be largely excluded from any meaningful role in management, but this situation is changing. These changes are particularly apparent in the northern regions (as well as appearing elsewhere). Today, recognition and use of resource users' traditional knowledge and management institutions are being linked to orthodox state management systems (Freeman and Carbyn 1988, IUCN/UNEP/WWF 1991, Inglis 1993, Keith and Saunders 1989, Williams and Baines 1993).

New Partnerships

One means that facilitates linkages between indigenous and science-based knowledge involves co-management arrangements in which the state and the user-groups jointly assume responsibility for research and monitoring, and for developing and implementing management plans. There are now many successful examples of co-management in northern North America (e.g., Osherenko 1988, Pinkerton 1989, Binder and Hanbigbe 1993, Usher 1987, 1993).

Primary Environmental Care

A recent human-centred view on environmental management is captured in the term 'Primary Environmental Care' (PEC) proposed in the IUCN/WWF/UNEP *World Conservation Strategy*. For PEC to occur, three basic goal-oriented principles require to be satisfied:

1. Ensure that basic human needs are satisfied;
2. Protect the local environment to ensure future production;
3. Empower local communities and community-based institutions.

Arrangements satisfying these three principles tend to be community-based, small in nature and impact, and respecting and then utilizing local communities' knowledge and

dependence upon local environmental resources. Such arrangements may provide the best assurance that resource use will be sustainable (Young *et al.* 1994).

The International Whaling Regime

Thirty-eight countries have signed the 1946 International Convention for the Regulation of Whaling (ICRW) which gives them membership in the International Whaling Commission (IWC). The purpose of the IWC is to conserve whales in order to allow the orderly development of the whaling industry (ICRW, Preamble). Decisions taken to accomplish this goal are to be informed by the best scientific advice (ICRW, Article V, para. 2) and are to take into account the needs and concerns of the users and producers of whale products (ICRW, Article V, para 2(b)).

Introduction of a Whaling Ban

In 1982 a pause in commercial whaling was adopted by the IWC. This decision prohibited all whaling by non-aboriginal people until 1990, by which time a comprehensive assessment of whale stocks and a rigorous management plan (the so-called Revised Management Procedure) was to be completed by the IWC Scientific Committee.

By 1990 newly available population data indicated that the minke whale (a non-endangered whale occurring in all the world oceans and of interest to some whaling nations) was at considerably higher stock levels than was thought to be the case at the time the pause in whaling was adopted.

Furthermore, in 1992, and again in 1993, the IWC Scientific Committee unanimously recommended adoption of its very safe and conservative Revised Management Procedure (RMP). The newly completed and rigorously tested RMP satisfies stringent scientific criteria and management goals set by the IWC; in addition, it is in accord with the World Conservation Union's guidelines for the sustainable use of wildlife (IUCN 1993). Thus quotas established under the RMP are not only conservative and sustainable (as demanded by IWC), but will also strengthen social and economic incentives that are encouraged as a helpful aid in conservation (as recommended by IUCN).

The Commercial Exploitation of Wildlife

However, there exists a widespread belief that wildlife cannot be used sustainably when it is commercially exploited. Evidence for this statement is part of 'conventional wisdom', and is confirmed in the public's mind by what is generally known about the poor record of commercial fisheries (including whale fisheries) worldwide.

However, there exists a large body of scholarship (unknown to the general public and ignored by most IWC delegates) that supports the view that common property can be used sustainably when appropriate management institutions are in place (e.g., Berkes *et al.* 1989, Ostrom 1990). This literature rarely draws a distinction between commercial and non-commercial resource users (e.g., Conrad and Bjorndal 1993).

The errors and dangers of ignoring these advances in understanding of common property have been addressed elsewhere (Freeman 1993); here it is sufficient to note that the whale fisheries operating today, whether 'subsistence' or 'commercial' in nature, are family-owned and community-based enterprises which generate important social, as well as narrowly economic, benefits to the local population. As many have observed, in the modern context, it makes little sense to try to draw artificial distinctions between 'commercial' and 'non-commercial' or to believe that subsistence societies do not engage in commercial exchanges, because all subsistence societies today are

monetized and engage in both commercial and non-commercial economic transactions (e.g., Peterson 1991, Caulfield 1994).

Nevertheless, the belief continues to exist in the IWC that when community-based whaling operations involve the sale of whale products, such economic behaviour necessarily represents an unacceptable threat to viability of the stock.

The Polar Bear Regime

Polar bears are one of many subsistence resources having had commercial importance since Arctic residents first encountered visitors wishing to engage in trade. In the 1960's there was concern in some countries that the 1,300 - 1,500 polar bears killed each year was unsustainable given a world population variously estimated at the time to range between 5,000 to 19,000 animals (Fikkan *et al.* 1993).

As a consequence of these estimates, many U.S. and Russian scientists and conservationists believed that bear sanctuaries or a total ban on hunting should be imposed if bears were to avoid extinction. However, countries, such as Canada and Greenland, with apparently healthy bear populations and large annual kills, did not share the view that all hunting should be banned, arguing that such a prohibition would create hardship for people responsibly utilizing the resource.

In order to satisfy the concerns of the parties to the agreement believing that bears required total protection, the treaty sets out a general prohibition on the hunting, capture, and killing of the animals. However, to accommodate the needs of other parties to the treaty who favour continued hunting, specific exemptions are made to this general prohibition against killing.

This approach is important, for it allows parties to the agreement wishing to prohibit hunting for conservation, political or cultural reasons to do so, whilst not restricting the sovereign right of other parties to the treaty to legislate different conservation regimes that may be equally appropriate in their own national and cultural contexts.

In the Canadian Arctic, where selling polar bear hides and guiding trophy hunters are economically significant activities, community quotas limit the number of bears that can be taken. This limitation inevitably results in some hunters each year being unable to take even one bear. However, despite the negative cultural and economic impacts resulting from these restrictions, respect shown to local hunters by the management authorities ensures that the high traditional value Inuit place on wildlife conservation is not severely compromised by this outside imposition. Thus, even where, from time to time, it may be necessary to reduce polar bear quotas, local hunters fully cooperate with the authorities (Freeman 1986).

Contrasting the Polar Bear and Whale Management Regimes

The polar bear agreement contrasts in several ways with the international whaling convention, most notably perhaps by restricting membership in the treaty to only those five states where polar bears are found (Canada, Denmark/Greenland, Norway, Russia and the U.S.). In strong contrast, any nation can become a party to discussions and decisions affecting whaling societies by signing the international whaling convention.

What appears to allow the polar bear treaty to operate effectively (and cost efficiently) is (1) a high degree of resource user involvement in research and management activities, (2) management decisions based upon the best research-based information, (3) a willingness among treaty members to respect each others' cultural differences and (4) negotiations carried out in good faith.

In contrast, the international whaling regime has moved progressively away from these prudent management principles, and as a consequence its annual meetings promote conflict and result in a continuing failure to discharge management responsibilities required of the commission.

The contrasts between these two management regimes are marked. Thus despite continuing hunting of polar bears (between 700-800 bears are taken annually) the estimated world population has steadily increased to between 25,000 - 40,000 since the treaty came into effect about 20 years ago.

Importantly, under this international treaty, no non-hunting nation, no non-range state and no non-government animal rights organization can claim that its own opposition to the consumptive use of wildlife endows it with the right to interfere with others' lawful use of this international and highly migratory resource.

This pragmatic, effective and co-operative approach to managing a global population of only several thousand polar bears stands in marked contrast to the approach being taken by the international whaling regime to manage an expanding global population of about 1 million minke whales (to take a single example). The attempts to regulate whaling (which remains the purpose of this *whaling* regime) consumes considerable time, effort, and resources of a large number of nations, and leaves the potential users of these important resources wholly dissatisfied by the non-productive outcome of these efforts.

Conclusions

Polar bears appeared to be conserved through the actions of a highly effective and minimalist international management regime, under whose authority polar bears continue to be hunted sustainably for a variety of commercial and non-commercial reasons. The regime functions in ways that do not result in challenges to the authority or legitimacy of the management regime, nor to the sovereignty of any party to the treaty. This desirable state of affairs doubtless owes much to the recognition of, and the accommodation made to, the variable cultural and political realities existing among the five treaty nations.

In contrast, the international whaling regime acts in ways that continually question the legitimacy of some members' cultural and sovereign rights, and seeks to impose by threats of trade sanctions and other coercive means, an extremely narrow ideological position that opposes the killing, trade and consumption of whales.

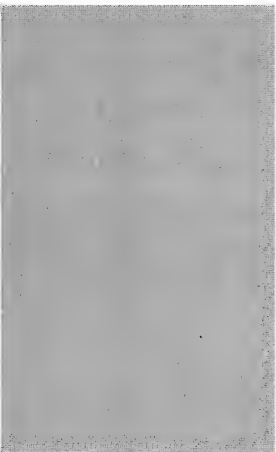
Whilst the international polar bear management agreement provides an informative window on to an effective wildlife management regime, the international whaling regime, being highly conflictual and preventing any realization of the goals of the international whaling convention, provides an explicit demonstration of what to avoid when seeking international living resource management arrangements.

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All That Glitters is not Green: Environmental Responsibility and Canada's Arctic Diamond Rush

Larry Reynolds¹

Introduction

Canada's Arctic is considered by many to be a vast storehouse of mineral wealth waiting to be unlocked. There is now a belief that the key to unlock that storehouse has been found — diamonds! One of the largest diamond rushes in history is currently underway in the Slave Geological Province Region of the Northwest Territories. The diamond rush has prompted speculation that the potentially high value of diamond discoveries may act as an economic catalyst to other types of mineral exploration and development, such as lead, zinc, copper and gold through creation of the infrastructure (such as roads, hydro dams and port facilities) necessary to ensure the economic viability of these other mining activities.

There is a danger that in the rush to explore and develop new mineral deposits we may trample one of the planet's few remaining pristine frontiers — the magnificent but fragile environment of Canada's arctic. Thus, society's ongoing struggle to develop an equitable balance between economic development and environmental responsibility has shifted to a new arena — an arena where there is no room for second chances!

Historical Background

Mineral exploration is occurring at an unprecedented rate in the Northwest Territories. As an indication of the pace of development, statistics compiled by the Land Administration section of the Federal Department of Indian Affairs and Northern Development (D.I.A.N.D.) reveal that over a ten year period between 1981 and 1991 on average less than 1,000,000 acres per year were staked for mineral exploration in the Northwest Territories. However, between October 31, 1991 and April 29, 1994 a total of 49,129,658 acres were staked for mineral development in the Northwest Territories.

