

Critical Northern Geography: A Theoretical Framework, Research Praxis and Call to Action in our (Post)Pandemic Worlds

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Abstract

This article traces the historical and evolving development of "critical northern geography"- paying attention to questions of Indigeneity, research ethics, and the practice of northern geographical fieldwork from within the settler colonial context of Canada. We share our reflections on the current state of the field and its future directions by weaving together contributions from scholarly literature, and creative texts, among other sources. Critical northern geography offers a theoretical framework and research praxis shaped by feminist, anti-colonial, anti-racist and critical Indigenous scholarship, and is driven by a belief that scholarly inquiry and practice can be tools for social justice. We argue that the COVID-19 pandemic has reframed understandings of research harm and practices of care for study communities. COVID-19 thus amplifies existing imperatives to move towards the use of critical research methodologies grounded in social justice frameworks, such as critical northern geography, as a means of



nurturing more respectful research relationships. To this end, critical northern geography can help shape the questions we are asking as researchers and can contribute to the ever-evolving development of anticolonial, anti-racist and non-extractive research relationships in the North.

Keywords

Critical northern geography, methodology, Indigenous geographies, northern research, Indigenous research ethics, northern Canada

Introduction

In this paper we outline the historical and evolving development of critical northern¹ geography by engaging principally with questions of Indigeneity and northern geographical research processes and practices emerging from the settler colonial context of Canada. The work interrogates "communitybased" research methodologies, and the changing nature of geographical fieldwork² with Indigenous peoples, within northern Indigenous communities and on northern Indigenous territories and homelands. The literature we engage with is largely situated in Inuit Nunangat, the Inuit homeland in Canada, reflecting a history of anti-colonial and critical Indigenous scholarship emerging from these geographies (Cameron 2015; Liboiron 2021; Pfeifer 2018; Stevenson 2014), though we believe the provocations offered are of relevance to the practice of northern geographical research across circumpolar regions.

This article was written as an act of collective reflexivity by a group of early career researchers in geography and their professor regarding our roles and responsibilities as scholars working in northern Canada. It stems from a graduate seminar course we took together at Memorial University in the fall of 2019 led by co-author Dr. Julia Christensen in which we explored the concept of "critical northern geography" and its emergence as a sub-field of geography. This paper was also influenced by weekly meetings held virtually from 2020-2021 during the COVID-19 pandemic, in which we discussed the significance of the pandemic for Indigenous communities in northern Canada and the ways it continues to influence our responsibilities as researchers, and changes our understandings of how to produce ethical research in the North.

While this paper is not *about* COVID-19, the pandemic has brought to the fore many of the systemic injustices experienced by Indigenous peoples and within Indigenous and northern geographies in Canada. The pandemic has reminded non-Indigenous Canadians not living in the North of the ongoing underfunding of education, health care, and critical infrastructure such as housing, water and sewage systems, and broadband internet, that have placed remote, northern and Indigenous communities at increased risk of the spread and harmful effects of COVID-19 (Penney and Johnson-Castle 2020). We believe COVID-19 reframes our responsibilities as researchers, amplifying existing needs to critically reflect on research methodologies and processes in the practice of northern geographical research (Goldhar et al. 2021). We are at a turning point that forces us to rethink the value and potential harms that the presence of a researcher brings, when they arrive from outside of a northern Indigenous

¹ The words "northern" and "the North" are used interchangeably throughout this article. Within Canada, there are many competing definitions of "the North", including areas of the country located north of 60° latitude, areas north of the taigatundra transition ecozone, Inuit Nunangat (the Inuit homeland in Canada), and others. For the purposes of this paper, "the North" refers to the territories (Nunavut, Yukon and Northwest Territories), Inuit Nunangat, and the provincial north (regions of the Canadian provinces that identify as northern such as Labrador and "Northern Ontario").

² While the focus of this paper is on northern geographical research and fieldwork, the discussion presented is equally relevant to scholars of disciplines such as anthropology and archeology that conduct fieldwork in northern places and communities.

community for the purposes of conducting fieldwork. In the context of northern Indigenous research, we believe critical northern geography can help shape the questions we are asking as researchers, contributing to the ever-evolving development of anti-colonial, anti-racist and non-extractive research relationships.

As students, we approach this discussion from a variety of perspectives. Collectively we are white settlers, Indigenous, francophones and anglophones, mothers, sisters and daughters, we are both younger and more mature students, we are predominantly heterosexual and cisgender, and for the most part, we are from Canada. Our collective experience in northern Canada includes being born and raised in the North, living and working in the North, and visiting the North from our southern homes to develop research projects. Each of our theses involve studying issues of relevance to northern Canada and, prior to the COVID-19 pandemic, most of our research plans involved extended periods of fieldwork in northern cities and communities. The article presents a series of vignettes offering first-hand personal reflections on our role as early career researchers and critical northern geographers during the COVID-19 pandemic, and weaves these reflections together with contributions from the scholarly academic literature, documentary film, creative texts, and other media sources.

The Conceptual Roots of Critical Northern Geography

Critical northern geography makes direct reference to critical geography, a practice of scholarship that is committed to social justice and liberation through scholarly enquiry. The sub-discipline emerged from a long tradition of dissent, particularly that of radical geography that emerged in the 1970s (see Peet 2000). A self-identified field of critical geography began to emerge in the late 1980s, and has two crucial departures from radical geography: a rejection of the structural excess of Marxism, in accordance with the post-modern turn; and, an increasing interest in culture and representation, in contrast to radical geography's focus on the economy.

