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Inuit Traditional Knowledge and the Politics of Adaptation:
Broadening Conceptions of Agency in Climate Change Governance

Abstract: 'Traditional knowledge' (TK) has become an important resource for involving people on the ground in research programs and for designing locally appropriate policies. This paper examines the idea of traditional knowledge as it is used in the context of debates and initiatives on Inuit adaptation to climate change. Many of the arguments for the participation of indigenous peoples in governance processes at all levels focus on the special role of TK in promoting appropriate, local level adaptive response to environmental change. This paper offers a critique of the conception of Inuit agency that emerges from current research frameworks on adaptation to climate change in the Canadian Arctic. In particular, it examines the way that an exclusive focus on TK in the context of hunting practices renders other modes of agency less visible, thus limiting the kinds of responses that are deemed 'relevant' to climate change. It suggests that while TK can provide important information about local climate change impacts, a broader view of agency is needed to support adaptive governance across multiple scales.

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Introduction:

I am on a small, inflatable boat with an outboard motor, a Zodiac. It's summer, and the Arctic waters around me are free of ice. It is nearly seven in the evening, but the sun is still high in the sky. An old man stands next to me, ready to advise me as I steer the boat away from shore. I squint my eyes against the evening sun, searching the water. I am on a quest: if I can successfully hunt a seal and bring back its meat to share with others at our campsite, I will be given a stone with which to begin building my own *Inuksuk*¹. If I complete the entire series of tasks my elder guide has laid out for me, I will earn enough stones so that I can complete my *inuksuk* and find my way home. Hopefully, I will also have gained a set of tools that will help me navigate through life.

If this scenario sounds a bit like a videogame or choose-your-own-adventure story, then that's because this is exactly what it is. The "*Nanisiniq Inuit Qaujimajatuqangit*" or "Inuit Traditional Knowledge Adventure"² is a web-based "interactive movie" sponsored by the Department of

¹ An Inuksuk is a pile of stones shaped like a person with its arms outstretched that helps Inuit hunters find their way across the tundra, particularly when snow can make it difficult to distinguish other landscape features.

² The description of this online movie is based on text from the project's website: <http://inuitq.ca/vle.html>. I was unable to access the movie, which was unavailable at the time of writing due to technical problems with the software.

Canadian Heritage and developed through a partnership between academic, federal and territorial institutions. The movie is designed to create a “Virtual Learning Environment” that will serve as a resource for “Inuit and northern youth, Canadian youth and citizens of all ages, and people from around the world” to “learn about the values and ideals, knowledge and philosophies, legends and art which Inuit in the Eastern Arctic developed over millennia as they lived in harmony on the land, as Keepers of the Earth” (N.A. 2009). The website explains that due to changes brought about by climate change, there is a “pressing urgency” for “all of us around the world to serve as stewards of the land.”

In this paper, I draw on observations from anthropological fieldwork to comment on the nature of Inuit participation in climate change governance, particularly as it relates to questions of knowledge, representation, and agency. I am particularly interested in the political engagement and deployment of “traditional knowledge” (TK) in the development of research and policy on climate change. I open with the example of the “Inuit Traditional Knowledge Adventure” because it so nicely illustrates the embedding of ideas of ‘tradition’ in a context of youthful interest in technology and modernity, a major theme of this paper.

My analysis examines how knowledge claims create privileged opportunities for different actors to access decision-making processes and spaces. Attempts to create what Bravo (2000) calls ‘epistemic equivalence’ of TK and scientific knowledge in research and policy has been part of a process of empowerment for aboriginal peoples, and this is particularly so in the Canadian context. I argue that the different kinds of knowledge and skill (including, for example, web based technology) that Inuit employ to “adapt” to the complexities of governance are much broader than research on traditional knowledge in the context of subsistence hunting usually conveys. Although TK is an important resource for adaptation and for Inuit participation in governance processes, there are other mechanisms for Inuit agency that are less often discussed in the context of adaptation but perhaps equally important. By examining the political context in which these discussions occur, this paper seeks to expand ideas about Inuit agency in climate change governance.

