INDIGENOUS WAYS OF KNOWING

WITHIN CIRCUMPOLAR INUIT CULTURES:

DISCUSSION AND ANALYSIS OF THE LITERATURE

By David Button November, 2006

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INTRODUCTION

How a person knows something is as important as *what* he or she knows. Both the process of knowing and the product, knowledge, are forms of power. For my Inuit neighbours, the power lies within their stories, most often told from the viewpoint of "spiritual beings having a human experience" (*What is a paradigm shift?* 2006, ¶9). If the reader's viewpoint is secularist, some say modernist, (s)he may find that last statement unbelievable. Nevertheless, given my lived participant-observer experience of the past thirty-five years inside the Canadian Arctic circle, I conclude that the Inuit, once nomadic hunter-gathering families but more recently settlement and township dwellers who now hunt only on weekends, are not just surviving but thriving. As they have for centuries, they continue to move forward across the Arctic landscape from a position of power and strength because they employ skills acquired through Inuit Ways of Knowing. Anchored in their Traditional Knowledge system, and adapting through an ever-increasing participation in the Western Knowledge system, the Inuit are encountering some rough weather in their journey. Though at different stages of participation, strength, and power in their trek to modernity, as they develop both traditional and modern subsistence systems, the Inuit are emerging as powerful socio-political leaders among the other indigenous cultures in the circumpolar world.

Often the topic of alarmist stories from an outsider perspective, from my inside point of view, the Inuit possess a position of strength in today's circumpolar world. That position results from the ever-evolving Inuit Ways of Knowing enabling them to work in both the Traditional and Western Knowledge systems. The evolution of ways of knowing, as process and product, means that the Inuit are the proud bearers of an

individual and collective discipline. This is not just the discipline acquired by man against nature, but rather one achieved by man in harmony with nature. From my perspective, the meaning of Inuit discipline matches that attributed to Foucault as part of a larger discussion of the sociology of power. Foucault defined discipline as "a complex bundle of power technologies developed during the centuries" (Power, 2006, *Theories of Power,* ¶5). The Inuit were forced to develop power technologies because they believed "that very little is naturally linear, or occurs in a two-dimensional grid or a three dimensional cube…. [T]hrough long observation they have become specialists in understanding the interconnectedness and holism of our place in the universe" (Barnhardt & Kawagley, 2005, ¶23). As they have through the centuries, for today's circumpolar Inuit, "Ethos and culture, as means of adaptation, form the methodological basis for the development of models of ethnic adaptation to the natural and social environment" (Diatchkova, 2006, ¶1) The reader may want to keep the above in mind, as she continues further in this discussion of the literature on Inuit Ways of Knowing.

This report has the following format. After a general introduction, in section 1 I provide a brief description of Indigenous adult learning within the higher education context. In section 2 of this report, I explain the key terminology: Indigenous, Inuit or Eskimo, and Indigenous and Western Knowledge Systems. In section 3, I review some key publications and authors on Indigenous Ways of Knowing, and take pride in introducing Warner's *Native Ways of Knowing: Let me Count the Ways.* Through Internet and Library searches on Inuit Ways of Knowing, I found only a few primary publications about the Alaskan and Canadian Inuit, which I review in Section 4. In section 5, a review of

adult learning theory and its link to Inuit Ways of Knowing is outlined. Finally, in section 6, I provide an analysis of the literature's themes, some conclusions, and an identification of gaps in literature.

SECTION 1. INDIGENOUS ADULT LEARNING WITHIN THE HIGHER EDUCATION ENVIRONMENT

Malatest (2004) employed both quantitative and qualitative research methods to gather information from governments and academic institutions on the conditions of Aboriginal or Indigenous post-secondary education in Canada, United States, Australia and New Zealand. The author stated that "this study has an over-arching methodological limitation" (Malatest, 2004, p. 10). While making allowances for this limitation that "much of its information on strategies to increase Aboriginal enrolment and completion rates was collected from stakeholders involved who are a useful source of information but could be biased" (p.10), I feel that academics and all government representatives interested in the design of successful higher education programs for aboriginal students and communities should find this document a formative contribution to their efforts. The observations of contemporary Alaskan Indigenous scholars, Kirkness and Barnhardt, describe the historical situation on indigenous higher education programming:

> From an institutional perspective, the problem has been defined in terms of low achievement, high attrition, poor retention, weak persistence, etc., thus placing the onus for adjustment on the student. From the perspective of the Indian student, however, the problem is often cast in more human terms, with an emphasis on the need for a higher educational system that respects them for who they are, that is relevant to their view of the world, that offers reciprocity in their relationships with others, and that helps them exercise responsibility over their own lives. (p.23)

Malatest reports that as a result of the above institutional perspective, in the sample countries, "Programs have emerged to empower the students and see them in context of their culture" (p.23).

The above described context of indigenous higher education, and the move towards institutional design of closed, certificate based programs and open-ended, continuing education courses that are both individually and culturally empowering for indigenous students, has increased the demand for a greater understanding of Indigenous Ways of Knowing and how these can be internally incorporated for greater institutional success. This will be no simple task. "There are over 500 distinct indigenous communities in North America alone. Each indigenous community belongs to a specific language group and recognizes and practices cultural traditions in combinations that distinguish communities from each other, especially to insiders" (Warner, 2006, p.4). I have confined my research for this candidacy paper to the Inuit living in four geographic locations; Siberia, Alaska, Canada, and Greenland. They are distinguished from other Inuit in northern hemisphere as these four sub-tribes occupy homelands situated above the Arctic Circle.

I located very little research concerning the concept *Inuit Ways of Knowing*. There seemed to be a significant gap in the literature on Inuit Ways of Knowing as part of the broader field of Indigenous Ways of Knowing; therefore, I expanded my search for publications that employed not just the term *Indigenous* but *Native* or *Aboriginal* Ways of Knowing. I located a small body of items, consisting of internal Indigenous organizational papers and peer-reviewed articles from academic journals, of which the authors were of Inuit, Indian or Metis ancestry. Their research provided key insider

participant insights for this report. Works by Indigenous and non-indigenous academics, although written from an outside perspective of not having lived in or experienced the north over a long period of time, also provided additional layers of meaning to this report.

I confined this literature discussion to text sources with publication dates from 1950 to 2006. Finding literature on Indigenous or Inuit Ways of Knowing required an extensive search in the following areas: documents from Indigenous or Inuit academics or internal Inuit organizations, and literature from peer-reviewed research in the field of Adult or Higher Education. When no direct sources were found, I conducted a cursory review of literature on Indigenous or Inuit Anthropology, Inuit Traditional Ecology, and Indigenous Studies. The literature from these disciplines often contained casual references to Ways of Knowing or Inuit adult learning styles but, for this literature discussion, I chose to incorporate only a few of such references.

