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Inuktitut Online in Nunavik: Mixed-Methods Web-Based Strategies for Preserving Aboriginal and Minority Languages

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Abstract

Inuktitut Online in Nunavik: Mixed-Methods Web-Based Strategies for Preserving Aboriginal and Minority Languages

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The Canadian Arctic, long considered an isolated frontier, has become an area of contention and amplified media attention. The recent unblocking of the Northwest Passage shipping routes for the first time in human memory has created a global movement toward appropriation of the Arctic. In order to ensure the environmental health and sustainable economic profitability of this environment while avoiding its destruction through misuse, it is essential that the knowledge of those who know it best, the Inuit, be communicated in the strongest manner possible. Nevertheless, the opinions and voices of the Inuit are too-often overlooked when International policy creation is considered. During this tumultuous period when the voices of the Inuit need to be stronger, more focused, and more united than ever before, the traditional language and culture is eroding in response to foreign language media influx into the area.

During the 5 years preceding this research, the Internet has arrived in the Canadian North and the Inuit of Nunavik are actively participating in social networking, linking the communities together more closely than previously possible. Many of these online communities, however, are designed in English and optimized for English users. Inuktitut online is additionally fragmented through disconnects in fonts, software optimization, and hardware design. This research focuses on technological means for the creation of networks and tools designed to encourage Inuktitut use, preserve traditional knowledge, and more strongly connect a new generation of Inuit for the purpose of resistance to global pressures for unsustainable appropriation of the land and resources.

Based on a Mixed-Method Case Study design, this research incorporates a survey given while living in the community of Inukjuaq, Nunavik, in addition to Content Analysis, direct observation, and interviews. Research questions focus on the use of social networking in the Arctic, language use online, and the potentiality for increased use of Inuktitut on the Internet. Data was analyzed using SPSS and atlas.ti software and triangulates results for validity and reliability. Results demonstrate the extent of problems and hindrances regarding Inuktitut online and the research proposes nine policy recommendations.

TABLE OF CONTENTS

	Page
List of Figures	iv
Glossary	viii
Chapter I: Introduction	1 .
Historical Overview	
Purpose	
Conceptual Frameworks	20
Research Questions	44
Significance of Study	44
Assumptions and Limitations	
Definitions	47
Chapter II: Literature Review	48
Existing Inuktitut Research	
Ethnographic Literature Concerning Aboriginal Language	52
Canadian Cultural Communication Policy	66
Chapter III: Methodology	
Statement on Mixed-Methods	
Triangulating Quantitative and Qualitative Data	
Three Principles of Data Collection	
Preparation for Fieldwork	
Final Thoughts on Methodology	

i

Chapter IV: Discussion	107
Section 1: Short Answer Survey Response	111
Section 2: Long Answer Survey Responses.	147
Section 3: Long Interview with Donat Savoie.	
Summary of Findings	169
Chapter V: Conclusions and Recommendations	
Restatement of Purpose	173
Notes by Elders	198
Reflection on Mixed-Methods Case Study Research	215
Enhancing Inuktitut Online and Future Research	216
Broad Implications of the Findings	220
Applicability Beyond the Arctic	222
Government Policy Recommendations	223
Personal Letter from Inuit Bebo User	224
Relationship of Findings to Conceptual Frameworks	
Summary of Policy Recommendations for Social Change	227
Final Words	
Bibliography	231
Appendix A: Transcription of Donat Savoie Interview	
Appendix B: Radio and Television Stations in Inukjuaq	
Appendix C. Survey Questions	
Appendix D: Letter to Bebo Users	243
Appendix E: Blog Entries	
Appendix F: Canadian Media Policy History	
Appendix G: Selected Bebo Comments.	
Appendix H: Maps	
Appendix I: Descriptive Statistics	271

ji

Appendix J: Long Responses to Survey Questions	
Appendix K: Screen Captures of Arctic Websites	
Appendix L: Documentation of the Erosion of Inuktitut	

LIST OF FIGURES

Figure Number

Figure 1:	Map of Nunavik	. 8
Figure 2:	Symbolic Representation of Québec's Commitment to Nunavik	
Figure 3:	Case Study Diagram in Yin's Methodology	
Figure 4:	Mindmap of Methodology Employed	
Figure 5:	Online Language Use	
Figure 6:	Operating System Used	
Figure 7:	Use of Social Networking Sites	
Figure 8:	Use of E-mail with Friends and Family	
Figure 9:	Online Shopping Use	
•	Use of Inuktitut Online	
	Online Use of English	
	Online Use of French	
	Degree of Inuktitut Fluency	
	Web Benefits the Language of Inuktitut?	
	Social Networking Benefits to Inuktitut.	
	Language Usefulness Online	
	Future Inuktitut Use	
	Estimated Language Use Online in 5 Years	
	Concerns with Security Online	
	Desire for More Inuktitut Websites	
	Language Use on Bebo	
	Online Language Use with Other Inuit	
	Use of Bebo with International Friends	
	Language Usefulness on Bebo	
	Demand for Inuktitut Bebo	
	Bebo Influence to Use English Online	
	Importance to Protect Inuktitut	
	Inuit Pride	
	Perceived Threat to Inuktitut	
	Desire to Use Inuktitut More Often Online	
	Age of Study Participants	
	: Nunasoft Inuktitut Logo	
Figure 33	: Nunasoft English Logo	152
Figure 34	Nunasoft Mandate	154
	Nunasoft Hardware and Software Implementation Chart	
Figure 36	: Language Choices Available at Nunasoft	156
	: Detail of Nunatools/Inuktiboard	
Figure 38	Inukticode Example	159
Figure 39:	Inuktitut Syllable Matrix with Unicode Characters	164
	: Example of DevonAgent Web Crawling for Content Analysis	
	: English-Based Inuit Homepage on Bebo	
	Arjowiggins Inuit Font Presentation	
	Arjowiggins Font Design Elements	
Ŷ	: Arjowiggins Font Marketing	

iv

Figure 45:	Trilingual Cover Story	177
Figure 46:	Soleica Workers Installing Internet Installations in Nunavik	179
Figure 47:	Example of QWERTY Keyboard with Taped-On Syllabic Letters	185
Figure 48:	Map of Circumpolar Inuktitut Dialects	188
	Nunavik Unicode Installer	
Figure 50:	Nunavik Syllabics Support Installer	189
Figure 51:	Streaming Inuktitut Online at Tusaalanga	190
Figure 52:	Attavik Center for the Support of Nuktitut Computing	192
Figure 53:	Pirurvik Centre	193
Figure 54:	Tusaalanga Inuktitut Language Training	193
Figure 55:	Elders' Conference Logs	196
Figure 56:	Inuktitut Language Funding Proposal	199
Figure 57:	A History of Inuktitut Syllabics	200
Figure 58:	Statistics Canada Inuktitut Survey	204
Figure 59:	Map of Inuit Region and Communities	269
Figure 60:	Circumpolar Inuit Region	270
Figure 61:	www.itk.ca	280
Figure 62:	www.nunatsiavut.ca	280
	www.gov.nu.ca	
Figure 64:	www.inuvialuit.com	281
	www.makivik.org	
	www.nunavikgovernment.ca	
	www.krg.ca	
	www.kativik.cq.ca	
	www.nunavik.ca	
	Aboriginal Canada Portal	
	Aboriginal Canada Portal in English and French	
Figure 72:	Aboriginal Canada Portal in Inuktitut	289
	Elementary English for the Eskimo	
Figure 74:	Official Letter Regarding English Education	292
Figure 75:	Inuit Pointing to Numbered Tracking Tag	295

V

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DEDICATION

This work is dedicated to my father Rudy, my mother Donna, and my brother Adam. It is also dedicated to Saori and Kai. The love and support of these wonderful people is my truest wealth and I am deeply blessed to have them in my life.

Glossary

English	Inuktitut
Caribou	Tuktu
Computer	Qarasaujaq (like a brain)
Discover	Qauji
English	Qablunaatitut
French	Ouiouititut (the ones who say 'oui oui')
InternetQu	immuatitausimajukkut (meaning through satellite)
Inuit	
Inuktitut	(Speak) like Inuit (the language of the Inuit)
Keyboard	Naqittautik (meaning you press on them)
Mouse	Nalaanuuqutik (meaning you use it to align)
Non-Inuit	Qablunaat
PrinterQaritaujaup nuits	sigutinga (meaning you use it to show something)
Researcher	Qaujisaqti (struggler to discover)
Screen	Takunnavinga (meaning you use it to see)
Seal	Natsiq
Understanding	Tukisi

CHAPTER I: INTRODUCTION

"The political domination that is endlessly reproduced by institutions capable of imposing universal recognition of the dominant language is the condition for the establishment of relations of linguistic domination" (Bourdieu & Thompson, 1991).

The Canadian Arctic, long considered an isolated frontier, has increasingly become an area of contention and greatly amplified media attention. A multiplicity of issues has propelled the Arctic into modern global consciousness, and only infrequently does a day pass without mention of the Arctic on the Web and throughout the blogosphere. The ever-increasing prices of fossil fuels and increased resource scarcity have created mounting interest in resource extraction from the North.

The melting of ice due to climate change has unlocked access to the Northwest Passage for the first time in human memory. The potential to cut thousands of miles from current barge travel through the bypassing of the Panama Canal is extraordinarily attractive to international shipping interests. As a result, efforts are now underway attempting to prove that the Northwest Passage is an international waterway (and not under the control of Canada or the Inuit).¹

The imminent global decisions as to the future of the Arctic are of great importance and impact one of the few remaining areas of the globe considered to be relatively undamaged by commercialization and pollution. It is essential that the knowledge of the Inuit in regard to the preservation of the environment, the sustainable and simple life of the land, and the adaptability to the environment be communicated in the strongest manner possible.

1

¹ Author participated in roundtable discussion: *Sailing the Northwest Passage: Chronicles of a Changing Arctic* with Michael Byers, Canada Research Chair in Global Politics and International Law, University of British Columbia, held at University of Washington, May 2, 2007.

The Inuit, so in tune with the land and living as they are in a hunting culture, have a vested interest in preserving the health of the environment and the creatures that inhabit it. Nevertheless, the opinions and voices of the Inuit are often overlooked when international policy creation is considered. During this tumultuous period when the voices of the Inuit need to be stronger, more focused, and more united than ever before, the traditional language and culture is eroding in response to vast foreign language media influx into the area.

In the past 5 years, the Internet has become a reality for the communities of the Canadian North, and the Inuit are actively participating in online communities attempting to link the people together more closely than previously possible. Unfortunately, many of these online communities are created abroad, with commercial advertising and datamining goals as their primary function.

Additionally, these online communities are designed in English and optimized for English users. The Inuit desiring to participate in these communities (and demand is staggeringly high) are focusing their linguistic efforts on written English to the exclusion of written Inuktitut online. In so doing, native knowledge, skills, and worldviews are gradually eroded and superseded by majority language and corporate cultures with their attendant social agendas.

This research study focuses on technological means for the application of the power of the Internet to the creation of networks and tools designed to encourage Inuktitut use, preserve traditional knowledge, and more strongly connect a new generation of Inuit for the purpose of resistance to global pressures by profit-based appropriation of the land and resources. The goal of this research is to facilitate a united Inuit voice through digital communication technologies.

At the present time, this voice is fragmented through technological disconnects such as fonts, hardware, and software which are examined in this research. A unified Inuit voice online can serve to bolster its connections more fully with other Aboriginal communities worldwide, including the fellow Inuktitut-speaking Inuit in Greenland, Alaska, and Russia, in addition to other communities throughout the circumpolar North.

This researcher is convinced that through proper understanding of the hindrances to the unification of the Inuit voice online and subsequent policy rectification of these issues, solidified resistance to encroachment—both linguistic and cultural—can ensue.

HISTORICAL OVERVIEW

NOTE: There are five primary, distinct Inuit language dialects spoken throughout Canada. These dialects are: <u>Inuvialuktun</u> (spoken in the Inuvialuit region in the Northwest Territories), <u>Inuinnagtun</u> (primarily used in some communities in Western Nunavut); <u>Inuttitut</u> (spoken in Eastern Nunavut); <u>Inuttitut</u> (spoken in Nunavik); and <u>Inuttut</u> (spoken in Nunatsiavut). While some of these dialects have many speakers, others have very few. In this report, these dialects are collectively known as Inuktitut.²

The first known contact between Westerners and the Inuit occurred in the late-

16th century when explorers looking for a passageway to Asia arrived from Europe. While the discovery of this passage was not immediately successful, it did lead to the discovery of a wealth of natural resources and the development of industry. Bowhead whaling in the mid- to late-19th century was followed by the rise of the fox fur trade in the early 20th century, accompanied by the increased expansion of the Hudson's Bay Company into the area. Although Inuit and qablunaat³ sustained contact in both the whaling and fur industries, it was not until the mid-twentieth century that the so-called

² (http://www12.statcan.ca/english/census06/analysis/Aboriginal/language.cfm)

Statistics Canada report on Aboriginal Peoples in Canada, 2006.

³An Inuktitut word signifying any non-Inuit individual.

"esquimaux" (a now pejorative appellation to the Inuit) began to feel the impact of the concentrated presence of Canada's colonial move North.

World War II increased the focus of Canada and the United States on the Canadian North and its inhabitants (including the Inuit), resulting in the construction of a variety of military bases in the region. These included so-called weather stations such as those associated with the Crimson Project in Goose Bay, Labrador; Fort Chimo in Kuujjuaq; and others in Iqaluit and on Baffin Island. These Arctic bases, and especially those at Frobisher Bay (now Iqaluit), were a major encroachment on traditional nomadic hunting grounds and a major catalyzing force for industrial development in the region of Nunavik (Eno, 2002).

A culmination of factors was responsible for Canada's increasing move North: (1) A growing sense that sovereignty assertion over the Arctic would increase Canada's strength, (2) a need for increased security in the region due to the Cold War and the conceptualization of the Pinetree Line (Mid-Canada Line at the 55th parallel), and (3) the Defense Early Warning (DEW) Line (Alaska to Greenland). All contributed to a major thrust North, beginning with the Diefenbaker political campaign in the 1950s.⁴ Continued Arctic development further encroached on Inuit lands, with concomitant linguistic and cultural erosion.

Presence of Québec in Nunavik

Nunavik is the Inuit land situated in the northern third of the province of Québec. The year 1963 is generally considered to be the date of arrival of the provincial Québécois government on these Inuit lands, with the initiative of René Lévesque, the

4

⁴ (http://www.collectionscanada.gc.ca/primeministers/h4-3331-e.html).

Minister of Natural Resources at the time. Under his direction, the creation of the Northern-Québec branch administration was established in order to begin asserting the physical presence of Québec in the Northern Arctic Inuit communities. This led to the establishment of various services in the area such as schools for children and the support of Québec to the Co-operatives. These Co-ops" (hereinafter referred to as co-ops) exist today as important economic centers of goods exchange. The importance of the co-ops was observed first-hand by this researcher while living in Inukjuaq. Almost all observed exchanges of goods and services take place in co-ops.

In the time since the Cold War, government housing and traditional static architecture have come to represent the gradual transformation of the nomadic life of the Inuit. Canada's increasing presence in the North, during the Cold War specifically, was twofold: first, to assert its presence as a nation in the Arctic for security and sovereignty issues, and second, to bring Canadian social services north during an economically strong period. These aspects combined to create the first occurrence of a truly "colonized" North.

Concurrently, technology has entered into the communities in a dramatic way in recent years. Communication technology, from the introduction first of radio, then television, and now (as of 2004)⁵ through the implementation of broadband Internet networks, has propelled the Inuit onto the global stage.

However, the rapid changes in lifestyle concomitant with these technological shifts are at a potentially high cost to the preservation of traditional forms of linguistic communication and the integrity of foundational aspects of Inuit culture in general. Deep impacts to the maintenance and integrity of the Inuit culture were due to the government-

⁵ (http://www.tamaani.ca/en/index.htm).

enforced, English-based educational systems for which Prime Minister Harper recently issued a formal apology in the House of Commons on June 11, 2008:

The treatment of children in Indian residential schools is a sad chapter in our history. The government of Canada now recognizes that it was wrong to forcibly remove children from their homes and we apologize for having done this," Harper said. "We now recognize that it was wrong to separate children from rich and vibrant cultures and traditions that it created a void in many lives and communities, and we apologize for having done this. These objectives were based on the assumption Aboriginal cultures and spiritual beliefs were inferior and unequal," Harper said. Today, we recognize that this policy of assimilation was wrong, has caused great harm, and has no place in our country," he said.⁶

In addition to, and resultant from, the enforced education and Canadian law of

the time, suicide, drug abuse, teen pregnancy, single parenthood, depression, and an alcoholism epidemic occurred. All are aspects of Inuit reality which stem, in part, from the cultural and linguistic upheaval occurring with immense rapidity in recent history—issues that are discussed in detail in Stern and Stevenson (2006).

The two governing bodies of the Inuit, the Makivik Corporation and the Kativik

Regional Government, have invested over \$10 million dollars (CAN)⁷ in the deployment

of an Internet infrastructure in Nunavik. The hope is that its development will (1) spur

economic growth in the region, (2) assist in increasing communication between outlying

sectors, (3) facilitate electronic distribution of services such as governmental e-health,

(4) create jobs, and (5) spur artistic and entrepreneurial activity.⁸

At the same time, a review of literature in this domain reveals that the Internet can be a polarizing engine detrimental to the maintenance of minority culture, linguistic

⁶ (http://www.thestar.com/News/Canada/article/441414).

⁷ (<u>http://www.nunatsiaq.com/archives/51118/news/nunavut/51118_15.html</u> retrieved 05/29/2006).

⁸ (<u>http://www.hc-sc.gc.ca/</u>) retrieved 04/14/2006.

integrity, and cultural diversity (Kampf, 2004; Landzelius, 2003; Pannekoek, Taras, & Bakardjieva, 2003; Savard, 1998).

Approaching this issue from a critical perspective necessitates the use of a series of conceptual frameworks in order to properly gauge and guide data gathering, methodological design, and implementation. To this end, a combination of theories originating from Saïd, Foucault, and Gramsci, in addition to the Canadian multicultural theorist Kymlicka and Inuit activists Simon and Watt-Cloutier, are applied to the problem of language and cultural preservation in the Canadian North. This is true in general terms, and, in particular, in terms of the issue of language choice online in Nunavik when communicating between Inuit.



Figure 1: Map of Nunavik

SCOPE OF RESEARCH PROBLEM

Globalization is replacing minority languages with English, the lingua franca of the Internet (P. Norris, 2001). Many world Aboriginal languages are now maintained solely by the eldest members of the community and will cease to be spoken once those Elders pass away (Krauss, 1992; Villa, 2002). At least half of the approximately 7,000 languages in the world⁹ are estimated to become extinct this century (Bernard, 1992).

On June 10, 2008, Jacques Chirac, at the inauguration of his new Foundation for the Protection of Endangered Languages at the Quai Branly museum in Paris,¹⁰ stated that "Of the 6000 languages spoken today in the world, 90 percent are at risk of disappearing in the course of this century: Is this what we want? A world which would be impoverished and which could only preserve what is immediately profitable?"

Inuktitut is more vibrant than some other minority languages, with over 30,000 people now speaking the language as their mother tongue in Canada. Although, in the most recent survey (2006) completed by Statistics Canada concerning its relative strength, it is noted that "Inuktitut is not as strong nor as widely spoken as it was as recently as five years ago."¹¹ Despite Inuktitut's decline, it still remains stronger than the majority of indigenous languages in Canada today. Of over 50 Canadian First Nations languages, only three are estimated to have a good chance for survival.¹²

⁹ (<u>www.ethnologue.com/ethno_docs/distribution.asp?by=size</u>) retrieved 05/12/2006.

¹⁰ (<u>http://www.news.com.au/couriermail/story/0,23739,23839694-5003402,00.html</u>) retrieved 06/09/2008.

¹¹ (<u>http://www.statcan.ca/English/freepub/89-589-XIE/language.htm</u>) retrieved 04/2006.

¹² (<u>http://www.afn.ca/article.asp?id=831</u>), taken from 1982 *Special Report on Aboriginal Languages* by Statistics Canada.

This decline in language use is reflected to an even greater degree in other,

more southern Canadian Aboriginal languages: "In general, many of the Aboriginal

languages spoken by North American Indian and Métis in non-reserve areas are on

unsteady ground" (Statistics Canada, 2006).¹³

In 2006, just over 32,200 Inuit, or 64percent of the total, reported Inuktitut as their mother tongue, down from 68percent in 1996. (Mother tongue refers to the first language learned at home in childhood and still understood by the individual at the time of the census.)

Also on the decline is the proportion of Inuit who speak Inuktitut at home, the best place to pass on the language to younger generations. In 2006, about 25,500 Inuit, 50percent of the total, reported Inuktitut as their home language, down from 58percent in 1996. (Home language refers to the language spoken most often at home by the individual at the time of the census.)¹⁴

A higher percentage of Inuit (69percent) reported that they spoke Inuktitut well

enough to carry on a conversation; Ithough this, too, was a decline from 72percent in

1996. The emergence of the Internet has served to increase this disparity. Even when

minority language content is available on the Internet, such as those delineated in this

study, software and hardware interfaces written in nonlocalized languages hinder the

use and retention of mother tongues (Cunliffe, 2005). Many minority language users feel

that "...people have to use English too often on the Internet" (Wei, 2005).

Further citation of the dangers of language and cultural loss include the following

from Canada World View (Fall 2004):

The scientific community has warned that...historical assimilation campaigns—combined with declining Indigenous populations, increased mobility, economic pressures, as well as exposure to television and other communications technologies—could lead to the loss of half of the world's 6,000 to 7,000 languages by 2050. With such a decline will come the demise of local knowledge, creativity and heritage, as well as specialized information such as unique survival skills and traditional medicines.

¹³ (<u>http://www.statcan.ca/English/freepub/89-589-XIE/language.htm</u>) retrieved 03/2006.

¹⁴ (http://www12.statcan.ca/english/census06/analysis/Aboriginal/language.cfm).

The amalgamation of media, not only on the Internet, but also print and film media, into oligopolistic structures (McChesney, Newman, & Scott, 2005) serves to concentrate and focus language, flattening the international cultural and communicative landscape. Statistics from the United Nations Educational, Scientific and Cultural Organization (retrieved 04/29/2006),¹⁵ show a linguistic disparity between mean and median size of languages similar to world economic disparity: Five percent of the world's languages account for 95percent of the population. Bernard (2002) writes: "95percent of the cultural heterogeneity of the 95percent of the differences in ways of seeing the world (are) vested in under 5percent of the population."

Various international organizations have reacted strongly to the threat of language loss. The UNESCO conference entitled the *Safeguarding of the Endangered Languages* (UNESCO Paris, March 10-12,2003) was inspired by the Universal Declaration on Cultural Diversity (2001), the first assembly after the September 11th bombings in New York. In the wake of this tragedy, it was felt that "...the best and, indeed, the only way to strive for peace was continued intercultural dialogue rather than the belief that intercultural clash was inevitable" (Bensalah, 2003). Several articles in the UNESCO Declaration explicitly mention language preservation as a key component of diversity.

Article 1: Cultural diversity: the common heritage of humanity. "Culture takes diverse forms across time and space...all persons have therefore the right to express themselves and to create and disseminate their work in the language of their choice, and particularly in their mother tongue."

¹⁵ (w.unesco.org/culture/ich/doc/src/00120-EN.pdf).

Additionally, Article 10 of the Declaration specifically mentions "digital literacy"

and linguistic diversity as a UNESCO goal:

Article 10: Promoting linguistic diversity in cyberspace and encouraging universal access through the global network to all information in the public domain.

Finally, the Articles reiterate the importance of traditional knowledge and its potential impact on resource management and the co-existence of technologies and the natural world:

Article 14: Respecting and protecting traditional knowledge, in particular that of indigenous peoples; recognizing the contribution of traditional knowledge, particularly with regard to environmental protection and the management of natural resources, and fostering synergies between modern science and local knowledge.¹⁶

The Government of Québec has one of the more progressive language agendas

currently evidenced worldwide as concerns their French and Inuktitut language policies.

Nevertheless and, ironically, French is seldom spoken in Nunavik as a result of the Inuit

refusal of adoption of the Law 101; this observation was corroborated during the

observation of the researcher while residing in the community of Inukjuaq.¹⁷ English

media in the Canadian Arctic is being consumed at a furious pace, and a relative

lack of Inuktitut media, coupled with the rise of the Internet and social networking

(especially among Inuit youth) in the region, may be having a seriously detrimental effect

on Inuktitut.

The state of Inuktitut in Arctic Québec, despite its decline, is nevertheless

considered to be greatly superior to that of neighboring Nunavut. This is partly due to the

¹⁶ Office of the United Nations High Commissioner for Human Rights: Universal Declaration on Cultural Diversity. 2 November, 2001.

^{(&}lt;u>http://www.ohchr.org/English/law/diversity.htm</u>). Retrieved 05/12/2006.

¹⁷ Please refer to survey responses, Chapter IV, regarding issues of language spoken and used online.

care and cultural sensitivity to language that the Québec government has shown. This sensitivity can be conceived as an extension of language policy arising from Québec's own experiences with the protection and fears of dissipation of French and often demonstrated by the commitment to Loi 101 which is summarized here:

1977

Loi 101

(L.R.Q. chap. C-11 (1977, chap. 5)

Charte de la langue française :

-impose l'usage exclusif du français dans l'affichage public et la publicité commerciale; (langue de l'affichage commercial)

-étend les programmes de francisation à toutes les entreprises employant cinquante personnes ou plus; (langue du travail)

-restreint l'accès à l'école anglaise aux seuls enfants dont l'un des parents a reçu son enseignement primaire en anglais au Québec; (langue de l'enseignement)

-seule la version française des lois est officielle. (langue de la législation et de la justice)

1977: Law 101. Charter of French Language Fundamental language rights

The fundamental language rights of every person in Québec are:

1. The right to have the civil administration, the health services and social services, the public utility enterprises, the professional corporations, the associations of employees and all enterprises doing business in Québec communicate with him in French. (article 2)

2. The right to speak French in deliberative assemblies. (article 3)

3. The right of workers to carry on their activities in French. (article 4)

4. The right of consumers to be informed and served in French. (article 5)

5. The right of persons eligible for instruction in Québec to receive that instruction in French. (article 6).

These laws are unique in North America and they have no parallel in the United States. For example, where colonized territories such as Hawaii have traditionally had few language protections, the result has been the general breakdown of indigenous communication systems. While this particular case is experiencing a renaissance of sorts, the Hawaiian language is no longer the primary language of communication between Hawaiian Islanders by any means, except on the isolated islands of Niihau and Kahoolawe (Romaine, 2007).

It is hypothesized that the comparatively progressive laws of Québec in regard to language, coupled with technological changes to social networking technology as delineated in this research, will assist in the sustainable language management of Inuktitut in the Canadian Arctic. Current issues related to (1) the Northwest Passage encroachment on traditional Inuit hunting grounds, (2) international pressure for resource management, and (3) a generally increasing interest in this popularly conceived "last frontier," the Arctic, calls for critical attention to the rights and culture of the Inuit, the original inhabitants of this geographically expansive region.

Symbolically, an Inukshuk erected at the Québec Parliament demonstrates the Québec government's continued commitment to Inuit affairs. More than symbolic assistance, however, is required in order to strengthen and preserve Inuktitut and Inuit culture in the critical Northern period approaching. As attention increasingly focuses on the Arctic due to global warming issues, new access to the Northwest Passage, and corporations seeking untapped resources and vast parcels of unsettled land, the Inuit will be under increasing pressure to conform to outside standards of communication and comport.

This research study looks at technological means to focus the power of the Internet onto the creation of networks designed to encourage Inuktitut use and to empower a new generation of learners. The goal of this work is to create a more united Inuit voice through digital technologies. At the present time, this voice is fragmented through technological disconnects which will be examined in this research. It is hypothesized that through proper understanding of the hindrances to the unification of the Inuit voice online, and subsequent policy rectification of these issues, a more solid resistance to encroachment, both linguistic and cultural, may ensue.



Figure 2: Symbolic Representation of Québec's Commitment to Nunavik

Fragmentation of Inuktitut

One of the tragedies of modern Inuktitut begins with IBM (in its efforts to market its typewriters to the Arctic region in the 1970s) when it developed a typesetting element for its Selectric line of typewriters. This element, in the form of a ball, was originally designed for the English language and the shape was correspondingly specified for 26 letters. During the attempt to compress the Inuktitut written language onto this machine, several key syllabic sounds were consciously left out of the typewriters in Nunavut due to a lack of physical space on the element.

The deliberate cut of a major syllabic group from the written language caused a gradual shift in the nature of written communication between regions in the Canadian Arctic and a breakdown in communication in some areas. In this sense, the McLuhanesque (McLuhan & Powers, 1989) maxim of the "medium is the message" is appropriate in this case: the medium of a truncated hardware typewriter signifying the message of a corporate disregard for the importance of the subtleties of a language.

Economic factors were also a factor in the disregard of IBM for the nuances and subtleties of written Inuktitut, emphasizing the importance for the Inuit of taking matters of their language and communicative technologies into their own hands, so to speak, and to not depend on market forces and corporate agenda for culturally localized communication technologies. Due to the relatively small population of the Inuit, economic factors may ultimately dictate that Inuktitut receives little support, if any.

French Canadians of Québec are intimately aware of the fact that their language is tied into the health of their culture. It is for this reason that the Provincial Government of Québec has established a series of checks and balances to ensure the predominance of French within their borders through the office Québécoise de la langue française.¹⁸ The Inuit in Nunavik, however, are living in a territory where the amount of money spent on French and English materials for Inuit people far outweighs the funds allocated for Inuktitut.

Published in the *Montréal Gazette* in 2005, is the fact that under the Official Languages Act, the Canadian Government is obliged to provide translations of laws and documents in both official languages (English and French) everywhere in Canada. In 2006, the federal government spent \$1.45 million providing such services to Nunavik's small population of francophones.

A recent survey taken for the territory showed that 42 percent of Inuit had difficulties in acquiring services in Inuktitut from the federal government. Louis Chagnon of Canadian Heritage said that Nunavik has slipped through a hole in the Official Languages Act. "It falls between the cracks," he said from Winnipeg (Weber, 2005). For this reason, gauging the effectiveness of technologies, such as web tools, is important in order to properly allocate federal, provincial, and territorial funds. Effectively targeting the most cost-effective measures for preserving Aboriginal language in the Arctic through judicious cultural policy design in both linguistic and media/technologically-related components is critical.

Initiatives to Stem Language Loss

In December 2002, the Canadian Government announced that it would contribute \$172.5M (CAN) over 11 years to the Federal Cultural policy entitled, *Task*

¹⁸ (<u>http://www.oqlf.gouv.gc.ca/</u>).

*Force on Aboriginal Languages and Cultures.*¹⁹ In May of 2005 in the United States, National Science Foundation director Arden L. Bement, Jr. wrote that "Endangered languages are an irreplaceable source of linguistic and cognitive information." ²⁰ At this time, the National Science Foundation and the National Endowment for the Humanities announced the *Documenting Endangered Languages Project* with a total funding of \$4.4 million dollars.

Both the U.S. and the Canadian governments have as a priority the creation of digital archives preserving the cultures and languages of endangered communities. While digital archives are valuable resources, it is important to distinguish in the literature between "archiving (or documenting) and vitalizing activities" (Bernard, 1992). Unfortunately, the Harper administration has decided that the Task Force on Aboriginal Languages and Cultures is of low priority and has pulled funding for this effort (Wiwchar, 2005). This decision will undoubtedly impact Aboriginal languages in Canada in an undeniably detrimental fashion and make the implementation of language technologies designed to preserve Inuktitut and other First Languages all the more pressing.

An alternative or complementary element to the digital archiving of languages is the concept of web tools and, even further, integrated language plug-ins onto existing social networking technologies. Linguistic web tools can be used to encourage and facilitate the use of native languages through bypassing the traditional dominant language interfaces. Examples include Marco Fonseca's thesis at the Massachusetts Institute of Technology (Fonseca, 2002) and Cunliffe, et al.'s exploration of Welsh language online communities (Cunliffe, 2005).

¹⁹From the Aboriginal Canada Portal, Aboriginal Affairs, Canadian Heritage Division, (<u>http://www.Aboriginalcanada.gc.ca</u>) retrieved 05/25/2006.

²⁰ (<u>http://www.nsf.gov/news/news_summ.jsp?cntn_id=104138&org=BCS&from=news</u>) retrieved 05/29/06.

PURPOSE

The purpose of this study is to examine the current state of language use online in Nunavik and to evaluate new and existing alternate communication practices and technologies online. These tools consist of concepts, such as tools and plug-in additions to social networking technologies, that are designed to empower minority language users in general, and Inuktitut speakers in Nunavik in particular. This researcher's personal inquiry into the matter of retaining national culture is involved in the possibility of using technology to optimize virtual communities in order for minority cultures to preserve language and to identity themselves in the face of hegemonic and often times overwhelming media forces.

As social networking, blogging, chat clients, e-mail communication, and both personal and business computer use increases, minority users of technology in the Western World, especially younger users, are often presented with a single linguistic interface-that of English. This research explores alternative scenarios in which communication technologies are used to empower language and culture in indigenous communities, with a focus on the Inuit community of Inukjuaq.

In this particular research, thorough analysis of the Mixed-Methods dataset in the region, a mix of practices and technologies designed specifically to support and empower Inuktitut use online will be proposed. In advance of such a proposal, however, a series of conceptual frameworks giving direction to the methods will be discussed.

CONCEPTUAL FRAMEWORKS

The following section will examine various theories giving theoretical impetus to this research. The conceptual frameworks have been divided into two main sections representing both non-Inuit and Inuit theorists. Initially, non-Inuit theorists are the focus, followed by Canadian and Inuit conceptualizations.

In first conceptualizing the theories giving theoretical direction to the Case Study, the work of Nakamura (Nakamura, 2002) is useful in regard to understanding issues of race online. Nakamura calls the web browser's color a "default whiteness" as it boots up in English.

In this environment, the lingua franca of communication is the majority language. For those who have the cultural capital or insider experience to take advantage of this opportunity, the whiteness of the browser can signify a privileged future, elite membership, and economic and social advantage. For other subaltern societies and tribes, the whiteness of the English-based browser proposes a loss of culture, land, and communicative ability, and a linguistic and cultural whiteout.

Alice Crawford, in her *The Myth of the Unmarked Net Speaker*, deconstructs the fallacy that the Internet is a "medium that will break down barriers of social and cultural inequality, flatten hierarchies...and bring about a world in which...there is no race, there is no age, there are no infirmities" (Elmer, 2002). Crawford applies Bourdieu's concepts of habitus and cultural capital to the Internet, and shows that, "The language of the powerful, installed as legitimate, perpetuates the legitimacy of those who use it."

A comprehensive analysis of more than one billion unique web pages by the Inktomi search engine found that 87 percent of all documents were in English, a language understood by an estimated 1 in 10 people worldwide (Norris, p 59). This study of the implications of the rise of the Internet in the Canadian Arctic is a means of generating and exploring theories concerning Aboriginal language use online, and a
sounding of the dangers and possibilities inherent in engaging in a dialogue wherein minority voices are marginalized by the very nature of the communicative medium.

Nakamura's work analyzes the ways in which minority users feel marginalized and develop a sense of their own minority language and culture as somehow inferior and less desirable than the majority language. It is an element of conceptual concern that is used in the development of methodology concerning the ways in which English use online is affecting attitudes toward Inuktitut, especially in the youth.

Orientalism

The purpose of the Orientalism of Saïd is an attempt to trace the historical and literary evolution of paternalistic and control-oriented discourse that was imposed upon colonized and "Othered" cultures by the West. Through the literary background of Saïd and the comparative framework that he brings to his analysis, it is possible to trace historically the silencing and devaluation of subaltern voices, among which the Inuit can be interstitially situated.

Through a deeper understanding of this process, Saïd feels the possibility of "emancipation and enlightenment that, in my opinion, frames and gives direction to the intellectual vocation" (p 43). Saïd's work may appear, at first view, to be negating and to cast doubt on the possibility of endangered cultures surviving in the face of cultural and linguistic assimilation. Yet cultures that are affected by the effects of colonization move through a critical phase wherein it is imperative that essential aspects are preserved in order to retain their very existence. Key Post-Colonial theorists such as Spivak and Bhabha testify to this component of cultural preservation. (Spivak, Landry, & MacLean, 1996), (Bhabha, 1990).

Before using Saïd's work as a conceptual framework in this research, however, this researcher believes it imperative to mention that Saïd's work is controversial and that a large body of literature insists that his reasoning is flawed. Critics of his work insist that the realities of Saïd's privileged background, coming from upbringing at an elite school and working as an academic at an elite institution in the United States, devalues and even negates many of the criticisms that he posits concerning the West. Other critics claim that Saïd's lump categorization of the "West" and merging of a multiplicity of Western authors into one "Orientalist" discourse is a vast and erroneous simplification of matters that neglects to take into account entire phases of literary development.

This researcher feels that these criticisms are justified to an extent and, for this reason, has felt required to mention them here. Nevertheless, the key concept of the Orientalist theory—that of marginalization and the potentiality of the Othering of minority groups through media, be it literature, radio, television, or websites—remains valid in this researcher's mind and, for this reason, will continue to present it here. Although Saïd will continue to function as a theoretical framework in this research, the author has taken into account the sustained criticisms on Saïd, and will focus more attention on the local Inuit and Canadian multicultural theorists later in this section.

One of Saïd's more salient points was his insistence on the importance of Worldliness, the deep commitment to a discourse of literary theory that actually impacted the quality of life of a people. This concept is opposed to control and promotes freedom of knowledge rather than a discourse of cerebral reflection and deliberation. The tools which Saïd created empowered Post-Colonial theorists such as Gayatri Chakravorty Spivak, whose text *Can the Subaltern Speak*? (Spivak, et al., 1996) explores the difficulties of the reclamation of culture for the colonized, and Homi Bhaba, whose *Nation* and Narration, (Bhabha, 1990) shows that a colonized culture can believe that an insinuated cultural replacement is, in fact, the real culture.

It is not the purpose of this study to focus solely on Western theorists, however, and it is for this reason that Inuit frameworks such as those proposed by Watt-Cloutier and Mary Simon will also be posited. Importantly, the Inuit are not to be seen as victims, but rather as a strong and versatile people exhibiting extraordinary resilience and adaptability. The purpose of beginning with the use of Western theorists in the rubric of a conceptual framework is to first demonstrate the traditional canon of Post-Colonialism and resistance to hegemony. From there, it offers techniques in which the Inuit and other indigenous communities may use technologies in order to bypass traditional systems of control and assimilation and move into a sphere of cultural empowerment.

Potential Impact on Inuit Web Presence of Cyberculture Theorists

Saïd's controversial work in Orientalism continues to impact the field of cyberculture studies, for better or for worse, among which Lisa Nakamura's *Cybertypes* (Nakamura, 2002), as previously mentioned, is an example in the genre. In Nunavik, surfing the web links the Inuit users to the browser and operating system where the lingua franca of communication is English. For those who have the cultural capital (Bourdieu & Wacquant, 1992) to take advantage of this opportunity, the mastery of the browser can signify a privileged future, elite membership, and hierarchical advantage, yet at the potential cost of original language use, cultural identity, and Inuit ways of life.

One of the more relevant aspects of Nakamura's research is her look at techno-Orientalism in which she applies Saïd to digital culture in order to demonstrate the means in which ethnic groups are subtly and grossly discriminated against online. Nakamura ties her ideas to those of Saïd's Orientalism in explaining how idealized and stereotypical images of natives "The Eskimo" (à la *Nanook of the North*) can appeal to white users' sense of exoticism even as they more deeply ingrain these racially diminishing concepts into web cookies, blogs, and forum posts.

Using Nakamura's concepts of race and its nontransparency online, it becomes easier to show that the à priori utopist conceptualization of the Internet as the ultimate equalizer, creating a public sphere completely free of race and discrimination, is a fallacy.

Such is the stubborn power of Cybertyping that even when substantial numbers of racial minorities do have the necessary computer hardware and Internet access to deploy themselves "fluidly" online they are often rudely yanked back to the realities of racial discrimination and prejudice (p 10).

Arctic Orientalism (Post-Colonial Theory Applied to the Canadian North)

One example of Canadianist Arctic critical theory is a doctoral dissertation (Behrisch, Queen's University , 2002) which applied Saïd's critical approach from Orientalism to the British colonization of the Canadian Arctic between 1818 and 1860. The work "...challenges existing conceptions of nineteenth-century British Arctic exploration as a non-imperial project..." (p 4) and uses Orientalism as a critical framework, showing how the British colonial discourse undermined the autonomy and credibility of the Inuit people through a complex web of communication artifacts, both physically (through written missives to the Crown) and audibly (through oral discourse).

The author proposes a new type of Orientalism, called "Arcticism" (p 7). The dissertation explains the lack of Post-Colonial attention paid to the Arctic in that the British never intended to colonize that land; rather, they were looking for a passage through it. The Northwest Passage continues to be a point of controversy today, with

increasing interest due to the melting of polar ice and increases in American and international trade in the region, to the detriment of traditional Inuit hunting grounds and territory (Delgado, 1999; Waterman, 2001; Williams, 2003).

In the first chapter, the author hypothesizes, "A blanket signifier of difference that ultimately defers to Western discourse's superiority...served to circumscribe (the Arctic) within a British system of representation" (p. 16).

Orientalist conceptualization may provide a framework for understanding how the prevalence of English online may be influencing Inuktitut and adversely affecting the continuance of Inuit culture. Through looking at the Inuit through the lens of Western eyes and the framework of Saïd, and especially Nakamura, some websites, blogs, and films can be shown to be detrimental to traditional culture through racially motivated prejudices and the exclusion or devaluation of the Inuit experience.

As the Internet and technology make inroads into traditional culture, Orientalism can provide a framework for linguistic resistance and the emphasis of the importance of Inuktitut. While this researcher personally believes it to be important that the Inuit embrace technology, it should be done on Inuit terms, using websites and software optimized for traditional culture, rather than changing adapting language and culture and slowly deteriorating cultural capital in order to fit into erroneous concepts of Western linguistic and cultural dominance.

An example of Western linguistic superiority that can come across through cybertyping can be expressed in a phrase of Saïd's, quoting Coleridge:

"Language is the armory of the human mind; and at once contains the trophies of its past and the weapons of its future conquests" (Saïd, 1979).

The work of Saïd is one corpus that has indeed transcended the academic and entered into the realm of work with real impact in the political arena. Its use as a conceptual framework for digital fieldwork in Nunavik can assist in the creation of politically-relevant material whose use extends beyond the academy and into the public sphere.

As mentioned previously, however, citing the work of Saïd must be taken under advisement and with caution, because currently a sustained criticism of Saïd's work is underway. One text in particular, entitled *Dangerous Knowledge: Orientalism and its discontents* (Irwin, 2006), is, in effect, a sustained attack on the entire concept of Saïd's Orientalism, claiming that Saïd's work discredits the entire field of respected Orientalist scholars through a misrepresentation of a multiplicity of authors, falsely claiming the existence of racial discrimination.

This researcher is aware of such criticism; however he believes that Saïd's work, while not without problematic aspects, remains valid as a theoretical conceptual framework demonstrating the possibility of the damaging effects of racially-motivated media and misrepresentation. At the very least, Saïd's work is valid through its galvanization of the field of Post-Colonial Studies and its inspiration of the development of this corpus, generating valuable discourse on the realities of the struggles of Post-Colonial and Diasporic communities. It will be in this sense, then, that Saïd's work will be approached: not as an entirely accurate historical document, for this is in dispute. Rather, it is approached as a signifier of the effort to strive for racial and cultural equalities between disparate groups and the need for marginalized Othered communities to work for their equal representation in the media outlets of the time.

27

Michel Foucault, Pierre Bourdieu, and Dominant Discourse

Michel Foucault is arguably one of the most influential critical theorists of the Twentieth Century, whose works encompass an enormous range of social issues, often with a historical sweep of impressive magnitude. His primary ideas of applicability to the concepts of the effects of language and cultural shift currently affecting the Inuit are ideas of discourse, power structures, and a deep analysis of the mechanism by which individuals are objectified. In his words, we should, in our inquiry, be asking "how things work at the level of ongoing subjugation, at the level of those continuous and uninterrupted processes which subject our bodies, govern our gestures, dictate our behaviors...." (Foucault & Gordon, 1980).

Foucault's purpose is to empower individuals through providing them with the tools of understanding the inner mechanisms of power and control active in society, often without the understanding of the individual and, indeed, often completely transparent to those made into the objects of external power structures. Foucault's work is therefore useful in developing conceptual frameworks related to race, discrimination, new social movements, and resistance. One potential drawback, however, to drawing heavily on Foucault is the fact that many readers have become jaded due to excessive exposure to his frameworks, often improperly used. Stuart Hall, in reference to this phenomena, wrote:

Foucault is not a political activist in any simple sense, but when you read the Foucault interviews, you know at once that his work has a bearing on resistance, on sexual politics...on the debate about the West...it has political implications. Wonderfully agile, Foucaldian studies can be produced inside the American academy which invoke power all the time; every second line is power/discourse, power/knowledge, etc., whilst the actual integument of power is absolutely nowhere located in concrete institutions, as it is in *Discipline and Punish* or in the disciplinary regimes of knowledge, as it is in *The Birth of the Clinic* (Hall, Morley, & Chen, 1996).