Drawing on Science and Technology Studies, this approach views climate change as both a physical process rooted in the material world and as a particular frame for understanding human-environment relationships that is partly constructed through practice and discourse

(Wynne 1996; Jasanoff 2004; Nilsson 2007). To say that climate change is “partly constructed” is not to deny the physical reality of climate change (Demeritt 2001), nor is it purely an academic exercise. As I will discuss in relation to my research in Clyde River, Nunavut, this perspective reflects the way that Inuit at the community level in some instances experience ‘climate change’ as a framework imposed on them from outside. A constructivist approach allows me to examine the material ‘adaptations’ to climate change such as new funding for research and policy initiatives, and redirection and redistribution of governance through a ‘climate change’ framework, as part of the landscape of governance in which Inuit and others engage in order to successfully ‘adapt’ to change.

This paper engages with literature on traditional knowledge and climate change adaptation in the Canadian Arctic, and attempts to place this literature in a broader context that bridges the multiple governance scales in which Inuit engage. I incorporate examples drawn from the initial stages of anthropological fieldwork that will conclude in the summer of 2010³. This ethnographic project utilizes interviews and ‘participant observation’ of science and policy initiatives in Clyde River, Nunavut; Iqaluit, Nunavut; and within the work of the Inuit Circumpolar Council, an organization that engages with issues of international policy that are relevant to Inuit. It also involves archival research on the history of government and scientific institutions in Clyde River and the Canadian Arctic. My interest in commenting on the state of TK and adaptive governance in the Canadian Arctic is not to discount the importance of traditional knowledge in climate change decision-making, but rather to point to some additional arenas in which Inuit agency is important, and to suggest that the dialogue on climate change adaptation should therefore be expanded to take these arenas into account.

Traditional knowledge and adaptation research in the Canadian Arctic

There are many terms that are used, sometimes interchangeably, to refer to traditional knowledge. For example, some use “indigenous knowledge,” others prefer “local knowledge,” and still others choose “traditional ecological knowledge” (TEK) to define more precisely their

³ The observations and conclusions offered from my fieldwork are preliminary. In addition to my initial period of research in the Canadian Arctic and current research with the Inuit Circumpolar Council, I plan to spend an additional four month period in the Arctic in the spring of 2010, during which time I will consult with residents of Clyde River about my observations and conclusions.

focus on human-environment relations. Many who engage with this topic in the Canadian Arctic choose “Inuit Knowledge” or “IQ” – the shorthand term for *Inuit Qaujimaqataqangit*, an Inuktitut term that translates as “Inuit knowledge” or “Inuit traditional knowledge.” In this paper, I use “traditional knowledge” (TK) because it is a term that is familiar to Inuit living in Clyde River, as well as being the most commonly used term in the context of United Nations initiatives.

Research on traditional knowledge and on local ways of classifying and understanding the environment has been a central part of anthropology for at least the past 60 years, if not since the beginning of the discipline (Scott 1996; Barsh 2000). TK often defined in contrast with Western, scientific knowledge. According to Ellen and Harris (2004:4-5), traditional knowledge is local, orally transmitted, based on “practical engagement in everyday life,” empirical rather than theoretical, fluid, shared but distributed asymmetrically. In contrast, scientific knowledge is often portrayed as “global,” theoretical, rigorous and capable of testing through the development of formal hypotheses and experimentation (Sillitoe 2007). The pursuit of scientific knowledge requires dividing up the world into discrete categories, with different branches of science involved in discipline-specific inquiries and projects. By contrast, TK is holistic, with an emphasis on the importance of knowing and understanding the environment as a total entity.

More recently, TK knowledge has emerged from the academy to become a preoccupation of international development practitioners and government employees involved with co-management initiatives in aboriginal communities in North America (Nadasdy 1999). This interest in TK reflects a disillusionment with high modernism stemming from the failure of ‘scientific’ management projects of the 1950s and 60s (Scott 1998; Tsing 2005). Social movements of the 1980s and 1990s critiqued the dominance of science, showing scientific knowledge to be social and therefore political (Leach, Scoones et al. 2005). This, in turn, paved the way for local experience and knowledge to be considered alongside scientific knowledge.

In the Canadian Arctic, land claims processes and empowerment of aboriginal peoples led to an interest in incorporating local culture and knowledge forms into systems of governance. This is frequently accomplished through the establishment of co-management boards, comprised of both holders of TK and scientists, who share and compare knowledge with a goal of collaborative decision-making (Usher 2000; White 2006).

