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Engaged acclimatization: Towards responsible community-based participatory research in Nunavut

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In this article, we consider the formation of responsible research relationships with Inuit communities from an "outsider" researcher perspective. Cautious not to prescribe what counts as responsible, we draw on research experiences in several Nunavut communities to introduce and explain "engaged acclimatization." This neologism refers to embodied and relational methodological processes for fostering responsible research partnerships, and is inspired by the significance of preliminary fieldwork in orienting the lead author's doctoral thesis. As a complement to community-based participatory methodologies, engaged acclimatization facilitates endogenous research by enacting ethics as a lived experience, initiating and nurturing relationships as a central component of research, and centring methods on circumstances within participating communities. After we locate engaged acclimatization within resonant literature and details of interrelated research projects, our article sketches out four aspects of engaged acclimatization: crafting relations, learning, immersion, and activism. In our discussion of each, we integrate specific insights derived from field notes, observations, photographs, critical reflections, and literature that have brought us to this understanding. The four aspects provide conceptual and methodological tools for readers to apply in the contexts of their own research programs or in guidelines for establishing partnerships with Inuit or Aboriginal communities. The value of this article lies in the extent to which it encourages readers to situate engaged acclimatization in their own research and further develop it as a process.

Keywords: research relationships, fieldwork, methodology, community-based participatory research, engaged acclimatization, Nunavut

L'acclimatation engagée : Vers une recherche responsable et axée sur la collectivité au Nunavut

Cet article aborde la question de l'établissement de relations responsables de recherche avec les collectivités inuites du point de vue du chercheur «étranger». Des recherches menées dans plusieurs collectivités du Nunavut servent de base à la définition de ce que nous appelons «acclimatation engagée», en se gardant de prescrire d'emblée ce qui peut être considéré comme responsable. Ce néologisme renvoie à une démarche méthodologique incarnée et relationnelle par laquelle des relations responsables de recherche peuvent émerger. Ce terme découle d'ailleurs des résultats importants issus des premiers travaux sur le terrain menés dans le cadre de la

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recherche doctorale de l'auteur principal. L'acclimatation engagée se greffe aux approches axées sur la collectivité en recherche et favorise ainsi la recherche endogène par l'adoption d'un code d'éthique en recherche en tant qu'expérience vécue, l'amorce et l'entretien de relations qui s'inscrivent au cœur de la recherche et l'ancrage des méthodes de recherche au sein des collectivités à l'étude. Nous menons d'abord une exploration de l'acclimatation engagée dans la littérature scientifique pertinente et des projets de recherche connexes en vue d'élaborer, sous la forme d'une esquisse, les quatre aspects de l'acclimatation engagée : fonder des relations, l'apprentissage, l'immersion, et le militantisme. Nous engageons ensuite une discussion sur chacun d'eux qui fait état des connaissances tirées des notes prises sur le terrain, des observations, des photographies, des réflexions critiques, et de la littérature. Cette lecture des quatre aspects nous amène à définir des outils conceptuels et méthodologiques qui peuvent être utilisés dans les programmes de recherche que les lecteurs effectuent ou servir de lignes directrices pour les partenariats de recherche établis avec les Inuits ou les collectivités autochtones. Tout l'intérêt de l'article est de renforcer auprès des lecteurs l'importance de bien situer l'acclimatation engagée dans leur propre recherche et soutenir son évolution en tant que processus.

Mots clés : relations de recherche, travaux sur le terrain, méthodologie, recherche participative axée sur la collectivité, acclimatation engagée, Nunavut

Introduction

Encouraged by complementary aspects of different knowledge systems, communities of Indigenous and non-Indigenous researchers have worked together to develop shared understandings and address common sources of concern. In the Canadian Arctic,[1] substantive hubs of knowledge-sharing partnerships between Inuit and non-Inuit (Qablunaat[2]) include: climate change mitigation and adaptation strategies (Krupnik and Jolly 2002; Pearce et al. 2009; Ford and Pearce 2012); the health implications of environmental and social change (Furgal and Seguin 2006; Doubleday 2007); documentation of toponyms, travel routes, and sea ice terminology (Stewart et al. 2004; Laidler and Elee 2008; Aporta 2009); wildlife and resource comanagement (Berkes et al. 2005; Freeman and Wenzel 2006; Kendrick and Manseau 2008); and Aboriginal ecotourism and tourism development (Stewart and Draper 2007, 2009; Dowsley 2009). Articles in a recent issue of this journal demonstrate that such knowledge-sharing partnerships are being sustained over time and the course of multiple projects (Aporta 2011; Gearheard et al. 2011; Laidler et al. 2011).

Yet, while productive and lasting partnerships are important to Canadian Arctic research, the processes for initiating and nurturing research relationships between Inuit and Qablunaat, and Aboriginal and non-Aboriginal communities more generally, require careful, critical, and consistent consideration. This is particularly relevant for researchers situated within institutions of power and influence (such as universities based in the Canadian south) as we become more alert to the politics of academic knowledge production and relate further to Smith's (1999) persuasive call to decolonize research. Inevitably, certain imperialisms accompany the naturalization of prescriptive and procedural standards in social science methods (Law 2004). If we are to heed Smith's counsel that, as researchers, we first centre our own concerns and worldviews, and then come "to know and understand theory and research from our own perspectives and for our own purposes" (Smith 1999, 39), what guidance might be extended to Qablunaat for engaging in responsible research *for* and *with* an Inuit community? When starting from the position of an "outsider" (Mohammad 2001), how can we bring into being research relationships that are characterized by equitable power sharing, justice, and collaboration? If indeed, "there is no formula for responsibility…[and] responsible learning is a multiplicity of spatiotemporal registers that

[1] Confusion arises when "the Arctic," "northern Canada," "the North," or "circumpolar region" are used interchangeably (Stewart et al. 2005), and when perceptual, geophysical, and political delineations are taken into account (Bone 2009). For the purposes of this paper, we define the Canadian Arctic as a northern region distinguished by tundra vegetation or polar desert and the traditional homeland of Inuit (Bone 2009, 294).

[2] *Qablunaat* is an Inuktitut word for non-Inuit people often used by residents of Nunavut's Kivalliq region (west of Hudson Bay). An individual non-Inuk is *qablunaaq*.

do not cohere into a straightforward 'project'" (Jazeel and McFarlane 2010, 121–122), what recommendations or strategies can be extended to those starting out in community-based participatory research (CBPR)?