To summarize this section, I note that the reader might very well be wondering, *Who are the Inuit*? The Inuit are defined as a "group of culturally similar indigenous peoples inhabiting the Arctic coasts of Siberia, Alaska, the Northwest Territories, Nunavut, Quebec, Labrador and Greenland (see Eskimo)" (Inuit, 2006a, ¶ 1). The Inuit of the circumpolar, northern hemisphere derive socio-political strength in their membership and participation in the affairs of the Inuit Circumpolar Conference. The "Inuit Circumpolar Conference or ICC, is an multinational non-governmental organization representing the 150,000 Inuit living in Canada (Inuvialuit (Northwest Territories), Nunavut, Nunavik (Northern Quebec), and Nunatsiavut (Labrador)), Inupiat and Yupik living in Alaska in the United States, Kalaallit living in Greenland, and Siberian Yupikhyt living on the Russian Chukchi Peninsula" (Inuit, 2006b, ¶1). As part of this

research, I located significant sources on Alaskan and Canadian Inuit Ways of Knowing, but none were found on Ways of Knowing for the Siberian Yup'ik or the Greenland Kalaallit Inuit.

SECTION 2. TERMINOLOGY AND CONCEPTS

2.1. What Do We Mean by *Indigenous*?

Indigenous, in this research, refers to the original Inuit people who through their oral histories, and sometimes printed documents (maps and explorers' journals), make a claim that they are the original inhabitants of an area of Arctic land, particularly before colonization efforts by outsiders …and who continue to occupy said lands today in the customs and practices of their ancestors. The line of distinction between Indigenous and other societies is not finite particularly in the field of academic research. My employment of this term is enhanced by this further clarification: "Indigenous peoples are always marginal to their states and they are often tribal [in the sense that they belong to small-scale pre-industrial societies that live in comparative isolation and manage their own affairs without the centralized authority of a state].... The point is that there are no hard and fast distinctions that enable us to place societies unambiguously within these categories" (Mayberry-Lewis, 1997, pp.54-55). While I confine my research results in this paper to the terms *Indigenous* and *Inuit*, the reader should note that they are part of the family of other "first inhabitants" terminology such as Aboriginal, Aborigine, Native, and First Nations. My insights into Indigenous Ways of Knowing expanded greatly once I searched for publications that utilized Native or Aboriginal Ways of Knowing in their titles or their abstracts.

2.2. Is it *Inuit* or *Eskimo*?

As a northern researcher who has resided in the Western Arctic for thirty-five years, I know it is important, no matter what our ethnic background or identity group, to use terms that we apply to ourselves. Related to this naming situation and how

terminology and knowledge have different social restraints in Indigenous than in non-indigenous communities, Kaplan (2006, p.1) states:

> Although the name "Eskimo" is commonly used in Alaska to refer to all Inuit and Yupik people of the world, this name is considered derogatory in many other places because it was given by non-Inuit people and was said to mean "eater of raw meat." Linguists now believe that "Eskimo" is derived from an Ojibwa word meaning "to net snowshoes." However, the people of Canada and Greenland prefer other names. "Inuit," meaning "people," is used in most of Canada, and the language is called "Inuktitut" in eastern Canada although other local designations are used also. The Inuit people of Greenland refer to themselves as "Greenlanders" or "Kalaallit" in their language, which they call "Greenlandic" or "Kalaallisut." Most Alaskans continue to accept the name "Eskimo," particularly because "Inuit" refers only to the Inupiat of northern Alaska, the Inuit of Canada, and the Kalaallit of Greenland, and is not a word in the Yupik languages of Alaska and Siberia. (Kaplan, 2006)

In discussing each of the four Inuit geographical areas, I use the term that it reports as being preferred. After my initial review of Indigenous or Native Ways of Knowing, throughout the remainder of this paper I employ the term *Inuit Ways of Knowing* when discussing the Inuit of all four geographic areas.

2. 3. What Are the Features of Indigenous Knowledge Systems and Western Knowledge Systems?

An analysis of Indigenous Ways of Knowing as a process is not easily separated from Indigenous Traditional Knowledge as the product of knowing. In fact, the trail to the literature in this field is full of twist and turns, as often a researcher will start out discussing knowing and then break trail and go off to begin speaking about the knowledge found. A brief overview of the two types of knowledge follows.

In both Indigenous Traditional Knowledge (ITK) and Western Knowledge systems, "information is organized to condense both experience and beliefs into knowledge" (Smylie, 2003, *Results,* ¶2). However, as a result of the global emergence of Indigenous self-governments and their successful documentation of both oral and textual histories, there has been a trend to cooperation between researchers from both knowledge systems. In fact, Indigenous cultures have assumed ownership of their knowledge and are taking increasing control of the processes of observation, documentation, and public presentation of their identities. Martha Flaherty, as President of Pauktuutit Inuit Women's Association in Canada, stated, "I have chosen to stand firm in my position that it is time for Inuit to set our own terms upon those working within these professions who want to come to our land.… [T]here is a growing concern among Inuit women about the exploitation and appropriation of Inuit knowledge practices and culture by well-intentioned, well meaning researchers" (Flaherty, 1995, p.182-183). Knowledge from both traditional (historical) and cosmopolitan (modern) sources assists the Inuit to achieve balance in what I describe as living in a two worlds situation. There are essential differences in the theoretical and epistemological frameworks underlying Western

knowledge systems and Indigenous knowledge systems (Battiste, 2005; Crowshoe, 2005; Kanatami, 2005; Kawagley, 1998; Smylie; 2003; Warner; 2006). My observations of contemporary Inuit cultural organizations' goals and achievements suggest, however, that Inuit citizens can be participants in both knowledge systems. As in Merriam & Caffarella's survey of adult learning, the Inuit utilize formal and "non-formal settings, community-based learning and indigenous learning" (Merriam & Caffarella, 1999, p.31) to enhance personal and cultural learning. While there may be a tendency to see these two knowledge systems and their participants as exclusive of each other and leading to unsettling environments, I have observed the opposite. "Forging broad alliances can risk disengaging leaders from local issues, but Inuit appear to have successfully linked concerns about global change with local, territorially based knowledge, at least in some communities" (Cruikshank, 1998, p.65). As Inuit move and are moved into a more active role in the global village, the following statement summarizes their new situation: Warner, as a concluding sentence in her paper, stated, "The globalization of our world through technology is the single most representative explanation of a movement to acknowledge Native Ways of Knowing in scholarship. None of us are place bound, in the historical sense" (Warner, 2006, p.19). So while change is global, in the circumpolar world researchers are giving a new priority to understanding the Inuit Knowledge through Inuit Ways of Knowing.

In the context of increasing Indigenous and Inuit self-government initiatives and local control over areas traditionally held by the State, Smylie (2006) speaks to a Way of Knowing common to almost all Indigenous cultures. "In Indigenous knowledge systems, generation of knowledge starts with 'stories' as the base units of knowledge; proceeds to

'knowledge', an integration of the values and processes described in the stories; and culminates in 'wisdom', an experiential distillation of knowledge" (Smylie, 2003, *Results*, ¶ 2). I have observed that most often research into Indigenous Knowledge focused on ecological and cultural practices; more recently, there has been an increase in research on how socio-political identity can be achieved through Indigenous Knowledge claims. In the past, Inuit employed a Ways of Knowing process where "local forms of knowledge dissemination were interwoven with social, political and kinship structures to reinforce individual and collective well-being and to ensure the protection and sustainability of the physical environment" (2003, p.5).