The lack of a core theoretical framework, and the normalization (or institutionalization) of critical approaches has meant questions persist for those inside and outside critical geography as to what critical geography's tangible objectives really are. For example, there has to date been relatively little discussion over the shared commitments, if any, of critical geographers (though cf. Harvey 2000). What are geographers critical of? Why? And to what end? If the goal is to not simply understand the world, but actually change it, what does this look like, and when do we know that we have achieved it? Are we, as Trevor Barnes (2002) has suggested, better at critiquing than at imagining and advancing alternative futures?

Critical northern geography has emerged at a transformative time in northern Canada, where land claims, self-government and devolution processes have meant, to varying degrees, the resumption of authority, autonomy and sovereignty over knowledge and practices of knowledge production across northern and Indigenous communities. In this way, the core tenets of critical northern geography emerge through a critical dialectic occurring between northern and Indigenous communities, scholars and leadership, and university-based scholars who work with northern communities and on northern themes.

Critical northern geography, conceptually and methodologically, continues to evolve in response to scholars and Indigenous organizations who seek to push the current boundaries of accepted ethical research practice in the North, as determined by university research ethics boards and other institutions, and reframe dominant discourse and southern Canadian perspectives on northern peoples and places (see for example: Aldred et al. 2021; Zanotti et al. 2020). These writings have offered critiques of the colonial frameworks that continue to shape research questions and methodologies in Indigenous and northern communities, such as academic frameworks that preference the interests of southern research institutions over the needs of northern and Indigenous communities, and that preference knowledges, ways of being, and ways of understanding the world held by the white settler majority (Inuit Tapiriit Kanatami 2018).

In the context of Inuit Nunangat, northern geographical research has transitioned from research on Inuit, to research with Inuit, through the introduction of community-based practices, though research led by Inuit remains rare (Pfeifer 2018, 29). Furthermore, while an increasing number of Indigenous scholars have been hired to academic positions in geography at Canadian institutions, geography remains a largely white discipline (Choi 2016).

The lack of representation of northern Indigenous scholars stems in part from material conditions of austerity found in much of northern Canada and systemic inequalities and injustice that result in fewer Indigenous students completing high school, attending university, and pursuing academic opportunities (Hicks 2018; O'Gorman and Pandey 2015). These inequalities are demonstrated through the gap in both social and economic infrastructure in Inuit communities, the widely referenced "housing crisis" in northern Canada (Nunavut Housing Corporation 2016), high rates of food insecurity and the high cost of food and other essential goods (Bowers et al. 2020), the chronic underfunding of health care, child welfare services, education, mental health services and counselling, among other areas (Blackstock 2007; Obed 2020). Much of the wealth generated through various resource extraction industries in the Canadian territories, Inuit Nunangat, and the provincial north, is drained to the southern core of the country and to the pockets of private corporate shareholders, embodying an exploitative, colonial relationship between the northern and southern centers of the country (Bernauer 2019; Hall 2020).

The Historical Evolution of Northern Geographical Scholarship, Imaging the "New North"

Historically, the Canadian North was deeply embedded within the imperial discourse. Its' hardto-reach, vast and harsh territories were represented as the ultimate wilderness to be conquered and tamed by the "civilized" European (Bloom 1993). Representations of emptiness made the northern lands mysterious and appealing to the imperial state; and representations of harshness made its exploration physically and morally difficult, thereby giving the brave explorer the characteristics of a "hero", a character constructed on ideas of hypermasculinity and manliness, physical strength, endurance, and bravery (Farley 2005). When considering northern research critically, it is important to acknowledge how much these exploration narratives contribute to current representations of the Arctic as a space to be tamed by the civilized, where only the most masculine, capable, gentlemanly (that is, white) could thrive.

Through the historical writings of northern explorers, the North is also recurrently described as "new" or becoming. The moment is often "unprecedented", and the focus is on changes occurring or changes to come. Science and technology are tools with the power to transform northern opportunities, and the opportunities themselves appear unlimited. The "New North" has thus been created and recreated as a concept over the last century through ahistorical readings of northern places by non-northern peoples, often with self-serving ambitions. This creation and recreation of the "New North" is therefore not benign but rather has "accompanied attempts to cajole, conquer, civilize, consume, conserve and capitalize upon the far north," as offered by Stuhl (2013, 95). By rendering invisible contemporary experiences of colonialism and histories of imperialism, among other northern histories, the North is cast as a place of Arctic futures, where expert and outside knowledge and skills are needed to safeguard the North and protect northern peoples from dooming future change, or otherwise "help" northerners capitalize on perceived opportunities.

The legacy of these framings of the "New North" can be traced through more recent northern geographical research and the contemporary climate change literature (Cameron 2012; Stuhl 2013). Contemporary fieldwork conveys the same rite-of-passage symbolism as imperial expeditions. And arguably, a continued emphasis on northern fieldwork within the discipline by students otherwise unfamiliar with northern and Indigenous geographies continues the tradition of geography within the values of what a postcolonial discourse identifies as imperialism and whiteness (Abbott 2006).