Usefulness to Data Gathering in the Canadian Arctic

Foucault's work, as previously mentioned, serves as a conceptual basis for inquiry concerning power, and the mechanism by which power structures are implemented over time by hegemonic systems of thought. In this particular research, Foucault's work can serve as a bridge showing the power relationships that link the conceptual frameworks that begin with Saïd, and which are applied to society through *Cybertyping* (Nakamura, 2002); *Critical Race Theory* (Hall, et al., 1996; Omi & Winant, 1994); and *Linguistic Hegemony* (Bourdieu & Thompson, 1991). Additionally, critical approaches to the Internet and electronic communication are heavily influenced by the thought of Foucault, especially in the area of control and surveillance.

Concerns with privacy online, fears of cultural and intellectual dissipation, and even cybercrime can benefit from an understanding of Foucault's thought. In relation to minority groups using the Internet, it is possible to use Foucaldian critical frameworks in order to trace power structures that exist in an electronic form. As Foucault is concerned with how subjects are transformed into objects, thoughts concerning digital tracking, surveillance and ramifications of search engines to privacy should be of the utmost concern to minority groups using the Internet.

What does all this have to do with power?" Who are the most marginalized and disempowered by these trends? Often women, ethnic minorities, and the poor. We need to pay special attention to the political economy of ICTs and to the capitalist, patriarchal, and ethnocentric tendencies and structures that regulate ICTs and net practices today (Escobar, 2004).

More specifically, Foucault can be applied to the concept of the reinstatement of aspects of culture and communication that may have been deemed inferior, or subaltern to the majority. Foucault is strongly concerned with the re-empowerment of subjugated knowledges, and mentions them specifically:

On the other hand, I believe that by subjugated knowledge one should understand something else...namely, a whole set of knowledges that have been disqualified as inadequate to their task...naïve knowledges...what I would call popular knowledge (le savoir des gens)...local, regional knowledge, a differential knowledge incapable of unanimity and which owes its force only to the harshness with which it is opposed by everything surrounding it (Foucault & Gordon, 1980).

Foucault wants to show how "not simply the laws, but the whole complex of apparatuses, institutions, and regulations responsible for their application transmits and puts in motion relations that are not relations of sovereignty, but of domination" (p 95).

The applications of Foucaldian power relationships to the Internet are numerous. One work in this domain, *A Diagram of Panoptic Surveillance* (Elmer, 2003), deals with the concern that the paths and routes which Internet consumers take are being "duly noted, stored, cross-referenced, and often tracked or mapped" (Elmer, 231). This concern is reflected in government efforts to gain access to Google, Microsoft, and Yahoo! search databases.²¹

While this issue may not yet seem to be of concern to issues of the Internet in the Canadian Arctic, the increase in the number of users online and the interest of governments and corporations in the area attest to the necessity for understanding and preparation for such eventualities. The fact that Microsoft and Yahoo! have complied with demands to provide personal information exemplifies the fragility of so-called "privacy laws." This shows that the concepts of Jeremy Bentham, as alluded to by Foucault in his *Discipline and Punish: The birth of the prison*, are very applicable today.

For this reason, when developing secure social networking spaces for the Inuit and other marginalized communities, issues of security and freedom from tracking,

²¹ (<u>http://www.washingtonpost.com/wpdyn/content/article/2006/01/19/AR2006011903331</u> .html.)

mapping, and generating statistical data for commercial purposes are essential. The linguistic and social networks proposed in this study are those that have as their goals the empowerment of marginalized communities through the expansion of linguistic and cultural expression. The dangers stated in the conceptual frameworks here are mentioned precisely as a warning in order to prevent these potentialities in the linuit networks.

In continuing the potential Foucaldian elements of tracking networks, Elmer does not merely restate the standard concept of the Panopticon as a "...prison-machine with a cell of visibility...and a central point from which a permanent gaze may control prisoners and staff" (Foucault, 1984, p 217). Elmer mentions technologies such as TiVo and embedded streaming video as examples of such a "dataveillance" in which we see an "ability to continuously track user's viewing preferences...and offers broadcasters the long-sought ability to deliver tailored commercials to individually-targeted consumers" (Boddy, 1999).

Elmer cites the works of Deleuze and his book *Foucault* (1986), as well as his work in *Anti-Oedipus* (1983) where he revises the enclosed-space model of Foucault's Panopticon for a more free-form "mold, or casing" in which exist the structures of the "rhizome" and "nomadic movement" (Elmer, p 241). This shift of a prison environment from an enclosed space to a free-form digital environment of control introduces the possibility of "creativity, change, and resistance" to an otherwise enclosed, hopeless space in the strict Foucaldian tradition. Expanding on the ideas of Deleuze and Guattari, Elmer claims we can generate a "diagram which affords us the possibility of tracing the everyday data-economy, in which habits, routines, rhythms, and flows are digitized, coded, and diagnosed for purposes of control" (p 243).

Elmer combines the diagrammatic power of the Panopticon as inspiration for this control through observation, yet he finds that the enclosed space of the Panopticon is too restrictive for the complexity of the Internet. He therefore uses the seed of Panopticism to apply itself to the rhizomatic, viral concepts of Deleuze and Guattari's blueprint, or "chain of signifiers" (p 242), to posit a system of observation in which data streams can be used as mechanisms of control. The insidious aspect of this type of control is that this diagrammatic view of panoptic surveillance argues that subjects are not only surveyed, but are rewarded with familiar commodities when they "acquiesce to social norms and rules, and punished if they attempt to opt-out.

Elmer's point is that we may soon find ourselves being fed "more of the same" and, increasingly, having great difficulties finding something different. The fear is that, eventually, there will be "nothing different" at all. This concept of rewarding users who acquiesce to the "common sense" of hegemonic power structures while surfing the Internet illustrates the manner in which Gramsci's concepts of embedded hegemonic requirements are propagated electronically through Foucaldian online power structures.

Colin Gordon, in a 1980 interview with Foucault, asked:

Q. You determine one moment as being central in the history of repression: the transition from the inflicting of penalties to the imposition of surveillance.

A: That's correct—the moment where it became understood that it was more efficient and profitable in terms of the economy of power to place people under surveillance than to subject them to some exemplary penalty...In terms of the mechanisms of power, I am thinking rather of its capillary form of existence, the point where power reaches into the very grain of individuals, touches their bodies and inserts itself into their actions and attitudes, their discourses, learning processes and everyday lives. The eighteenth century invented, so to speak, a synaptic regime of power, a regime of its exercise within the social body, rather than from above it (Foucault & Rabinow, 1984).

It is for the reasons of power that Foucault posits that the question of security online is an essential element in the development of Inuit networks. One of the questions in this general examination will deal exclusively with questions of security in Inuit networks, and I will expand on the concept of power/control from a Foucaldian perspective and the necessity of preserving native identities and knowledges distinct from hegemonic power and surveillance to the greatest extent possible.

Antonio Gramsci and Hegemonic Discourse

The concept of hegemony is central to the development of methodology and, for this reason, this researcher considers a review of Gramscian theory justified. In terms of the Inuit language question online, hegemony occurs through a saturation of media into an environment ill-equipped for resistance and the creation of alternate forms of communicative discourse. The plug-ins proposed in this research posit a resistance to hegemony through alternate interfaces. In regard to Gramsci himself, he was born in Sardinia in 1891. At that time, Sardinia stood in a colonial relationship to the Italian mainland. Gramsci was acutely aware of the great line of division that separated the industrializing and modernizing "North" of Italy from the peasant, under-developed and dependent "South" (Hall, et al., 1996).

One key concept of Gramscian thought is the idea of hegemonic "common sense." This form of consensus reality is reflected in Benedict Anderson's imagined communities (Anderson, 2006), in Omi and Winant, and especially in Stuart Hall's *Prison Notebooks. G*ramsci wrote that: "Common sense… is a relatively rigid phrase of popular knowledge at a given place and time" (*Prison Notebooks*, p 362, fn. 5). Gramsci's work is particularly well-suited to this exploration of linguistic

hegemony in the Internet, because Gramsci was particularly interested, as was

Bourdieu, in dominant groups and subordination through language.

Language and linguistics have...come to be seen not as a marginal subject in the prison notebooks but as occupying a central place in their overall theoretical construction (Gramsci, Forgacs, & Nowell-Smith, 1985).

Gramsci's exploration of hegemony and cultural control had as a basis the model

for describing linguistic change from "high-prestige to lower-prestige speech

communities." This work is reflected in the work of Bourdieu in Language and Symbolic

Power (Bourdieu & Thompson, 1991). For Gramsci:

Linguistic relations are...representations and historical traces of past and present power relations...the network emanating from a homogenous cultural center" (Gramsci, p. 165).

In order to more properly understand and successfully apply Gramsci's thought

to the question of the Internet and linguistic preservation in the Canadian Arctic, this

research turned to the work of Stuart Hall and Omi and Winant and their deep analyses

of Gramscian hegemonic theory.

Stuart Hall

Stuart Hall, generally considered one of the founding fathers of British Cultural Studies, focuses his work on post-Gramscian issues of hegemonic power structures, critical race theory, and gender studies. In one sense, his work can be conceived as an extension of Gramscian theory applied to race and language. Critics of Hall's work claim that he is too idealistic and ignores socioeconomic influences in an attempt to create neo-utopian realms of cultural equality. Hall, however, does not seek utopia, but rather a realistic view of race as a constantly shifting aspect of power and control rather than any one fixed, never-changing biological aspect of humanity.

Stuart Hall's work on race, dominant paradigmatic structures, and language use as it relates to hegemonic "common sense" in the Gramscian sphere can be applied to language use and the dissipation of Inuktitut in the Canadian Arctic due to Internetbased English media influx. Hall's work on the analysis of media messages and finding embedded racial meaning is designed to unmask pre-existing conceptions of color, ethnicity, and racial superiority. Hall offers profound insight and great intellectual generosity into the scaffolding of the "shifting signifiers" of power and race.

As one of Britain's leading intellectuals, "Hall's work is a combination of Marxism, post-structuralism (especially Foucaldian), critical race theory and feminism." ²² Hall's contribution to critical race theory is not contained in any one opus, but rather is encapsulated in a multiplicity of interviews, essays, journal articles, and texts. Hall's purpose is in the study of the organization of power and cultural power, and his studies of *Racial Stereotyping* (Hall, et al., 1979), coupled with deep analysis of *Gramsci and Ideology* (Hall, Lumley, and McLennan, 1977), "...served to make issues of race and gender central to cultural studies." ²³

One important factor of Hall's Gramscian interpretation of hegemony is that power and control is never static. All hegemonies, and race itself, are "floating signifiers" which are constantly in flux. These power structures are put in place through public speech and cultural materials, and are "creatively designed to fit the purposes of resistant groups" (Norton, 1897).

²² Norton, W.W., Anthology of Theory and Criticism, New York, 2001. p 1896.

²³ Macey, David, *Critical Theory*, Penguin, London, 2000.

Looking at the Canadian government's Internet Policies concerning the Inuit, and

examining newspaper content concerning the technology and the "Eskimo" (sic) in

mainstream Canadian and American media can serve as a glimpse into

stereo/cybertypes, racial signifiers, the production of intertextual meaning, and

hegemonic construction using the critical cultural framework of Hall as a starting point.

Every philosophical current leaves behind a sediment of "common sense," (however) this is not the document of its historical effectiveness. Common sense is not rigid and immobile but is continually transforming itself, enriching itself with scientific ideas and with philosophical opinions which have entered ordinary life (Hall, et al., 1996).

Daniel Chandler of the University of Wales²⁴ continues:

Gramsci used the term hegemony to denote the predominance of one social class over others (e.g. bourgeois hegemony). This represents not only political and economic control, but also the ability of the dominant class to project its own way of seeing the world so that those who are subordinated by it accept it as "common sense" and "natural." Commentators stress that this involves willing and active consent.

However, unlike Althusser, Gramsci emphasizes struggle. He noted that

...common sense is not something rigid and immobile, but is continually transforming itself" (Gramsci, cited in Hall 1982, p 73).

Omi and Winant

Gramsci and his concepts of "common sense" and the manner in which

hegemonic power structures are reinforced through media constructions concerning "folk

wisdom" and the "right things to do" serve as an excellent marker for showing the

dangers inherent in the mass consumption of mainstream media. This is of great

importance for a proper understanding of the Inuit and their struggle for equal

representation in the Canadian government and online.

²⁴ (<u>http://www.aber.ac.uk/media/Documents/marxism/marxism10.html</u>).

Using this conceptual framework, it becomes possible to show similarities between the mass use of English-based Internet by the Inuit to experiences with black Americans being influenced by generations of white filmmakers, white radio, and newspapers, and molding their conception of "normal" insofar as it corresponded with the dominator culture's underlying power/control rubric. Omi and Winant write:

The answer, we believe, lies in the concept of hegemony. Antonio Gramsci—the Italian Communist who placed this concept at the center of his life's work—understood it as the conditions necessary, in a given society, for the achievement and consolidation of rule. He argued that hegemony was always constituted by a combination of coercion and consent (p 66).

Gramsci's treatment of hegemony went even further: He claims that it is the

elaboration and maintenance of a popular system of ideas and practices through

education, the media, religion, folk wisdom, etc., which he called "common sense."

It is through its production and its adherence to this "common sense" or ideology

(in the broadest sense of the term) that a society gives its consent to the way in

which it is ruled.

Omi and Winant's application of Gramsci's theories to their analysis of race

relationships in the United States, particularly of American black/white relationships, was

focused and had as its core the concept of social resistance and new social movements.

We suggest that two important changes characterize...racial politics...the first of these was a paradigm shift; the established system of racial meanings and identities, based in the ethnicity paradigm of race, experienced increasing strain and opposition. The second change was the mobilization of new social movements (Omi & Winant, 1994).

First Nations, Inuit, and Canadian Conceptual Frameworks

Up to this point, the literature review and conceptual frameworks used in this work have been predominantly Western. Although the tenets of many of the theorists are

Post-Colonial and focused on the dissolution of dominant Western (and predominantly

male) power structures, very few of the theorists write from the perspective of First Nations or Aboriginal cultures. In this section of the literature review, a focus is placed on Inuit and First Nations theorists who can offer an alternate perspective to the most commonly cited theorists mentioned in the preceding section.

In many ways, the opinions and theories offered by these individuals build constructively on the works of Saïd, Gramsci, and Bourdieu, for example. The conceptual frameworks offered by the theorists previously mentioned are powerful and ;offer insight into the inner workings of power structures and influence, yet without a personalization of the theory, the lofty abstraction can distract a researcher from the realities of the issues and, more importantly, the people at hand.

When conducting research in the Arctic, therefore, it is important for the researcher to be focused principally on looking at events through the lens of local conceptualizations such as those of Watt-Cloutier or Mary Simon, rather than on more rarified and potentially inappropriate theories. For this reason, the previous theories in this chapter will be considered as secondary to the Inuit and Canadian theorists mentioned here, which will, in this researcher's mind, be of primary focus.

Will Kymlicka

Will Kymlicka is a Canadian-born political philosopher who is most well-known for his research on multiculturalism, especially as it impacts Canadian society. Educated at Queens University, he received his doctorate in Philosophy from Oxford University in 1987. One of the principle elements of Kymlicka's work is "providing a framework for the just treatment of minority groups." ²⁵ Kymlicka's impact on the Inuit

²⁵ (http://en.wikipedia.org/wiki/Will_Kymlicka).

arises from his differentiation between immigrant groups and those groups that he calls "national minorities." He lists criteria for national minorities or "minority nations:" (1) present at founding; (2) prior history of self-government; (3) common culture; (4) common language, and (5) governing selves through institutions.

Following these concepts, the only two groups in Canada that adhere to these criteria are the Indigenous Native peoples of Canada and the French-Canadian Québecois. Due to these definitions, the Inuit people, and indeed all Canadian Aboriginal Communities, are highly deserving of special rights in regard to cultural preservation, even more so than other immigrant groups. The fact that the Inuit share a common culture and common language is yet another reason to strive for the preservation of Inuktitut through all means possible, including potential consideration of the policy recommendations related to Inuktitut online resulting from this research.

In an excerpt from the book *Language Rights and Political Theory*,²⁶ Kymlicka and Patten discuss the justifications for minority language preservation claims and show that "linguistic diversity is an enduring fact of modern societies," as they consider the connection between language rights and democracy. Kymlicka's interests extend to immigration and Diaspora. However, he continually reflects upon the experience of the immigrant and Other. "Immigration, Citizenship, Multiculturalism: Exploring the Links," (*Political Quarterly*, January 2003) looks at what it means to be a citizen, and it is helpful to keep Kymlicka's concepts of national minorities and immigrant Diaspora distinct. Conceiving of the Inuit as national minorities differentiates and, indeed, empowers them. This empowerment of the Inuit is essential in order for them to assume their rightful role as the guides to, and protectors, of the Arctic in this time of Northward expansion.

²⁶ Annual Review of Applied Linguistics, Vol 23, March 2003, pp 3-21.

Sheila Watt-Cloutier

Sheila Watt-Cloutier is an Inuit environmental activist. Born in Kuujjuaq, Nunavik,

she is trilingual in English, French, and Inuktitut. She is known to be a descendant of a

powerful Inuit healer (her mother). In 1995 she was elected as President of the Inuit

Circumpolar Conference.²⁷ From the official website, <u>http://lnuitcircumpolar.com</u>:

Founded in 1977 by the late Eben Hopson of Barrow, Alaska, the Inuit Circumpolar Conference (ICC) has flourished and grown into a major International non-government organization representing approximately 150,000 Inuit of Alaska, Canada, Greenland, and Chukotka (Russia). The organization holds Consultative Status II at the United Nations. To thrive in their circumpolar homeland, Inuit had the vision to realize they must speak with a united voice on issues of common concern and combine their energies and talents toward protecting and promoting their way of life.

The principal goals of ICC are, therefore, to:

- Strengthen unity among Inuit of the circumpolar region
- Promote Inuit rights and interests on an international level
- Develop and encourage long-term policies that safeguard the Arctic environment; and seek full and active partnership in the political, economic, and social development of circumpolar regions.²⁸

Sheila Watt-Cloutier has been a very outspoken proponent of language

preservation and has been particularly critical of policy changes that have taken place

under Prime Minister Harper's administration. Watt-Cloutier is extremely vocal on the

topic of climate change and considers the Inuit to be the group suffering the most drastic

changes possible.

On the occasion of the award of an honorary Doctorate of Law to Watt-Cloutier at

the University of Winnipeg in May 2006, she spoke:

²⁷ Paraphrased from (http://en.wikipedia.org/wiki/Sheila_Watt-Cloutier).

²⁸ (http://Inuitcircumpolar.com).

Some years ago, it became clear that, although the Arctic has hardly any industrial development, we were becoming home to the highest levels of toxic contaminants on the planet. By working with dedicated scientists we were able to track these dangerous chemicals back to their sources, sometimes halfway across the planet where they were being used. By exposing this link, Inuit helped mobilize countries through the United Nations to tackle the elimination of the so-called 'dirty dozen' persistent organic pollutants through the rapid creation of the United Nations Stockholm Convention.

Believe me, when we began this work, we had many skeptics who denied that 155,000 Inuit of the world could move some of the most powerful nations and industries to action. They did not count on our strong commitment to protect our way of life and on the wisdom and power of the ancient Inuit culture to bridge huge gaps between not only countries but also hemispheres and on our understanding of our connectedness to the rest of the planet.²⁹

Additionally, Watt-Cloutier is, for the purposes of this research and most

importantly, a proponent of Inuktitut education and the preservation of Inuktitut culture through media.

She was nominated for the Nobel Peace Prize in October 2007; however, this

was awarded to AI Gore for his work on climate change. One of the most unifying

aspects of Watt-Cloutier's work as an environmental activist of the Arctic is that she

served as president and International Chair of the Inuit Circumpolar Council. This was in

addition to serving terms as president of the Makivik Corporation and spokesperson for

all Arctic indigenous peoples at the Stockholm convention.

Watt-Cloutier's work emphasizes the essential importance of the land "nuna" for the Inuit people, and the importance of keeping the language and culture alive, vital, and protected from dangers. These dangers include diminution of language, destruction of natural resources, and the responsibility of the Industrialized World to protect the Inuit.

²⁹ Inuit Circumpolar Conference, Media Room,

^{(&}lt;u>http://Inuitcircumpolar.com/index.php?auto_slide=&ID=356&Lang=En&Parent_ID=&curr</u> ent_slide_num=).

Watt-Cloutier correctly states that the Inuit are experiencing the brunt of climate change (confirmed by Dr. Michael Byers on a recent voyage across the ice-free Northwest Passage) ³⁰ and that the world has a responsibility to solve the problem. Recent attempts to prove that the Arctic waters of the Northwest Passage belong neither to Canada nor to the Inuit, but are rather International Waterways based on the Laws of the Sea, are of particular concern. If the waters of the Canadian Arctic were to become an unregulated passage, the environmental impact could irrevocably damage the fragile ecosystems; deeply fragmenting the Inuit connection with the land and permanently blocking sustainable economic development. Watt-Cloutier's focus on media education for Inuit youth with the goal of climate change education is admirable, and this research proposes policy recommendations for Inuktitut use online as potentially useful to her purpose.

Watt-Cloutier, featured on the <u>www.itk.ca</u> website on July 25, 2008, has been vocal about criticizing the Canadian government in its response to issues of the Northwest Passage.

Watt-Cloutier urges "low-carbon economy:" Breathless headlines proclaiming an ice-free Northwest Passage within decades might be music to the ears to companies that trade in global shipping or resource exploitation. But Sheila Watt-Cloutier thinks Canada, already fretting over how to defend its tenuous hold on control of the passage, could kill two birds with one stone and step up the fight against climate change. After all, she said in a keynote address to the *Planning For Climate Change* conference in Iqaluit July 20, the reason the passage is impassable now is because it's frozen. "Until that ice started to melt nobody cared," Watt-Cloutier told 200 assembled delegates at the Frobisher Inn. "But an ice-free Northwest Passage is an environmental disaster.³¹

³⁰ (<u>http://www.ligi.ubc.ca/?p2=/modules/liu/profiles/profile.jsp&id=8</u>).

³¹ (http://www.nunatsiaq.com/news/climate/80725_1397.html).

Mary Simon

Mary Simon is an Inuit born in Nunavik. She was elected as president of the Inuit Tapiriit Kanatami³² in 2006 and serves as the voice of Canada's Inuit. The ITK serves as the voice of a unified Inuit organization, not only representing Nunavik but also Nunavut. Nunatsiavut, and Inuvialuit.

Through negotiation with various levels of Canada's governments, the ITK has accomplished an extraordinary amount for the Inuit of Canada-including land claim settlements, the creation of Nunavut, autonomous regional governance for Nunavik, and public statements of support for Inuit—including apologies for past mistreatment.³³ Nevertheless, the ITK and Mary Simon are facing enormous challenges specifically related to language loss and social issues. These are related to the disintegration of traditional Inuit ways of life and the influx of worldviews based on unsustainable Western models of consumption and separation from the natural world.

Most specifically, the ITK desires that Canada realize that the Inuit comprise an essential component of the nation and that the Inuit have equal rights for prosperity and equal opportunity. This includes language rights as developed as French rights for Québec, and "access to programs and services that help raise their standard of living to levels enjoyed by other Canadians." 34

Summary of Conceptual Frameworks

The theorists and concepts discussed in the preceding section form the data gathering discussed in Chapter III. The combinations of theories serve as a guidepost

 ³² (<u>http://www.itk.ca/President/index.html</u>).
³³ (<u>http://www.cbc.ca/canada/north/story/2007/05/03/north-apologyreax.html</u>).

³⁴ (http://www.itk.ca/corporate/index.html),

and define the worldview from which the information is gathered during the fieldwork stage. Beginning with the concepts of the Post-Colonial, especially the theories of Saïd, Spivak, and Bhabha, the framework is rooted in ideas of the control by colonials professing a superior mode of communication and proposing a new language system as a replacement for those extant.

These ideas of control are expanded through the ideas of discourse espoused by Foucault and the concept of Gramscian hegemony. Race and its effects are contained in the writings of Omi, Winant, and Hall. Finally, the expansion of these ideas is taken online using theories of Nakamura and Arctic Orientalism.

The concepts discussed here are further developed in practice during the literature review.

RESEARCH QUESTIONS

The research questions for this study are the following:

- R1: To what extent, and in what ways, is the Internet being used in Nunavik?
- R2: What language is predominant in Nunavik, in both spoken and written forms, and online?
- R3: To what extent and in what language is social networking being used in Nunavik?
- R4 Does alternate language use online adversely affect Inuktitut language ability?

SIGNIFICANCE OF STUDY

In the opinion of this researcher, the Inuit have only begun to experience the

impact of cultural and linguistic penetration into the Canadian North. Current and

pressing issues of global warming and resource scarcity are attracting concerted

attention on the Arctic. Considered one of the last frontiers on the planet, the melting of

ice that previously rendered large regions inaccessible is now becoming disputed land,

and Canada is fighting for sovereignty as the United States, Russia, and other nations begin to assert their claims.

The Northwest Passage, now navigable for the first time in human memory, can cut thousands of miles of transport distance from the world's largest cargo ships over traveling to the Panama Canal. International laws of the sea, at times questionable, are being invoked attempting to prove that the waters do not belong to the Inuit nor to Canada, and are, in fact, international waterways, open to all. The environmental and cultural impact of such an oceanic "free-for-all" cannot begin to be anticipated. Inuit hunting grounds, irreplaceable natural environments, and the very framework of Inuit life on the land is at risk due to unregulated dumping, potential environmental disasters, and limitless hunting, fishing, and commercialization of local resources. The time for a concerted Inuit voice of resistance to the appropriation of these traditional lands has arrived.

Unfortunately, one aspect of the Inuit voice is fragmented. More specifically, this lack of cohesion in communication can be found online, where the issues of fonts and social networking have arisen. Although the Inuit have a common culture, it has become difficult to properly write and read Inuktitut fonts online, making intercommunity and interregional communication problematic. Additionally, social networking, which can potentially become a powerful tool for Inuit community building, linguistic preservation, and planning for policy and resistance operations, is now currently dominated by an American corporation, Bebo, out of San Francisco.

This organization advertises in English and has no Inuktitut optimization. The purpose of this research is to investigate alternate possibilities for Inuit social networking—initially ways to optimize Bebo and existing networks to the Inuit experience—and, in a more long-term manner, to create new networks, potentially sponsored by government, that incorporate web tools and technologies designed to nurture and encourage Inuktitut development and retention online rather than potentially undermining it. To this author's knowledge, no current research specifically addresses the nature of social networking communication technologies in the Canadian Arctic and attempts to strengthen and standardize these technologies for the purpose of strengthening Inuktitut.

It is hypothesized that a more unified Inuit voice online and a strengthened Inuktitut social networking presence on the Internet will create a more effective and empowered framework for resistance to cultural, environmental, and linguistic encroachment that, in the opinion of this researcher, is increasing at a rapid pace. In order to ensure the sustainability, environmental health, and economic profitability of this environment while avoiding its destruction through misuse, it is essential that the knowledge of those who know it best, the Inuit, be communicated in the strongest manner possible.

ASSUMPTIONS AND LIMITATIONS

In this study, it is assumed that the preservation of Inuktitut is a positive goal and worth concerted effort and academic research. It is assumed that readers are familiar with terms related to electronic communication such as browser, social networking, e-mail, blog, and other computer-based concepts.

Limitations included the logistical impossibility of conducting interviews in each and every community in Nunavik personally. However, this was offset through a Content Analysis of websites created by Inuit throughout the Canadian Arctic. It was also not feasible at this time to conduct a full experiment testing users of web tools to see if Itheir Inuktitut use increased or decreased over a period of several years. Rather than an experimental approach, a Mixed-Method Qualitative/Quantitative Case Study incorporating a full Internet-based survey and paper survey was combined with personal interviews of public officials and Internet users in Inukjuaq. The researcher was able to conduct interviews in English and French as well as in Inuktitut to ensure that all users are capable of responding.

Another limitation concerns the definition of eligibility for these surveys. They were designed for "Internet-using Inuit in Nunavik." However, membership in the Inuit community must be taken at face value—it was not this researcher's place to begin defining community membership for others. If a community member defines him or herself as Inuit, then this was accepted as valid through self-identification.

DEFINITIONS

A glossary of Inuktitut and French words used in this study is available in the front matter to assist the reader. In addition, the following products and corporation names referenced in this thesis are registered trademarks of their respective owners: atlas.ti, Babelfish, CAQPAS, Catalyst WebQ, CSS, Devonlink Pro, Dragon Naturally Speaking, Firefox, Flash, Google, Inktomi, Inuktiboard, Java, Kelkoo, Microsoft, Novamind Platinum, NUD-IST, Nunablog, NunaCommunities, Nunafun, Nunasoft Corporation, Nunatype, NVIVO, SPSS16, Tamaani, Unix, Windows and Yahoo!

CHAPTER II: LITERATURE REVIEW

In order to properly apply the lens of the conceptual frameworks to the methodology of data gathering, it is important to properly understand existing literature in three key areas. The first area focuses on the particular case of Inuktitut and language loss due to foreign language exposure. This section includes an examination of peer-reviewed journal articles demonstrating the reality of linguistic and cultural dissipation. Additionally, it focuses on research concerning the emerging field of language preservation through social networking technologies as a theoretical underpinning for the study.

The second area reviews existing literature emphasizing qualitative ethnographic research concerning language, and speech codes, and their pivotal role in Aboriginal communities and identity. The final area examines the history of Canadian Communication Technology in its attempt to simultaneously create a national identity while preserving distinct cultural groups.

EXISTING INUKTITUT RESEARCH

According to the 2006 census of Statistics Canada, 31,925 individuals in Canada consider Inuktitut to be their native tongue. *The Future of Inuktitut in the Face of Majority Languages: Bilingualism or language shift?* (Allen, 2007b), summarizes the state of Eskimo-Aleut languages as spoken in the Arctic regions, claiming, "There is a danger of language shift from Inuktitut to...majority languages, perhaps leading to eventual loss of Inuktitut" (p 517).

This conclusion is correlated by Dorais: "Eskimo-Aleut languages have declined significantly, such that there are few speakers left among the Eskimo-Aleut population in Siberia, less than 50percent in Alaska, and only about 25percent in Western Canada

48

(Dorais, 1990, 1992). Dorais additionally writes, "Inuit language risks being pushed into the margins of everyday life—for use at ceremonies, such as at church and in the legislative assembly, and to say trivial stuff to parents and Elders at home." ³⁵ An exception to this loss of Inuktitut is the vibrant health of Inuktitut in Greenland, an important factor, which is addressed in Chapter V of this document.

Explanations for the decline of Inuktitut outside of Greenland are numerous; however, two primary explanations consist of the relocations and enforced English language schools of the Canadian Government (Marcus, 1992) and, more recently, the impact of English and French omnipresence in electronic media (Taylor & Wright, 1990). Initial oral language experience in Inuktitut for Inuit children is excellent, resulting in oral fluency. Subsequent education entails exposure to predominantly English language at school. Added to this environment are English-based television, radio, film, and, increasingly, social networking. The language erosion that ensues results in a decline in grammatical, written, and oral Inuktitut.

A growing body of work has documented the impressive fluency in Inuktitut achieved by preschool children raised as monolingual speakers of Inuktitut in this region, fully consistent with the linguistic skills expected of a young native speaker (e.g. Allen, 1996, 1998; Allen & Crago, 1996; Crago & Allen, 1998, 2001)." (Allen, 2007a).

That said, a potential language shift is occurring to the predominant languages of

English and French, as expressed by Louis and Taylor:

Moreover, despite the favorable current position of Inuttitut in Nunavik, recent research reveals a growing intrusion of the dominant languages, English and French, in the daily lives of the Inuit of Nunavik (Crago, Annahatak, & Ningiuruvik, 1993; Taylor & Wright, 1989; Louis & Taylor, 2001).

³⁵ Quoted on Native Unity Blog, Friday November 23, 2007, (<u>http://nativeunity.blogspot.com/2007/11/schools-will-decide-fate-of-inuit.html</u>).

While the learning of a second language does not necessarily negate the native language, in the case of the Inuit, the loss of Inuktitut can be seen quantitatively through surveys conducted by Statistics Canada. In an article by M. J. Norris (2007) written after data analysis of a 2003 survey, she writes:

Aboriginal peoples, though, are confronted with the fact that many of their languages are disappearing, an issue that may have profound implications. Over the past 100 years or more, at least ten once-flourishing languages have become extinct...these languages reflect distinctive histories, cultures and identities linked to family, community, the land and traditional knowledge. For many First Nation, Inuit, and Métis people, these languages are at the very core of their identity.

Of course, the issue is even more salient in Aboriginal communities. In 1996,

about two-thirds of comparable communities reported that most Aboriginal speakers had

learned the language as their mother tongue; by 2001, the proportion had dropped to

less than half.

The survey, archived on the Statistics Canada website, cites a variety of studies

undertaken in the North. Norris, in her analysis of the general health of Inuktitut in the

Canadian Arctic, refers to Tulloch (2004) and the particular importance of Inuktitut to the

health of Inuit cultural identity:

An in-depth study about the values and attitudes of Inuit youth concerning Inuktitut and English found that most young Inuit, even those who thought that they were "good" or "excellent" at speaking Inuktitut, expressed concern that as they use and hear English more frequently, they are losing their ability to speak Inuktitut well. At the same time, many Inuit youth associate the Inuktitut language with their identity, traditional knowledge, and culture. For some, losing Inuktitut can affect their sense of belonging, leading to feelings of marginalization and exclusion. Allen (1998) references survey data indicating that the Inuit place a high value on Inuktitut (Crago, Chen, Genesee, & Allen, 1998; Dorais & Sammons, 2002; Taylor & Wright, 1990), yet adds "...However, it is not clear whether there is enough concrete support for the language for its survival to remain viable" (Allen, 2007b).

Freeman corroborates this high value that Inuit place on their language:

Indigenous languages have strong value as symbols of identity, in addition to cultural worldview and communication value, including written forms as identity symbols even though, for many indigenous languages, these forms are very new (Freeman, 1995).

Finally, in the experience of this researcher living in Inukjuaq, the pride of the Inuit at "being Inuit" was noted to be extremely strong and vibrant. The sense of belonging and community created through the sharing of common language in Inukjuaq was remarked about on many occasions by the researcher and numerous quotes attesting to this fact are printed in Chapters IV and V. There is no question in this writer's mind that the Inuit are proud of their heritage and desire to retain and teach Inuktitut to their children and future generation.

The issue at hand, however, is not concerning the pride of the Elders and adult speakers, who grew up, for the most part, without the Internet and major foreign language penetration, but to young people who are learning from an early age that Inuktitut is secondary to what they see on Bebo and MySpace online, for example. Coupled with the difficulties of typing and communicating in Inuktitut online, it becomes a simple step for young people to associate English with all that is modern and progressive, and Inuktitut with the "old ways." It was part of this research to propose exciting methods for keeping the interest of young people in the use and development of Inuktitut in online communication to ensure the propagation and strengthening of the Inuktitut online discourse.

ETHNOGRAPHIC LITERATURE CONCERNING ABORIGINAL LANGUAGE

Looking at language use online and attempting to preserve traditional languages with technology is a task that carries with it many assumptions. Among these assumptions is the idea that language is important and that it carries with it some intrinsic value to society or to the group in question. Having grown up in a French-Canadian environment, with the embedded understanding that French was a language that deserved "protecting" and that was under some "threat," this researcher had always assumed that it was a universally understood truth that language was an essential, intrinsic, embedded part of culture.

This belief, however, requires careful analysis and deliberation before it can be used with any seriousness in research, or as a conceptual framework in ethnographic fieldwork design. It is not sufficient to state that "language is an essential component of culture," for example, and then continue on to further analysis. There is a need to show the essentiality of language and its connection and necessity for the experience of a group. This concept of language as "important and worth preserving" is a key component of this research in the Canadian Arctic and, before progressing, must be properly managed and understood.

It seems that two essential, yet potentially problematic, concepts concerning the initial assumption were those of "culture" and "language." Culture is a concept that can have variable definitions depending on the angle from which it is approached. Looking at culture from the perspective of the *Ethnography of Speaking* yielded the following interpretation:

Culture, as it is used here, refers to a socially constructed and historically transmitted pattern of symbols, meanings, premises, and rules (the definition is adapted from [Geertz 1973] and [Philipsen, 1992]).

While the term "rules" used in an elaboration of the concept of culture initially appeared to this writer as somewhat rigid and unyielding, Philipsen's reiteration of this terminology in terms of the concept of "codes" was useful in clarification. Looking deeper into the relationship between language and culture, it can be seen that the term "language" can be limiting to a strictly delineated definition as to what constitutes communication—namely voice utterances.

In order to expand this definition, it was helpful to move forward from the conceptualization of "Language and Culture" to the idea of "Speech Codes Theory" as an "original theory of human communication as considered from a cultural perspective." From here, Speech Codes Theory can be applied to the case of Inuktitut to show its connection to the Inuit culture. A speech code, then, is a system of socially constructed symbols and meanings, premises, and rules pertaining to communicative conduct (Philipsen, Coutu, & Covarrubias, 2005).

In this section of the ethnography of language as culture, I propose the examination of the fieldwork of several ethnographers working with local systems of communication in Aboriginal communities.

Dell Hymes

One justification for the preservation of the Inuktitut language rests in the concept that entire ways of thinking of a people such as the Inuit can be thought to be encoded

53

within these very languages. Dell Hymes,³⁶ a strong proponent of such a concept, wrote quoting Edward Sapir:

One can only hope that linguists will become increasingly aware of the significance of their subject in the general field of science (Hymes, 1964).

The fact that Hymes mentioned this point so prevalently shows the intense interest that he had in language; however, not in the way that linguists understand their field. Hymes implies his dissatisfaction with the "old standby" of "language and culture" in which linguistics could tentatively be tied to other fields such as anthropology.

Rather than choosing the terms ethnolinguistics, sociolinguistics, or psycholinguistics, Hymes focused on the concept of Ethnographies of Communication which, he felt, seemed to best indicate the necessary scope and to convey and encourage the fundamental contribution they best can make (p 3).

At this point, Hymes made a profound shift in his conceptualization. Beginning with a quote of Sapir which claimed that linguistics is extremely important, he proceeded to write, "It is not that linguistics does not have a vital role...it is rather that it 'is not linguistics, but 'ethnography'-not language, but 'communication' which must provide the frame of reference within which the place of language in culture and society is to be described" (p 4). In its applicability to the case of Inuktitut, it can be taken to mean that it is not simply the language of Inuktitut that is of essentiality, but the frame of reference—the place in culture that emerges through the use of this language.

³⁶Dell Hathaway Hymes is currently Emeritus Commonwealth Professor of Anthropology and English at the University of Virginia.

Basso

Basso's approach to the study of *Native Peoples* (Basso, 1988) resonates strongly in relationship to fieldwork with First Nations communities. Upon his first experience in working with the Western Apache:

Surrounded by foreign geographical objects and intractable acts of speech, even the most practiced ethnographers become diffident and cautious. For the meanings of objects and acts alike can only be guessed at, and once the guesses have been recognized for the arbitrary constructions they almost always are, one senses acutely that one's own experience of things 'out there' cannot be used as a reliable guide to the experience of native people Cultures run deep...and the ethnographer comes to appreciate that... utterances exchanged in forms of daily discourse acquire value and significance by virtue of the ideational systems with which they are apprehended and construed (p 100).

Language is an essential aspect of Basso's work. "Every culture, whether literate

or not, includes beliefs about how language works...(and) about the kinds of social contexts in which these capabilities may be realized most effectively" (p 123). The language *itself*—the actual sound utterances themselves are not in themselves sufficient to create meaning. In Basso's experience, coherence in Western Apache discourse is more than just words, it is "interlocking utterances and actions, the expressive force of Apache discourse–what people call its 'strength' (nalwod), and which may be viewed as a product of multiple interlockings at different levels of abstraction...In other words, the expressive force of an Apache utterance seems to be roughly proportionate to the number of separate but complementary functions it accomplishes simultaneously," or, as Alton Becker (1982) has intimated, "...to the number of distinguishable subject matters it successfully communicates about" (p 121)."

This conceptualization of language, wherein words themselves are not enough, but where place, conduct, and subtle, almost imperceptible signs (to those outside the group), which Basso appropriately calls "interlockings," introduce a depth of communication that supersedes language, and which informed, and was informed by, culture.

After reading Basso, it became apparent that the original set of theories; namely, that language equaled culture, would no longer be sufficient. A new model for this research was required wherein something deeper than merely language could be used to help define culture and communication. Therefore, further investigation was therefore required into the idea of "communicative conduct" as found in the work of Carbaugh.

Carbaugh

In Carbaugh's *Just Listen: Listening and landscape among the Blackfeet* (Carbaugh, 1999), we learn of this ethnographer's exploration of "listening" as a cultural form of communication. His realization of the Blackfeet way of "dwelling in place," a "complex way of being, derives from and helps constitute cultural and physical spaces, (and) provides a traditional, nonverbal way of being in those places" (p 250). Carbaugh writes specifically that he explores a "deeply significant form of listening among the nizitapi, or 'real people' as the Blackfeet are known to each other."

Carbaugh begins by explaining that "recent discourse and culture studies have reminded us how intimately related cultural worlds and discursive places indeed are." Carbaugh writes of the feeling of displacement and disjointedness that can arise from finding one's self betwixt cultures and gives the example of climbing a hill to eat lunch only to find out that the proposed picnic area is a "sacred burial mound" (p 251). At times like these, discourse escapes the researcher, and there are no words to express such an "under-exposed view."

In this study, Carbaugh, before beginning his work in earnest, presents a literature review of research in the field of ethnographic ways of studying discourse and culture. Starting from the legacy of Benjamin Lee Whorf (Whorf, 1949), who explored the ways that "habitual thought and behavior" could teach us about routine linguistic patterns, Carbaugh explains that Whorf and Sapir, as well, were concerned with the manners in which people act in the world, and suggested linking "cultural patterns of behavior and thought with linguistic routines" (p. 252). This idea of linking cultural patterns with language shows the essential nature of language and alludes to the fact that the erosion or loss of language can equally threaten the loss of culture and societal cohesion as an organic whole.

Carbaugh then differentiates between those who felt that habitual thought informed linguistic patterns and those researchers who felt that "fashions of speaking relate to places," and cites Philipsen and Basso, among others, in this area. This aspect of his thought is intriguing because it emphasizes the importance of geographic place to culture as well.

Carbaugh summarizes the importance of places poetically when he writes, "...places, in other words, can communicate beyond words, if only we "listen." Carbaugh, of course, realizes that he is attempting to translate the ineffable into words, a paradoxical task resembling a Koan to which there is no rational solution except abandonment to the fullness of the moment and a keen awareness of silence. What Carbaugh proposes is a "translation" of sorts, from listening among Blackfeet into writing
by academics. He proposes the examination of a sort of pre-linguistic communication practice—a "cultural action prior to language."

As Carbaugh visited the sacred spaces of the Blackfeet community, there were often times of silence, reflection, and observation. "As we looked around, I noticed the remains of five Sun Lodges. Asking us not to take any pictures...we stood in silence for a while" (p 254)...Two-Bears invites us into a prolonged period of silence, to pray, meditate, or leave an offering, if we wished. Two-Bears claims that "if you have a problem, or can't find the answer for something, our belief is that you can come out here, or to the mountains...sit down and listen. If you sit and listen patiently, you'll find an answer" (p 255)..."Just over a close rise, a beautiful, hidden, verdant valley reveals itself," and Two-Bears says: "This would be an ideal place for those of our people having trouble with drugs or alcohol. They could come out here and think about things. It's ideal for that" (p 255)...

The importance of silence demonstrates that language is not the only aspect of culture; that culture can exist even when language is not present. This said, however, it is important to realize that without language to create the scaffolding of communicative discourse and ritual, these cultural "silences" might no longer exist. Modern languages and cultures often have little time for silence, preferring to inundate citizens with a constant barrage of commercial and propagandistic media discourse, and the importance that Aboriginal languages (including lnuktitut) place on silence is important.

"As we walk from the small valley up the hill to leave, Two-Bears stops and reflects: 'Just listen.' (A pause of about 1 minute reveals utter tranquility, a few birds sing, followed by a magnificent silence and stillness.)" Upon reflection on the moments of silence that Carbaugh experienced during his time with the Blackfeet, he realized that, rather than simply moments in which there was an absence of communication (which would correspond with this researcher's original model of "language as culture"), what he experienced was a "deeply cultural form of action in which the Blackfeet persona and the physical place become intimately linked, in a particularly Blackfeet way."

