Why subsistence matters

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Hunter Gatherer Research 3.4 (2019): 635–649.

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Abstract: Subsistence, including hunting, sharing the proceeds of the hunt, and the social relations associated with these activities, is central to Inuit life. Here I synthesise my previous research on food security, economics, hunting and sharingin Kangiqsujuaq, Nunavik, tracing some of the pathways that connect traditional harvesting and sharing with political, economic and social life in the settlement today. The results reveal that some of the most fundamental aspects of life in the settlement – not just food access but also local leadership and the formation of family units – continue to be closely associated with the hunting and sharing of traditional foods. At the same time, broader economic forces threaten the ability of many Inuit to fully participate in subsistence activities. Understanding the social importance of traditional harvesting and sharing, and its relationship to the economic strategies of households, therefore remains necessary to approaching economic and social problems in northern communities. Because of the patterns of socioeconomic differentiation observed in Kangiqsujuaq and other settlements, the dynamics of complex social systems, including poverty traps, and the responses of norms and values to changed socioeconomic structures emerge as critical areas for future research.

Keywords: subsistence, food security, food sharing, social structure, Inuit

1. Introduction

Over the past 70 years, the traditional harvesting activities of Inuit have been transformed by permanent settlement, new technologies, and a political and economic environment that have made it impossible for most Inuit hunters to gain a living solely off the products of the land. These changes have led North American Arctic settlements to become 'mixed economies' in which wage labour and traditional harvesting are closely intertwined (Wolfe & Walker 1987). Harvesting persists even though the cost of harvesting traditional foods can sometimes exceed the opportunity costs of labour and the substitution value of store foods – and has for decades (eg Smith & Wright 1989; Langdon 1991; Smith 1991). The mixed economies of Canadian Arctic communities today generally involve the redirection of money earned in the cash economy to support the acquisition of equipment and supplies required to support a subsistence 'way of life' in centralised settlements (Poppel 2010), just as they have for the past several decades (Wenzel 1991).

Considering the scope of economic changes during the past century, the continued importance of traditional harvesting in Inuit communities may initially appear paradoxical to those unfamiliar with life in the Arctic today. Although Euro-Canadian economic, political, social and educational institutions are now a part of everyday life, Dorais (1997) argues that *maqainniq*, 'going away (out on the land)' remains at the core of Inuit identity; in opposition to *kiinauja- liurutiit*, or 'making money'. Based on my work in Kangiqsujuaq, Nunavik, over the past several years, I think this statement remains almost as true in 2017 as it was in 1997. Harder & Wenzel (2012) argue that a key reason for the persistence of traditional harvesting and sharing in Canadian Arctic settlements is that Inuit economic decisions continue to be guided by social relationships that are maintained through sharing practices. For this reason, they argue that the mixed

economy is also a 'social economy'. However, Harder & Wenzel (2012:306) point out that 'much Arctic social research refers to the cultural importance of customary resource sharing practices [...], but little attention is given to the details of the current function and organization of this practice'.

Concurrent with similar recent research in Alaska (eg Kofinas et al 2016), the structure and function of contemporary hunting and sharing practice have been the focal point of my ethnographic research in Nunavik. In this article, I summarise some of my previous work on food security, food sharing practices and household livelihood strategies in Kangiqsujuaq. By assembling the conclusions of several studies that have focused on different problems and different scales of analysis, my goal is to illustrate how it is that traditional harvesting and sharing practices remain an essential thread tying social, political and economic life in the settlement together – and, at the same time, to identify some points where the thread may be wearing thin.

While recognising that the term is culturally, and in some contexts, legally, loaded (ICC-Alaska 2015), I use the term 'subsistence' following its use by the Inuit Circumpolar Council (ICC 1992:36), as well as by many Arctic scholars (eg Condon et al 1995; CRCDQP 1999; Thornton 2001) to refer to a way of life in which hunting, gathering and fishing are important economic and social activities, and that encompasses a broad set of practices, beliefs and values relating to these activities, as well the relationships, knowledge and skills involved. I do not attempt to present all aspects of the meaning and importance of subsistence to Inuit today, but focus primarily on the economic impacts of harvesting and sharing. I begin by considering the relationship between country food, meaning foods that are hunted, fished or gathered, and food security in Kangiqsujuaq. All of the studies reviewed here are based on interviews I conducted with 110 households in Kangiqsujuaq between July 2013 and July 2014.