Efforts to document and engage TK in bureaucratic governance processes have been criticized by authors who suggest that these projects filter local knowledge, selecting only the

pieces that can be ‘compared’ with scientific knowledge and discarding the more value-based or spiritual components (Agrawal 1995; Gupta 1998). For example, Leduc (2007) writes about the translation of the Inuktitut word “sila” to mean “weather” in discussions of Inuit knowledge about climate change. He suggests that Inuit elders often define “sila” much more broadly as meaning “wisdom” or “the forces which push or pull a person through life” (Ernsting 2001, cited in Leduc 2007). Younger generations of Inuit now understand ‘sila’ in the narrower, scientific meaning, resulting in a narrowing of worldview that is more compatible with science.

Some writers suggest that TK and science are incommensurable, because they reflect specific worldviews that place entirely different values on the environment, and because TEK tends to view humans as part of the natural world, whereas science – and the Western worldview - maintains a clear distinction between humans and the environment. Others have criticized efforts to establish co-management boards not so much on the basis of the incommensurability of knowledge forms, but rather on the basis that these efforts mask unequal power relations, leading to conflict and dissatisfactory results (Nadasdy 1999).

Inuit knowledge about the changing environment has been the source of significant academic interest ((IISD) 2000; Riedlinger and Berkes 2001; Gearheard 2002; Krupnik and Jolly 2002; Laidler 2006; Riewe and Oakes 2006). Riedlinger and Berkes (2001: 315) suggest that Inuit knowledge has a role to play in climate research for three main reasons: because of the lack of historical baseline climate data in the Arctic; because the Arctic has been an “early indicator” of ecological changes; and because TK offers a local scale that fills a gap in scientific knowledge of physical and ecological processes in the Arctic. The flourishing of academic interest in Inuit knowledge about climate change may be related to several different factors, including new funding made available through major initiatives such as the International Polar Year and Canada’s ArcticNet program (Shadian and Tennberg 2009), and the evolution of research politics in Inuit communities that has increasingly emphasized TK or Inuit knowledge as a mechanism for inclusive research (Bravo 2000).

Historically, adaptation literature in the Canadian Arctic has focused significantly on Inuit “adaptiveness” to a cold and challenging environment, as well as on how new forms of technology such as high powered rifles, snowmobiles, and GPS have been incorporated into a subsistence hunting and sharing economy (Damas 1963; Wenzel 1991; Sahlins 1999; Pelly 2001). Ford and colleagues draw on what they have termed a “vulnerability approach” to

studying community adaptation to climate change; this framework evaluates susceptibility of Inuit communities to environmental changes as well as their ability to respond (Ford, Smit et al. 2006; Ford, Pearce et al. 2007; Ford, Smit et al. 2008). This approach foregrounds the local level of participation, focusing in particular on the ‘harvesting sector’ (Sejersen 2009).

Several critiques from TK literature can be applied here: first, that this focused view removes TK from its broader context, selecting only those aspects of TK that are deemed relevant to climate change adaptation. This means that the knowledge and experience of some community members (in this case, hunters and elders who routinely travel on the land) are emphasized over others. Although the political context of decision-making is incorporated into the vulnerability framework, it is analyzed only from the perspective of harvesting practices, thus limiting the kinds of experience and agency deemed ‘relevant’ to climate change (Sejersen 2009). For the most part, adaptation literature does not try to add to a theory of TK, but focuses on its applied uses. These are themes that will be addressed further in the context of observations from my fieldwork in Clyde River. First, however, I will present an overview of the complex interweaving of institutions that structure decision-making by and for Inuit in the Canadian Arctic.

Governance institutions and Inuit agency in the Canadian context

Indigenous peoples are engaged in an ongoing struggle for autonomy and recognition of cultural distinctiveness based on intimate knowledge of and association with “local” places (Dirlik and Prazniak 2001; Escobar 2001). A central tension that emerges for indigenous peoples in the context of globalization is what Niezen has labeled the “Weberian dilemma” (2003). This term refers to Weber’s theory of bureaucracy (1958), which he believed would inevitably expand to encompass all systems because of its association with capitalism and its ‘technical superiority’ over other forms of organization. Indigenous peoples are engaged in a Weberian dilemma because, like all of us, they are embedded in a world economy and political structure that is increasingly networked. In order to take advantage of this structure, and in part to gain leverage vis-à-vis nation states, indigenous peoples must learn the skills needed to participate in bureaucracy: English language skills, fluency in writing as well as oral communication, and the

ability to work comfortably in highly structured work environments in which decision-making is hierarchical and centralized (Babidge, Greer et al. 2007).