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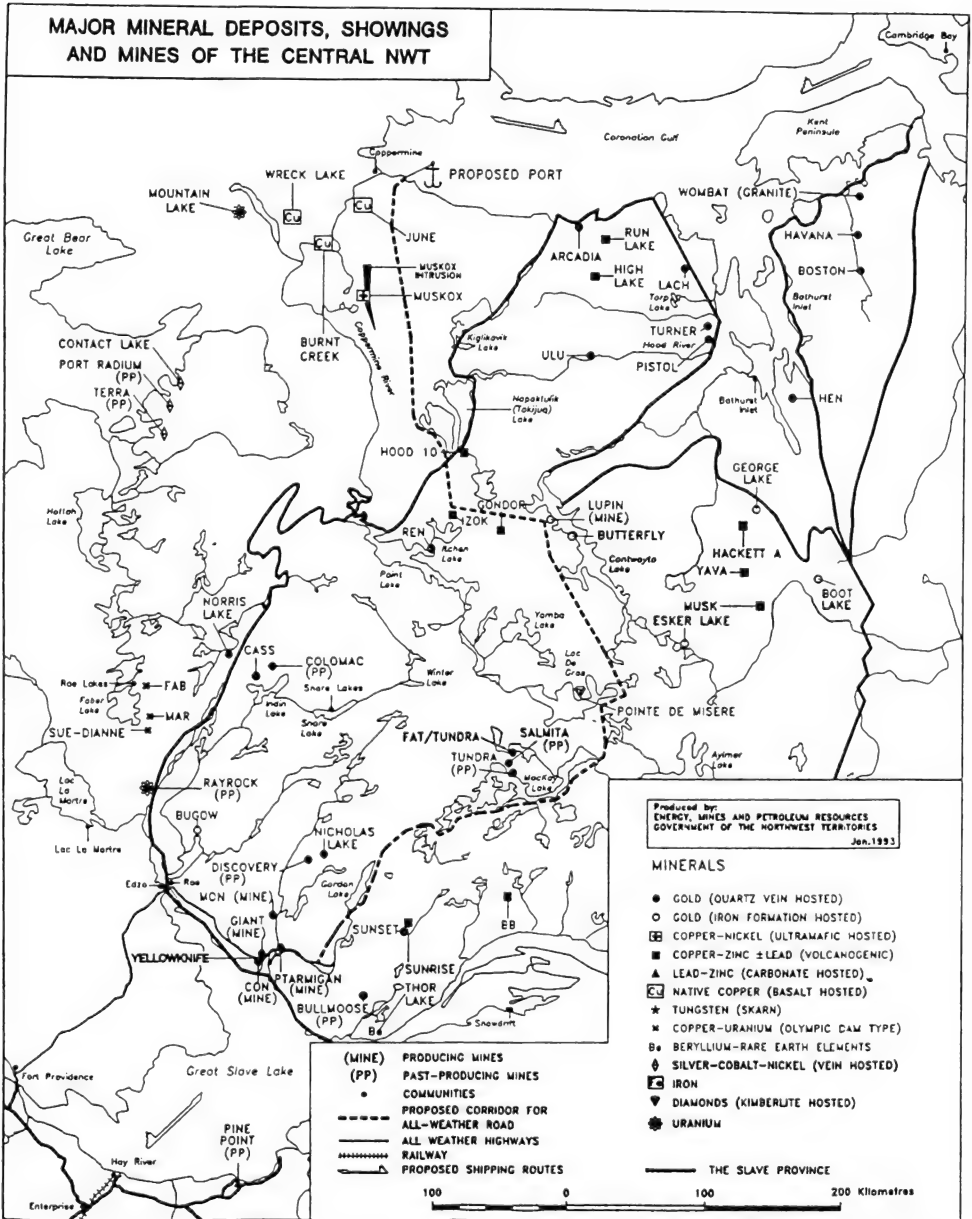


Figure 1. The Slave Province: A Storehouse of Wealth.

Consistent with this, the Northwest Territories Chamber of Mines has reported that exploration expenditures increased from approximately \$30 million dollars in 1991 to a predicted \$75 million in 1993. Much of this increase may be attributed to the discovery of diamonds in the Lac de Gras region of the Northwest Territories in 1991.

The focal point for mineral development in the Northwest Territories is the Slave Geological Province (Figure 1). Located between the Coronation Gulf and Great Slave Lake, this area has been described by the Northwest Territories Chamber of Mines as 'A Storehouse Of Wealth'.² Gold has traditionally been a mainstay of the Northwest Territories mining industry and currently is being mined at the Royal Oak Giant Yellowknife Mine and at the Lupin Mine, some 400 kilometres northeast of Yellowknife. Ongoing exploration has identified several other potential gold mines including sites at Tundra, George Lake, ULU, Nicholas Lake and Arcadia. In addition, Royal Oak Mines is reported to have plans to re-open the Colomac gold mine, located approximately 220 kilometres north of Yellowknife.

The Slave Geological Province is also rich in base metal deposits, including lead, zinc and copper. The Northwest Territories Chamber of Mines has identified a minimum of nine base metal deposits with reserves in excess of 1 million metric tonnes. Perhaps the best known of these deposits is the lead-zinc-copper deposit at Izok Lake, situated some 250 kilometres south of Coppermine. The Chamber of Mines reports that more than 13 million tonnes of high grade lead-zinc-copper reserves have been identified at this site.

By far the greatest interest in mining in the Northwest Territories has centered around the discovery and subsequent exploration for gem quality diamonds in the Lac de Gras area. The discovery of diamonds at Lac de Gras in 1991 sparked what may best be described as a diamond rush, with approximately 130,000 square kilometres staked as of early 1993. Recently, diamonds have also been discovered in the Yellowknife Bay area near the City of Yellowknife.

Initial diamond exploration in the Lac de Gras area has been very successful. It is reported that exploratory activity in 1993 has located diamond bearing kimberlite pipes '... with diamonds in deposit sizes and stone grades and qualities believed to be comparable to those in South Africa and Russia.'³ A number of companies are currently engaged in various stages of exploration and sampling. The most advanced project is that of Broken Hill Proprietary (BHP) Canada Ltd. in partnership with Dia Met Minerals Ltd. BHP/Dia Met has conducted an extensive bulk sampling program of a number of kimberlite pipes at its project site, located approximately 300 kilometres northeast of Yellowknife. As a result, BHP has made application for permits to construct and operate a diamond mine. If the required permits are obtained, BHP/Dia Met has stated that it intends to commence construction in 1996. The total cost of the project is estimated at approximately \$550 million dollars. An executive summary of the proposed project as prepared by BHP/Dia Met is set out in Appendix A.

The recent flurry of diamond exploration and possible mine construction and operation has heightened the desire of the mining community in the Northwest Territories for increased infrastructure for mining generally. For example, key aspects

2. Northwest Territories Chamber of Mines, *Mining North '93*, at p. 43.

3. Northwest Territories Chamber of Mines, *Mining North*, Vol. 2 No. 1, at p. 19.

of potential infrastructure development identified by the Northwest Territories Chamber of Mines includes:⁴

1. Construction of an all-weather road between Yellowknife and Coppermine.
2. Development of a port facility in the Coronation Gulf near Coppermine.
3. Development of hydroelectric dams to provide electrical energy to mining operations.

Many in the mining community are of the view that a viable diamond mining industry in the Northwest Territories may provide the financial impetus necessary to convince the Federal Government and the Government of the Northwest Territories to undertake large-scale infrastructure developments which will benefit not only the diamond mining industry, but other infrastructure intensive mining ventures such as base metal mining. Thus, many in the mining community see diamond mining as the key to the future growth of the mining industry in the Northwest Territories.

Environmental Review

Assessment of the environmental impacts of proposed natural resource extraction projects which impact upon areas of Federal constitutional jurisdiction has a short history in Canada. It was not until 1992 in the case of *Friends of the Oldman Society v. Canada (Minister of Transport)*⁵ that the Supreme Court of Canada held that a little known 1984 Federal Order-in-Council (considered by many who knew of its existence to be little more than an internal Federal policy guideline for inter-departmental environmental review of Federal projects), was in fact mandatory legislation which required a comprehensive assessment of the environmental impacts of any proposed activity which could have an environmental effect upon any area of Federal constitutional jurisdiction. The Order-in-Council, which came to be known as the '1984 EARP Guidelines Order' became the legal basis for a Federal environmental review process⁶ which included two levels of screening and a public hearing process.⁷

The history of environmental assessments of proposed mining projects through a public hearing process in the Northwest Territories is even shorter. Prior to December 9, 1994 the D.I.A.N.D. Regional Environmental Review Committee (R.E.R.C.) had not recommended a single proposed mining project in the Northwest Territories proceed to a review through the public hearing process. The proposed BHP/Dia Met Diamond Mine project was to change the pattern. Concerned by reports of the magnitude of the proposed BHP/Dia Met project and suggestions by the mining community that the BHP/Dia Met project could provide the economic impetus to convince the Federal and NWT governments to provide funding for potentially environmentally damaging infrastructure required for a variety of other proposed mining activities, the environmental community⁸ made a concerted effort to inform the public of the situation and to

4. See Appendix A.

5. [1992] 2 W.W.R. 193, 84 Alta. L.R. (2d) 129, 7 C.E.L.R. (N.S.) 1. For a detailed discussion of this case see Joseph de Pencier, 'Oldman River Dam and Federal Environmental Assessment Now and in the Future', *Journal of Environmental Law and Practice* (Vol. 2) at p. 293.

6. SOR/84-467. On February 19, 1995 the Federal Government replaced the 1984 EARP Guidelines Order with the *Canadian Environmental Assessment Act*.

7. The level of screening which a proposed project undergoes is dependent upon a variety of factors, including potential environmental impacts of the project.

8. The environmental community was lead by organizations such as World Wildlife Fund Canada

convince Federal decision-makers to conduct a full public hearing of the proposed project. As a result of the efforts of the environmental community on December 12, 1994 the Federal Environmental Assessment Review Office released the following statement:

On December 9, 1994, the federal Environment Minister Sheila Copps appointed a four person environmental assessment panel to conduct a public review of the environmental and socio-economic effects directly associated with BHP Minerals Canada Ltd.'s proposed diamond mine project in the Lac de Gras area of the Northwest Territories. The review was requested by Indian Affairs and Northern Development Minister Ron Irwin.⁹

The public hearing process is governed by 'Terms of Reference' issued by the Federal Minister of the Environment. The Terms of Reference for the BHP/Dia Met Panel Review, (Appendix B) are interesting for a number of reasons:

1. The Terms of Reference stipulate that the scope of the Review must be sufficiently broad to include the short and long term environmental and socio-economic effects of the project within the entire Northwest Territories. In this regard the Terms of Reference state:

In conducting its review, the Panel will take into consideration the following:

- the project's short and long-term environmental effects within the Northwest Territories and the social effects directly related to these environmental effects; and
- the project's short and long-term general socio-economic effects within the Northwest Territories.¹⁰

2. The Terms of Reference also require that the Review must include consideration of the cumulative environmental and socio-economic effects of the proposed project. The Terms of Reference provide:

The Panel's review shall also include consideration of issues relating to long-term cumulative effects of the current project in addition to future development scenarios as identified by BHP on its Lac de Gras properties.¹¹

3. Finally, the Terms of Reference mandate that in conducting its review the Panel must give full and equal consideration to traditional knowledge:

In reviewing and assessing the project's environmental and socio-economic effects, the Panel will give full and equal consideration to traditional knowledge.¹²

and the Canadian Arctic Resources Committee. These organizations were later joined by others including Ecology North and the Canadian Nature Federation, and formed the Northern Environmental Coalition (NEC) for the purpose of participating in the Public Hearings.

9. Federal Environmental Assessment Review Office, Newsletter No. 1, December 12, 1994.

10. 'Terms of Reference', p. 1.

11. 'Terms of Reference', p. 2. The wording of this requirement subsequently became a matter of some controversy, with the environmental community taking the position that the requirement allowed a review of cumulative effects outside of the BHP/Dia Met Claim Area, while BHP/Dia Met argued that it should not be required to consider the cumulative effects of its proposed projects in the ecosystem outside of its Claim Area.

12. 'Terms of Reference', p. 2.

In order to translate the mandate provided by the Terms of Reference into a workable process, the FEARO Panel Review process requires the Panel to determine the scope of the Review through development of a 'Guideline For The Preparation Of An Environmental Impact Statement', which sets out the expectations of the Panel with respect to the nature of the evaluation of the environmental and socio-economic impacts of the proposed project which the Proponent must provide to the Panel and all interested parties in the form of an Environmental Impact Statement. With respect to the BHP/Dia Met proposal, prior to releasing its 'Final Guidelines For The Preparation Of An Environmental Impact Statement' the Panel conducted a series of public hearings throughout the region for the purpose of obtaining public input regarding the scope of the Review. At the scoping hearing held in the City of Yellowknife on April 5, 1995 the Northern Environmental Coalition expressed its views with respect to a number of issues pertaining to the scope of the Review, including the opinion that the review of environmental impacts of the proposed project should be conducted with respect to the entire ecosystem in which the project was located, rather than within the artificial constraints of the BHP/Dia Met Claim Area. In addition, the Coalition also expressed concern that the review of cumulative environmental impacts of the proposed project should not be limited to the BHP/Dia Met Claim Area, but rather should include the cumulative effects of all environmental impacts in the region. This position was opposed by BHP/Dia Met, which argued that information with respect to cumulative environmental effects of the proposed project should be limited to the BHP/Dia Met Claim Area, and that the Proponent should not be required to provide cumulative effects information with respect to the ecosystem outside of the Claim Area.