2. Subsistence and food access

Food security refers to 'access by all people at all times to enough food for an active, healthy life' (Bickel et al 2000:6). Food insecurity, meaning insufficient or uncertain access to adequate food, is high in Kangiqsujuaq, as it is in other settlements in northern Canada (CCA 2014). Using the standard criteria of the USDA Household Food Security Assessment (HSFMM) (Bickel et al 2000), my survey of food security in Kangiqsujuaq suggests that 20% of households in the settlement have low food security, while 21% have very low security (Ready 2016). In this case, 'very low food security' refers to households where adults reported occasionally going hungry due to lack of food, while 'low food security' refers to households where adults reported anxiety about access to food but did not report going hungry (Wunderlich & Norwood 2006). Compared to past studies (Lawn & Harvey 2004), these rates suggest that the severity, but not the prevalence, of food insecurity has increased in Kangiqsujuaq over the past decade. A major contributor to these alarming statistics is poverty resulting from a combination of inadequate incomes and the high cost of living in the settlement (Ready 2015; 2016).

However, these numbers do not tell the whole story about food security in Kangiqsujuaq. In fact, despite my best attempts, these numbers only reflect household access to store food, and do not account very well for the role of country food in promoting food security. In the food security

assessment instrument that I used, I attempted to include both store and country food. I did this by adding questions about country food to the standard USDA set of food security assessment questions, following the methods of the Alaska Department of Fish and Game (eg Magdanz et al 2010), and by using modifi- cations to question wording that had been used in previous studies of Inuit food security (eg Lawn & Harvey 2004). But subsequent analyses of the data revealed that Kangiqsujuarmiut answers to questions that specifically referenced country food did not correlate with their answers to questions about store food (Ready 2016). That is, although answers to questions that referenced store food correlated with wealth and followed expected patterns of frequency and severity with respect to each other, answers to questions that referenced country food did not.

While standard assessment instruments treat food security as a unidimen- sional trait, it is clear that for Inuit, questions about access to country food do not conform to this assumption. Regardless of their access to store food, a large proportion of Kangiqsujuarmiut indicated that they sometimes ran out of country food and were unable to access more. Consequently, standard assessment tools may do an adequate job of measuring Inuit access to purchased food, but if we are interested in anything more than an exceptionally narrow definition of food security (ie one that ignores food preference and the contri- bution of country food to nutrient intake) then they are clearly insufficient.

Unfortunately, my study was not designed to quantitatively tease out the various factors affecting access to country food at the household level. Nevertheless, one of the major barriers to country food access was the cost of harvesting: over 50% of households felt that they faced a lack of resources for obtaining their preferred foods (see Brinkman et al 2014 and Wenzel et al 2016 for similar conclusions). This pattern can be attributed to the same underlying factors as insecure access to store food: the high cost of harvest supplies and equipment along with inadequate incomes in many households. However, cost is not the only barrier to access to country food. The uncertainty of hunting conditions, the need for experience and knowledge to be a successful harvester, and the social channels through which country food is distributed are important additional factors that affect Inuit responses to questions about access to country food.
Other authors have also noted the role of uncertainty in shaping perceptions of food security in mixed economies. For instance, Ikuta et al (2014) recorded the greatest prevalence of food insecurity during peak salmon fishing season in Napaskiak, Alaska, which they attributed to respondents' anxieties about obtaining enough fish to last through the winter. In this case, the respondents' concerns were likely exacerbated by declining local fish stocks and increasingly strict conservation regulations. Numerous studies have examined the role of changing weather patterns in country food availability and access, suggesting that climate change may increase environmental risks to harvesters (eg Brinkman et al 2016; Archer et al 2017). Loss of traditional hunting knowledge has also been documented by several researchers (Condon et al 1995; Heyes 2011; Pearce et al 2009). In Kangiqsujuaq, the loss of traditional knowledge among younger Inuit is widely acknowledged but remains an unresolved problem.

Country food access is also deeply social because of the continued importance of food sharing between households. Food flows along social ties representing family connections, friendships, workplace affiliations and myriad other social relationships. It is this aspect of country food access that has been the focus of my research: in particular, the relationships between economic

factors at the household level and food sharing ties.