Carbaugh claims that this kind of listening "functions in a complex way: it is a carrier of cultural consent, a historical way of being that invokes that history in the present" (261). To understand silence in the Blackfeet way is to truly extend one's life to a range of feeling, doing, and being that transcends language and can create a sense of union with others in the community as well as with the environment itself.

Pratt and Weider

The work of Pratt and Weider (Pratt, 1993) on the speaking practices of the Osage people is of potential relevance to the experience of Inuktitut spoken by the Inuit of the Canadian Arctic. Pratt, et al., draws heavily on the concepts of Hymes concerning speech communities, and focuses on the idea of "appropriating languages" and transforming them through the use of "glosses." Their understanding of these glosses also corresponds with the term "speaking being a gloss on the overarching concept of 'communicative conduct," which is a much larger superset conceptualizing both speaking and nonspeech communication.

Pratt and Weider use italics as gloss marks to emphasize the deeper levels of meaning within the English as used by the Osage---glosses such as arbor, fireplace, elder, and committee---words that carry deeper levels of meaning only within the community. When defining community, Pratt (a full member and Headman of the Osage community) and Weider felt the temptation to "extract the simplest, unqualified aspects

of Hymes' definition (incorporating Gumperz's definition) (Gumperz & Hymes, 1964), "and be done with it" (p 7).

If they had done so, the researchers could have simply written that they were focusing on a local unit characterized by "...knowledge of rules for the conduct of speech" (Hymes, 1974, p 51). Rather than this approach, however, which would have excluded members living outside the immediate vicinity of the tribe, Pratt and Weider chose to define membership in the speech communities not simply by "speech" (which would have corresponded with this writer's initial concepts of the "old standby" of "language and culture"). Rather, they defined membership through social roles expressed in the Elders through language and also through nonlinguistic cues. "Observing the conduct and listening to the advice of the Elders…permit us to specify the speech community and membership in it" (p 42).

Their examination of "public speaking" in the Osage community and the historical underpinnings of the tradition and means of carrying it out serves to underscore the fact that language and speech are not the only aspects of culture, far from it. Far more important than language is the communicative conduct in which language is used. The depth of the glosses and the detail in the Pratt and Weider piece is immense. Perhaps one of the essential aspects of their work is the thought that while they began their study "asking how events and acts of Osage public speaking are distinctly recognizable," (p 37), they realized that the meaning of this "public speaking" goes far deeper than merely the words used.

Rather, there is an ineffable "stream of experience" within which the recognition occurs, and which "is not an anonymous stream." Due to shared experience, shared

tradition, and shared communicative conduct, the English used by the Osage had developed into a vehicle wherein the words were only one aspect of the whole.

One final aspect of this work shows that it is not enough to have shared past experience, but that in order to remain an active member in the Osage speech community, one must "continually enrich their knowledge of their predecessors and to keep abreast of 'who is who' among the current members" (p 40).

In the notes of their piece, Pratt and Weider mention Philipsen (1986, 1992) who provided an ethnographically-based interpretation of a speech by Chicago Mayor Richard Daley that begins with a premise similar to ours; namely, that the speech under analysis "was intelligible and convincing to those who shared the speaker's culture, but not to . . . outsiders" (1992, p 43). Pratt, Weider, and Philipsen, are all concerned with features and aspects of the respective speeches that are heard and grasped by insiders and missed by cultural outsiders. A look at Philipsen's ethnographic fieldwork in Chicago seems appropriate at this time.

Teamsterville

In Philipsen's *Speaking Culturally* (992), we learn of the Teamsterville and Nacirema speech communities and of the elements that unite these disparate groups. These elements are more than just words, they are the way "to know, and to use appropriately, the meanings, rules, and speech habits of a local group...(which) signals and affirms that one is a member of it" (p 14). Philipsen's observations concerning the fact that "to know the local parlance, but be unwilling...or feel not permitted to use it...reveals a relationship, perceived or real, that places one at some distance from the group." "Feeling not permitted to use languages" is an aspect of communicative conduct with which this writer is personally familiar. While conducting graduate studies in Hawaii after living in Japan, good friendships were established with several native Hawaiian Islanders. As a result of a good working relationship at a local business, our talk was generally friendly, yet this writer did not feel that these friends evidenced any distinctive or memorable speech patterns.

On one occasion, however, having received an invitation to a wedding reception, it was noticed that at this new locale, the friends' language and communication took on another dimension with new words, accents, and interactions that had never been seen before by this writer. It was almost as if an entirely new language had emerged. These people were not speaking purely Hawaiian, however, but rather a distinctive form of English interspersed with Hawaiian words, the speaking of which signified a relationship with their "family," or "ohana."

Having lived in Hawaii for several years by this time, this researcher was very aware of many words that he might have been used in order to fit into the conversation and "pretend" to be Hawaiian. However, these were not used as an instinctive sense andwarned that they would have come out completely wrong. Not only would it have seemed like an attempt to pretend membership, but it would have embarrassed both parties as well. There is nothing quite so strange as a "haole" (white) pretending to be Hawaiian, and due to the sad history of Colonialism in the region, this pretending can be very offensive as well. In the researcher's experience, this phenomenon also applied in Inukjuaq in the Canadian Arctic.

Although this researcher had developed a working knowledge of Inuktitut at this time, the simple fact of using the language did not gain immediate membership into the

group. The "Inuitness" of the Inuit goes beyond language, yet language is nevertheless an essential component.

Studying the text of Philipsen's experiences in Teamsterville brought this researcher's own experiences strongly to light. One aspect of importance, and perhaps the focal point of this essay, is the fact that "talk is not everywhere valued equally, nor is it valued equally in all social contexts." In contrast with the original statement of "language is culture," this writer is gradually coming to understand that while it is true that language is an aspect of cultures, it is only when language is combined with communicative conduct that it begins to impart meaning to other members of the community, and to create membership for the speaker.

The words themselves are of secondary importance, as some members may value silence, for example (as the Blackfeet may do), more than any other social behavior. In Teamsterville, the words used are not the only aspect of communicative import. Protecting one's wife from an insult using words alone would be a mistake in Teamsterville: the appropriate cultural response would be to strike the offending individual. Children should not be taught lessons with words (as Philipsen discovered when Teamsterville residents doubted his masculinity simply based on his use of words over violence), because the belief system was that children should be beaten and subdued in order to make them into "real men" (a gloss). In Teamsterville, for example, "Speech is proper and functional in asserting male solidarity, but not in asserting power and influence in interpersonal situations. In critical symbolic ways, as protector and master of a house, the Teamsterville man devalues speech as a resource for male enactment" (pp 28-29).

This is not to say that speech is not important. Speech is still an important part of Teamsterville, just as it is in Osage, Blackfeet, and Inuit cultures. Speech is just not the only communicative conduct intrinsic to culture. In Philipsen's experience in Teamsterville, "Awareness of a linguistic norm and the concurrent belief that one's own speech is substandard can create what Labov calls "linguistic insecurity." Rather than changing their speech to match any external standard, Teamstervillers would value the fact that (one of their own) "murder(s) the American language, the way most of us do," and this conduct lets the others know that "he's one of us, he's just like us" (p 35).

Mayor Daley's council speech serves as the paragon of Philipsen's example of Teamsterville ways of speaking, and allows the reader to see further into the "interlockings" of meaning that are emerging not only from the words themselves, but from the resonance that these words have with members of his cultural community and who feel and understand, on a very fundamental level, the "truths" of his meaning.

The ethnographic interpretation of this work serves to display the ideas of place, gender, symbols, and meanings that are present only to the initiated, but can be completely incomprehensible to those who are not "family" or "this society" (Philipsen, 1992). The connection of these concepts of initiation and ideas of "interlockings" are of primary importance to Inuktitut. They are an essential concept of being Inuit, and being capable of initiation into Inuit life and culture, as well as the hunt, is the capability of understanding and communicating in Inuktitut. Additionally, the language of Inuktitut itself, consisting as it does of morphemes which lock into each other through a process or "morphing" of sounds and meanings, consist of stacking meanings onto each other, ultimately creating extraordinarily long "information chunks" of meaning, far surpassing the simple words used in English for example.

Speech Codes Theory—Philipsen

During the reading of the previous pieces, it has become apparent that language cannot be the totality of culture. Although language is an important part of the cultural realities of a community, ultimately, language is one aspect of the totality of communicative conduct. Looking for a unified theory of communicative conduct, Philipsen's work with Teamsterville and with the Nacirema cultures revealed a "distinctive code of self, society, and strategic action" (Gudykunst, 2005).

Speech Codes Theory was created for two purposes. "One purpose was to distill some of what might be learned from a large body of fieldwork research on culturally distinctive ways of speaking...a second purpose was to provide a focus for further research and discussion. A Speech Code, then, is a system of socially-constructed symbols and meanings, premises, and rules pertaining to communicative conduct" (Philipsen, 1997 p 126).

The observer-analyst notices that participants in the discursive life of a speech community use particular resources to enact, name, interpret and judge communicative conduct, and the analyst uses what she or he has noticed in order to construct a hypothesis as to the existence and nature of a system of resources that these participants use to do that enactment, naming, interpretation, and evaluation. That hypothesis is the observer-analyst's formulation of what in Speech Codes Theory is called a speech code (Philipsen, p. 57).

The propositions in Speech Codes Theory showed that, rather than relying on a theory of "language being intrinsic to culture," it was the discursive force of culture that produced language, and that language was indeed, simply one aspect, or "gloss," on the idea of communicative conduct as expressed through the propositions involved in Speech Codes Theory.

This researcher lists the Speech Codes propositions here in order to reflect upon

them further. A realization has occurred, based on the fact that although this writer

speaks several languages and had strong views on the matter at hand, previously held

assumptions concerning the nature of the relationship between language and culture

have changed. At the same time, this research has brought the realization of something

deeper than the language itself that informed communication. The Inuit people, like the

Japanese and Blackfeet, use, at times, deep silences to communicate their truths, and

those who do not know how to properly interpret and participate in these communicative

practices can be severely reprimanded. The Speech Codes propositions are listed here:

Proposition 1: Wherever there is a distinctive culture, there is to be found a distinctive Speech Code.

Proposition 2: In any given speech community, multiple Speech Codes are deployed.

Proposition 3: A Speech Code implicates a culturally distinctive psychology, sociology, and rhetoric.

Proposition 4: The significance of speaking is contingent upon the Speech Codes used by interlocutors to constitute the meanings of communicative acts.

Proposition 5: The terms, rules and premises of a Speech Code are inextricably woven into speaking itself.

Proposition 6: The artful use of a shared Speech Code is a sufficient condition for predicting, explaining, and controlling the form of discourse about the intelligibility, prudence, and morality of communicative conduct.

With this examination of ethnographic literature demonstrating positive ways of

interpreting speech, the policies of the Canadian with regard to Cultural Communication

will be evaluated, always keeping in mind the culture of the Inuit and, indeed, all First

Nations, minority cultures, and language groups in Canada.

CANADIAN CULTURAL COMMUNICATION POLICY

"The convergence of capitalism and...technology on the...diversity of

human language created the possibility of a new form of imagined community"

(Anderson, 2006).

Technologies such as the Canadian Pacific Railway and, subsequently, the telegraph, the telephone, and broadcasting have been used to craft an artificial nation where before there was none (Barney, 2005).

The history of Canadian Communication Technology is a history of competing forces striving for what often seems to be contradictory goals. The sheer size of Canada has required a strong sense of national identity to merge developing communities and to develop the growing economy. At the same time, individual cultural groups strive for independence and differentiation, a factor in the Canadian cultural and media landscape that continues today.

In order to review the literature and history surrounding this issue, and to show how these issues affect the Inuit people and the Inuktitut language, it was necessary to examine the ways in which Canada has approached the paradox of how to create a strong and united nation while preserving distinct voices and cultural communities. Additionally, questions remain of how to accomplish this while fostering a vibrant and economically healthy media landscape.

Communication policy in Canada is "predominantly a federal matter" (Barney, 2005) that takes into account broadcasting, telecommunications, publishing, and cultural industries (p 27). Current policy in these areas in Canada is held in the Telecommunications Act (1993) and the Broadcasting Act (1991) and involves a number of diverse ministries and bureaus. However, the CRTC, Industry Canada, and the Department of Canadian Heritage are paramount in policymaking. On the CRTC website ³⁷ (Canadian Radio-Television and Telecommunications Commission) there is a list of acts and regulatory policies that can serve as a guidepost to current Canadian communication policy.

³⁷(<u>http://www.crtc.gc.ca/eng/statutes.htm</u>).

Perhaps one of the most important sections is Section 3, wherein the Broadcasting Policy for Canada is laid out. In this section it is made clear that culture, language, and the protection of Canadian identity are paramount in the Canadian media environment. In order to begin an examination of the potential conflict between national broadcasting identity and the recognition and protection of minority and Aboriginal cultures, specifically the Inuit, this researcher feels it useful to embed a heavily truncated synopsis of the Canadian Broadcasting Policy here. Commentary is offered throughout with questions for reflection as the history of Canadian Media Technology is traced in the subsequent section.

Broadcasting Policy for Canada

3. (1) It is hereby declared as the broadcasting policy for Canada that
(b) The Canadian broadcasting system, operating primarily in the English and French languages. . . provides, through its programming, a public service essential to the maintenance and enhancement of national identity and cultural sovereignty;

Section 3.b of the policy summarizes quite succinctly the issue at hand concerning the paradox between national identity and cultural sovereignty. This combination of an extended national solidarity and unity—an imagined community as it were—combined with the sovereignty of individual cultures, is an extremely ambitious proposition.

The most important aspect of this tension between the national and the cultural, of course, is the case of Québec. However, the Canadian First Nations community, in addition to the multiplicity of cultural communities living in Diaspora throughout the Canadian landscape, also attests to the contrast between the national and the distinctly cultural. Canada is celebrated as being the "cultural mosaic" contrasted against the American "melting pot" of culture. The issue at hand is coming to terms with the inherent difficulties of binding the mosaic within a rubric of "Canada" through media technology

and broadcasting policy making.

As the list of policies continues, it becomes evident that the contrast between the

national and the local, between cultural and country, become quite blurred. According to

the CRTC website, media in Canada should:

(i) Serve to safeguard, enrich and strengthen the cultural, political, social and economic fabric of Canada,

(ii) Be predominantly and distinctively Canadian,

(iii) Actively contribute to the flow and exchange of cultural expression,

(iv) Be in English and in French, reflecting the different needs and circumstances of each official language community, including the particular needs and circumstances of English and French linguistic minorities,

(vi) Contribute to shared national consciousness and identity,

(viii) Reflect the multicultural and multiracial nature of Canada.

This section displays another list of seemingly contradictory policies which, it is

this writer's hope, may become clearer as Canadian media policy is traced historically. In the above sections (i-viii of section 3), one observes that media policy in Canada is designed to enrich the fabric of Canada and to be predominantly and distinctly Canadian, yet should also be in English and French. At the same time, Canadian media should contribute to shared national consciousness and identity while reflecting the multicultural and multiracial nature of Canada. Such ambitious policies are reflected in section 7 of the Telecommunication Act (1993)³⁸ that adds the further idea of "the national and international competitiveness of Canadian telecommunications firms" (section 7C).

³⁸ (http://www.crtc.gc.ca/ENG/LEGAL/TELECOM.HTM).

Canadian Cultural Media Policy

The following paragraphs provide a brief history³⁹ of the policy.

A Canadian, Reginald Fessenden, was the first person to broadcast a voice by radio. On December 23, 1900, near Washington D.C., his transmitted message was indeed received, and the industry of radio broadcasting began from Canadian hands.⁴⁰ One of the first commercial concerns to Canadian policy makers, however, was the fear of influx of programming from the United States. This, therefore, was one of the first, and most long-lived, cultural concerns in Canadian Media history-namely, the fear of cultural and economic media submersion by the United States.

The French-Canadian influence on Canadian media is of the highest importance. Canada's first radio station, XWA, began broadcasting from Québec in English. This was guickly followed by the initial francophone radio station in the early 1920s.

It was later in the 1920s that the Royal Commission on Radio Broadcasting (RCRB) recommended to policymakers in Ottawa that, due to fears of private ownership and foreign (especially American) competition, broadcasting be publicly owned by a national body. What would later become the CBC (Canadian Broadcasting Corporation) started as the Canadian Radio Broadcasting Corporation in 1929. The CRBC existed between 1932-1936, and this short-lived organization made great headway in the development of a national, English-speaking Canadian identity.

³⁹ The chronology of this historical overview was assisted with the media tools available for educators at The Canadian Media Awareness Network (http://www.media-awareness.ca/).

⁽http://en.wikipedia.org/wiki/Media in Canada).

The most memorable CRBC program achievement was the coverage of the Moose River Mine Disaster in April 1936 in Nova Scotia. Three men were trapped in a mine cave-in 141 feet below the surface and rescue crews worked frantically around the clock to save them. The CRBC made arrangements with Halifax station CHNS to send an announcer, J. Frank Willis, to the mine-head to report from the scene every half hour for almost five days. Two of the men survived.^{41.}

One point of note was that this radio station was broadcasting in English, to an anglophone audience, potentially alienating the Québécois population, a source of broadcast tension.

In 1931, the first Canadian television (VE9EC) station began broadcasting, also in Montréal. It is noteworthy that although the first radio and television broadcasts took place in Montréal, most of the programming available at the time was predominantly in English. The first Canadian television station, VE9EC, began broadcasting in Montréal.

At this point, the CBC was created due to recommendations by the Federal Government to develop a national broadcasting service for Canada. The CBC Act prohibited any national private radio networks. One of the factors leading to this decision were the attacks on the Canadian government by some conservative Christian groups over the radio, leading to fears of splintering factions and a loss of national identity. This was further extended by the creation of the National Film Board in 1939 which was created in part to "help Canadians in all parts of Canada understand the ways of living, and the problems of Canadians, in other parts."⁴²

During the determination of policy for these national programs, the Canadian Radio League, a "coalition of nationalist and progressive intellectuals and groups that extended across lines of class, region, language, and gender" (Barney, p 33). Along with

 ⁴¹(<u>http://www.broadcasting-history.ca/networks/networks_CRBC.html</u>).
 ⁴² From the NFB Mandate: (<u>http://www.nfb.ca/about/mandats.php</u>).

a concern for the vulnerability of indigenous culture under a commercial system, the CRL's case for state broadcasting was based on a conviction that public communication free of domination by powerful private interests was integral to democracy. Referring to communication as "the heart of democracy," Spry (1931) argued, "There can be no liberty complete, no democracy supreme, if commercial interests dominate the vast, majestic resource of broadcasting" (p 33).

Fears of Cultural Dispersion

In 1951, the Massey-Lévesque Commission recommended the creation of the Canada Council to support Canadian arts, amidst fears that Canadian identity could easily be overwhelmed by media influx from their neighbors to the south. Described as "the most extensive public discussion of communications in Canada up to that time" (Raboy, 1990 p 94), in which an enormous variety of groups came together for public forum and discussion concerning the future of Canadian media. This included the CBC, the National Film Board, Telefilm Canada Québec, and the Department of Canadian Heritage.

Due in part to the reports of the Commission, the Broadcasting Act (1958) mandated the first "quota" of Canadian content and stipulated that at least 45percent of content broadcast in Canada be Canadian in nature. The publication industry in Canada (newspapers and periodicals) also were under threat of foreign influence (the O'Leary Report by the Royal Commission on Publications stated that 80 percent of publications were of foreign origin), and the Canadian government attempted to implement reprinting laws in order to generate Canadian revenue. The Broadcasting Act in 1968 added even further to the powers of national broadcasting identity in that it made 60 percent Canadian content the minimum for broadcasting and established the CRTC. One of the first acts of the CRTC was to stop issuing broadcasting licenses to less than 80 percent Canadian-owned organizations. The CRTC is a uniquely Canadian organization whose purpose is to uphold the belief that communication is not a merely commercial field, but that it is in the Canadian public interest to create a space where media transparency is guaranteed and where "the cloistered backrooms of telecoms' politics were to be opened to citizens" (Winseck, 1998).

Due to increased fears for the Canadian publishing industry, financial assistance programs were implemented in the late 1970s. In the early 1980s, the Federal Cultural Policy Review Committee issued a report that recommended a shift away from public broadcasting and suggested that the CBC run as an alternative to private broadcasters rather than a replacement. This was a major shift and would have serious implications for issues of Canadian content and national identity created through broadcasting.

In 1991 the Federal Government passed the Telesat Canada Reorganization and Divestiture Act that transferred ownership of Canadian satellite technology used in broadcasting to the private sector as well. This is yet another example of the trend in Canadian media to be moving from public to private ownership. In response to this, however, the Broadcasting Act, passed in1991, attempted to increase awareness and reduce tensions that had arisen from increased privatization and decreases in representation for minorities and non-English speaking Canadians.

This act emphasized the importance of both English and French in Canadian society, affirmed the multicultural nature of the Canadian identity, and validated the First

73

Nations presence through charters promising further representation through broadcasting. Some of the points included: "Emphasizes the importance of programming which is Canadian in both content and character and redefines the CBC's role as creating a "Canadian consciousness."

Soon afterward, the Federal Department of Communications was closed and the new Department of Canadian Heritage began its jurisdiction over the cultural aspects of Communication Technology and policy, and Industry Canada oversaw the economic aspects, the situation that still exists at this time.

The 1990s also saw Canada dealing with many difficulties concerning GATT and NAFTA with the United States and Mexico. The WTO ruled that Canada's protectionist laws concerning Canadian periodical publications were in violation of International trade rules and could not be used. This was a blow to Canada's struggling print industry.

In 1995 the CRTC released its report on New Media that states that "the CRTC will not attempt to regulate the Internet," and the CRTC leaves "Canadian Internet Presence" and "Canadian Product" to "market forces." In February of 1999, the Cultural Industries Sectoral Advisory Group on International Trade released its report, entitled "New Strategies for Culture and Trade: Canadian Culture in a Global World." This report gave a listing of International cultural practices and offered options for Canadian cultural policy online. Some major points from this report (taken from the website of Foreign Affairs and International Trade, Canada), included:.⁴³

⁴³ (http://www.international.gc.ca/tna-nac/canculture-en.asp).

Over time, Canada's cultural policies have evolved, continually adapting to changes in both the domestic and the global markets. As we approach the beginning of the 21st century, massive changes—driven by technology and "freer" trade—are creating both opportunities and challenges for our cultural industries.

Emerging technologies are offering Canadians new communications tools, but are also challenging the government's ability to enforce regulations designed to ensure that Canadians have access to Canadian cultural products.*

With the growth of multinational corporations and the vertical integration of entertainment, distribution and delivery systems and products, national policies are shifting and adapting to address these changes.

*NOTE: Here and throughout the paper, cultural "products" refers to both goods and services.)

Finally, the report states that "the trend to more open markets and a free trading

world make it more challenging to negotiate trade agreements that recognize cultural

diversity and the unique nature of cultural products." 44.

The report additionally proposed increased powers for cultural support for

languages and cultural products. In the last section, a brief discussion shows the policies

of the Harper administration are opposed to such cultural assistance.

Some of the policies recommended by the Task force included:

(to) recognize the importance of cultural diversity;

(to) acknowledge that cultural goods and services are significantly different from other products;

(to) acknowledge that domestic measures and policies intended to ensure access to a variety of indigenous cultural products are significantly different from other policies;

(to) set out rules on the kind of domestic regulatory and other measures that countries can and cannot use to enhance cultural and linguistic diversity.

^{44 (}www.international.gc.ca/eet/pdf/06-en.pdf).

Thoughts on Canadian Cultural Policy

This section provides an analysis of Canadian cultural policy and an accompanying evaluation of cultural retention vs. national identify building.

"Technologies such as the Canadian Pacific Railway, and subsequently, the telegraph, the telephone, and broadcasting, have been used to craft an artificial nation where before there was none" (Barney, 2005). Barney, in *The Canadian Democratic Audit*, published by the University of British Colombia Press, explains that such media technologies operate both materially and ideologically.

Maurice Charland writes that "Canada owes its existence to technologies which bind space...the idea of Canada depends upon a rhetoric about technology" (Charland & Dorland, 2002). Minority groups however are becoming increasingly dissatisfied with the national rhetoric that excludes them. Canadian writer Aritha van Herk, expressed her views i(Pannekoek, et al., 2003) as:

My tentative conclusion is that (Canadian) culture is seeking to reinvent itself now as it inevitably must. It is looking to the local and the regional. It is not looking to that nationalist discourse. And if Canadian culture is going to survive, it is going to be there" (p18).

Canadian Television, for example, is also confused about its identity. Sullivan and Beaty report that "...on the one hand, we look to a strong and diverse television industry as evidence of our status on the global media stage. On the other, the discourses of television are captured by anxieties over cultural sovereignty and notions of national identity...as evidence of our cultural sophistication versus crass American mass media" (Pannekoek, et al., 2003).

The Aboriginal community in Canada is also dissatisfied with attempts of Canada to capture its identity in a strong nationalist media discourse. Cora Voyageur, in her

piece *Aboriginal Media in Canada*, published by the University of Calgary press, writes of her childhood experiences growing up as a First Nations member in the 1960s:

Nobody looked like me! As a child growing up in Canada in the 1960s, I saw no reflections or affirmations of myself in the media. Nobody I saw on the television, in the newspapers, or in magazines shared my cultural background" (as a First Nations woman).

Ms. Voyageur reports that Canadian Aboriginal Media is alive and well in many diverse publications including *Windspeaker*, *Aboriginal Times*, The Aboriginal Peoples Television Network, and CFWE-FM, the native perspective, but that much more effort is needed to promote and encourage Aboriginal media.

Inuit documentary and feature film production has made important progress. The most well-known of these production group is the Igloolik-based *Isuma-Igloolik* production company who produced Atanarjuat. Unfortunately, language protection policy is not progressing as positively as media in Canadian First Nations Communities (please refer to final section on language application of media policy).

Returning to the concept of Canadian national identity which, ideally, contains all cultures and preserves minority identity, the Canadian Democratic Audit claims that "Beginning with the Canadian Pacific Railway and continuing right through to the 'New National Dream' (of ICTs and Canadian New Media)...state-owned broadcasting in Canada was established 'to occupy and defend Canada's ether and consciousness'" (Charland & Dorland, 2002).

The telegraph and telephone assisted in the integration of Canada. "The existence of Canada as a political and social entity has always been heavily dependent upon effective systems of east/west communication" (Babe, 1990). Canada's efforts in creating Canadian content laws, organizations such as the Canada Council and National Film Board, and policies designed to protect and nurture Canadian media, "...have not

been adequate to the tasks set for (them) either in (their) ideological or material aspects" (Barney, 2005). Barney posits that these communications policies in Canada have rather served historically as instruments of cultural dependency and integration with the United States.

Dallas Smythe (1981) argued that Canada had effectively become a dependency of the United States, and that the primary functions of communication policy in Canada were to create a suitable audience for American media consumption, "…producing the necessary consciousness and ideology to seem to legitimate that dependency." (Smythe, p ix, as quoted in Barney, 2005).

In regard to new media and technology, the IHAC (Internet Highway Advisory Council) characterized the situation surrounding "Canadian Sovereignty and cultural identity" on the Internet as "urgent" and called for "expanding the scope of Canadian cultural policy to encompass new media." (IHAC 1997, 59-60 as quoted Barney, p 74). The CRTC's *Report on New Media*, however, rejected the idea that Canadian content on the Internet was a factor of concern. "Circumstances that led to the need for regulation of Canadian content in traditional broadcasting do not currently exist on the Internet." (CRTC, 1999).

Suffice it to say, that even with Canadian content laws, that Aboriginal, Québecois, regional, working-class, immigrant, and women's cultures have not always been well served, or even adequately represented, in the imagination of Upper Canadian cultural nationalists (Barney, 2005). Richard Collins writes that "Assertion of Canadianness in public broadcasting against the 'external contradiction' of the United States meant that the public broadcasting system tended to suppress regional differences, provincial interests, and most important, the different cultural and historical experience of francophone Canadians."

Canadian Communication Technology, all-in-all, is a contradictory construction. It offers a tension between the stated desire to protect Canada from pure economic forces and offers a social space for identity where Canadians can create discourse in a public sphere (Habermas, 1989). However, at the same time, "The state has been, and remains, a powerful agent committed to the profitability and competitiveness of Canadian commercial industries and to the enforcement of an official, national cultural discourse, both of which have significant democratic liabilities" (Barney, 2005).

Before beginning a discussion of media policy applied to language retention and cultural preservation, it is necessary to answer the initial question of: "Has Canadian Cultural Communication policy worked?" it would seem to be that the answer is that it "has not truly worked." The Canadian policies on media have, at best, been a stop-gap for avoiding pure market forces to completely swamp Canadian media, yet when creating the dominant media to represent as "Canadian," it has ended up being a hegemonic Upper-Canada construction of Canadianness that has emerged.

The state is thus both a friend and an enemy...of communication in Canada. This contradiction must be kept in mind as we confront questions about the prospects of inclusive democracy in the age of capitalist globalization and digital networks (Barney, 2005).

79

CHAPTER III: METHODOLOGY

STATEMENT ON MIXED-METHODS

In designing the fieldwork methodology for this research, it became apparent that a single methodological procedure would be insufficient to cover the scope of the issues in question. Upon reflection, it was decided that the most flexible, yet rigorous possibility consisted of a combination of methods. Relying on Mixed-Methods design rather than a single source of data allows the researcher to comparatively test each hypothesis before creating policy recommendations, avoiding assumptions which can create possible threats to internal validity. Mixed-Methods research "focuses on collecting, analyzing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provide a better understanding of research problems than either approach alone (Creswell & Plano Clark, 2007).

Since beginning this research work with the use of Inuktitut online, it has become apparent that a purely quantitative collection and analysis of empirical data would not suffice to capture the nuances of the case at hand. At the same time, this researcher is of the opinion that statistical data, especially data taken from the Internet and surveys in this case, will aid in deeper analysis of the issues discovered through qualitative fieldwork in Inukjuaq. In an effort to combine both of these data types, this researcher elected to approach the methodology of this project through a Mixed-Methods Case Study incorporating the following elements:

- (1) Qualitative interview data with personal interpretive data
- (2) Quantitative survey data and Content Analysis

These two elements are combined under the overarching rubric of the Case Study following the protocol based on Robert C. Yin, *Case Study Research: Design and Methods* (Yin, 2003). Within the rubric of the Case Study, quantitative and qualitative data are combined through a triangulation convergence model.

TRIANGULATING QUANTITATIVE AND QUALITATIVE DATA

There are four major types of Mixed-Methods designs: Triangulation, Embedded, Explanatory, and Exploratory designs (Creswell & Plano Clark, 2007). For the purposes of this study, upon reflection and analysis of the data, the Triangulation Convergence model appeared to be the most suitable.

In this model, which is summarized by Creswell using the notation QUAN/QUAL, the design calls for a convergence of data in which quantitative data is validated through the qualitative analysis and interpretation of interview and ethnographic data collected during the fieldwork. The timing is concurrent and

the weighting is usually equal. The purpose of this type of combined data is to merge the findings during interpretation and analysis and to create conclusions using a combination of these data sources. A combination of empirical quantitative survey results, and qualitative interpretive interviews and comments are merged in the Data Analysis section as a procedure to address each research question and to ensure that internal validity is maintained according to Yin's Case Study methodological rubric (Yin, 33).

Uniting Mixed-Methods Through a Triangulated Case Study Approach.

A review of the aforementioned *Case Study Research Design and Methods* by Robert K. Yin (Yin, 2003) elucidates the accepted procedures and standards of the Case Study method of social scientific research. The Case Study is an excellent candidate for Mixed-Methods research when appropriately combined with complementary quantitative analysis such as surveys and the implementation of properly-designed ethnographic qualitative data collection techniques. This particular Case Study took place in the region of Nunavik in Arctic Québec during the Summer/Fall of 2007.

Definition of a Case Study

According to Yin, a Case Study is an empirical research method that is complete in itself and not a variant of another form of research methodology. Case Study research is ideally suited to problems that need to be studied in relation to a specific phenomenon. Additionally, Yin recommends that the Case Study be applied to those situations where a researcher has little control over the variables. This is relevant methodology for the research topic in question in that the question of the Inuit and the Internet is a current event, yet it is a social phenomenon not under the direct control of the researcher.

Application of Case Study Methodologies

Yin writes that a Case Study: "...investigates a contemporary phenomenon within its real-life context" (p 42). The case of the use of the Internet by the Inuit people, and the ramifications of its use for the language of Inuktitut certainly falls under the rubric of such a contemporary phenomenon; this issue has only developed within the past few years.

Yin continues that this form of method "...copes with the technically distinctive situation in which there will be many more variables of interest than data points, and relies on multiple sources of evidence, with data needing to converge in a triangulating fashion" (p 13).

The Case Study in question combines qualitative interview data (which can be analyzed in atlas.ti⁴⁵) with quantitative survey and experimental data (which can be analyzed in SPSS⁴⁶ software). This form of Mixed-Methods Triangulation can be combined under the rubric of the Case Study, creating a powerful dataset that can generate new ideas, information, and serve to develop and support a critical theoretical conceptual framework.

Contained within this Case Study are five components of research design which are of critical importance:

- (1) The study's questions
- (2) Its propositions
- (3) Its units of analysis
- (4) The logic linking the data to the propositions
- (5) The criteria for interpreting the findings

This Case Study proposes fieldwork, interviews, and Content Analysis to derive further explanations of the phenomena of the increased use of English online by Inuktitut-speaking Inuit, and the lack of Inuktitut use on the Internet by Inuit. It also proposes potential solutions to this issue.

⁴⁵ atlas.ti is qualitative analysis and coding software produced in Germany (<u>www.atlasti.com</u>).

⁴⁶ SPSS is the Statistical Package for the Social Sciences, published by SPSS (<u>www.spss.com</u>).

Units of Analysis

In this case, the group for the survey consists of the inclusive categorization of Inuit residing in Inukjuaq who currently use the Internet. The group for the Content Analysis consists of Inuit Bebo users registered with the social networking server at <u>www.bebo.com</u>. Due to impossibilities of directly identifying every user, the pages considered as units of analysis were those which contained a sufficient number of keywords identifying the content as Inuit. Some keywords found to be identifiers of Inuit content were: Inuit, Inuktitut, Arctic, Nunavik, Nunavut, Inukjuaq, Iqaluit, Kuujjuaq, Puvernituq, and other keywords defined in a web crawling software protocol designed in Devonagent software.⁴⁷

Criteria for Interpreting the Findings

In this case, the methodology consisted of using a combination of qualitative interview data (for analysis in atlas.ti) with the results of the on-site survey conducted through Catalyst and analyzed in SPSS. The combination of the survey data with the online archival material was matched with evidence from long interviews and personal direct observation of the researcher while living in Inukjuaq. Finally, the results were interpreted through a series of policy recommendations and analysis, both interpretive and software generated.

⁴⁷ Devonagent is a web-crawling search engine capable of finding precise data through detailed Boolean qualifiers for including and excluding information on the Internet. (<u>http://www.devon-technologies.com/</u>).

Review of the Research Questions

In preparation for the fieldwork, the research questions were once again reviewed and analyzed, this time with an eye for survey design and code sheet generation.

- R1. To what extent, and in what ways, is the Internet being used in Nunavik?
- R2. What language is predominant in Nunavik, in both spoken and written forms and online?
- R3. To what extent and in what language is social networking being used in Nunavik?
- R4. Does alternate language use online adversely affect the Inuktitut language ability?

Combining Quantitative and Qualitative Data in a Case Study.

Case Studies need not be limited to a single source of evidence. In fact, most of the better Case Studies rely on a variety of sources. One example of a Case Study that used such a variety is a book by Gross, et al. (1971), *Implementing Organizational Innovations*, which covers events in a single school. The Case Study included an observational protocol for measuring the time that students spent on various tasks—but also relied on a structured survey of a larger number of teachers, open-ended interviews with a smaller number of key persons, and a review of organizational documents. "Both the observational and survey data led to quantitative information about attitudes and behaviors in the school, whereas the open-ended interviews and documentary evidence led to qualitative information."

All sources of evidence were reviewed and analyzed together, so that the Case Study's findings were based on the convergence of information from different sources, not quantitative or qualitative data alone. When deciding on the qualitative data that will be analyzed, Yin recommends that direct visual observations can be extremely importanand recommends considering taking photographs or film of the site which will help to convey important case characteristics to outside observers (p 93).

THREE PRINCIPLES OF DATA COLLECTION

Use Multiple Sources of Evidence

Triangulation: Rationale for using multiple sources of evidence

A major strength of Case Study data collection is the opportunity to use many different sources of evidence. Furthermore, the need to use multiple sources of evidence far exceeds that of other research strategies (p 97).

An example of a Case Study combining personal experience with extensive field research is the book *Head Start*, by Zigler and Muenchow (1992), based on the personal experiences of the author, the first director of the national Head Start program. The book is also empirically-based, including interviews of more than 200 people associated with Head Start. "All of these multiple sources of evidence are integrated into a coherent, if not compelling Case Study of Head Start. The result is a winning combination" Yin, 1984). The design of this particular Case Study mentioned by Yin was instrumental in the modeling of the methodology used in this research in the Arctic.

Analyzing the Case Study Data

"No matter how the experience is gained, every Case Study investigator should be well versed in a variety of data collection techniques so that a Case Study can use multiple sources of evidence. Without such multiple sources, an invaluable advantage of the Case Study strategy will have been lost" (Yin, p 101). This quotation from Yin is the true spirit of Mixed-Methods Case Study research. In this research study, the converging evidence methodology worked to create a series of conclusions, answering the research questions through a combination of Direct Observations, Interviews and Surveys, and Documents and Archival Records.



Converging Evidence

Figure 3: Case Study Diagram in Yin's Methodology

Sources of Evidence According to Yin

Documentation can include letters, memoranda, and administrative documents such as proposals, etc. The most important use of documents within a Case Study is to corroborate evidence from other sources. There has been some confusion of overreliance on documents in Case Study research as suggested by Yin.

Archival Records can include service records such as the number of clients served over a given period or organizational records such as budgets, etc. Yin, therefore, believes that it is important that the investigator is careful in determining the accuracy of records and the conditions under which they were produced.

Interviews are the most important sources for a Case Study and can take several forms—from an open-ended interview to a structured interview. Interviews can therefore

be used to corroborate interview data with information from other sources, as suggested by Yin. Interviews must be considered as verbal evidence and, for this reason, they could be subject to problems of bias, poor recall, and poor or inaccurate articulation.

Direct Observation occurs when the investigator makes a site visit, e.g., to a new hotel. Direct observations can be either formal or casual; the main concern is the reliability of the observation. One way to overcome the problem, as suggested by Yin, is to use multiple observers.

Participant Observation is unique in that the researcher may actually participate through a variety of roles; this can, however, be a problem since there may be a potential for bias.

Physical Artifacts can include any physical evidence that may be gathered during a field visit (Yin 1984).

Field Procedures

The field procedures of the protocol have, as their purpose, the emphasis of the major tasks in data collection; namely,:

- Gaining access to key organizations and interviewees
- Having sufficient resources while in the field—including a personal computer
- Providing for unanticipated events, including changes in the availability of interviewees during the process of the data collection

In this study, access to the key organizations was provided through the Canadian

Embassy Grant and the Avataq Cultural Center. Thanks to the Embassy Grant from the

Government of Canada, contact was made with Donat Savoie, former Chief Federal

Negotiator for the Nunavik Project in regard to the Nunavik Self-Government claim.

Assistance was also provided for flights to Nunavik through the kind assistance of Mr. Savoie and the director of Air Inuit, Mr. Horsman.

The host family in the village of Inukjuaq provided resources in the field. Arrangements for the host family were organized by the Avataq Cultural Center. Funding for the Center was provided thanks to a United States Department of Education Foreign Language and Area Studies (FLAS) Fellowship secured by the Canadian Studies Center, Henry M. Jackson School of International Studies, University of Washington.

This FLAS grant was the first grant awarded for a First Nations language and the first for Inuktitut. This grant enabled 4 years of Inuktitut training and, as a result of this aspect of the language acquisition, communication with Inuit in Inukjuaq was possible in Inuktitut. Although the language skills of the researcher are not fully fluent, they were sufficient to "break the ice" so to speak, win trust and friends, and assist in clarification of questions. The most important aspect of this language training was that it enabled the researcher's deeper integration into the community and an invitation to join a hunting trip in which he participated fully.

Sources of Evidence Used in This Study

This study used four sources of evidence—documentation, archival records, interviews and surveys, and direct observation—the specifics of which are discussed below.

Documentation: The documentation used in this study consisted of various documents and journals published by the Avataq Cultural Center, the Makivik Corporation, and the Kativik School Board. While visiting the Avataq Cultural Center in

89

Montréal and Inukjuaq, the organization generously agreed to furnish this researcher with every issue ever printed of this Inuit cultural publication. This resource cmprises well over 50 publications issued in Inuktitut, English, and French, many of which are not catalogued or available for online use. Donat Savoie made further publications available, and these are listed in the bibliography.

Archival Records: The archival records, referred to as sources of evidence in this study, consist of digital archives provided by Nunasoft Corporation and taken as screen-captures from various websites during the research phase. The archives from Nunasoft Corporation consist of APACHE logs of "hits" logged onto the <u>www.nunasoft.com</u> website. These logs, while anonymous, reveal important information from those who visited the site, including the browser and operating system used, the language of the browser, and which sites were visited. Judging from which languages were used, in many cases, it is possible to determine the location and even culture of the individual surfing the web.

Interviews and Surveys: The primary survey was conducted in Inukjuaq with a total of 31 Inuit participants in the village of Inukjuaq in Nunavik. This survey was created using the Catalyst WebQ system at the University of Washington (Seattle, WA) and was administered on a Macintosh laptop computer on-site. All participants were paid \$10 CAN in exchange for the time allotted for the survey—usually 30 minutes.

The primary survey consisted of a series of short-answer questions related to Internet and language use, followed by a section for a free answer wherein a longer response was permitted. The results were tabulated on the computer and saved to the University of Washington server using the wireless, satellite-based Internet service available in the region. Long interviews took place both in the Montréal area and in Inukjuaq. Longer interviews were given by Donat Savoie and by Eric Poncet, CEO of Nunasoft Corporation. Shorter interviews (off the record) were also given by Nancy Palliser, Director of the Avataq Cultural Center in Inukjuaq and by Elisapi Novalinga, of Avataq Montréal. Both of these individuals are Inuit and fluent Inuktitut speakers.

While their interviews were not officially recorded in accordance with Human Subjects regulations, the researcher's impressions of the information gathered during these interviews is included in the data analysis and policy recommendations presented in Chapter V.

Direct Observation: Direct observation took place during the fieldwork while living with the Inuit in Inukjuaq. It was a privilege for this researcher to have been asked on a hunting expedition with the Inuit which took place during a time longer than 1 week away from the village. Only a bare minimum amount of supplies were taken along, and the group depended on food caught on the land or from the sea for sustenance. During this time, many questions were asked of the group concerning their opinions and thoughts concerning language-use, influence of media and the Internet, and hopes and fears for future development.

Most interesting were the interactions with the Elders, who were, for the most part, incapable of communicating in English. For this reason, all communication took place in Inuktitut. The thoughts of the Elders concerning the Internet were most valuable. The time spent during this expedition, as well as observation of Internet users working in the Library in Inukjuaq and at the Avataq Cultural Center, formed valuable opinions which were cross-referenced with the data from the archival records, interviews and surveys, and other documentation to create a Mixed-Methods Case-Study portrait of

91

the issue at hand—namely, the influence and effects of nonnative language use online in an Inuit community.

Immersion Methodology: One aspect of the Direct Observation methodology is

an approach taken by this researcher that will be called Immersion Methodology. This

type of research consists of immersion in the community and the temporary elimination

of the "observer's mind" to the greatest extent possible. One major criticism voiced by

the Inuit concerning researchers in the Canadian Arctic is that previous researchers

isolated themselves from the Inuit communities, preferring to stay in hotels and watch

the activities of the villages from a distance.

A publication was issued by the Inuit Tapiriit Kanatami especially addressing this

issue and asking researchers to remember a series of community concerns, three of

which are reprinted here:

(1) Lack of input/consultation in identifying research needs and questions and in designing studies. Inuit often feel that scientists do not make enough effort to consider Inuit knowledge and perspectives when framing research questions, and designing studies.

(2) Lack of local involvement in the research process. Inuit sometimes feel they are not adequately involved throughout the research process (e.g. project design, data collection and analysis, and communication of results).

(3) Token or cursory inclusion of local expertise in research. There is profound dissatisfaction with research proposals that offer to incorporate or consider local expertise, but do not provide a valid plan and/or commit resources necessary to do so. Token references to traditional knowledge are viewed as insincere attempts by researchers to leverage funding or fulfill requirements (Nickels, 2007).