Like other indigenous peoples, Inuit living in Nunavut territory in Arctic Canada have been drawn into this dialectic of tradition and bureaucracy. Although the creation of Nunavut added significantly to Inuit autonomy and control over decision-making, it also brought the bureaucracy of governance closer to home. Nunavut, which administers 20 percent of the total land area of Canada (and is inhabited by a population of nearly 30,000, of which approximately 25,000 are Inuit), was created in 1999 as the result of an extended land claims negotiating process between Inuit leaders and the Canadian government (Hicks and White 2000). Although Nunavut is a public government, it recognizes a special role for Inuit as the majority population and indigenous occupants of the territory. Traditional knowledge is officially recognized as “*Inuit Qaujimagataqangit*” (IQ), an Inuktitut term that translates as “Inuit traditional knowledge” or “Inuit knowledge.” IQ is “mainstreamed” throughout all official Government of Nunavut departments and initiatives, and is expected to play a role in decision-making and to guide the creation of new policy (Wenzel 2004; Henderson 2007). In practice, the IQ mandate lacks clarity and is easier to implement in some arenas than others – for example, in wildlife management rather than the budget office (Tester and Irniq 2008).

The creation of Nunavut followed decades of top-down, federally based decision-making and moved the administrative center of governance from Yellowknife in the Northwest Territories to Iqaluit on Baffin Island. It also helped spur a proliferation of institutions engaged in the business of governance. Federal departments, territorial departments, land claims and regional organizations, a parliament made up of elected members, co-management boards, and advocacy organizations all participate in a sometimes crowded decision-making field. Two organizations, Inuit Tapiriit Kanatami (ITK) and the Inuit Circumpolar Council (ICC), advocate for Inuit interests within federal departments and internationally in global governance processes and are based in Ottawa. Both organizations are involved in trying to engage policymakers on climate change issues, and both frequently refer to the importance of TK in their advocacy efforts as well as contributing to research and policy development on TK.⁴

⁴ For example, the Inuit Circumpolar Council helped lead an effort to incorporate TK into the Arctic Council’s *Arctic Climate Impact Assessment* (2005) and is currently involved in documenting TK of the circumpolar flow lead system in the Beaufort Sea as part of International Polar Year research.

ICC has drawn on different modes of authority to support Inuit agency in relation to climate change. Although traditional knowledge has been a major emphasis, under the chairmanship of Sheila Watt-Cloutier (2002 - 2006), ICC also advanced the position that climate change is a human rights issue. ICC supported Ms. Watt-Cloutier in the development of a human rights petition against the United States, which she submitted on behalf of Inuit from across Canada and Alaska to the Inter-American Commission for Human Rights (Watt-Cloutier 2005). The petition drew on interviews with Inuit hunters and elders who shared their traditional knowledge about climate change, but it also engaged with tools of international law to articulate a legal basis for a human rights perspective on climate change. Although the petition was rejected by the IACHR, the idea that climate change is a human rights infringement has since become more or less mainstream; in 2009, the United Nations High Commission for Human Rights adopted a resolution noting that “climate change-related impacts” have both direct and indirect implications “for the effective enjoyment of human rights” (UNHRC 2009).

Questioning ‘stakeholder’ uniformity: Observations of traditional knowledge and climate change in Clyde Rivers

Although anthropologists interested in theories of knowledge increasingly argue for an erasure of the boundary between “traditional” and “scientific” knowledge (Gupta 1998; Bravo 2000), much of the current literature on climate change and Inuit reinforces this boundary. This is in part reflective of the politics of research in the Canadian Arctic and the historical relationship between scientific research and colonial and military practices. In Clyde River, for example, the Carnegie Institute constructed an ionospheric station in 1943 as part of the US “war effort.” One of the first southern institutions to establish a physical presence in Clyde, the station assisted with wartime radio efforts while collecting local-level scientific data (Smith 2009). Given this context, the contemporary emphasis on TK can be viewed as a mechanism for countering past knowledge practices that helped perpetuate colonial practices of governance (Bravo 2006; Bocking 2007).

Traditional knowledge serves an important role in indigenous peoples’ agency, unsettling the claims of scientific management to being the sole source of authoritative knowledge. Through land claims, co-management boards, and local Hunters and Trappers Organizations (which have been established in every Inuit community in Nunavut) traditional knowledge

consultation has become a routine part of the governance process. In this light, TK is one of the central means by which communities can engage in decision-making on issues ranging from wildlife management to climate change adaptation.