The purpose of this article is to introduce and explain "engaged acclimatization," a neologism referring to embodied and relational methodological processes that can foster the responsible research relationships necessary for CBPR. In conceptualizing engaged acclimatization, we are cautious not to prescribe "right" or "wrong" ways of *doing* responsible research. We are also cognizant of its situated nature; engaged acclimatization emerged as Bryan, the lead author,[3] negotiated the meaning of responsible research during initial exposure to CBPR in Nunavut. In other words, the genesis of engaged acclimatization is experiential and contextual. Accordingly, the discussion herein is based on our perspective as researchers, and does not claim to speak for the Inuit communities informing and sharing in our practices.[4]

In this article, we discuss engaged acclimatization by weaving together supporting literatures, reflexive engagement with the research process, and illustrative moments from research experiences in Nunavut. This approach resonates with various theoretical perspectives (e.g., feminism, critical theory, and constructivism) that create space for situated and positioned styles of inquiry to counterbalance research traditions stressing "objectivity," "detachment," and "universality" which often result in the marginalization of certain voices and/or histories (see, e.g., Haraway 1991; Foucault 1997; Simpson 2001; Wilson 2008). We begin by clarifying what engaged acclimatization is, and then locate it within related academic literature. After this, we give an overview of research programs contributing to its development. The article then illustrates four fundamental aspects of engaged acclimatization: crafting relations, learning, immersion, and activism. These are mapped conceptually as, respectively, an intention, approach, practice, and effect of engaged acclimatization. In these sections, we integrate specific insights derived from field notes, observations, photographs, critical reflections, and literature that have brought us to this understanding. In conclusion, we identify potential barriers to enacting engaged acclimatization.

The value of this article will ultimately lie in the extent to which it can encourage readers to situate engaged acclimatization, or something like it, in their own research and further develop it as a process. The four aspects will provide conceptual or methodological tools for readers to adapt in diverse research contexts. They might also inform guidelines for research partnerships with other Inuit, Arctic, or Aboriginal communities. In any event, we encourage readers—graduate students, research ethics and licensing agencies, funding organizations, and communities of Arctic and Indigenous scholars—to explore the positive possibilities of engaged acclimatization for *becoming* responsible and practicing responsibility through research.

What is engaged acclimatization?

Like other constructs, engaged acclimatization has the potential to take on multiple levels of meaning and value. Our particular use of the term is intended to complement the relational dimensions of CBPR (discussed further below). As a starting point, engaged acclimatization names a methodological approach for initiating the kinds of partnerships necessary for effective and responsible research with Arctic and Indigenous communities. It requires that researchers visit communities and communicate transparently (Markey et al. 2010), and it arises through cooperation, mutual trust, and shared learning (Rundstrom and Deur 1999). As such, engaged acclimatization encourages endogenous constructions of knowledge (Desbiens 2010) and instills axiology (the study of value systems, morals, and

[3]The authors are each principal investigators of one or more of the research programs discussed in this article and are referred to throughout by their first names.

[4]Co-authorship between academic researchers and community partners is one strategy that can help lessen the risks associated with representing the Inuit communities discussed in this article. In fact, ideas presented in this article were initially discussed with a key community partner with the intention of adding in an Inuk's perspective. However, this individual chose not to contribute for various reasons, including the preference for a greater degree of anonymity among the growing number of Arctic researchers.

beliefs) within the research process (Lincoln and Guba 2000; Wilson 2008), derivatives that will be illustrated later in the article.

Moreover, as Indigenous scholars indicate, we are *always* accountable to our relations (Louis 2007; Wilson 2008). Thus, responsible research relationships are those that are (re)established and nurtured over time; they do not simply terminate at the conclusion of a fieldwork season. Enacting responsible relationships means that some traditional aspects of a researcher's identity, such as authority, control, and certainty (Desbiens 2010), must be exchanged for "the concept of respect as part of a relational ethic including the idea of reciprocity, listening, and a continuous re-visiting and re-evaluation of our relationships as researchers with others" (Caine et al. 2009, 507). Engaged acclimatization continuously orients researchers to these relational goals through all stages of community-based research, which Stewart and Draper (2009, 131) have described as "getting there," "getting in," "getting along," and "getting out." While our article is mainly derived from experiences in the early stages of CBPR projects, our vision of engaged acclimatization as a process should be interpreted as one extending across multiple stages, and beyond the scope of individual projects.

We credit our evolving practices and discussions of engaged acclimatization to our shared background in environmental and experiential education. When taking on Bryan as a doctoral student, Nancy committed to prefacing his course of study with fieldwork in Nunavut. Activities included community familiarization, consultations, and research workshops as part of International Polar Year (IPY) projects. These early experiences in and with Nunavut communities parallel in many ways Van Matre's (1979, 1990) inspired use of "acclimatization" as the initial title for Earth Education programs, which aim to familiarize children with the natural world through multi-sensory encounters. In community-based research and Earth Education contexts, acclimatization means gradually growing accustomed to unfamiliar surroundings through immersive experience.

Combining acclimatization with "engaged" reflects the action-oriented and critically charged positions of engaged and committed scholarship (Kobayashi 2002). These research orientations assume ethical and political dimensions that help align research purpose, design, and procedures with the interests, issues, and priorities of community partners (Cameron and Gibson 2005). In Nunavut, such approaches hold promise for social change determined in relation to the capacities and identities comprising Inuit communities (Doubleday 2003).

In sum, engaged acclimatization is a synthesis of research ideas and practices that refers to a process of embodied and reflexive knowledge production occurring through immersive encounters with the material, political, cultural, and perceptual ecologies of Arctic communities. Exploration, reflection, care, creativity, and interaction characterize these encounters, thereby challenging assumptions that research methods, like some styles of participant observation, are best performed by those who bracket their experiences to stand apart from the messiness of context (Stevenson 2006). Engaged acclimatization can help researchers develop a relational perception and intuition that informs preliminary research objectives, design, and procedures; how research is actually carried out; and later stages of analysis, writing, reporting, and future project identification (Caine et al. 2009).

Locating engaged acclimatization

The projects underpinning this article have been enriched by particular expectations, opportunities, and capacities for research partnerships located within different Nunavut communities. In addition, our understanding of engaged acclimatization is informed by literature concerning Indigenous research and methodology, CBPR, research ethics, and relational geography. Each of these synergistic threads is introduced in this section to help situate our discussion.