The New "New North", Climate Change, Crisis and the Institutionalization of Northern Research

During the early 2000s, communities from across the Circumpolar North were at the forefront of a highly politicized global movement to better understand and better prepare for the current and future implications of climate variability and change. Climate change science had identified the Arctic as an "at-risk" region, one that was (and continues to be) particularly sensitive to the threats of climate change, where average air temperatures are projected to increase at a rate twice as fast as the global average (Watt-Cloutier 2016).

Social scientists contributed to global climate change discussions by studying policy response options in the Arctic and the vulnerability and adaptive capacity of Arctic communities to adjust to the implications of these biophysical changes (Hovelsrud and Smit 2010). Geographers were at the forefront of research studying the human dimensions of climate change, developing "community-based" research protocols that aimed to guide a more ethical approach to research with northern communities (see for example: Ford and Smit 2004; Laidler 2006). Research guidelines published by organizations representing the interests of Inuit and other northerners shaped many of these discussions (Inuit Tapiriit Kanatami and Nunavut Research Institute 2006).

The political importance of climate change led to an influx of public and private research funding and the creation of large, southern-based institutions that began driving northern research agendas. ArcticNet emerged in 2003 as a Network of Centers of Excellence in Canada, dedicated to "helping Canadians prepare for the impacts and opportunities brought by climate change and modernization in the Arctic" (ArcticNet 2017, 8). Together with the International Polar Year of 2007-2008, these initiatives inspired the work of tens of thousands of scholars who traveled to northern regions and communities to develop research projects centered around Arctic futures and concepts of change (Allison et al. 2007; ArcticNet 2020).

Vignette 1: Positivist Absurdities- Arielle Frenette

At the 2019 ArcticNet conference held in Halifax, an Inuk speaker told the story of an Arctic char he had fished that had unusual stomach content. He informed a scientist, who agreed to investigate the issue, only to come back two years later to announce that the char's stomach content was indeed abnormal. And that more research was needed to find out why.

I keep thinking about this story, and of how absurdly it portrays northern research (Audla and Smith 2014). Although some very inspiring stories were shared throughout the week, it was concerning to realize just how much Pitseolak Pfeifer was right when he spoke of a "credibility gap" in northern research (2018). While we discuss critical social justice frameworks, we need to remind ourselves that Inuit and Indigenous land-based knowledges are not partial accounts of a situated reality: they are cumulative lay knowledges of generations of observing, living, and using the land. Still, by categorizing their knowledge as "traditional" and "ecological", settler scientists dismiss Indigenous knowledges as a parallel source of information, enclosing knowledge holders in space and time. Academic knowledge is just as partial and situated as any other form of knowledge can be.

The Emergence of Critical Northern Geography

In the early 2000s, critical perspectives emerged regarding the practice of northern research, the use of "traditional ecological knowledge" and "Inuit Qaujimajatuqangit" or "Inuit Knowledge" within Qallunaat (non-Inuit) research and policy frameworks, and the increasing presence of southern-based researchers within northern communities (Martello 2008; Nadasdy 2003). The satirical film *Qallunaat! Why White People Are Funny* (Sandiford and Nungak 2006) captures many of these perspectives. The film uses humour to offer a critical reflection on the racialization of Inuit and the harmful and misguided

representations of Inuit by southern-based researchers and within white settler society in Canada more broadly.

Other creative texts, such as the works of Nunavut-born artist, Annie Pootoogook, the photography and film of Labrador's Jennie Williams, and the music of Matiu (Matthew Vachon) of Québec's Côte-Nord have offered honest and compelling portraits of northern life from an Indigenous perspective that refuses to engage with the expectations of settler society (Campbell 2020; Inuit Art Quarterly 2020; Matiu 2018). These affirmations of Indigeneity align with the scholarship of Leanne Betasamosake Simpson and Glen Coulthard, calling for Indigenous cultural and political revitalization, the celebration and strengthening of Indigenous intelligence as rooted in Indigenous ways of knowing and being (known as "grounded authority") and advancement of the broader project of Indigenous resurgence (Coulthard 2007; Simpson 2017).

Following similar themes, documentary filmmaker Alethea Arnaquq-Baril of Nunavut offers a direct and incisive challenge to settler-colonialism's destructive impacts and what sociologist Anibal Quijano has termed "colonial/modern Eurocentered capitalism" in her film *Angry Inuk* (Arnaquq-Baril 2016; Quijano 2000). *Angry Inuk* confronts the stagnant colonial and traditional representations of Inuit by members of the European Union and anti-seal-hunt activists. These representations confine Inuit to a local space, implying Inuit and the Inuit seal hunt are not entangled within the global market economy of seal skins; and a historic time, effectively writing Inuit out of the contemporary world, an objective that arguably serves the interests of settler-colonial society (see for example: Wolfe 2006).

A critical body of academic work that developed in parallel with these creative texts has also shaped the development of critical northern geography. These texts include Indigenous and settler critiques of post-colonialism from within settler-colonial societies such as the Americas and New Zealand. They trouble the temporality of post-colonialism that denies the lived experiences of colonial violence that continues to strip the subjecthood of Indigenous peoples and obstruct their efforts towards self-actualization and self-determination (Cameron 2015; de Leeuw and Hunt 2018; Wolfe 2006).