In addition to other concerns of the Inuit concerning visiting researchers, the

existence of the previously mentioned issues were made abundantly clear to this

researcher before beginning fieldwork. After long consideration and in consultation with

Mr. Donat Savoie, the Avataq Cultural Center, and the Tusaalanga Center, it was

decided that a full immersion in the community, living with a family and speaking Inuktitut

to the fullest extent possible was the very best way to experience the Inuit way of life and to learn more about the use of the Internet in the communities. In this sense, it was felt that this research would be able to offer a truer portrait of the effect of the Internet in the daily life of Nunavik.

With this view in mind, the researcher accomplished the following goals:

1) *Non-Judgmental:* The researcher, to the best of his ability, did not judge or criticize what he saw, but rather accepted events as they unfolded with an open mind, using the Japanese concept of "beginner's mind" or *shoshin wasuru bekarazu*.⁴⁸

2) *Community Involvement:* To the greatest extent possible, the researcher participated in all community functions, events, tasks, and meals, and attempted in all ways to become one with the community, without drawing attention to himself and by learning through participation.

3) *Delaying of Questions:* In every way, the researcher delayed asking questions related to the research until a "settling" period had been achieved. During this initial acclimatizing period, the researcher attempted to forget his research and focus rather on building relationships, learning the language, and developing the proper mindfulness required in the community. The researcher allowed the conversations to build naturally and, rather than attempting to guide the topics back to his research, the topics were chosen by the group. In this sense of allowing the moment to emerge, trust was built, upon which any good research must always be based.

⁴⁸ A quote by Zeami, a 14th century Japanese Noh Drama Master. This is explained here: "*shoshin wasuru bekarazu* suggests that you face new experience with a fresh mind and attitude to take on challenges while honestly recognizing your own immaturity. If you do not forget these attitudes, you will be able to face new ordeals regardless of your age.(<u>http://www.the-noh.com/en/zeami/words.html#word01</u>).
Creating a Case Study Database

The last section of Case Study protocol involves the analysis of the data retrieved during the fieldwork/data collection process. Unlike the analysis of statistical data, there are no set protocols concerning the analysis of Case Study data. Yin claims that: "The experienced Case Study investigator is likely to have great advantages over the novice at the analytic stage" (Yin, p 110). That said, there are software solutions available to researchers that serve as desktops or workspaces in which a large variety of data can be assembled and analyzed. Yin mentions the software packages NUD-IST and CAQDAS in his text.

At the present time, these two software packages are no longer produced; however, one of the two major developers in the qualitative data analysis field, QSR Industries (the former producers of NUD-IST), now produces NVIVO which allows coding, organizing, and manipulation/analysis of textual, audio, and video data, and as well as importation from notes, downloaded newspaper articles (.pdf, .doc), and still images from cameras and entire movies.

The other package used in this research is atlas.ti, designed for the analysis of large sets of qualitative data. The information gleaned from such data can then be exported for further statistical analysis in SPSS, generating a Mixed-Methods QUAN/QUAL software workflow.

All of these packages were used at the CSSCR⁴⁹ research labs where the data from this study was analyzed, allowing detailed analysis of both qualitative and quantitative aspects of the research.

⁴⁹University of Washington Center for Social Scientific Computation and Research, 610 Condon Hall, Seattle, Washington. (<u>http://julius.csscr.washington.edu/</u>).

Reporting Case Studies

Reporting a Case Study means bringing its results and findings to closure

(Yin, p 141). Regardless of the form of the report, there are similar steps underlying the Case Study composition:

- (1) Identifying the audience for the report
- (2) Developing the compositional structure
- (3) Following certain procedures (having the report reviewed, for example).

Yin's definition for a complete Case Study Protocol includes:

- (1) A case in which the boundaries of the case are given explicit attention. (the distinction between the object being studied and its context).
- (2) The collection of evidence should be precise and exhaustive.
- (3) The Case Study must consider alternate perspectives.
- (4) The Case Study must display sufficient evidence.
- (5) The Case Study must be composed in an engaging manner.

Engagement, enticement, and seduction—these are unusual characteristics of Case Studies. To produce such a Case Study requires an investigator to be enthusiastic about the investigation and to want to communicate the results widely. In fact, the good investigator might even think that the Case Study contains earth-shattering conclusions. This sort of enthusiasm should pervade the entire investigation and will indeed lead to an exemplary Case Study (Yin, p. 152).

PREPARATION FOR FIELDWORK

A careful review of the steps delineated in the preceding document concerning preparation for the Case Study resulted in a detailed plan. The implementation of a rigorous data gathering and analysis stage, plus logically presenting the findings in a detailed, precise, yet engaging manner increased the possibility of a Mixed-Methods Case Study with results meriting peer review and subsequent publication.

Method A: Content Analysis and Survey Data as Quantitative Method

Using the Internet as a data source, this study proposed an inquiry into the linguistic aspects of the online presence of the Inuit and an analysis of Inuit homepages on <u>www.bebo.com</u>, a social networking site very popular with the Inuit, in order to generate theories concerning the use of Inuktitut online.

This data source was coupled with statistical data generated from a survey given in the field in Inukjuaq. Codesheets and initial findings are displayed in the Appendices, and web archival material, including images, text, and symbolic (syllabic) representation is incorporated. The statistical quantitative survey results were analyzed by frequency in SPSS and examined for trends.

For the purposes of this project, proper data analysis requires a systematic, rigorous approach in order to prove validity. It was important for the researcher to judge the quality of his work through several distinct validity checks: a construct validity to establish chains of evidence, internal validity, external validity, and reliability. This reliability check is crucial in order to ensure that, if later, another independent research attempted the identical Case Study, the later research should discover the same findings. Reliability ensures that the results of any procedure will repeatedly return similar results on further trials. In this way, a high level of scholarship, research integrity and accuracy can be maintained throughout the Case Study research (Yin, 26-29).

The external validity and reliability of this research are strengthened primarily through the triangulation of multiple data sources using a Mixed-Methods Case Study

rubric. Internal validity refers to the rigor with which inferences and assumptions potentially coloring data are monitored. Yin exhorts the investigators to ask themselves: "Is the inference correct? Have all the rival explanations and possibilities been considered? Is the evidence convergent? Does it appear to be airtight? A research design that has anticipated these questions has begun to deal with the overall problem of making inferences and, therefore, the specific problem of internal validity" (Yin, 36)

In justification of Content Analysis as a scientific method, Neuendorf, an authority in the development of social scientific Content Analysis, makes several key points. Objectivity is required in order to avoid inserting bias and coloring the research with the opinions and attitudes of the investigator, and reliability ensures that the results of any procedure will repeatedly return similar results on further trials. Reliability in terms of the survey design of this research answers the question as to whether the survey offers consistency and reproducibility of the survey data. In this particular survey, the standard deviation (SD), or statistical measure of variability, is the rubric by which reliability is measured. This data is available in Appendix I and represents the variation of data points from the average or mean. The consistently small SD values in this survey demonstrate the lack of random outlying responses, and attest to the reliability of the dataset.

Neuendorf writes, "...(Content) Analyses are typically extremely useful. They are capable of providing a highly valid source of detailed or deep information about a text" (Neuendorf, 2002). In their article, "Content Analysis of Internet-Based Documents," Van Selm and Jankowski write that "Content Analysis has, in fact, often been considered as the method par excellence for the scientific study of media messages" (p 2).

Content Analysis, according to Krippendorff, is conducted with varying motivations such as discovering trends and patterns in a media source, comparing media content to a specific group or phenomenon, and constructing indexes of social values (Krippendorff, 2004).

The Internet, generating as it does reproducible textual and media artifacts, can be appropriate for Content Analysis. The rapid retrieval of information from distant sources allows for exploration from distant locations and interactivity allows for up-to-theminute analysis. In this research, the focus revolves around the presence of Inuit web users on the social networking site <u>www.bebo.com</u>.

This site is by far the most popular site of its kind for Inuit users in Nunavik, with thousands of registered Inuit users as of this writing. ^{50.} This researcher will use Case Study methodology on these websites from the viewpoint of a Content Analysis for three reasons. First, they are texts that are "freezable" in time and can be archived and analyzed. In this respect, they are excellent tools for coding and for generating rich Case Study data for Mixed-Methods Triangulation.

Second, the websites in Nunavik were reliable sources for analyzing language use in the region. Although the worldwide language of the web is predominantly English, Inuktitut syllabic characters are available for both Windows and Unix environments, although their use and implementation can be problematic. Inuktitut use on the web is linguistic data that is of cultural concern to the Inuit of Nunavik and the Inuit Tapiriit Kanatami (<u>www.itk.ca</u>), and also to the Government of Canada and Province of Québec in regard to Communication and Language Policy and implementation.

⁵⁰ Please see Chapter IV for detailed Bebo user registration data.

Finally, from a statistical perspective, Internet linguistic communication artifacts are recorded, comparable data sets. The comparison of the amount of electronic communication that takes place online in Nunavik, the nature of the language used, and where these communiqués are routed, provided rich cross-case data for future research.

The recent total broadband connectivity of Nunavik (<u>www.soleica.ca</u>) and the large investments by the autonomous regional government and the Kativik Corporation, as well as by the Federal Government of Canada and the Provincial Government of Québec, show the capital outlay that has gone into the infrastructure in the region. In order to ensure the optimal preservation of Inuit linguistic culture while simultaneously working with government and industry to improve the economy and social services of the region, a comparison of online society is vital.

For this reason, the suitability of other forms of Internet-based quantitative social scientific research was not as justifiable as that of Content Analysis. Forms such as Rhetorical Analysis or Critical Discourse Analysis would be less appropriate to this type of research in that they are less able to offer empirical, statistically reproducible sources of measurement when studying linguistic data on the Internet. This researcher is interested in linguistic statistics that consist of a minimum number of generalizations and contain broad analytic possibilities with the goal of policy recommendation in mind.

For the Content Analysis portion then, this research looked at a moderate number of attributes such as language use, social setting and region, gender, and number of users, whereas the qualitative methodology used many more and subjective attributes. For this and other reasons, Content Analysis was chosen as the most appropriate method of carrying out the analysis of the Inuit social networking clusters. Content Analysis alone, however, does not always offer a complete portrait of an issue,

especially when conducted from a distance. It is for this reason, then, that the content analytics and web archives of Bebo.com were accompanied by a survey given on location in Inukjuaq.

Method B: Humanistic Ethnographic Qualitative Fieldwork.

While the first portion of the data collected for this study was taken from Quantitative Content Analysis and survey techniques, the second method was taken from immersion in the environment and the region of Nunavik. This ethnographic fieldwork took a humanistic approach in order to situate this research in the field with the people and to enable a closer look at the data through the framing of the theories deliberated in the literature review.

This humanistic ethnographic approach was a desirable qualitative approach in that the writer could approach the ethnographic fieldwork through the philosophical lens of conceptual frameworks. In particular, humanistic theorizing occurred using the conceptual frameworks of Bourdieu, Foucault's research on language and its relation to social power, and on the concept of the "subaltern" as relayed by Spivak and Saïd.

Additionally, multicultural theorist Kymlicka and Inuit representatives Watt-Cloutier and Simon were of primary importance as the relevance of their worldview colored all the research. In fact, without the Inuit perspective, this work would have been simply an academic exercise with no applicability to the region in question.

A major portion of the ethnographic research involved in this study consisted of interviews. As such, Human Subjects Review was an essential component of this work, as was an intelligible explanation to each subject concerning the nature of the study and what it entails. At all times, the requirements for Social and Behavioral Research and the codes of the University of Washington were upheld. The personal survey of Internet habits and language use online approved by the Review Board contributed to this portion of the ethnographic research and the data subsequently analyzed.

Initial Fieldwork and Budget Proposal—Logistical Framework

The initial Content Analysis was performed online. Using issue-mapping tools and web archival software, sites were located and research conducted from Seattle. Interviews of web designers also were undertaken using electronic means. However, the in-person talks were more advantageous during on-site fieldwork. Interviews, with examination of the local infrastructure, added a wealth of data to the ethnographic portion of the analysis. The costs for the fieldwork consisted of flights throughout the region, food, and accommodations.

No major equipment costs were incurred because the Internet is accessible in the Arctic via the TAMAANI satellite broadband system. A wireless extender antenna was attached to the researcher's computer to increase reception. However, often the researcher walked up the hill to the satellite tower in Inukjuaq in order to gain sufficient reception to upload his data. Flights, however, are very expensive due to the premium on Arctic transport. This was taken under advisement and a special arrangement was made with the director of Air Inuit.

Choice of Inuit Community

The choice of the community of Inukjuaq was made in part due to the suggestions of Mick Mallon and Alexina Kublu, two respected Inuktitut linguists, upon learning of this Case Study. The choice of Inukjuaq as a sample community was made due to the relative health of the Inuktitut language and the perceived lack of erosion of

Inuit culture in the area. The choice of a relatively modest sample size in the community of Inukjuaq was not perceived as a defect in Case Study design, as the survey data is not the sole dataset but rather a contributing dataset in the triangulated data of the Study. "The main point at this juncture is that you should try to aim toward analytic generalization...and should avoid thinking in such confusing terms as 'the small sample size of cases.' " (Yin, 33). The survey in this Case Study functions on Level Two Inferences, in which hypotheses are developed at the intersections of Mixed-Methods, rather than relying on the results of one survey alone.

In the capital of the region, Kuujjuaq, English has taken a much greater hold and it was postulated that Inukjuaq, where the vast majority of inhabitants speaks Inuktitut on a daily basis, would offer superior insight into the online habits of a group speaking their Aboriginal language. As a result, Inukjuaq was selected as the location for the sample

Sample for Data Collection: Subjects for Interview

After traveling to Montréal, an interview was conducted with Donat Savoie concerning the health of Inuktitut, government initiatives for the preservation of language, and related issues. Notes were taken throughout using pen and paper as stipulated in the Human Subjects exemption disallowing digital recording.

Subsequent to this interview, another interview was conducted with Eric Poncet, whose mandate involves the production of technologies for the Aboriginal world. The results of this interview were also recorded manually. The Avataq Cultural Center was visited and several fruitful interviews were conducted with several members of the center. These were not recorded; however, the information acquired from these talks is applied in the analysis of the datasets.

Survey Data (Quantitative/Qualitative)

The Survey Data results were tabulated in SPSS and analyzed at the CSSCR labs in Condon Hall at the University of Washington. This statistical data was combined with the Content Analysis data taken from the social networking site <u>www.bebo.com</u> for triangulation under the Case Study rubric.

Bebo Content Analysis. (Quantitative/Qualitative)

A series of e-mails were sent to Bebo users who categorized themselves as "Inuit" in the identity portion of their Bebo profile. Users were determined through a search of the social networking site <u>www.bebo.com</u>, based on the criteria for users physically located in Northern Canada and identifying themselves as "Inuit" in their homepages. Although the interviews were focused on Inukjuaq in particular, the e-mails were sent to any users who classified themselves as "Inuit," which resulted in the inclusion, to some extent, of users beyond the borders of Arctic Québec and into Nunavut for example.

While this inclusion moved beyond the primary focus on Nunavik, the use of Inuktitut online moved beyond borders and this data was felt to be of merit. The responses and Bebo pages of these users were recorded in NVIVO and coded for meaning using techniques listed in Nuendorf's *Content Analysis Guidebook* (Neuendorf, 2002).

The majority of the in-person interviews were conducted in Inukjuaq with Inuit people. Inuktitut was used as much as possible during the interviews and these were conducted using the questions devised and hosted by the Catalyst WebQ servers at the

University of Washington. The questions were asked in English and Inuktitut and answers were recorded on a notebook computer in the field.

These questions were asked in various locations: in homes, in the public library, the Avataq Cultural Center, the village gymnasium, the Mayor's office, and while on an expedition hunting with a team on the Tundra. Two major interviews held with non-Inuit were with site designers who are both French; namely Antoine Monnier and Eric Poncet. These individuals are large-scale developers of Inuit web content in Québec: Antoine as director of Solieca Corporation (<u>www.soleica.ca</u>), an Arctic Internet corporation; and Eric as director of Inuktichat, the only Inuktitut-based web chat software developer. All interviews in this study were conducted in one or more of the three official languages of Canada.

The date of arrival into Canada was August 1, 2007, and the time of departure was September 1st, 2007. Potential challenges were mostly linguistic; however, several cultural issues took place which are documented in the blog section of the Appendices.

Human Subjects Review Approval

This Case Study was approved by the Human Subjects Division as "Inuktitut Online in Nunavik—A Mixed-Methods Approach to Web-based Strategies for Preserving Aboriginal and Minority Languages." It was assigned the application number 07-7695-X/C. The dates of the approval period for this project are from July 17, 2007 to July 16, 2012 and were approved by the Human Subjects Review Coordinator, Human Subjects Division, University of Washington, (206) 543-3033.

Concerning Methodology—Broad Impact, Triangulation, and Intellectual Merit

The results of this research will apply primarily to the Internet community of the Canadian Arctic. To the knowledge of this researcher, work of this type is yet to be undertaken on a large scale in the region. The combination of a comparative Content Analysis with humanistic ethnographic fieldwork is a synergy that, through analysis, may reveal significant information. The initial Content Analysis-guided interviews and ethnographic interpretation are seen through the humanistic lens of a discourse of power and language. The Canadian Federal Government and the Province of Québec, respectively, offered support. Data generated from this project may assist in gauging the development of Inuktitut social networking in Nunavik. This comparative Content Analysis, coupled with a humanistic interpretation, may assist in design policy ensuring that Inuktitut will remain vibrant and successful online into the future.

Post-Fieldwork Report

The research conducted in Nunavik, including the survey, was successfully undertaken during the summer of 2007. During this time, a group of Inuit living in the Nunavik community of Inukjuaq were surveyed concerning their language preferences while using the Internet. This survey was conducted while living in situ with an Inuit family and speaking Inuktitut as much as possible. The survey was not completed in one session, rather it took place over the weeks spent living in the community and during the expedition on which this researcher was invited by members of the community.

While the survey supplied data essential to this study, it does not supply all elements of the broader picture of the issue. For this reason, the Case Study consisted

of the additional components of interviews, direct participation in the community, and the various archival records and documentation. Through a triangulation of information from differing perspectives, a Mixed-Method portrait of social networking in Nunavik was developed.

In the following chapter, graphs and data are presented as they were collected during the fieldwork stage of this research. This researcher intends that this data be seen as a part of the whole and that the statistics be recorded not simply as numeric data but as representative of members of a vibrant community undergoing rapid change in traditional values as they begin a new phase in their technological development. For this reason, pseudonyms are used when reporting data. However, these names have no basis in actual identities of participants and were chosen at random from the Inuit Syllabary produced by the Arctic College of Nunavut.

FINAL THOUGHTS ON METHODOLOGY

The Inuit are known for their adaptability and resilience. These qualities will be essential in order for the Inuit to simultaneously preserve their traditions and language while training a new generation to deal with, and thrive in, a competitive and increasingly encroaching world community. Quantitative statistics can never fully capture all nuances of opinion. For this reason, qualitative comments— with pseudonyms representing participants—will be interspersed along with the graphical output.

In this way, it is hoped that the data can begin to develop a more fully realized significance to the issue at hand—which is the potential use of technology to encourage and empower the preservation of threatened languages and cultures through adapted social networking communication technologies.

CHAPTER IV: DISCUSSION

Following the methodology used during the data gathering of this research, the fieldwork was successfully carried out during the summer of 2007. In the time since, this data has been transcribed and analyzed using the tools at the University of Washington's Center for Social Scientific Computation and Research. In this section, the data is presented and analyzed. Conclusions and recommendations will follow in Chapter V.

The data presented in this chapter is divided into sections. The first section focuses on the survey data. Beginning with a reiteration of the question, the information is presented in a graphical format along with the qualitative commentaries and short responses that accompanied some of the questions. In accordance with Human Subjects regulations at the University of Washington, and the National Research Council/Canadian Research Ethics Boards,⁵¹ no names were recorded during this research. The names listed here are pseudonyms created for the purpose of this chapter and have no connection whatsoever with the identities of the participants. In this way, the Inuit participants felt more free to share their honest opinions without fear that their true names would be associated with their stated opinion.

The statistical data can be found in the Appendices and was processed at the Center for Social Scientific Computation and Research at the University of Washington⁵² using SPSS16.

⁵¹ (<u>http://www.nrc-cnrc.gc.ca/randd/ethics/human_e.html</u>). ⁵² (http://julius.csscr.washington.edu/).



The following conceptual map created by the researcher⁵³ displays graphically the elements of the Case Study contributing to the development of data collection.

Figure 4: Mindmap of Methodology Employed

The preceding chart displays graphically the intersections of methods employed in this Mixed-Methods Case Study, and shows how they interacted in responding to the research questions during fieldwork. The survey conducted in Inukjuaq consisted of 39 questions, most of which were multiple choice. The questions were asked to members of the Inuit community and were open to members over the age of 18 who desired to participate. Special permission to conduct the survey was given to the researcher by the Mayor of Inukjuaq before beginning.

Publicity was generated through word-of-mouth, and interviews were conducted at the Avatag Cultural Center, when applicable. Although a word-of-mouth call for a

⁵³ Conceptual map created using Novamind Platinum software.

survey would be unusual in an urban setting, in Inukjuaq this was felt to be a most effective manner of communicating the availability of the survey. Due to the isolated location and relatively small population, the call was quickly passed to friends and, in this manner, numerous people asked to participate. When interested Inuit were not able to arrive at the Cultural Center, the researcher went to various locations in the village which included the police station, the public library, the community center, the co-op and private residences. Surveys were also conducted in the general region north-northeast of Inukjuaq, reachable during several days of boating from the village. A power generator was already onboard one of the boats, and several Inuit members of the hunting team had already packed their laptop computers.

When stopping to camp, gasoline generators were started and those traveling with computers charged their laptops. It was an unexpected turn of events for this researcher, who had not anticipated the presence of a power device while traveling into the tundra and, as such, had not packed his personal device. During this time, therefore, all responses to the surveys during the hunting expedition, as well as the blogs were recorded by hand. The inclusion of advanced communication technology on the hunting expedition emphasized the changes that are taking place, even in the most traditional Inuit undertakings.

As originally stated, the purpose of this survey was to generate a general understanding for many of the phenomena concerning the current state of Internet use by Inuit in Nunavik, language use online, and the presence and popularity of social networking for the Inuit as well. Although online research had been conducted during the pre-fieldwork phase, it was the understanding of this researcher that the knowledge learned through actual fieldwork might be quite different. This survey, then, was exploratory in nature and served as a means of developing a deeper understanding of the actual realities on digital life in the Canadian North.

The following section lists each question in bold, followed by the responses which are presented in initialized quotes for enhanced readability. Each question was asked to 31 Inuit men and women ranging in age from 18 years to village Elders. Each question, is followed by a graph showing a representation of the responses. Any long answer responses related to each question are listed. Not all responses are shown here. However, responses that have direct bearing on the research questions at hand are listed. All statistics and a full listing of survey commentaries for all responses are presented in the Appendices.

SECTION 1: SHORT ANSWER SURVEY RESPONSE

Which language is the most important for you when communicating online with your friends? (Chatting, e-mailing, blogging, social networking) N=31)





Of the 31 respondents, 28 replied that English was the most important language when communicating online with friends. One respondent replied, *"I am now more comfortable in English online than Inuktitut."* (F. Okalik)

Another comment reflected, "We don't know how to write in Inuktitut on the Internet." (R. Ikajuqti)

In a similar vein, comments reflect, "It is the way of the Internet, if we have a choice of Inuktitut we would use it; nobody forces us in English, it's just that the choice is not there for Inuktitut." (R. Piqaanaaq)

Others reflected on the lack of choice available for Inuit who use the Internet. One Inukjuaq female replied, *"You don't have a choice when you go online; English is the only way I can use Bebo."* (D. Saunik)

Do you use Windows (PC) or a Macintosh computer more often? (N = 31)



Figure 6: Operating System Used

This question was quite straightforward; most users seemed to use Windows. This is partly due to the lack of an alternate choice and partly due to software availability. No quotes were recorded in relation to this question.

I use social networking sites like Facebook, Bebo, or MySpace. (1=strongly disagree, 5=strongly agree). N=31



Figure 7: Use of Social Networking Sites

Of 31 respondents, 20 individuals, or approximately 64.5 percent of those asked, strongly agreed that they use social networking sites when online.



I use e-mail to communicate with my friends and family. (1=strongly disagree, 5=strongly agree). N=31.

Figure 8: Use of E-mail with Friends and Family

Several respondents mentioned that the Internet in the North is particularly important due to the fact that air flights and long telephone calls are so expensive. The use of Bebo, in particular, as a means of communicating between communities along the Ungava and Hudson Bays was extensive and was praised throughout the interviewing. One explanation for the popularity of the Bebo service is that, for many residents of Inukjuaq, the telephone and its accompanying expense, has been the only quick way to communicate between villages. Many family members marry and move to other villages, and communication between these locations by telephone has been expensive and infrequent by necessity.

Bebo has united disparate family members along the Ungava and Hudson

coasts. However, these e-mails used in Bebo are predominantly written in English even

though the spoken language of these family members, when meeting face to face, would

invariably still be Inuktitut.

With the youth, in the experience of this researcher, English has already begun

to supplant the Inuktitut of their parents.

I tried Facebook, msn.ca, and Myspace, but they are boring. I like Bebo the most, (the) structure is simple, one click, most of my Inuit friends are on Bebo, I can keep in touch with friends I have not seen in a while, (it is) cheaper than long distance, (I can) share pics. (I use) qaluijapaitituk (Inuktitut in English letters), its not the same, (as syllabics). (English) coming from the outside world is far greater, (there are) more movies, music, (online) Inuktitut writing skill: I know how, (I) don't use (Inuktitut) online, (I have) no chance. (R. Ullumi)



I use the Internet for shopping. (1=strongly disagree, 5=strongly agree). N=31.

Figure 9: Online Shopping Use

The results of this question were surprising in that the Internet did not seem to be a common means of purchasing goods. Most Inuit with whom I spoke purchased goods from the co-op and Northern—two warehouses with a variety of goods available. I was shocked by the prices in these stores, especially for foods imported from the South. A liter of milk, for example, was almost \$10 (CAN). With prices like these, it might make more sense for the Internet to be used to purchase goods from Montréal for transport. The key inflator of prices is, indeed, the transportation costs and many Internet vendors simply cannot afford to ship to Nunavik. There are many opportunities for investing in this area; an Internet portal designed for Inuit shopping could potentially be a great success.

I mainly use Inuktitut online. (1=strongly disagree, 5=strongly agree). N=31.



Figure 10: Use of Inuktitut Online

Over 60 percent of Inuit surveyed disagreed to some extent when asked if Inuktitut was the primary language used online. Nearly 70 percent (67.7 percent) strongly disagreed that Inuktitut was used predominantly online and almost 30 percent somewhat disagreed. The subsequent questions elaborate on the fact that for the Inuit, Inuktitut significantly appears as the language *not* used online, even when communicating among fellow fluent Inuktitut speakers.

I mainly use English online. (1=strongly disagree, 5=strongly agree). N=31.



Figure 11: Online Use of English

In this question, the participants were asked if they use English most often online. Ninety percent agreed that English was the most heavily used language and very few of those asked used French at all. Inuktitut was the next most-used language, and it was expressed in several instances that rather than using Inuktitut syllabics, qalirapait (the use of Inuktitut with English letters) was used second most often after English. The use of qalirapait, however, was far less common than standard English use. One comment to this question expressed the sentiment, *"Even though we have downloaded the Inuit fonts, the kids don't use them; they are too hard to use, and not (available) on Bebo."* (G. Tuinnaq)

I mainly use French online. (1=strongly disagree, 5=strongly agree). N=31.



Figure 12: Online Use of French

Considering that Nunavik is geographically situated in Northern Québec, it was highly noteworthy that almost none of the Inuit met during this researcher's stay in Inukjuaq spoke French. In my experience there, the few who spoke French were employed by the government in various administrative positions. The responses to the question concerning the use of French online also corroborated these impressions. As the results show, 87 percent of Inuit surveyed strongly disagreed that they used French when online.

Please rate your fluency in lnuktitut from 1-5. (1 is not fluent at all, 5 is very fluent) N=31.



Figure 13: Degree of Inuktitut Fluency

Almost all Inuit who responded to this survey classified themselves as fully fluent in Inuktitut. Inuit children in Inukjuaq are usually raised speaking Inuktitut at home and the first three grades of schooling, as determined by the Kativik School Board, are conducted in Inuktitut. For this reason, Inuit who grow up speaking Inuktitut usually keep this fluency through adulthood.

Unfortunately (and increasingly), the influx of media into the homes of Inuit throughout Québec has begun altering these language acquisition patterns and many children now prefer to communicate with their parents in English. Although French television programming is available in Inuit homes in Inukjuaq, without exception, these programs were not watched in any of the cases observed by this researcher.

The Inuktitut programming on television and radio was very attentively listened to and watched; however, the television offerings were extremely minimal in this respect. Radio, on the other hand, was much more prevalent for the Inuit, and the Inuktitut radio station was tuned to the Inuktitut language for many hours throughout the day. The radio was a very important part of Inuktitut communication in Inukjuaq and was a primary source of Inuktitut listening for many of the youth observed by this researcher.

Most troublesome for Inuktitut is the fact that English language television and film offerings were observed to be the primary and preferred source of entertainment for Inuit youth and these were not subtitled in syllabics. The channels and languages used in the Inuit household in which this researcher lived (and where the discrepancy between Inuktitut and English/French can be noted) are listed in Appendix B. Some direct quotations which demonstrate the worries of adults vis à vis

language loss in children include:

Some brother's Bebo friends refuse to speak Inuktitut, he is about 10, when they are around, his friends visit him and they are all speaking English, his friends say: "I don't understand Inuktitut, I don't know what to say." They are all Inuit. (F. Ilinniaqtiga)

The Web as it currently is will benefit lnuktitut. (Responses are from 1 (strongly disagree) to 5 (strongly agree)). (N = 31)



Figure 14: Web Benefits the Language of Inuktitut

This question queried the respondents about their thoughts concerning the benefits of the Internet for the language of Inuktitut. Many Inuit expressed their concerns with the current state of online content applicable to the Inuit experience and expressed their desire that more content be made available. Especially relevant were repeated requests to localize (adapt) the most-used communication tools to the Inuit experience, especially <u>www.msn.ca</u> and <u>www.bebo.com</u>.

Social networking sites (like Bebo, Facebook, MySpace) help me to use Inuktitut more often. (Responses are from 1 (strongly disagree) to 5 (strongly agree)). N=31)



Figure 15: Social Networking Benefits to Inuktitut

This question attempted to determine whether the currently available social

networking sites were beneficial to the language use of Inuit users. The results were

striking, with over 70 percent of users surveyed strongly disagreeing that social

networking was helpful to the language of Inuktitut.

Some comments mentioned in relation to this question included the following:

Bebo is always in English, this has an effect for sure, for the real young kids, TV is a major factor, when they get a bit older, then into computers, and then they learn more English. Treehouse channel, I feel bad, I speak to him in Inuktitut, he answers in English. (P. Tamaani)

Another comment was the following:

In Bebo, when I chat, I have to use English. In this town, young people use Bebo, I like to chat with them in Bebo. I wish I could use syllabics in Bebo, but its been a while since I didn't read in Inuktitut, since my grandmother passed away, and nothing online is in syllabics. If I want to communicate with the young people I have to use English. (D. Qarasaujaq) Inuktitut is the most useful language for me online. (Responses are from 1 (strongly disagree) to 5 (strongly agree)). (N = 31)



Figure 16: Language Usefulness Online

Related to the previous question concerning the helpfulness of social networking online to the language of Inuktitut, this question attempts to broaden the questioning to the Internet as a whole. Based on the fact that Inuktitut is the primary language spoken in the community, it might seem logical that it would also be the most useful language online. Interestingly, the results clearly show that Inuktitut is not generally considered to be useful online and a clear preference for English was demonstrated with a near-rejection of French, based on the accompanying results. *"I want my son to keep my culture. I worry that he will speak too much English and lose our heritage."* (R. Sivalaag)

In the future, lnuktitut will be used less and less by lnuit. (Responses are from 1 (strongly disagree) to 5 (strongly agree)). (N = 31)



Figure 17: Future Inuktitut Use

This question demonstrated the sense of inevitability that some Inuit possess concerning the fact that Inuktitut will gradually decline. This became noticeable when asking and analyzing questions such as this one. Almost half of the Inuit with whom this researcher spoke expressed frustration and disillusionment with the state of Inuktitut online, and mentioned their fears of the complete loss or erosion of Inuktitut. *"We don't know how to write in Inuktitut on the Internet."* (R. Ikajuqti)

The current way of spelling in Inuktitut on a computer is not efficient; it is made by too many keystrokes. To spell the word Inuktitut, you have to spell many characters in English letters, using alt-key commands. Kids don't want to do this." (G. Innialik)

In 5 years, which language will you use to communicate with your lnuit friends online? Why do you think so? (N = 31)



Figure 18: Estimated Language Use Online in 5 Years

This question asked users to project their Internet use 5 years into the future. In

this question, over 90 percent of Inuit queried predict that they will, in 5 years time, use

English primarily online, and very few had the optimism to believe that their language

would become an important part of their online lives.

The answer to this question reflects, in large part, the fears and apprehensions of

cultural erosion which is being felt throughout the North and which is potentially being

exacerbated through the Internet.

Quotes related to this question were particularly strong:

More English everywhere everyday, things are mixing, because of the qablunaat, we are in Ungava Bay, but if you go to Kuujjuaq, you will notice, everyone is speaking English! It is coming to us from teachers! Schools! TV, Movies, Radio, the Internet. (G. Natsiqsiuqti)

My 2 year old is also learning English from TV and also her brother. Although I speak to them in Inuktitut they are still learning in English, the TV is more stronger (sic) than us, so is the Internet when they get older. (P. Nunasiuti)

So much going out at night, so much Internet, less hunting, less work. I am worried about my children, not enough Inuktitut teachers, not enough skills for the teachers, too much television, Internet, drugs, alcohol, pregnant early, suicide big problems for us. (A. Aanniasiuqti)

Yes definitely, Inuktitut Internet equipment is not enough available. Even on the Internet, not enough services, there are more non-Inuit in the community we can protect by talking to them in Inuktitut more, watch Inuktitut TV, Inuktitut Internet. (P. Tamaani)



I worry about security, privacy, and virus online. (Responses are from 1 (strongly disagree) to 5 (strongly agree)). (N = 31)

Figure 19: Concerns with Security Online

The responses to this question reflect a nonchalance concerning computer security in the North that is worrisome to this researcher. In this sense, the people who strongly disagree—almost half—really do nott worry at all! Only16.13 percent somewhat disagree (they don't worry about it much) and almost 10 percent are neutral. Only the last two categories (somewhat agree and strongly agree) say that they worry about it.
When observing the library computers used by many of the young Inuit, it was noted that a significant number of these machines were affected by adverse security-related issues such as pop-ups, unnecessary and potentially dangerous startup applications, and even viruses, which had rendered several machines completely unusable.

Several Inuit Internet users commented on how "slow" the systems were. However, the machines themselves were quite modern and the relatively slow speed of the systems was, in the opinion of this researcher, partly due to the high quantity of bloated software and unresolved malicious software issues.

As the Internet and general computer use in the Canadian North increases, it is of serious importance not only to work with language preservation, but also with the education, especially of young people, concerning information assurance and security issues. This aspect of digital education will become vitally important as interest in the North increases due to resource scarcity, climate change, the advent of the Northwest Passage, and tourism.

Barbara Endicott-Popovsky at the University of Washington Center for Information Assurance and Cybersecurity ⁵⁴ has written (Endicott-Popovsky & Frincke, 2006) concerning the need for security education, especially in developing communities, It is hoped that a result of this research will be increased attention to this important issue in the northern Canadian communities.

⁵⁴ (http://ciac.ischool.washington.edu/index.shtml).

The preceding graph shows the high percentage of those surveyed who disagree with the statement that they "worry about security and computer viruses online." Considering the very high occurrence of social networking seen in the Arctic, this is an aspect of electronic communicative health that requires further improvement and, especially, education of the youth.

There should be more websites in lnuktitut. (Responses are from 1 (strongly disagree) to 5 (strongly agree)). (N = 31)



Figure 20: Desire for More Inuktitut Websites

All of those questioned agreed, and most agreed strongly, that the language of

Inuktitut and the Inuit culture would benefit from more sites optimized for Inuktitut. The

two sites that were the most highly requested for optimization and localization were

www.bebo.com and www.msn.ca.

When we use the Makivik website, they give us the choice to use whatever language we like, I like having the choice, to use my own language if I want. If I read in Inuktitut, its better, I don't need a dictionary. I already understand everything. In English I need a dictionary. (P. Aakuluk)

I mostly use English when using Bebo. (Responses are from 1 (strongly disagree) to 5 (strongly agree). (N = 31)



Figure 21: Language Use on Bebo

The analysis of this question's data showed that of the Inuit who used Bebo,

a large majority strongly agreed that they mostly use English on that site. Based on

the analysis of the Inuit Bebo pages as well, it can be seen that most of the webpages

are in English, and in Romanized Inuktitut. There are a variety of factors contributing to

the difficulties of properly inputting and representing Inuktitut syllabics on the social

networking sites, making it problematic for the Inuit to consistently write and properly

read online in that medium. These issues will be discussed in the Policy

Recommendations section in Chapter V.

This question focuses on the language in which communication occurs when

using Bebo. The findings of this research show that the primary language used by the

Inuit when social networking is English. At times, Inuktitut words are used spelled in

Roman letters; at other times, languages are used in combination.

Some comments mentioned by the participants are listed below:

Bebo for social networking, MSN.ca for chat, all in English only, and keyboard is ABC style: Inuktitut is complicated on the computer. (K. Kangiqsuk)

Bebo is always in English, this has an effect for sure, for the real young kids, TV is a major factor, when they get a bit older, then into computers, and then they learn more English (like on the) Treehouse channel, I feel bad, I speak to him (my son) in Inuktitut, he answers in English. (P. Tamaani)

Bebo, when I chat, I have to use English. (In) this town, young people use Bebo, I like to chat with them in Bebo, I wish I could use syllabics in Bebo, but its been a while since I didn't read in Inuktitut, since my grandmother passed away, (and I read) nothing (in Inuktitut) online. (D. Qarasaujaq) I mostly use Bebo to communicate with other Inuit. (Responses are from 1 (strongly disagree) to 5 (strongly agree). (N = 31)



Figure 22: Online Language Use with Other Inuit

The response to this question was surprising to the researcher. Bebo was invented in 2005 by a British programmer, Michael Birch, and has over 40 million registered users as of this writing. Although the site has been sold to AOL⁵⁵ (America Online) with registered users from a host of countries, for the Inuit surveyed, this is primarily a tool used for inter-Inuit communication. As of this writing in August 2008, the only languages available on Bebo are English, Polish, German, and French. For those ⁵⁵ (<u>http://en.wikipedia.org/wiki/Michael_Birch</u>). Bebo was sold to America Online in March 2008, for \$850M U.S.

¹³⁴

whose languages are not supported, the de facto interface is automatically selected as

English. Among comments related to this question were the following:

I like it, I can talk to my friends, send them e-mail, pictures, see pictures of my friends, (I) would like to type in syllabics, they do not come out right. (P. Uqalimaaq)

I like the way, in Bebo, it helps me make Inuit friends from Bebo. (Z. Iqaluq)

I want to make friends, I want my friends on my Bebo, (I) only use English on Bebo. I see pics of my friends, remind me of the old days, I use English when talking with my friends on Bebo, I never type in Inuktitut, because the keyboard is in English. (D. Umiaq)

I mostly use Bebo to communicate with International friends. (Responses are from 1 (strongly disagree) to 5 (strongly agree)). (N = 31)



Figure 23: Use of Bebo with International Friends

This question was asked primarily to verify the results of the previous question, and to confirm that, for the most part, Bebo social networking tools were primarily used among Inuit rather than with International friends. The answer to this question confirmed the hypothesis that Bebo serves as an inter-Inuit communication tool. For the most part, serves as a combination website, e-mail client, chat room, and forum for the Inuit. The results of this question serve to emphasize the intercommunity nature of Internet communication in Inukjuaq. For many of the participants, this researcher would be the first non-Inuit "friend" on Bebo, and this was an exciting element for them.

English is more useful for me than Inuktitut on Bebo. (Responses are from 1 (strongly disagree) to 5 (strongly agree)). (N = 31)



Figure 24: Language Usefulness on Bebo

The answers to this question demonstrated that English is more useful than

Inuktitut on Bebo among primarily Inuktitut-speaking users, even though the majority of

Inuit users use this communication tool to communicate strictly between each other.

Because localization in Inuktitut is not available, there is little alternative, however.

This is exacerbated through the combination of the QWERTY keyboard and the

relative difficulty of acquiring and installing the proper fonts. But even when these fonts

are installed, there are few programs that will support the proper display of them online.

(For example, Bebo will not display syllabic Inuktitut fonts as of this writing.)

They don't see the version of syllabics on the keyboards, giving them a hard time, they have to use a manual to use the AIPAI font. (Internet supervisor R. Piqaanaaq)

It has become difficult for me to type in syllabics, I would try an Inuktitut keyboard if they had one. (F. Okalik)

I like it, I can talk to my friends, send an e-mail, pictures, see pictures of my friends, would like to type in syllabics, they do not come out right. (P. Ugalimaag)





Figure 25: Demand for Inuktitut Bebo

This question attempted to gauge the desire of Inuit for a site that "they could call their own" in regard to language. Nearly 75 percent of those surveyed felt that an Inuktitut-based social networking site would be excellent and that it would be very popular. Comments reflected the relative difficulty of using Inuktitut online presently, in addition to expressing interest in an Inuktitut-based plug-in for Bebo or another site allowing Inuktitut access and ease of expression. In answering this question, many began recounting issues related to current

difficulties.

(I like the) pics, photos, new friends, music, Inuit friends, (but I) write in English; don't know why I don't write in Inuktitut. (Z. Iqaluq)

I heard complaints that it is not easy to use (Inuktitut online), it takes a long time to make Inuktitut signs on the computer, I never tried it, cuz (sic) Bebo is (in) English so I use English. (H.Uvanga)

It has become difficult for me to type in syllabic., I would try an Inuktitut keyboard if they had one. (F. Okalik)

We don't know how to type in Inuktitut, we don't know HOW! We have never been taught how to use it on a computer, only KSB⁵⁶ knows but they never told us. (A. Kiinaujaq)

It can be seen from many of the previous comments that there is a need and a

desire for an avenue of Inuktitut communication on the Internet. At the present time,

the initial opinion of this researcher is that the currently available fonts system is not

sufficient to satisfy this demand. This will be further examined upon further analysis in

Chapter V.

⁵⁶ Kativik School Board section on policy recommendations and influences.





Figure 26: Bebo Influence to Use English Online

This question is a logical extension of the previous questions related to language preferences for lnuit when social networking. The increased use of English by lnuit desiring to communicate among each other reflected above is a direct result of the lack of support for lnuit on Bebo. How important is it to protect lnuktitut online? Please rate your choice from 1 (not important) to 5 (very important). (N = 31)



Figure 27: Importance to Protect Inuktitut

The purpose of this question was to gauge the level of concern and interest in protecting Inuktitut online. Nearly 80 percent of Inuit surveyed expressed their deep concern with the current state of Inuktitut, and much of this concern was focused on the younger generation. Almost 80 percent of the Inuit asked felt that it was important to protect Inuktitut in the future in order to ensure its survival. Elders, and parents in particular, emphasized that young people are spending more and more time online, and that it was important for them to "get into the habit" of using lnuktitut online "before it was too late." The graphic shows a very strong response with almost 80 percent of those queried agreeing that it is important in some way to protect lnuktitut online. This question, along with the one asking respondents if they were proud to be lnuit, generated some of the most emphatic, passionate responses.

We can predict the weather without weather stations, we can go swimming I don't know how to put it, the way of life, I like it...I love my culture. (R Tukisijunga)

I am proud to be Inuit. (Responses are from 1 (strongly disagree) to 5 (strongly agree). (N=31)



Figure 28: Inuit Pride

One of the more dramatic questions asked and, without doubt the one that generated the strongest emotional response, was this question related to the pride of Inuit users vis à vis their culture. Again, over 80 percent of those asked expressed their deep and passionate pride related to their language and culture. The pride had many sources; among these, the hunting ability of the Inuit, pride in diet, proximity and relationship with nature, ability to speak Inuktitut, physical characteristics (skin color, hair color, beauty, etc.); some were more nebulous and almost ineffable in their generality and mysticism. One theme that was recurring was the ability to speak Inuktitut.

I am so proud to be Inuit, it's off the charts. (R. Tuktumit)

I don't have to worry about sunburn, I can eat raw foods and go hunting. (G.Nunaliarvik)

Of course I am proud to be Inuit! (R. Aupattuq)

We can predict the weather without weather stations, we can go swimming, I don't know how to put it, the way of life, I like it...I love my culture. (R. Tukisijunga)





Figure 29: Perceived Threat to Inuktitut

This question displays statistically the reality that became increasingly apparent to the researcher after speaking with numerous Inuit. The Elders, and especially parents of younger children, are very concerned by the dramatic influx of the English media consumed by young people, especially in Iqaluit; however, increasingly in the smaller communities as well.