Indigenous research and methodology

Indigenous communities worldwide continue to express interest in academic research despite its difficult history and colonial legacies (Smith 1999; Caine et al. 2009). Recent efforts across disciplines include work done *with* and *by* Indigenous peoples, perhaps as a response to historical injustices associated with modernist

research identified by Indigenous communities and scholars (Smith 1999; Cole 2002; Johnson and Murton 2007; Panelli 2008). This shift has been a source of enrichment for Indigenous communities: they take ownership of research agendas, enable projects that follow local codes of conduct, and honour Indigenous knowledge and worldviews (Simpson 2001; Weber-Pillwax 2001; Wilson 2008). Moreover, articulations of Indigenous methodologies—characterized by Louis (2007) to include relational accountability, respectful representation, reciprocal appropriation, and endorsement of Indigenous rights and regulations—emphasize cyclical and dynamic research styles with the central intent of performing sympathetic, respectful, and ethical research from an Indigenous perspective (Smith 1999; Wilson 2008). The politics of Indigenous methodologies include instilling axiology in human geography and other disciplines (Cole 2002; Panelli 2008; Watson and Huntington 2008), which challenges objectivity, universal abstractions, and generalized understandings. It advocates styles of knowing and approaches to producing knowledge that are responsive to place (Johnson 2010).

Community-based participatory research

CBPR is understood as a general framework for research conducted by, for, or with the participation of a community (Markey et al. 2010). The practice of CBPR includes a range of action-oriented intentions, participation, and collaborative partnerships (Stewart and Draper 2009; Markey et al. 2010). These goals have built awareness among researchers and community members of the community capacity inherent in local knowledge systems, helping substitute paternalistic, and condescending practices of research *on* communities (Gibson-Graham 2003; Battiste 2008). Accordingly, CBPR aims to: 1) balance research power relations by sharing control of research processes and outcomes; 2) foster trust through transparent, reciprocal, and interactive relationships; and 3) support community ownership of research priorities, decision-making, and knowledge generation (Castleden et al. 2008).

Caine et al. (2009) explain that researchers working in northern Canada, regardless of their discipline, have been encouraged to modify their research priorities and methods to respond to the interests and agendas of Indigenous communities and their cultural traditions. Researchers will "often discover that communities are neither uninterested nor ignorant of the potential for research to benefit their communities and address deteriorating environmental conditions" (Caine et al. 2009, 490). Across Nunavut, Inuit are well acquainted with research and with the practices of visiting researchers. This has fuelled expectations for greater participation in all stages of research, including defining research priorities and methods, collecting data, and analyzing and disseminating results (Gearheard and Shirley 2007; ITK and NRI 2007). Researchers listening to such requests have welcomed opportunities for CBPR so that locally driven projects can contribute to the quality of local and regional life and address local interests, priorities, and knowledge (ITK and NRI 2007; Doubleday et al. 2008; Laidler and Elee 2008; Stewart and Draper 2009; Gearheard et al. 2011). These goals represent the high degree of research involvement desired and performed by Nunavut communities.

To be sure, the social processes of CBPR have temporal and spatial dimensions. They have a starting point, require development through interpersonal interactions, and are understood as a continuum of experience or relationship, rather than as something that can be definitively realized (ITK and NRI 2007). It is important then for both researchers and communities to reflect on how relationships are initiated and nurtured, and the extent to which these contribute to the aims of CBPR (see, e.g., Caine et al. 2009; Desbiens 2010). Engaged acclimatization, we argue, offers an approach for meeting these objectives.

Research ethics

As academic research becomes increasingly responsive to diverse knowledge systems through approaches like CBPR, some researchers have weighed in on processes that engender inclusiveness, courtesy, and respect, and avoid cultural appropriation (Wenzel 1999). The boundaries of research ethics have received critical consideration (Rundstrom and Deur 1999; Battiste 2008; Dyer and Demeritt 2009). The challenge, according to Battiste (2008), is not so much about

the research community being receptive to ethical research, but about exposing systematic oppressions. For example, in some cases, systems of research ethics governance are said to obscure and burden ethics in practice (Dyer and Demerritt 2009), or function as a sort of cognitive imperialism that positions some groups in power and others to be exploited (Battiste 2008).

In recent years, however, formulations of research ethics have progressed. Castellano (2004) proposed a set of principles for ethical research in Indigenous communities rooted in local cultural worldviews and struggles for self-determination. In Nunavut, all research must be reviewed and licensed by the Nunavut Research Institute (ITK and NRI 2007; CIHR et al. 2010). Moreover, recent revisions to the Canadian Tri-Council research ethics policy provide greater flexibility and guidance for university review boards, researchers, and Indigenous communities working closely together (CIHR et al. 2010). Acts of naming research participants, for example, are no longer strictly prohibited (Wilson 2008). More support exists for the Indigenous protocol of granting participants the choice of being named in the research, which signals special knowledge-sharing relationships and the participants' custodial ownership of that knowledge (Battiste 2008; Wilson 2008). Clearly, initiatives among Indigenous communities, granting councils, and institutions demonstrate that addressing research ethics is becoming much more consultative, yielding effective results (Castellano 2004).

Yet even with such improvements, what constitutes ethical research cannot be fully captured in the policy documents of funding agencies and universities. Several authors remind us that research with Indigenous communities is performed as a set of ethical relationships (Watson and Huntington 2008; Wilson 2008; Desbiens 2010); it entails responsible human interaction and interpersonal experience, which are not guaranteed when a researcher receives ethics clearance from the host university. With engaged acclimatization, we prompt further consideration of research ethics issues and offer suggestions for enacting research ethics as embodied, affective, social, and everyday performances (Haraway 2008).

Relational geography

Engaged acclimatization is informed by the "relational turn" in geography, and related perspectives that engage with perforated boundaries and non-dualistic metaphors such as fluidity, complexity, and hybridity (Massey et al. 1999; Whatmore 2002; Hinchliffe 2007; Braun 2008). We draw two elements from these works. The first is a hesitation to use either/or constructions, where mixtures of purified forms are accounted for and reduced in various ways, for example, between "nature" and "society" (Latour 1993). The second is the promise of the "relation" as the finest scale of analysis and the fundamental basis of reality and knowledge (Haraway 2008; Wilson 2008).

Tester and Irniq (2008) link such perspectives in a discussion of Inuit knowledge, or *Inuit Qaujimajatuqangit* (IQ).[5] As a variant to holistic conceptions of Indigenous knowledge, IQ is a "seamless" unity with no discernible parts and where "everything is related to everything else in such a way that…nothing can stand alone, even in the interest of gaining an appreciation of the whole" (Tester and Irniq 2008, 49). For Tester and Irniq, IQ is fundamentally about relationships: for example, between factual knowledge and uses of the environment; culturally informed values, norms, and behaviours; and culturally based cosmology founded upon the explanations and guidance derived from observation, experience, and instruction. The definition and application of IQ in Nunavut government and Land Claim contexts demonstrates its adaptability and fluidity (Tester and Irniq 2008).