The development of decolonizing research methodologies (Smith 1999), and calls to decolonize the discipline of geography (Holmes et al. 2015) have also shaped directions within the field. However an important body of scholarship contests the concept of decolonization, its effectiveness as a theoretical tool, and its common separation from praxis in the academy (de Leeuw and Hunt 2018; Smith 1999; Tuck and Yang 2012). As a theory of research and research praxis, critical northern geography cannot be "decolonizing" or contribute to "decolonization", as it does not entail the rightful return of colonized lands to Indigenous peoples. It can, however, be anti-colonial- it can draw to light and interrogate colonial assumptions, privileges and structures of power, supporting decolonization projects and labour (see for example: Cameron 2015; Liboiron 2021; Tuck and Yang 2012).

Until relatively recently, settler-colonialism and the increasing presence of multinational corporations pursuing mining and oil and gas developments in the North were largely absent from the literature regarding the human dimensions of climate variability and change (see for example: Ford and Goldhar 2012). Climate change alone was often cast as the most significant determining force in the lives of northern peoples, and the inevitability of climate change led to the framing of research efforts around "adapting" to the impacts of climate change rather than the far less politically advantageous goal of "mitigating" these effects through reductions in fossil fuel emissions. The institutionalization of northern research thus led to the development of research agendas that favoured state and corporate interests and neglected to interrogate (or acknowledge) the continuous role of colonialism and resource extraction in shaping the lives of northern Indigenous peoples. Emilie Cameron (2012) articulated these perspectives through her work critiquing the framing of the human dimensions of climate change literature. Cameron's (2012) writing supported the previous work of Caroline Desbiens (2010) who challenged the

predominance of climate change as a framework for funding Arctic research, illuminating the many stories and worlds (particularly those of Indigenous women) that common methodological approaches within the human dimensions of climate change field failed to acknowledge. Scholarship regarding northern socionatures has also presented an alternative means of conceptualizing the human and more-than-human landscapes of northern places, peoples and climate change, influencing the development of critical northern geography (see for example: Cruickshank 2006).

Vignette 2: Critical Northern Geography as Activism- Kathleen Hackett

So far removed from the harms So much time has passed *To the settler...* The holes The cuts The knots The rips ... in relationships hard to see So many distractions Stop! Breathe. Be open. Listen. The band aids laced with poison fearing what healing would actually mean reverse examination And that is how we begin listening reconciling The future is about choosing Continue in ease or jump into the frigid waters Put out the raging fire of privilege of power and control We can't do both It is time to be uncomfortable And humanity will be better for it

Praxis

Practicing critical northern geography must begin with an acknowledgement of the on-going violence of settler-colonialism that continues to shape northern research geographies. Acknowledging that knowledge is produced *in places* that are established through colonial violence and are imbued with history is an important step in framing anticolonial research and in challenging the modernist framings of science and social science as universal knowledge unentangled in the politics and power of place (de Leeuw and Hunt 2018; Latour 1993). Geographers have long recognized that knowledge is situated, produced in a place, and by specific people, and often cite the works of Donna Haraway when referencing these points (1988). A recognition of the positionality of a researcher and their specific socio-cultural and temporal places (that are variously enmeshed within settler colonialism) helps shed light on the power differentials that shape research relationships. Though like land acknowledgements, declarations of settler identity (or whiteness) can be performative and confused with antiracism, anticolonialism and

decolonization while they don't constitute actions or challenge the deep privilege inherent in these identities (Ahmed 2004).

Scholars have similarly questioned the positioning of "best practice approaches" in northern research methodology and ethics protocols as tools for northern and Indigenous self-determination (Zanotti et al. 2020). "Community-based" and "participatory" research approaches have been conflated with decolonizing methodologies and Indigenous self-determination, despite their rooting within setter-colonial ontologies and research paradigms (Morton Ninomiya and Pollock 2016). These misleading associations have contributed to the mainstreaming of these methodologies as "best practice" approaches and led to their widespread reference, which has arguably created too much comfort, neutralizing and replacing a more honest accounting of the politics and power of northern research relationships (de Leeuw, Cameron and Greenwood 2012). While these ethics principles and methodologies have offered positive contributions towards a more respectful conduct of research in the North, they must be adapted to individual research contexts and do not represent or replace northern self-determination in research (Gabel and Cameron 2016; Morton Ninomiya and Pollock 2016).

As Terry Audla (the former President of Inuit Tapiriit Kanatami) and Duane Smith (the former President of Inuit Circumpolar Council) so clearly reminded researchers, Inuit and other northern Indigenous groups have established their own governance structures to guide northern research (2014). Despite these efforts, "a multigenerational and apparently continuing challenge for Inuit is raising awareness of the obligations of non-Inuit to value and respect Inuit leadership, governance, decision making, institutions, knowledge systems, and vision for the Arctic" (Audla and Smith 2014, 120). As early as 2008, Inuit began organizing to inform the direction of research occurring on their homelands through the creation of Inuit Nipingit (National Inuit Committee on Ethics and Research; Nickels and Knotsch 2012). Today, the Inuit Nunangat Research Program seeks to advance Inuit self-determination in research by providing funding and support for Inuit-led research (Inuit Tapiriit Kanatami 2020).