In its Final Guidelines For The Preparation Of An Environmental Impact Statement the Review Panel accepted the recommendations of the Northern Environmental Coalition with respect to an ecosystem-based approach. In this regard the Panel stated:

The Proponent should define the spatial boundaries of the maximum area in the NWT potentially affected by the Project (the impact area). These spatial boundaries for environmental assessment should be based on an analysis of impact systems such as pollutant transport and accumulation mechanisms. Spatial boundaries of the impact area will vary seasonally and for different impact systems. For example, spatial boundaries for hydrographic studies related to tailings pond design will differ from studies on caribou migration.¹³

In addition, the Panel also accepted the arguments of the Northern Environmental Coalition with respect to the scope of the cumulative impacts of the proposed project which must be considered in the Panel Review:

Further, the EIS should assess the long-term cumulative effects of the Project when combined with potential future development identified by the Proponent within the claims block. The boundaries of the cumulative effects assessment should cover the maximum area potentially affected by the development and may therefore extend beyond the claims block.¹⁴

13. 'Final Guidelines For The Preparation Of An Environmental Impact Statement', at p. 9.

14. 'Final Guidelines For The Preparation Of An Environmental Impact Statement', at p. 12.

Finally, the Panel made it clear that traditional knowledge would receive full and equal consideration throughout the Panel Review. In this regard the Panel stated as follows:

Traditional knowledge, which is rooted in the traditional life of aboriginal people, has a vital contribution to make to a full assessment of the effects of the Project. Those who live on the land and harvest its resources have an intimate knowledge of the distribution of resources, the functioning of ecosystems, and the relationship between the environment and their culture. For many questions that are raised in the Guidelines, traditional knowledge will have as important a contribution to make as scientific and engineering knowledge. The Proponent should fully consider local traditional knowledge and expertise in preparing the EIS.¹⁵

It seems however, that the FEARO Review Panel's position on the importance of traditional knowledge in an environmental review may not be well received by some within the mining community in the Northwest Territories. In a letter to the Review Panel, legal counsel for Kennecott Canada Inc. (KCI) expressed Kennecott Canada Ltd.'s concern with the role to be played by traditional knowledge in a Panel Review:

KCI believes that the importance of traditional knowledge relative to the importance of scientific data should be downgraded. To treat them as being of equal weight, as is suggested by Section 4, 'Full and Equal Consideration of Traditional Knowledge' and Section 4.2, 'Study Strategy and Methodology', is to leave the mining proponent open to having its project halted despite the fact that all environmental concerns have been adequately addressed. This results in a severe diminution of the value of its mining claims and its prior investment in the property.

KCI is, as you are no doubt aware, very active in the Northwest Territories, and urges you to take proper account of its concerns.¹⁶

Conclusions

Irrespective of the final outcome, the FEARO public hearing with respect to the BHP/Dia Met diamond mine proposal is an important development in environmental assessment and regulation of natural resource extraction activity in the Northwest Territories for a number of reasons:

1. The referral of a proposed mining project such as the BHP/Dia Met project to a Panel Review public hearing process sets an important precedent with respect to the role of public review in future natural resource extraction projects in the Northwest Territories. The Panel Review process will provide both Aboriginal and non-aboriginal northerners, and those from other parts of Canada with legitimate interests in the North, with the opportunity to become informed with respect to the issues created by resource extraction proposals and to participate in the decision-making process.

15. 'Final Guidelines For The Preparation Of An Environmental Impact Statement', at p. 3.

16. Letter of April 11, 1995 from Chris G. Baldwin of Lawson Lundell Lawson & McIntosh, Barristers and Solicitors, Vancouver, British Columbia, to the BHP Diamond Mine Panel Office. The letter was received by the FEARO Review Panel as part of its scoping hearing process, and consequently has been made available to the public.

2. The Panel Review is also setting important precedents with respect to the scope and rigour of the review of natural resource extraction projects in the Northwest Territories, which precedents will be of value in the review of future project proposals.
3. The public hearing process will likely act as a stimulus for the generation of scientific information in this region of the Northwest Territories, which information should be of assistance in considering both the current BHP/Dia Met proposal and also in addressing future resource extraction proposals.
4. The public hearing process provides a unique opportunity for the generation, presentation and evaluation of traditional knowledge in the decision-making process.

Thus the true significance of the FEARO Panel Review of the BHP/Dia Met diamond mine proposal may not lie so much with the final decision reached by the Review Panel as with the legacy that the Panel Review process leaves with respect to the future environmental review of major natural resource extraction projects in the North. That is, in requiring a project proponent such as BHP/Dia Met to conduct a thorough environmental and socio-economic evaluation of its proposed project, and providing those with legitimate interests in the North such as environmental and aboriginal organizations the opportunity to conduct a careful review of the proponent's evaluation and to point out deficiencies in the evaluation and problems with the proposal itself, a precedent is effectively set which sends a strong message to those future proponents within resource extraction industries that projects in the Northwest Territories must now be prepared to undergo the same level of environmental scrutiny as would occur throughout the rest of Canada.

Appendix A
Executive Summary of BHP/Dia Met's Proposed Project in the Vicinity of Lac de Gras, N.W.T.

The NWT Diamonds project has been organized to explore and develop claims in the Coppermine River basin, approximately 300 km. northeast of Yellowknife. BHP Diamonds Inc. has earned a 51% interest in the joint venture, and is the operator for the project. The other joint venture party is the Blackwater Group, consisting of Dia Met Minerals Limited, Charles E. Fipke and Stewart L. Blusson. The joint venture partners believe that the project will develop Canada's first diamond mine, and that advanced exploration, bulk sampling and feasibility work now underway will demonstrate the viability of the mining operation. An aggressive development schedule is being pursued under which development would begin in late 1995 and diamond production in mid 1997.

This Project Description Report has been prepared to meet the requirements of the federal Environmental Assessment and Review Process (EARP). In July 1994, the Minister of Indian Affairs and Northern Development referred the project to the Minister of Environment for public review by a federal Environmental Assessment Panel. The Project Description Report will assist the panel in its evaluation of the BHP proposal, and will be followed by a comprehensive Environmental Impact Statement (EIS).

The discovery of diamond-bearing kimberlite pipes in the Northwest Territories followed systematic prospecting by geologist Charles Fipke for over ten years. The claims block is located in the Archean Slave province of the Canadian Shield. The regional cratonic rocks consist of metasediments of the Yellowknife Group which are locally intruded by granitoid rocks. The age of these units ranges between 2.6 and 3.3 billion years. Kimberlite pipes, one of which has been dated at 52 million years, have intruded into these country rocks. Exploration of the kimberlite pipes has been complicated because kimberlite is generally a soft rock which was preferentially eroded by glacial activity. Consequently, kimberlite pipes in the Lac de Gras area are frequently associated with depressions which, since the last ice age, have often become lakes.

Since the initial discovery in 1991, a total of 39 kimberlites have been identified on the property. Of these, 27 have proven to be diamond-bearing. Each pipe is unique with respect to diamond content, size and quality. To date, more than 10,000 tonnes of material have been recovered and processed. Results compare favourably with those at other diamond mines in the world. Bulk sampling and other drilling programs are continuing to provide sufficient samples and data for planning, design, development and marketing purposes.

The NWT Diamonds project can meet present regulatory requirements and is economically feasible at today's prices and tax and royalty provisions. Assuming no major changes in these conditions or the development plan, a decision to proceed to full scale development is anticipated on receipt of regulatory approvals and that of the joint venture partners.

The mining development plan involves five diamondiferous pipes. Four are located within a few kilometres of each other in the Koala watershed north of Lac de Gras and the fifth, 27 km. to the southeast, adjacent to Lac de Gras. The pipes, termed Panda, Misery, Koala, Fox and Leslie, are located under lakes of the same names. Mining methods selected are conventional open pit followed by underground development of

at least two of the pipes. The Panda pit would be developed first, followed by Misery, Koala, Panda (underground), Fox, Koala (underground) and Leslie. During the first nine years of operation, the mine will provide ore for processing at a rate of 9,000 tonnes per day. For the remaining life of the project, the processing rate would be 18,000 tonnes per day. Over the life of the project, approximately 135 million tonnes of ore will be processed. It is possible that further development will take place which will extend the life of the project.

Each mine will require the lake overlying the pipe to be drained. The open pit design for each of the five pits is similar, with both single and double benching applied depending on prevailing conditions. Excavated rock will be loaded into large haul trucks and transported to either a waste rock dump or to a collection point for processing. Panda and Koala pipes will be mined underground following pit closure. The underground method selected is sublevel caving, which is a high production method suited for massive and steeply dipping medium-width ore bodies such as those commonly found in kimberlite deposits.

Between 35 and 40 million tonnes of waste rock annually will be excavated from the open pits, and smaller volumes from the underground operations. This material, which has a negligible potential for acid generation, will be stockpiled in dumps in the vicinity of each pit. It will also be utilized for building materials for roads and other requirements. Waste dumps will be contoured to blend in with existing topography.

A single, centralized processing plant will be located southwest of the Koala pit. The plant and mining operation will operate 24 hours per day, 365 days per year. Processing of kimberlite diamond-bearing ore is unique in that extremely high recoveries of diamonds must be obtained, without causing breakage. Basic unit operations will include crushing, dense medium separation and x-ray sorting.

Process plant tailings will be thickened and discharged into Long Lake, to the west of the mines and plant site. The coarser fraction of tailings (approximately 20%) will be separated and hauled by truck to the waste rock dumps. The tailings will be discharged under water in winter and subaerially to the upstream face of divider dykes in summer. Due to the volume of tailings to be stored over the life of the disposal site, it will be necessary to raise the lake level by approximately 9 metres by damming the outlet and constructing small dykes at various locations around the periphery. Process water for the processing plant will be pumped from Long Lake, and the system will operate almost entirely on a recycle basis.

Diamonds are valuable and easy to conceal. Accordingly, a comprehensive security control plan has been developed. The minesite and offsite facilities will be divided into several different levels of security. Access to high security zones will be restricted and closely monitored, requiring special access cards at controlled entrances. Access to the recovery section at the minesite and the offsite cleaning and sorting area will be restricted to personnel required only in those sections.

Due to the remote location of the project, the site will include a full range of ancillary facilities. Permanent camp facilities will be provided to serve the estimated 400 person mine and processing plant on-site workforce. A truckstop and service complex will be located adjacent to the processing plant. Power will be generated on-site by six 4.4 megawatt generators.

Access to the site by ground will be possible only for three months each year, when the Echo Bay Lupin winter road is operable. An access road will be constructed to

connect the mine facilities to the winter road, approximately 45 km. away. A runway suitable for use by Hercules aircraft and cargo jets has been completed.

BHP is committed to sustainable development and will undertake its mining development operations with concern for the long-term influence on the communities that may be affected by its mining activity. Project planning, construction and operation will occur in consultation with First Nations and territorial and federal representatives in order to minimize environmental and socioeconomic disruption and to ensure that the benefits derived from mining development are shared locally.

In its commitment to sustainable development, BHP will consider the links between ecosystem integrity, social health and economic stability, as well as the cultural values that influence these relationships. An integrative approach will be used to evaluate the potential effects of specific mining activities on their surrounding environment. This will include an examination of the cumulative effects of the current proposal as well as future expansion possibilities for this specific project.

An environmental impact which may be expected to arise from project development will be the loss of aquatic habitat in the Koala watershed. The draining of Panda, Misery, Koala, Fox 1 and Leslie Lakes for the purposes of developing mines at these sites will eliminate fish habitat, as will the in-filling of Long Lake. To date, five principal species of fish have been identified in the study area: lake trout, Arctic grayling, round whitefish, burbot, and longnose sucker. A diversion channel connecting upper Panda and Kodiak Lakes and bypassing Panda and Koala Lakes will preserve a pathway for the free movement of fish and mitigate these effects to some extent. Other measures to mitigate impacts to fish populations in the project area could include establishing fishing regulations such as catch-and-release programs and catch and size limits in order to reduce angling pressures by project staff. Due to the abundance of fish habitat in the Lac de Gras area and the small area of affected lakes, the impact of aquatic losses will be minimal.