Consistent with relational thinking is the understanding that conventional divisions between substantive and procedural dimensions of a research project often can, and should, be blurred. We are regularly reminded that in research, the process is the product—how research is performed is just as important as "results" or "findings" (e.g., Hodge and Lester 2006; Caine et al. 2009; Desbiens 2010; Nakamura 2010). Yet,

[5]The Government of Nunavut defined IQ as "the Inuit way of doing things: the past, present, and future knowledge, experience, and values of Inuit society" (Inuit Qaujimajatuqanginnut Task Force 2002, 4). To perceive IQ as the traditional knowledge of Inuit would be to overlook the adaptive and complex matrix of Inuit experience, values, customs, and knowledge.

Table 1
Summary of CBPR in Nunavut through which engaged acclimatization was practised

Project	Dates	Principal investigator(s)	Participating communities	Primary funding sources
Photographs and plants through time	2007–2011	N. Doubleday S. Donaldson	Kinngait (Cape Dorset) Sanikiluaq Qamani'tuaq (Baker Lake)	International Polar Year (PPS Arctic Canada), SSHRC IPY Education and Outreach[a]
Access to healthy foods: Understanding gendered dynamics among cultural, economic, and environmental factors	2007–2010	S. Donaldson N. Doubleday	Kinngait (Cape Dorset) Iqaluit Kimmirut	International Polar Year (PPS Arctic Canada)
ECOTRAD: Aboriginal ecotourism, traditional knowledge, and livelihoods in the context of environmental change	2008–2010	S. Blangy	Qamani'tuaq (Baker Lake)	Institut de Recherche Polaire Paul Emile Victor (IPEV), International Polar Year (PPS Arctic)
Qanuittumik takuvik? (What do you see?)	2009–2010	G. Ljubicic (formerly Laidler)	Kangiqliniq (Rankin Inlet) Uqsuqtuuq (Gjoa Haven)	SSHRC Research Development Initiative
Picturing kangijuaq (the Thelon River): Natures, ethics, and travel within an Arctic riverscape	2009–ongoing	B. Grimwood	Qamani'tuaq (Baker Lake)	SSHRC Canadian Graduate Scholarship, AANDC[b] Northern Scientific Training Program

[a]PPS Arctic Canada: Present processes, Past changes, Spatiotemporal dynamics; SSHRC: Social Sciences and Humanities Research Council.
[b]Aboriginal Affairs and Northern Development Canada.

relational thinking takes this a step further by claiming that ontology (the nature of reality or being), epistemology (the nature of knowledge), and methodology are mutually constitutive. For example, Law (2004) calls for methods in social science that help us learn not just about reality, but how to participate in the *making* of those realities. Thinking about method in this way involves considering how everyday acts of living contribute towards the kind of world we want to inhabit. Thus, method is about ways of being and becoming (Law 2004). Accordingly, engaged acclimatization as a way of fostering responsible research relationships is also about the making of responsible realities. For a researcher *to know* responsibility, she or he must *become* responsible by thinking, feeling, doing, and sensing responsibility (Wilson 2008).

A uniting theme in the threads discussed above is that they represent steps towards the creation of safe social spaces for sharing knowledge across cultures. Tester and Irniq (2008, 59) argue that both Inuit and non-Inuit play a part in creating a *kappianannggittuq* (a safe, non-scary place). Such a space is important to share understanding, acknowledge different historical, cultural, and political contexts, and work together on global scale challenges. Engaged acclimatization, upon which we elaborate shortly, is an approach for respectfully participating in the construction of these kinds of spaces.

Project overviews

While the intention of this article is not to review or prescribe specific community-based research methods, a brief discussion about the different projects that have led to our understanding of engaged acclimatization is warranted. Table 1 summarizes the five projects underpinning this article. These projects are related in at least three ways. First, they share a commitment to collaborating with Nunavut communities within a framework of CBPR. The locations of participating communities are identified in Figure 1. Second, each project was required to comply with institutional protocols, including university ethics clearance and research licenses issued by the Nunavut Research Institute. Third, the projects are related by virtue of the lead author's participation in their fieldwork

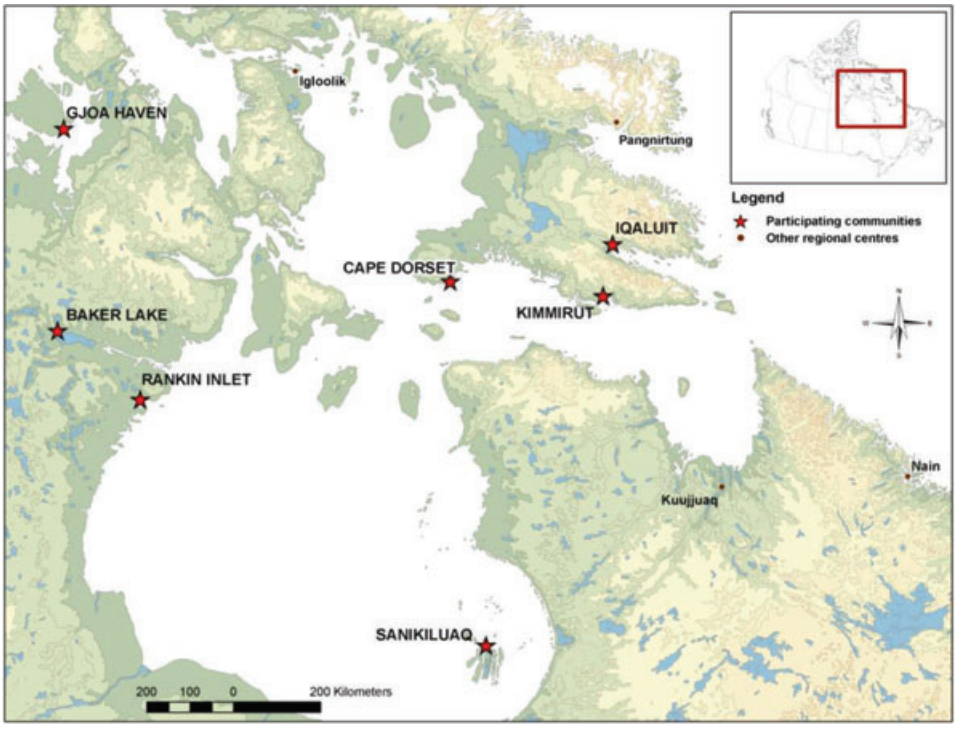

Figure 1
The location of participating Nunavut communities. SOURCE: This map was created using Atlas of Canada Basemaps (1:7.5 million scale) from GeoGratis, Natural Resources Canada. March 2011.

components. Between June 2007 and November 2011, Bryan participated in ten community visits to support or facilitate various aspects of these projects. These visits ranged from 4 to 18 days in length. The success of the first trip to Cape Dorset led to Bryan's subsequent interest in CBPR and the direction of his PhD thesis. While the significance and implications of these visits evolve and shift with the field-based and analytical contexts of ongoing research, they are the stage upon which the process of engaged acclimatization was formulated.