3. Why give food away?

To understand more clearly the contribution of country food sharing to food security in Kangiqsujuaq, an obvious first line of inquiry is to determine whether households in need of food tend to be prioritised in the sharing network. To do this, I used data on household wealth and harvest production from my household survey as measures of household access to store and country food and examined whether these attributes were negatively correlated with network properties that enhance access to resources that are obtained through social channels (network size, quality and density) (Ready 2018a). The network data were also collected in the household survey and represent household self-reports of important sharing ties, aggregated to form a settlement-wide network (Ready & Power 2018; Ready 2018a). The country food sharing ties in this network include numerous types of relationships, including both one-way and two-way relationships of exchange between households, as well as ties with both kin and non-kin.
The results showed some surprising trends. First is that neither household wealth nor harvest level had any direct effect on network size (the number of other households in the network that a household received food from). Neither did network quality (measured by the number of ties from high-harvest production households) nor network density (a measure of network redundancy) show any correlation with household economic characteristics. Rather, network quality and density were correlated only with network size. In other words, I found no evidence that the structure of the country food sharing network privileges flows of food towards households in need, as measured by their wealth, harvest production, or even by their household size. In contrast, the age of the oldest household member, and whether it was a household headed by a single woman, did have effects on network size, suggesting that flows of food are sometimes directed by cultural obligations to give to individuals, who, at least historically, would have been more likely to be in need of food. However, this is far from a direct mapping on to household need in the settlement today.

Because I did not have data on the quantities of food exchanged, there could be variations in exchange frequency or amounts not captured in the analysis described above. Nevertheless, economic need fails to explain the structure of the sharing network. This seems to be upheld by the perceptions of many residents of the settlement. For example, when asked to describe what factors had affected her access to country food, one woman in her fifties, head of a food insecure, low-harvest household, stated: ‘I think there’s hardly foods in Wakeham Bay. They say there’s nice people in Wakeham Bay but they don’t share.’ Yet, at least a dozen households in this woman’s neighbourhood each had harvests of beluga, seal, caribou and geese that exceeded a million calories (500 person-days of food) in the previous year. Her more fortunate neighbours did not regularly include her when they shared food, to the point that she wondered if anyone had much country food at all.

This woman was far from the only person in the settlement who felt that harvesting and sharing were in decline. Indeed, many survey respondents said that when sharing country food, they tried to think about ‘those who need it’, while at the same time noting that their ability to share with those in need was limited by the amount of country food they had and their primary obligation to share with close family members. Others mentioned a desire to help but said they did not know

which households were in need of food. Clearly, although Kangiqsujuarmiut often express that need is an important motivation for sharing, other considerations, as well as social barriers to knowledge about who needs food, shape the distribution of country food in the settlement.
To identify some of the factors that households find most important when deciding whom to share with, Ready & Power (2018) examined what benefits households might derive from giving away food, by modelling the structure of the food sharing network data described above using an exponential random graph model. We then examined the coherence of this statistical model with hypotheses derived from different theoretical models from human behavioural ecology, all of which propose ways that actors might benefit from giving away resources to others. These models include reciprocity, exchange for other resources, investments in the well-being of kin, and reputational benefits.

We found that the country food sharing network data were consistent with multiple alternative hypotheses for the function of food sharing. First of all, dyadic reciprocity, meaning two-way exchange of country food between pairs of households, was an important feature of the dataset. Households also strongly preferred to share with kin, and with close kin more than more distant kin. Moreover, we found that households with different socioeconomic profiles (as measured by their harvest production level and food security status) had somewhat different preferences for sharing with other types of households. Most notably, food insecure high-harvest households had a higher probability of sharing with food secure low-harvest households than with any other household type, a pattern we interpret as likely representing exchange of food for other resources (money, gas, other supplies) between these resource comple- mentary households. Interestingly, households with the highest socioeconomic status in the settlement – those that were both food secure and high-harvest – were most likely to share with similar high-status households, and least likely to share with households that were both food insecure and lower harvest. Finally, our analysis, consistent with research conducted in Nunavik in the 1960s (Pryor & Graburn 1980), also showed that sharing is associated with political influence in the settlement. In particular, giving country food out over the FM radio – a behaviour inconsistent with attempts to direct shares towards kin or towards preferred exchange partners – was correlated with membership on several local elected councils (Ready & Power 2018). This connection between generosity and political influence is consistent with traditional Inuit models of leadership (Hervé 2015).

