

# Inuit Subsistence, Social Economy and Food Security in Clyde River, Nunavut

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**ABSTRACT.** This paper examines the flow of money and country food resources within an Inuit extended family (*ilagiit*) in Clyde River, Nunavut, to understand the effects of a mixed wage-income and hunting economy on customary resource sharing and food security. Over a 12-week period in 2009, data were gathered through participant observation and bi-weekly recall interviews with 10 *ilagiit* households in the community. The findings are compared to data on sharing collected in 1999 from the same family group. Results indicate that resource sharing, especially for country food, continues to follow traditional kinship patterns and retains considerable importance in the group's aggregated "income." Further, imported foods are shared, but on what appears to be an ad hoc basis, while control of money appears to rest with individuals. Overall, differences between households in cash income, seen in terms of hunting and fishing equipment, are more apparent in 2009 than in 1999, but this inequality is moderated by shared use among close kin of large items like freighter canoes and outboard motors. At this time, social relations critically buffer subsistence disparities between lower- and higher-income households in culturally prescribed ways. Our study of the socioeconomic dynamics within an Arctic community is particularly valuable for informing a culturally relevant understanding of Arctic food security, given significant recent interest in this research area.

**Key words:** Inuit subsistence, northern Baffin Island, mixed economy, sharing, socio-cultural relations, food security

**RÉSUMÉ.** Le présent article se penche sur le flux monétaire et les ressources alimentaires prélevées dans la nature au sein d'une famille inuite étendue (*ilagiit*) de Clyde River, au Nunavut, dans le but de comprendre la dynamique d'un revenu mixte et d'une économie basée sur la chasse en matière de partage des ressources coutumières et de salubrité des aliments. Sur une période de 12 semaines en 2009, des données ont été recueillies par le biais d'observations des participants et d'entrevues de rappel aux deux semaines auprès de 10 foyers *ilagiit* faisant partie de la collectivité. Les constatations ont ensuite été comparées aux données partagées recueillies en 1999 auprès de ce même groupe familial. Les résultats indiquent que le partage des ressources, plus particulièrement en ce qui a trait aux aliments prélevés dans la nature, continue de suivre les modèles parentalistes et conserve une importance considérable sur le plan du « revenu » collectif du groupe. Par ailleurs, il y a lieu de remarquer que la nourriture importée est également partagée, ne serait-ce que sur une base ad hoc, tandis que le contrôle de l'argent semble incomber aux individus. Dans l'ensemble, les différences relevées entre les foyers en matière de revenu monétaire, vues en termes de matériel de chasse et de pêche, sont plus apparentes en 2009 qu'en 1999, mais cette inégalité est modérée par l'utilisation partagée, au sein de la parenté proche, de plus grands articles comme les canots de fret et les hors-bords. Pour l'instant, les relations sociales ont pour effet d'amortir, de manière critique, les disparités de subsistance entre les foyers à revenu plus faible et les foyers à revenu plus élevé en fonction des pratiques culturelles. Notre étude de la dynamique socioéconomique au sein d'une collectivité de l'Arctique a de l'importance quand vient le temps de comprendre, sur le plan culturel, la salubrité des aliments de l'Arctique et ce, à la lumière de l'intérêt considérable qui est porté à ce sujet depuis un certain temps.

**Mots clés :** subsistance des Inuits, nord de l'île de Baffin, économie mixte, partage, relations socioculturelles, salubrité des aliments

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## INTRODUCTION

Contemporary Inuit subsistence is often described in one of two ways: as a mixed economy or as a social economy. Applying these two terms to describe the Inuit socio-economic system does not indicate two different interpretations; rather, both these concepts are needed to describe

the complete system. The system is mixed because Inuit must now rely on a variety of material resources to meet basic dietary and nutritional needs. It is social because Inuit cultural norms reliably facilitate the transfer of these material resources among Inuit. Together, the mixed and social aspects make 21st century Inuit subsistence functionally dynamic and analytically complex (Wenzel, 2000; Gombay, 2005).