Taken as a whole, the projects encompass a range of collaborative partnerships between Inuit and Qablunaat researchers. IPY projects "photographs and plants through time" (PPTT) and "access to healthy foods" (AHF) emerged from Nancy and Shawn's enduring partnerships with people in Cape Dorset (Doubleday et al. 2004; Donaldson 2007), but have since expanded to involve other regional partners, local participants, and graduate students (Doubleday et al. 2008; Doubleday et al. 2010; Ip et al. 2010). PPTT mobilized teams of academic, student, government, museum, and community researchers from Cape Dorset and Sanikiluaq to collect local plants and participant photographs, and integrated these items into workshop settings and on-the-land camps. The emphasis was on plant and photograph interpretation as "social observations" of environmental change and well-being (Vlasova 2006; Doubleday et al. 2008; Ip et al. 2008). For the AHF research, partnerships were established in Cape Dorset, Iqaluit, and Kimmirut. Qualitative interviews with community members were used to examine relationships between gender, country food, and dietary choice (Ip et al. 2010).

The collaborative aims of ECOTRAD included understanding how Indigenous tourism can contribute to well-being in Baker Lake, preserve and enhance traditional culture, sustain natural resources, and help people face the challenges of climate change and economic dependency. The project's CBPR approach supported the development of additional project ideas directed by community residents, as well as international research and Indigenous partnerships (Blangy 2010). In contrast, the "Qanuittumik Takuvik?" project entailed research-planning workshops to identify community research priorities and research best practices (Laidler 2010; Laidler and Grimwood 2010). Following up on invitations from community Elders, Gita worked in cooperation with representatives in Rankin Inlet and Gjoa Haven to design and facilitate these project meetings. An outcome of this project was the additional research funding secured for a community-led caribou study in Gjoa Haven.

Finally, for "Picturing Kangijuaq (the Thelon River)," the participatory and visual methods used in PPTT were adapted and combined with experiential river trips so that knowledge from tourists and Baker Lake residents could be documented and used to consider the moral terrains of an Arctic riverscape. The participatory photography approach enabled participants to take photographs during their riverscape experiences, or to select photographs from their personal collections as reflections of their experience. Images were then used to direct interviews and workshops where the emphasis was on understanding social meanings related to a special and changing place. In the literature, similar processes have been identified as photo elicitation (Harper 2002; Beilin 2005), photovoice (Wang and Redwood-Jones 2001; Castleden et al. 2008), and volunteer- or visitor-employed photography (MacKay and Couldwell 2004; Garrod 2007).

Crafting relations: An intention of engaged acclimatization

We know that the production of knowledge has real-world effects associated with particular value systems (Said 1978; Haraway 1991; Braun 2002) and that reality is always being made and remade through methods and instruments employed in social and natural science (Latour 1993; Mol 1999; Whatmore 2006). Hence, methodology and ontology are closely linked in the impact that the social and material practices of research have on the world. The participatory research and Indigenous methodology literatures accommodate such perspectives (Kemmis and McTaggart 2000; Kobayashi 2002; Castleden et al. 2008; Wilson 2008). In light of the related nature of ontology and methodology and Law's (2004) repudiation of the prescriptive norms of method that authorize a powerful but exclusive vision of reality, what advice might be offered to researchers for discovering appropriate methods for CBPR projects in Arctic and/or cross-cultural contexts?

In this section, we describe encountering and/or enacting relations as an intention of engaged acclimatization. In Bryan's training as a community-based researcher, an initial grasp of this aspect was achieved through direct fieldwork experience. Research assistantships in the projects led by the co-authors (Table 1) provided opportunities to visit several Nunavut communities. The first of these occurred in June 2007 in the form of familiarization and IPY consultation visits to Cape Dorset and Iqaluit. At the time, Bryan's relationship to the Arctic was largely shaped by an imagination of the "far north"—he had not previously been to Nunavut. As his research supervisor, Nancy offered straightforward instructions: attend and observe the meetings between fellow visiting academic researchers and community representatives, make introductions to people in the communities, walk around town and on the land, take photographs, and record reflections in field notes. The intention was not to collect what is typically referred to as "data," but to set in motion personal engagements with the social, cultural, economic, and ecological fabrics of Nunavut.

One morning in Cape Dorset, for example, Bryan and another research assistant toured the town site with a local research associate.

> We wandered around with Elee, who pointed out various buildings of interest (e.g., the Co-op, RCMP, and Hamlet office, residences of carvers, the Northern Store, etc.). We also spent moments gazing out on the bay and exploring the ice and rock shoreline on the north point of the hamlet. On our way

Figure 2
Boy Scouts near Cape Dorset, NU in July 1969. SOURCE: Photograph contributed by A. Pitseolak.

> back into town, Elee introduced us to a carver who was working on a white marble piece. He discussed with us how the rock is retrieved from a distant quarry. (Grimwood field notes, June 05, 2007)

As this kind of orientation to environmental and economic landscape features transpired, a nascent awareness developed of local expressions of Inuit community, culture, and identity, and how these have been adapted to settlement life. Bryan's participation at a meeting of the Cape Dorset Healing Team (comprised of mostly female Elders) was a case in point. In addition to learning about IPY research, this "grassroots" group was discussing the possibility of a new cultural centre, which they envisioned as a space for gathering, practicing cultural skills, sharing knowledge, and promoting well-being. But more than a functional space, the building was intended to improve the Healing Team's visibility within the community, thereby increasing local participation and involvement in cultural activities. Constraints included the high costs of construction, limited local access to building supplies, and insufficient technical expertise; thus, the group had recruited outside support in the form of an architecture graduate student, who was also in attendance (Ip 2009). At this meeting, Bryan perceived the convergence of complex relations, some that were local and/or distant in reach, and some that reflected environmental, cultural, and economic considerations.

Indeed, engaged acclimatization is about opening up to, and creating, circumstances for relationships to emerge or to be formulated. It is about a researcher crafting relations with others, with ideas, cultures, identities, places, and materials in personal ways; a process that can orient a researcher's interactions within a community such that these are more conducive to the goals of CBPR. Unlike methodologies that require adherence to certain data collection techniques, engaged acclimatization prioritizes the notion that research *is* a relationship-forming process. Appropriate "methods," like the familiarization encounters in Cape Dorset, are those that construct relations and help situate the researcher within wider ecologies.