In summary, along with the apparent importance of dyadic reciprocity, both in-kind and involving different resources (eg money, gas) and sharing with kin, members of households with the ability to sustain high levels of harvest production and to share food widely are often influential persons in the settlement. These conclusions confirm that households may benefit from giving away food in several different ways. Further, based on socioeconomic factors, households – by choice or by necessity – pursue different strategies when they share country food. Indeed, some households hardly give to others at all, while the most affluent often endeavour to share beyond their close circles of family and reciprocal sharing partners to the community at large, particularly elders and single women.

4. Subsistence, employment and family life

As described above, the analyses of the sharing network revealed considerable variability in the participation of households in country food sharing. Some of these differences reflect the

socioeconomic status of households; with high harvest, higher income and food secure households giving country food to more other households. This observation led me to investigate the relationship between household demographic composition and participation in harvesting and sharing. A gender division of labour between husbands and wives has long been considered an important feature of the subsistence economy, even up until quite recently. For instance, anthropologists who conducted fieldwork with Inuit during the 1980s suggested that a specialised division of labour between hunting husbands and wage-earning wives was important to maintaining high household harvests in the mixed economy (Condon 1987; Dahl 2000). Yet, today, 33% of households in Kangiqsujuaq are headed by single women.

To examine the extent to which marriage and a gender division of labour factor into patterns of harvesting and sharing within the settlement, I compared the socioeconomic attributes of married households (including co-habiting couples) with different wage-earning patterns to those of households headed by single men and single women (Ready 2018b). While single women are the most common household type in the settlement (33%), dual income households are most common among married households (28% of all households; 56% of married households). Dual income married households have the highest per capita incomes, lowest rate of food insecurity, and highest median number of outgoing food sharing ties of any household type. Importantly, in terms of per capita income, married households with only one wage earner do not fare better financially than the households of single men and women. Furthermore, married households where the wife was the primary income earner do not tend to have larger country food harvests than dual income households.

These patterns suggest that economic cooperation between men and women remains an important contributor to socioeconomic status in the mixed economy, not only in terms of having a higher income per se but because it appears to be money – not time – that is the limiting factor in household harvest production. We therefore might expect employment to be an important factor in peoples' choice of domestic partner, and the survey data confirm that this is the case. At any age, individuals of either sex with full-time employment are more likely to be in a co-habiting conjugal relationship than those without full-time employment (Ready 2018b). For men, participation in harvesting, specifically seal hunting, is also a predictor of co-habitation or marriage.

The results of the household survey indicated that 26% of women and 29% of men aged 18 to 65 had no formal employment in the 12 months prior to the survey. Thus, the observed tendency for individuals in Kangiqsujuaq to prefer employed individuals as domestic partners may contribute to the relatively high frequencies of dual income households and single female households in the settlement. These patterns feed into the large differential in harvest production between households in the settlement (Ready & Power 2018), partly because of the financial advantage of dual income households. But the households of single women, especially young single mothers, tend to harvest less not only because of income but also because of traditional gender roles. Although there are a few women in Kangiqsujuaq who are competent hunters, they are exceptions rather than the rule. Previous research in the Inuvialuit region has suggested that boys raised in the absence of a father figure (biological or adopted) have limited opportunities to learn traditional land skills (Pearce et al 2011). Critically, then, broader economic forces impact the formation of conjugal households in Kangiqsujuaq, which has implications for household

participation in subsistence as well as for the transmission of skills to the next generation.

5. The future of subsistence

Recently, BurnSilver et al (2016) argued that the 'acculturation paradigm' that characterised much of twentieth century Arctic anthropology – the idea that integration into the broader Canadian political and economic system would inevitably lead to cultural loss – is no longer tenable, due to the continued central place of subsistence in Inuit life. There are many ways in which the results of my research support this view, as they demonstrate how subsistence remains an organising principle of political, economic and social life in Kangiqsujuaq, influencing diverse aspects of life in the settlement, from food security to political influence to patterns of marriage and cohabitation. Critically, the results of my work, which has focused on the economic aspects of harvesting and food sharing, as well as recent research focused on reported quality of life (eg Morin et al 2010), clearly demonstrate that the persistence of subsistence among Canadian Inuit is not a side-effect of poverty (cf Chabot 2003:31). On the contrary, members of wealthy households are often those who are most active in harvesting and sharing, share the most widely, and express the importance of values associated with subsistence the most emphatically. Even more significantly, subsistence values have been integrated into modern government institutions, both directly, in the provisions of the James Bay and Northern Quebec Agreement (JBNQA) (Kishigami 2000), and perhaps more importantly, indirectly, due to continuity in the relationship between influence and generosity in the settlement (Ready & Power 2018). This is not to mention the important contributions of subsistence to Inuit nutrition, physical and mental health, and cultural identity (Blanchet et al 2000; Searles 2002; Kuhnlein et al 2007; Johnson-Down & Egeland 2010; Egeland et al 2011; Kral et al 2011; Dowlsey 2015).