Position or perspective is everything, and from their locale near the North Pole, Northerners looking south notice that there are features of the Western knowledge system that southern researchers and institutions have, perhaps, forgotten or taken for granted. Western knowledge, for Inuit is often described as the white man's way of knowing and doing things, with the knowledge arising out of those capitalist values of competition and domination. Regarding the Western knowledge system, Hoppers (2003) describes it as "knowledge that is culturally anchored in Western cosmology, Western scientific discoveries, economic preferences and philosophies" (Hoppers, 2003, p.3). From my career lifetime perspective within the circumpolar world, influenced by Indigenous neighbours and their worldview, I can now see that Indigenous people view Western knowledge as individuated, detached from the group, and often speculatively forward-looking. "In Western knowledge systems this process involves the organization of individual data into abstract theoretical systems, composed of multiple components, each of which requires a 'specialist' to be fully understood…. [T]through processes of self-

authentication (as opposed to the Indigenous group or cultural authentication) science is set apart by its practitioners from other forms of knowledge production" (Smylie, 2003, p.5). However, I must support the research statement made by Warner (2006): "The globalization of our world through technology is the single most representative explanation of a movement to acknowledge Native Ways of Knowing in scholarship. None of us are place bound, in the historical sense" (2006, p.19). Though change is upon us globally, nonetheless, in the circumpolar world, researchers are giving a new priority to understanding the insider Indigenous point of view on Inuit Ways of Knowing.

2.4 Summary

Four of the Indigenous tribes in the circumpolar northern hemisphere are the Inuit cultures of Canada, Alaska, Siberian and Greenland. In each geographic area, through participation by elders and in partnership with the younger generation of leaders educated in the Western model of colleges and universities, Inuit today are examining ways of knowing that enable them to draw strength and guidance from both the Traditional Knowledge System and the Western Knowledge System. "The concept of culture includes patterns of knowledge, skills, behaviours, attitudes and beliefs, material artifacts etc.…. Culture is the whole of humanity's intellectual, social, technological, political, moral, religious and aesthetic accomplishments…" (Keskitalo, 1997, p.188). Cultures in the northern hemisphere are in transition as modernity creates a situation where "The society changes from an integrated type, sharing common needs of knowledge, common goals and the same values, to a differentiated society. Economic and social adaptation through modernization, specialization and differentiation form a compound and complex society" (Keskitalo, 1997, p.199). However, to stop the erosion of and to strengthen Inuit

identity, now more than ever, Inuit are uniting to expand their collective understanding of Ways of Knowing that are applicable to both knowledge systems.

SECTION 3. INDIGENOUS WAYS OF KNOWING

Throughout the early stages of this research, specific themes appeared over and over. Some of the themes were *knowing as forms of power*; *knowing through spatial memory and spatial language*; *knowing as ways of being and ways of doing*; and *ways of knowing for cultural intelligence and individual intelligence.* These turned out to be my trail markers as I continued hunting and gathering for both primary and secondary sources.

3.1. The Digging

The literature on Indigenous or Native Ways of Knowing by northern Indigenous scholars, such as Alaskan Inupiat (Inuit) authors Barnhardt & Kawagley (2005) and southern Canadian Indigenous authors Battiste (2002) and Crowshoe (2005), contributes significantly to the field in that it documents insights not accessible to non-indigenous researchers.

Although not anchored in scholarly models of data collecting, methodological review and analysis, the observations and perspectives situated in three internal documents/ position papers by Indigenous socio-political organizations proved to be invaluable in assisting this non-indigenous researcher to grasp the subtleties of the indigenous perspective on this research topic. They are *Cultural citizenship in the 21st Century: Adult learning and indigenous peoples* (Belanger, 1999); *Backgrounder on Inuit and Education for Discussion at Life Long Learning Sectoral Meetings* (Kanatami, 2004); and *State of Inuit Learning in Canada* (Kanatami, 2005). Literature from *A seminar on two ways of knowing; Indigenous and scientific knowledge. Inuvik, Northwest*

Territories (Summary notes, 1996; Fehr & Hurst, 1996) yielded the only two primary sources found on Inuvialuit Ways of Knowing.

Indigenous researchers and organizations publish data based on their lived experience, yet, as a non-indigenous community participant, I have come to realize that the pictures the photographer captures can also provide insight into and appreciation of the subject(s). Long term non-indigenous residents in Indigenous communities, through the strengths of their audio and visual (text or photograph) impressions acquired from their participant-observer roles among not Field Subjects but rather their neighbours, have produced significant research on Indigenous Ways of Knowing. Papers by Cruikshank (1981, 1998), Klassen (1994), and VanNieuwenhuyzen (2001) added greatly to this paper. The co-production of knowledge (Kofinas, 2002), which in northern parlance means a "white guy and a native" working together, yielded research that added another layer of meaning to Indigenous Ways of Knowing. Regardless of ethnicity, such teamwork arose naturally out of shared values of cooperation, sharing, and collaboration. Castleden & Kurszewski (2000), the former a southern non-indigenous researcher and the latter a northern Indigenous researcher, published *Re/searchers as co-learners: Life narratives on collaborative re/search in Aboriginal communities.* In it, they spoke of the significance and strengths of Indigenous and non-indigenous collaboration in a publication exemplifying a blend of ways of knowing. A similar Indigenous / non-indigenous research partnership, Binder & Hanbidge (1993), focusing on the Inuvialuit of Inuvik and the Western Arctic and the data gathering process of accumulating knowledge, stated:

> Traditional knowledge plays a strong part in the Inuvialuit management systems, from data collection and general wildlife observation, to decision-making, to implementation and enforcement of decisions. Without input of data from the users in the field, there would be less information collected at greater cost. (Binder & Hanbidge, 1993, p.131)

To round out my search, I reviewed text sources, some of which were peer-reviewed, by the following non-indigenous researchers: Clarke (2006); Collings (2000, 2001); Dyck (2005); Ellen & Harris (2000); Kanu (2006); Krupnik & Vakhtin (2000); and Krupnik & Jolly (2002). The absence of Indigenous ancestry for these individuals does not lessen, in any way, the significance of the research snapshots their publications provide on Native Ways of Knowing.

Throughout the early stages of candidacy research, specific topic themes appeared over and over. Some such themes were *knowing as forms of power*; *knowing through spatial memory and spatial language*; *knowing as ways of being and ways of doing*; and *ways of knowing for cultural intelligence and individual intelligence.*

By mid-candidacy time frame, I had accumulated a multitude of research papers, with only a few on Indigenous Ways of Knowing, with brief but significant insights by way of discussion on Indigenous Traditional Knowledge. I had anticipated that in reviewing the latter I would extrapolate insights into ways of knowing, but I underestimated what a time-consuming process that would be. Before long, I became so caught up with aligning the threads of varying length on ways of knowing that I felt I was tied up in knots. Fortunately for this review, I was able to locate source documents by

Inuit spokespeople. Authored by Alaskan or Canadian Inuit leaders or academics, they were significant in that there were few first person accounts on Inuit Ways of Knowing. In a few instances in this paper, I cite secondary references on adult learning or knowing from literature arising out of anthropology. However the limitation of anthropological literature is that anthropologists, in their search for something else, would employ methods that would not have adequately captured what really constitutes Indigenous Ways of Knowing. As well, in those instances, the theory may misinform the practice (Collings, Personal Communication, 2006). For one day and one very restless sleep, I doubted that I was going to be able to weave everything together to form a blanket understanding of Indigenous Ways of Knowing. However, I breathed out a sigh of relief and began to sleep much better, after came across a peer-reviewed paper entitled, *Native ways of knowing: Let me count the ways* (Warner, 2006). From this publication, I was able to derive a structure for understand Indigenous or Native Ways of Knowing which I then used in my discussion and analysis portions of this paper.