A moment from a June 2008 research workshop in Cape Dorset illustrates how more tangible methods encourage this relational awareness. Figure 2 is a photograph taken in 1969, which was contributed by Annie Pitseolak to PPTT (Ip et al. 2008). Like many other PPTT contributors,

Annie selected the photograph from her personal collection to use as a focal point in a research interview and to display and discuss in workshop settings along with a series of other contributed photographs. The image became the point of conversation between an Inuk man and Bryan, details of which were recorded in field notes, edited as follows:

> The Elder identified himself as one of the marching young men, and explained that the boys had been preparing for a visit from either Queen Elizabeth or Prime Minister Trudeau. With no airstrip at the time, planes could land only on open water or solid ice. The spring thaw arrived late in 1969, and broken ice slabs littered the sea, making landing impossible. The visit of the esteemed guest had to be cancelled. (Grimwood field notes, June 10, 2008)

The photograph and the Elder's associated narrative expressed a matrix of historical, political, cultural, and ecological circumstances. Local observations of environmental change were communicated, and past moments of Inuit transition into settlements, the order marshalled by colonial regimes, and evolutions of Arctic aviation (Cape Dorset now has an airport and land-based airstrip) could be interpreted. These were revealed through the memory of one participant conveyed in relation to a photograph contributed by another participant. Additionally, the circumstances were revisited only because local research participants directed the study content and interacted through the medium of the photograph (Doubleday et al. 2008).

Learning: An approach for engaged acclimatization

In cross-cultural research contexts, we must be particularly alert to the ways a researcher's gaze, acquisition of knowledge, and representations might contribute to colonial narratives and power imbalances. Since Foucault's (1980) articulation of the productive fields of power, claims to knowledge and truth have been associated with discourse and understood as always partial, situated, constructed, and mobilized in various ways (Haraway 1991; Johnson and Murton 2007). Indigenous scholars, including Smith (1999), have found these analytics useful for resisting colonial and other so-called "Western" epistemologies by using "counter-stories;" in other words, demonstrating the constructed trajectories of knowledge to reveal authoritative knowledge systems as particular rather than universal in nature. This understanding has contributed to opening institutional spaces (e.g., university settings) to the influences and contemporary relevance of Indigenous knowledge understood as a relationship with all creation (Louis 2007; Battiste 2008; Wilson 2008).

In recognition of the partiality of knowledge, and in an attempt to balance power relationships between different knowledge systems, engaged acclimatization approaches the field with a learning perspective (Jazeel and McFarlane 2010; Nakamura 2010). Assuming the mantle of a learner facilitates the shift from research driven by expertise, certainty, and efficiency to humility, ambiguity, and a willingness to deal with flux in the processes, practices, peoples, and places that constitute research (Desbiens 2010). Any aversions to adapting methods in the field—for instance, to letting the community research contexts influence the procedures of "data collection" or "data analysis"—must be set aside so that the researcher can openly listen to and accept project-related content, etiquette, actions, meanings, or priorities shared by community participants. To borrow from Cruikshank (2005), research is not only about listening to stories, but also listening *for* stories. Learning thus becomes indirect, embodied, emotional, and imprecise (Law 2004; Jazeel and McFarlane 2010; Nakamura 2010). The skill is in being alert to how knowledge changes with circumstances, and the potential opportunities created by and through this volatility (Jazeel and McFarlane 2010).

Two moments from research in Baker Lake help us ground the learning approach in practice. The first occasion took place in July 2010 during a photo-elicitation interview with a young adult Inuk. Evening set in as the conversation turned to the participant's experiences at a nearby archaeological site, a series of tent rings that mark a former camp at the mouth of the Thelon River.

> She asked if I wanted to join her on an ATV ride out to "Blueberry Hill" where [this] archeo-

> logical site can be found… I welcomed the short excursion. The evening light illuminated the tundra, the airport, and the industrial site located nearby. As we explored the tent rings, we talked casually about the diversity within the landscape (e.g., industrial and traditional) and respecting this place of heritage (e.g., should we walk through the tent rings?; visiting the area with friends to have bonfires; showing concern and care by picking up litter and preventing damage at the site). (Grimwood field notes, July 29, 2010)

The event not only deviated from the photographic interview, it made more tangible the meanings and experiences that the participant inscribed within place. These were sensed and felt by Bryan, and made possible by a style of research that remains oriented to the directions and invitations of participants.

The second illustration occurred when Anautalik's[6] mother-in-law expressed her desire to go ice fishing, creating a change in plans for working on the Thelon River project. As the primary research contact in Baker Lake, Anautalik had initially agreed to spend the day working with Bryan. However, Anautalik's mother-in-law required transportation and desired companionship. To be Inuk means to listen to and obey the guidance and requests of Elders. On this day, formal Thelon work would wait.

After Anautalik had driven her mother-in-law by snowmobile to the ice and helped auger out a fishing hole, she returned to invite Bryan to come along. Bryan had encountered similar events of spontaneity during his fieldwork, many of which had led to clarifying moments of learning, new interactions with people and places, and a broader understanding of the cultural landscape. For example, he had learned on his first snowmobile journey how to orient travel using two distant and faint ridges on the horizon. "You go there," Anautalik instructed.

While fishing, the northwest wind hurried dusts of snow across the frozen Baker Lake, and pierced Bryan's multiple insulating layers, which included caribou skin *kamiks* and three layers beneath a downfilled jacket and overalls. "The fishing was cold… you stand or sit. Movement is minimal—a flex of the bicep pulls the lure line up quickly and regularly (intervals of a few seconds)—so staying warm by being mobile is not really an option" (Grimwood field notes, November 20, 2010). The elements and local harvesting practices were corporally encountered. This learning facilitated a greater appreciation of the Inuit capacity to adapt and thrive in cold regions, and of the celebration that comes with a successful harvest: "Anautalik constructed a wind block by pulling her *qamutiik* [a sled, towed behind the snowmobile] near her fishing hole and flipping it on its side. This seemed to give her good fortune as she pulled out a medium-sized lake trout soon after" (Grimwood field notes, November 20, 2010). The catch would nourish Anautalik's mother-in-law for a couple of days. In Bryan's case, the events supplanted intentions of formal research work with an embodied and experientially derived understanding of certain aspects of Inuit identity and culture.

Many important lessons for CBPR occur spontaneously and/or serendipitously (Caine et al. 2009; Blangy et al. 2010). While formal research consultations, meetings, and procedures can be planned and implemented with varying degrees of success, elusive and powerful lessons are also derived from unforeseen opportunities to interact with community research participants in town and on the land. Informal conversations and serendipitous moments are opportunities for place-based learning and relationship development that add depth and meaning to the formal project components. Researchers must be cautious to avoid rigid schedules or unbendable research protocols during community visits. Patience, flexibility, and a willingness to adapt and deal with uncertainty are traits of a respectful researcher and help convert the research field into a teacher.