Below, I present three ‘observations’ related to TK and climate change that emerged from preliminary dissertation research in Clyde River, Nunavut, a small hamlet of around 1,000 people located midway up the northeast coast of Baffin Island. These observations provide context in which to understand and reformulate conceptions of agency in climate change governance.

Observation 1: Questioning the local value of climate change research

One of the first responses to my research I encountered in Clyde River was what might be termed “climate change fatigue.” Because my interests include documenting Inuit experiences of governance, my interviews focused on individuals’ past and current experiences with scientific research and institutional development. I asked interview participants about climate change only as a secondary aspect of my research, following recommendations by other researchers who suggested asking about specific environmental indicators or relationships rather than leading with the term “climate change” (Marino and Schweitzer 2009). This approach recognizes that “climate change” is a scientific understanding of global phenomena that may or may not correspond to local understandings.

Even though I didn’t lead with inquiries about “climate change,” still I was party to various reactions and commentary on the term that indicated a sense of impatience with research on this subject. For example, one elder refused my interview request because my interpreter mistakenly told him that I wanted to interview him about “climate change.” When I clarified that I actually wanted to ask him about his experience as the first employee of the local weather station, he agreed to be interviewed. Someone observing this exchange commented that “people are tired of being interviewed about climate change.” In another encounter, when I had asked an acquaintance in conversation about whether or not she had been involved in climate change research, her husband interjected, stating that he was not sure what the purpose of such research was. “Is there a solution to climate change?” he asked. “Has the research that has been done helped stop it?”

These questions are certainly legitimate and reflect skepticism of the rather intense interest of southerners in climate change impacts in Arctic communities. Over the past few years, Clyde River has been visited by documentary makers for the BBC series “Frozen Planet,” a dogsled expedition organized by the Will Stegar Foundation to raise awareness about climate change in the Arctic, a “fact-finding” initiative to document local perspectives on climate change for a petition on climate change and human rights (Watt Cloutier 2005), and a series of workshops and research visits focused on climate change impacts and adaptation organized jointly by Natural Resources Canada and the Government of Nunavut.

Given the broader context of research in Nunavut, where efforts are being made to engage local communities in research design and to prioritize local concerns and interests, a skeptical response to this southern-driven research agenda is perhaps not surprising. There is a sense, then, that the idea of “climate change” as a way of talking about and understanding change and mobilizing and directing resources is, to a certain extent, imposed by southern actors rather than arising from local perspectives and initiatives. This observation has also been made in relation to climate change research in the Russian Arctic (Forbes and Stammer 2009).

Observation 2: Traditional knowledge as expert knowledge

One of the challenges of equating traditional knowledge with participation and agency is that TK is not necessarily shared by all members of a community because it is often highly specialized (Brown 1998; Richland 2005). As I mentioned above, climate change and adaptation research focuses significantly on the harvesting sector. While both men and women engage in subsistence hunting, it is predominantly a male activity, which means that men’s knowledge is especially sought out by researchers. Although women are also holders of TK, the knowledge they are often invited to share (and rarely in the context of climate change) is usually focused on family relations, the preparation of foods and animal skins, and sewing skills.

In most aboriginal societies, elders hold a special place, acknowledged for their wisdom based on many years of experience with subsistence, spiritual, and cultural practices. Inuit acknowledge the role of elders as holders of special wisdom, a role that is enshrined in the structure of the Government of Nunavut through the creation of a special division that focuses on “Culture, Language, Elders and Youth.” Elders are often invited to share their knowledge in

special gatherings on specific topics. For example, a conference on planning for climate change held in Iqaluit in July of 2008 incorporated a session in which elders from different communities across Nunavut were invited to share their observations of climate change impacts. In contrast, the designated role for youth in the conference was to participate in a “fashion show” of traditional and contemporary Inuit sealskin clothing and to demonstrate traditional Inuit games.