3.2. The Find

Warner (2006) wanted to know more about the generalities and commonalities among researchers (Indigenous and non-indigenous) and their perspective on the meaning of Indigenous Ways of Knowing. Utilizing the term *Native* instead of *Indigenous* in her discussion of ways of knowing, she discussed how the research findings could be grouped into four categories: person, product, position, and process (Warner, 2006, p.9). After reviewing her paper, I moved forward in my literature review with a new confidence. I highly recommend academics and researchers employ her model for future Indigenous Ways of Knowing research. As an educator in Indigenous (Inuit and Dene)

communities, I am adding my support to Warner's assumptions, particularly her following statements: "Indigenous pedagogy is valued [and] … Native Ways of Knowing is not a debate about the effects of colonization, but actualizing Native Ways of Knowing in a curriculum is a political act of self-determination" (Warner, p.8).

In a review of 25 publications by different researchers, Warner found that their approaches to the concept or the term *Native Ways of Knowing* fell into four categories (p. 9):

Person: Is it "who is" Native that makes it Native Ways of knowing?

Product: Is it "what", the product achieve, that makes it Native Ways of Knowing?

Position: Is it "where" the research or practice operates that makes it Native Ways of Knowing?

Process: Is it "how we get things (research or practice) done" that makes it Native Ways of Knowing?

Warner admitted that there was overlap in categories, but stated that this was compatible with the multi-layered meanings often found in Indigenous practice. I note that she did not explain the criteria for selecting these 25 out of what I would assume could be a larger sample group. While the majority of her 25 listed researchers produced papers relating to the field of education, in a repeat study with an expanded sample group to mine references to ways of knowing from such disciplines as ecology, anthropology and sociology, in my opinion, one could expect increased and varying category amounts.

Warmer's comment below held particular significance for a separation that I have referred to earlier in this paper on the role of insider / outsider research perspectives:

> Some terms involve more than one element in this typology, but it is also clear that the terms are radically different when used by an insider as compared to a scholar (even a Native scholar) who is an outsider in the Native community where the research or practice is found. (p.10)

In my opinion, regarding the insider-outsider continuum, Warner did not make allowances for the strengths resulting from the position that I possess, along with other non-indigenous researchers (Cruikshank, 1981, 1998; Klassen, 1994; VanNieuwenhuyzen, 2001), due to our long years of northern residency.

Warner's voice is a lone one, and a welcome sound in the wilderness when analyzing the significance of the insider / outsider variable in existing research. New research should necessarily "…include(s) variables of scholarship origin (Native and non-Native); focus on Research or Practice; and linguistic ability (Native language speaker or non-Native language speaker).These variables would serve as indicators for future research" (p.16).

3.3. Summary

In summary, throughout the remainder of this paper, I assign the items discussed to one or more of Warner's typology of the term *Native Ways of Knowing*: that it can be based on person, product, position, or place.

SECTION 4. INUIT WAYS OF KNOWING

In these modern times and like other Indigenous groups, Inuit are concerned with the hunting and gathering of both types of knowledge: discursive and the practical and the traditional and western (Battiste, 2004; Hoppers, 2003; Kanatami, 2005; Keskitalo, 1997). At an Arctic Borderlands Committee meeting of Gwich'in and Inuvialuit at Aklavik in 2001 and described by Kofinas (2002), participants coined the term *co-production of knowledge* to describe how the two different ways of knowing (Indigenous and Western) led to an integration of the two types of knowledge. There are two camps reflecting two varying opinions on the nature of such integrated knowledge. One camp is alarmist and preservationist, feeling this new form is eroding traditions and the knowledge that goes with them. The other camp while fueling their argument with references on how knowing must be carried out from an optimistic, adaptive position, are expressing that culture cannot be static but needs to change with the times. While there are differences in the ways of knowing, there are also similarities (Scott, 2002, p. 59). Northerner indigenous scholars, Barnhardt and Kawagley, explain this process "as recognizing generalization as indicative, but not definitive" (2005, p.10).

And finally some information related on a common Inuit expression found in almost all Inuit cultures. For the Inupiat and the Inuvialuit, who employ spelling and speech variations, it is *ayorama*, meaning, "It can't be helped." Outside perspectives consider this one of the fatalist threads common to the Inuit, as well as many Indigenous cultures. Inuit insiders, particularly those who have lived year after year on and with the northern landscape, feel that it is a sound facet of Inuit Ways of Knowing. Long ago, and in modern times, it is used as an adaptive response (Lazar, 2006, p.4) tool such that when

faced with the stressors and hardship in their living environment, the person can feel in harmony with nature. Abe Okpik, an Inuvialuit from Canada's western Arctic, whose ancestors were Alaskan Inupiat, is most known for his migration throughout late 1960s to all parts of the then one and a third million square miles of the Northwest Territories. He was determined to carry the message to Inuit of all NWT regions that they should put aside the Government of Canada use of a Disc Number (Okpik, 1960; Hansen, 2006; Waddington, *Glossary-Disc*, 2006) to identify them. This numbering instead of naming was a byproduct of an earlier federal government initiative when the government agents working in the north, encountering difficulty spelling and speaking Inuit surnames, decided it would be simpler to just use numbers. A good friend of mine, # W2-5708, remembers his feelings of frustration and shame that greatly impacted his interest in Western Ways of Knowing. The role shame or public embarrassment plays in adult learning has not yet been documented to any great degree by researchers in any field. Okpik made his way around the North and is remembered today for his pivotal role in reinstating control by Inuit over the names they choose to call themselves. Displaying the new English literacy acquired by adult Inuvialuit at night classes in the Rehabilitation Centre in the new town of Inuvik, he wrote:

> At one time an Eskimo believed he was the only living man in the whole creation. In our Eskimo language we say, "Inopiat". The translation for this word is very interesting; it means 'people above people'. This is not to suggest any superiority, other than the ability to survive where others cannot. (Okpik, 1960, p.38)

This perspective is a key component of the knowing process and explains why Inuit today, with their history of adaptation (Kanatami, 2005; Northwest Territories, *Inuuqatigiit*, 1996), are not just surviving but thriving.

Today, in their "transition from relatively isolated local communities to a more integrated large-scale society" (Inuit, 2006, *Defining Characteristics…*¶4), Inuit are observing that it is modernity, by which I mean the new environmental conditions of modern life, that is proving to be the harshest survival challenge of all. These conditions include "bureaucracy, disenchantment of the world, rationalization, secularization, alienation, commodification, de-contextualization, individualism, subjectivism, linear progression, objectivism, universalism, reductionism, chaos, mass society, industrial society, homogenization, unification, hybridization, diversification, democratization, centralization, hierarchical organization, mechanization, totalitarianism, and so on" (Modernity, Defining characteristics, 2006, ¶3).