Practicing critical northern geography means listening to and learning from Indigenous and northern scholarship of all forms (including academic texts, visual and creative texts and other nontraditional forms of scholarship and storytelling; Christensen 2012; de Leeuw et al. 2017). It means producing research outputs in a variety of forms that will appeal to and engage with diverse northern audiences. It means being conscious of our positionality and the privilege and power we bring to our relationships as researchers (Haraway 1988), and being uncomfortable and allowing that discomfort to reflexively shape our thinking and conduct as scholars. It also means questioning whether the stories we hear as students and researchers are ours to share, as well as whether the research we are doing is ours to do; and, discussing these questions more overtly, shedding greater light on all parts of the research process and assigning value to aspects of it beyond just the results. That is to call for greater transparency and honesty when storying northern research, and thus making valuable space for dialogue, collective reflexivity and growth in the field. Practicing critical northern geography means seeking to be respectful of northerners and northern worlds by negotiating research relationships and foregrounding those relationships through research praxis. It means asking permission, anticipating and acknowledging ethnographic refusal, recognizing that silence itself can be a communication of refusal, and accepting "failure", even where failure means our inability to carry out our research as planned (see for example: Desbiens 2010; Simpson 2007). Ultimately it means approaching with humility and opening yourself to modes of uncertainty, accepting that there may be elements to research geographies that extend beyond what can be captured through research methods or settler frames of understanding (cf. Stevenson 2014, 2).

We are conscious of the need to refrain from providing an overly restrictive definition of the practice of critical northern geography. A framing of the practice in this way would silence the continuous and necessary critical questioning within the field. In addition, the practice of critical northern geography

may manifest in a variety of potentially contrasting ways as shaped by individual research contexts, partners and circumstances.

Finally, we are conscious of the harms a researcher can render while seeking to be the "good researcher" producing research to "help" northerners and northern geographies, and the ways in which these approaches can re-enact a long history of paternalistic colonial relations initiated by settlers seeking to "do good" in the North. While good intentions alone do not produce good research, there is also no formula to follow that will ensure respectful, ethical research relationships and a critical engagement with research geographies (Smith 1999).

Vignette 3: Unintended Familiarities- Gillian McNaughton

Critical northern geographies are intimately personal. Narratives and themes that are drawn out of northern research often resonate with pain and trauma that northern Indigenous peoples have experienced. As we, in our southern settings, live with increasing restrictions and limitations imposed upon us for the sake of public health, Indigenous communities, leaders, activists and youth continue to draw attention to the unequal and oppressive conditions they have been experiencing for generations. While the tides are slowly turning, critical northern geographies draw attention to the tangible embodiment of this change. This has touched upon ways in which Indigenous self-determination and the reconstitution of academic and research paradigms are contributing to northern research occurring in ways that provide power, autonomy and amplifies the voices of Indigenous peoples in the North. Yet, in the vast depths of academia, it is pertinent that we, regardless of discipline, invoke others to contribute towards this shift. There has been a conscious movement away from damage centered research and towards assigning and holding accountable oppressive power structures (Tuck 2009). Academia, however, is one of those structures, and as holders of space within institutions and social constructs that wield power, we must evaluate the impacts of our own work.

Where do we go from here?

There are a number of areas in need of further development within the field of critical northern geography. As a field that has emerged relatively recently, the field is vulnerable to many of the same critiques as critical geography; scholarship arguably lacks a core theoretical framework and questions remain regarding the tangible objectives unifying the field. Critical northern geography offers a radical contrast to traditional academia, as it practices epistemological reflexivity and places importance not just on what, how, and why we hold the knowledges we do, or the relational variations therein. It also questions the certainty and completeness of our stories, acknowledging the co-existence of other stories, including those not told.

Critical northern geography is also informed by the actions and organizing of Indigenous scholars, groups and peoples towards greater self-determination in northern research and calls for the Indigenization of the academy as a means of beginning to address some of the systemic injustices experienced by Indigenous peoples. These actions and organizing continue to influence the methodologies of critical northern geography. Despite current "best practice" approaches, colonial research paradigms are still being reproduced within Indigenous territories among a researcher demographic that remains largely white and settler. These limitations extend to the governance of northern research, more broadly. As discussed by Pitseolak Pfeifer, the governance of Arctic research in Canada arguably continues to operate in a colonial framework that privileges non-northern understandings of northern worlds and does little to strengthen efforts towards self-determination in northern research (2018, 29).

Researchers are increasingly seeking to address some of these challenges by developing partnerships with Indigenous organizations and governments to co-design research projects. While these approaches hold promise for a more just distribution of power within research projects, the development

of more respectful research relationships and the use of appropriate methodologies, they have yet to address the root structures of research funding. Questions also remain regarding the ability to produce "critical" northern research from within a government partnership (whether that government be Indigenous or settler). Clearly, a partnership implies an effort to produce research and research outcomes that benefit all parties - while the interests of Indigenous communities, governments and individuals are far from homogenous. If critical northern geography is a tool to address social injustice, what kinds of social injustice are we targeting? What scale of analysis are we using to identify these injustices? What parties, or interests are we aligning with?