Preliminary post-closure plans are to allow the Panda, Misery, Koala, Fox and Leslie pits to refill with water through runoff, precipitation and ground water seepage. In time, the water in these lakes will return to normal levels. However, it is not expected that they will recover historical aquatic production levels, given the relatively great depths and lack of littoral habitat in the pits. Measures to be considered for compensation of the relatively small loss of fish habitat include the transferral of current breeding populations of fish from the lakes affected, increasing the levels of primary productivity and the availability of food to fish in other lakes, and introducing stocking programs.

Project development may have some effect on wildlife, such as barren-ground caribou, grizzly bears and wolves. Mining activities may cause habitat loss or alteration, interference with migration patterns, increased noise disturbance, hazards and altered ecology. The habitat found in the project area does not appear to be unique and the area of disturbance is small in relation to the habitat available. However, construction may reduce local food sources and den sites. Increased levels of human activity and noise may disturb wildlife and may cause higher levels of mortality through road kills and increased hunting pressure.

Mining activities will be conducted so as to address the potential issues mentioned and to minimize impacts on surrounding wildlife. Local populations will be monitored and effects on endangered species will receive particular attention. Measures to mitigate potential impacts include habitat enhancement, employee education, enforcement of speed limits and firearm restrictions.

Impacts to soils and terrain, permafrost, vegetation and wildlife habitat, water quality, and hydrology will be minor on a regional scale and appear to be manageable. Studies being completed in 1994 will provide more information, allowing for a more detailed evaluation of project impacts.

The key impacts of this mining development are expected to be socioeconomic, and it is expected that these will be, largely, positive. It is the project owners' intent to ensure that the socioeconomic benefits of the project to the people of the North are maximized and shared equitably.

There will be no major socioeconomic effects in the immediate project vicinity due to its remote location. However, employment will be generated for local Aboriginal communities and significant socioeconomic benefits will be realized in Yellowknife, the closest major centre, and an important source of supplies and employment.

Much of the western Northwest Territories is under Native land claims, including the NWT Diamonds project area, which lies within the North Slave Division of the Dene/Metis Land Claim Region. Consultation with First Nations councils has been an important component of activities to date, and will continue to be so as development progresses.

It is currently estimated that the project workforce will reach a maximum of 1,000 employees during the construction phase. During production, there will be approximately 650 employees, representing 16,250 person-years of employment over an approximate twenty-five year mine life. Shift rotation will be on a fly-in/fly-out basis, with Yellowknife and local communities serving as the major departure point for flights and the likely place of residence for most employees.

BHP has in place a modern Occupational Health and Safety Policy. Compliance with all applicable laws, regulations, codes and standards relating to occupational health and safety is an integral part of this policy. In the interest of preventing injury and to promote a safe work environment, safe working practices and efficient operations, it is a strict BHP policy to ensure that health and safety programs are followed and that all employees receive proper orientation and training in safe work practices.

An environmental management plan is being developed and will be presented in the EIS. The plan centres around the safe and permanent storage of process plant tailings in Long Lake and mined out pits; the control and proper disposal of domestic and other wastes; construction and operation of the project in such a manner as to minimize surface disturbance; and the development of an appropriate site reclamation and abandonment plan.

Design of the tailings impoundment at Long Lake calls for subaqueous discharge from November to May and subaerial discharge on the upstream face of divider dykes from May to October. A preliminary water balance for the impoundment indicates that if the lake outlet is dammed prior to commencement of operation, the lake level will rise slowly until discharge through the spillway begins after several years. The lake will be capable of containing all the tailings until it reaches capacity sometime after year 20. By that time Panda pit should be available for tailings disposal. Studies are currently underway to better define certain components of the water balance and the consolidation behaviour of the tailings.

Planning for reclamation includes building up the tailings level until they become elevated above water level then covering the tailings with waste rock rip rap to prevent erosion by wind and water.

Considerable volumes of fuel will be hauled to the site over the winter road and stored during the remaining nine months of the year. The final storage area will meet all the requirements of the Land Use Permit and the National Fire Safety Code. All staff involved in fuel handling will be properly trained and all tanks, lines and equipment will be inspected regularly.

A General Contingency Plan has been developed to minimize the effects of a spill from a system failure (*e.g.* slurry or tailings lines) or from a fuel spill, by establishing predetermined lines of response and plans of action. The plan is associated with, and references, other emergency and contingency plans including health and safety plans and fire and emergency plans.

Wastes generated on-site will be treated or safely disposed of. These include:

- domestic sewage, which will be treated in two sewage treatment plants;
- ethylene glycol (antifreeze), which will be recycled and, when necessary, stored on site and sent to waste disposal companies;
- domestic garbage, which will be incinerated; and
- waste oil and grease, which will be burned as fuel on-site or stored and sent to a waste disposal firm for recycling.

Roads will be designed and constructed so as to minimize environmental impacts. Permafrost will be protected and environmentally sensitive areas will be avoided. Culvert placement will be designed to ensure that free fish passage is not impeded, and effects on drainage patterns will be minimized. Disturbance of significant heritage sites will be avoided.

A preliminary reclamation and abandonment plan has been formulated to ensure that if the bulk sampling operations are shut down, the site will be left in an environmentally acceptable condition and will pose no long term threat to the surrounding area. The closure plan is developed according to guidelines set forth by the Northwest Territories Waterboard. A more comprehensive plan will be submitted at a later date when feasibility and environmental baseline studies have been completed to address the reclamation issues surrounding the full-scale development. Research programs to support the reclamation effort have already begun.

In this report, the most critical aspects of the NWT Diamonds project are described at a level of detail sufficient to permit identification of the major environmental and socioeconomic issues. This document expands on earlier information compiled for the Bulk Sampling Project Description Report (BHP 1993a), Addendum Report (1994a), Project Description Report (January 1994b), and the Baseline Environmental Monitoring Protocols (BHP 1993b) which more fully explain the nature of the environmental and socioeconomic baseline data collection effort, designed to allow accurate impact assessment and management. A comprehensive examination of potential environmental and socioeconomic impacts will be undertaken and described in the future Environmental Impact Statement.

Appendix B

Terms of Reference

Environmental Assessment Panel Review of the Proposed BHP Minerals NWT Diamond Mine, Northwest Territories

Introduction

At the request of the federal Minister of Indian Affairs and Northern Development, an Environmental Assessment Panel has been appointed by the federal Minister of the Environment in accordance with the requirements of the Environmental Assessment and Review Process (EARP) Guidelines Order to conduct a public review of the environmental and socio-economic effects directly associated with BHP Minerals Canada Ltd.'s proposed diamond mine project in the Lac de Gras area of the Northwest Territories.

These Terms of Reference are issued by the Minister of the Environment and were developed through consultation with the Department of Indian Affairs and Northern Development, the Government of the Northwest Territories and directly affected First Nation and Inuit organizations.

For purposes of this review, the Department of Indian Affairs and Northern Development is the project initiator and BHP Minerals Canada Ltd. is the project proponent.

Scope of the Review

In conducting its review, the Panel will take into consideration the following:

- the project's short and long-term environmental effects within the Northwest Territories and the social effects directly related to these environmental effects; and
- the project's short and long-term general socio-economic effects within the Northwest Territories.

The above effects will include those associated with:

- construction activities;
- mining operations;
- milling operations;
- transportation of mine products, materials and consumables within the NWT;
- tailings and waste water management;
- waste rock management;
- site infrastructure including camp, roads, powerhouse and air strip;
- regional infrastructure including access roads (all weather and ice roads); and
- mine abandonment and reclamation activities with emphasis on waste rock and mine tailings.

The Panel's review shall also include consideration of issues relating to long-term cumulative effects of the current project in addition to future development scenarios as identified by BHP on its Lac de Gras properties.

In reviewing and assessing the project's environmental and socio-economic effects, the Panel will give full and equal consideration to traditional knowledge.

In the course of conducting its review of the BHP proposal, the Panel may identify issues which, in its view, may also arise in conjunction with other development initiatives in the Slave Geological Province and which could, therefore, be considered as generic issues. Although a review of other development initiatives is not within the Panel's Terms of Reference, the Panel may recommend appropriate approaches on how to deal with these generic issues, including referral to the regional study being proposed

for the Slave Geological Province. This regional study is intended to establish an information base that would be used in decisions related to future developments in the area. The Panel's report is not to be contingent upon this other initiative. Rather, the Panel should proceed to conduct its work and produce its report, including any input it may provide to the regional study, in a timely manner. If, at the completion of its review, the Panel concludes that the effects of the project referred to above are acceptable, it shall recommend terms and conditions under which the project could proceed and provide recommendations relating to appropriate procedures for the management of short-term and long-term cumulative effects associated with any future development by BHP on its Lac de Gras properties. If the Panel concludes that the effects of the project are unacceptable, it shall provide its rationale for this conclusion.

Review Process

The main steps in the Panel review process shall be as follows:

1. Preparation and, subject to the approval of the Executive Chairman of the Federal Environmental Assessment Review Office, issuance by the Panel of operational procedures for the conduct of its review (within one month of appointment of the Panel).
2. Submission by BHP Minerals Canada Ltd. of a project description document that will form the basis for the review. This document should include the project description that the proponent wishes the Panel to review including longer term future development scenarios for the BHP Lac de Gras properties. It should include a description of all of the project elements listed in the **Scope of the Review** above. If the Panel concludes that the project description document does not adequately describe all aspects of the proposal, it can request additional information from the proponent. Should the project be changed by the proponent at any time during the review, the Panel may choose to repeat some or all of the review steps to ensure that these changes are subject to review.
3. Review by the Panel of existing project documentation including the project description and the results of the Regional Environmental Review Committee's technical evaluation.
4. Preparation by the Panel of draft Guidelines for the Preparation of an Environmental Impact Statement (EIS Guidelines) and distribution for public comment (within one month of receipt of project description).
5. Holding of public 'scoping' meetings by the Panel in communities and centres in the Northwest Territories that could be affected by the project (within three months of receipt of project description). The Panel will determine which communities are appropriate for these meetings. The purpose of these meetings will be to introduce the Panel to the communities, to explain its review process, to help identify priority issues to be addressed during the review and to receive comments on the Panel's draft EIS Guidelines.
6. Finalization by the Panel of the EIS Guidelines (within five months of receipt of the project description). These EIS Guidelines will be issued to the project proponent, BHP Minerals Canada Ltd., which will then be responsible for preparing the EIS. The final EIS Guidelines will be made publicly available.

7. Submission to the Panel of the completed EIS by the project proponent. Upon receipt, the EIS will be publicly distributed by the Panel for review and comment.
8. At the completion of the EIS review (within three months of receipt of the EIS in appropriate languages as determined by the Panel), if the Panel identifies deficiencies in the document, it may request additional information from the proponent. If these deficiencies are deemed significant, the Panel may provide an additional period for public review and comment on the proponent's response to the request for additional information.
9. Once the Panel determines that the EIS documentation is sufficient to proceed to public hearings, it will schedule and announce the hearings. The Panel will issue detailed procedures for the conduct of the hearings. As in the case of the public meetings described in (5) above, the Panel will decide which communities in the Northwest Territories will be included in the hearing process. The hearings will be conducted in a non-judicial manner but will be structured to allow for an examination of matters relevant to the Panel's mandate.
10. Preparation of Panel report containing its findings, conclusions and recommendations (within four months of the completion of the hearings). This report will be formally conveyed to the federal Ministers of the Environment and Indian Affairs and Northern Development. The report will also be transmitted to the Premier of the Northwest Territories as well as to the Dogrib Treaty 11 Council, the Yellowknives Dene Band and Nunavut Tunngavik Incorporated.

Specialist Advisors to the Panel

The Panel may secure the services of independent specialists to provide information on and help interpret technical and scientific issues and issues relating to traditional knowledge.