Clearly, subsistence 'matters' for a lot of reasons. Yet, some scholars view the mixed economy as a fundamentally unstable system (eg Chabot 2003), and there is also some evidence to support this view. In the Canadian Arctic, the contribution of country food has declined over the past decades – from 23.4% of energy intake in 1999 to 16.1% in 2008 (Sheikh et al 2011). Wenzel et al (2016) recently compiled historical harvest data from the Qikiqtaaluk-Baffin region and found not only decreases in per capita availability of food but declines in the total volume of country food harvests over a 20-year period from 1980 to 2001. Moreover, Collings (2014) suggests that Inuit themselves have internalised a narrative of cultural decline. Undeniably, many elderly and middle-aged Kangiqsujuarmiut view the past with great nostalgia and sometimes lament the loss of traditional knowledge, values and tastes that they perceive among today's youth.

Some of the patterns documented in my research can help us reconcile this apparent contradiction in perceptions of the vitality of subsistence. The correlation between income and harvest production reflects the fact that the high cost of harvesting constitutes a formidable barrier to entry for many would-be hunters (Wenzel et al 2016). One of the most skilled hunters in Kangiqsujuaq lamented that he and other hunters in the settlement had been forced to become 'weekend warriors', while young men without sufficient means were essentially cut out from pursuing subsistence activities. Unemployment is one contributor to this problem. Without employment, it is harder for individuals to form families with the ability and means to support harvesting and sharing, and consequently to pass on subsistence skills and knowledge (and tastes and values) to their children. In contrast, for those with the means, sharing begets sharing,

through dyadic reciprocity; and for some, sharing helps them achieve positions of prominence. In other words, it seems like there may be positive feedbacks affecting the socioeconomic status of both wealthy and poor households in the settlement. Of course, this description is an over-simplification: not all households fit in to this pattern. For example, some hunters attempt to offset the cost of hunting by selling country food instead of sharing it; a practice that is gaining ground although it is frowned upon by many as contrary to subsistence values (Gombay 2010). There are also some (albeit extremely few) households who choose to opt out of subsistence entirely. Nevertheless, it is clear that subsistence practices, knowledge and values are intimately tied to processes of social reproduction in Inuit communities.

When we consider the reality of inequality within the settlement, the simultaneous vibrance and decay of subsistence makes more sense: different segments of the population of Arctic settlements experience very different socioeconomic environments, and are consequently differentially experiencing processes of culture change. From this perspective, it becomes clear that it is not just averages but variances in socioeconomic variables that are significant for understanding economic and cultural change in Arctic settlements today. Some six-year olds in Kangiqsujuaq are already seasoned participants in subsistence harvesting, while some young adults have never spent more than a few hours out on the land. Similarly, some households eat country food every day, while others eat it only once or twice a month, when they get a fish from the community freezer or from a family member.

With this variability in mind, then, it is evident that the classic competing theoretical frames of Inuit subsistence studies, 'adaptation' and 'acculturation' (Wenzel 2001; Collings 2014), are both insufficient for understanding processes of change in Arctic mixed economies today. Subsistence is still 'adaptive' in the sense that it serves many social and economic functions; yet, cultural change (some might say loss) is also happening. This apparent contradiction can be partly attributed to economic conditions and social structures within communities, which lead people to differ in their ability to participate in subsistence and to derive benefits from it. It is needless to point out that these differences cannot be reduced to a dichotomy between 'Nunamiut' and 'Kabloonamiut': those who keep traditional ways and those who have abandoned them (Vallee 1968). It is more accurate to say that there are real socioeconomic barriers for some members of the population, and these limit the livelihood choices available to them, particularly their engagement with the subsistence sector and enjoyment of its benefits. This conclusion is not limited to my own research. I think it is fair to suggest that there is an emerging consensus on the issue of socioeconomic differentiation (if not stratification) in Inuit settlements, at least in Nunavik and Labrador (Dombrowski et al 2013, 2016; Duhaime & Édouard 2015; Ready & Power 2018; Ready 2018b). A recognition of the inadequacy of our classic theoretical approaches is important not just for Arctic people and researchers, but also provides an important frame of reference for understanding ongoing processes of integration into cash/market economies occurring among many foraging and traditional agricultural populations worldwide. As my research suggests, in the Arctic, understanding the actual processes that drive change in the mixed economy requires factoring in the importance of social relations and how they shape economic decisions.