This fear was found throughout the community and in almost everyone this researcher met—a sense of growing nostalgia for the "old ways," the skills of hunting

and living with the land, eating "country food" and spending weeks away from the villages—that some seemed to think of as being lost ways.

One prime example of this was the host-brother of the researcher, a youth who was sent to live with his grandparents in the Tundra in order to be away from English, TV and movies, Bebo and the Internet, to be exposed to full Inuktitut each day. This boy confided in the researcher that he spent much time on Bebo perfecting his webpage, and the researcher confirmed that this page is completely in English. While it is not believed that the inclusion of alternate interfaces to social networking in the North will eliminate exposure to foreign languages, it is, however, hypothesized that such an inclusion will increase the quantity of Inuktitut being used while social networking.





Figure 30: Desire to Use Inuktitut More Often Online

This next-to-last question summarized the opinion of Inuit and desire to use Inuktitut more often online. Again, over 80 percent were very clear on the fact that they wanted to use their language more often online. Very few were neutral in this regard, and comments generated ranged from anger at the current state of the Internet, to frustration, and even to hopelessness at the difficulty in using Inuktitut fonts, teaching children how to type in Inuktitut using computers designed for English, and trying to get syllabics to display properly in Bebo before giving up.



Age in Years

Figure 31: Age of Study Participants

SECTION 2: LONG ANSWER SURVEY RESPONSES.

"Can you tell me why Inuktitut use is declining?"

Below is a synopsis of the responses given to the researcher. This Case Study

methodology has benefited from the on-site direct participation in this survey and the

information here builds synergistically on the results. In the opinion of this researcher,

these personal responses are even more insightful than the numeric statistical data.

During the 70s and 80s, white people not too many, these days a lot of them are here now, they are here for teaching, business, kids these days, want to speak different, they think Inuktitut is not cool, TV and Internet, they IM and chat in English.

Even though we have downloaded the Inuit fonts, the kids don't use them, too hard, not on Bebo.

I am now more comfortable in English online than Inuktitut.

I heard complaints that it is not easy to use it takes a long time to make Inuktitut signs on the computer, I never tried it, cuz Bebo is English so I use English.

I read faster in English now. Wwaliujarpait (qalirapai) Inuktitut in English letters.

I want my son to keep my culture. I worry that he will speak too much English and lose our heritage.

If I make it like that, I cannot use syllabics on Bebo it doesn't understand, it doesn't look right.

If I read in Inuktitut, its better, I don't need a dictionary. I already understand everything. In English I need a dictionary.

In school in the 90s this was missing, Kativik school board went back to replace the first letter, now I read faster in English because I use the Internet so much.

Inuktitut is declining because they are in school, by the TV in English, music in English, Internet in English, everything!

It is the way of the Internet, if we have a choice of Inuktitut we would use it, nobody forces us in English, its just that the choice is not there for Inuktitut

It would be so much better if we could use a keyboard with Inuktitut letters we can see on the keys it would be so much better.

Its faster in English, how to make it faster in Inuktitut? Maybe a keyboard in Inuktitut, I for Ia Ii Iou, m for ma mi mou, n for na ni nou, s for sa si sou, aiua, would be better

More English everywhere everyday, things are mixing, because of the qablunaat, we are in Ungava bay, but if you go to Kuujjuaq, you will notice, everyone is speaking English! It is coming to us from teachers! Schools! TV, Movies, Radio

My 2 year old is also learning English from TV and also her brother. Although I speak to them in Inuktitut they are still learning in English, the TV is stronger than us, also Internet when they get older.

Never seen Inuktitut in Bebo, cuz they use English or French on the Internet

Qaluijapaitituk (romaji!), Inuktitut in English letters, its not the same, com from outside world is far greater, more movies, music, Inuktitut writing skill- I know how, don't use online, no chance

So much going out at night, so much Internet, less hunting, less work. I am worried about my children, not enough Inuktitut teachers, not enough skills for the teachers. Too much television, Internet, drugs, alcohol, pregnant early, suicide big problems for us

Some brother's Bebo friends refuse to speak Inuktitut, he is about 10, when they are around, his friends visit him and they are all speaking English, his friends say I don't understand Inuktitut, I don't know what to say" they are all Inuit

Some of the kids, speak only English, they always use English with each other, because cartoons and Bebo and msn.ca are only in English, parents don't understand them. Cartoons are in English! Nobody watches the French channel here.

Speaking to friends, we do it in English online, we are doing it more and more in person too, my younger brother won't answer me in Inuktitut anymore he doesn't like it, English is cooler

The current way of spelling in Inuktitut on a computer is not efficient; it is made by too many keystrokes. To spell the word Inuktitut, you have to spell many characters in English letters, using alt-key commands; kids don't want to do this.

The entire section of ai pai tai sai this entire 4th section of the language is not represented in syllabics when typing on the computer.

The keys are not the same as Inuktitut writing

We don't know how to type in Inuktitut, we don't know HOW! We have never been taught how to use it on a computer, only KSB knows but they never told us. . .

We don't know how to write in Inuktitut on the Internet

When we were kids we hardly spoke English, kids today only speak English, I even tell little kids inuqualuratsi, inuktitulauritsi! (You are Inuit, speak Inuktitut)

Yes definitely, Inuktitut equipment is not enough available. Even on the Internet, not enough services, there are more non-Inuit in the community we can protect by talking to them in Inuktitut more, watch Inuktitut TV, Inuktitut Internet.

You can change the language on a DVD movie player, why not on the Internet, change the language, typing way

You don't have a choice when you go online

The following set of responses were given to those users who used Bebo

services for their social networking (a majority of the respondents).

"Why do you like Bebo?"

Bebo for social networking, msn.ca for chat, all in English only, and keyboard is abc style, Inuktitut is complicated on the computer.

Bebo is always in English, this has an effect for sure, for the real young kids, TV is a major factor, when they get a bit older, then into computers, and then they learn more English. Treehouse channel, I feel bad, I speak to him in Inuktitut, he answers in English.

Bebo, when I chat, I have to use English, this town, young people use Bebo, I like to chat with them in Bebo, I wish I could use syllabics in Bebo, but its been a while since I didn't read in Inuktitut, since my gm passed away, nothing online.

I like it, I can talk to my friends, send am e-mail, pictures, see pictures of my friends, would like to type in syllabics, they do not come out right.

I like the way, in Bebo, it helps me make Inuit friends from Bebo.

I want to make friends, I want my friends on my Bebo, only English on Bebo. I see pics of my friends, remind me of the old days, I use English when talking with my English friends on Bebo, I never type in Inuktitut, keyboard is in English.

Inuit friends, I like everything about Bebo. I tried MySpace, Bebo is more fun.

it has become difficult for me to type in syllabics, I would try an Inuktitut keyboard if they had one.

make friends, see the profile, so many profiles are in English. can't find Inuktitut font.

pics, photos, new friends, music, Inuit friends, write in English, don't know why I don't write in Inuktitut.

they don't see the version of syllabics on the keyboards, giving them a hard time, they have to use a manual to use the AIPAI font. (internet supervisor in Inukjuaq)

tried Facebook, msn.ca, MySpace, but they are boring, I like Bebo the most, structure is simple, one click, most of my Inuit friends are on Bebo, I can keep in touch with friends I have not seen in a while, cheaper than long distance, share pic.

we have to make money now, for everything. Elders get together, to help the language, I think it helps, but it takes too long to type in syllabics for now, we have to press more than one key at a time, make it easier Timi.

SECTION 3: LONG INTERVIEW WITH DONAT SAVOIE.

The next section of data collection consisted of longer interviews permitted under the Human Subjects Review and are transcribed here. The interview presented on the next page was conducted in French in Montréal with Donat Savoie. Mr. Savoie served as Chief Federal Negotiator for Nunavik as a member of the Department of Indian and Northern Affairs and has been a major presence in Arctic Québec since his earliest experience living with Tivi Etok while a graduate student in 1967.

He was responsible for organizing the visit of Pope John Paul II to Nunavik. In addition, his often featured in the *Nunatsiaq News*, which has published numerous news articles concerning his activities in the Department of Indian and Northern Affairs.⁵⁷ It is clear from this writer's experiences with the Inui that they hold Mr. Savoie in very high esteem.

In the unpublished conference notes for a presentation given at the University of Washington in May 2008, Mr. Savoie wrote:

The community I was living in 1967 and 1968, Kangiqsualujjuaq (George River) was only established in 1960. It is located on the East coast of the Ungava Bay. I was living with Tivi Etok. He had invited me to live with him and his family in a very small house. Tivi is still alive today and I was able at the recent Annual meeting of the Inuit of Nunavik, to thank him publicly for having instructed me in the Inuit ways, giving me good advice and encouraging me to take a job with the Government of Canada, so with the knowledge I had acquired on the Inuit, I could better serve the Inuit as a member of the Public Service of Canada. Well, this is what I have done through all those years.⁵⁸

⁵⁷ (http://www.nunatsiag.com/archives/50415/news/nunavut/50415_02.html).

⁵⁸ (http://www.nunatsiag.com/archives/60407/news/nunavik/60407_01.html).

The interview lasted for quite some time; the essential points of the conversation

are summarized here in English. (The interview summary is provided in its original

French as Appendix A.)

D: = Donat Savoie

T: = Timothy James Pasch

D: In regard to the website <u>www.nunavikgovernment.ca</u>, how many people do you think visit this site per week? 1000! We know that 95 percent of these visitors are Inuit. Who do you think is using this service? Not often the Elders! The youth. In the population (of Nunavik), 50 percent are less than 18 years old. When I saw that I thought of you! Put these two things together. (During the fieldwork), keep the mentality of a seeker for your work in Inukjuaq, write and speak of this. Use modern technology to aid the language.

Speak with the young people, get the ideas of the land! (the word on the street). It is the young people who will tell you how things work. Go to the public library, things will happen there. It will be good, speak with your Inuit family, speak with the Mayor; it will go very well. As much as possible, speak with the Inuit in Inuktitut.

T: How is the current state of Inuktitut in the Canadian Arctic?

D: In Nunavut things are bad, in Inuvialuit and Labrador it's in danger. In Nunavik it's getting worse. They will soon pass a language law, it is based on—they are inspired by Québec. Use as a model the law 101 of Québec.

T: Is this a good idea (to pass a language law for Nunavik)?

D: Oh it is essential. That which is happening, some are finding that the law doesn't go far enough! (They must realize) that between laws and reality, there is a difference (a margin). Start with that, and don't be too difficult. Step by step, start to change the surroundings. Mentalities must be changed.

T: In regard to Inuktitut, is it (the language) in good health for the future?

D: It is in peril! All of the regions are in peril for the language, Labrador, Nunavut, Nunavik, Western Arctic, the healthiest one is Nunavik (but it is also in peril).

T: Is the reason for this comparative health because of Québec?

D: The only phenomenon that exists is that the students leave school trilingual—something that is very special. It's there that Inuktitut is the healthiest. It is really something, a phenomenon. The phenomenon of respect. Québec (in its case), respects French, and knows that language is integral to a culture. When you go to Inukjuaq, go to the library and speak with the young people in Inuktitut. For this, you can speak their language, it is very important. Ask to see the Mayor, I will send him a message. He is very kind and is simply brilliant.

Information Received from Eric Poncet, CEO of Nunasoft Corporation

The data in the following section consists of information acquired by a company called Nunasoft. This information is deemed relevant to the Case Study because this company creates tools designed to integrate Aboriginal First Nations languages more fully with the Internet. The information listed in this section, interviews, and logged, "APACHE" data concerning users, is used as part of the Mixed-Methods rubric for the Case Study.

Nunasoft Corporation is owned and operated by a Frenchman living in Montréal named Eric Poncet. Mr. Poncet's concept with Nunasoft is the adaptation of computers to cultures and languages, especially Aboriginal and other minority languages. His site offers the option of browsing in syllabic Inuktitut, English, French, or Spanish. Poncet's efforts have developed new hardware and software technologies, which are working with Inuit communities to develop and strengthen the Inuktitut presence online.

His tools include Nunatype, NunaCommunities, Nunablog, Nunafun, and Inuktiboard in software and hardware. These new interfaces work with Inuktitut rather than supplanting it. The website is located at: <u>http://nunasoft.com</u>. His work is of great interest to this researcher, as the tools currently created by Mr. Poncet allow users to bypass traditional means of entering text into a website and can allow alternate languages to be expressed in reproducible ways. Following are screenshots (web archives) of the site:



የዋሳጋር ቁጋት ላሳሪ ኃህት የብላ ም

Figure 32: Nunasoft Inuktitut Logo



Adapting computers to cultures (not the other way around)

Web sites ≉ Applications ≉ Databases → Design, development & hosting Internet ≉ Systems ≉ Networks → Architecture, installation, training & support

Figure 33: Nunasoft English Logo

The initial page that greets visitors offers statistical information concerning the current state of language loss and technological contribution to this state and are shown here as essential Case Study archival data. In the first image (shown on the following page as figure 34), Mr. Poncet summarizes several current quotes citing the dangers to Aboriginal languages in Canada.

Following that (as figure 35), Mr. Poncet lists the technological advances that his company has developed in order to assist with the preservation and revitalization of these languages. Please note that Inuktitut, while the first language used as a focus, is not the only language supported by these tools. Other languages such as Blackfoot, Cherokee, Cree, Dene, and Ojibwe are also being assisted by these technologies.

From facts...

"Indigenous communities and their languages are threatened around the world".

International Symposium on the World's Indigenous Languages 2005

"Canada's Aboriginal languages are among the most endangered in the world."

> UNESCO Atlas of the World's Languages in Danger of Disappearing 1996

"The typewriters and computers don't carry the first column of our writing system anymore and I had to conform to their programs. It is unfortunate that our traditional way of writing had to disappear. How I wish it could be retrieved."

> Taamusi Qumaq| Introduction to his dictionary in syllabic| 1990|

"Indigenous peoples have the right to revitalize, use, develop and transmit to future generations their histories, languages, oral traditions, philosophies, writing systems and literatures, and to designate and retain their own names for communities, places and persons."

> United Nations Declaration on the Rights of Indigenous Peoples Draft, Article 14 1994-95

Figure 34: Nunasoft Mandate

... to acts 🗎

So, unless we missed something, we observe that:

a) Aboriginal languages are endangered globally;

b) Technology poorly integrates them, if at all;

c) Technology has an increasing weight in our societies; and

d) This increase gets sharper and quicker every day.

And we dare formulate this hypothesis:

"Aboriginal languages will be increasingly endangered, and quicker."

So: act we must, and act we do!

We're taking those facts very seriously. From facts to acts... Here's the big picture of what we've done, are doing and will do:

Preservation and revitalization of languages: we help Communities and Nations to protect their language, through our original process, fruit of 4 years of research, combining coaching, culture, language and technology. We read your mind: yes, our process is especially well thought for small-budget projects...

Input of Aboriginal languages into computers:

	Hardyare :		
Language	keyboard		7
Blackfoot	Done 1	n programs 🛛 🖡	Nanned 2008
Cherokee	. Done i	tropped i P	lanned 2008
Cree	Done	n progress 🛛 🕴 🖡	lanned 2008
Dene	1 <i>4 progress</i> 1		tanned 2008
Inuktitut	Done	Done	Done
Ojibwe	In creative set in the set of the	i de la company de la comp	

Figure 35: Nunasoft Hardware and Software Implementation Chart

Archival Evidence: Apache Logs From nunasoft.com

In an announcement in the Montréal blog reporting on cultural events for "Journées de la Culture," it was reported that: "French developer Éric Poncet of Nunasoft presented the very first 100 percent Inuktitut chat system based on the InuktiBoard, a unique keyboard specially created for the Inuit language. In collaboration with SAT, Nunasoft has launched an ambitious research and development program designed to preserve and pass on First Nations culture."⁵⁹

The tools that are created by Nunasoft are designed with First Nations users in mind. In an attempt to generate archival evidence showing the nature of the users of these tools, Mr. Poncet generously offered this Case Study an example of some Apache logs.

Apache logs are one of the ways in which programmers estimate the relative interest in a site, and determine the needs of users, in this case the Inuit. These logs do not record personal data. They do, however, record information that can tell developers about the languages, fonts, and regions from which the visits are arriving.



Figure 36: Language Choices Available at Nunasoft

⁵⁹ (<u>http://www.nunasoft.com/press/journees_de_la_culture_01_10_2005.pdf</u>).

In the following Internet archival screen recordings, it can be seen that there are a series of tools available on the Nunasoft site. These tools can be used by First Nations users to accomplish various goals in relation to language use online. For example, in the case of the Inuktiboard, users can input Inuktitut text even if the user does not know the key commands for these characters. This is an empowering development for the representation of Inuktitut online.

InuktiBoard OriScreen		InuktiBoard Phonetic		
$ \begin{array}{c} \varphi \alpha^{1,\text{SC}} & \Rightarrow \\ \varphi \alpha^{1,\text{SC}} & \Rightarrow \\ \psi \alpha \beta 4 , \\ \psi \alpha \beta $		Type in soman characters here: nunavut, nunavik. Get your Inuktitut text here: [σ2.9°, σ2.δ°.		
Inuktitut keyboard for easy input of Inuktitut text. Click on the keyboard => the InuktiBoard will get you the Inuktitut character.	letters	ur text on any keyboard wi => the InuktiBoard will rate them into Inuktitut charac	instantly	
Try the InuktiBoard		Try the InuktiBoard		
Select board size -		Select font name		
[Select funt earne <u>*</u>]		Go		

Figure 37: Detail of Nunatools/Inuktiboard

In the following screen capture, another tool can be seen. This tool attempts to resolve the issues related to the discrepancies currently troubling the communication of Inuktitut in the Canadian Arctic; namely, the variety of fonts that represent the Inuktitut syllabic language. These fonts are AiPaiNunavik, NunaCom, Unicode, and Qallunaatitut, or Roman lettering.

The discrepancies between these fonts, and the relative difficulty for many users of installing and using these fonts, (not to mention the lack of support and proper representation of the fonts in computers without the fonts installed), is problematic, at best, for syllabic representation online. The tools in Inukticode can convert any Inuktitut text from one font to another, converging the fonts into one interface.

This idea of font and communicative convergence of Inuktitut is a central theme of online unification of the Inuit voice that will be addressed in Chapter V.

	InuktiCode Web
	AiPaiNunavik: Da.>*, Da.A*.
	NunaCom:
	Unicode:
	Qallunaatitut:
	nunavut, nunavík.
et, includin	oard: paste your inuktitut text, using any font or cha gallunaatitut => inuktiCode will it into any other in cter set (or gallunaatitut). Try the inuktiCode

Figure 38: Inukticode Example

At the request of this researcher, Mr. Poncet supplied Internet logs in order to more properly analyze the results of the types of users who will access an Inuit site of this type. One question related to this user base was whether it would primarily be used by Western academics or Québecois scholars. It is presented on the next page. The rationale behind such analysis rests in the fact that web designers must always target the needs of their users. Through evaluating the search terms that a person uses in order to find the site and, additionally, through checking which fonts and which browsers a person might be using, the web designer can gain a better picture of the type of user, where the person is situated globally, and what languages they are using online while using the site. By analyzing this information, a better understanding of the Internet and how it is being used by Inuit can be generated.

The period of time analyzed is 2 years and 1 month. His comments are listed here to reflect his interpretation of the data. The log entries are listed below:

378,070 log entries (1 per HTTP request)	
Coming from 2,844 different hosts	
Total transferred 1.097 gigabytes	

The first question asked by Mr. Poncet, and the question of the most importance, was: "What keywords do people use to find us?" The answer to this question can reveal much of what is desired by a certain community and can show the importance of certain services and elements of a website.

The following dataset demonstrates that numerous Internet users have an interest in Nunasoft due to the availability of the Inuktitut keyboard and the service entitled Inukticode. Using this service, an iteration of which was previously mentioned, users can enter text in English and transform it into Inuktitut, either Romanized or phonetic syllabics.

The terms are listed here:

149 times: nunasoft

59: Inuktitut keyboard

8: inukticode

7: ainunavik font download

5: aipainuna

4: Inuktitut

3: aipainutaaq

3: inukjuak

3: inuktiboard

3: large ainunavik font

3: onscreen keyboard

3: nunavik weather

3: nunasoft.com

2: www.krg.ca

2: inukshuk

2: nunaweb

2: nunapix

2: musique inuit

1: Inuktitut transliterator

1: avataq photo

1: nunafun

1: la culture arctique

1: ivujivik

1: nunavut

Based on the above listings, it can be seen that the issues of highest priority for those visitors to the site are those related to issues of language online. The Inuktitut keyboard and Nunasoft technologies are the most widely queried on search engines by potential visitors to the site; however, issues of fonts are also very important. The terms "ainunavik," "aipainuna," and "aipainitaaq" are all fonts which are available for download. Unfortunately, the fonts are problematic to install, difficult to configure, and are not useable in many programs. Mr. Poncet writes that the site has become popular, based on the fact that over 350,000 users have 'hit' his site with searches similar to the ones listed previously.

"356,734 requests are NOT search engine indexers, so out of the grand total above of 378,070 hits, a 94.35 percent of hits are NOT engines but real human users, most of them originating from Inuit lands."

The code listed below demonstrates fonts used by visitors to the site. This

information determines the language used and displayed by those "surfers" to the site.

In this example showing the fonts used by visitors to the Inukticode service, it can

be seen that, based on the variety of font used by the visitors, that the part of the

Canadian Arctic where the user is based can be determined. For example, whenever the

font used is "Nunacom", this signifies that the user is from Nunavut and using a Nunavut-

specific font. When a font is "AiNunavik" or "AiPaiNunavik," it signifies a Northern

Québec Inuit user from Nunavik.

The problems emerge when Inuit from diverse regions are writing to each other,

creating font discrepancies and even crashes when the dialects do not match up in the

systems. The current state of the Unicode Inuktitut font is in disarray as well. Taken from

the Unicode syllabary is the following statement:

In the 1960s the AI series was dropped for typewriter hardware reasons. With that change AI (U+1401) was written as A + I (U+140A U+1403), PAI (U+142F) became PA + I (U+1438 U+1403), et cetera. The AI series has fairly recently been re-adopted by some, but not all, user communities...I am unable to find NNGAI in Unicode. The character looks like NNG + GAI (U+1596 U+1489)...I am unable to find LHAI in Unicode. The character looks like LHA (U+15A4) rotated 180 degrees.

This short example lists some of the problems affecting Inuktitut online. The Inuktitut syllable matrix below lists the key commands that are required in order to properly present the syllabics. Unfortunately, these commands are beyond the skill of many users, and Inuktitut keyboards are still not widely used. For this reason, a webbased Inuktitut font such as Inuktiboard, or even better, a plug-in embedding itself directly into Bebo would be the ideal solution for language-based issues of this type.

Some examples of how these fonts can be read are listed below. The reading of these logs was the means by which both researcher and programmer were able to determine the spatial locations and language preferences of the users.

199: 0,06 perce break down per font a	ent: 26 Avr 06 16:50 as follows:	D: /proc	ducts/inul	kticode.ph	p, which
26: /products/inukticode.r	0,01percent:	26	Avr	06	16:50:
(This is a Nunavut fo	nt)				
When users make us logs are shown:	e of the Nunasoft o	onscree	en keybo	ards, the f	ollowing
181:	0,05percent:	26	Avr	06	16:36:
/products/inuktiboard	_onscreen.php				
transliterator: 167:	0,06percent:	29	Avr	06	12:03:
/products/inuktiboard					

While it may appear that these statistics are nonsensical, the reality is that these logs show that many Inuit attempting to access the site looking for Inuktitut content are attempting to interpret the data using different fonts. There is a great need for a universal Inuktitut font and a manner in which Inuit Internet users can enter, display, and communicate in Inuktitut syllabics in a transparent fashion.

The following chart shows the current state of Inuktitut syllabics online, and the key commands required to enter them into the Unicode system. For many, these are simply too difficult to master, resulting in defaulting back to English due to its ease of use.

	Inuktitut syllable matrix								
initial	vowels						isolated		
cons.	AI	1	lĮ	AAI	U	UU	A	AA	cons.
(none)		Δ	À	Å	\triangleright	Þ	4	V	
(mane)	U+1401	1403	1404	1402	1405	1406	140A	140B	
P	V	Λ	À	Å	>	5	<	Ċ	<
г 	U+142F	1431	1432	1430	1433	1434	1438	1439	U+1449
	11	Λ	Ń	n	5	Ċ	C	Ċ	c
T	U+144C	144E	144F	1440	1450	1451	1455	1456	U+1466
	9	ρ	Þ	Þ	d	d	Ь	Ь	ь
ĸ	U+146B	1 146D	146E	146C	148F	1470	1472	1473	U+1493
ł	2	n	ń	ŕ	J	, Ť	b	Ĺ	L
G	U+1489	148B	148C	148A	148D	14BE	1490	1491	U+14A1
	-	r	ŕ	r	1	i	1	i	Ĺ
M	U+14A3	1 14A5	14A6	1 14A4	1 14A7	- 14A8	144A	14A3	U+148B
	ס	σ	σ	ĉ		i	0	ċ.	٩
N	U+14C0	1402	1403	1401	1404	1405	1407	1468	U+14D0
	L	,	نر	9	4	نړ	4	Ę	Γ.
8	L	ノ 14EF	14F0	14EE	14F1	14F2	ר 14F4	14F5	U+1505
				ĉ					<u>с</u>
L		1405	Ċ 1406	C	1407	1409	14DA	14D9	U+14EA
								*	
Y	4	4	Á	م	イ	<u>ب</u>	5	5	*
	U+1526	1528	1529	1527 9	152A	1529	152D	152E	U+153E
F	8	6	6	å	9	タ	2	\$	٩
	U+1553	\$555	1556	1654	1557	1558	1559	155A	U+1550
R	J	L	'n	^ ^	2	?	۲	Ś	۶
	U+1542	1546	1547	1545	1548	1549	1548	154C	U+1550

.

Figure 29: Inuktitut Syllable Matrix with Unicode Characters

Further Evidence: Internet Content Analysis of Bebo Home Pages

When beginning the search of the Internet to discover instances of Bebo home pages written by Inuit users, the means in which such a search would be conducted was problematic. Standard search engines such as Google are relatively limited in that they do not offer a series of Boolean operators to be used for refining searches in overly complex ways. For this search, the engine needed to be adapt at filtering out nonessential information and, for this reason, an alternate means of searching the web was used.

The program chosen by this researcher was DevonAgent by Devon

Technologies of Coeur d'Alene, Idaho. The search technology developed by this

company enables researchers to do detailed searches of the Internet using webcrawlers

and targeted search strings, resulting in highly accurate lists of websites. The popularity

of Bebo among Inuit youth was found by this crawler in an article by Nunatsiaq News:

If you don't know what Bebo is, just ask a teen in Nunavik or Nunavut.

They're likely to know about Bebo.com, an internet networking site, which is where you go to learn the latest gossip about who's doing what and with whom, according to one Kuujjuaq teen.

A search on Bebo shows hundreds of young Inuit who are registered users from Kuujjuaq, Iqaluit, Cambridge Bay and Inukjuak...As with most social networking sites, there's concern about the potential risks to youth from pedophiles accessing personal information contained in profiles. This can be prevented by making a personal profile private. But many sites aren't private and anyone can read intimate details of the users' lives.⁶⁰

⁶⁰ Jane George, *Nunatsiaq News*, June 29 2007, (<u>http://www.nunatsiaq.com/archives/2007/706/70629/news/nunavut/70629_260.html#_jmp0)</u>.
Trépanier (2003) when crawling the Arctic Web, used a service called Kelkoo to identify Inuktitut writings. Articles written in Inuktitut online were then used to prove her hypothesis that the meaning of Inuktitut texts was lost when using online translating tools such as Babelfish by Yahoo. Similarly to this technique, this particular researcher used DevonAgent to crawl the web using heuristics, or techniques used to filter out unnecessary data.

The result of these searches was a large list of Bebo-based Inuit web pages. There are far too many for all of these to be listed here. However, web archival material from some of them is listed in this section, and more in the Appendices. The final result of this search was the discovery of the relative lack of syllabic and Inuktitut-based web material even on Inuit sites. The majority of content was written in English, with a smaller amount written in Romanized (and often corrupted) Inuktitut.

Beginning with detailed searches, a "cloud" of Content Analysis data can be generated to focus on the majority of websites available in the region. In this screen shot from DevonAgent, it can be seen that the sites; namely, Canada, Arctic, Culture, among others, are primary examples of associations with the term "Inuit. Other issues of major concern include those of language.

166



Figure 30: Example of DevonAgent Web Crawling for Content Analysis

Among the archives of the sites listed are a variety of signs of pride and appreciation for being Inuit. Many of these, however, are written in English, as the one shown below.



Figure 41: English-Based Inuit Home Page on Bebo

Of the thousands of pages visited and archived, the Bebo sites were the pages of the highest value to this particular research. Many of these pages are off-limits to viewing unless the individual becomes a "friend" of the researcher. In the efforts of this research, the investigator befriended hundreds of Inuit on Bebo, and joined their network. In so doing, a picture of language use on the Bebo site in the Canadian Arctic was generated. While checking these sites, the language most commonly used was recorded. However, this work is not an exhaustive list of all Bebo websites in the Canadian Arctic.

The ever-changing nature of the Internet coupled with security issues transformed this section of the research from a Quantitative Content Analysis counting each site, to a more interpretive, ethnographic portrait of the Inuit Bebo world as a whole. In this sense, while it is impossible to record every site with any degree of certainty, it became apparent that the world of Inuit social networking is a mixture of languages. One fact that came to dominate the discourse, however, was that English was, without a doubt, the standard form of written communication online. Inuktitut, when used, was primarily written in English lettering.

The survey results, coupled with the interview and direct participation data, plus the web archival analysis of the Bebo networking sphere, has provided a spectra of evidence demonstrating that there is a lack of written Inuktitut online, especially in syllabic form. This researcher postulates that this communicative disconnect is a result of inadequate technologies resulting in the de facto language of English replacing the Aboriginal communicative discourse of the Inuit people online. Archival data collected during this phase of the research is found in Chapter V, in the Appendix section, and on the researcher's website at www.timpasch.com.

SUMMARY OF FINDINGS

Based on the data collected through the variety of data sources included in this Case Study, it has become apparent to this researcher that there is a disconnect involved with the online communication processes of the Inuit in Arctic Canada. It appears clear that the language of choice for verbal communication among Inuit is Inuktitut, and although this is changing, the health of the language is still sufficient to consider it a living language community. As the Inuit of Nunavik begin to use their new Tamaani Internet service (Buckstein, 2002), (*Nunatsiaq News Service*, 2004), the choice of languages for communication online, especially for young people, will be critical in the development of identity.

Although the Inuktitut writing system is a relatively new development in the history of the Inuit, it has become an important aspect of Inuit communicative discourse. The appearance of written Inuktitut in its symbolic form is so distinctive that a special font, called Arjowiggins Inuit, was created by a renowned designer who was inspired by the appearance of the Inuit syllabic form. This font is available to designers and graphic artists for use in creating a certain atmosphere.

It is ironic to this researcher that the West has become interested in Inuktitut more for its appearance than for any intrinsic value to the communication system. In this example, although the shapes of Inuktitut have been appropriated into a Western formation, there is no attempt to support the actual language or culture. When the original shapes are too extreme, alternate solutions are suggested from the Roman alphabet. This font is a metaphor for what is occurring online in the Canadian Arctic. The

Inuit possess an extremely strong cultural "brand" that is beginning to become

appropriated by the corporate and political world.

Inspired by the evocative forms and personality of the Inuktitut alphabet, ... (This font) has been carefully crafted to reflect its cultural roots. These strangely alien shapes and squiggles provided the raw material for our new typeface. It's a surprisingly modern collection of characters, as the Inuit people only developed a written language in the 1890s, in an effort to preserve their history and identity...(the font) draws heavily on the character and composition of the Inuktitut alphabet. While some letters took their shape directly from the Inuktitut alphabet, others are based on more familiar Roman letterforms. Jagged edges counterpoint sleek curves, suggesting the Arctic landscape and indigenous way of life. Some of the original Inuit shapes seemed too extreme, so we developed various alternate characters⁶¹.



Figure 42: Arjowiggins Inuit Font Presentation

⁶¹ (http://www.inuitpaper.com/arjowigginsinuitfont.htm).



Figure 43: Example of Arjowiggins Inuit Font Design Elements



Figure 44: Example of Arjowiggins Inuit Font Marketing

Without encouraging youth to begin using their language online, and becoming excited by this, it will begin to be reduced to a commodity, as illustrated by the previous example. This graphic example provides evidence of the erosion of its source. It is the opinion of this researcher that the implementation of the technologies created by the developer Poncet and others into the San Francisco-based social networking engine entitled <u>www.bebo.com</u> can theoretically result in a reinvigoration of interregional Inuktitut online.

CHAPTER V: CONCLUSIONS AND RECOMMENDATIONS

The choice of living with the Inuit for fieldwork research has been fortuitous. This researcher has never been part of a more welcoming community of individuals. While living with the Inuit, he was consistently impressed with the curiosity, resiliency, and generosity of spirit exhibited. He was additionally surprised when many of his preconceptions were altered through the realization that much of what is commonly "known" of the Inuit had been colored by the media and a "qablunaat" or Western worldview. In this sense, he feels that commonly preconceived notions of the Inuit in the West are entirely inadequate in expressing the nature of the experience in the Canadian Arctic.

RESTATEMENT OF PURPOSE

The purpose of this study is to examine the current state of language use online in Nunavik and to evaluate new and existing alternate communication practices and technologies, such as webtools and additions to social networking technologies that are designed to empower minority language users in general, and lnuktitut speakers in Nunavik in particular. Additionally, policy recommendations are an important aspect of this research and will be presented throughout.

As social networking, blogging, chat clients, e-mail communication, and both personal and business computer use increases, minority users of technology in the Western World, especially younger users, are often presented with a single linguistic interface—that of English. This study explores ways in which the current state of Inuktitut online is lacking and proposes communication technologies used to empower language and culture in indigenous communities, with a focus on the Inuit community of Inukjuaq.

Research Questions

- R1. To what extent, and in what ways, is the Internet being used in Nunavik?
- R2. What language is predominant in Nunavik, in both spoken and written forms, and online?
- R3. To what extent and in what language is social networking being used in Nunavik?
- R4. Does alternate language use online adversely affect Inuktitut language ability?

In order to answer these research questions, they will be reexamined under the rubric of each of four sources of evidence. The sources of evidence used in this study are the following:

- Documentation
- Archival Records
- Interviews
- Direct Observation

First Research Question.

R1. To what extent, and in what ways, is the Internet being used in Nunavik?

This first broad and exploratory research question can initially be observed through the lens of documentation, specifically through the views of the Inuit people themselves in their writings in the *Tumivut* publication published by the Avataq Cultural Center. The *Tumivut* journal is a previous incarnation of the *Makivik* magazine, and was published as documentation of traditional Inuit knowledges.

These magazines are now out-of-print and have become difficult to acquire. The Avataq Cultural Center in Montréal and Inukjuaq generously and unexpectedly gifted this research with the entire back catalogue of publications. For this reason, the cultural material found in this journal, often contributed to by Elders directly, was considered without peer by this researcher. Additionally, *Inuktitut*, a journal produced by the Inuit Tapiriit Kanatami, the national organization representing the Inuit, was examined. In this journal, an entire issue (Summer 2007) was dedicated to the question of the Internet; the article discussed the hopes and fears of the Elders and youth concerning this subject and entitled "The Internet as Catalyst for Arctic Inuit Business."

In this documentation, an entire section of the journal focused on the Internet, asking the question "Can the Internet Be the Arctic's Economic Future?"⁶² This article, (written, as are all articles in this magazine, in all three official languages—English, French, and Inuktitut), begins with a summary of Ottawa Summits focusing on the potential of the Internet in the Arctic and mentions the Societies who participated, specifically DIAND (The Department of Indian And Northern Affairs), Industry Canada, Infrastructure Canada, Health Canada, Natural Resources Canada, Heritage Canada, and the Inuit organizations ITK, Air Inuit, the Makivik Corporation, the Kativik School Board, and others. "Financial investments have been in the billions of dollars," and the "clear focus" was to "deliver a level of basic Internet service to the regions" (p 44).

In this, the government has succeeded and, as this researcher can testify, the Internet signal in the Canadian Arctic is reliable. Although the speeds and strength of the wireless signal are not extreme, they are more than adequate for communication and data transmission. The Inuit certainly desire to use the Internet for economic stimulus in addition to cultural and linguistic retention. Increased broadband technology is also seen

⁶² Inuktitut, Aujaq/été 2007, p 45-50.

as critical in terms of Inuktitut language development, preservation, and even language renaissance.

There is an urgency to work with Inuit Elders collecting, recording, and documenting Inuit history and knowledge. However, a basic question often asked is: "What is the economic potential for combining cultural preservation with Internet technology" (p 48).

Economic Aspects of the Internet in Nunavik

When writing of the concept of cultural and linguistic preservation, the economic value to the region is of primary concern. As previously mentioned, one of the major reasons that IBM did not develop an entirely new typing surface for the Inuktitut language when producing the Selectric typewriters in the North was the simple reality of the market economy. For a small user-base such as the Inuit people, it was not financially viable for a multinational corporation to spend a great deal of money on research and development for the proper implementation of the Inuit language.

Similarly, for many software developers and web designers, the Inuit market is small to such an extent that localizing software and content to the Inuktitut market is not even a factor worth considering. It is for this reason that the Inuit must take a proactive approach to language preservation. The relatively small market of Inuit software users (as of this writing) need linguistic adaptations of their favorite software, social networking tools, and websites; however, this will not occur automatically. In the opinion of this researcher, a complete replacement of external content is not the answer, rather a series of tools, or interfaces that translate, educate, and recode data into Inuktitut potentially offer a flexible solution.



Figure 45: Trilingual Cover Story

The image included above is included in order to demonstrate the inclusion of all three languages in the *Inuktitut* journal. Trilingual publication material is rare and the particular article referenced was featured as a cover story. When answering the first research question with regard to the publications and governmental agencies mentioned, judging from the importance given to this particular article concerning the Internet in the North, it appears that the economy and business interests of the Inuit are taking a primary role.

When implementing business plans regarding the Internet in the Arctic, or indeed in any developing community, one challenge is the high cost of software. In order for the Inuit to justify the cultural preservation of the language and culture, the realities of budgets and the economy must be respected and a maximum of benefit must be realized from the investment. Copies of Microsoft Windows and Microsoft Office, in particular, are sometimes more expensive to purchase than the components of the computer itself. When approaching the Arctic Internet from a business perspective, and answering the research question of which applications and operating systems are being used, the current answer would be Microsoft Windows, and Microsoft Office. The high expense of these commercial software packages, however, can prevent many Inuit from having the capital to commence business.

Currently, one solution that is worth investigating is that of open-source operating systems and open-source office suites. Linux is an operating system that is open-source, promoting discourse and exchange among users and promoting user-initiated improvements and changes to the source code. In this sense, users have a great deal of freedom using free code; indeed users often remark that open-source software users are members of a family.

Policy Recommendation #1

The Inuit must attempt to save resources as much as possible through the use of open-source software whenever feasible. The funds saved through this vast reduction in expenditure can be applied to Inuktitut localization and enhancement online.

Open-source refers to the processes of creating, distributing, using, modifying, and sharing software programs without the fear of patent infringements in both commercial and noncommercial environments. Linux, the heart of the current opensource software movement, evolved over a dozen years ago from a simple hobbyist operating system to one of the most stable server-class systems. On the other hand, open-source programs give users absolute freedom to distribute, use, modify, and share source codes (Petrina, Volk, & Kim, 2004).

The increased business economy and protection of Inuktitut are not the only ways in which the Internet is affecting life in Nunavik. In a response to an Internet query, a representative from Soleica Corporation, the Montréal-based Information Technology firm responsible for much of the hardware installation and training of Inuit Internet specialists, replied in French with a synopsis of the most interesting uses of the Internet for the Inuit:



Figure 46: Soleica Workers Installing Internet Installations in Nunavik

Au niveau des particuliers, les avantages sont nombreux tels que: rapidité de communication entre les villages (possibilité d'envoyer des photos numériques) pour rapprocher les familles qui ont des membres dans plusieurs communautés, achat de produits par internet: (les Inuits n'ont pas accès à des détaillants dans leurs villages. lis peuvent maintenant acheter online!)

Le commerce des ordinateurs a beaucoup augmenté dans le nord (achat massif de PC, laptop, etc. . .) L'information circule mieux (ils peuvent consulter leurs journaux sans attendre le passage de l' avion) exemple : www.nunatsiaqnews.com

Etonnement, les communautés religieuses ont bénéficiées de l'arrivée d'internet

(Rapprochement / messages / etc. . . .) Les sites de météo et de la chasse sont très utiles pour les chasement, très important pour les chasseurs Inuits.

English Translation

In regard to the particularities, the advantages are numerous and I delineate them here: first, the rapidity of communication between villages makes it possible to send digital images to bring together families who have members in distant villages. The purchasing of products online is a major factor, for products with suppliers previously unavailable in the villages. The commerce of computers has greatly increased in the North with massive purchases of Desktops and Laptops. Information circulates better and faster; for example the Inuit can consult their newspapers without waiting for the arrival of the airplane delivery for example, through using <u>www.nunatsiaqnews.com</u>. Surprisingly, the religious communication, transmission of messages etc. The weather sites and hunting-related sites are very useful for expeditions, and very important for the Inuit hunters.⁶³

Policy Recommendation #2

As much as possible, train local Inuit community members as Information Technology specialists, Information Assurance (security) consultants, and instructional and webmaster experts.

Not only will this focus on local training bolster the economy, but it will also

increase the awareness of Inuktitut online and reduce dependency on qablunaat experts

from Montréal. For example, a Case Study conducted by Soleica examined the use of

the Internet for daycare and early-education situations. Their mission was to discover the

ways in which the Internet would be used, and ways in which groups could benefit from

being online. Some recommendations were listed as documentation:

⁶³ E-mail sent to the researcher from Soleica Corporation.

- 1. Need for strong security tools to protect the children and staff from accessing unauthorized websites (pornography, violence, etc). Soleica recommended them firewall solutions to fit their needs.
- 2. Request to provide animators with tools to download educational games or kids recipe for specific events (Halloween, Christmas, etc.). Most of the daycares' employees needed skills to conduct research by themselves on the Internet
- 3. Manage digital pictures: most of the daycares report to the government in Kuujjuaq and the need to send digital pictures to Kuujjuaq back and forth. This has been identified as a major asset (of the Internet for Nunavik; i.e. pictures. construction projects, family management, etc) train a specific person in charge of first-level support for the most important daycares.

Looking at the documentation listed above, it can be seen that there are

numerous and ever-increasing uses for the Internet in the North. It would be impossible to summarize every possible use. However, the improvement of the economy, the preservation of the language and culture, and the need for social services are very important aspects of the development of electronic communication in the area. As has been seen in this research, the use of social networking, especially for the youth, is another extraordinarily large development and is impacting the manner in which families stay in touch across the communities.

Focus on the Youth

Donat Savoie stressed the importance of the Internet for the youth and due to the high numbers of children born to mothers in their teens, the population of youthful Inuit was inordinately high.⁶⁴ In Mr. Savoie's opinion, the youth hold the future of Nunavik and

⁶⁴ This inference is corroborated by Statcan Census Data related in *A Statistical Profile on the Health of First Nations in Canada*. Health Canada, First Nations and Inuit Health Branch, Ottawa: Minister of Health Canada, 2005.

the future of the language. It will be their experience with technology that will shape the development of the region in the next generation.

Mr. Poncet agreed that the increasing use of the Internet for communication was a sign of a larger movement toward digital communities, and stressed through his work at Nunasoft that the use of Inuktitut online must be emphasized in order to create for young people a sense of "cool" and an interest in using Inuktitut online.

This is a very important aspect of the research: namely, that the technologies used to invigorate the language must be easy to use, have an appealing look and feel, and match this form with advanced functionality. Currently, the sense is that English is the language to use online and that the relative difficulties of using Inuktitut online create issues for Inuit youth and adults alike. The youth are the primary users of these technologies and the next policy recommendation focuses on this aspect of the Inuit population.

Policy Recommendation #3

As much as possible, integrate Inuktitut technologies into software to such an extent that they are easy to use for the youth, increasing the excitement and "cool" factor, creating an environment for Inuktitut online that is easy to use as well as exciting. Increase Inuktitut web education in schools and teach Inuit children how to use Inuktitut online. This aspect of online education is very important.

While living in Inukjuaq, this researcher had the opportunity to observe first-hand the Internet usage patterns and styles of many Inuit. This was accomplished primarily in Montréal and in Inukjuaq. This was also observed while working with Inuit teachers and communicating with Inuit friends using social networking. During these observations, several patterns were observed concerning Inuit language use online. The first of these was the fact that English, in the experience of this researcher, is definitively the primary language used online. This is due to a number of factors, primarily due to the lack of available primary Inuktitut language material on the Internet.