Immersion: A practice of engaged acclimatization

> Knowing things requires one first of all to place oneself between them. Not only in front in order to see them, but in the midst of their mixture, on the paths that unite them (Serres 2009, 80).

[6] "Anautalik" is the self-selected pseudonym of a research partner in Baker Lake who requested that her name not be identified.

The third fundamental of engaged acclimatization, immersion, is a central practice in the CBPR we have undertaken in Nunavut. Immersion refers to the generation of knowledge in ways alluded to by Serres (2009); that is, through local experiential and corporeal encounters with the things, people, communities, or relations with which we seek to learn and work. It is about engaging with "place-specific ways of knowing that place and that community" (Johnson 2010, 7). To reiterate the recommendation of Markey and colleagues (2010), researchers need to visit communities as part of the research process. Indeed, time spent in communities helps build reciprocal learning relationships and a sense of how the nuances of place relate to more generalized processes (Markey et al. 2010). But, as we illustrate below, it is through immersive experiences that researchers develop an understanding of local knowledge and an enhanced capacity to translate knowledge across cultural groups. We explain and exemplify the value of immersion through an episode from the Thelon River project.

As southern-based researchers working with Nunavummiut (the people of Nunavut), immersion has facilitated our encounters with the seamless and relational qualities of IQ (Tester and Irniq 2008), and shown how these are expressed in different community contexts. In our collection of projects, immersion has been facilitated through multiple visits to participating communities, regular project consultations with local and regional representatives, participation in community events and celebrations (when invited), and importantly, experiential trips with Inuit guides and research participants on land, sea, ice, and water. The significant understanding derived from these experiences is corporeal and difficult to describe. We know that without immersion, we could not feel or sense, for example, the bitter rip of a northwest wind, the laughter and relaxed shoulders in a cabin on the land, the hum of snowmobiles piercing a spring evening soundscape, or the subtleties in a specific Inuktitut dialect that resonates with place. These sensations function as windows of shared and lived experience with Inuit, adding a certain depth to our participation as researchers in northern contexts.

Figure 3 depicts Bryan during his first personal encounter with the Thelon River. The photograph was taken in July 2008 along the river's shoreline, during a weekend outing spent with an Inuit family at their cabin northwest of Baker Lake. The masses of ice littering the shore are wintry remnants from upriver and inland lakes that accumulate near the river's outpouring and linger well into July. As the ice jarred Bryan's expectation of an ice-free river, it also provoked closer attention in the project to seasonal variations within the riverscape; how Inuit hunting and traveling practices, for example, adapt to fluctuating river levels, freeze and thaw cycles, caribou migration patterns, or hours of daylight. Conversations with Inuit about these river dynamics followed and revealed social-cultural–ecological relations as fundamental to Inuit knowledge (Doubleday 2007; Tester and Irniq 2008).

Insights into the workings and content of local knowledge derived from immersion are necessary for researchers to contribute to the dialoguing of knowledge across groups (e.g., from community contexts to academic contexts and vice versa). Equally, if not more important to knowledge translation, is the introspective and critical self-awareness in relation to others and place that is encouraged through immersion. Experiential encounters with difference (e.g., culture) prompt personal reflection and epistemological reflexivity; they can encourage researchers to reflect on the ways that their own values, beliefs, attitudes, or identities shape the field experience, or how power relations and broader discourses structure the production of knowledge (Mohammad 2001; Patton 2002). Reflexive researchers learn to question their assumptions and positionality as agents to influence, and reveal how these have real-world effects. When balanced with a learning perspective and the intention of crafting relations, this reflexive and critical questioning allows researchers to gauge their representations to remain accountable to and for their relations.

To illustrate, we return to the encounter as shown in Figure 3. Upon reflection, Bryan determined that his misplaced expectation of an ice-free Thelon was connected to his affiliations with the outdoors and canoeing subcultures

Figure 3
On the shores of the Thelon River. SOURCE: Grimwood, July 2008.

(Raffan 1999; Mullins 2009), subcultures which are in part constituted by various texts (Hodgson and Hobbs 1987; Pelly 1996), and which mark the riverscape as a *summer* canoe destination. In Canada, canoeing is associated with hegemonic discourses of nationalism, wilderness, masculinity, and the leisure class, and in many ironic and unfortunate circumstances, has led to marginalizing Indigenous canoe designers and users (Baker 2002; Haun-Moss 2002; Newbery 2003; Erickson 2008; Baldwin 2009). The seasonal "nature of canoeing" (Grimwood 2011) had structured Bryan's imagination with summerscape assumptions about the river environment. The ice exposed these very clearly. It also entrenched in Bryan the persistent question of how other aspects of the riverscape are made visible or invisible in certain ways by broader networks of influence and power relations.

If endogenous understanding and application is a goal of CBPR in the Canadian Arctic, then immersion is a foundational practice for Qablunaat academic researchers working with Inuit communities. In relation to the Thelon River project, the moment of immersion described above led to two central objectives. First, CBPR was employed, with the support of Baker Lake representatives, to juxtapose the values and practices of both Thelon canoe travellers and Baker Lake residents. The tourist and Inuit dimensions would be an effective way to document and share knowledge about the multiple ways that the Thelon is a special and changing place. Second, immersive experiences in different seasons were determined to be important for a more complete understanding of the riverscape, and to facilitate more trusting and respectful relationships with the Baker Lake residents who use and know the Thelon throughout the year. Fieldwork was therefore organized as multiple community visits in different seasons (early spring, mid-summer, and early winter).

Activism: An effect of engaged acclimatization

Certain forms of activism are derived from CBPR and Indigenous methodologies, particularly in terms of advocating and creating social change, balancing the power relations and ownership of research, and committing to ethical positions within the production of knowledge (Kobayashi 2002; Castleden et al. 2008; Johnson 2010; Markey et al. 2010). Indeed, we see these research practices making inroads into the institutional frameworks of research agencies, governments, and Indigenous communities (Castellano 2004; McDonald 2004; ITK and NRI 2007; CIHR et al. 2010). Previous sections show the role of engaged acclimatization in realizing some of these tangible effects. In this final section, we turn our attention to two more subtle modes of activism: one that emerged through engaged acclimatization, and one expressed through it. We begin with some instructive grounding.