Translation/Interpretation Requirements

Key review documents shall be translated into appropriate Native languages. The Panel, following consultation with appropriate First Nation and Inuit organizations, will determine into which languages these documents will be translated. For some of the documents, the Panel may decide that translation into an oral format may be more appropriate than a written translation.

During the Panel's 'scoping' meetings and at the public hearings, appropriate interpretation services will be provided by the Panel.

What if the Climate Warms? Implications for the Mackenzie Basin

Stewart Cohen¹

The Mackenzie Basin Impact Study (MBIS) is a six-year effort to assess the potential impacts of global warming scenarios on the Mackenzie Basin region and its inhabitants. Participants include researchers from governments, the private sector and universities. Interim Reports #1 and #2 have recently been published (Cohen 1993, 1994), and the final report is expected in 1997.

Climate is a complex agent of change, and an interdisciplinary approach is needed in order to account for the direct and indirect linkages between climate and society. This study of 'futures' also recognizes that climate is not the only element that may change, so MBIS includes scenarios of population and economic changes that may occur without climate change (Cohen 1993). The net result will be an expression of potential effects of climate change superimposed on other changes. If climate change impacts are significant, then their 'signals' should be visible when compared with other forces that may affect the region.

Preliminary indications include the following: a) the basin would receive slightly less runoff, with an earlier spring peak, lower average water levels and reductions in ice cover, b) the Fire Weather and white pine weevil indices would increase significantly, indicating increased risk of fire and weevil infestations in the Boreal forest, c) permafrost thaw would occur at different rates, with accelerated erosion rates in the Beaufort Sea coastal zone and Mackenzie Valley, and slower rates in wetland areas, d) peatlands would gradually change, expanding in the Mackenzie Valley, and disappearing in northern Alberta, and e) impacts on Northern settlements would depend on lifestyle choices, since different climate impacts on the landscape would lead to different effects on non-wage and wage based settlements.

The MBIS includes consideration of a number of issues that could be affected by climate change: a) interjurisdictional water management, b) sustainability of ecosystems, c) sustainability of native lifestyles, d) economic development opportunities, and

1. Stewart J. Cohen is on the staff of the Environmental Adaptation Research Group, Atmospheric Environment Service, Environment Canada, in Downsview, Ontario, and has been project leader of the Mackenzie Basin Impact Study since its inception in 1990.

e) maintenance of infrastructure. There are science and policy elements in each of these, and accounting for both elements in a scenario context is a major challenge. For example, it may be that the capability of land to support agriculture or commercial forestry in the Mackenzie Valley may improve in a warmer climate. Would this automatically lead to widespread conversion of land from their current uses to these new ones? Could this result in new land use conflicts, or new opportunities, particularly in land claims areas? Does current legislation, or the establishment of new agreements, enhance or diminish the capability of the region and its various stakeholders to adapt to a scenario of climate change?

Similar kinds of questions could be asked regarding water management, water levels in the Peace-Athabasca Delta, forest fire management, national parks, wildlife management and overlap agreements between neighbouring land claims.

MBIS has been designed to be a collaborative effort between scientists and stakeholders. The ultimate success of the MBIS exercise will depend on the level of participation of both sets of interests. Although MBIS seeks to address regional impacts issues in an integrated manner, the achievement of integration has been difficult. MBIS was successful at attracting researchers in hydrology, terrestrial ecosystems, forestry, freshwater fisheries, tourism, energy and some others, but some issues, such as water quality and marine ecosystems, have not been represented. In the case of traditional environmental knowledge, the MBIS includes several community-level studies that were initiated from outside the communities (e.g. community response to flooding in Aklavik and Fort Liard, non-wage economy of Wrigley, land use in Aklavik). MBIS was not successful, however, at finding co-sponsors for a study in Lutsel k'e, which would have employed Participatory Action Research in documenting Dene traditional knowledge related to climatic variability (Bielawski 1994).

The latter experience is indicative of the constraints imposed by the current funding environment. The part time nature of most of the MBIS activities is a by-product of funding limitations. Most study participants could only be supported to a limited degree, and although it was adequate for graduate students (as long as some additional funding could be obtained from other sources), MBIS support could not take the place of long term baseline funding for monitoring and other related activities which should have come from elsewhere. Examples include fisheries inventories, water quality monitoring, and the collection and archiving of traditional environmental knowledge.

Other large research efforts in the region, including the Northern River Basins Study (NRBS), Peace-Athabasca Delta Technical Studies (PAD), and the Global Energy and Water Cycle Experiment (GEWEX), are now collecting considerable amounts of baseline information. These data sets, when they become available, could be extremely useful in any follow-up studies on climate change that might be considered by the region's scientists and stakeholders after MBIS is completed in 1997. Sharing of information has generally been done by individual researchers on an *ad-hoc* basis, but in order to address the complex environmental and social impacts that could occur in the future (at least in part) because of climate change and other external forces, a regional archive will be needed for these and other data bases. Options for such an archive should be considered as soon as possible.

Another related issue is the fact that research on climate change has been initiated from outside the region. Most of the scientists are located outside the region. When MBIS was initiated in 1990, most Northerners I spoke with felt that they were not yet ready to deal with climate change, but that they were interested in the subject and would

follow the Study's progress. Since that time, the Gwich'in and Sahtu claims have been settled, the Science Institute of the NWT and College West have been reorganized, and new resource management bodies have been set up. In other words, the regional capability for initiating and carrying out studies related to climate change is growing. By the time MBIS releases its final report in 1997, the North may be able to generate its own response to this challenge.

The MBIS has held a number of meetings and workshops since it began in 1990. Interim Report #2 was produced from a workshop held April 10-14, 1994 in Yellowknife (Cohen 1994), in which over 120 people attended. It is expected that the final MBIS workshop will take place in Yellowknife, probably during the spring of 1996. The final report, including recommendations for future research, will be based on the discussions at this event. Anyone who is interested in the workshop should contact the author.

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Shaping Circumarctic Science Policies

Gerald S.H. Lock¹

Introduction

During most of the present century, the shape and pace of arctic scientific research has been determined largely by political events or, more precisely, by the military initiatives which accompanied them. Little by little, the transportation and communication problems have either been removed or reduced to a size which is negligible in comparison with the difficulties faced in the previous century. In recent decades, these scientific and technological advances have transformed the northern regions of the eight arctic countries: economically, socially and politically. The last decade, in particular, has witnessed the metamorphosis of the Soviet Union consequent upon which it has become apparent that the Arctic, as a unique region of the planet, has been afforded an unprecedented opportunity for international cooperation at precisely the moment when the region is confronted by the greatest economic and ecological crisis in its history.

It is now common knowledge that our economy and our ecology must both be treated in terms of global phenomena. These developments present fresh challenges to national governments working individually and collectively. It is also widely believed that science and technology together play a key role both in setting the global intensity of economic and ecological change and in the search for remedies to adverse trends.

Arctic science, broadly viewed, thus becomes a vital component of policies and actions to be embraced by the eight arctic nations for their mutual benefit and for the benefit of the rest of the planet. Against this background to the arctic theatre, two vitally important new organizations have arisen: the International Arctic Science Committee and the Arctic Council.

What follows below is, first, an attempt to describe the essential nature of arctic science and politics, special attention being given to their practitioners. Against these realities, a set of national and circumpolar science policies are suggested. These are offered merely as an illustrative, first step in an attempt to define the optimal relationship between political priorities, reflected in the mandate of the Arctic Council, and the scientific priorities, expressed through the International Arctic Science Committee.

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1. Dr. G.S.H. Lock is Professor Emeritus of Mechanical Engineering at the University of Alberta. This paper is based on a presentation to the International Conference for Arctic Research Planning, December 1995, Dartmouth College, Hanover.

The Nature of Arctic Science

The typical politician is a pragmatic generalist charged with improving the lot of his constituents, a citizenry most often concerned with regional or local problems. The typical scientist, by way of contrast, is usually viewed as a theoretical specialist charged by his curiosity on behalf of all humankind to discover why the Universe unfolds as it does. It is not surprising that scientists and politicians often fail to communicate with each other: their objectives, *modus operandi* and world views are entirely different. This section and the next are therefore devoted to descriptions of the practitioners who occupy these separate domains. Armed with clear profiles, albeit in brief, it should be possible to identify particular aims and circumstances when politician and scientist are able to converge for their mutual benefit and for the benefit of the societies they both serve. I begin with science.

Arctic science is often thought of as a branch of science in general, but this hides the impressive reality that virtually every branch of science is practised in the arctic regions. In other words, the adjective 'arctic' brings only a geographical connotation and has little to do with philosophy or methodology. Certainly, arctic science is set in the high latitude landscape of low temperatures and large seasonal swings, but in essence it is no different from pure science practised anywhere and defined, for example, as: 'Rational, objective understanding of the natural world including humankind'.

This is a cultural pursuit driven by curiosity; it is an end rather than a means; it is detached, analytic, amoral and apolitical. Its aim is to reveal scientific truth in the form of demonstrable hypotheses rationally founded on observable, quantifiable facts.

However, this description does not fit science applied — that which is more commonly known as technology. This is a very different pursuit with a very different aim. Here we have a mission-oriented activity which may use science but equally may drive or support it. Technology employs a high degree of subjectivity: in value judgement and in the search for acceptable compromises. It is inextricably linked to the goals of society and is therefore neither amoral nor apolitical. It culminates not in truth but in action.

Whether the practice of arctic science is pure or applied thus determines not only the nature of the work but the *milieu* in which it is conducted: the university library or field station; the government institution; the industrial research laboratory. A further complication arises in the context of the communities within which, or upon which, the scientific research is to be performed. In addition to the obvious question of ethical practice, which is beyond the scope of this paper, we face a much larger epistemological question: namely, the structure of traditional knowledge acquired by the Aboriginal population over thousands of years. The difficulty lies in the fact that of the three types of knowledge accessible to humankind — rational, empirical and metaphorical — the first characterizes (pure) science while the second is characteristic of technology. Traditional knowledge is typified by a blend of empiricism and metaphor; it is experiential rather than contemplative; intuitive rather than conceptual; holistic rather than analytic. For the Aboriginal population, it is both means and end.

It should now be apparent that the definition of science given earlier, while correct, is not up to any task which goes beyond intellectual curiosity in the search for solutions to the economic, environmental and socio-cultural problems so prevalent in the Arctic. Perhaps a broader definition is required, one which sacrifices the integrity of none of the three basic components, but recognizes their complementarity within the realm of

human knowledge. Perhaps it would be wise to recognize arctic science as a unified collectivity, much as we do with space science; to treat it as a subject *sui generis*.

Turning now to a description of the practising scientist, loosely defined, let me begin with some observations on three sovereignties to which he or she owes loyalty. In the first of these — the physical sciences — we are schooled in the immutable laws of the Universe as they apply to super-galaxies, at one extreme, and to subatomic particles at the other. Depending upon the occasion, we may be overawed by the majesty of a glacier or the kaleidoscope of possibilities in ice crystal perfection; alternatively we may be distressed when hail destroys crops or icebergs sink ships. We are in the presence of beautiful and powerful physical phenomena.

In the next sovereignty — the biological sciences — we encounter life in all its complexity and diversity ranging from microscopic ice biota to the bowhead whale. Of all the planetary water required to sustain this life, only 5 parts in 100 million are contained within the entire plant and animal kingdoms. Even on this water planet, the life force is at best precarious.

Atop the biological world sits man contemplating all that is below him, and perhaps reflecting on his own destiny. Here we have the most recent sovereignty — the social sciences, set within the humanities. No longer are we dealing with immutable laws governing landscape and climate; nor are we dealing with mere cellular aggregations in which order and purpose expressed through anatomy and physiology reach bewildering complexity. Over and above these are the traits and propensities of our species — individuals and groups — living on the edge of survival in northern fringes. Rational, objective description must now be modified by the gross inexactitudes of economics and politics, and the irrational latent forces of legend, myth and ritual. Of greatest interest here is the subculture known as science.