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The term “mixed economy” accurately describes the integration of the foods produced through hunting and the money, accessed through wage employment and government transfers, that has developed as an aspect of the modern economic environment of the North (Langdon, 1991; Wenzel, 1991; Usher et al., 2003; Abele, 2009; Dowsley, 2010). Indeed, as Wenzel (2000), Duhaime et al. (2002), Chabot (2003), and Myers (2008) have noted, since the centralization of Eastern Arctic Inuit into spatially fixed communities, money for purchasing and maintaining the modern equipment needed for hunting has become an essential subsistence resource.

Social economy (Wenzel et al., 2000; Abele, 2009; Natcher, 2009) is also an apt descriptor of the Inuit subsistence system in that it refers to the complex set of behaviors, structured principally by kinship but also by residential association, that frame economic decisions. These activities, generally referred to as sharing (see Damas, 1972; Wenzel, 1995), continue to be a fundamental trait of Inuit society and culture (Bodenhorn, 2000; Hovelsrud-Broda, 2000; Wenzel, 2000; Levesque et al., 2002; Gombay, 2005). While sharing has long been recognized as guiding the transfer, allocation, and redistribution of traditional resources (also referred to as “country food”), non-traditional resources such as money, equipment, and store foods have now become a component of the socio-economic environment of Nunavut communities.

Much Arctic social research refers to the cultural importance of customary resource sharing practices (e.g., Tait, 2001; Chan et al., 2006; Ford et al., 2008; Myers, 2008), but little attention is given to the details of the current function and organization of this practice. Even fewer studies have addressed the flow of non-traditional resources, particularly money or the equipment it buys in support of harvesting (e.g., Riches, 1975; Langdon, 1991; Bodenhorn, 2000; Hovelsrud-Broda, 2000; Gombay, 2003; for an exception see Wenzel, 2000). The specific ways that money and other non-traditional resources such as store food function in this economy are not well understood (Wenzel, 2000). This is likely because these exchanges are less predictable and occur on a situational basis.

The purpose of this paper, therefore, is to extend the analyses that already exist on Inuit resource sharing by adding further depth regarding the structural intricacies of contemporary resource sharing. The flow of both resource types within an Inuit extended family (*ilagiit*) may reflect differential valuing, or scarcity, or both. Imported foods, for instance, almost never figured in transfers between households, although they sometimes were central to hosted meals, albeit far less so than traditional resources.

This analysis relies on data obtained during two periods of fieldwork, the first in 1999 and the second in 2009, with one cooperating *ilagiit*. Despite its limited context, this study of Inuit socioeconomic dynamics may illuminate the kinds of adaptive strategies that Inuit use to obtain needed resources, maintain food security (Ledrou and Gervais, 2005; Chan et al., 2006; Lambden et al., 2007; Duhaime and

Bernard, 2008; Egeland et al., 2010), and cope with climate change, which is increasingly linked to food security (Ford et al., 2008; Ford, 2009).

## METHODS

It is generally agreed that measuring individual economic activity is insufficient for understanding Inuit economic relations (Anderson and Poppel, 2002; Usher et al., 2003) because economic activity often includes regular or sporadic wage employment of individuals, a cooperative harvesting sector, and a transfer system that responds to the characteristics of individuals (age, health) and households (number of minors). This structure is overlain by culturally normative distribution rules that almost always link producers to a cluster of consumers. Therefore, in an effort to capture individual and multi-actor production and consumption, most contemporary approaches to Inuit economy (Duhaime et al., 2002, 2008; Chabot, 2004) focus on the household unit.