At this particular time and place, we find ourselves in the midst of the COVID-19 pandemic. Concerns regarding the volume of southern-based researchers entering northern communities to conduct fieldwork have been compounded by the health and safety risks that northern travel poses for northern residents in fear of contracting COVID-19. These ethical concerns and health risks further confirm the importance of developing northern-based academic institutions to center the future development of northern research. Reflections around positionality and the particular time, place and identity of researchers will likely be of increasing importance in the future development of critical northern geographical scholarship in a (post)pandemic north.

Vignette 4: Critical Northern Geography in a (Post)COVID-19 North- Aimée Pugsley

To speak of opportunities rather than barriers in reference to the impact of the pandemic, seems odd and somewhat challenging when so many have been and are still being hurt by COVID-19. A position true of northern research, where many research plans including my own, were derailed by the travel restrictions that arrived with the virus – while simultaneously we were presented with valuable learning opportunities to re-think the way northern research is done. Demonstrative of one such opportunity; in a special event at ArcticNet's 2020 conference we listened to some wonderful stories of northern natural science research being conducted by community partners and northern residents, in the place of southern researchers unable to make it to their field sites this summer. Afterwards I asked via Twitter if perhaps these cases that engaged with the scientific capacity of northern and Indigenous peoples, are indicative of what a post-pandemic future could (and in fact should) look like for northern research. Indeed, I feel strongly that the COVID-19 pandemic has brought us to a significant pause and junction in critical northern geography and scholarship, whereby we can either choose to make deeply meaningful shifts towards centering the agency and self-determination of northern and Indigenous peoples, or not.

Conclusion

This paper has offered a review of the emerging field of critical northern geography- as it concerns questions of Indigeneity and geographical fieldwork methodologies. We feel a reflection on the promise and directions of critical northern geography is especially pertinent in our current times, where the COVID-19 pandemic has brought the systemic injustices experienced within northern Indigenous communities to the forefront of the public consciousness, and the consciousness of researchers and geographers alike. It forces us to consider our research relationships as practices of care, and of research as a practice of care for the communities with whom we work (Goldhar et al. 2021). It reframes our understandings of harm and the potential harms of conducting geographical research within northern Indigenous communities and on Indigenous homelands.

Within northern and Indigenous research geographies in Canada, critical northern geography offers a means of grounding northern research within a social justice framework that builds on anticolonial, anti-racist and feminist traditions, and is cognisant of these changing researcher responsibilities. The praxis of critical northern geography has the potential of leading to less-extractive research relationships in the North where southern settler researchers actively de-occupy academic spaces meant for northern narratives.

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References

- Abbott, Dina. 2006. "Disrupting the 'Whiteness' of Fieldwork in Geography." Singapore Journal of Tropical Geography 27, no. 3: 326–41.
- Ahmed, Sara. 2004. "Declarations of Whiteness: The Non-Performativity of Anti-Racism." *Borderlands* 3, no. 2: 1–14.
- Aldred, Terri Leigh, Charis Alderfer-Mumma, Sarah de Leeuw, May Farrales, Margo Greenwood, Dawn Hoogeveen, Ryan O'Toole, Margot W. Parkes and Vanessa Sloan Morgan. 2021. "Mining Sick: Creatively Unsettling Normative Narratives About Industry, Environment, Extraction, and the Health Geographies of Rural, Remote, Northern, and Indigenous Communities in British Columbia." *Canadian Geographer* 65, no. 1: 82–96.
- Allison, I, M Béland, D Carlson, D Qin, E Sarukhanian and C Smith. 2007. "International Polar Year 2007-2008." *World Meterological Organization Bulletin* 56, no. 4.
- ArcticNet. 2017. "ArcticNet Annual Report 2015-2017." https://arcticnet.ulaval.ca//pdf/media/arcticnetra-15-17-ang-web.pdf
- ---. 2020. "Network Investigators." 2020. https://arcticnet.ulaval.ca/network-investigators
- Arnaquq-Baril, Alethea. 2016. Angry Inuk. Canada: National Film Board of Canada and EyeSteelFilm.
- Audla, Terry and Duane Smith. 2014. "A Principled Approach to Research and Development in Inuit Nunangat Starts with the People." *Arctic* 67, no. 1: 120–21.
- Barnes, Trevor J. 2002. "Critical Notes on Economic Geography From an Aging Radical. Or Radical Notes on Economic Geography From a Critical Age." ACME: An International Journal for Critical Geographies 1, no. 1: 8–14.
- Bernauer, Warren. 2019. "Land Rights and Resource Conflicts in Nunavut." *Polar Geography* 42, no. 4: 253-266.
- Blackstock, Cindy. 2007. "Residential Schools: Did They Really Close or Just Morph into Child Welfare?" *Indigenous Law Journal* 7, no. 1: 71–78.
- Bloom, Lisa. 1993. Gender on Ice: American Ideologies of Polar Expeditions. Minneapolis: University of Minnesota Press.
- Bowers, Renee, Gail Turner, Ian D. Graham, Chris Furgal and Lise Dubois. 2020. "Piecing Together the Labrador Inuit Food Security Policy Puzzle in Nunatsiavut, Labrador (Canada): A Scoping Review." *International Journal of Circumpolar Health* 79, no. 1.
- Cameron, Emilie S. 2015. Far Off Metal River: Inuit Lands, Settler Stories, and the Making of the Contemporary Arctic. Vancouver: UBC Press.