Science, at least in the pure sense, has its own morality borne out of respect for universal knowledge: revering such knowledge; obeying the strict procedures necessary for its acquisition; upholding the universal laws which stem from it; celebrating the knowledge in rituals ranging from the informal seminar to the Nobel awards. But it is worth bearing in mind the insight of the distinguished poet Rabindranath Tagore when he suggested that ‘the world of science is not a world of reality; it is an abstract world of force’. Against the objective view we espouse, Tagore suggested that ‘science (is) mysticism in the realm of material knowledge’. In his opinion, science brings a ‘freedom of spirit’, more commonly called academic freedom, which, if encouraged, leads to ‘the purest feeling of disinterested delight’. Perhaps this is the poetry of science.

Politics, Administration and Policy

A full description and analysis of politics and political life is far beyond the scope of this paper; indeed it is beyond the competence of the author. Nevertheless, it might be helpful to sketch the essential nature of political and bureaucratic processes by way of contrast to the scientific method. In this way, not only will it be possible to see how incongruences may occur, and may thus be avoided, but it might also become clearer how scientist and politician can become acquainted with each other’s aims and needs, and thus find mechanisms for mutual support. In a perfect world, the scientist would have a working knowledge of political processes while the politician would be familiar with scientific technique. But that is not the world in which we live.

It may seem trite to observe that a politician, at least in democratic regimes, is elected to a position of power which he or she is expected to exercise for the public good. But

this stands in sharp contrast to the curiosity-driven scientist content to further her or his systematic understanding of the Universe. Beyond the need to earn a living, the first loyalty of the scientist is to his discipline; to his peers in general and journal editors in particular. He must practice at the altar of scientific truth and actively preach its virtue. The politician, on the other hand, has different allegiances. His primary duty is towards his constituents but, more generally, he will have loyalties towards the general public at one extreme and his political party at the other; perhaps even to the party leader. His is a world of compromise where principles constantly vie with pragmatism; he is judged by his actions, not his understanding. Even so, he is guided by political ideology and constrained by the mandate given by the electorate.

Politics is rooted in the locality, region or nation in which it is practised. Science is universal. A scientist may expect objective criticism from peers according to criteria which are accepted world-wide, and which are more or less absolute. Criticism in political life may also come from peers but it is equally likely to come from people without responsibility, outside of public life; from the media, it is unbounded, often undeserved and frequently comes from those who have the right but not the qualifications to give it. The rigour of scientific debate is a safe harbour compared with the vigour of public debate. Ironically, the broad scope of most political discussions is often accompanied by geographical restrictions on the outcome; local, regional and national boundaries play a significant part in structuring the debate and in limiting the extent of any actions which ensue. By comparison, science moves across political borders unimpeded. In fact most scientists transcend international boundaries much easier than disciplinary boundaries; quite naturally, like talks to like.

Scientists are, however, bound willingly by the laws of nature, the framing of which may shift but only over extended periods of time. Scientists and politicians alike are bound by civil and criminal laws within their nation, and these too often change with glacial speed. But on a daily basis, politicians are constrained by the policies of government; sometimes these are obsolete but extant; sometimes they are old but popular; sometimes they are newly minted. Always they must be regarded as precarious — to be altered, abandoned or replaced as circumstances and public opinion dictate. This feature of public life requires a politician to be flexible and nimble. It also forces him to view science as a small though vital part of a shifting scene. To cope effectively, he will need sound scientific advice.

As a final comparison, it is worth noting that first rate science requires an infrastructure of laboratories, libraries, universities, etc. to support the work of motivated and highly-trained individual scientists. Nothing comparable to this is available to, or needed by, the politician, unless he were to claim that life is his library and that a Parliament, for example, is his laboratory. However, he does require legions of civil servants organized in government departments to ensure that adopted policies are translated into programmes and regulations. The bureaucracy is thus an essential aspect of government, not only to the politician, who relies on it for implementation, but to the scientist whose work is needed in many government departments. In fact, the ubiquitous nature of science cutting across departmental borders — analogous to its crossing of international borders — creates a major organizational problem within the bureaucracies of many countries.

In the modern state, the bureaucracy comprises a complex web — or perhaps a set of such webs — whose main function is to carry out the directives of the government: specifically, the instructions of cabinet ministers who usually hold office at the pleasure

of their chief — the Prime Minister or President. This arrangement has hardly changed since medieval times when a Prince, for example, assigned responsibilities to favoured courtiers who were not, however, elected in the first place. Nor, in general terms, has the function of the bureaucracy changed much since Niccolo Machiavelli published his celebrated book in Florence about five hundred years ago. In a climate of international cooperation and commitment to the ideals of environmental conservation and economic prosperity, the bureaucracies of the arctic nations must assume the demanding, and indeed critical, role of facilitating the application of arctic science in mutually-beneficial schemes and projects. When a minister declares an action is to be taken, it will be the bureaucrats under his control who have to wrestle with the requirements and consequences of the action, and devise ways by which the action can be effected within the specified time frame and budget. This requires considerable managerial skill and a keen sense of priority, especially in the competitive environment within which government departments invariably operate. The bureaucrat does not hear the same drumbeat as the politician; nor does he follow the drumbeat of the scientist. He is, however, acutely aware that 'he who pays the piper calls the tune'.

Before leaving this section, a few remarks on the nature of issues and policies may be in order. Issues lead to policies. For practical purposes, an issue may be taken as: 'Any controversial, complex and pressing matter requiring rigorous debate in order to clarify disagreements, place problems in priority, and explore the resolution of conflict'.

When the debate has been completed to the satisfaction of the government, it may be, and often is, necessary to draft a statement which clarifies the position of the government. If the issue has a sense of permanence, this statement becomes a policy defined, in general terms, as: 'The articulation of the attitudes, commitment and sense of priority of those who espouse it'.

Clearly, specific policy statements deal with limited topics under restricted circumstances. From the identification of a public issue to the crafting of public policy is a huge step during which the politician and the bureaucrat must work hand in hand. When the issue involves science, the scientist must be enjoined to service, much as a general would be enjoined in a military issue. Science policies drafted without the advice of scientists are equivalent to defence policies drafted by children, and perhaps more dangerous.

National Policies for Arctic Science

In their daily work, most scientists are neither concerned with nor particularly interested in political matters. Similarly, the daily life of a politician will seldom require him to deal with scientific truth. However, should the application of science create a public issue or should science be touted as an essential remedial element in the issue, politicians and scientists may be thrown together as strangers in circumstances which are at best unfamiliar and at worst deteriorate into open hostility. The discovery of atomic energy release provides the classical example, but there are more current examples which press upon arctic communities: exploitation of mineral resources, wildlife management, air and water pollution, substance abuse, etc. The resolution of issues such as these flows only from carefully crafted policies.

Each nation must devise its own policies for arctic science. These policies make little sense unless they support a set of societal goals established for the nation as a whole and its arctic region in particular. In general terms, these goals, where stated, articulate priorities in the management of human environments in the Arctic: in the

physical environment, an emphasis on ecological preservation; in the economic environment, the need for sustainable economic development; in the socio-cultural environment, concern over education and health protection. Against this backdrop of societal goals it is often helpful to distinguish between science in support of public policy (e.g. to improve transportation links) and public policy in support of science (e.g. in promoting science education). The general list given below, while based on Canadian experience, is not intended as a template for adoption by other countries. It is offered here for two reasons: first, as a suggested starting point for jurisdictions which have not yet articulated their policies but wish to do so; second, as a basis on which to build a circumpolar policy for arctic science. It is worth noting that pure science, applied science and traditional knowledge are all incorporated but the appropriate balance between these activities must be determined by the socio-political *milieu* in each nation.

Arctic science and technology in support of national policies:

- * protection and preservation of the physical environment;
- * promotion of socio-cultural development;
- * advancement of sustainable economic development;
- * development and maintenance of high standards for physical and mental health
- * development and maintenance of transportation and telecommunication networks;
- * development of cold regions technologies.

National policies in support of arctic science and technology:

- * development and maintenance of arctic science and technology infrastructures;
- * development and management of accessible arctic databases;
- * education and training in the scientific and, where appropriate, aboriginal traditions;
- * where appropriate, accommodation of both the aboriginal and scientific traditions in the acquisition and use of arctic knowledge.

It must be emphasized that these are suggested only as very general arctic policy statements; so general, in fact, that it may not be obvious how to implement them. Specific policies which address specific problems or situations are invariably necessary, but since these must incorporate local, regional or national peculiarities they are best left to the appropriate jurisdictions which would be wise to tap the knowledge, if not the wisdom, of their scientists in developing an agenda for action. However, such a process may not be simple. Arctic scientists are unevenly distributed throughout government departments, industrial corporations and universities; some of these may have competing interests. In the search for funds, factions may arise: physics *versus* biology *versus* sociology, etc. It is common for lobby groups to form and press the special merits of their case, and it is also common for these groups to strengthen their hand intranationally by organizing internationally.

Science and the Arctic Council

Not long after the Second World War, and largely as a consequence of it, science swept into international prominence as attention was directed towards large scale objectives: the exploration of space, peaceful uses of atomic energy, the feeding of underdeveloped nations, etc. At about the same time, international political developments led to that great advance, the creation of the United Nations organization. In retrospect, it seems almost inevitable that the UN would soon recognize the need for regular consultation with scientists, and promote the systematic implementation of their suggestions. The

United Nations Education, Scientific and Cultural Organization (UNESCO) became an integral part of UN operations while the International Council of Scientific Unions (ICSU) has assumed the role of general scientific advisor.

International polar science was largely accommodated within the Scientific Committee for Antarctic Research (SCAR) which held, and holds, specific high latitude responsibilities within ICSU, and thus assumes the natural role of advisor to the Antarctic Treaty System. At the South Pole, the circumstances are unusual, and unique. Since all territorial claims to the antarctic continent were voluntarily suspended, polar science was able to proceed in an apolitical environment which both demanded and encouraged international cooperation. Antarctic scientific research has been justly cited as a model for international research but, of course, the circumstances are not common to other regions of the world, with the exception of the unpopulated expanses of the oceans.

Against the many successes of science and technology during the second half of this century we must note the significant drawbacks. In the euphoria of post-war reconstruction, the understandable enthusiasm for industrial development had little time for fundamental criticisms, the seeds of which had been sown almost two centuries earlier. It slowly became apparent that industrial processes could be malignant to such an extent that the pollution of land, water and air threatened the very existence of life in all forms. Moreover, we finally had to concede that pollution was almost impossible to contain locally; intercontinental and global movements in the oceans and atmosphere rendered the problem international. Exacerbating the difficulties inherent in global climatic effects is the internationalization of the economy. In the words of the Organization for Economic Cooperation and Development (OECD), this occurs when 'previously separate national economies become increasingly interrelated and economically interdependent to an unprecedentedly high degree'. Interdependence carries with it the obvious advantage that regions and nations may reap the benefits of cooperation and avoid the penalties of isolation. But economic questions such as employment, marketing, financial stability, etc. are then no longer within the exclusive control of national jurisdictions. When a company places headquarters (management, R&D) in one country while placing productive (industrial) capacity in another, and perhaps marketing in a third, new economic and political paradigms emerge.

These massive ecological and economic shifts are felt everywhere on the planet, not least in the Arctic. It seemed perfectly natural to antarctic scientists, with several decades worth of experience under the auspices of SCAR, that their knowledge might be equally useful in the Arctic where, hitherto, the efforts of a few national groups had perhaps not been accorded the recognition they deserved; nor had the scientists been given the opportunity to work with their international colleagues except in an *ad hoc* manner. In a spirit of cooperation, the International Arctic Science Committee (IASC) was born with the expectation, at least initially, that the large scale physical sciences — geology, meteorology, oceanography, glaciology — would all benefit from the cooperation and coordination which a circumpolar organization promised. It very soon became apparent that the same prospects existed for the biological and social sciences.