As Usher et al. (2003) have noted, however, analysis at the household level, let alone the individual level, does not necessarily provide a complete picture of Inuit economic organization and the relations that result, as inter-household economic connectivity is predicated on primary bonds of kinship. Kinship ties, notably between blood-related male householders, have been repeatedly documented as central to intra-*ilagiit* economic activity, especially in the northern Qikiqtaaluk Region–Iglulingmiut culture area of Nunavut (Damas, 1972; Wenzel, 1981, 1991, 1995). Thus, *ilagiit* structure and dynamics affect the transfer and application of resources (food, money, equipment), labour, and information by and to individuals, phenomena not easily evidenced or explained by more socio-economically bounded analytical units. The analysis developed here therefore focuses on the *ilagiit* as the more encompassing economic unit in Clyde River, the community where this research was conducted.

The data on *ilagiit* resource transfers were collected during the summers of 1999 (Wenzel and White, 2001) and 2009 (Harder, 2010). Because both datasets covered roughly equivalent periods between May and late August (9.5 weeks in 1999 and 12 weeks in 2009) with the same extended family, they are highly comparable. The 2009 research was designed to be as similar as possible to the 1999 work in order to examine change in the social unit over the 10-year period. The goal was to determine 1) whether the level of resource transfers had changed significantly; 2) the degree to which country food remained important in the group’s overall “income”; and 3) whether (and if so, how) changes in group composition had affected resource transfers.

After securing adult participants’ consent for inclusion in the project, an initial interview was done to acquire baseline data on household economics and demographics, assets (hunting equipment), and typical hunting and fishing activity. Thereafter, household heads were interviewed every

two weeks (to reduce interview fatigue) about hunting activity, food and money sharing (giving and receiving), meals eaten at other households and hosted in their own homes, and changes in employment and sources of income. These structured interviews were supplemented by un-directed and broad-ranging conversations with other household members, as most households were socially visited several times each week. These casual contacts provided a more detailed and nuanced perspective on the interview data.

As a result, the documentation of resource flows and sharing transactions is a representation of these interactions rather than a precise account of the content and quantity of each transaction, not least because “economic activity” could occur at many times in a 24-hour period and vary from large groups of 20+ partaking of a fresh caribou to a single outside person casually eating during a visit.

### THE STUDY SITE AND RESEARCH PARTICIPANTS

Clyde River (*Kangiktugapik* or ‘nice little inlet’) is a medium-sized village in the Qikiqtaaluk Region. Located on the eastern coast of Baffin Island (70°28′05″ N, 68°35′40″ W; Fig. 1), the area used by Clyde River Inuit consists of a complex, fiord-dissected coastline backed by the mountains of the Arctic Cordillera. The settlement is located on Patricia Bay and connects to Clyde Inlet, a fjord that joins Baffin Bay to the east and extends from Patricia Bay some 100 km westward, where it meets a meltwater river flowing from the Barnes Ice Cap.

The community, in Nunavut political parlance, is a hamlet. At the time of the 2009 project, it had approximately 935 Inuit residents (*Kangiktugappimiut*) (up from about 700 in 1999), the majority of whom spoke the Iqulingmiut dialect. Access to the hamlet is limited to weather-dependent daily flights from Iqaluit and Pond Inlet, and bulk supplies (fuel oil, non-perishable foods, and construction materials) are delivered via the annual sealift. Despite rapid population growth (ca. 3.5% annually between 2005 and 2010), the settlement has limited employment opportunities (Myers, 2008), and the hunting mainly of ringed seal, polar bear, arctic char, caribou, and narwhal dominates the traditional resource sector (Wenzel et al., 2010).

In the wage sector of the local economy, the hamlet government is Clyde River’s largest employer (17 full-time, 11 part-time), although both the Ilisaqsvik Wellness Centre and Arruja, both community-operated organizations, employ large numbers of residents on a casual or part-time basis. Other significant employers are the Kulluak School, the Health Canada nursing station, and the Northern Store retail food and dry goods outlet.