While the observation that differences in socioeconomic status lead people to be differentially impacted by change may not be surprising, this issue is of considerable importance with respect

to some of the pressing issues that confront Inuit communities today, ranging from climate change to mental health, and suggests new directions of research focused on livelihood strategies within complex, evolving social structures. To date, the role of pre-existing social structures and patterns of access to capital (especially social capital) in conditioning processes of social and economic change within communities have not been given sufficient attention by researchers working in mixed and transitioning economies both in and outside of the Arctic. For instance, research on the impacts of climate change in the Arctic (and elsewhere) needs to adopt theoretical and methodological frameworks that can model socio- ecological resilience in systems where actors face very different economic and social constraints and feedbacks, and examine how such constraints and feedbacks might make it more difficult for poor households to transition out of poverty or to maintain beneficial traditional practices. There are important questions relating to the role of inequality in health and well-being, too, such as the potential role of social position in how individuals perceive their own well-being and how they define living a good life. Investigating these issues will require subsistence researchers to get out of our comfort zones of ecology and economy and more carefully consider the complex processes that link economics with social structure, value systems and mental and physical health. But it is important that we do so, because the social relations enacted through subsistence are an essential part of these linkages.

Acknowledgements

This research was funded by a SSHRC doctoral fellowship, NSF Office of Polar Programs grant PLR-1303874, and a Satre Family Fellowship through the Stanford Interdisciplinary Graduate Fellowship program at Stanford University.

References

Archer, L, Ford, JD, Pearce, T, Kowal, S, Gough, WA & Allurut, M 2017. Longitudinal assessment of climate vulnerability: a case study from the Canadian Arctic. *Sustainability Science* 12(1):15–29.

Bickel, G, Nord, M, Price, C, Hamilton, W & Cook, J 2000. *Guide to measuring household food security, revised 2000.* Alexandria, VA: United States Department of Agriculture, Food and Nutrition Service.

Blanchet, C, Dewailly, E, Ayotte, P, Bruneau, S, Receveur, O & Holub, BJ 2000. Contri- bution of selected traditional and market food to the diet of Nunavik Inuit women. *Canadian Journal of Dietetic Practice and Research* 61(2):50–59.

Brinkman, TJ, Hansen, WD, Chapin III, FS, Kofinas, G, BurnSilver, S & Rupp, TS 2016. Arctic communities perceive climate impacts on access as a critical challenge to availability of subsistence resources. *Climatic Change* 139(3–4):413–427.

Brinkman, TJ, Maracle, KB, Kelly, J, Vandyke, M, Firmin, A & Springsteen, A 2014. Impact of fuel costs on high-latitude subsistence activities. *Ecology and Society* 19(4):18.

BurnSilver, S, Magdanz, J, Stotts, R, Berman, M & Kofinas, G 2016. Are mixed economies persistent or transitional? Evidence using social networks from Arctic Alaska. *American Anthropologist* 118(1):121–129.

CCA (Council of Canadian Academies) 2014. *Aboriginal food security in northern Canada: an assessment of the state of knowledge*. Ottawa: Expert Panel on the State of Knowledge of