To follow is a discussion and analysis of an overview of the research on Ways of Knowing. While one can expect that there will be variations in the type and validity of data sources on ways of knowing as well as features unique to each, nonetheless, there will be some identifiable shared features of Inuit Ways of Knowing that I will comment upon in my conclusion.

4.1 Discussion of Research on Alaskan Yup'ik and Inupiat Ways of Knowing

So strong is the Alaskan Inuit Way of Knowing that in a 2002 workshop of Inupiat and Yup'ik citizens, one person summarized the relationship of the people with the land in this way: "I think that (we are) so salmon dependent, being a coastal

community, and its been in our blood for years and years that we are salmon fishermen" (Mustonen & Mustonen, 2004, p.68). I am ready to support that statement based on my lived experience in the Western Arctic, so I would suggest the reader hold that thought as I continue to review the literature.

Barnhardt and Kawagley (2005), employing Warner's guidelines, conducted research from the perspective that Native Ways of Knowing is a process. They observed that there was very little literature "that addressed how to get Western Scientists and educators to understand Native worldviews and Native ways of knowing" (2005, ¶7) and emphasized that there was now a two-way street between Indigenous and Western Knowledge networks. They concluded that "Native people may need to understand western society, but not at the expense of what they already know" (2005, ¶7). In their article, with reference to both Yup'ik and Inupiat, the authors employed an effective visual diagram, and stated that the processes of learning "occur within and at the intersection of diverse worldviews and knowledge systems through a comparative analysis of experiences [are] derived from across multiple Fourth World Contexts (Barnhardt, 1991, ¶8).

Barnhardt and Kawagley supported the position of Maori scholar Smith (1999) that Indigenous people need to design their own research methodologies which will delineate issues using "frames of reference that derive from within their own communities and cultural traditions" (2005, *Indigenizing Research,* ¶ 1). In doing so, literature will result which will contribute to the further conceptualization, critique and development of indigenous knowledge systems in their own right…" (2005, *Indigenizing Research*, ¶2).

In his doctoral dissertation on a Yupiaq (alternatively *Yup'ik*) Worldview, Kawagley (1995) stated that, "Myths are the Alaska Native's tool for teaching" (Kawagley, 1995, p.31). Other approaches listed were: intuition as a way of knowing; from shamans who were respected for their visions and dreams; visualization, elder's oral histories, and "the releasing of negative thoughts from the mind by participating in steam baths, singing and dancing, talking with others playing games, spending time in silence with one's own thoughts, learning to relax and visualizing a good life" (p.36).

Morrow (1990) suggested that the "philosophical expression of multiple, simultaneous reference pervades Yupik society…encompassing phenomena as…flexibility, avoidance of generalization, deference, politeness, metaphors of transformation in art and ritual" (Morrow, 1990, p.154). Yupik citizens reported that for them meaning was not measurable, indeterminate, and the first principle connected with learning was that there were reliable human limits, as referred to earlier in this paper by the Inupiat expression *ayorama* (Okpik, 1960, p.40) or *it can't be helped*. With such uncertainty as to causes, one cannot make generalizations, a practice of Western Ways of Knowing that goes back centuries.

Commenting on the balance of self and the collective, Morrow observed, "Analysis is self-centered, a quality which detracts from the value of the collectivity; another is that presumes impossible knowledge" (Morrow, 1990, p. 155). He noted also that the reason why analysis and specification are so frowned upon as a Yupik Way of Knowing is that such practice "disrupts the dynamic tensions which holds the world in balance" (1990, p. 155).

A final insight provided by Morrow is the appearance of double-think in Yup'ik society: "the man who has the most to give at the Messenger Feast seems on one level to gain prestige by his actions; yet he is ridiculed immediately after his apparent triumph…in order to bring the world back into balance" (p.155). From the above data, researchers anchored within the Western Knowledge system can see how Western Ways of Knowing introduces a paradigm shift for younger Yup'ik and Inupiat Alaskans.

4.2 Discussion of Research on Inuit Ways of Knowing for the Nunavummiut, the Inuit residing in Nunavut, Canada

Any discussion of Inuit ways of knowing, with insights into Inuit Adult Learning, must begin by referencing the first document of its kind for the Inuit of northern Canada: *Inuuqatigiit – the Curriculum from the Inuit Perspective* (Government of the Northwest Territories, 1996). Years in the making and sponsored by the Government of the NWT Minister of Education, Culture and Employment, Inuit elders compiled for print publication key aspects that are *common* to the Canadian Inuit tribes gathered along the Arctic circle and high Arctic waters. "Children were encouraged to watch and observe adults at their tasks…short verbal instructions were used, with a calm, respectful, positive voice…learn with all their senses…Inuit want learning to be just as meaningful for today as it was in the past" (Northwest Territories, 1996, p.14). The learning styles for adults and children were the same. "Inuit did not have a written language. All of Inuit history, knowledge, values and beliefs were passed on from generation to generation by word of mouth. The information was contained in both songs and stories, repeated to children by their parents and grandparents as they grew…There would often be chants and songs in

the story which the listeners got involved with through facial expressions, body language, murmurs of wonder and a great deal of enjoyment" (p.19). This way of knowing was categorized by Ridington (2000) as narrative technology. He stated, "The ability to remember, to tell, and organize this information is a key to what I have called the "narrative technology" of hunting and gathering peoples" (Ridington, 2000, p.3).

Like other Indigenous cultures around the world, the Inuit from all circumpolar areas are faced with what Battiste (2002) describes as the duality of two ways of knowing (the traditional native way versus the modern, white way). She reported:

> Indigenous scholars discovered that indigenous knowledge is far more than the binary opposite of western knowledge. As a concept, indigenous knowledge benchmarks the limitations of Eurocentric theory — its methodology, evidence, and conclusions — reconceptualizes the resilience and self-reliance of indigenous peoples, and underscores the importance of their own philosophies, heritages, and educational processes. Indigenous knowledge fills the ethical and knowledge gaps in Eurocentric education, research, and scholarship. (2000, p.5). Reflecting the holistic nature of Inupiat, and for all Inuit in general, Jens (1993, p.41), in speaking of this same Inupiat situation, described it as, *Two Worlds, One Spirit.*

In 1999, the government of Canada deeded the traditional lands of what was once Canada's eastern portion of the entire one and a third square miles of the Northwest Territories to the Inuit. The Inuit, the "people," named their territory its long held Inuit term, *Nunavut*.

> The emotional, spiritual, deeper meaning of nunavut or nunavun is "our homeland." The unspoken meaning stresses "home." To some Inuit, with

deeper knowledge of the language, when nunavut is spoken, the silent understanding means "we share in this together, unconditionally," and there is an intense gratitude. Hanson, 2006, ¶1)

Since becoming a territory, Nunavut has become a case study of the impact of modernity which has been termed a struggle by some researchers but from within, is described as the life as usual. Through their adaptation and use of both old (IQ) and new technologies (Western media, corporate models of governance etc), Nunavummiut continue balancing the integration of their old Ways of Knowing with the new Western Ways of Knowing. Like bad weather, since formation they have been buffeted by Western Ways, some from the inherited government institutions of the civil service, and others arriving by the new technologies of television and the Internet. As they have for centuries though, they apply Ways of Knowing by taking solace and confident that some things are *ayorama* and can't be helped.