This is also due to the problems associated with typing and inputting Inuktitut using current hardware and software. The primary elements of communication are without question, found at <u>www.bebo.com</u> and this website is used for many aspects of Inuit online identity. Primarily, this is an e-mail client, a website, and a message board. The primary chat service that is used for instant messaging is <u>www.msn.ca</u>. The combination of these two sites creates the vast majority of communicative online discourse for Inuit that was observed by this researcher.

Bebo is very attractive for the Inuit for a number of reasons. First is the ease of use of the service itself. It is very easy to set up and relatively nonintimidating to register a new account. Secondly, Bebo is attractive because so many Inuit who use the Internet have a Bebo presence, that it is simple to search for friends and find them. There is little reason to use Facebook or Myspace when most Inuit friends are using Bebo.

I tried FaceBook, msn.ca and Myspace, but they are boring. I like Bebo the most: the structure is simple, one click, most of my Inuit friends are on Bebo, I can keep in touch with Inuit friends I have not seen in a while, (it is) cheaper than long distance, (I can) share pics. (R. Ullumi)

Policy Recommendation #4

Realize that Bebo is the most popular social networking service in the North and integrate Nunasoft plug-in technologies into it.

The web tools have already been developed and Mr. Poncet has stated that the

creation of a plug-in would be possible. The possibility of adding syllabic functionality,

translation tools, and font universality is exciting for Inuktitut.

With regard to data entry for the Internet, the only Inuktitut-based keyboards that

were observed were located in the Avataq Cultural Center. These keyboards were

regular QWERTY keyboards, covered with tape and relabeled as Inuktitut syllabics. The keyboards that were observed in Inukjuaq were standard Western keyboards. Few of the Inuit with whom I spoke were aware of how to use the font systems in order to apply Inuktitut syllabics to the Bebo sites they were accessing, stating that these were too complicated and did not work properly.

At the time, the keyboard in the following photograph was the main keyboard used at the Avataq Cultural Center. The Inuktitut letters have been taped onto a standard Western keyboard in order to enter syllabics into the systems. Considering that this is the main cultural center for the Inuit, it is reasonable to expect that syllabics will be used on a regular basis, and the time and effort to convert a keyboard into an 'Inuktiboard' has been invested.

For the everyday user in the North however, the expertise to map fonts to each key, and the time spent taping syllabics to each key is not possible. For this reason, additional hardware interfaces are essential. Additionally, the Western keyboard is not optimized for Inuktitut, and this taping of keys onto a Western keyboard is a temporary solution at best.



Figure 47: Example of QWERTY Keyboard With Taped-On Syllabic Letters

Policy Recommendation #5

Begin the purchase of Nunasoft Inuktiboards for Inuit government computer systems and schools and subsidize their sale to local Inuit.

Taping syllabic key markers on keyboard is a temporary solution, and the language is sufficiently important to justify the investment in proper keyboards. The money saved from going open-source and training local consultants will contribute to making the necessary funding available for this project.

The websites presented in Appendix K are those available to the Inuit in order to provide social services and information regarding governance and society. For the most part, in the opinion of this researcher, these websites are not the ones that are the most often used by the Inuit. Rather, the most popular sites that are accessed when first beginning a web session, and which are returned to as "home-bases" are <u>www.bebo.com</u> and <u>www.msn.ca</u>.

The websites that are available in the Inuktitut language are also accessed by the Inuit. However, during the observations by this researcher, these were accessed more often on a "need-to-know" basis by Inuit requiring information on government services and news.

Many of the ways in which a researcher can determine where the "action" is occurring online in the Inuit experience can be found from a listing of those sites that offer services in Inuktitut. Many of these sites are government sites. Following the location of the site listed in Appendix K, a brief description based on the official summaries from the Department of Indian and Northern Affairs is shown. Screenshots are listed, where appropriate, and discussion follows, again, as appropriate.

One of the main points related to the display of these websites is the discrepancy in the fonts used in each site. On this researcher's computer, depending on which fonts were installed and on which computer/operating system, many of the sites displayed would not properly display Inuktitut syllabics. For this reason, another policy recommendation follows this section concerning fonts. These sites are also listed as a reference and an Internet archive of sites accessed during this research. The sites can be viewed in the appendices along with screen captures of each website.

Although all Nunavik fonts are installed on this researcher's computer, many of the sites were not properly displaying the syllabics. For this reason, a new policy recommendation is proposed here:

Policy Recommendation #5:

A new universal Inuktitut font is required, and this font should be standardized throughout the Inuktitut-speaking circumpolar environment.

The current state of written Inuktitut online is divisive and damaging for the continued use of Inuktitut online. It is no longer sufficient to have a variety of fonts that improperly display varying sites, even government sites, online. The answer is the recommended establishment of a standardized Inuktitut font.

This should include Nunavik, Nunavut, and all of the regions where Inuktitut and a dialect of such is spoken. (See figure on next page.) Although syllabics are not necessarily used in all of these regions, the fact that Inuktitut websites will display properly in everyone's browser is an important issue. Once this font is created and distributed, it should be posted online as the official Inuit font and integrated into the major operating systems.



Figure 48: Map of Circumpolar Inuktitut Dialects



Figure 49: Nunavik Unicode Installer



Figure 50: Nunavik Syllabics Support Installer

In this response to the first research question, it has been shown through a variety of sources of inquiry that the Internet is a vibrant part of Inuit daily life. There are a variety of websites that Inuit can visit and, some of them, especially the government-based websites listed in this section, are available to some extent in Inuktitut. For the most part, these sites are compendiums of links and informational sites where users can gain knowledge of services and opportunities.

One site in particular is quite exciting with regard to its implementation of Inuktitut; namely, <u>www.tusaalanga.ca</u>. This site is a result of the combining of resources from Attavik, a company supporting Inuktitut computing. It takes its name from "Inuktitut Qarasaujalirinirmut Attavik" or "setting a foundation for Inuktitut computing." The Information Technology acumen of Attavik has been applied to the Inuit Center for Language Preservation of the Pirurvik Center, resulting in the creation of the website <u>www.tusaalanga.ca</u>.⁶⁵ This website is extraordinary due to the streaming audio clips of native Inuit speakers communicating in Inuktitut. These online lessons can be used for non-Inuktitut speakers to grasp many essential concepts of the language while



simultaneously working with grammar, syllabic creation. and cultural content.

Figure 51: Streaming Inuktitut Online at Tusaalanga.

⁶⁵ (http://www.tusaalanga.ca/).

The site itself was launched very recently and is currently beginning its function as a digital compendium of songs, stories, and dialogues. Assignments are available, and all of the online services are free. The Center additionally offers courses where students can work with Inuktitut teachers who will speak monolingually for a true language immersion.

This site is extraordinarily exciting for a variety of reasons, one of which is that for many non-Inuit, finding an instructor for Inuktitut is most difficult. This researcher spent a good deal of time looking for an Inuktitut instructor when beginning his instruction. The resources on Tusaalanga can give a new learner an important head start while preparing for the possibility of working with an Inuit native speaker.

While Tusaalanga is an extraordinary resource, it is less useful for Inuit themselves and more useful for non-Inuit speakers looking for initial training in the basics. For Inuit, the important need remains: a means iby which the Inuktitut language can be written reliably and consistently online. This is especially important for users involved in the most popular social networking services currently used in the North; namely, <u>www.bebo.com</u> for social networking and <u>www.msn.ca</u> for text and instant messaging.

There also remains the larger problem of fonts in general, and the discrepancies between fonts used in Nunavik and those used in Nunavut. Even in the experience of this researcher, it was difficult on many occasions to properly display fonts and render web pages properly in Inuktitut. Many Inuit survey participants and friends also commented on the general difficulty of using fonts in the North. Many had given up on them completely, preferring to use English, even though they were required to use a dictionary, rather than using Inuktitut. A problem assuredly exists and it is within the scope of this research to propose solutions to this issue which can be applied to alternative language input methods throughout the Aboriginal world and in larger, global minority language situations.

Policy Recommendation #6:

Recognize the incredible resource available in the Pirurvik Center and Tusaalanga, and actively promote the audio-streaming technologies, integrating them into government websites and expanding the audio, video, and syllabic integration of Inuktitut into the Internet.

These new technologies should be incorporated into Bebo and social networking,

with the ultimate goal of dramatically increasing the exposure that young people have to

Inuktitut online.



Attavik is a partnership between <u>Pirurvik</u> a new Inuit-owned Centre for language, culture and well-being, and <u>Web Community Resource Networks</u> which has provided website services to socially committed organizations since 1986.

Figure 52: Attavik Center for the Support of Nuktitut Computing



Pirurvik Centre - Λ ⁵6^b +1 867 979 4722 | + 1 867 975 2063 | info@pirurvik.ca

Figure 53: Pirurvik Centre

Tusaalanga Inuktitut		
LESBONS Select a Lesson	GLOSSARY DIALOGUES ASSIGNMENTS	
Welcome to Tusaalanga Inuktitut LEARNING INUKTITUT ONLINE		
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ላbኦታ%ሩ ህህ ኃላምበት ኋህ ጋላፎ ነህ ዕረብሮ ኦብሥሬታሌ ዕሮቶ ታላብናበ መኦኖናጋሆ ለዖናልዛር, የሥላታም ላጋንታና bኒኒ ናንም የኦዕጋልቶዉና ው ፊውስ ኃሊኦ%አዮ ማደረዳውና የኦህጋልቶዉቫዥ ሮኖኖታ ወዉጅዣ.		
Tussalanga is a dynamic new website that brings Inuktitut learning to the world wide web. It was created by the Pirurvik Centre, an Iqaiuit-based company dedicated to enhancing inuit language, culture and well-being.		
Tusäalanga features hundreds of vocebulary items, dialogues, soundfiles and grammar notes, all organized into a series of lessons.		
Although Tusaalanga is best used as part of a comprehensive program to learn Inuktitut, it is an invatuable resource to anyone wishing to build their skills in Nunavut's largest language.		
For people not at all familiar with the Inuktitut language, we are happy to provide some background information about Inuktitut		

Figure 54: Tusaalanga Inuktitut Language Training

Second Research Question

R2. What language is predominant in Nunavik, in both spoken and written forms?

While spending time at the Avataq Cultural Center in Montréal and in Inukjuaq, this researcher had the good fortune to be granted access to the archives of the *Tumivut* journals chronicling the combined documents of the meetings of the Elders in past years in Nunavik. The journals published the stories and experiences of Inuit past and included articles written by contemporary Inuit concerning social issues related to language and technology. Using Devonthink Pro Office archival software⁶⁶ to scan and perform optical character recognition on these documents resulted in a collection of quotations, articles, and scans that demonstrate aspects of the current state of language in Nunavik.

First, perhaps, is to mention the current lack of literature in Inuktitut. There is a dearth of books written in Inuktitut. This is understandable considering that Inuktitut was an oral culture until comparatively recently. "There isn't a tradition of reading," says linguist Mick Mallon. "The people who are accustomed to reading, many of them obviously have had an English education—and the books they do have would be mostly written in English." ⁶⁷

Notwithstanding the lack of printed material in Inuktitut, part of the explanation is related to the difficulties that the Inuktitut syllabic has experienced in its transition from a written form to a digitized one. The issues with IBM dropping an entire line of the syllabary in order to fit on the Selectric type-ball were serious, and the Elders expressed this during an Elder's conference in 1996, as chronicled in the *Tumivut*.⁶⁸

⁶⁶ (<u>http://www.devon-technologies.com/products/devonthink/uniquefeatures.html</u>.)

⁶⁷ *Nunatsiaq News*, Nunavik, Feb. 22, 2002, Web Archive.

⁶⁸ *Tumivut* Journal, Avataq Cultural Center, Summer 1996, Inukjuaq, Elder's Conference.

An unknown speaker at this conference raised the issue of the need to bring

back the "ai, pai, tai" etc., in the syllabics.

Also, today we call transcribe stories on tapes directly to computers. There is no reason why this Commission, or any related work on language should be put aside. More and more we are receiving requests from competent individuals who can transcribe, translate or interpret English to Inuttitut, but we as Elders must guide them to choose the appropriate equivalents of Inuktitut dialects.

One elder, Johnny Annanack said:

Yes, lack of funds caused this Commission to collapse, although it is very important. Many times, I receive personal calls from young people, requesting help for a particular word. I'm sure Elders from other communities go through this too. Many young people are not aware of how many traditional words are no longer in use.

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work on language, should be put aside. More and name we are receiving requests from competent individuals who can transcribe, translate or interpret English to Institut, but we as elders must guide them to choose the appropriate equivalents of Inutitut dialects

Johnny Annanack: Yes, lack of funds canned this Commission to collapse, although it is very important, Many times, I receive personal calls from young people, requesting help for a particufor word. I'm ware elders from other communities go through this too. Many young people are not aware of how many traditional words are no kinger in use.

Figure 55: Elders' Conference Loas

Many Elders desired to see the return of the lost ai/pai/tai symbols, and a new font was created in the early 1990s to restore this. In an article in *Makivik* magazine, the publication of the Makivik Corporation(Caines, 2005), the author expresses hope that Inuktitut of Nunavik and Nunavut will be able to catch up to the vibrancy of Greenlandic Inuktitut:

Full Inuktitut literacy—the ability to read and write the language—is suffering across Canada today. Technology evolves on a global scale, so it is important that Inuit themselves initiate projects based on their cultural needs. One project of large potential is increased communication and inspiration from Greenlandic Inuktitut. Inuktitut, being the working language of the Greenlandic government, thousands of books have been—and continue to be—written in and translated into Greenlandic. Nunavik Inuit are striving to succeed as Greenland has, and If the Nunavik dialect font helps more young Inuit to read in Inuktitut. It may lead to many more Inuit writing stories in their own language and to a blossoming of Nunavik Inuktitut literature.

Continuing the discussion concerning Greenlandic Inuktitut is worthwhile, as the

health of the language in that region is dramatically superior to that of the Canadian

North. A partial explanation for this relates to the difference between colonial

approaches of the Canadian and Danish governments.

While Canada moved North with a relatively aggressive stance regarding re-

education and resource allocation, the Danish government approached the situation with

more sensitivity to the local environment and culture. However, the question of the

Internet in Greenland is one that this researcher has been approaching, however, with

less than conclusive results as of this writing.

Although the Inuit Internet in Greenland is definitely a subject of future research,

online searches have not led to sufficient data for reporting here. In order to gain a more detailed perspective, this researcher would attempt to use complete immersion methods in the Greenlandic communities, speaking Inuktitut and learning from local users regarding Internet habits, social networking preferences, and language use online. In this way, connections between Canadian and Greenlandic Inuit, through social

networking, language portals, and empowered web tools could be determined.

Policy Recommendation #7:

Increase the online communication with Greenland. Learn from their successful and vibrant retention of Inuktitut and build a social networking community integrating the tools and technologies mentioned. Begin online correspondence between Greenlandic and Nunavik Inuit and require each Inuit child to have a Greenlandic "pen pal" online, with all exchanges in Inuktitut (video, audio, and written).

NOTES BY ELDERS

In the hope of revitalizing the language and the literature, records of proposals by

Elders for language preservation projects are scattered throughout the *Turnivut*

documents. One proposal, in particular, was broad in scope and summarized the

situation with urgency. It is presented on the following page.

Good knowledge of one's language is a fundamental to the development of an individual's mind and to the balance of a society. In Nunavik, if the language itself is still widely spoken, it is degrading rapidly, as certain structures and parts of the vocabulary could be soon forgotten if they are not recorded and transmitted systematically. The spelling and syntax are also getting damaged, especially by the young users. If we do not act now, it will soon really be too late.

The complete knowledge of Inuktitut is still with the Elders of today. It is urgent for the younger users to have access to it. It is also urgent for professional translators to have sources of reference and teaching.

The Language Program aims at:

- re-organizing the Inuttitut language Commission;

- working with Elders and translators on the development of terminology as well as on the recuperation of language;

- building a computerized reference file on Inuktitut terminology, and gathering other relevant written material;

- organizing a network of language users, as well as setting up a Translators and Interpreters Association;

- diffusing the information through publications and other supports

- seeking long-term funding for the Inuit Language Commission and the Program as a whole.

We wish to establish this program in consultation with everyone concerned with the issue. The language question needs political support, now; it also needs individuals to get involved. We also wish to establish a good relationship with the Kativik School Board as far as this subject is concerned, as they are a major player in this field.

We welcome your suggestions, and would appreciate a letter of support to add to our supporting documents. Acquire information from Elders through requests of manuscripts, interviews, and other ways, to retrieve their knowledge to the maximum. 69

Figure 56: Inuktitut Language Funding Proposal

⁶⁹ *Tumivut* journal, Vol. 6, Spring 1995.

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Figure 57: History of Inuktitut Syllabics

This researcher has sought documentation of traces of the origins of the loss of

Inuktitut. He recovered the following documents from the Archives of the Department of

Northern and Indian Affairs thanks to the assistance of Donat Savoie. These documents

express the desire of the Canadian government of the time to educate and, indeed, fully

transform the language of the Arctic from Inuktitut into English. Although the Prime

Minister has recently apologized for the intensive re-education programs and abuses

suffered in Northern Canadian schools in the past, it is very unfortunate that the

government has recently cut all funding from the language program designed to

revitalize Inuktitut. Prime Minister Harper announced these cuts in 2006. As a result,

Tapisiriit Kanatami reported the following on its website.⁷⁰

ITK Condemns Aboriginal Language Cuts: Seeks to Restore Inuktitut Language Funding in Next Federal Budget

Tuesday November 7, 2006 - Ottawa, Ontario - Speaking on behalf of Inuit Tapiriit Kanatami (ITK), the National Inuit Organization President Mary Simon today deplored the recent cut of the Aboriginal Language Initiative program of \$160 million.

"Our language and culture is at the core of our identity as a people and is a very delicate and sensitive issue," noted Mary Simon. "I have received a tremendous amount of feedback from Inuit on this issue. We know from our own experience how fragile the Inuktitut language is. English and French may be the official languages of Canada, but in the Arctic our Inuktitut language in a variety of dialects is our first language and must be protected and enhanced if our culture is to survive. We received no indication that cuts of this nature were imminent. Despite the Governments explanations as to why this funding was eliminated, the result is still a massive reduction to Aboriginal languages programs.

"I am writing to Canadian Heritage Minister Bev Oda to ensure our position is clearly stated for the record, and to work toward making sure funding for Inuktitut language initiatives that truly work and benefit Inuit are restored in the next federal budget," said Mary Simon. "In addition, we encourage the Government of Canada to equally support the protection and development of other Aboriginal languages."

⁷⁰ (<u>http://www.itk.ca/Media-Release-Archive/2006/press-archive-2006-index.html</u>).

Further documentation demonstrates the increased need for the Internet in language and cultural preservation. In a document, again taken from the *Tumivut* journal, the Elders once more expressed their concern, this time with a proposal to the Avataq Cultural Center and the Government of Québec to initiate the use of the Internet in language preservation.

Good knowledge of one's language is fundamental to the development of an individual's mind and to the balance of a society. In Nunavik, if the language itself is still widely spoken, it is degrading rapidly, as certain structures and parts of the vocabulary could be soon forgotten if they are not recorded and transmitted systematically. The spelling and syntax are also getting damaged, especially by the young users. If we do not act now, it will soon really be too late.

The complete knowledge of Inuktitut is still with the Elders of today. It is urgent for the younger users to have access to it. It is also urgent for professional translators to have sources of reference and teaching.

The Language Program aims at working with Elders and translators on the development of terminology as well as on the recuperation of

Language (through technology) including:

(1) Building a computerized reference file on Inuktitut terminology, and gathering other relevant written material;

(2) Organizing an (online) network of language users.⁷¹

Documents such as these assisted the researcher in developing a deeper

understanding of language issues in the North. Written and textual documents are not

the only form of records examined, however, and Internet archives are important and

discussed in the next section. Further information concerning the dominant spoken and

online languages was gleaned through the web archives summarized in the following

discussion.

The current state of Inuktitut spoken in Nunavik can be shown through online

archival data by means of Statistics Canada website material. In this section of the

⁷¹ *Turnivut* Journal, Vol. 7, Avataq Cultural Center, Montréal, Inukjuaq, Nunavik.
Statistics Canada (Statcan) Web Archive, a portrait of the current state of the Inuit, and

of Inuktitut, can be shown.72

Of the 1,172,790 people who identified themselves as an Aboriginal person in the 2006 Census, about 4 percent, or 50,485, reported that they were Inuit. This was a 26 percent increase from 40,220 in 1996. Large percentages of Inuit are in the youngest age groups. While over one-half (56 percent) of all Inuit were aged 24 and under, about one in three non-Aboriginal people (31percent) were in this age group.

This statistic shows the enormous importance of the youth for the Inuit

population. It bears repeating that over one-half of the Inuit population is under 24

years old!

In 2006, just over 32,200 Inuit, or 64 percent of the total, reported Inuktitut as their mother tongue, down from 68 percent in 1996. (Mother tongue refers to the first language learned at home in childhood and still understood by the individual at the time of the census.)

Also on the decline is the proportion of Inuit who speak Inuktitut at home, the

best place to pass on the language to younger generations. In 2006, about 25,500 Inuit,

50 percent of the total, reported Inuktitut as their home language, down from 58 percent

in 1996. (Home language refers to the language spoken most often at home by the

individual at the time of the census.)

A higher percentage of Inuit (69 percent) reported that they spoke Inuktitut well

enough to carry on a conversation, although this, too, was in a decline from the 72

percent in 1996.

Inuktitut was spoken equally by Inuit in all age groups. About 7 in 10 young,

middle-aged, and older Inuit could converse in Inuktitut.

⁷² (http://www.statcan.ca/Daily/English/080115/d080115a.htm).

inuktitut as moti	her tongue ¹	Inuktitut as hor	ne language ²	Knowledge ³	of Inuktitu
1996	2006	1996	2006	1996	200
percentage					
68	64	58	50	72	6
79	78	69	63	84	8
20	22	9	7	27	2
98	97	96	94	99	Ş
88	83	76	64	94	9
20	14	4	3	23	2
13	14	4	4	16	1
9	13	1	2	11	1
15	14	5	4	17	-
17	17	8	7	20	1
13	11	3	2	16	1
	1996 68 79 20 98 88 20 13 9 15 15 17	1996 2006 68 64 79 78 20 22 98 97 88 83 20 14 13 14 9 13 15 14 17 17	1996 2006 1998 percenta 68 64 58 79 78 69 20 22 9 98 97 96 88 83 76 20 14 4 13 14 4 9 13 1 15 14 5 17 17 8	1996 2006 1996 2006 percentage 68 64 58 50 79 78 69 63 20 22 9 7 98 97 96 94 88 83 76 64 20 14 4 3 13 14 4 4 9 13 1 22 15 14 5 4 17 17 8 7	percentage 68 64 58 50 72 79 78 69 63 84 20 22 9 7 27 98 97 96 94 99 88 83 76 64 94 20 14 4 3 23 13 14 4 4 16 9 13 1 2 11 15 14 5 4 17 17 17 8 7 20

Figure 58: Statistics Canada Inuktitut Survey

This statistical *I*nternet archival data shows a decline in all three categories: those Inuit who consider Inuktitut as their mother tongue, those who speak it at home, and those who have enough knowledge of Inuktitut to carry on a conversation. The health of Inuktitut is greatest in Nunavik; however, this is also on a decline. Also, tThese statistics are mostly measuring oral communication and not written communication. The writing system is not as widely practiced, especially online. The decline shown in the previous chart, coupled with the significantly younger population, points to the importance of continuing to develop communicative systems online that will not only encourage, but will make exciting the continued use of written Inuktitut online.

When interpreting the results of the data, several elements continually recur to such an extent that they bear mentioning as patterns. The elements included in this interpretive section are based on notes taken in the field. It contains impressions that have been developed qualitatively while examining the correspondences between survey and Internet data. It is in this sense that the concept of Mixed-Methods produces results, as conclusions are developed through not one, but several aspects of this Case Study.

Principle aspects of the previously-mentioned recurring elements are the concepts that (1) language is important for the Inuit, (2) the idea of Inuktitut is completely central to the Inuit experience, and (3) membership in this speech community in a large sense defines what it means to be Inuit. The Elders, speaking no English, have a great deal of difficulty coming to terms with the fact that many of their grandchildren are no longer fluent Inuktitut speakers.

The community of Inukjuaq is special in Nunavik, as it is considered by some to be one of the "healthiest" language communities in Arctic Québec. When searching for a community in which to conduct fieldwork concerning Inuktitut, this researcher was advised to seek out contacts in Inukjuaq, for "there are too many English speakers in Kuujjuaq." For this reason, the results given here should be seen as conservative; the speakers in Inukjuaq having a much more vibrant Inuktitut community than in the capital.

Creating a list of the interpretive elements remarked by this researcher has been helpful in conceptualizing the responses to the research questions. It is printed below.

- Language is important to the Inuit.
- Inukjuaq is special because so many community members still speak Inuktitut.
- Community is important to social cohesion and group dynamics, supporting healthy interpersonal relationships.
- Inuit are proud to be Inuit.
- Inuit are losing their language.
- Elders are concerned about the situation.

- Social problems are omnipresent and these are related to cultural upheaval.
- The Inuit are resilient, strong adapters of new technology.
- The Inuit use computers often and well.
- Even though, in Inukjuaq, the Inuit speak to each other in Inuktitut, they communicate with each other in English online, to the detriment of the language (especially in the youth).
- This is partly due to social networking technologies not being available in Inuktitut.
- A potential catalyst for improved intercommunity native language communication is the inclusion of language-specific social networking tools.

When asked what changes had occurred since their birth, one survey participant

replied:

When we were kids we hardly spoke English, kids today only speak English, I even tell little kids, Inuqualuratsi inuktitulauritsi (you are Inuit, speak Inuktitut!!) Some of my brother's friends refuse to speak Inuktitut, he is about 10, when they are around, his friends visit him and they are all speaking in English, his friends say "I don't understand it, I don't know what to say" (they are all Inuit).

It would be naïve to believe that the Internet is solely responsible for these

changes. Language shift of this magnitude is a result of a variety of factors. However,

one major issue is that of the educational system of the Kativik School Board, which

teaches Inuit children in Inuktitut for the first years, before switching to English or French

and drastically reducing, if not eliminating formal Inuktitut instruction at school (Louis &

Taylor, 2001).

More insight was offered by the webmaster of a community, who explained that for young people, using Bebo especially was a very important rite of passage. In order to

be considered "cool" and to gain status, it has become important for young Inuit to have

a "Bebo" or be "on Bebo." Although many young Inuit are playing games online, for

many, chatting and sending e-mails on Bebo has become an important part of

communicative discourse in the Canadian Arctic. For many Inuit who have recently switched from the Inuktitut immersion track to an English immersion, this activity is difficult, since English was not the language emphasized in the home and in the school.

Additionally, the focus on Bebo may create the impression that English is more important than Inuktitut, even when communicating with other Inuit. The combination of Bebo and MSN create a powerful argument for the superiority of English and the relative irrelevance for Inuktitut insofar as communication among Inuit is concerned. It is the purpose of this research to posit an argument for the attention to further development of localization tools for the purpose of increasing native and first-language social discourse online.

In the experience of this researcher, the language of the Inuit remains Inuktitut. However, it is threatened in such a way as to appear obvious—even to this observer who was only a temporary member of the community. While living in Inukjuaq, all Inuit in this community communicated with each other in Inuktitut, and in English when the words were not available in Inuktitut. However, it was noted on several occasions that young people used a great deal more English than their Elders. With regard to the Internet, most Inuit users browsed the web in English, as this language was the language of the most-used website by those interviewed; namely, <u>www.bebo.com</u>. When sending e-mails, the writings are in a combination of English and Romanized Inuktitut (qaluijapaitituk). During the time spent in Inukjuaq, a blog was kept recording the experiences of this researcher.

Throughout the fieldwork in Inukjuaq, all Inuit in this community, when speaking with each other, were observed to be speaking in Inuktitut together. English use was usually initiated with this researcher and with other qablunaat. However, when an attempt was made to speak in Inuktitut, this was happily accepted. Many young people were eager to speak in English and did so at every opportunity. The Elders were unable to communicate in English and therefore the Inuit translated words that this researcher could not understand.

That said, and regardless of the spoken language between Inuit, the written

language online is English due to hardware and software constraints. From the

researcher's blog are the following quotes in regard to this aspect of the research:

I am called to the boats, we are ready to leave, one last thought that I had on this leg of the trip, about language, about how hard it is to get foreign language TV/news/programming in the U.S. and Canada (I pay \$24.95 per month to get one word of Japanese on our TV, the French channel is similarly priced, ditto for Chinese), but English is heard on every single TV and radio I hear up here. I think of what I am told, that current media realities are "realism," this can't be changed, and I hear about idealism of the academy, but I would infinitely rather hear the silence and peacefulness and Inuktitut that I hear today than the English-language advertising that assails me when I head back to town. When I asked my tupiq-mates how they felt about being Inuit, they said "Lucky." When I asked where they would rather be, in town or on the land, they all said "on the land." We head off on the boats and wave goodbye to the grandparents.⁷³

Although the spoken language is in good health, at least in the community of

Inukjuaq (albeit suffering more elsewhere in the Arctic), the children are spending much

more time reading and writing in English online than developing, reading, or working in

Inuktitut. This will have detrimental effects on the grammatical structures and knowledge

of literature of the region.

⁷³ (www.timpasch.com and www.timothyjamesinseattle.blogspot.com).

Third Research Question

R3. To what extent is social networking being used in Nunavik?

The webmaster, F. Okalik,⁷⁴ confirmed the survey results showing that Bebo and

MSN were the two most popular online websites for Inuit youth. However, he additionally

expressed dismay that these sites were not available in Inuktitut. The few sites that were

optimized for Inuktitut were lauded:

When we use the Makivik, (www.makivik.ca) they give us the choice to use whatever language we like, I like having the choice...(however), they (Inuit young people) are mostly communicating through MSN or BEBO, BEBO is more popular, I would place them half and half, msn.com is even for chat, BEBO is for making a website and writing to friends...

When asked about protections for the Inuit youth, We have set up a firewall here, configured to detect looking on unwanted websites, like violence, but not for language.

One of the most insightful statements was relating the popularity of the computer terminals and the social networking websites to the books in the library (which were extensive and were in English, French, Inuktitut, and other languages as well). When asked to compare the use of books to the terminals, this researcher was told that:

Books are hardly used, mostly the Internet is popular.

A short series of questions were asked during this session of the Bebo users in

the library who were at least 18 years old, and these are printed below. One aspect of

this research that proved problematic was the restriction on interviewing any Bebo users

below 18 years old. In this researcher's opinion, it would prove beneficial in future

research to conduct surveys related to the Internet use in the Arctic with questions asked

⁷⁴ All names used are pseudonyms. No personal records were recorded in compliance with IRB Human Subjects Division, University of Washington. (http://www.washington.edu/research/hsd/for_rs.php).

to young people under 18; there is important information regarding the Internet to be

learned from the youngest users.

Q: Why do you use English on Bebo if your friends are Inuit?

A: Because we can't type in Inuktitut, we don't know HOW!!!! We have never been taught how to use it on a computer, only KSB knows, but they never tell us...

Q: What language do you like speaking better?

A: (cheering) INUKTITUT!

A: (from parent): Some of the kids, speak mostly English, they always use English with each other, because of the parents, cartoons are in ENGLISH...nobody watches the French channel here but everybody is English on Bebo.

During this researcher's fieldwork in Inukjuaq, it was observed on numerous

occasions that Bebo was the software of choice for social networking. This was

observed at various locations in the village and throughout the interactions with the Inuit

during various discussions and encounters. The blog recorded by the researcher also

contains several references to this fact.

I noticed that the room was relatively full of computers, there are about 20 modern Dell computers in the room, with a large router to handle all of the Internet connections. No one was reading books, everyone was online. Most of the computer users were young, no one was over 20, and many were under about 12 years old or so. As I walked past the screens, I could see the "BEBO" logo almost everywhere. Music was playing, everyone was typing furiously away. No one was reading books, only a few magazines. The books in the library are for the most part in English, after that there is an extensive French section, and the Inuktitut section is very small, mostly academic texts and journal publications. There are no books on Inuktitut grammar. (I looked for a long time.) The English books contain a mix of literature and popular books, there is a good selection, and French books seem to be literature-based. The online connection was painfully slow, due to the demands on the server.

Finally, with regard to the Internet being used online, further journal notations

include:

Younger sister and her friend are talking about Bebo, this is social networking, I ask if they like computers, I am impressed by their knowledge, they like msn.ca for chat, but Bebo is how they stay in touch and get to know other Inuit from other communities, they do not like MySpace, Bebo is the way to go for them, but they cannot type in syllabics on Bebo they say, they use English...They both seem very computer literate.

Fourth Research Question

R4. Does alternate language use online adversely affect Inuktitut language ability?

Consistent alternate language use will shift the focus of language to the new

language. The fact that many Inuit are using English online, especially young Inuit in the

phases of language and the formation of identity, is creating a social movement toward

further English use and a general loss of Inuit cultural identity.

In Saussure's schema this is so, both for the individual sign and for the collection

of signs, and for language as a whole.

Langue, the system of a particular language, is the expression of a social force, both by making the arbitrary connection and in sustaining it in convention (Saussure, Bally, Sechehaye, & Riedlinger, 1986).

A ramification of this question is related to the adverse effects of alternate

language use for the Inuit. For many young Inuit, the essential Internet communication

tool and rite of passage, Bebo, seems to be very safe and not an element of concern.

Unfortunately, as a recent event suggests, the safety and security of Bebo is, in

actuality, an area of high concern.

On May 21, 2008, users in New Zealand were given access to other user's accounts.⁷⁵ As reported in the *New Zealand Herald*, the following day, telephone numbers, addresses, personal letters, and financial information were made available at random to a variety of other users. This is not an isolated incident, as a host of similar situations have arisen on the other major social networking servers of MySpace and Facebook. As a recent blog posted:

As published on the Jobmatchbox blog, according to a Facebook insider, "privacy controls at Facebook are non-existent." Any employee within the company has full access to your messages and account information. Technically, they can even login as you and impersonate you. This is not going to bode well for Facebook.⁷⁶

Incidents such as those mentioned in the previous example create worry for

Information Assurance consultants. However, for most Inuit, security issues seem to be

a nonissue. When visiting a local Inuit community library, this researcher inspected the

computers used and saw that all of them were running an outdated version of Norton

Antivirus which, in the opinion of this researcher, was offering inadequate protection.

The children who were using the systems commented on the slowness of the connection

speed. Much of this lag was caused by a series of spyware and malware on the

systems. Many start-up items were also clogging the machines.

⁷⁵ (<u>http://www.nzherald.co.nz/section/1/story.cfm?c_id=1&objectid=10511780</u>).

⁷⁶ (http://www.allfacebook.com/2007/09/facebook-security-breach-results-in-lawsuit/).

Policy Recommendation #8:

Recognize the importance of Information Assurance and online security. Begin actively training Inuit youth in proper online habits and protection. Realize that the economic safety of Inuit businesses will depend on the security of the networks. Teach Internet safety in schools, educate youth of the importance of passwords and privacy, especially in social networking sites.

All of the young people who were using the systems were typing in English, and

when the webmaster was asked about why children and students were not using the

Inuktitut fonts (which are available), the reply was that:

Even though we have downloaded the Inuktitut fonts, the kids don't use them...only once in a while when they write...

As some of the long responses to the survey demonstrated, typing online in

Inuktitut is not being underused due to a lack of desire, but rather due to a series of

technical difficulties combined with the lack of support for the most popular websites.

Because we can't type in Inuktitut, we don't know HOW! We have never been taught how to use it on a computer, only KSB knows, but they never tell us...

Judging from the numerous conversations held with the Inuit family with whom

this researcher lived, talks with government officials, web designers and educators,

mothers and fathers of Inuit children, members of the Avataq Cultural Center, and many

others, this researcher is convinced that the constant influx of English media, the focus

on the Internet for young people is definitively acting as an adverse influence on the

Inuktitut language in Nunavik.

If this researcher were to attempt to empirically prove this point, a quantitative experiment would need to be initiated with pretests of young people now, as well as control groups of young people who would be daily exposed to an English-based Internet environment and compared to another group of children who would be isolated from such Internet exposure. It is the opinion of this researcher that such a study would be impossible for a number of reasons, not the least of which is the relative impossibility of creating a group of individuals who would be isolated from the Internet.

Full wireless broadband Internet in Nunavik is somewhat of a Pandora's Box, in that no one will be willing, and rightly so, to deny themselves a piece of this new influx of information and sensory stimulation. Conversely, the immersion of the researcher in the community, the survey data, the lengthy conversations with many members of the local community, and users online, has led this researcher to believe, as previously stated, that the focus, especially for young people on a social networking forum that is exclusively offered in English, is detrimental to the development and retention of Inuktitut in Nunavik.

Policy Recommendation #9 Consider the implementation of "Inuit Content" laws for media.

Canada as a whole, and the province of Québec, in particular, have Canadian and Québec Content laws ensuring that a certain percentage of media content is created or in some way influenced by Canadians and/or francophone artists. In a similar way, Inuktitut should be approached with "Inuit Content" policies, ensuring that television, radio, and the Internet are regulated by these principles which will, in turn, greatly affect the health of Inuktitut.

REFLECTION ON MIXED-METHODS CASE STUDY RESEARCH

At this point, the researcher would like to pause and re-examine the choice of Mixed-Methods when exploring this multifaceted, interdisciplinary Case Study issue. As initially intended, the issue at hand, the Internet in the Canadian Arctic, is an issue possessing numerous layers of meaning, and this researcher has realized that inquiry into one aspect often opened doors of inquiry into related areas.

In this sense, the choice of Mixed-Methods was, in retrospect, optimal for this exploration. A simple survey could not have captured the full nuances of understanding that were gleaned during fieldwork, for example. In addition, Internet archives complement textual documentation with the inclusion of direct observation. For these reasons, a synergy of methods has proven to be the means by which the policy recommendations have been determined.

One question that has arisen in dialog between this researcher and educators and security consultants is the potential for "linguistic firewalls" or censorship of certain languages online. In this sense, as occurs with street signs in Québec, for example, languages that are considered a threat to the regional language could be minimized or completely removed. A language firewall, for example, could block access of users to certain sites and only allow access to Inuktitut-based content. In the opinion of this researcher, such a "censorship approach" would be counter-productive to the issue of Inuktitut online in the Canadian Arctic.

The issue at hand is not to stop English-based access nor to block the continuing education and learning of English for Inuit users. This would have negative impacts on the economy of the region and would effectively block much content from Inuit users. As opposed to taking such a censorship approach, it is the opinion of this researcher that a positive, proactive effort of vitalizing Inuktitut online and making it more exciting, engaging, and easy to use for Inuit youth, as well as older users, would be the most effective way of vitalizing Inuktitut and other minority languages online.

ENHANCING INUKTITUT ONLINE AND FUTURE RESEARCH

Based on this research, it is believed that the social networking site Bebo is firmly entrenched in the minds of the Inuit youth, and that this site is worth focusing on. Although there are a variety of additional sites available through the government and private organizations, which offer services and links in addition to language training, the most popular for the youth is undoubtedly Bebo.

For this reason, this researcher has initiated an effort to create plug-ins for Bebo that can embed Inuktitut tools directly into the social networking host. These tools would (1) allow the on-screen look-up of Inuktitut words while social networking, (2) allow the translation between English and Inuktitut, and (3) enable the correct rendering of Inuktitut fonts, thereby eliminating the discrepancy between Nunavut, Nunavik, Greenlandic, and additional Inuktitut fonts that are causing issues in circumpolar Inuktitut as it is displayed digitally.

Plug-ins are different from standalone programs in that they serve as enhancements to existing hosts. The Firefox browser, for example, allows the enhancement of its capabilities through the installation of plug-ins created by third parties. ⁷⁷ The creation of plug-ins, which would tightly integrate Inuktitut language tools into Bebo, is a distinct possibility. The actual creation of plug-ins for this platform has been established and the programming language "Ruby on Rails" is used for this coding method. "Rails is a mature framework for developing Web applications, with many

⁷⁷ (<u>https://addons.mozilla.org/en-US/firefox/browse/type:7</u>).

focused libraries and plug-ins and a large and lively developer's community" (Heitmann & Oren, 2007).

In May 2008, a framework for the development of social networking plug-ins for Bebo was released to the open-source community by Intridea Corp.⁷⁸ This platform, called Beboist, enables plug-ins to be embedded into the user experience of the social networking engine. This creates an API, or Application Programming Interface, which in essence, can "translate" the instructions given by a user into a different output.

In this instance, it can translate the English keyboard input of a user into a standardized Inuktitut for rendering in Bebo. Additionally, it could additionally integrate the Nunasoft web tools directly into the Bebo interface, bringing the power of these language interfaces to the "coolness" of Bebo for Inuit youth. This is the first part of the proposal; namely, the Bebo plug-in concept.

The second, more ambitious project, is the creation of an API that integrates with the operating system at a low level, interprets the input from any source (such as an Inuktitut syllabic keyboard), and then inputs a universal Inuktitut font. This form of API, optimized for Inuktitut or for additional Aboriginal and minority languages, is superior in some ways to a simple plug-in, because it is system-wide as opposed to applicationlinked.

A system-wide operating system API will be useable with any application, not only Bebo. The Bebo plug-in, on the other hand, will be more important in the short term due to the sheer numbers of users online. Once a Bebo plug-in is established, an integrated API would be advisable.

^{78 (}www.intridea.com).

The vision of this researcher for the ideal Bebo plug-in would be a heads-up display (HUD) that can be invoked by the user upon demand while using Bebo. This could be accomplished with a keystroke or by clicking on the "Inuktitut" button embedded in the site. This would call up the language tools, such as "Inuktiboard," allowing the user to enter the Inuktitut word in Romanized letters, for example.

The Inuktiboard refers to the standardized dictionaries of Inuktitut of the Avataq foundation, and it cross-references the text with the possible meanings in Inuktitut. A series of choices is offered to the user, who can choose the syllabic phrase which matches the Romanized letters. The choice is made, and the output is chosen and rendered in the universal Inuktitut font, standardized across the circumpolar Arctic, with full ai/pai/tai inclusion, and no Nunavik/Nunavut/Alaska Inuit/Greenlandic Inuktitut discrepancies. The rendering engine of this plug-in is font-independent, meaning that it will not matter which font is installed in the user's computer for it to render itself perfectly every time. Currently, this is a major issue, with many Inuktitut websites and chat messages/e-mails/web posts rendering incorrectly, depending on which font is installed on the user's computer.

Additionally, if the user does not understand a word in Inuktitut syllabics, this text can be copied and placed in the plug-in for a reverse translation from syllabics to Romanized Inuktitut, and even to English or French. In this way, cross-linguistic education can be achieved, keeping Inuktitut in the loop and allowing for the simultaneous development of the alternate languages.

Although the next suggestion is currently not feasible, the API previously suggested would easily integrate with the microphone in a computer. It is currently possible for the API to receive input from a microphone. Although Inuktitut voice recognition software is currently not available, the possibility is there. Since Inuktitut is primarily a language for oral communication, there is nothing preventing the possibility of transcribing syllabic Inuktitut from speech. In this way, Inuit users could have full syllabic transcription of spoken conversations, stories, chats, and e-mails. This technology, while still undergoing optimization, has existed in English for several years and is currently in existence. "Dragon Naturally Speaking" ⁷⁹ software has become quite powerful in transcribing English. There is nothing preventing similar software being integrated with Inuktitut dictionaries and pronunciation lexica.

In order for Inuktitut (and other minority and Aboriginal languages) to remain vibrant, a proactive approach must be taken. Technologies cannot simply be passively received, but must rather be adapted to most optimally promote the retention and encouragement of traditional forms of communication. Web tools such as those on <u>www.nunasoft.com</u> offer an alternative interface, which can help to create interstitial spaces and communities. As opposed to mere archiving, web tools are vibrancyenhancing technologies that can encourage users to participate more actively in their linguistic communities and enhance cultural exchange.

Considering the amounts of funding that the Canadian and American governments are investing in the preservation and digital archival of Aboriginal and minority languages, a more thorough investigation into the efficacy and feasibility of instituting web tools to promote linguistic vibrancy and diversity on a wider scale is warranted.

⁷⁹ (http://www.nuance.com/naturallyspeaking/).

Additional research is needed and a larger qualitative survey and Mixed-Methods Case Study, including the collection of data related to a quantitative survey, will offer further insight into alternate technologies for preserving minority language and cultural capital.

BROAD IMPLICATIONS OF THE FINDINGS

The implications of the adaptation of communication technologies to minority languages and cultures are far-reaching for small languages groups worldwide.