This division between elders and youth was evident in the interviews that I conducted in Clyde River. When I introduced my research interests and asked who might be interested and available to participate in interviews, I was directed towards particular elders or adults who had significant experience as community leaders. Many of these individuals are skilled at listening to researchers’ questions and then offering extended commentary drawing on their own life experiences. Being interviewed, I found, is actually a skill as much as learning to interview is a skill, and there were a wide range of competencies that were demonstrated in interviews that I conducted. Those with most experience were most likely to be able to offer extended answers to questions without further prompting or the need to rephrase on my part. I also found that in interviews with active hunters and elders who had been interviewed previously about climate change, I had a difficult time redirecting interviews *away* from climate change impacts to my broader questions about governance. In spite of my best efforts to ask about their experience with committees, hamlet institutions, and scientific research, these individuals usually wanted to share with me their detailed observations of changes in weather, ice and snow.

In contrast, the younger community members that participated in my research (individuals between the ages of 18 and 25) had never been interviewed about climate change and were much more tentative interview subjects in general. Some of them offered first-hand observations along the lines of: “the climate is changing, there is less snow than there used to be and the weather is difficult to predict.” These were usually general observations, though, and lacked the specificity that elders were eager to provide. In general, while elders often spoke confidently and offered longer narratives, many of the younger people seemed less comfortable being interviewed, less certain of what to expect from the interview process, and offered very brief answers or required multiple reframings of the question before offering a response.

This distinction between elders and youth as research participants reflects the fact that traditional knowledge is based on expertise and skill in particular, land-based activities. The association of age with wisdom is widespread, but today the distinction between “elder” and

“youth” also denotes significantly different life experiences stemming from major social, political, and economic changes that have occurred in the Canadian Arctic since the 1950s (see “observation 3” below). The identification of TK as ‘expert’ knowledge has implications for research practice, as those with certain kinds of experience are sought out for interviews frequently, while others find that their views and perspectives are not seen as ‘relevant’ to subsistence hunting or observations of environmental change. This dynamic is reinforced by a system of compensation that guides research on traditional knowledge. Inuit participants are compensated for their time and expertise by researchers, who offer either an hourly payment or a fixed “honorarium” per interview. This system of payment is intended to equalize relations between Inuit and researchers by acknowledging the value of TK in a market economy. Because TK is ‘specialized’ knowledge, this means that some members are interviewed routinely while others rarely or never; this distinction is perhaps felt more strongly due to the fact that there is a monetary benefit to participation in interviews.

Further complicating this dynamic of the ‘value’ of knowledge is a concern that the rapid pace of environmental change is eroding the ability of elders to serve as advisors to younger community members. Elders worry that their knowledge is not as “valuable” as it once was because they are no longer able to predict whether conditions are safe for travel with the same accuracy as in the past (Ford, Pearce et al. 2007). This introduces a dynamic in which TK may be losing value in a social context (due perhaps as much to changes in interests of younger generations as to environmental change), but gaining value in a commercial sense.

Observation 3: Skills to adapt, new and old

There is considerable concern in Inuit communities in Nunavut about passing on land skills and traditional knowledge to younger generations (McElroy 2008). The oldest generations alive today were born “on the land” in outpost camps and learned subsistence skills as a part of everyday life. In contrast, for many younger Inuit who were enrolled first in government and missionary boarding schools and later in government-funded schools in their communities, these skills have been gained through weekend excursions with family members, TK classes and outings organized as part of the school curriculum, and week-long summer excursions organized by local organizations.

Although there are significant challenges involved with passing on land skills and TK to younger generations, residents of Clyde River have been proactive and innovative in establishing new initiatives to equip youth with skills, old and new. Through the Ilisaqsivik Society, a family resource center established by community members in 1996, different programs are offered to support youth not only in learning land skills, but also in other kinds of activities of interest to them. For example, a hip hop program offers a drug and alcohol free space to learn new techniques, and has offered opportunities to travel to other communities to participate in hip hop competitions. Another initiative has taught video and filmmaking to youth and Ilisaqsivik employees. One employee used his new skills to make a short film about a presentation that researchers from Natural Resources Canada made to community members about earthquakes and tsunamis following a tsunami scare. He plans to offer media services in the future to researchers and others interested in documenting, for example, local observations of environmental change.

Ilisaqsivik also houses an initiative called the Ittaq Cultural Heritage Center. Ittaq is run by community members interested in working to preserve local heritage and interfacing with visiting researchers. The coordinator of Ittaq has participated in various trainings outside the community, such as a workshop on how to archive the digital interviews on traditional knowledge and storytelling that the group has collected. He told me that before beginning his work at Ilisaqsivik, he had very little knowledge or understanding of climate change apart from what he had learned in high school, but now he has been able to bring back information and perspectives he has learned outside the community. As he explained: “Through my job, I’m learning all this new stuff I would never have dreamed of or even seen. This job was like: hey wake up! It was a wake up call for me” (personal interview, July 2009).