The second primary document (*Inuuqatigiit* is the first) that directly addresses Ways of Knowing is: *Inuit Qaujimajatuqangit* (shortened to IQ). The Nunavut Government website states, "IQ is traditional knowledge" (Nunavut, 2005, ¶1). Relating to Warner's position that ways of knowing can be product, as described above by the Nunavut government, Simpson (2004) stated "IQ was recently defined by the IQ Task Force as 'the Inuit ways of doing things: the past, present and future knowledge, experience and values of Inuit society' (Simpson, 2004, p. 10). The Nunavut Government position is that IQ is not fixed, that it

evolves. Some alarmists are worried that IQ is leading to a melting away of rich historical ways of knowing and traditional knowledge. The counter argument has been stated as follows: "Just as culture is not frozen in time, but rather evolves, IQ has become the conduit and epistemological glue for creating and projecting a culture onto the new place called Nunavut" (2004, p.11).

To close this brief overview of IQ, the Nunavut Government stated that within IQ, and as part of Ways of Knowing, there are a number of guiding principles...that arise out of commonly held beliefs and values. The values are based on the following six principles: 1.) Pijitsirarniq: Concept of serving; 2.) Aajiiqatigiingniq: Consensus-decision making; 3.) Pilimmaksarniq: Concept of skills and knowledge acquisition; 4.) Qanuqtuurungnarniq: Concept of being resourceful to solve problems; 5.) Piliriqatigiingniq: Concept of collaborative relationship of working together for a common purpose; 6.) Avatimik Kamattiarniq: Concept of environmental stewardship (Nunavut, 2005, p.2).

It is a credit to all Nunavummiut that, once again, being faced with difficult weather they continue to move forward with strength and optimism.

4.3. Discussion of Inuit Ways of Knowing for the Inuvialuit residing in the Mackenzie Delta/ Beaufort Sea region of the Northwest Territories, Canada

In my doctoral dissertation proposal, I defined the term *Inuvialuit adult learning* as being a combination of the terms *adult learning* and *Inuvialuit ways of knowing.* The following literature review, while limited in numbers, reflects the depth and breadth of knowledge about Inuvialuit Ways of Knowing within the larger Inuit framework.

It should be noted that Inuvialuit Ways of Knowing has its roots in the cosmology and traditions of their ancestors and their immediate geographic neighbours, the Alaskan Inupiat and Inupiaq people (whom I described earlier in this report). The work of Barnhardt & Kawagley (2005) as an Indigenous team and the work of Barnhardt and Kawagley as Indigenous individuals (Barnhardt (1993, 1999, 2002, 2004); Kawagley (1995, 1998)) provide significant insights into Alaskan and Canadian Inuit Ways of Knowing.

Through my first-hand observations, anecdotal reports of elders, and extrapolated peer-reviewed research from other academic disciplines, it can be stated that the Inuvialuit define *adult learning* as learning associated with the cultural values, customs, and practices by Inuvialuit both long ago and in these modern times, rather than as learning in a classroom. Adult learning that arises out of "participation, communication and the co-construction of knowledge" (McLoughlin, 2000, p10) has begun to increasingly appear in publication by members of the Inuvialuit community. Cournoyea, describing the context of adult learning or ways of knowing by her people, stated, "There are two basic types of Traditional Knowledge: elder knowledge and local knowledge" (Forward in Condon, 1998, ¶ 7). At that time she mentioned that a pressing concern for Inuvialuit, as for all Indigenous cultures, was that if documentation did not occur swiftly, the elders' knowledge would disappear. Further, she reaffirmed the common Inuit perspective that local knowledge is "a combination of that which has been passed down plus the accrued day-to-day experience of the more recent generations" (1998, ¶7). Cournoyea's observation confirmed Barnhardt and Kawagley's position, as shown in diagram format earlier in this report, that Traditional and Western Ways of Knowing

share a common ground. To lessen any concerns that cooperation between researchers and citizens in the camps of Traditional and Western knowledge was lacking, Cournoyea continued with "The Canadians' response has been to create mechanisms that incorporate Traditional knowledge and Native Ways into the regulation-making process, with natives participating as decision-makers" (¶12). In the understated manner indicative of her people, she closed with "My own observations confirm that the Canadians' co-management approach generally has been quite successful" (¶12).

Since 1986, the JS or Joint Secretariat (Secretariat, 2006), the support organization for board members and employees of the Inuvialuit Renewable Resource Committees (Binder & Hanbidge, 1993; Joint Secretariat, 2006), has been a source of indirect insights into Inuvialuit Ways of Knowing through literature supported or published by them on Inuvialuit Traditional Knowledge or Traditional Ecological Knowledge. A similar contribution to this field of knowledge can be found in literature produced by Parks Canada (Cockney, 1998; Hart, 1997, 1999, 2001; Nagy, 1994). The strength of literature from both these groups is in the observational snapshots of academic researchers combined with the insights from anecdotal comments by elders and citizens on Inuvialuit adult learning or Ways of Knowing. The literature produced by the Inuvialuit Regional Corporation, particularly the Co-management boards, is reflective of the Bateson (1994) process by which individuals and cultures learn to learn.

Further insights into Inuvialuit Ways of Knowing can be found in six publications by authors who conducted research in Inuit and/ or Inuvialuit communities. They are the works by Condon (1987, 1996), Collignon (2006), Collings (2000, 2001), Damas (1988, 2002), Freeman et al (1992), and Krupnik & Jolly (2002).

The contributions by long time residents in the Inuvialuit Settlement Region, Klassen (1994) and Van Nieuwenhuyzen (2001) are based in their extensive cross-cultural experience in education. In her research entitled *Inuvialuit Culture and the Rules of Traditional Times*, Klassen (1994) concluded that out of a review of five possible ways of knowing there were two ways of learning unique to the Inuvialuit: "The two rules that appear to have the greatest support are the ethic of non-interference and the ethic that anger not be shown. It is possible that these two ethics are the easiest for a person from Euro Canadian culture to recognize as they differ so obviously from behaviour in that culture, and for this reason have been more extensively documented" (p.22).

To close this discussion, while all of the above literature provided rich Ways of Knowing insights, the sole primary sources containing the term Inuvialuit Ways of Knowing that I was able to locate were by authors relating data outcomes of the same conference. Fehr and Hurst (1996), on behalf of Aurora Research Institute, Aurora College, NWT, and the host organization Conservation of Arctic Flora and Fauna (CAFF, 1996) who are the working group of the Arctic Council, produced literature on the conference titled, *CAFF Seminar on the Documentation and Application of Indigenous Knowledge, Inuvik, Northwest Territories, Canada November 15-17, 1996.* The literature discussed ways of knowing that, as per Warner's categories, approach Inuvialuit Ways of Knowing as being both a process and a product. Some of the highlights from Fehr and Hurst's (1996) document are:

1) Traditional Knowledge should be gathered resulting out of group discussions, interviews, employing maps to gather first hand experience from Inuvialuit, the data of which to be for scientific or Western use.

2) Interview should use a holistic approach…conducted on the land…highlighting the knowledge around local place names and terminology provided by the community.

3) Participants should be compensated…the process and the product of Inuvialuit ways of knowing should be conducted and presented in plain English and in local Inuvialuktun dialects.