Food Security in Northern Canada.
Chabot, M 2003. Economic changes, household strategies, and social relations of contemporary Nunavik Inuit. *Polar Record* 39:19–34.
Collings, P 2014. *Becoming Inummarik: men's lives in an Inuit community.* Montreal: McGill-Queen's University Press.
Condon, RG 1987. *Inuit youth: growth and change in the Canadian Arctic.* New Brunswick, NJ: Rutgers University Press.
Condon, RG, Collings, P & Wenzel, G 1995. The best part of life: subsistence hunting, ethnicity, and economic adaptation among young adult Inuit males. *Arctic* 48(1):31–46.
CRCDQP (Committee to Review the Community Development Quota Program) 1999. *The community development quota program in Alaska.* Washington, DC: National Academy Press.
Dahl, J 2000. *Saqqaq: an Inuit hunting community in the modern world.* Toronto: University of Toronto Press.
Dombrowski, K, Channell, E, Khan, B, Moses, J & Misshula, E 2013. Out on the land: income, subsistence activities, and food sharing networks in Nain, Labrador. *Journal of Anthropology* 2013(185048):1–11.
Dombrowski, K, Habecker, P, Gauthier, GR, Khan, B & Moses, J 2016. Relocation redux: Labrador Inuit population movements and inequality in the land claims era. *Current Anthropology* 57(6):785–805.
Dorais, L-J 1997. *Quaqtaq: modernity and identity in an Inuit community.* Toronto: University of Toronto Press.
Dowlsey, M 2015. Identity and the evolving relationship between Inuit women and the land in the eastern Canadian Arctic. *Polar Record* 51(260):536–549.
Duhaime, G & Édouard, R 2015. Social stratification through the capability approach: the case of the Inuit of Nunavik. *Polar Geography* 34(4):325–343.
Egeland, GM, Johnson-Down, L, Cao, ZR, Sheikh, N & Weiler, H 2011. Food insecurity and nutrition transition combine to affect nutrient intakes in Canadian Arctic communities. *The Journal of Nutrition* 141(9):1746–1753.
Gombay, N 2010. *Making a living: place, food, and economy in an Inuit community.* Saskatoon: Purich Publishing.
Harder, MT & Wenzel, GW 2012. Inuit subsistence, social economy and food security in Clyde River, Nunavut. *Arctic* 65(3):305–318.
Hervé, C 2015. *Le pouvoir vient d'ailleurs: leadership et coopération chez les Inuits du Nunavik.* Québec: Presses de l'Université Laval.
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Heyes, S 2011. Cracks in the knowledge: sea ice terms in Kangiqsualujjuaq, Nunavik. *Canadian Geographer* 55(1):69–90.
ICC (Inuit Circumpolar Council) 1992. *Principles and elements for a comprehensive Arctic policy.* Montreal: Centre for Northern Studies and Research.
ICC-Alaska (Inuit Circumpolar Council-Alaska) 2015. *Alaskan Inuit food security conceptual framework: how to assess the Arctic from an Inuit perspective.* Anchorage: Inuit Circumpolar Council-Alaska.
Ikuta, H, Brown, C & Koster, D 2014. *Subsistence harvests in 8 communities in the Kuskokwim River Drainage and Lower Yukon River, 2011.* Technical Paper No. 396. Anchorage: ADFG.
Johnson-Down, L & Egeland, GM 2010. Adequate nutrient intakes are associated with