When looking at the broader field of Communication and the history of Communication Technology in particular, questions emerge related to the feasibility and applicability of the concepts involved in proposing the Internet as a vitalizing force for culture. As each iteration of Communication Technology emerges into mainstream use, a sense of techno-optimism may also arise, potentially giving new adopters a sense of increased connectivity and a belief that this new technology will be "the one" to allow freer cultural expression and identity-building. There is often a conflict between the interests of the media content creators and advertisers, and the end-users. In this particular case of the Internet in the Canadian Arctic, a potential cultural and economic conflict exists between the Makivik Corporation and the Kativik Regional Government, on the one hand, and big business and advertising interests desiring to penetrate the markets of the North.

Citing the example of radio, Kielbowicz writes:

By the mid-1920s, however, broadcasters labored to establish radio advertising by aiming contradictory messages at two audiences. For advertisers, broadcasters promised that direct commercial appeals would be powerful and effective; for radio listeners, broadcasters promised that advertising would remain unobtrusive and harmless (Kielbowicz, 1995). In this example, the history of radio shows the similarities between the technologies of radio and the Internet. The regional governance in the North feels that the installation of the Internet will be greatly helpful to the Inuit of the region with no specific policies in place to protect the language or culture as of this writing.

Conversely, content creators (Bebo and other English-based media), are gaining a foothold in the North and it will not be long before Inuit-targeted online advertising begins to emerge. Although the optimism of the Internet is in place, with predictions of "cyber-utopia" (Nakamura, 2002), the Internet may be another repetition of past technologies such as the telegraph, radio, and television, with no impact on the preservation of the culture. Rather, the Internet will further contribute to its dissolution in the flood of majority and mainstream media.

One potential solution might be a policy proposal for Inuktitut Content Creation laws. In this sense, as with Québec and in Canada as a whole, Content regulations define specific guidelines for the quantity of Canadian content that must be played on certain stations in order to comply with Canadian Cultural Content Standards.

A discussion of these concepts can be found in Chapter II in the brief history of Canadian Media with a focus on the report by Barney (2005). A concept of Inuit Cultural Content based on the Internet as well as television and radio would provide a media regulation framework. Rather than focusing on eliminating all influx of foreign media (which this researcher feels is a negative, censorship-based model), this Content Creation Model would serve to increase the production and cultural-linguistic content of media.

220

APPLICABILITY BEYOND THE ARCTIC

Although the Inuit have been the focus of this research, the applicability of plug-in technologies goes beyond the Canadian Arctic. The concept of modular software used as extensions of Communication Technology can be applied to a variety of techniques and methods for Communication research and methodology. For example, when researching a phenomenon on the Internet, the sheer immensity of websites can be problematic for Communication researchers. Plug-in tools and add-ons enable the researchers to customize their research tools to the situation and target the data more precisely.

This concept is illustrated in an article entitled "*Groupware Plug-ins: A Case Study of Extending Collaboration Functionality Through Media Items*" (McEwan, Greenberg, Rounding, & Boyle, 2006) in which plug-ins can be used to facilitate communication between researchers. The plug-ins can serve as an interface for researchers working together across distances. Similar to the web tools proposed as Bebo plug-ins for the Inuit, the "groupware" plug-ins could serve as bridges between collaborators in which (1) files could be dropped for sharing, (2) video and audio could be placed for collaborative coding and editing, and (3) language tools could be used for simultaneous translation.

A plug-in such as those used for the Inuit works toward easing the use of syllabics between community members. However, if the community were a group of researchers working together on a project, then the stackable and customizable nature of the extensions would serve to add functionality to software, browsers, and social networking spaces. Plug-ins can continually update data to keep users synchronized with each other in the group. This ability can be essential for Communication researchers working on coding for Content Analysis in a Quantitative research setting using SPSS or SAS, and also for Qualitative coding for meaning in large textual documents in atlas.ti or Nvivo.

At this time, there are no plug-ins available for these Communication software packages. However, adding such functionality would enable collaboration, language extensions, fast exchange of data, live chat, translation, and more as third-party developers code them. Plug-ins are ideal for adding functionality to a research setting in that the they do not necessitate a complete redesign of the software or website—they can be added afterward and stacked in order to supply multiple benefits.

GOVERNMENT POLICY RECOMMENDATIONS

In this study, the researcher has noted the large variety of government websites available to the Inuit in Inuktitut. Unfortunately, many of these sites are not nearly as popular as the more exciting and functional English-based sites such as Bebo. The recommendation of this researcher for the Regional Government of Nunavik leans toward a recognition of the reality of social networking in the North as a communication tool. Rather than attempting to shut such systems down, they should be encouraged. A full summary of policy recommendations is listed at the end of this section.

The most essential point of such encouragement, however, should be in the inclusion of exciting, easy-to-use, and powerful language plug-ins that will enable users to translate, encode, and properly display Inuktitut syllabics. Users unsure of the proper spellings could enter approximations into the tools and have corrected syllabic Inuktitut emerge (possible as of this writing). Words could be translated immediately and the popularity of this social networking site could be utilized to the benefit of the language.

With regard to the fonts, the current problems related to Inuktitut fonts need to be recognized and corrected as soon as possible. The ideal solution to this issue would be a universal font that would work across the circumpolar world, ideally housed in a plug-in uniting circumpolar Inuit, not only in Nunavik but across to Alaska and Greenland as well. Variances in local dialects can be rectified with the plug-ins, which can use Nunasoft's Inukticode to translate between dialects. A unification of the fonts and an integration of Inuktitut tools into the most popular social networking sites are the recommendation of this researcher.

PERSONAL LETTER FROM INUIT BEBO USER

Perhaps one of the best summaries and conclusions of the importance of using technologies to foster first-language preservation and communication is also one of the most realistic. While corresponding with an Inuit Bebo user and Inuktitut translator, this researcher received the following letter. It summarizes the importance of this work, and also emphasizes that much more in addition to this is necessary:

I think that (the online) resources to enable easier use (of) syllabics would help....however i think that the problem goes much farther than Bebo's ability to facilitate the Inuktitut font, although that would be a great step, to at least give the user the option to write in Inuktitut.

The steady loss of the Inuktitut language is definitely moving at a much faster pace than are the attempts to preserve the language...the elementary/high school curriculums that are eventual goals of the Nunavut government still haven't moved beyond the goal setting stage...Inuktitut in the workplace isn't as common as you'd like to see, and a problem with Inuktitut being used on the Internet has, I think, greatly not only to do with the flood of information available in English, but the fact that Inuktitut has always been an oral language, and was only converted to a written language when the missionaries came, and taught them syllabics, so that the word of the Bible could more easily be taught...

Now, for me personally, it is much easier to write in English, because it is faster to read and write in English, because that is what i am exposed to on a daily basis (especially living in a city).

Several essential points are made in this salient letter. While this user feels that the inclusion of Inuktitut syllabics into social networking would help, she also feels that it will not be enough to stem the loss of Inuktitut. The fact that Inuktitut is traditionally used primarily in an oral sense is a compelling argument for the use of complementary voicebased technologies in addition to written tools (fonts, forums, blogs, e-mail), including such future directions as voice memos, embedded video, visual and auditory home pages, and other audio/visual plug-ins such as CSS, Java, and Flash, in order to preserve and empower minority languages in as dramatic a fashion as possible.

The inclusion of Inuktitut language tools and technologies into existing social networks will not be the only manner in which the language will be preserved. However, it will be an important aspect of continuing to encourage and transmit language and cultural values to the next generations of Inuit and other First-Nations communities. Indeed, based on the increasing numbers of young people who are using these services, it will be equally important an to any community in which language and culture is threatened through majority-language use.

RELATIONSHIP OF FINDINGS TO CONCEPTUAL FRAMEWORKS

Before beginning the data acquisition phase, a series of conceptual frameworks was examined and used as a foundation in developing the research design. These frameworks laid the groundwork for a concept of linguistic and cultural erosion through the Post-Colonial theorists examined, in addition to works related to race theory, hegemony, and discourse online. These concepts also served as a base for the research. However, the underpinnings of the work are more firmly rooted in the work of Inuit theorists who provide the impetus for the preservation of Inuktitut and the increased resistance to encroachment on Inuit territory—geographic, social, or linguistic. The findings have reflected both the Post-Colonia and the Inuit aspects of these theories. The survey results prove this fact in that such a large majority of websites visited and languages used online reflect the majority culture. It builds on the ideas espoused by Nakamura, Gramsci and Foucault—in that minority cultures can easily be subsumed by larger forces if resistance is not put in place.

Through the work of these theorists, the continued use of Inuktitut, and the continued interest in and use of Inuktitut online should be perceived as a threatened resource that requires swift protection in order to preserve its continued existence as a form of communication in the Canadian Arctic. Even more important than the survey data reflecting the erosion of Inuktitut, however, are the relationships of the interview and qualitative data with the theories and ideologies of Watt-Cloutier, Mary Simon, and Will Kymlicka. These theorists advocate the increased resistance of the Inuit to external forces, working toward the goal of a stronger Canadian Arctic communicative society.

With the increased movement North due to issues of global warming, resource extraction, and territorial acquisition, the cohesion of Inuit society in the face of these threats is of primary importance. If the world desires responsible management of the Arctic, potentially leading to mutually beneficial arrangements of transport, energy, and resource management, then the vibrancy and leadership of the Inuit, the people the most attuned to the Arctic, should be paramount as well.

It is for this reason that the opinions of the Inuit shown in the data results, especially those related to pride in Inuit identity, desire for increased online Inuktitut use, and demand for localization and optimization of social networking tools to the Inuit way of life be related with the Inuit theorists' ideas discussed in Chapters I and II. It was through relating the Inuit voices found in this research through the ideas of the Inuit theorists, that the social policy recommendations in this chapter were developed.

SUMMARY OF POLICY RECOMMENDATIONS FOR SOCIAL CHANGE

Policy Recommendation #1: The Inuit must attempt to save resources as much as possible through the use of open-source software whenever feasible. The funds saved through this vast reduction in expenditure can be applied to Inuktitut localization and enhancement online.

Policy Recommendation #2: As much as possible, train local Inuit community members as Information Technology specialists, Information Assurance (security) consultants, and instructional and webmaster experts. Not only will this focus on local training bolster the economy, but it will also increase the awareness of Inuktitut online and reduce dependency on qablunaat experts from Montréal, for example.

Policy Recommendation #3: As much as possible, integrate Inuktitut technologies into software to such an extent that they are easy to use for the youth, increasing the excitement and "cool" factor, creating an environment for Inuktitut online that is easy to use as well as exciting. Increase Inuktitut web education in schools and teach Inuit children how to use Inuktitut online. This aspect of online education is very important.

Policy Recommendation #4: Realize that Bebo is the most popular social networking service in the North and integrate Nunasoft plug-in technologies into it. The web tools have already been developed, and Mr. Poncet has stated that the creation of a plug-in would be possible. The possibility of adding syllabic functionality, translation tools, and font universality is exciting for Inuktitut.

Policy Recommendation #5: A new universal Inuktitut font is required, and this font should be standardized throughout the Inuktitut-speaking circumpolar environment. This should include Nunavik, Nunavut, and all of the regions where Inuktitut and a dialect of such is spoken. The current state of written Inuktitut online is divisive and damaging for the continued use of Inuktitut in general. It is no longer sufficient to have a variety of fonts that improperly display varying sites, even government sites, online.

Although syllabics are not necessarily used in all of these regions, the fact that Inuktitut websites will display properly in everyone's browser is an important issue. Once this font is created and distributed, it should be posted online as the official Inuit font and integrated into the major operating systems.

Policy Recommendation #6: Recognize the incredible resource available in the Pirurvik Center and Tusaalanga, and actively promote the audio streaming technologies, integrating them into government websites and expanding the audio, video, and syllabic integration of Inuktitut into the Internet. These new interfaces and alternate streaming technologies should be incorporated into Bebo and social networking, with the ultimate goal of dramatically increasing the online exposure that young people have to Inuktitut.

Policy Recommendation #7: Increase the online communication with Greenland. Learn from their successful and vibrant retention of Inuktitut and build a social networking community integrating the tools and technologies mentioned. Begin online correspondence between Greenlandic and Nunavik Inuit and require each Inuit child to have a Greenlandic "pen pal" online, with all exchanges in Inuktitut (both video, audio, and written). **Policy Recommendation #8:** Recognize the importance of Information Assurance and online security. Begin actively training Inuit youth in proper online habits and protection. Realize that the economic safety of Inuit businesses will depend on the security of the networks. Teach internet safety in schools and educate youth about the importance of passwords and privacy, especially in social networking sites.

Policy Recommendation #9: Consider the implementation of Inuit Content laws for media. Canada as a whole and the province of Québec in particular have Canadian and Québec Content laws ensuring that a certain percentage of media content is created or in some way influenced by Canadians and/or francophone artists. In a similar way, Inuktitut should be approached with "Inuit Content" policies, ensuring that television, radio, and the Internet are regulated by these principles will greatly affect the health of Inuktitut.

FINAL WORDS

The voices of the Inuit contain knowledge and wisdom that is sorely needed during this tumultuous period for the Arctic. While working on this research, an enormous ice-shelf the size of Manhattan has cracked from the edge of Ellesmere Island,⁸⁰ demonstrating the beginnings of a vast era of climate change in the Canadian Arctic. The firm belief of the Inuit in the importance and necessity of the natural world in sustaining human life on this planet is relevant and necessary.

⁸⁰ (http://www.timesonline.co.uk/tol/news/environment/article4676815.ece).

In the years to follow, the Inuit voice will be tested and tried as commercial interests of all types attempt to divest the Inuit of their resources. Time is of the essence for the Inuit to master the technologies required for them to transmit their unified voices on the subjects of climate change, cultural and linguistic preservation, sustainable economic development, and a general rejection of unimpeded International traffic into their lands. If the research and recommendations in this work have helped to focus the voice of the Inuit toward these goals to even a small degree, then they have been successful.



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Gouvernement

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APPENDIX A: TRANSCRIPTION OF DONAT SAVOIE INTERVIEW

Original summary of interview conducted by the researcher with Mr Savoie in French (The English translation is provided on page 151.)

T = Timothy Pasch

D = Donat Savoie

D: À propos du site www.Nunavikgovernment.ca, combien de personnes visitent le site par semaine? 1000! On croit que 95 pourcent sont Inuit. Qui utilise cela? Moins souvent les agespour la plupart ce sont les jeunes. Parmi la population, 50percent a moins de 18ans. Quand j'ai vu cela j'ai pensé à toi! Mets les deux ensembles. « Mentalité de technicien », ton travail à Inukjuag : parler de cela! Mettre le modernisme pour aider la langue.

Parler avec les jeunes, accumuler les idées du terrain! Les jeunes vont te dire. La bibliothèque publique, c'est là où cela se passe. Parle avec ta famille, parler avec Andy, çela va bien aller. Cela va être bon pour ta thèse. Parler avec les gens.

T: Comment ça va avec l'Inuktitut, dans l'Arctique en ce moment au Canada?

D: Nunavut ça va mal, Inuvialuit, Labrador c'est en peril, Nunavik cela descend. Ils vont bientôt passer des lois sur la langue, et ils se sont inspirés sur le Québec. Prend comme modèle la loi 101 du Québec.

T: est-ce que c'est une bonne idée?

D: Oui il le faut! Ce qui est arrive, c'est que quelques personnes trouvent que la loi ne va pas assez loin! Entre la loi et la réalité, il y a une marge! Il faut commencer avec cela, puisque les choses vont pas à pas. Commence à changer l'affichage. It faut changer des mentalités à Iqaluit.

T: À propos de l'Inuktitut, est-ce que c'est en bonne santé pour l'avenir?

D: C'est en péril! Nunavik et la région en meilleure santé linguistique des 4 régions du Canada, Labrador, Nunavut, Nunavik, Western Arctic, la plus en santé est le Nunavik.

T: à cause du Québec, avec la loi 101?

D: Le seul phénomène qui existe, les gens sortent de l'école trilingue, 3 langues : au Québec, c'est spécial. C'est là que l'Inuktitut est le plus en santé. C'est quelque chose, un phénomène- le phénomène du respect. Pourquoi est-ce que les gens parlent 3 langues?

C'est puisque le Québec respecte le français et le fait que la culture est intégrale

Quand tu vas à Inukjuaq- va à la bibliothèque parler avec les jeunes en Inuktitut. Pour cela, tu parles notre langue, c'est important.

Demander voir le Maire, il est très sympathique et un jeune brillant. Son père est Anglais, il a appris Inuktitut par la suite, Il parle Inuktitut couramment. Bonne chance!

APPENDIX B: RADIO AND TELEVISION STATIONS IN INUKJUAQ

For Inuktitut programming on radio, the option in Inukjuaq is CBC 97.1.

For Inuktitut on television, there is only channel 4, APTN (Aboriginal People

Television Network). Languages of transmission are in Inuktitut and Cree, and "They

show movies in Inuktitut."

Channel 2	Radio Canada (French)
Channel 3	Cartoons (English)
Channel 4	APTN (Inuktitut, Cree)
Channel 5	C News (English)
Channel 7	RDS Sports (French)
Channel 8	French Québecois Comedy (French)
Channel 9	Téléjournal Radio Canada (French)
Channel 10	AccessCanadian Kids (English)
Channel 12	TVA Montréal (French)
Channel 13	CBC English Kids (English)
Channel 17	Canadian CHCH News Channel (Ontario)
Channel 18	Detroit Channel CBS (English)
Channel 19	ABC (English)
Channel 20	TYRA (English)
Channel 21	City News (Toronto) (English)
Channel 22	Children's (Mr. Rogers) (English)
Channel 23	WDIV (Detroit, U.S.) (English)
Channel 24	CTV News (English)
Channel 25	CBC Newsworld (English)
Channel 26	TSN (Toronto Sports Network Canada) (English)
Channel 27	Discovery Channel (English)
Channel 28	American Kids Cartoons, Kimtastic, (English)

- Channel 30 Bravo! (English)
- Channel 31 HBO (Movie Channel) (English)
- Channel 32 Christian Channel (Christian/Catholic Mass) (English)
- Channel 33- Cartoons (English)
- Channel 34 Telemarketing (American) (English), (World Vision asking for donations)
- Channel 35 TLC (English)
- Channel 36 TBS (American/English)
- Channel 37 CNN (24-Hour News) (American/English)
- Channel 38 TSN (The Sports Network) (English)
- Channel 39 Disney Channel (English)
- Channel 40 CINEMAX (Movies) (English)
- Channel 41- HBO (Movies) (English)
- Channel 42 OLN (Exercise) (English, Canada)
- Channel 43 Treehouse (Cartoons) (English)
- Channel 44 Much Music (English)
- Channel 45 American (Telemarketing) (English)
- Channel 46 National Geographic (English)
- Channel 47 A&E (Arts and Entertainment) (English)
- Channel 48 Action (Nonstop Movie) (English)
- Channel 49 Scream ((English)
- Channel 50 NHLN (National Hockey League) (English)
- Channel 51 Razer (Music Videos) (English)
- Channel 52- "S" (Canadian Sports) (English)
- Channel 53 Canadian Comedy Channel (53)
- Channel 54 Discovery Kids (Corporate commercial channel aimed at children/heavy advertising, i.e. Transformers, Rice Krispies/ military show on a given day was American Navy Seals
- Channel 55 DIVA (English)
- Channel 56 SPACE (Science Fiction) (English)
- Channel 57 Animal Planet (English)
APPENDIX C: SURVEY QUESTIONS

Inuktitut Online in Nunavik

Page 1 of 2

Question 1. Which language is the most importa	nt for you when comm	unicating online with y	our friends? (chatting, e	mailing, blogging, social	networking).
Select one to one answers.					
C English					
🖸 İnuktitut					
E French					
Cother:					
Question 2. Do you use Windows (PC) or a Macir	itash computer more c	iten?			
U Windows					
Macintosh					
[] Linux					
Other:					
Question 3. Please answer the following question I use social networking sites like facebook, bebo, myspace	is from 1 (strongly disc 1 💮	agree) to 5 (strongly a 2 O	gree). 3 🕀	•	5
And the company and the second of the second s	1	2	3	4	5
I use email to communicate with my friends and family	0	0	Ø	0	0
	1	2	З	4	5
I use the Internet for shopping	0	0	0	0	0
		2	3	4	5
I mainly use Inuktitut online	0	Θ	0	0	0
	1	2	3	4	5
I mainly use English online	0	0	0	Ø	0
	1	2	3	4	5
t mainly use French online	0	Θ	Θ	Θ	Ø

Inuktitut Online in Nunavik

Question 4. Please rate your fluency in Inuktitut from 1-5 (1 is not fluent at all, 5 is very fluent)

Question 5. Please rate your agreement with the following statements from 1 (strongly disagree) to 5 (strongly agree) Required.

	1	2	3	4	5
The Web as it currently is will benefit Inuit and Inuktitut.	Θ	Θ	Θ	0	0
6	1	2	3	4	5
Social networking sites (like Bebo, Facebook, MySpace) help me to use Inuktitut more often.	0	Θ	Θ	0	Θ
สีขาของได้สาขาง พระการสมขาวของสมมัย สาขาย สมมัติสังเทศ จากสายสายการ จากการสาขาย สาขาย สาขาย สีสิณาจาก	1	2	3	4	5
Inuktitut is the most useful language for me online.	0	0	Θ	Θ	Θ
Винистринализите со со со ставарание со разникот со сили на насти на на	1	2	3	4	5
In the future Inuktitut will be used less and less by Inuit.	0	0	0	0	0

Question 6. In five years, which language will you use to communicate with your Inuit friends online? Why do you think so?

Required.

Question 7. Please answer the following questions with 1 (Strongly Disagree) to 5 (Strongly Agree)

	1	2	3	4	5
์ worry about security and privacy onkine (passwords, viruses, spyware)	Θ	0	Θ	Θ	Θ
i like social networking sites (Bebo, Myspace, Facebook)	Θ	0	0	Θ	Θ
l use Inuktitut online when emailing my friends	0	0	0	Θ	0
Question 8. Please answer the following question	ons from 1 (strongly d	isagree) to 5 (strongly a	igree)		
Der an der all					
Required.					

There should be more websites in Inuktitut	Θ	Θ	0	Θ	0
Annu reason and a second s	1	2	3	4	5
I wish I could use Inuktitut more often on the Internet	Θ	Θ	Θ	0	0

Page 2 of 2

	1	2	3	4	5
I wish there were an Inuktitut social networking place (like an Inuktitut Facebook, Myspace, Bebo)	0	Θ	0	0	θ
· · ·	1	2	3	4	5
It is easy for me to use Inuktitut syllabics on my computer	0	0	0	Θ	0

Question 9. Can you tell me why Inuktitut use is declining in the Canadian North?

Required.

	*
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Question 10. (For Bebo users) Why do you use Bebo, and what do you like/dislike about it as an Inuit user?

Question 11. The following questions are for Bebo users, please answer from 1-5, 1 (strongly disagree to 5 (strongly agree). Required.

1	2	Э	4	5
60	0	Ø	0	0
0	0	Θ	0	0
6	Θ	Ø	0	0
0	Θ	Θ	θ	Θ
θ	Ø	Θ	Θ	Θ
0	••••••••••••••••••••••••••••••••••••••	6	Θ	Θ
6	0	0	0	Θ
		1 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 2 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Question 12. How important is it to protect Inuktitut online? please rate your choice from 1 (not important) to 5 (very important) 0-----

Question 13. Where do you access the Internet most often? Required. () Home

O School O Friend's House O Work $\tilde{\Theta}^{\text{Library}}$

Other

Question 14. Please answer the following questions with 1 (strongly disagree) to 5 (strongly agree) Required.

	1	2	3	4	5
I am proud to be Inuit	Θ	Θ	0	0	0
I think that is is important to protect Inuktitut	0	Θ	θ	0	θ
I think that Inuktitut is threatened by English media (TV/Radio/Internet)	θ	Θ	Θ	Θ	Θ
I am interested in using more Inuktitut online	0	Θ	0	0	0

APPENDIX D: LETTER TO BEBO USERS

Ublakkut! Kanuippit? Kanuinngittunga!

My name is Timothy Pasch, I am a qablunaat student at the University of Washington, in Seattle. I lived in Inukjuaq last summer, and I have been studying Inuktitut for a few years. I am still a basic speaker, but I really believe that language is important!

Did you know that many languages in the world, including Inuktitut, might be in danger of disappearing in the future? I am very concerned about this problem, and I am working toward new technologies to help young people speak and use their native languages on the Internet.

As an Inuit Bebo user, you are a very special person! I am wondering, do you use English or Inuktitut more often on Bebo? This is a very important question! So far, I have discovered that many Inuit people are using mostly English on the Internet. I am wondering why this is!

Please send me an e-mail on Bebo! If you can, please tell me about which language you use on Bebo, and why. This would be so helpful!

Some questions that I have for you are:

Do you speak more often in English or in Inuktitut with your Inuit friends? but Do you think that young people are using less Inuktitut than before? Why? -how about this one...

Which language do you use more often on Bebo?

Can you type in Inuktitut on Bebo? Also, have you tried, is this difficult? (Is it possible to use syllabics on Bebo?? Has anyone done it?

If it were easier for you to type in Inuktitut on Bebo, would you do it? We are thinking about making Inuktitut 'plug-ins' for Bebo. Would you be interested in those? Free of course...and would make it easier to type in Inuktitut... please let us know!

Thank you so much for your time!! Any ideas, stories, thoughts, and input you have about Inuktitut on the Internet would be great!

Please feel free to read about me on my profile, I am Tim P866. From-timi

APPENDIX E: BLOG ENTRIES

Heading North!

7/26/07

I am in Toronto and on my way to Montréal tomorrow morning on the VIA train. I am getting very excited about my trip to Inukjuaq in Nunavik, Arctic Québec. I will be meeting [today] with members of the Avataq Cultural Center in Montréal who are helping to arrange my host family in Inukjuaq. I am nervous but excited.

I have just received notice that the <u>Tusaalanga</u> website is launched! This site is an absolutely fantastic reference for Inuktitut grammar and conversation. I have also heard that their team is working with Microsoft in developing Inuktitut localizations for software and hardware. These are exciting times for Inuktitut on the Internet!

My survey concerned with questions about current Inuktitut use on the Internet, and social networking in the Arctic, is in its final stages of development. I look forward to working on it further during the train ride tomorrow.

Progress in Montréal—8/3/07

Thanks to the generosity of Air Inuit and Director Horsman, I have been able to purchase my ticket from Montréal to Inukjuaq.

My meeting with Donat Savoie was wonderful last night. We spoke extensively about the health of Inuktitut (Inuttitut) online and I learned a great deal. He arranged a meeting with some members of the Inuit community in Montréal and I had a chance to practice Inuttitut with native Inuit from Nunavik. This was an excellent experience.

My stay here in Montréal has just emphasized my understanding of the importance of language as it relates to the relative health of a culture. Although my work with Professor Gerry Philipsen showed me that language is not the only aspect of a culture, I remain convinced that language is one of the most critical elements in preserving and protecting a culture in the face of globalization and media consolidation. I support all that can be done to promote traditional language use and its role in diversity. Since my arrival in Montréal, I have remarked upon the increase in English that I am hearing here since 1999. Many of my French-Canadian friends have also remarked on the increase of English being spoken on the Plateau.

Monday August 6, 2007: inukjuaq

I am here in the airport at Kuujjuaraapik. It is raining; our Air Inuit plane is being refueled for the trip to Inukjuaq (Inukjuaq). The atmosphere in the cabin was jovial, like a party. I spoke in French with a young female police officer who has been stationed in Nunavik for two years, then with a health worker, and then I tried my hand at Inuttitut with several Inuk who were watching a movie in front of me. That got a lot of attention, right away three of her friends started laughing at my attempts, but it was a lot of fun. I experimented with some verb endings (tutit), and that brought gales of laughter, as I was told that there was a second meaning to this word and that they would not explain it to me ©. Their meaning was clear though and I blushed furiously–they didn't seem bothered in the least. I think that I am in for a real education in Inuttitut; I am looking forward to meeting the Avataq members in Inukjuaq and seeing the library that Donat Savoie told me about. I can see the coast of the Hudson Bay behind me–it's cold out. I am glad that I brought heavy jackets.

Heading North—07/26/07

It's morning on Tuesday, 6:21 am. I woke up early this morning-exhausted last night but amazed at yesterday's events. I'll sum up what happened after we took off from Kuujjuaraapik yesterday. Once the place was refueled, we were told to make our way back to the aircraft. As we were walking to the DC-8, a qimmiq sled dog mounted a female right on the tarmac and began furiously copulating. This caused everyone to erupt into gales of laughter. As we began climbing the stairs, the dogs stood end to end but were stuck together. The Air Inuit staff tried to get them away from the plane but they yelped and ran under the landing gear. After I boarded and sat down, we could hear their yelps of discontent as the technicians tried unsuccessfully to catch them. We were watching the pair of painfully connected dogs crashing against the wheels, all the while the Inuit onboard were announcing comments in Inuttitut that caused the whole cabin to shake with the laughter and back slapping ... It took about ten minutes to get the dogs off the runway (there were many). After the plane took off (Anne-Marie*) and I spoke again about her police duties in Povungnituq. Often calls involve domestic quarrels, but a main concern of northern officers is weaponry; hunting culture leads to easily available high-powered rifles with scopes. She said that bulletproof vests are not regularly worn-while they would stop a shotgun blast, rifles still penetrate. She was just beginning a four-month contract; she told me about the philosophy of Canadian police forces in the north, I was impressed with her community spirit and positive attitude. She will be away from her family the whole time; the only way to return south is for a prisoner transfer. I enjoyed our conversation and said goodbye after we landed at Inukjuaq.

(Just an aside-at the airport, I saw a man with an OMS technical diving shirt at the airport in Montréal. I spoke with him and his friend, asking them about scuba in the north. Turns out that they were the directors of Nunavik Arctic Adventures and just getting their new cold-water technical scuba program underway. They are based in Povungnitug and invited me to dive with them. An unexpected opportunity.)

08/07/2007--Inukjuaq 2

As I got off the plane, I was wondering whether I would be met at the airport by my contacts from Avataq. The small plane had made me feel sick to my stomach on several occasions in the turbulence and I was feeling woozy. There were 3 other Qablunaat who disembarked and all the other passengers who got off were Inuk. Everyone was met warmly, I saw lots of young children slung traditionally over the back wrapped in swaddling, they looked a lot warmer than I was. As I explored the small airport, reading the job announcements from Makivik, I was greeted by Nancy Palliser from Avataq! I was relieved, got my bags and we went outside. I saw a small army of Honda ATVs loading passengers, everyone was speaking Inuttitut. Nancy led me to her Jeep Cherokee and we loaded up; she drove around Inukjuaq giving me my first view of my new home. It is a very attractive place with colorful houses and everything seems to be right on the Hudson Bay or the river. The air is so fresh– it tastes so good. She dropped me off at my new family's house–a wonderful house!

I have an Inuk mother and father-they are off on the land-my younger sister has 3 children, older brother returned from hunting yesterday with a seal and good fish. Younger brother has started to get interested in stylish clothes, he looks shyly at me but we have not yet spoken. Older sister teaches Inuttitut at the school. Everyone speaks Inuttitut at home.

I told them in Inuttitut that I like seal (I have never tried it but want to), Immediately the knife came out, the seal meat was removed from the freezer and chunks of raw seal began appearing on my plate. The frozen seal tastes fantastic, texture like raw maguro or horse sashimi in Japan, but richer, very deep tasting. I felt much better after eating the seal.

We spoke a lot, younger sister can speak English, no one speaks French (ouiouititut, from the French oui, oui!) very well–surprising, as this is Nunavik, Northern Québec. I am impressed again by the health and fluency of Inuttitut but dismayed that many of the Inuktitut patterns that I memorized are not understood. I am corrected in some of my pronunciations, laughed at, make adjustments, need to rememorize and relearn the differences in the Inuttitut (Nunavik) dialect.

My head is pounding and I need to lie down. I slept for an hour and woke up feeling better. Younger sister and her friend are talking about Bebo-this is social networking. I ask if they like computers. I am impressed by their knowledge. They like <u>www.msn.ca</u> for chat and Yahoo! mail, but Bebo is how they stay in touch and get to know other Inuit from other communities. They do not like MySpace. Bebo is the way to go for them, but they cannot type in syllabics on Bebo they say; they use English or typing in Inuttitut using romaji/roman keyboard. They both seem very computer literate. They are watching a U.S. channel on TV: Today, McCain, drink packs, Barbie@ Mattel, Fritos, skateboard contest sponsored by Fruit Roll-ups, Much Music, DIVAS, Avril Lavigne.

Got out my down jacket and went outside; younger brother Ilisiaq is having a cigarette (I can see tobacco is very popular here, I see many packs of Du Maurier cigarettes, I learn that these cost \$14 per pack). I ask him if he wants to take a walk, we walk to the shore together. Arctic Chat nets are drying on the beach, canoes are stacked along the water's edge, each has a 40- or 50HP 4-stroke outboard engine. He tells me that many rifles (qukiuti) are stored in the sheds; he has scopes, he uses shotguns for

ducks, and he can shoot more than one duck at a time. He tells me headshots are best for seals, seals float in the fall and sink in the summer *, I wonder how this can be so, I am told that this is due to the varying fat content. I learn that we are to go on hunting expeditions together when we go "camping." I learn that camping here is much different than camping that I am used to; here it means a hunting expedition— we may not return for a while. I am excited, the sun is setting, the colors are very beautiful and I am told that northern lights are good here in the winter. The air is so fresh, breathing is a pleasure.

Two boys ride up on their bikes, they are happy to see me, they want me to take pictures of their stunts, they cheer in Inuttitut, they do some radical jumps, they are fearless, one crashes, laughing and shouting-these are happy boys. We take a walk around town, Ilisiaq shows me the radio station and I notice the huge satellite dishes. I see the museum, Avatag and Makivik offices, school, community center; we pass the stores (co-op and Northern, co-op is cheaper), children everywhere! Riding up to me with curiosity, I am asked for gum, I don't have any, "then I hate you" shouted by a grinning girl, everybody laughs, I yell "thanks" in Inuttitut, this generates roars of approval by the children, bicycles all over the place, this is great fun. We pass a carver-Ilisiag tells me not to buy yet, there is much better work around. We move to the museum-I will visit soon. I am shown the library, then Avataq, a boy yells in Inuttitut, Ilisiag laughs loudly and well, I love the way that Inuit laugh, it is very deep and pure, I ask what he said, it was "doesn't he have eyes?"-I am wearing sunglasses at 9 pm-the light is very bright, I laugh too, humor is found everywhere here. Ilisiaq observes everything, but we don't speak often. When we do speak, it is short and to the point, but always with shining eyes-I am reminded of Japan, conversations with Watanabe, always deep but with few words, this is a spiritual place-I can feel it. We pass the church, I ask if everyone goes, I am told "not really,"-perhaps church popularity has waned? In our Inuk home, though, there are many Christian pictures and relics. I need to look into this more.

We see a figure working on a deck. Ilisiaq tells me that it's Andy Moorehouse, the former mayor of Inukjuaq who Donat Savoie told me about. I had been hoping to meet him. We greet each other warmly, he remembers my e-mail. I see this is a man of skill and education, He radiates strength and confidence, he looks as comfortable hunting as

248

he would be negotiating with politicians, this is a leader. I congratulate him on the library, he says it was a difficult project, but that it is operational, Internet running, Inuttitut books available for my research. This is excellent news, I will be able to access my surveys on Catalyst WebQat the UW.

We return home, there is more food waiting, chicken, garlic honey, this is good meat, everyone relishes meat, sucking fat off fingers, I am bone tired, up since 4:30, it is still light outside, but late-I sleep with clothes on, don't remember falling asleep.

Inukjuaq 3

It's Wednesday morning, I have taken to writing these entries in the mornings, I have been sleeping very well, and deeply, but feel very tired at the end of the days, there is a lot going on, but slowly Yesterday morning I woke up to a nice smell, it was Naqitsajaq, unleavened flour cakes, delicious. Older sister J* is making a hat for my son, with his name in syllabics. I gave her a colored scarf from Montréal, she twirled around, a true Inuk runway model. We worked on Inuktitut pleasantries and conversations, as when I meet the grandparent-Elders on the land, they understand no English at all. We talked about the difference between "Inuktitut" and "Inuttitut." She told me that when talking about language, it's Inuktitut, and when something is "like Inuit" (for example, an object), it's better to use Inuttitut. Some say that the Nunavik dialect is known as Inuttitut and other dialects as Inuktitut; however, I think that I will use "Inuktitut" when referring to language from now o– that's what everyone recommends here.

The seal meat that I ate raw yesterday was ready for the next stage, so into the pot it went, it's time for boiling. It will be ready for lunch. Brother stood next to the window for a long time. He is watching the winds, judging when we can go hunting. His verdict for today is that the winds are too strong. Today will be a waiting day. I really like him, he is a very quiet person, but when he speaks there is always a sense of humor and intelligence. This morning we went over some pronunciation, he smiled a lot, happy to help. I'm glad that he's my Inuit brother \odot . (I am not using names on purpose for their privacy).

It's cold out today, time for many layers, and after breakfast I went over to the public library that Andy Moorehouse and Donat Savoie made. As I approached, a young boy came up with a big smile, not saying anything, he wanted to slap hands, we did high-fives and slapped hands, then spoke in Inuktitut, it went well, learned his name, age, and that he was going biking, but his bike was gone, he had to wait? (I think he shared his bike). He was happy. I went on into the library and was very impressed! The library was housed in a beautiful, large building, light shining inside, lots of books and many computers.

I met B*, he is assisting in the library, but was happy to see me–all eyes went over to the qablunaat (i.e., me). I noticed that the room was relatively full of computers. There are about 20 modern Dell computers in the room, with a large router to handle all of the Internet connections. No one was reading books, everyone was online. Most of the computer users were young, no one was over 20, and many were under about 12 years old or so. As I walked past the screens, I could see the "BEBO" logo almost everywhere. Music was playing, everyone was typing furiously away. No one was reading books, only a few magazines. The books in the library are for the most part in English, after that there is an extensive French section, and the Inuktitut section is very small, mostly academic texts and journal publications. There are no books on Inuktitut grammar (I looked for a long time). The English books contain a mix of literature-based. The connection was painfully slow due to the demands on the server.

I spoke with B* about the system, he feels that the systems are infected with Spyware and because of this have become very slow. I will check out the virus protection on the computers tomorrow.

I was able to get a few e-mails out, but there wasn't enough bandwidth for any kind of image upload. I will try again from another server if I can find one.

I need to investigate Bebo, and find out why it is so much more popular than MySpace and Facebook here. Also, I would very much like to see what people are putting on their Inuit Bebo sites. I will keep my eyes and ears open. I wonder how much Inuktitut is really being used on the sites...and whether a localized Inuktitut social networking site would assist with language retention.

After leaving the public library, I proceeded to the Northern store because I wanted to see what they had. I was attacked by black flies-they were very persistent, taking chunks out of my head (bald), I couldn't shoo them away, they were very skilled at their work. I made it to the Northern store. Inside I was stupefied by the prices, I don't think that I have ever seen prices to beat them, \$7.50 for a jug of milk, juice at \$6.50, bottles of water for \$3.75, boxes of cereal for \$6.50 CAN...what I was really interested in were boots...when the weather clears (maybe tomorrow), I will be in the boats and wading in the waters, fishing, working nets, moving in mud/slush. I have been checking out the Inuit boots, they are long waders, waterproof, with sub-zero insulation and reinforced soles and toes. My boots will not cut it in this environment. I am happily surprised to find an excellent selection of beautiful Canadian boots, Kamik and Baffin brands, exactly what I need, and the prices are very low! I think that the necessities are cheap but any imported luxuries are taxes and priced to match. I bought the Kamik Hunter boots with insulated thermal socks (Kodiak). I feel much better knowing that my feet will be warm, cold feet can lead to sickness, and it's hard to dry socks and feet once they get wet. I was very happy to have these boots. I saw Andy Moorehouse briefly outside the co-op.

Upon returning home we ate boiled seal with blubber...the blubber is really good, so tender and juicy, I was taught not to eat too much, but to match the meat with a small amount of fat, it was really lovely, the seal meat next to the bone is just amazing. There is caribou in the community freezer, we will have that tomorrow if we don't go camping. There was also immakpalijuq, fish cakes, like Japanese kamaboko but nicer, using white river fish, and frying with flour, it was amazing. We spent time on syllabics after dinner. W wrote out our names and went over the standard introductions again. I was tired when the sun finally went down but it was already after 10:30, I slept around midnight.

Today the weather is fantastic and J* says that we can go hunting - this is very exciting, I am glad that I have my boots. I showed them to Ilisiaq, he said they are good; they are the same boots that he uses. This morning I read over my vocabulary, many of the meanings are different, when I said " aakkuluk" everybody roared with laughter, it's supposed to mean "what a sweet little thing" in my book but it turns out I just declared my undying love...hmmm...

Hunting Expedition

Day 1, Wednesday

- today is a waiting day, J* and L* are anxiously watching the weather. I am told to prepare, we don't know when we will return. Noon, and word goes out that we leave

251

soon. Buzzing activity, we meet on the beach with a small army of little ikajuqti (helpers). We leave to cheers, over to the lake to fill huge bottles with drinking water. Three hours on the water, a stop for a tea break. We practice grammar, today the "najaq/kisiani" forms (if/then)–it's so hard! We are ten on the trip, in two boats. C*, the leader calls a stop for a tea break, we disembark. A*, the little baby lnuk girl is so cute in parka, teen-aged girls M* and I* see an Arctic hare. I run up clumsily to film it, they look at the big qablunaat disdainfully and whisper behind cupped hands. Little brother IO* fishes, gets his lure stuck in a rock, cool older brother helps him get the lure out. Tea is delicious, bannock bread even better, we speak Inuktitut over tea, the wind is whipping, raining a bit, and it's very cold.

After another hour we pull into a small inlet, grandparents' house. They have a nice boat, they meet us at the beach, toothless grins, Inuktitut only, I tell them I want to catch many Arctic char (iqaluqpiq) they double over laughing for a good two to three minutes at the qablunaat, everyone smiling, they like this funny qablunaat...some other hunters arrive at this waypoint after their expedition–they are fully equipped with hip-waders, they have much meat.

We depart for the next leg of the voyage; we are moving north along the Hudson coast and we travel another hour at least. We set nets before arriving, rocks on both ends, blocking off an inlet, hoping for char. We finally arrive at the campsite, we disembark but it's getting dark, we must work fast. I have never seen a camp set so quickly; wood is cut and my first view of "tupiq" Inuit tents: the first word I learned but I never thought they would be like this–semi-rigid structures, wood beams inside and outside, supported by rocks, ultra heavy duty canvas and skin–these are nomadic moveable houses, they are 100percent stable in the heaviest winds and very warm on

252

the inside. They are nailed through the canvas onto the wood for extra support. There is no dinner-we have not caught anything yet. We have some bannock waybread but this is important and we have to save it. The tupiq is warm, we are exhausted after the rough open water travel, and we sleep quickly and deep.

Day 2, Thursday

We wake up to heavy rain and wind. Rain batters the tent and wind vibrates the taut strings, a strange and wonderful music. Not one drop enters the tupig, it does not move in the wind. We are on a plain; these are strong winds. I reluctantly go outside for a call of nature, I am battered by this weather, I am glad to get back in the tupig, my tent in Seattle would not last in this, and flexible tent poles would bend/snap. I sleep again, the rain stops. I go outside, lovely colors, water so clear and fresh. We walk up the hill, brother J* shows me the Inukshuk his grandfather made. A small one, big views of the countryside. Tracks on the beach say "tuktu" caribou. I am told there are mammoth bones near the lake three hills over. We check the nets in full waterproof gear. I am told seriously to not get wet whatever else I may do. I am told never to walk alone, I hear the word amaruq a lot (Arctic wolf). Gulp... We check the nets, three codfish, one igalugpig-Arctic Char! We eat raw char cut into strips and niritsaijug (bannock) bread, wonderful. Today we are told that the weather is not good for tracking caribou so it is a fishing day. We spend the day fishing on the rocks, wind gusting, beautiful rocks everywhere, salt spray. Fishing all day, we catch many codfish, we are hungry, the day passes, I am called for "snack time," what to eat? L* is wading with a net, I see the girls laughing as they smash something against the rocks, I am handed an urchin, instructed to throw it against the stone, it shatters after several tries, the orange part is good to eat,

in Japan they call it "uni," this is a delicacy! I have never enjoyed it in Japan but here in the frigid water it is just delicious, I eat with gusto, we feel great. I pass a dead seagull. I am told it was shot "qukiutimut" (with a rifle, for trying to eat the drying char). We catch mussels, eat them raw as well, they are lovely. L* catches a fish I recognize from diving as a stonefish, I know these are very poisonous in tropical waters, I yell out in warning, am looked at like a lunatic–apparently in the North these are good to eat...oops.

Some caribou soup is delivered to the man's tent where I sleep, it is delicious, the first meal for today. Until we catch more food we won't have a real meal, I feel strangely strong. Although the food has been scarce, the water is so fresh and the urchin and mussels were very fortifying. I sleep again so comfortable in the tupiq. Before sleeping, I am told why we (whites) are called "qablu (bushy eyebrow) naat (fat gut)." I fit the bill perfectly! :)

I woke up very early (4 am), went outside and looked around, the moon was out, stars going on forever, very clear and fresh air. I am dreaming a lot and thinking clearly up here!