Both research items above made reference to how some information or data is not transferred easily between the Inuit Knowledge System and Western Knowledge System., "so that some of the depth of knowledge is lost as well" (Fehr, 1997, p.13). Inuvialuit researcher and elder, Richard Binder (1997, p.60) made reference to how Knowledge was shared through visual observation and songs and drum dances.

4.3. Summary

In closing section 4, I as an observation on the ethnicity of researchers and its connection to the depth of insights possible on as they pursue documenting data on Inuit Ways of Knowing and Traditional Knowledge, Fehr recorded, "The chairman's [Henry Huntington, Alaska] observation that Indigenous Knowledge may imply[s] that any Indigenous person may have this expertise, when in fact personal experience and learning from the elders are more important factors than ancestry" (Fehr, 1996, p.4). I share this point of view particularly since the new generations of young Inuit are developing Ways of Knowing resulting out of the increased of increased exposure and expectation, and indeed desire, to participate in Western ways. Thus, it is from my position as a non-Inuit, who has acquired both elder knowledge and lived local knowledge that I move on to my analysis and conclusions.

SECTION 5. ADULT LEARNING THEORY AND LINKS TO INUIT WAYS OF KNOWING

5.1. Adult Learning within Western Cosmology

Learning that takes place in the adult years was described by Merriam & Caffarella as a situation where "the configuration of learner, context and process together makes learning in adulthood distinctly different from learning in childhood" (1999, p.389). This definition is in keeping with the Inuit tradition of looking for meaning and understanding by examining the whole. In addition, I provide the following representative perspectives on adult learning that have evolved out of western cosmology.

Knowles (1980) used a set of assumptions about adult learners (regarding self-concept, experience, readiness to learn, problem-centered focus, and internal motivation) to define *andragogy* (Merriam & Caffarella, 1999, p. 286). Other researchers such as Peterson (1998) and Coombs (1985) argue that self-directed, informal learning is both powerful and legitimate for adults. Yet other researchers have focused on the types of knowledge as another way to define adult learning: Habermaas (1970) outlined three domains of knowledge (technical, practical, and emancipatory), and Mezirow (1981) proposed that several types of learning (instrumental, communicative, and emancipatory) accompany Habermas's domains (Grill, 2002, section 3). I can confirm first hand the many observations made in literature from the fields of Inuit Anthropology and Traditional Ecological Knowledge that above Inuit cultures display all of the above adult learning features.

Of direct relevance to research on adult learning in Inuit cultures is Kolb's (1984) proposal that much of adult learning is experiential. Kolb's position has been criticized as being individualized and internal (rather than socially situated) and concerned with the production of knowledge (rather than practice). Most importantly, Cranton (1994) provides the following observation, which indigenous cultures globally, and the Inuit as well, have focused upon:

> Perspectives on adult learning have changed dramatically over the decades. Adult learning has been viewed as a process of being freed from the oppression of being illiterate, a means of gaining knowledge and skills, a way to satisfy learner needs, and a process of critical self-reflection that can lead to transformation. The phenomenon of adult learning is too complex and difficult to capture in any one definition. (1994, p.3)

Nunavut's IQ may be augmented by a fact which is common knowledge to all northerners: IQ is both the tool and the product by which Inuit can distance themselves from their past historical domination as well as transforming themselves for the future.

Merriam and Caffarella (1999) in their work on self-directed learning stated that there are "frameworks suggesting further directions for theory. Other efforts can properly be labeled models …or theories" (Merriam & Caffarella, 1999, p.267). I suggest that Wilber's (2001) *A Theory of Everything* provides insights into adult learning theory that exemplifies the Inuit condition. Observing that many Western theories are hierarchical and have a history of domination, Wilber stated, "Postmodernism has fortunately made us all the more sensitive to these injustices" (Wilber, 20001, p.38). Further, in his opinion, "post-modernists value pluralism over absolutism – and that is their value hierarchy"

(p.38). Indeed, given his statement I conclude that the Inuit are the epitome of postmodernism. Wilber puts great emphasis on having identified "over two hundred hierarchies" (p.39) situated in all of the academic disciplines. His research led to a model that assigned these hierarchies to four different quadrants. I suspect that in an "A-ha!" moment Wilber realized that "the ingredients of these hierarchies are holons. A holon is a part of other wholes" (p.40). Wilber, acknowledging the contribution of a colleague, capped his thinking with the statement, "[A]s Arthur Koestler point out, a growth hierarchy is actually a holarchy…which is why holarchies are the backbone of holism" (p. 40). I do believe I could translate this into Inuktitut (Nunavut) and Inuvialuktun (Inuvialuit) languages and it would bring an "Ah-leeeee!" moment of understanding to my Inuit neighbours, as, finally, someone from the Western way has grasped the foundation of their Inuit Way of Knowing.

In my opening sentences to this paper, I stated that Inuit are "spiritual beings having a human experience" (*What is a paradigm shift?* 2006, ¶9*)*. Kuhn, the author of this statement, along with Dilthey, Gebser, Weber, and Gadamer are described by Wilber this way: "Theorists of the Lower Left investigate the *interior* of the *collective* – all the shared values, perceptions, worldviews, and background cultural contexts that are expressed, not in 'I' language or in 'it' language, but in 'we' language" (Wilber, 2001, p.51-52). This is a definitive description of Inuit Ways of Knowing from a Western perspective that absolutely amazes me. I can't wait until Wilber hears about visitors to the north who, through their lenses, initially photographed only the landscape or the spectacle of the Inuit. With Wilber's model as a lens, now visitors will be able to see deeply into the spirit-scape of northern people. As Wilber also observed, "The profound

effects of background cultural texts on the other quadrants have especially been emphasized by other postmodern writers (from Nietzsche to Heidigger to Foucault to Derrida, even if they overstate the case" (2001, p.52).

5.2. Summary

In closing, I propose that future research on Inuit Ways of Knowing may benefit if situated in either Wilber's *Holarchy of development model* (2001, p. 46), or in Barnhardt and Kawagley's (1995, Intersecting World, ¶) 10) model, *Qualities Associated with Traditional Knowledge and Western Science*. Research situated in either of these models will allow scientific inquiry that will address spiritual concerns as part of the larger Inuit ontology and epistemology.

SECTION 6.ANALYSIS

6.1. Warner's Typology

In reviewing the primary sources that made reference to Inuit Ways of Knowing in their titles and utilizing Warner's categories, I obtained the following results. Research by Fehr and Hurst (1996) and Simpson (2004) fell into both the product and the process categories. Barnhardt's and Kawagley's research, so said Warner, fell predominantly into the process category, but just as Warner noted that literature could fall into multiple categories, I assigned Barnhardt's and Kawagley's research to the person and position categories. It qualified so because Barnhardt and Kawagley write in the Indigenous voice of their people, and they are residents of an Inuit territory. Finally, I conclude the Nunavut (2005) IQ item, along with Kanatami (2005) item fell into all four of Warner's categories. Overall, then there are gaps in literature that discuss Inuit Ways of Knowing from the perspective of person and position.