- Cameron, Emilie S. 2012. "Securing Indigenous Politics : A Critique of the Vulnerability and Adaptation Approach to the Human Dimensions of Climate Change in the Canadian Arctic." *Global Environmental Change* 22, no. 1: 103–114.
- Campbell, Nancy. 2020. Annie Pootoogook: Life & Work. Toronto: Art Canada Institute. https://www.aci-iac.ca/art-books/annie-pootoogook/
- Choi, Andrea. 2016. "Equity, Race, and Whiteness in Canadian Geography." *Canadian Geographer* 60, no. 3: 369–380.
- Christensen, Julia. 2012. "Telling Stories: Exploring Research Storytelling as a Meaningful Approach to Knowledge Mobilization with Indigenous Research Collaborators and Diverse Audiences in Community-Based Participatory Research." *Canadian Geographer* 56, no. 2: 231–242.
- Coulthard, Glen S. 2007. "Subjects of Empire: Indigenous Peoples and the 'Politics of Recognition' in Canada." *Contemporary Political Theory* 6, no. 4: 437–460.
- Cruikshank, Julie. 2006. Do Glaciers Listen? Local Knowledge, Colonial Encounters, and Social Imagination. Vancouver, UBC Press.
- de Leeuw, Sarah, Emilie S. Cameron and Margo L. Greenwood. 2012. "Participatory and Community-Based Research, Indigenous Geographies, and the Spaces of Friendship: A Critical Engagement." *Canadian Geographer* 56, no. 2: 180–194.
- de Leeuw, Sarah and Sarah Hunt. 2018. "Unsettling Decolonizing Geographies." *Geography Compass* 12, no. 7: 1–14.
- de Leeuw, Sarah, Margot W. Parkes, Vanessa Sloan Morgan, Julia Christensen, Nicole Lindsay, Kendra Mitchell-Foster and Julia Russell Jozkow. 2017. "Going Unscripted: A Call to Critically Engage Storytelling Methods and Methodologies in Geography and the Medical-Health Sciences." *Canadian Geographer* 61, no. 2: 152–164.
- Desbiens, Caroline. 2010. "Step Lightly, Then Move Forward: Exploring Feminist Directions for Northern Research." *Canadian Geographer* 54, no. 4: 410–416.
- Farley, Rebecca. 2005. "By Endurance We Conquer': Ernest Shackleton and Performances of White Male Hegemony." *International Journal of Cultural Studies* 8, no. 2: 231–254.
- Ford, James D. and Christina Goldhar. 2012. "Climate Change Vulnerability and Adaptation in Resource Dependent Communities: A Case Study from West Greenland." *Climate Research* 54, no. 2: 181.
- Ford, James D. and Barry Smit. 2004. "A Framework for Assessing the Vulnerability of Communities in the Canadian Arctic to Risks Associated with Climate Change." *Arctic* 57, no. 4: 389–400.
- Gabel, Chelsea and Emilie Cameron. 2016. "The Community Readiness Initiative in Kugluktuk, Nunavut: The Challenge of Adapting an Indigenous Community-Based Participatory Framework to a Multi-Stakeholder, Government-Designed Project Environment." *Engaged Scholar Journal: Community-Engaged Research, Teaching, and Learning* 2, no. 1: 89–108.
- Goldhar, Christina, Arielle Frenette, Crystal Gail Fraser and Julia Christensen. 2021. "Return to Normal Travel and Research May Bring Hazards to Northern, Indigenous Communities." The Conversation. 2021. https://theconversation.com/return-to-normal-travel-and-research-may-bring-hazards-tonorthern-indigenous-communities-163240
- Hall, Rebecca. 2020. "Indigenous/State Relations and the 'Making' of Surplus Populations in the Mixed Economy of Northern Canada." *Geoforum*, 126: 461-470.