Thus with the model of SCAR in mind, scientists of arctic and non-arctic countries alike sought to fashion IASC for the benefit of science, and during the formative years much discussion centred around the need to supplement or complement the efforts of those arctic science organizations already in existence. Slowly, an IASC mission and set of priorities evolved, but long before this happened it became evident that arctic

geopolitics was fundamentally different from antarctic geopolitics. The existence of eight sovereign arctic nations had to be recognized. To effect this, IASC was designed with two components: a Council, given the responsibility for scientific priorities, projects and planning; and a Regional Board, assigned the task of ensuring that IASC activities were consistent with the interests of the eight arctic nations. The former has been very effective; the latter has not. Accountable only to itself, IASC was left in a political vacuum.

With the end of the Cold War, the idea of a political body able to address the large scale ecological and economic problems of the Arctic became a reality through a series of steps which eventually led to the proposal of an Arctic Council. Subsuming the Arctic Environmental Protection Strategy (AEPS) and the concomitant concerns over sustainable development in the region, the Arctic Council promises to provide the political framework within which to establish science policies and priorities, and thus provide a rational basis for science resource allocation in the arctic nations. It has been noted, using the European example, that international cooperation on ecological and economic questions may lead to close political cooperation. Whether or not this is true of the Arctic Council remains to be seen, but at the moment of its inception the Council is little more than a voluntary collection of nations anxious to facilitate solutions to the pressing problems of degradation in the physical, biological and social environments in the Arctic.

The match between the Arctic Council and IASC activities is excellent. Even so, gaps within and between the organizations leave unanswered such questions as:

- * Who speaks for arctic science?
- * How can the sovereignties of science be united?
- * How do governments obtain and use international science policy advice?
- * How can science systematically identify and solve circumpolar problems?
- * What is the role of government research agencies in arctic science?
- * To whom are arctic scientists responsible?
- * Is education of the next generation of arctic scientists adequate?
- * What is the role of the university in arctic science?
- * What is the best way to recognize and reconcile science, technology and traditional knowledge?
- * How can the aims of business, industry and government be made congruent in the Arctic?
- * How can international science be used to build international bonds?
- * How can international science be integrated within regional, national and international governmental organizations?

To broach questions like these will require detailed and extensive debate by those responsible for placing science in a societal context.

International Policies for Arctic Science

Some arctic nations have stated policies on arctic science and technology; the majority have not. The national policy framework given earlier, while only a rough guide, is designed to suggest a general set of foci around which political attention is likely to be concentrated in most arctic nations. Assuming a reasonable amount of common interest in each of the priorities listed, the same policy framework may be used as a starting point in drafting circumpolar policies, always recognizing that emphases and priorities may vary from nation to nation. Again making the division between science in support

of public policy and public policy in support of science, the list given below suggests itself.

Arctic science and technology in support of international policies:

- * cooperation in the protection and preservation of the circumarctic physical environment;
- * cooperation in the promotion and coordination of socio-cultural development;
- * cooperation in the advancement of sustainable economic development and the promotion of circumpolar trade;
- * cooperation in the development and coordination of high circumarctic standards for physical and mental health;
- * cooperation in the development and integration of circumarctic transportation and telecommunication networks;
- * cooperation in the development and transfer of cold region technologies.

International policies in support of arctic science and technology:

- * cooperation in the development and integration of arctic science and technology infrastructures;
- * cooperation in the development and integration of circumarctic databases;
- * respect for variations in the appropriate balance between the aboriginal and scientific traditions throughout the circumarctic world;
- * cooperation in the development of education and training in the scientific and, where appropriate, aboriginal traditions;
- * support of high priority international arctic science and technology projects;
- * promotion of public understanding of arctic science and technology in the circumarctic world.

Once again, it is important to note that these are intended only as very general arctic policy statements. They emphasize cooperation and coordination of science and technology subject to priorities yet to be established, presumably by the Arctic Council. The role of arctic residents, the Aboriginal population in particular, is a difficult question in a circumarctic context. While we may appeal to the basic expectation that arctic science must ultimately benefit the residents of the arctic, we must also concede that the accommodation of northerners' aspirations and needs may vary significantly throughout the circumpolar world. No doubt the discussion of this question will influence the priorities assigned to each general policy.

Finally, it is worth mentioning that general science policy statements do little more than establish the climate into which specific projects and programmes are launched. An agenda for action is required. This follows immediately once particularly pressing issues are identified. The urgency currently attributed to environmental preservation and sustainable economic development issues is a good illustration. Specific policies are then required, nationally and internationally; specific projects and programmes must be designed and implemented; funding must be secured. Action without policy, however, carries considerable risk and is at best redundant, if not harmful. The International Conference for Arctic Research Planning (Hanover 1995) has provided an excellent beginning to the discussion of science priorities. By identifying attractive and feasible projects at various stages of development, IASC has been able to develop a comprehensive menu of activities for the consideration of the Arctic Council.

Advisory Mechanisms and Models

Dialogue between the science community and the policy community is a two-way communication, or should be. And I hope the discussion in earlier sections will have made clear that it is a discussion between two solitudes, or at least between two communities which are not naturally inclined to converse in the course of their daily work. Meaningful dialogue will not take place unless a special effort is made to facilitate it; history is replete with examples of missed opportunities, misunderstanding and mistrust. Rather than enter a pointless discussion of past blame, I suggest we turn to the future and recognize that the responsibility has to be shared.

Scientists must accept responsibility for the collection and interpretation of scientific data, and be prepared to judge its accuracy and its adequacy; at the same time, science must be sober in its appraisal of the benefits which society may expect from it. Politicians, on the other hand, must integrate scientific information and opinion into their wider responsibilities without expecting instant remedies or assuming that science is perfectly predictive; they must also recognize that without public policy in support of science they can not expect much from science in support of public policy.

The responsibility for science policy lies, ultimately, with the political community. But, clearly, any science policy formed solely by politicians or career bureaucrats, who are not trained scientists themselves, may easily be flawed either by being based on poor science or by failing to capture the imagination or enthusiasm of the scientific community. A good science policy must mobilize the scientific community to achieve a significant goal. And more often than not, that goal and the means to achieve it are best understood by the scientist. Frequently, the role of the politician is reduced to choosing between conflicting or competing goals being actively promoted by different groups of scientists. Lobbying is a recognized process in democratic societies, and no doubt will continue. But for the long term benefit of both politician and scientist, and indeed of society itself, the scientific establishment as a whole must organize and present itself in a disinterested way. It must be prepared to marshal its considerable intellectual resources in the provision of closely-argued and carefully-weighted advice. In many countries, this role is performed by a Royal Society or a National Academy.

Advice to government members may take a number of forms depending upon the status of the member and the urgency of the issue in question. Even so, we can detect two distinct and complementary mechanisms: intramural and extramural. Intramural advice, e.g. from a Presidential Committee, is usually privileged because it originates either in the bureaucracy or in a special individual, or body of appointees, whose business may be conducted *in camera*. Such advice usually carries two main advantages: first, it may be obtained with a minimum of delay and thus permits prompt government action; second, it tends to incorporate the political and programmatic experience of those familiar with the difficulties of implementation, not the least of which are budgetary constraints.

Extramural advice, on the other hand, usually has the advantage of being more detached and thus freer of personal bias and politics; typically, it is offered by a wider constituency, e.g. a Royal Society, with a broader range of concerns. Properly sought, it can be more proactive than reactive, and thus it may provide an objective, long term view more concerned with visions and options than with immediate remedies.

By and large, the strengths of each of these advisory mechanisms are the weaknesses of the other. What then is the ideal mechanism for providing science advice to national governments? In my view, both should exist simultaneously with neither holding sway.

Each serves functions the other can not; and all of the functions are important. However, the two mechanisms must be reconciled with each other by two simple measures: 1) delineation of the areas of separate responsibility along with areas of joint responsibility; 2) overlapping membership of a few key advisors having proven wisdom and discretion.

Ultimately, each national government will decide on the balance and blend most suited to its purpose and traditions.

Intranational Models

Within a given nation, the characteristics of the advisory system may be represented in diagrammatic form by showing the flow of directives, advice, consultation, etc. between the four basic elements in the policy process (see Figures 1 - 5).

The politician, designated by the letter P, may be taken as the representative of the policy community, by which is meant the collective political authority to adopt any policy with the intention of using it as a *directive* for government action.

The bureaucrat (B) belongs to the community of civil servants whose task it is to *administer* government policies within set financial and temporal constraints. This is usually done through specified procedures and programmes.

The scientist (S) belongs to a mixed community: some working inside government departments, some in industry or the university. In general, therefore, some scientific work will be directed towards the *implementation* of government policies and some will not.

The science advisor (A) stands in a small buffer zone between those who do the science and those who commission it, ultimately between the science community and the policy community. The task of the advisor is to provide policy *recommendations* after discussions with both communities.

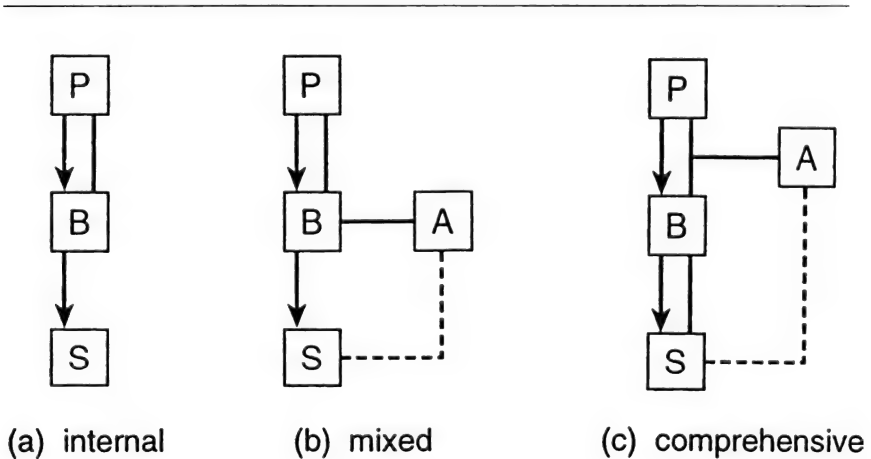


Figure 1 — Science under state control

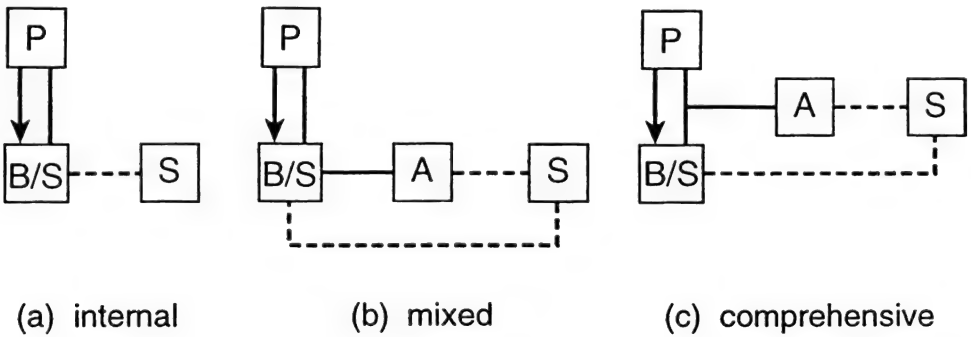


Figure 2 — Science policy advisory systems in arctic nations

In linking these essential elements the following convention will be used:
 A single, full line signifies advice, invariably to the policy community.
 An arrowed, full line signifies a directive.
 Two full lines indicate cooperation and coordination.
 A single, broken line signifies a two-directional consultative process.

In sequential order, *direction, administration and implementation* followed by *recommendation* form a continuous loop in which policies arise and apply until they are either revised or abandoned. But the relationship between the elements may vary significantly. For example, within a nation where science is directed solely by the state, a number of obvious alternatives exist. These are illustrated in Figure 1. While direction always flows from the politician through the bureaucrat to the scientist, advice is offered in three distinct patterns: internal (bureaucrat to politician only); mixed (to politician from bureaucrat assisted by an advisory body which consults with the scientist); and comprehensive (to politician from scientist, indirectly through the bureaucrat and indirectly through an advisory body).