The *ilagiit* that was the focus of both studies, although having changed in overall size during the intervening 10 years (see Table 1), still had most of the same members as in 1999. The group’s economic relations were evaluated with reference to three broad categories of sharing: country food

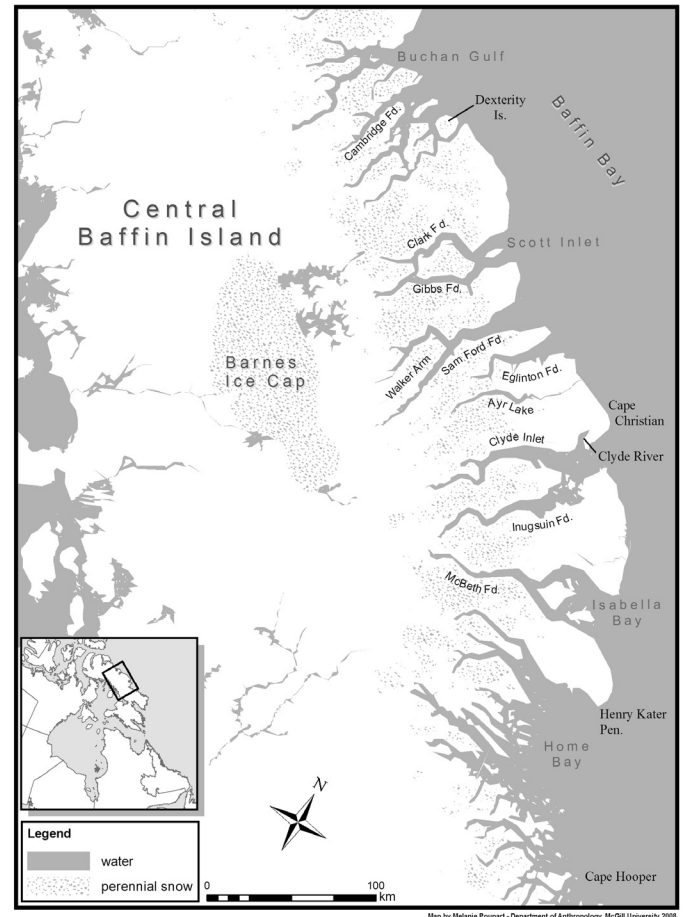


FIG. 1. Map of central Baffin Island, showing the Clyde River area.

given and received; meals eaten in another household and meals hosted in the home; and money and/or hunting equipment given and received (a more detailed description of resource flows is provided by Harder, 2010).

There were, however, some changes, one of which came to be seen as very significant in terms of the socio-economics of the group as the 2009 research progressed. One nuclear family that had participated in the 1999 research had emigrated to another community; several individuals who in 1999 were children or young adolescents were either no longer living in the community or declined (two unmarried males) to participate in the study. Thus, in 1999, participants included nine *ilagiit*-affiliated households with 49 members, 21 adults and 28 children (those under 18 years of age were regarded for the purpose of the study to be children), while in 2009 there were 10 households with 69 members, 38 adults and 31 children.

These changes, however, were regarded as minor. A much more significant change was that three major participants in the 1999 study (in fact, the three oldest *ilagiit* members), all of whom had exerted social and economic leadership at that time, had died during the interim between the studies. The emic effect of their absence had particular significance for the third study objective: determining whether group changes had affected resource transfers.

TABLE 1. Participating *ilagiit* households, 1999 and 2009.