traditional food consumption in Nunavut Inuit children aged 35 years. *The Journal of Nutrition* 140(7):1311–1316.
Kishigami, N 2000. Contemporary Inuit food sharing and hunter support program of Nunavik, Canada. In Wenzel, G, Hovelsrud-Broda, G & Kishigami, N (eds) *The social economy of sharing: resource allocation and modern hunter-gatherers.* Osaka: National Museum of Ethnology:171–192.
Kofinas, G, BurnSilver, SB, Magdanz, J, Stotts, R & Okada, M 2016. *Subsistence sharing networks and cooperation: Katovik, Wainwright, and Venetie, Alaska.* BOEM Report 2015–023 DOI; AFES Report MP 2015–02. Fairbank: University of Alaska Fairbanks.
Kral, M, Idlout, L, Minore, J, Dyck, R & Kirmayer, L 2011. Unikkaartuit: meaning of well-being, unhappiness, health, and community change among Inuit in Nunavut, Canada. *American Journal of Community Psychology* 48:426–438.
Kuhnlein, HV, Receveur, O, Soueida, R & Berti, PR 2007. Unique patterns of dietary adequacy in three cultures of Canadian Arctic indigenous peoples. *Public Health Nutrition* 11(4):349–360.
Langdon, SJ 1991. The integration of cash and subsistence in southwest Alaskan Yup'ik Eskimo communities. In Peterson, N & Matsuyama, T (eds) *Cash, commoditi- sation and changing foragers.* Osaka: National Museum of Osaka:269–291.
Lawn, J & Harvey, D 2004. *Nutrition and food security in Kangiqsujuaq, Nunavik. Baseline survey for the food mail pilot project.* Ottawa: Minister of Public Works and Government Services.
Magdanz, J, Braem, N, Robbins, B & Koster, D 2010. *Subsistence harvests in Northwest Alaska, Kivalina and Noatak, 2007.* Technical Paper No. 354. Anchorage: ADFG. Morin, A, Édouard, R & Duhaime, G 2010. Beyond the harsh. Objective and subjective living conditions in Nunavut. *Polar Record* 46(237):97–112. Pearce, T, Ford, JD, Laidler, GJ, Smit, B, Duerden, F, Allarut, M, Andrachuk, M, Beryluk,
S, Dialla, A, Elee, P, Goose, A, Ikummaq, T, Joamie, E, Kataoyak, F, Loring, E, Meakin, S, Nickels, S, Shappa, K, Shirley, J & Wandel, J 2009. Community collaboration and climate change research in the Canadian Arctic. *Polar Research* 28:10–27.
Pearce, T, Wright, H, Notaina, R, Kudlak, A, Smit, B, Ford, JD & Furgal, C 2011. Transmission of environmental knowledge and land skills among Inuit men in Ulukhaktok, Northwest Territories, Canada. *Human Ecology* 39:271–288.
Poppel, B 2010. Are subsistence activities in the Arctic a part of the market economy, or is the market economy a part of a subsistence based mixed economy? In Langgård, K (ed) *Cultural and social research in Greenland: selected essays 1992–2010.* Nuuk: Ilisimatusarfik/Forlaget Atuagkat:349–365.
Pryor, FL & Graburn, NHH 1980. The myth of reciprocity. In Gergen, KJ, Greenberg, MS & Willis RH (eds) *Social exchange: advances in theory and research.* New York: Plenum: 215–237.
Ready, E 2015. Ensuring country food access for a food secure future in Nunavik. In *Québec policy on the Arctic: challenges and perspectives*. Arctic and International Relations Series, Issue 1. Seattle: University of Washington: 50–54.
Ready, E 2016. Challenges in the assessment of Inuit food security. *Arctic* 69(3):266–280.
Ready, E 2018a. Sharing-based social capital associated with harvest production and wealth in the Canadian Arctic. *PLOS ONE* 13(3):e0193759.
Ready, E 2018b. Who, being loved, is poor? Poverty, marriage, and changing family structures

in the Canadian Arctic. *Human Organization* 77(2):122–134.
Ready, E & Power, E 2018. Why wage-earners hunt: food sharing, social structure, and influence in an Arctic mixed economy. *Current Anthropology* 59(1):74–97.
Searles, E 2002. Food and the making of modern Inuit identities. *Food & Foodways* 10:55–78.
Sheikh, N, Egeland, GM, Johnson-Down, L & Kuhnlein, HV 2011. Changing dietary patterns and body mass index over time in Canadian Inuit communities. *International Journal of Circumpolar Health* 70(5):511–519.
Smith, EA 1991. *Inujjuamiut foraging strategies. Evolutionary ecology of an Arctic hunting economy.* New York: de Gruyter.
Smith, TG & Wright, H 1989. Economic status and role of hunters in a modern Inuit village. *Polar Record* 25(153):93–98.
Thornton, TF 2001. Subsistence in northern communities: lessons from Alaska. *The Northern Review* 23:82–102.
Vallee, FG 1968. Differentiation among Eskimo in some Canadian Arctic settlements. In Valentine, VF & Vallee, FG (eds) *Eskimo of the Canadian Arctic*. Toronto: The Canadian Publishers:109–126.
Wenzel, GW 1991. *Animal rights, human rights: ecology, economy and ideology in the Canadian Arctic.* London: Bellhaven Press.
Wenzel, GW 2001. 'Nunamiut' or 'Kabloonamiut': which 'identity' best fits Inuit (and does it matter)? *Inuit Studies* 25(1/2):37–52.
Wenzel, GW, Dolan, J & Brown, C 2016. Wild resources, harvest data and food security in Nunavut's Qikiqtaaluk region: a diachronic analysis. *Arctic* 69(2):147–159.
Wolfe, RJ & Walker, RJ 1987. Subsistence economies in Alaska: productivity, geography, and development impacts. *Arctic Anthropology* 24:56–81. Wunderlich, G & Norwood, J (eds) 2006. *Food insecurity and hunger in the United States: an assessment of the measure.* Washington, DC: National Academies Press.