In the eight democratic arctic states, science is generally directed by, and undertaken by, government and non-government agencies. This permits a greater range of alternatives in which it is important to clearly distinguish between science inside and outside of government agencies. Henceforth, S will designate science not (necessarily) aligned with government policy, while B/S will designate the direct application of science within bureaucratically controlled government agencies. Figure 2 shows the three advisory alternatives corresponding to Figure 1: internal (with the bureaucrat now consulting with scientists external to government); mixed (with the bureaucracy now advised by an external body, A, which consults with the nongovernmental science community; comprehensive (with the politician now advised internally by the bureaucracy and externally by a consultative advisory body). Government directives continue to flow from politician to bureaucrat.

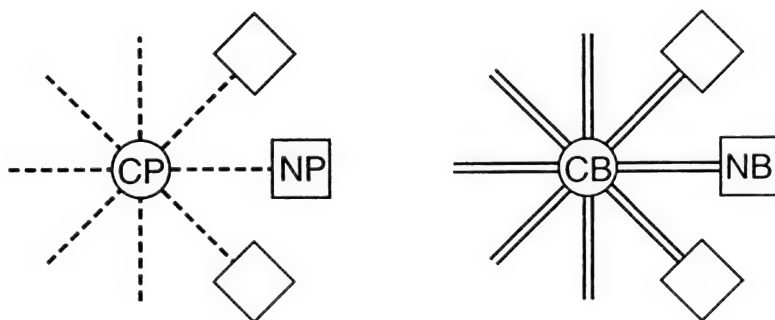


Figure 3 — Political and bureaucratic links in the circumarctic world

It is clear from Figure 2 that the existence of science beyond direct government control frees not only those scientists who undertake that work but also frees the government to choose an appropriate balance between fundamental and applied research within its agencies; this balance will usually differ from that in non-government science. Industry, for example, will concentrate on applied research while in the universities the emphasis will be on fundamentals. The former will be the freer because the research is usually company funded whereas the universities are restricted not in subject but in scale by the availability of government funds assigned to policies in support of arctic science and technology.

Another significant feature seen in Figure 2 is the maintenance of communication between government and non-government scientists. This leads not only to the sharing of ideas but of resources for the benefit of all. The advantage increases when an advisory function is introduced, even when everything is funnelled through the bureaucracy, e.g. by using an interdepartmental committee. The 'comprehensive' advisory structure provides a better balance by combining internal advice with independent external advice. The politician is then free to accept either, neither or both of these while working from a broader range of options. Independent advice can also strengthen the claims or requests of government departments anxious to avoid the criticism of self-interest and wishing to capitalize on an external audit. It can also do much to reinforce science priorities.

Canada uses the comprehensive system with the Canadian Polar Commission acting as the external advisor.

A Circumarctic Model

For the purpose of discussion the Arctic Council will be taken as the circumpolar analogue of the two-tier structure found in arctic nations. An international assembly (CP) of eight senior arctic politicians, e.g. Minister, Secretary of State, etc. represents the elected governments of the eight arctic countries. It is their collective responsibility to decide upon circumarctic policies, in general, and circumarctic science policy in

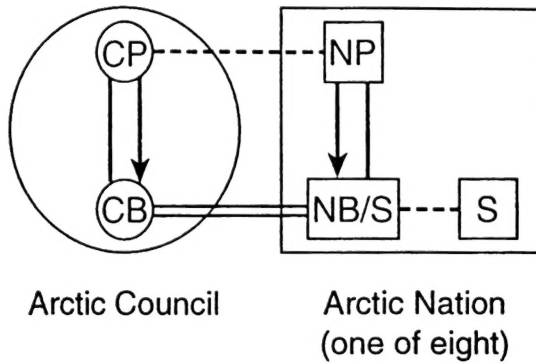


Figure 4 — The Arctic Council in the circumpolar world

particular. The corresponding international bureaucracy (CB) of senior arctic affairs officials has the task of administering the circumpolar policies. It is to be expected that circumpolar politics will entail regular consultation between the circumpolar policy community CP and the eight national policy communities NP. At the same time, the Arctic Council bureaucracy (CB) will be characterized by close cooperation and coordination with the national bureaucracies NB. Figure 3 illustrates the radial links connecting the respective communities and suggests the different forms of inter-communications.

The flow of arctic science advice to the Arctic Council will depend upon whether the Council decides to use an internal, a mixed, or a comprehensive system. If only internal advice is used, the arrangement may be described by Figure 4, directives flowing from politician to bureaucrat with internal advice flowing in the opposite direction. This has the advantage of simplicity and efficiency but the role of the science community is then indirect and is restricted to intranational discussion. Circumpolar science would be subordinated to the arctic science initiatives undertaken by individual nations.

For a comprehensive advisory system, external advice would be added at both the national and international levels. A circumpolar science advisory body CA could then be formed from, and/or receive advice from, the eight corresponding national arctic science advisory bodies NA. Figure 5 illustrates the flow of science advice under these circumstances and reveals that while the arrangement is more complex it carries several significant advantages:

- 1) Advice from the bureaucracy is retained intact intranationally and internationally;
- 2) Independent, external advice complements bureaucratic advice;
- 3) The circumpolar advisory body CA is a well established international model that develops and integrates advice from individual nations;

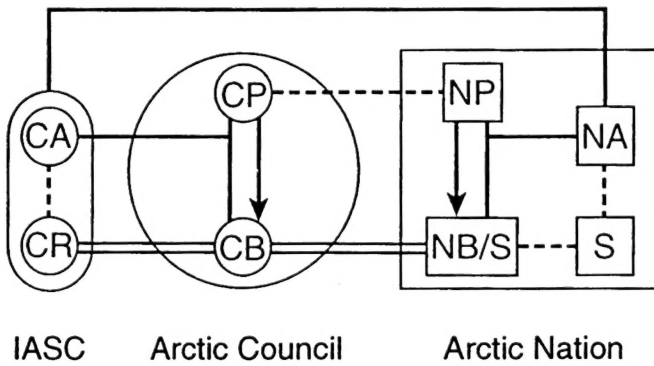


Figure 5 — Science policy advisory system for the circumarctic world

- 4) Each nation may participate in the circumarctic advisory body whether or not the comprehensive advisory system exists nationally.

A Framework for Policy Advice and Scientific Research in the Arctic

It was noted earlier that whereas it is the responsibility of politicians to authorize and support arctic science and technology undertaken for the benefit of society, it is the scientists and engineers who are expected to embrace the policy goals and devote themselves to their attainment. It is therefore clear that politicians and scientists, aided by bureaucrats, have a joint responsibility for the deployment of science. These joint efforts are best done in concert by recognizing the societal goals which depend upon science for their accomplishment. If any of the three cardinal groups were to act alone, their efforts, however well-intentioned, would be lacking in balance and completeness. And if this is true in the execution of science, it is especially true in the formulation of science policy.

It is beyond this paper to present detailed recommendations for the procedures used by national jurisdictions and their respective bureaucracies. Responsibilities for arctic science policy advice, and the precise balance between intramural and extramural mechanisms, are matters for intranational discussion in line with national objectives and traditions. It may be helpful, however, to suggest how national procedures and priorities may be woven into a circumarctic framework which would facilitate two major objectives: the execution of research on arctic science and technology; and the formulation of circumarctic policies for science and technology. These are the main objectives of the International Arctic Science Committee. In reaching these objectives, two important considerations must be borne in mind. First, the Arctic Council must decide how to integrate national policies, in general, and arctic science policies in particular; only a clear statement of circumarctic societal goals can determine a clear set of circumarctic science priorities. Second, it must be recognized that any external advisory body must be independent of any organization with a vested interest in the

outcome of the advice tendered. Political and scientific bodies concerned with the funding and execution of arctic science must remain at arm's length from the advisory body. In short, those who do the science, or have it done, should not be those who recommend it.

Figure 5 suggests how IASC could position itself between the science communities of individual arctic nations and the policy community within the Arctic Council. Given its two complementary functions, IASC is perhaps best viewed as a bipartite body in which an Arctic Science Research Council, CR, (facilitating arctic science) complements an Arctic Science Advisory Board, CA, (providing science policy advice). While these bodies must be mutually independent, there is every reason to expect that they could, and would, consult each other extensively. An outline of their respective functions and modes of operation are suggested below.

Arctic Science Research Council

This body, affiliated with ICSU, would be the principal planner and coordinator for all international arctic science, much like the present IASC Council. It would oversee and record the work undertaken in international projects. Its members would be drawn from practising arctic scientists working in their national institutional context, e.g. under the auspices of National Academies. Any country expressing an interest in arctic science could seek membership; that is, membership is not limited to the eight arctic nations.

To undertake its facilitatory work the Council, like the current IASC Council, might function as follows:

- i) hold regular meetings to review its plans, programmes and progress;
- ii) hold *ad hoc* conferences and workshops to examine scientific findings;
- iii) facilitate logistical support and scientific information exchange;
- iv) consult with the Arctic Science Advisory Board (see below) on the problems and prospects of arctic science.
- v) be supported by a small Secretariat.

I suggest that the Council chairman should be a member *ex officio* of the Arctic Science Advisory Board.

Arctic Science Advisory Board

This would be the principal science and technology advisor to the Arctic Council in particular, and to arctic governments in general. It would develop arctic science policy proposals consistent with the interests of the arctic nations. Its members, preferably trained (though not practising) scientists and engineers, must be thoroughly familiar with the complex admixture of science and politics; they would be appointed from each of the arctic countries with at least one additional member representing the indigenous peoples organizations.

The main function of the Board would be to develop science and technology policy recommendations for the consideration of the Arctic Council, upon request (reactively), or based upon its own findings (proactively). To develop these policy recommendations the Board might operate as follows:

- i) hold regular meetings to address enquiries or tasks assigned by the Arctic Council and review its proposed recommendations;
- ii) sponsor *ad hoc* workshops or studies on specific policy topics;
- iii) consult with the arctic science and technology community on the need for research, data collection, information exchange, etc;
- iv) be supported by a small Secretariat.

I further suggest that the Board chairman be a member *ex officio* of the Arctic Science Research Council.

Concluding Remarks

Science and politics are, all too often, two solitudes. Yet it is obvious in today's world that while significant benefits accrue from their convergence, costly penalties must be paid when they fail to converge. The unique characteristics of the Arctic, with sovereign nations set around its frozen oceans, is a most challenging theatre in which to attempt this convergence. Yet attempt it we must, not only for the benefit of arctic residents, and the collectivity of nations to which they belong, but for the benefit of all who recognize that the Arctic is an integral part of the planet.

While science and politics are not natural bedfellows, nor are they intrinsically inimical to one another. It is increasingly recognized that science, launched in pursuit of stated societal goals, is best organized and mobilized within a framework of science policies. The principal responsibility for these policies lies with the political community which, for the most part, is not well versed in science or the scientific method. On the other hand, the scientific community, which carries the responsibility for the execution of science, is not usually characterized by a surfeit of sympathy for the purpose and practice of politics.

The circumstances most likely to produce a convergence between such differing dispositions occur during the formulation of science policy. In that process, politician and scientist ideally share their aims and their frustrations, and if both subscribe to the greater cause — the societal benefits of science — each may preserve the integrity of his community and yet take considerable satisfaction in playing a vital role in society.

Historically, arctic policies have been set by each nation in its own interest. Similarly, arctic science policies are, for the most part, implicitly established intranationally. But recent exceptions, notably in environmental protection, indicate that arctic science policy, while still in its infancy, is poised to undergo substantial development. With the advent of the International Arctic Science Committee and the Arctic Council, there is every possibility that the circumarctic policy vacuum will vanish. If policy formulation for arctic science is limited to *ad hoc*, intranational discussions, we are more likely to encounter difficulties integrating national efforts, not least those of governmental research agencies, and in reconciling policy differences. However, if the Arctic Council adopts the more usual international model, recognizing the universality of science and seeking policy advice from a credible body with a circumarctic mandate, the way ahead will be much smoother.