For the most part, current discussions of adaptation focus on addressing the loss of traditional knowledge rather than emphasizing other kinds of capacities that could empower youth to engage with climate change adaptation in a different way. For example, one article states: “The adaptability of younger generations to future climate change will depend upon how well they acquire Inuit traditional knowledge and land-based skills” (Ford, Smit et al. 2008:58). The diversity of interests and capabilities demonstrated by youth as well as older adults in Clyde River today suggests that a broader view of adaptation might be appropriate. Taking into account the multiple governance scales in which decisions are made, supporting Inuit in their diverse interests to learn different kinds of skills, both “traditional” land-based skills, as well as

skills of technology, the arts, languages, and bureaucracy, seems to be an important part of the picture of “adaptation.”

Conclusion: Supporting multiple frameworks for Inuit agency in climate change adaptation

Theories of knowledge that emphasize its practice-based, performative nature (Bourdieu 1977; Richards 1993) allow us to understand TK as a living entity that is constantly changing and that depends on embodied experience. Because each individual’s embodied experience is different than every other’s, TK is to a certain extent personal. However, the social context of hunting practice and the importance of hunting and sharing to Inuit identity means that TK is also collective. As such, traditional knowledge has been an important resource for Inuit in adapting to environmental change for thousands of years, both in guiding individual behavior and experience, as well as in shaping a collective understanding of life in relation to the land.

As Wenzel (2009) and Keskitalo and Kulyasova (2009) have pointed out, however, the social conditions that frame adaptive response have changed considerably over the past century. Inuit agency is now constrained to a certain extent by decisions made at higher scales, such as trade restrictions and hunting quotas placed on polar bear. A framework for adaptive governance must take into consideration the obstacles to adaptation that exist at various levels, and must be pragmatic and open-minded about the skills and capacities needed to support Inuit communities in the context of change.

Sejersen (2009) critiques adaptation literature in the Canadian context for not engaging enough with the broader environment of political, economic, and social institutions that structure local responses to change. He suggests that the conception of agency that this literature supports focuses on ‘stakeholder integration’ into research and policy models. In contrast, he outlines a framework for “double agency” that includes both a stakeholder/participation component, as well as the agency of “rightholder possibilities and self-determination” (221). Sejersen’s critique is consistent with other scholarly engagements with TK that focus on the social, economic, and political context in which TK initiatives are implemented; these authors draw similar conclusions that supporting agency for indigenous communities requires, above all, devolution and sovereignty (Agrawal 1995; Nadasdy 1999).

Adapting to environmental change requires connecting decision-making at different levels and channeling resources to communities. This, in turn, requires multiple skill sets: the ability to persuade others and inspire action, the ability to communicate effectively in writing in multiple languages, the ability to engage the media and the broader public in support of common goals, and even the ability to counteract goals of – for example – environmental groups that may run counter to Inuit aspirations and life projects. These skill sets are not contradictory to traditional knowledge, but certainly require exposure to different kinds of environments, including formal schooling and bureaucratic institutions. This is a reality that is recognized perhaps more in applied settings than in academic engagements with adaptation. For example, the Government of Nunavut is aware of this dilemma, and it struggles with the challenge of recruiting qualified employees who can participate in a bureaucratic system, while also searching for ways to support “IQ” and cultural continuity. Another example is the “*Nanisinig Inuit Qaujimajatuqangit*” web-based, interactive movie that I discussed in the introduction to this paper.

Following Sejersen (2009), I have argued in this paper that a more expansive conception of agency is needed in order to recognize the diversity of Inuit experiences, goals, and aspirations that emerge in the face of current challenges and future uncertainties. By incorporating a framework of multi-level governance, it is possible to recognize that the structures that frame Inuit engagement in decision-making are complex, involving interlinkages between different scales. Traditional knowledge is an important resource for guiding local understandings of and responses to change. As discussed in the example of the ICC’s work in international settings, the ‘value’ of TK as a resource for agency is not limited to the local scale, however, although its uses may vary in different settings. Similarly, locally-based projects also engage different ways of knowing, experiencing, and understanding the world. These are guided not only by TK, but also by skills of navigating bureaucracy and utilizing technology to connect to people and processes in other spaces.

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