I slept again and these tupiq are toasty.

Day 3, Friday

Nothing like the smell of fresh naphtha in the morning, tea is made inside the tent, tastes great, I miss my Seattle coffee but this tea is fortified with plants and herbs found by aunt S* yesterday, very nice and fortifying. We are told that it is time to move camp, that the conditions here are too windy, and that we need a calmer place to hunt caribou. In record time the camp is taken down, tents loaded in canoes, everything packed up, we check the nets, jackpot! Two ducks (in the net), two Arctic char–one is huge and there are cheers all around, five codfish, one duck is released as it is a mother, the other's neck is snapped with practiced ease, it goes under my feet, codfish are casually

thrown in the bucket, char are treated like gold and heads smashed repeatedly before bringing on the boat so that if they drop they will not get away. We stop back at grandfather's house to bring char, we arrive like heroes with all these fish, celebration. Inside the home, on the floor, the char is cut with uluq knives, each chunk of meat is cut into chunks and eaten raw with gusto. Tea is made, everyone loves heavily-sugared tea. Grandparents take their time teaching me how to say every object in the house in Inuktitut and laughing at my attempts, this is a fun game (for them!). I get some rainbow trout jerky as a present, bright orange color, delicious and chewy. We're all full and ready for the journey ahead. I asked the Elders questions related to my research, changes that have occurred in their lifetime, they told me about "English voices" (TV/Radio) changing things for them, they are worried about I* their grandson–they want him to grow up in the old ways. They spend a lot of time with him for this; he will stay with his grandparents for the whole time that we are on the land. Grandparents say, "We are worried about Inuktitut."

After awhile I get hot and take a walk alone. Along the beach there are many signs of death–caribou antlers, bones, skulls, a massive ribcage (beluga?), shattered sea urchins, and the theme of life/death comes back again–instead of hiding death, it is celebrated here. Hawks circle overhead and loons (many), I like that sound very much.

I am called to the boats, we are ready to leave. One last thought that I had on this leg of the trip, about language, about how hard it is to get foreign language TV/news/ programming in the U.S. and Canada (I pay \$24.95 per month to get one word of Japanese on our TV; the French channel is similarly priced, ditto for Chinese), but English is heard on every single TV and radio I hear up here. I think of what I am told, that current media realities are "realism"—this can't be changed, and hear about idealism of the academy, but I would infinitely rather hear the silence and peacefulness and Inuktitut that I hear today than the English-language advertising that assails me when I head back to town. When I asked my tupiq-mates how they felt about being Inuit, they said "lucky." When I asked where they would rather be, in town or on the land, they all said "on the land." We head off on the boats and wave goodbye to the grandparents.

We are on the water for another hour, we turn a corner, suddenly L* shouts tuktu! They point, I see nothing, they point frantically, I still see nothing. My guides see everything, they recognize every bird call, but I am clueless. We round a corner and

255

finally I see it, a big buck with a full set of antlers-a prize catch. My guides deliberate, they decide there must be more in the area and choose to head back to camp to tell the others (this will prove to be a sore point for them for the rest of the trip though...general consensus afterward being that they should have shot it immediately). We arrive at camp and everyone is excited, even before camp is set we head out to find the caribou but it has escaped! Everyone is disappointed and we return to camp to find it set up. We lay out nets again, this campsite is very beautiful, a sheltered bay, not windy-but I learn that no wind up here means mosquitoes-more than I have ever seen, bigger, meaner, in clouds and they do not "shoo off." I am told that dogs left chained to a post have died from mosquitoes when they cannot run away...I am given a beekeeper's hat to protect my face and all skin must be covered...I am tired and a bit discouraged by all these insects. It's hot today, I retreat to the tent and take a nap.

I am awakened by the call for hunting. I get up and get waterproof, we head off and look for caribou. I am handed a .243 bolt-action rifle with scope to familiarize myself-there is a 10-gauge and 12-gauge shotgun and numerous .22 long rifles-an

We got back to camp, everyone very pleased with our catch. There are two char and three codfish in the nets. I speak with S* about her experience impressive armory. I shoot the 10-gauge in practice. It is the most powerful weapon I have ever shot. I am told that it will knock me out of the boat if I accidentally pull both triggers at the same time and to be careful. I am impressed by the care that goes into the weapons, these people treat these tools with respect. Also, I realize that no meat was brought on this trip. The only food we eat is what we catch, making the hunting even more important. As food is so expensive up here, especially meat, community members are also depending on what is caught during these expeditions to put in the community freezer and on the table.

There is frantic activity and the boat veers off toward an island where I see nothing. We beach and J* is off like a shot running up the hill. The two girls also start running. I hear "Go! Go! in Inuktitut, and find myself running up a hill chasing two girls, J* already having reached the top and over out of sight. Not knowing where I am going or why I am there, just running feeling immensely stupid. I puff up the hill much slower than these athletes, I reach the top and there is J* holding two goslings by the neck, they are still alive. He is very happy and proud, the girls are running chasing goslings around the rocks. L* yells "atii!," jolting me out of my stupor. I run after the girls, I catch up with beautiful M*, her face beaming, looking for all the world like a cover-girl from Teen-Beat magazine, kneeling on the jugular of this gosling and crushing the life out of it. Her friend Li* is running- chasing another one. L* spurs me on and then I spot one, cringing in fear under a rock, and here is where a change came over me, there is a big difference between seeing a cute, cuddly fuzzy baby goose as a pet and seeing it as dinner-with your friends depending on you-and I chased that gosling along the rocks until I caught it around the neck. They yelled at me to wring its neck, I must say that I have never done this before-I spun it around, and it was still screaming out, and then I realized that I was just making it suffer-and then I spun it the way I should have done in the first place, and the bones just dropped out; it went limp in my hands and twitched before going still. And here another change came over me, at first when I was holding it before it died, it was warm and cute, and I felt affection; but after it died, I felt the blood running and it got colder, and I felt revulsion-as I think we do for dead things-but I wanted to feel like the Inuit do and I urged myself to continue feeling love for it even though it was dead, and not to hold it as if it were a cold clammy dead goose but to hold it as a lover would and cherish it because it was going to feed the family. And my grip changed from a harsh grip to a softer grip and I carried it back to the boat where we had five of them, making this a very successful afternoon. Everyone was elated. I saw a full caribou skull with antlers on the beach before we left that island that day growing up in Resolute Bay on a government outpost (this is one of the most northern communities of them all, except for maybe Grise Fjord?). She tells me of walrus and Arctic tern and that it is a truly cold place there. I believe her. I also tell her my plan that I want to cook some fish and meat on a fire tonight, I feel the need for something cooked-we have wood as there is a wrecked cabin here (wood is rare because we are above the tree line). So I make a fire-this is a big event even for the girls, fires are rare. I make a small fire, we have some tinfoil that we can spare, I wrap some fish and the goose I killed in foil (S* had prepared it for cooking in record time, feathers/insides gone in about 5 minutes). We wait until the wood burns and only glowing embers are left. I put the foil-wrapped fish and goose in the coals, the sizzling smells attract the whole camp, curious at this way of cooking, then the northern lights come out as we open the packages; the goose is cooked perfectly in its own juice. I distinctly remember the girls tearing away at that

goose like lusty Vikings, everyone was impressed but there was not enough for everyone. We decide that we will have a bigger feast cooked like this tomorrow. I felt good having contributed to the community; it felt good seeing people eating what I had killed, a kind of pride.

Day 4, Saturday

This morning the mosquitoes are so bad I don't want to leave the tent. I am told that an amaruq (wolf) was spotted over the ridge at sunrise. There are fresh caribou tracks on the beach. We put on our waterproof and bee-keeping insect gear and head out early, checking nets, and this day is spent cruising the coastline looking for caribou and fishing. The nets are full today with many igaluppig and codfish. We do not see caribou but not from lack of trying-we cruise for miles along the beautiful coast, scanning for antlers and signs. We have language class in the boat today and I learn a lot of vocabulary. We catch some fish, one char gets away after being on the hook, to universal dismay. I am taught local geography, we stop at an island for tea, I am shown goose eggs but these are not taken as the geese are already developing inside. I am shown the herbs that are used to make Inuit tea. There is an Arctic spider, very big and I take a picture-they are not sure if it is poisonous. We drink tea, it is bitter but good, we head back on the water, find a mussel bed and harvest some of them, there is target practice but no real shooting, they cannot find the tuktu this time! My guides are berated for not shooting that buck when they saw it...everyone laughs good-naturedly but there is some seriousness in it too; the chance was there and they should have taken it, they say.

We return to camp and we have many, many fish today, nets are again full, we have about six big char and many more codfish just from the second checking, the five geese left, the one duck and we are in good shape. Everyone wants to try the fire-cooked way. This time we make a really big fire, it is indeed a lovely bonfire, we stand around as the Northern Lights come out again, there are shooting stars. As the fire dies down we wrap seven fish and seven potatoes in foil, we have three big char and five codfish. The fire is so big that there are plenty of embers, I let them cook slowly for about an hour, the smells are delicious, when they are unwrapped it is like "presents." Everyone laughs, we eat with our hands right on the rocks, we gorge ourselves, the

258

steaming char cooked in its own juices on the fire in the cold air was very nice. Grace was said over the food but it is eaten not with quiet reverence but with lip-smacking, finger-licking appreciation. The pleasure taken in food here is almost sexual, the animals killed with your own hands and eaten in the same way, there is no distance between you and your food, you take it from start to finish and I think that the Inuit appreciate their food very intensely. We sleep deeply and everyone is completely full for the first time.

Day 5, Sunday

Today we hear over the CB that heavy rain is coming and we need to return back if we don't want to be stuck on this part of the Hudson for a long time. We pack camp very early (start at 5 am) and we are ready to leave with all meats dressed and packed for travel by 7:30. We check the nets and get some more fish for the cooler on the way back, there are three nets to check. J* works very hard in the cold morning water, he is quiet and a hard worker and has a gentle way about him and he is the best hunter on the team. We begin the trip back, this is very difficult, waters are very rough and crash over the bows on every wave; soon backs and bones hurt and this continues for several hours. We stop at grandparents' house for a break–this is a welcome respite and we are grateful for the tea and bannock. They accompany us with young I* who is 10 and he shows me his new rifle, a .22 (very impressive). We relax for a bit before heading off again for the next leg of the return journey.

This is a long trip and I am shown and taught Inuktitut words for the geography on the way back. Seeing the houses of the Inukjuaq community was wonderful, we return before 3 pm, then we unload for about an hour. I return back to my Inuit family, utterly exhausted; looking in the mirror I have grown a scraggly beard and am sunburned, but feel that sense of happy deep exhaustion that means when you lie down you breath a big sigh of contentment...I must say that a shower was very welcome. I take a long rest, download some pictures and, after a few hours, walk up the hill to the satellite dishes where I can jump on an Internet connection. I spend a few hours up on the hill-hood up against the wind checking my e-mail-this has been a wonderful week. I will begin my survey data collection next week and take some time here in town before possibly heading out on the land again.

The Last Few Days in Inukjuaq

The last few days in Inukjuaq have been passing pleasantly, the family walked up the mountain outside of town yesterday, it was a long walk, about five hours there and back! The mountain has "Inukjuaq" written in syllabics up there, and there is an Inukshuk on top where we gathered around, drank Inuit tea and talked. Even grandmother walked all the way up, very impressive! The view from the top was amazing, like looking out over the Grand Canyon, a vast open space with valleys and lakes spread out all around. There were hawks circling overhead and the wind was whipping so hard we took refuge behind the stones.

I noticed so many different types of mushrooms, berries, and roots: an herbalist's dream. The grandparents told us about legends of the caribou (they used to be the rulers of the world until the spirits knocked their teeth out!). We saw several complete caribou skeletons on the way up the pass, including one with pelt still on its head and bones. There were several crevasses that we had to avoid while climbing and descending; it would be most treacherous to climb if these were disguised by ice and snow.

On the way down we were attacked by flies; we fled off in all directions–I had to cross a small swamp by jumping on the stable rocks, the insects were in clouds; I finally made it through and we all met at an Inuit graveyard–Christian crosses but all handwritten names in Inuktitut. We paid our respects and returned to the boats needed to cross the channel and return home.

Inuit Wedding in Inukjuaq

I was invited to an Inuit wedding reception in Inukjuaq and we left home for the event around 6 pm. It took place at the Anglican Church in town and when I arrived there were already about 50 ATVs outside the building. I entered and took in the scene–it was very different from any wedding reception that I had attended before. The bride and groom were seated at chairs at a table facing the crowd, but the guests were seated on the floor (pews had been removed) and everyone was eating seafood with gusto. The fish (mostly char) had been removed from the community freezer and were still frozen, so there were several axes scattered around the room to use in chopping good-sized pieces off the fish, or for chopping off heads or tails. Sea urchins were also in bowls in the corners. There were also bowls of Western foods: spaghetti, meatballs, salad, fruit, juice, and banana bread. It was a wonderful combination, the atmosphere was very welcoming, people were all smiling and passing food around. I congratulated the bride and groom in Inuktitut and was gracefully thanked: it was a wonderful evening and a very colorful event!

APPENDIX F: CANADIAN MEDIA POLICY HISTORY⁸¹

CRTC Chronology

1852- The first *Telegraph Act* is passed.

1866- The first permanent transatlantic telegraph link is built, via a submarine cable between Ireland and Newfoundland.

1876- Alexander Graham Bell, of Brantford, Ontario, patents his invention, the telephone.

1880- The Bell Telephone Company of Canada is incorporated by a Special Act of Parliament.

1893- An amendment to Bell Canada's charter now requires it to obtain the permission of the Governor in Council before increasing rates.

1900- There are now 19 transatlantic cables. The site with the highest concentration is in Nova Scotia.

1901- The first wireless (radiotelegraph) trans-Atlantic signals are sent from Cornwall, England to St. John's, Newfoundland.

1902- Canada's first wireless station is established in Glacer Bay, Nova Scotia.

1905- The first Canadian legislation, the *Radiotelegraph Act*, on wireless telegraph is passed.

1913- The Radiotelegraph Act encompasses the radiotelephone sector.

1918- The Department of Naval Service, under the authority of the *Radiotelegraph Act* (1913), issues the first experimental broadcasting license to a radio station-XWA-in Montréal, Québec. XWA, which is owned by the Marconi Wireless Telegraph Company of Canada, later becomes CFCF.

1919- XWA/Montréal is the first radio station to broadcast regular programming.

1923- Canadian National Railways (CN) installs radio equipment on trains.

1928- The Government of Canada forms a royal commission chaired by Sir John Aird, to study the state of broadcasting in the country and make recommendations on its administration, management, and monitoring, and to assess its financial needs.

The Commission recommends the creation of a Canadian broadcasting network, to be supervised by an independent federal agency.

Three years go by (1932) before the Government acts on the Aird Commission's Report.

1931- The first Canadian television station, VE9EC, goes on the air in Montréal. VE9EC is owned jointly by radio station CKAC and the newspaper, La Presse.

⁸¹ (http://www.crtc.gc.ca/eng/BACKGRND/Brochures/B19903.htm).

1932- The first trans-Canada telephone system is completed (the Copper Highway).

In response to the Aird Commission's report, Parliament sets up a special committee on broadcasting and acts on its recommendations through the *Canadian Radio Broadcasting Act.*

This legislation, amended in 1936, creates the Canadian Radio Broadcasting Commission (CRBC).

The CRBC is to regulate and control all broadcasting in Canada and provide a national broadcasting service. This entails determining the number, location, and power of radio stations as well as the time that should be devoted to national and local programming.

1933- The Canadian Radio Broadcasting Commission (CRBC) extends its reach and expands its programming. It also acquires CN's facilities.

1936- Amendments to the 1932 *Canadian Radio Broadcasting Act* create a Crown corporation: the Canadian Broadcasting Corporation (CBC).

The CBC is now responsible for providing a national radio service in Canada. The Corporation produces, broadcasts, and regulates programming.

The CBC replaces the CRBC and takes over the Commission's staff and facilities (8 public stations, 14 private stations).

An act is passed to create the Department of Transport, which includes the Department of Naval Service, the Department of Railways and Canals as well as the Civil Aviation Branch of the Department of National Defense. From now on, telecommunications are primarily the responsibility of the Department of Transport.

Beginning in 1938, the Board of Transport Commissioners for Canada regulates Federally-chartered telecommunications companies, called common carriers.

1937- Through the Minister of Transport, the CBC organizes the Havana Conference attended by the governments of a number of countries in the Americas, including the United States, Mexico, and Cuba. They reach an agreement, called the Havana Agreement, on the allocation of frequencies. This will reduce interference.

Under the Havana Agreement, Canada obtains six unoccupied frequencies as well as other limited or shared frequencies. These new acquisitions enable Canada to introduce more powerful transmitters and expand its network.

With new transmitters in Toronto and Montréal, public radio now reaches 76 percent of the population (up from 49 percent).

1939- A team of announcers and technicians accompanies the Canadian Armed Forces First Division to England, where they set up Radio Canada's overseas service.

Developments in telecommunications are mobilized for the war effort.

1941- Creation of the Canadian Broadcasting Corporation News Service. Special broadcasts include Sir Winston Churchill's speech to the House of Commons in Ottawa.

1942- The Canadian Association of Broadcasters (CAB) calls on the Association of Canadian Advertisers (ACA) and the Canadian Association of Advertising Agencies to develop a system to determine the price of advertising air time. This leads to the creation of the Bureau of Broadcast Measurement (BBM).

1944- CBC creates a third public network (across Canada), known as Dominion, to provide a second choice of English-language programs.

1949- CBC acquires the facilities of the Broadcasting Corporation of Newfoundland when that Province enters the Confederation.

1950- Nationalization of Cable & Wireless Limited and the Canadian Marconi Company results in the creation of a Crown corporation, the Canadian Overseas Telecommunication Corporation (COTC), which becomes Teleglobe in 1975.

1951- The Massey-Lévesque Commission entrenches the CBC's regulatory role. **1952**- Canadian television (CBC) is launched.

Canada's first urban cablevision facility opens in London, Ontario.

1955- The first television broadcast of the opening of Parliament.

CBC television is now accessible to 66 percent of Canadians.

A Royal Commission on broadcasting, chaired by Robert Fowler, is created.

1957- The Fowler Commission recommends that responsibility for regulating broadcasting be removed from the CBC.

The lack of restrictions on foreign ownership prompts the Commission to recommend that forthcoming legislation on broadcasting include a provision prohibiting the direct or indirect acquisition of over 20 percent interest in any Canadian radio or television station by non-Canadians.

1958- The first television program is broadcast live from Nova Scotia to British Columbia. The CBC's microwave network is now the longest television network in the world.

The CBC creates its Northern Service (radio).

The Government creates a new regulatory body to replace the CBC. From now on, the Board of Broadcast Governors (BBG) regulates Canadian broadcasting, including the CBC and private broadcasters.

The BBG is empowered to establish regulations designed to promote Canadian talent by broadcasting stations.

1960- The Board of Broadcast Governors (BBG) invites private television stations to submit applications to establish networks.

1961- The CTV network (Canadian Television Network) is launched.

The CBC submits recommendations on satellite telecommunications in Canada.

The transatlantic telephone system is officially launched with a call from Queen Elizabeth II to Prime Minister John Diefenbaker.

1962- The Alouette satellite is launched. Canada becomes the third country in the world to have a satellite in orbit.

1963- The Government makes a decision to have the private sector develop Canada's aerospace industry (the ISIS satellite program).

1964- A new committee on broadcasting is formed, the Fowler Committee.

The Committee urges the Government to identify its expectations for the broadcasting system as well as set specific objectives for both the public and private broadcasting sectors in Canada.

The Committee also recommends replacing the BBG with a new regulatory and licensing agency.

1965- The Canadian government announces its policy on color television.

1966- A white paper on broadcasting is published.

The Government establishes its broadcasting policy: Canadians should maintain control over new electronic communications technologies in order to preserve and strengthen Canada's social and economic structures.

Color television broadcasts begin in Canada.

1967- The Chapman Report recommends that Canadian research on space technology focus on communications and remote sensing. The Report also suggests that Canada capitalize on its expertise in the international market. This Report leads to the creation of the Department of Communications and Telesat Canada in 1969.

1968- A white paper on satellite telecommunications is released.

The first televised debate by leaders of political parties in Canada (joint CBC/CTV production) takes place.

The *Broadcasting Act* is adopted. The Act does the following:

confirms CBC's mandate as a national broadcaster

strengthens restrictions on foreign ownership

requires the predominant use of Canadian creators and talent

Reaffirms a vision of the broadcasting system as a means of strengthening Canada's cultural, social and economic structures; creates the Canadian Radiotelevision Commission (CRTC), a new regulatory agency that becomes the Canadian Radio-Television and Telecommunications Commission (CRTC) in 1976.

1976- The Canadian Radio-Television and Telecommunications Commission Act expands the CRTC's jurisdiction to include Federally-regulated common carriers.

1984- First specialty services MuchMusic and TSN are approved. Later that year the Commission also grants licenses to specialty services Telelatino and Chinavision.

1991- Parliament amends the *Broadcasting Act*.

1992- CRTC allows long distance competition in the telecom industry.

1993- Parliament passes a new *Telecommunications Act*.

1995- The first broadcasting distribution undertaking license for direct to home satellite service (DTH) are granted to Bell ExpressVu and Power DirecTV.

1997- CRTC introduces local competition in the telecommunications industry.

1999- The Commission licenses the world's first service devoted to Aboriginal peoples for nation-wide distribution. That same year, the Commission publishes its report on New Media and became one of the first communication regulators in the world to clarify its position on the Internet.

2000- The Commission publishes a licensing framework for digital specialty and pay television services.

2001- The CRTC issues its report to the Governor in Council on French-language broadcasting services in a minority environment.

2002- The CRTC publishes a regulatory framework for guiding the transition to digital over-the-air television.

APPENDIX G: SELECTED BEBO COMMENTS.

Extracted From Inuit Bebo Pages

Roses are red Inuit are brown That's my race So don't turn it down My Inuit pride I will not hide My Inuit race

I will not disgrace My Inuk blood flows Hot and true My Inuit peeps I will stand by you Through thick and thin Till the day we die Our Inuit flag always stands high

I yell this poem Louder than all the rest Cause everyone knows Inuit are the best!!!!!!

Inuit pride in my mind Inuit blood is my kind So step aside and let me through Cause its all about the Inuit crew

Life sucks and then you die But if you're Inuit You die with good ass pride If you re a true Inuit You will add this to your blog with pride.

Hello Beboers...Welcome to my profile. I am from a town called Kugaaruk. I love living here, been born here and raised here now I am raising my own kids. I am a real Kugaarukmiut. I will always be from this community. The most beautiful place community I hope?

Why??? There thinking to put Polar Bears on endangered species!!! They don't even know how the North is and they talk about Global Warming all of a sudden they know all about Polar Bears and not once have they lived in the North. I think there crazy. Why do they keep Polar Bear in the Zoo and there not use to the south and they torcher (sp) them and lock them up and in the North they are free to go anywhere and eat and relax when they want to, they will never disappear from the world. Us Inuit we hunt them not for fun and we catch what were allowed and we don't waste any food, No one will ever stop Inuit way of Life!!!!!

For Everybody :D

INUIT ARE THE BEST!!!

"Irniaa-piga! pitaavinira, inuapiga!"

I am a mother now, and proud to call my irniapik, my love for him grows more and more each and everyday. I thank God for giving me an opportunity to have a child of my own, he's an awesome One, he forgave me for all the wrongs that i have done! it is amazing to see a baby that grew inside me. I Thank my family too for helping me raising my baby. I really appreciate it! anyhoo ppl pray always

Words from Elders, we need to know these. Honesty, consideration and respect for others were essential. • Be modest; don't show off • Remember your connectedness- love one another • Help out other Inuit

i didn't count those fish my little taqqutti tattajjujuq that time it was fun but i din't go back i was but it was kulliqtuviniq nice here from u see u around bye

What I want A government with A VISION, Less suicides, Inuktitut till end of grade 12, common sense, healthier body

I live a fairly simple life way up in the cold white north. I like to live up here because My community is unique, where four languages meet e.g. Inuit, Cree, French and English. and my hometown is the only place which has four names, Whapmagoostui, Kuujjuarapik, Great Whale River and Poste De La Baleine. We might not get along sometimes but we are very lucky to be able to share and experience the other cultures.

Welcome to my Bebo inuit's...

APPENDIX H: MAPS



Figure 59: Map of Inuit Regions and Communities



Figure 60: Circumpolar Inuit Region

APPENDIX I: DESCRIPTIVE STATIS	FICS
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	Mean	Standard Deviation	N
Online Language	1.2903	.90161	31
Operating System	1.0968	.53882	31
Use social networking?	4.6129	.55842	31
Use e-mail w/friends family?	4.4194	.67202	31
Use e-mail for shopping?	1.2581	.68155	31
Use mainly Inuktitut online?	1.3548	.55066	31
I mainly use English online	4.8710	.42755	31
I mainly use French online	1.1935	.54279	31
fluency	4.8710	.34078	31
The current Web benefits Inuit	1.6774	.87129	31
Social Networking Benefits Inuit/Inuktitut	1.3226	.59928	31
Inuktitut is the most useful lang online?	1.2258	.49730	31
In future Inuktitut used less?	4.0323	1.13970	31
In 5 years what language online	1.06	.250	31
I worry about security virus online	2.3548	1.51764	31
I like social networking sites	4.1613	.89803	31
I use Inuktitut when e-mailing friends	1.2903	.58842	31
There should be more Inuktitut websites	4.7419	.44480	31
I wish I could use Inuktitut more online	4.6774	.54081	31
I wish there were Inuktitut social newk	4.4194	.62044	31
It is easy for me to use syllabics online	1.2258	.56034	31
Mostly English on Bebo?	4.8387	.37388	31
Mostly Inuktitut on Bebo	1.1290	.34078	31
Mostly Bebo with other Inuit?	4.6452	.75491	31
Mostly Bebo with International friends?	1.3871	.76059	31
Eng more useful Inuk online	4.8387	.45437	31

	Mean	Standard Deviation	N
Bebo encourages me English	4.9032	.30054	31
How impt. is it to protect Inuktitut	4.6452	.66073	31
Where do you access internet	3.42	1.432	31
I am proud to be Inuit	4.8065	.47745	31
Impt to prote Inuktitut	4.6774	.70176	31
Inuktitut is threatened	4.2903	.78288	31
I want to use Inuktitut more online	4.7419	.63075	31
Age	26.7097	7.98830	31
Gender	1.5161	.50800	31
I would like an Inuk Bebo	4.6452	.60819	31

APPENDIX J: LONG RESPONSES TO SURVEY QUESTIONS

Pseudonym		Why do you like Bebo?	Can you tell me why Inuktitut use is declining?
A. Aanniasiuqti	1	we have to make money now, for everything. Elders get together, to help the language, i think it helps, but it takes too long to type in syllabics for now, we have to press more than one key at a time, make it easier timi.	so much going out at night, so much internet, less hunting, less work. i am worried about my children, not enough Inuktitut teachers, not enough skills teachers.Too much television, internet, drugs, alcohol, pregnant early, suicide big probs us
A. Kiinaujaq	1		we don't know how to type in Inuktitut, we don't know HOW! we have never been taught how to use it on a computer, only KSB knows but they never told us
D. Qarasaujaq	1	Bebo, when i chat, i have to use English, this town, young people use Bebo, i like to chat with them in Bebo, i wish i could use syllabics in Bebo, but its been a while since I didn't read in Inuktitut, since my gm passed away, nothing online	during the 70s and 80s, white people not too many, these days a lot of them are here now, they are here for teaching, business, kids these days, want to speak different, they think Inuktitut is not cool, TV and Internet, they IM and chat in eng
D.	1		you don't have a choice
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Saunik			when you go online
D. Umiaq	1	I want to make friends, I want my friends on my Bebo, only English on Bebo. I see pics of my friends, remind me of the old days, I use English when talking with my English friends on Bebo, i never type in Inuktitut, keyboard is in English	
E. Qikiqtaq	1		when we were kids we hardly spoke English, kids today only speak English, i even tell little kids inuqualuratsi, inuktitulauritsi! (you are Inuit, speak Inuktitut)
F. Arviaq	1	Inuit friends, i like everything about Bebo. i tried Myspace, Bebo is more fun.	the keys are not the same as Inuktitut writing
F. Aupaqtuq	1		it would be so much better if we could use a keyboard with Inuktitut letters we can see on the keys it would be so much better.

			[]
F. Ilinniaqtiga	1		some brother's Bebo friends refuse to speak Inuktitut, he is about 10, when they are around, his friends visit him and they are all speaking English, his friends say í don't understand Inuktitut, i don't know what to say "they are all Inuit"
F. Okalik	1	it has become difficult for me to type in syllabics, I would try an Inuktitut keyboard if they had one	i am now more comfortable in English online than Inuktitut
G. Innialik	1		the current way of spelling in Inuktitut on a computer is not efficient, it is made by too many keystrokes. to spell the word Inuktitut, you have to spell many characters in English letters, using alt-key commands, kids don't want to do this.
G. Natsiqsiuqti	1	make friends, see the profile, so many profiles are in English. can't fine Inuktitut font.	more English everywhere everyday, things are mixing, because of the qablunaat, we are in Ungava bay, but if you go to Kuujjuaq, you will notice, everyone is speaking English! it is coming to us from teachers! Schools! TV, Movies, Radio

G. 1 i read faster in English now. wwaliujarpait (qalirapai) Inuktitut in English letters. G. 1 even though we have downloaded the Inuit fonts, the kids don't use them, too hard, not on Bebo H. 1 if I make it like that, i cannot use syllabics on Bebo it doesn't look right, H. 1 i heard complaints that it is not easy to use it takes a long time to make Inuktitut signs on the computer, i never tried it, cuz Bebo is English on the computer, i never tried it, cuz Bebo is to make alumititut signs on the computer, i never tried it, cuz Bebo is english so I English K. 1 Bebo for social networking, msn.ca for chat, all in English only, keyboard is abc style, lnuktitut is complicated on the computer. speaking to friends, we do it in English online, we are doing it more and more in person too, my younger brother won't answer me in lnuktitut anymore he doesn't like it, English is cooler M. 1 you can change the language on a DVD movie player, why not on the internet, change the language, typing way P. 1 if I read in Inuktitut, its better, I don't need a dictionary. I already understand everything. in internet, language			·····	[
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P. Atausiq	1		the entire section of ai pai tai sai this entire 4th section of the language is not represented in syllabics when typing on the computer. when we
P. Nunasiuti	1		my 2 year old is also learning English from TV and also her brother. although I speak to them in Inuktitut they are still learning in English, the TV is more stronger than us, also internet when they get older.
P. Tamaani	1	Bebo is always in English, this has an effect for sure, for the real young kids, TV is a major factor, when they get a bit older, then into computers, they learn more English. Treehouse channel, i feel bad, i speak to him in inukt, he ans=engls	yes definitely, Inuktitut equipment is not enough available. even on the internet, not enough services, there are more non-Inuit in the community. We can protect by talking to them in Inuktitut more, watch Inuktitut TV, Inuktitut internet.
P. Uqalimaaq	1	i like it, i can talk to my friends, send am e- mail, pictures, see pictures of my friends, would like to type in syllabics, they do not come out right	Inuktitut is declining because they are in school, by the TV in English, music in English, internet in English, everything!

R. Ikajuqti	1	i like the way to Bebo, make Inuit friends from Bebo	we don't know how to write in Inuktitut on the internet
R. Palaugaaq	1		its faster in English, how to make it faster in Inuktitut? maybe a keyboard in Inuktitut, I for Ia Ii Iou, m for ma mi mou, n for na ni nou, s for sa si sou, aiua, would be better
R. Piqaanaaq	1	they don't see the version of syllabics on the keyboards, giving them a hard time, they have to use a manual to use the AIPAI font (internet supervisor in Inukjuaq)	it is the way of the internet, if we have a choice of Inuktitut we would use it, nobody forces us in English, its just that the choice is not there for Inuktitut
R. Qamutik	1		some of the kids, speak only English, they always use English with each other, because cartoons and Bebo and msn.ca are only in English, parents don't understand them. cartoons are in English! nobody watches the French channel here.
R. Sivalaaq	1		i want my son to keep my culture. i worry that he will speak too much English and lose our heritage.

R. Ullumi	1	tried Facebook, msn.ca, Myspace, but they are boring, i like Bebo the most, structure is simple, one click, most of my Inuit friends are on Bebo, I can keep in touch with friends i have not seen in a while, cheaper than long distance, share pic	qaluijapaitituk(romaji!), Inuktitut in English letters, its not the same, com from outside world is far greater, more movies, music, Inuktitut writing skill- i know how, don't use online, no chance
T. Sikituuq	1		in school in the 90s this was missing, Kativik school board went back to replace the first letter, now i read faster in English because i use the internet so much
Z. Iqaluq	1	pics, photos, new friends, music, Inuit friends, write in English, don't know why I don't write in Inuktitut.	don't know

APPENDIX K: SCREEN CAPTURES OF ARCTIC WEBSITES

<u>WWW.ITK.CA</u> Inuit Tapiriit Kanatami (ITK) is the national Inuit organization in Canada representing four Inuit regions—Nunatsiavut (Labrador), Nunavik (Northern Québec), Nunavut, and the Inuvialuit Settlement Region in the Northwest Territories. This website provides information on the activities of the various departments of ITK: Communications, Environment, Health, and Socio-Economic Development.





WWW.NUNATSIAVUT.COM This site provides information on the various departments of the Nunatsiavut Government and on the Nunatsiavut Assembly. The establishment of this Government is pursuant to the signing of the land claim agreement of the Inuit of Labrador by the Labrador Inuit Association. The website, when accessed in Inuktitut, is displayed not in syllabics but in Romanized syllables.



Figure 62: www.nunatsiavut.ca

<u>WWW.GOV.NU.CA</u> This is the website of the Government of Nunavut. It provides information facts about Nunavut, Legislative Assembly of Nunavut, Nunavut legislation, Government policies, public documents, and organizations and the various departments and Crown agencies of the Government.

」 こうって しぐしょし Nunavut Kavamanga Government of Nunavut Gouvernement du Nunavut



Figure 63: www.gov.nu.ca

WWW.INUVIALUIT.COM Pursuant to the signing on June 5, 1984 of the Inuvialuit (Western Arctic) Final Agreement, the Inuvialuit Corporate Group was established and is composed of the Inuvialuit Regional Corporation and its subsidiary corporations. It is active in various areas, including land, petroleum, and investment.



Figure 64: www.inuvialuit.com

WWW.MAKIVIK.ORG Makivik Corporation was established pursuant to the signing of the James Bay and Northern Québec Agreement in 1975. Makivik represents the Inuit of Nunavik (Northern Québec). The website provides information on the Mandate of Makivik, its projects and activities, and its annual report.



Figure 65: www.makivik.org

WWW.NUNAVIKGOVERNMENT.CA This interactive trilingual (Inuttitut, French, English) website was created by Makivik. Information is provided on the Nunavik Regional Government Project, and on the state of the negotiations between the Inuit of Nunavik and the Governments of Québec and Canada. Approximately 1,000 people visit this site every week. This is an abundant source of information and is highly recommended. Please note that this researcher's computer, even though equipped with the latest software and having downloaded multiple Inuktitut fonts, was unable to display the particular Inuktitut font used in this website (see right side). This is an example of the necessity for a universal Inuktitut font.



Figure 66: www.nunavikgovernment.ca

NOTE: Presently in Nunavik, there are three public institutions providing programs and services to all its residents: Kativik Regional Government, Kativik School Board, and Nunavik Regional Health Board and Social Services. These institutions will be amalgamated in order to establish the Nunavik Regional Government.

WWW.KRG.CA This website provides information on the Mandate of the Kativik Regional Government and on the programs and services delivered to the residents of Nunavik, and includes access to its annual report.



Figure 67: www.krg.ca

WWW.KATIVIK.QC.CA Information is provided on the Mandate, organization, and programs offered by the Kativik School Board which has the responsibility for schooling in Nunavik, Inuit teacher training, language, and culture. The fonts used throughout Nunavik can be downloaded here. However, in the experience of this researcher, even after installing the fonts, they did not properly display on many Inuit websites, including the Government sites listed here.



Figure 68: www.ktivik.qc.ca

WWW.NUNAVIK.CA Nunavik Portal



Figure 69: www.nunavik.ca (Nunavik Portal)

<u>WWW.ABORIGINALCANADA.GC.CA</u> The Aboriginal Canada Portal is a single Internet gateway to cover 7,500 links for and about Aboriginal peoples in Canada. It contains over 15,000 pages of information about business, employment, economic development, culture, communities, education, organizations, claims and treaties, health, and housing. It connects to more than 25 national Aboriginal organizations, Government of Canada departments and agencies, provincial and territorial governments, Aboriginal communities, national and regional associations, university and college Aboriginal Studies programs, key Aboriginal Urban programs and a variety of international resources.

The Portal was designed and will continue to evolve in partnership with the National Aboriginal Organizations (Assembly of First Nations, Métis National Council, Congress of Aboriginal Peoples, Inuit Tapirisat Canada of Canada, Native Women's Association of Canada, and Council for the Advancement of Native Development Officers); and Federal Government Departments (Industry Canada, Human Resources Development Canada, Privy Council Office, Canadian Heritage, Health Canada, Indian and Northern Affairs Canada, Treasury Board Secretariat, Public Works and

Government Services Canada),

As stated on the website,

"The Aboriginal Canada Portal holds tremendous potential as:

• A partnership site and digital meeting place, where ideas can be shared and discussed;

• An awareness vehicle, where people can learn more about Aboriginal peoples, successes and issues;

• A resource tool to provide online services to Aboriginal communities;

• A marketing tool for Aboriginal communities and businesses to promote their products and services to domestic and international consumers and tourists; and,

• An educational tool to share culture, heritage, arts, languages and traditions,

Canada's Aboriginal population is young and growing. More than any other

segment of the Aboriginal population, children and youth have the most to gain in the

digital age. The Aboriginal Canada Portal can also become an important tool to increase

awareness, understanding, and involvement by Aboriginal children and youth in digital

technology⁸²".

⁸²(www.Aboriginalcanada.gc.ca/abdt/lookups/graphics.nsf/vDownload/01128bk_e.pdf/\$fi le/01128bk_e.pdf).



Figure 70: Aboriginal Canada Portal

When accessing this site, this researcher was presented with the screen shown below, offering services in English or French. In the opinion of this researcher, having alternate language presented originally would be helpful when determining language choices for Inuit and other Aboriginal language users.



Figure 71: Aboriginal Canada Portal in English and French

Once within the website, areas are available that can link the user to Inuktitut content. This allows syllabic sites to be accessed. The site at www.Aboriginalcanada.ca is broad in its scope linking Aboriginal users together and offers a compendium of services available to Aboriginal users in Canada. Nevertheless, in the experience of this researcher, Bebo remains the most heavily used site by Inuit, and this site remains an English-based system in which English is the language of navigation and communication for Inuit. Additionally, many of the previously listed sites had issues with the proper

display of fonts in the browser as previously mentioned



Figure 72: Aboriginal Canada Portal in Inuktitut

APPENDIX L: DOCUMENTATION OF THE EROSION OF INUKTITUT

In order to document the beginnings of the assimilation of Inuit and remind policymakers of the dangers of linguistic hegemony, the documentation of the full text of the letter from the Commissioner of the Northwest Territories of the time (1950) is included here. The message shows clearly the disregard that was placed on Inuit language and culture and strongly encouraged all possible "white people" to teach English to the "Eskimos".



Figure 73: Elementary English for the Eskimo

INDIANA ATTA'TAS AND NORTHERN DEVELOPMENT LIBRARY GIGLIOTHEOUE DES AFFAIRES INDIENNES ET DE NORD CAMADIEM

Foreword . . .

Today there is a growing movement into the North. As a result, there is much more contact between the white men and the native inhabitants.

If the Eskimos are to meet these changing conditions on a more or less equal footing, they will need to have the advantage of being able to speak the kinguage in which husiness is transacted. Hence, this booklet is being distributed where English is the language used in business. The booklet is intended to serve as a manual for general use wherever there is an opportunity for white people to assist the Eskimos to learn English. It will serve as an introduction, following which a standard basic English text may be used.

Other white people in the North do not realize how much they could help the Eshimo learn English in the daily routine of their work. For example, if the trader uses an English giveting and a series of simple sentences while trading, the Eskimo will soon know the English names of many articles and be able to ask for them in a new language. Similarly, if the Royal Canadian Mounted Police officer on patrol uses the many opportunities at his disposed to tutor his unitive assistant in English, as many do, hours can be devoted to pleasant and profitable use.

Copies of this booklet should be given to Eskimos who show an interest in learning to speak English or to those in whom such an interest can be aroused. Giving the booklet to those who seem likely to value and make good use of it should be an important occasion. Explain to the Eskimos that the book is furnished to them by the people of Ganada who hope that it will help them to irorn English so that they and the white men will be able to understand one another better.

— With the help of this booklet and the tracking of their white friends; we are sure that many of the Eskimos will achieve a good start in learning to speak English. We hope that all the white people in the North, regardless of occupation, will take a keen and active interest in encouraging the use of English by the natives and will make the teaching of English a personal project.

H. A. YOUNG, Commissioner of the Northuest Territorics

November 30, 1950

Figure 74: Official Letter Regarding English Education

English Translation:

Today there is a growing movement into the North. As a result, there is much more contact between the white men and the native inhabitants.

If the Eskimos are to meet these changing conditions on a more or less equal footing, they will need to have the advantage of being able to speak the language in which business is transacted. Hence, this booklet is being distributed where English is the language used in business. The booklet is intended to serve as a manual for general use wherever there is an opportunity for white people to assist the Eskimos to learn English. It will serve as an introduction, following which a standard basic English text may be used.

Often white people in the North do not realize how much they could help the Eskimo learn English in the daily routine of their work. For example, if the trader uses an English greeting and a series of simple sentences while trading, the Eskimo will soon know the English names of many articles and be able to ask for them in a new language. Similarly, if the Royal Canadian Mounted Police officer on patrol uses the many opportunities at his disposal to tutor his native assistant in English, as many do, hours can be devoted to pleasant and profitable use.

Copies of this booklet should be given to Eskimos who show an interest in learning to speak English or to those in whom such an interest can be aroused. Giving the booklet to those who seem likely to value and make good use of it should be an important occasion, explain to the Eskimos that the book is furnished to them by the people of Canada who hope that it will help them to learn English so that they and the white men will be able to understand one another better.

With the help of this booklet and the teaching of their white friends, we are sure that many of the Eskimos will achieve a good start in learning to speak English. We hope that all the white people in the North, regardless of occupation, will take a keen and active interest in encouraging the use of English by the natives and will make the teaching of English a personal project.

> H. A. YOUNG, Commissioner of the Northwest Territories November 30, 1950

This document is a record of a little-known aspect of Arctic Canadian history, in

that it demonstrates a concerted "push" by Ottawa to indoctrinate the Inuit people in

English use. There are several other items of note, most prominently that the term

"Eskimo" was still in wide use, a term that has fallen out of favor today due to the pejorative and Colonial signifier that the word has shown.

Also it was assumed in this archival writing that business cannot successfully be conducted in Inuktitut and that the only way for Inuit to meet business on an "equal footing" would be for them to abandon their own language and adopt English immediately. It is additionally assumed that any non-Inuit in the north will be "white," reflecting the race-bias of the time. An example of this can be found in the phrase "with the...teaching of their white friends...we hope that all white people in the north...will take a keen and active interest in encouraging the use of English...by the natives".

A final, disturbing reminder of difference, and an unfortunate aspect of documentation related to Canadian Inuit history, are the "tags" to mark the Inuit people who had made contact with the "whites" of the time. In this next document, an Inuit man is shown wearing his "dog-tag" and learning that he must never forget the number and must learn how to write it in his book in English upon demand.



Figure 75: Inuit Pointing to Numbered Tracking Tag

The text itself, published in 1950, reads:

"This is a disc. It belongs to Urayah. It says that his number is E2-937. He wears his disc around his neck so that he will not lose it. He knows that it is important to have it with him."

Below the image, it continues, addressed directly to the Inuit:

"Do you have your disc with you? What is your number? Practice writing it so that you will be able to do so if you are asked. Write your name and number on this page and then everyone will know that this is your book." Timothy James Pasch was born in Toronto, Canada, yet has lived most of his life abroad. His Bachelor's degrees in International Economics and in French are from the University of North Carolina at Chapel Hill and were completed in 1996. He received a diploma in Interdisciplinary Literature from the University Paul Valéry III, after which he lived in Japan and studied several Japanese art forms and is now fluent in the language. His Master of Arts degree in Comparative Literature is from the University of Hawaii and was awarded in 2004. In Seattle he gained significant experience in technology in addition to a deeper understanding of critical Communication theory. In 2008, he earned a Doctor of Philosophy from the University of Washington in Communication.