- Haraway, Donna. 1988. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Feminist Studies* 14, no. 3: 575–599.
- Harvey, David. 2000. "Cosmopolitanism and the Banality of Geographical Evils." *Public Culture* 12, no. 2: 529–564.
- Hicks, Jack. 2018. "Nunavut: Conceived in Austerity." In *The Public Sector in an Age of Austerity: Perspectives from Canada's Provinces and Territories*, edited by Bryan Evans & Carlo Fanelli, 315– 349. Montreal: McGill-Queen's University Press.
- Holmes, Cindy, Sarah Hunt and Amy Piedalue. 2015. "Violence, Colonialism, and Space: Towards a Decolonizing Dialogue." ACME: An International Journal for Critical Geographies 14, no. 2: 539– 570.
- Hovelsrud, Grete K. and Barry Smit, eds. 2010. Community Adaptation and Vulnerability in Arctic Regions. Dordrecht: Springer.
- Inuit Art Quarterly. 2020. "Jennie Williams." Inuit Art Quarterly. 2020. https://www.inuitartfoundation.org/iad/artist-info/bio-citations/Jennie-Williams
- Inuit Tapiriit Kanatami. 2018. "National Inuit Strategy on Research." Ottawa.
- Inuit Tapiriit Kanatami and Nunavut Research Institute. 2006. Negotiating Research Relationships with Inuit Communities: A Guide for Researchers. Edited by Scot Nickels, Jamal Shirley & Gita Laidler. Ottawa and Iqaluit.
- Kulchyski, Peter and Warren Bernauer. 2014. "Modern Treaties, Extraction, and Imperialism in Canada's Indigenous North: Two Case Studies." *Studies in Political Economy* 93: 3–24.
- Laidler, Gita J. 2006. "Inuit and Scientific Perspectives on the Relationship Between Sea Ice and Climate Change: The Ideal Complement?" *Climatic Change* 78, no. 407: 407–444.
- Latour, Bruno. 1993. We Have Never Been Modern. Cambridge: Harvard University Press.
- Liboiron, Max. 2021. Pollution Is Colonialism. Durham and London: Duke University Press.
- Martello, Marybeth Long. 2008. "Arctic Indigenous Peoples as Representations and Representatives of Climate Change." *Social Studies of Science* 38, no. 3: 351–375.
- Matiu. 2018. "Petikat (Album)." https://matiu.bandcamp.com/album/petikat
- Morton Ninomiya, Melody E. and Nathaniel J. Pollock. 2016. "Reconciling Community-Based Indigenous Research and Academic Practices: Knowing Principles Is Not Always Enough." Social Science and Medicine 172: 28–36.
- Nadasdy, Paul. 2003. Hunters and Bureaucrats: Power, Knowledge, and Aboriginal-State Relations in the Southwest Yukon. Vancouver: University of British Columbia Press.
- Nickels, Scot and Cathleen Knotsch. 2012. "Inuit Perspectives on Research Ethics: The Work of Inuit Nipingit." *Études/Inuit/Studies* 35, no.1–2: 57–81.
- Nunavut Housing Corporation. 2016. "Nunavut Is Facing a Severe Housing Crisis." Appearance before the Standing Senate Committee on Aboriginal Peoples, March 23, 2016. https://assembly.nu.ca/sites/default/files/TD%20158-4(3)%20EN%20Nunavut%20is%20Facing%20a%20Severe%20Housing%20Crisis.pdf

- O'Gorman, Melanie and Manish Pandey. 2015. "Explaining Low High School Attainment in Northern Aboriginal Communities: An Analysis of the Aboriginal Peoples' Surveys." *Canadian Public Policy* 41, no.4: 297–308.
- Obed, Natan. 2020. "House of Commons: Evidence, Thursday December 10." https://www.ourcommons.ca/DocumentViewer/en/43-2/INAN/meeting-12/evidence
- Peet, Dick. 2000. "Commentary: Thirty Years of Radical Geography." *Environment and Planning A* 32: 951–953.
- Penney, Jessica and Patricia Johnson-Castle. 2020. "COVID-19 and Inuit Nunangat: Research, Responsibility & Infrastructure Inequality." Yellowhead Institute. https://yellowheadinstitute.org/2020/03/31/covid-19-and-inuit-nunangat-research-responsibilityinfrastructure-inequality/
- Pfeifer, Pitseolak. 2018. "From the Credibility Gap to Capacity Building: An Inuit Critique of Canadian Arctic Research." *Northern Public Affairs*, no. July: 29–34.
- Quijano, Anibal. 2000. "Coloniality of Power, Eurocentrism, and Latin America (English Translation)." *Nepantla: Views from South* 1, no. 3: 533–580.
- Sandiford, Mark and Zebedee Nungak. 2006. *Qallunaat! Why White People Are Funny*. Canada: National Film Board of Canada.
- Simpson, Audra. 2007. "On Ethnographic Refusal: Indigeneity, 'Voice' and Colonial Citizenship." *Junctures: The Journal for Thematic Dialogue* 9: 67–80.
- Simpson, Leanne. 2017. As We Have Always Done: Indigenous Freedom Through Radical Resistance. Minneapolis: University of Minnesota Press.
- Smith, Linda Tuhiwai. 1999. Decolonizing Methodologies: Research and Indigenous Peoples. London: Zed Books Ltd.
- Stevenson, Lisa. 2014. Life Beside Itself: Imagining Care in the Canadian Arctic. Oakland: University of California Press.
- Stuhl, Andrew T. 2013. "The Politics of the "New North": Putting History and Geography at Stake in Arctic Futures." *The Polar Journal* 3, no. 1: 94–119.
- Tuck, Eve. 2009. "Suspending Damage: A Letter to Communities." *Harvard Educational Review* 79, no.3: 409–428.
- Tuck, Eve and K Wayne Yang. 2012. "Decolonization Is Not a Metaphor." *Decolonization: Indigeneity*, *Education & Society* 1, no. 1: 1–40.
- Watt-Cloutier, Sheila. 2016. The Right to be Cold: One Woman's Story of Protecting Her Culture, the Arctic and the Whole Planet. Toronto: Penguin Canada.
- Wolfe, Patrick. 2006. "Settler Colonialism and the Elimination of the Native." *Journal of Genocide Research* 8, no. 4: 387–409.
- Zanotti, Laura, Courtney Carothers, Charlene Apok, Sarah Huang, Jesse Coleman and Charlotte Ambrozek. 2020. "Political Ecology and Decolonial Research: Co-Production with the Inupiat in Utqiagvik." *Journal of Political Ecology* 27, no. 1: 43–66.