1999 Households	Adults/Children	Comment
1	4/2	Head: <i>Ilagiit</i> leader + wife (both 70+) <sup>1</sup>
2	3/3	Head: Eldest son of HH#1, senior couple
3	1/3	Head: Daughter of HH#1 couple
4	2/3	Head: Third son of HH#2 couple
5	3/3	Head: Second oldest son of HH#1 couple
6	2/1	Daughter of HH#1 couple + husband (head)
7	2/5	Head: Oldest son of HH#2 couple
8	2/4	Head: Second oldest son of HH#2 couple
9	2/4	Daughter of HH#1 couple + husband (head)
Total	21/28	
2009 Households		
1	8/5	Head: Widow of former head of HH#2 in 1999
2	4/3	Head: Oldest <i>ilagiit</i> male; wife F-T employed
3	3/2	Oldest son of HH#1 head; F-T employed
4	2/1	Second son of HH#1; F-T hunter, wife F-T employed
5	3/2	Third son of HH#1; F-T employed
6	2/4	Fourth son of HH#1; wife F-T employed
7	7/6	Head: F-T hunter, wife is the sister of HH#6 & F-T employed; adult child seasonally employed
8	2/1	Head: Brother of HH#6 head; lived in HH#1 in 1999
9	5/3	Head: Sister of heads of HHs#6 & #8 & sister of wife in HH#7
10	2/4	Head: Daughter of HH#9 head
Total	38/31	

<sup>1</sup> Household includes two unmarried adult sons (both in their 20s).

## INUIT TRADITIONAL ECONOMY: AN OVERVIEW

While the research presented here is specific to socio-economic relations among Inuit at Clyde River, the pattern of sharing that the data describe closely conforms to the system generalized by Damas (1972) for the Iglulik Eskimo culture area. Wenzel has observed similar patterns of resource allocation and sharing in a number of other communities with an Iglulingmiut majority (Resolute, Igloodik, Pond Inlet), though during shorter study periods (unpubl. field notes: Resolute, 1976; Igloodik, 1992; Pond Inlet, 1998). Economic circumstances, not to mention regional societal differences, militate against projecting the pattern of resource sharing dominant at Clyde River to other regions of Nunavut. A more restricted socio-economic pattern (Collings et al., 1998; Collings, 2011) has been identified as functioning in the Inuvialuit community of Holman, Northwest Territories. In Nunavik, a robust harvester support program (see Kishigami, 2000; Chabot, 2003; Gombay, 2003), an outgrowth of the James Bay and Northern Québec Agreement, has contributed to a community economic pattern that is considerably different from that in Nunavut.

Traditionally, economic relations in the eastern Baffin region were ordered in much the way interpersonal relations were structured (Nuttall, 2000), that is, through two key kinship-based behavioral precepts. The most discussed of these with respect to Inuit subsistence is *naalaqtuq*, or obedience and respect (Damas, 1963, 1972; Wenzel, 1995), which is based primarily on positioning among consanguines, but includes age and gender differences between individuals. The other is *ungayuq*, or affective closeness, as between parent and child (Damas, 1963, 1972), but also includes solidarity among siblings (Wenzel, 1995).

This societal structure also had organizational importance beyond the main kindred, especially with respect to economic transfers. Unlike dyadic economic pairings, like seal partnerships, present in Netsilik and Copper Inuit societies (Van de Velde, 1956; Damas, 1972), the *ilagiit* formed the primary economic unit among Iglulingmiut, including the Inuit of northeastern Baffin Island (Wenzel, 1991). The production and consumption of resources occurred at the *ilagiit* level, as opposed to the nuclear household level, but could extend beyond the boundaries of kinship in certain situations.

Prior to contact with Europeans, the only organizing structure in Inuit society was kinship (Heinrich, 1963). Generally the oldest male and most accomplished hunter of the largest extended family assumed the role of group leader (*isumataq*) and was responsible for resource decisions, including the distribution of food (Damas, 1972). Most resources flowed from subordinate family members through the *isumataq* to other subordinate family members.

The primary obligation of subordinate family members was to the *isumataq*. Their secondary obligation was to uncles, older brothers, subordinate siblings, and (weakly) a spouse's parents. Resources thus flowed from younger to older and from subordinate to superior members of the family. Gender was also a factor, as women were subordinate to men in their sharing obligation. When a woman married, her economic obligations shifted to the *ilagiit* of her spouse, although, if distance was not an issue, she continued to eat meals and visit with her natal family.