6.2. Reliability of Inuit Recall

Information about Ways of Knowing and past conditions and events obtained from individuals in societies which lack a written record of their past may be inaccurate. It is necessary to establish the reliability and consistency of the recall capabilities of the informants. Cross-checking is an immediate step in any review process but, particularly in Inuit societies, this process may generate misunderstanding and ill-feeling when an individual finds that his information is being held in question, or indeed, that his integrity is being doubted" (Arima, 1976, p.31). Armina stated further that Inuit recall has "shown great retentiveness over several hundred years if it is assumed that mutual influence between sub-dialects of the groups has been negligible" (p.31). From his cited examples,

he observed that "Inuit recall is highly reliable (with due allowance made for cultural selectivity in what is recollected) within living memory from young adulthood at least, i.e. for about a half a century" (p.35). He concluded that Inuit recall is reliable at a generation's remove but "with some loss of original content to be expected and the beginnings of formalization into legendary narrative becoming apparent" (p.35).

6.3. Lincoln and Guba's Criteria for Judging Qualitative Research

What can we conclude when Lincoln and Guba's (1985) four criteria for the soundness of qualitative research (credibility, transferability, dependability, and confirmability) are applied to the literature cited in this paper? In the absence of any quantitative data, and in applying myself as "researcher-as-instrument", I concluded that the items discussed have high credibility because much of the literature was written by northerners – Inuit and non-Inuit. In my review, I identified common features of ways of knowing among both Alaskan and Canadian Inuit, and therefore, in my opinion the literature results have *transferability*, thereby enabling a degree of generalization about Inuit Ways of Knowing. Recall that "Barnhardt and Kawagley explain this process [of inter-tribal consensus] as recognizing generalization as indicative, but not definitive" (Warner, 2006, p.4). I also concluded that the items discussed have *dependability* because some of the earlier referenced themes of knowing and features of knowing appear over and over again. Inuit Ways of Knowing are based on the security of a centuries-old lived experience, a process evolving out of not struggle but harmony with the environment. Finally, I concluded that these items have *confirmability***,** again based on my own experiential knowledge as a northerner and confirmed through many indirect references on knowing found in the literature in other academic disciplines.

6.4 Gaps in Literature

As one might expect, given my dual roles as both student and teacher in the Arctic and my participation in doctoral studies, I have come to identify numerous gaps in the literature on Inuit Ways of Knowing. I would like to suggest that the depth and breadth of this field of knowledge could be expanded if future researchers employed the Holarchy of Development Model (Wilber, 2001) while being ever aware of their location in Warner's person, product, position, and process typology.

I have chosen to highlight three gaps that could be the focus of further research. First and foremost, this field of knowledge would be illuminated if there were more publications in the first-person voices of Inuit of all ages. Of course, first-person accounts by elders will enable a sharing of both the knowledge and the richness of the earlier hunting and gathering experience of Inuit cultures. But I wonder how the Inuit from the 1970s to the present time have adapted in their Ways of Knowing? This question arises out of the changes in Inuit culture, particularly for those persons raised in settlements or townships, encouraged to acquire job skills, and who today, like much of the developed world, are hunters and gatherers in the 500-channel universe.

A second area for future research would be to examine how Inuit social attitudes, and the prioritization of day-to-day decision-making, affect and are affected by their Ways of Knowing. A fellow Distance Education student in Taiwan (Bachiu, personal communication, Nov 23, 2003) , a participant in the University of Calgary – Master's of Education – Adult, Community and Higher Education (Distance) Program), related that, from his point of view, the indigenous Taiwanese people had only three major priorities: "food, family, and social connections." This can be said of Inuit cultures as well, and

knowledge of how priorities or values affect or are affected by Ways of Knowing would be of tremendous benefit to citizens, academics, and government leaders, regardless of their ethnicity. In both the Northwest Territories and Nunavut Legislatures, there is a majority of Indigenous MLAs who, both in legislative function and civil servant administration promote the significance of learning and education. There is a tremendous pressure for all civil service departments to highlight lifelong learning, particularly with a view to skill development; to its credit, the Nunavut Government has given an equal priority to learning for culture. If all Inuit share similar "food, family and social connections" priorities, that knowledge would be a partial explanation why other behaviours, expected in today's urban communities, are ranked lower do not have as high a priority as Inuit focus on food, family and social connections. There is room for research that examines the link between Ways of Knowing and such common behaviours as an unwillingness to retain long term jobs and a refusal to participate fully in the individual progression along the competitive / acquisition / consumer continuum now so present in the Arctic settlements.

Finally, there is a gap in the literature on whether social attitudes, acquired through Inuit Ways of Knowing, can be inherited. I wish to lend support to an elder's statement, cited earlier in this paper, that "…it's been in our blood for years and years that we are salmon fisherman" (Mustonen, 2004, p.68). Having observed how Inuit adapt to both the product and the process of the encroaching Western modernity, and without assuming either an alarmist or positivist opinion on this change, I could say that these changing times are a source of frustration for Inuit people. I have observed that arising out of their Ways of Knowing; Inuit demonstrate both adaptive and maladaptive

responses (Lazar, 2006, p.3) to modernity. Adaptive responses involve a person's naturally or intentionally learning new ways of transforming stress into active energy redirected towards another goal. Maladaptive responses, such as resignation, withdrawal, and aggression to name a few, are "characterized by a lack of constructive problem-solving and often make the frustrating experience worse by creating additional problems" (Lazar, 2006, p.3). I note that Lazar's article on *User Frustration with technology in the workplace* provides general insights into the "powers of technologies" referred to earlier in this paper and which I claim Inuit have been using for centuries. Just as elders pondered the question of whether salmon fishing is in the blood, I too feel there is room for further research on the question, *Is there is a genetic pattern for Ways of Knowing not just by the Inuit but all cultures?*

6.5. Summary

The field of knowledge around Inuit Ways of Knowing will grow immensely when future research is conducted on Inuit Ways of Knowing from either singularly or a blend of the four perspectives: Person, Product, Position and Process.

CONCLUSION

Cultural landscapes appear to influence Inuit Ways of Knowing. However, Indigenous and non-indigenous alike have observed that Inuit adult learners are capable of adapting through new technologies, and thereby making their way by thinking differently or apart from the cultural norm.

For generations, learning on the land was their schooling, and their Traditional Ways of Knowing, as the elders said, may well have been, 'in the blood'. Through a toughness and discipline developed over centuries, Inuit moved forward. Consistent and connected to all things, humbled by survival, they thrived in good weather and in bad. For the bad weather, their explanation? Ayorama. *It can't be helped.*

Today, Inuit live unsettled in settlements; they are experiencing adaptive and maladaptive responses to new Ways of Knowing. Whatever their response, it is a coping mechanism in order to maintain and acquire new skills to live on today's common ground, where the Traditional and the Western worldviews meet. Once seen as a stand alone pile of rocks on the tundra…in peering closer, Inuit now see an inukshuk pointing the way. There! On the horizon …Social Learning and Constructivist orientations to guide and inform Inuit Ways of Knowing.

Just as they were guided by the sun and the moon since the world was young, Inuit Ways of Knowing will also be guided by two other constants; their values of sharing and cooperation. It was like that long ago. It is so today. It will be that way for tomorrow. In good times and in bad, supported by their *ayorama* walking stick, Inuit continue to move forward across the Knowledge landscapes.

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