A primary goal of research planning workshops in Baker Lake (July 2008), Rankin Inlet (December 2009), and Gjoa Haven (February 2010) was for community representatives and researchers to work together to identify local issues that might benefit from partnered research and how potential research might best be structured. This research planning approach followed a collaborative model, advocating community participation at all stages of the research process, including the project design phase (ITK and NRI 2007; Stewart and Draper 2009). While the researcher-facilitated meetings were engaging and the attendees responsive, brainstorming sessions leaned toward discussions of problems, challenges, and deficiencies rather than hopes or capacity within the community, suggesting that this component of the collaborative research process can be detrimental to well-being. Bravo (2009) described a related concern with climate change crisis narratives that position northern communities as "at risk" or "vulnerable." According to Bravo, these narratives marshal scientific expertise and physical causation but mask the voices and knowledge of northern citizens while impeding civic participation in policy opportunities. While there exists a counter narrative that positions northern communities as resilient and adaptive in the face of climate change (see Ford and Pearce 2012), the question we continuously ask ourselves as Arctic researchers invested in CBPR is to what extent might our practices, such as research-planning exercises, rewrite narratives that position communities at authentic margins shaped by perceptions of deficiency and vulnerability?

The activism emerging through engaged acclimatization was the conceptualization of CBPR as a persistent orientation towards positive possibilities and capacities. We have found helpful here the work of Gibson-Graham (2003), which identifies the potential for research to create places for the "ethical practice of self-formation" by understanding and cultivating local capabilities, responsibilities, and potentialities to become something other than what we have hitherto chosen to be (Gibson-Graham 2003; see also Doubleday et al. 2004). Following Gibson-Graham's concept of "community," the methodology used in PPTT, for example, was designed to awaken practices and feelings "of appreciation, generosity, desire to *do* and *be* with others, connecting with strangers (no matter who), encountering and transforming oneself through that experience" (Gibson-Graham 2003, 68–69). As we noted above, the methods included: participatory landscape photography; local plant identification, collection, and specimen preservation; and interactive workshops with Elders, students, and visiting researchers in community settings and at on-the-land camps (Doubleday et al. 2010). The project resulted in locally derived baseline information for monitoring and evaluating environmental change, including tools for establishing a community herbarium.

During his research assistantship with PPTT, Bryan worked with Inuit researchers and participants that directed research content through the application, documentation, and discussion of knowledge and skills related to the contexts in which they live. Although not substantiated by community members, the research seemed to function as a ceremony bringing people together (Wilson 2008). Observations of environmental and social vulnerabilities still emerged during the project, but these were embedded within a framework prioritizing culture, learning, and community, keys to Inuit resilience and autonomy (Doubleday 2007). In this way, local and

university-based researchers have been revisiting meta-narratives of Inuit vulnerability with visions of community capacity, self-efficacy, and expressions of identity. This spirit of methodological practice has been replicated in the Thelon River project, and represents activism emerging through engaged acclimatization.

Attempting to revisit meta-narratives is an activist's endeavour as it provides a basis from which we can rethink our positionality in relation to other oppressive projects (Johnson and Murton 2007). Here, we find a thread that connects to the activism expressed through engaged acclimatization: specifically, that it fosters the decolonizing of research methods. As we have alluded to throughout the article, prescriptive and procedural research protocols can dictate how reality ought to be viewed and designate the field as uniform space to be observed by the knowing expert (Law 2004; Serres 2009). In contrast, engaged acclimatization becomes manifest with the recognition that uncertainty, variation, and creativity pervade the methods, places, and peoples involved in research. It therefore encourages methods given meaning less by external standards and protocols than by circumstances found within a community, and the relationships crafted between researchers and those communities.

To exemplify briefly, in the Thelon River project, a daylong motorboat trip with an Inuit hunter and his family journeyed up the neighbouring Kazan River rather than the Thelon. This raised the methodological question of whether or not the event would qualify in the case study of the Thelon River, and led to modifying the project focus from "river corridor" to "riverscape." The former phrase is tied to colonial narratives of crossing the North (Saul 2008), while the latter term better reflects the network of river, land, and ice trails that Baker Lake Inuit travel to hunt, fish, and spend time with family.

By centring methodologies on respectful relationships and circumstances within participating communities, researchers depart from prescriptive norms of social science method. Such endeavours resist research narratives characterized by exogenous benefits, decision-making, ownership, and control; the kinds of research that are likely to aggravate Indigenous communities (Smith 1999; Wilson 2008). Engaged acclimatization facilitates both the emergence and expression of this action for positive change.

Conclusion

Drawing from our experiences of CBPR in several Nunavut communities, we have introduced and developed engaged acclimatization as an embodied, responsible, and reflexive approach to knowledge production occurring through immersive encounters in the field. As a complement to the CBPR literature, engaged acclimatization facilitates endogenous research by embodying research ethics as a lived and relational experience, initiating and nurturing research relationships as a central outcome of research, and centring methods on relationships for and with participating communities. Specific attention in this article focused on four interrelated aspects—crafting relations, learning, immersion, and activism—that have come to light primarily through our field experience. But upon critical reflection, subsequent reviews of the literature, and through our writing, we identify engaged acclimatization as a methodological process that resists methods prescribing objectivity, detachment, and universality. We envision engaged acclimatization as an ingredient of responsible CBPR.

Engaged acclimatization does not happen without encountering some barriers. We identify three that relate well to research in Canada's Arctic contexts and deserve brief comment. Physical barriers include spatial and temporal obstacles, such as community remoteness, seasonal climatic patterns, and commercial shipping supply schedules, which make northern research time-consuming and expensive. Normative barriers refer to dogmatic and authoritative approaches to knowledge production that hold fast to certain procedures, objectives, and expected products. The prescriptive and procedural norms of method that may be imposed by research supervisors, evaluation committees, or the peer review process are a case in point (Law 2004). Finally, attitudinal barriers to people and place limit relationship building, learning, immersion, and activism. Indeed, as readers will recognize, engaged acclimatization is intimately connected

to overcoming this final obstacle. To overcome the first two barriers, however, more attention must be directed to changing institutional mechanisms that govern funding priorities and distribution, determine project timelines, and evaluate research.

In this article, we have suggested ways to augment relational geographies and responsible CBPR, while attempting to avoid prescribing ways of being responsible or doing responsible research. In Bryan's case, engaged acclimatization has helped develop research relationships within Baker Lake. These relationships have structured a project that has adapted to circumstances of spontaneous learning and uncertainty; documented knowledge to share within and between cultural groups; advanced through immersive experiences in different seasons; and invited the capacity of community representatives and participants. An important next step is to better understand the extent to which engaged acclimatization resonates with Inuit perspectives on responsible research, as well as their experiences cultivating research relationships with Qablunaat. We also encourage geographers and other researchers using CBPR to critically examine how engaged acclimatization is or could be expressed in their own practices, and how the process might contribute to their own enactments of responsible research involving Indigenous peoples.

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