This complex organization ensured the well-being of eastern Baffin Inuit regardless of their position in the genealogical structure (Damas, 1972). Just as women needed men to provide the food and materials for shelter, and men

TABLE 2. *Ilagiit* employment<sup>1</sup> and demographic profile, 15 May–17 August 2009.

	Total	Women	Men
Demographics:			
40+	11	6	5
18–39	27	13	14
0–17	31	15	16
<b>Total</b>	<b>69</b>	<b>34</b>	<b>35</b>
Average household size: 6.9 people (Range: 3–13)			
Employment status:			
Full time	10	7	3
Part time	3	2	1
Seasonal	9	2	7
Unemployed	16	9	7
<b>Total</b>	<b>38</b>	<b>20</b>	<b>18</b>
Active hunters	3	0	3

<sup>1</sup> Employment status pertains to people 18 years and older.

needed women to convert the meat and skins into food, clothing and shelter, it was impossible for an individual household to survive separate from the extended family (Giffen, 1930). In order to hunt successfully, individual hunters required the experience of older hunters, who in turn required the help and labour of the younger hunters, with whom they shared hunting equipment.

Consequently, the meat from a successful hunt was not the individual's property, but went directly into the extended family system (see Wenzel, 1995). More successful households did not accumulate surplus for their own use, but shared their production via the concomitants of kinship (Usher et al., 2003). Culturally embedded sharing practices thus optimized access to the resources of the *ilagiit* for both individuals and households, who shared the responsibility of community well-being (Wenzel, 1995). Social capital within and beyond the *ilagiit* was built through sharing and cooperation, and food was the most necessary and valued resource (Gombay, 2003).

In the contemporary mixed economy, food production is no longer the sole resource activity. Since the late 1940s, the northern economy has increasingly come to include money. As resource value is a social creation, tied to place and cultural context (Gombay, 2003), the meaning and value of money are continually being reinterpreted according to the context and situation (Parry and Bloch, 1989).

In the Western economic model, money is valued as an abstract measure of wealth and a method of storing value (Simmel, 1978). However, within the traditional Inuit cultural context of unpredictable resource availability, money is valued for its immediate use potential, not for its potential as a storehouse of value (Simmel, 1978; see also Gombay, 2003, re money as a resource in Nunavik). It is spent as needed in the immediacy of life. Food continues to function as a social currency and has more cultural value than money (Usher, 1976; Wenzel, 2008). Ultimately, economic decisions remain guided by socio-cultural responsibilities (Wenzel, 1995; Gombay, 2003; Natcher, 2009).

## THE *ILAGIIT*: ASSETS, INCOME AND SOCIO-ECONOMIC DYNAMICS

### *Economic Activity in 2009*

Across the 10 households in the *ilagiit*, 10 of the 38 adults were employed full time, three had regular part-time employment (average 20 hours per week), nine had seasonal or casual work (guiding, construction, babysitting, cooking) and 16 were unemployed (Table 2). As a result, the assets and income of the study households varied significantly (Table 3). Overall, during the 2009 study period, while men from one-half of the households took part in some hunting or fishing activity during the research period, only three men hunted and fished regularly.

### *Direct Transfers of Traditional Food*

We recorded 100 country food sharing events involving a direct transfer in which at least one participant was an *ilagiit* member or household during the 2009 study period. Of these 100 events, 39 were what is termed *tugagaujuq*, transfers from a subordinate person or household to the head of the *ilagiit* or to another older relative (Fig. 2a), and 30 were *tigutuinnaq*, that is, transfers from the *ilagiit* head to a subordinate person or household (Fig. 2b), and thus complementary to *tugagaujuq* transfers. Thus, intra-*ilagiit* transfers comprised 69% of direct transfer events. The other 31% of events involved the transfer of food to a close affine, usually the parents or grandparents of an *ilagiit* member's spouse (29 of 31 actions).

Most of the above *tugagaujuq* events that occurred within the *ilagiit*, with the exception of narwhal *maktaaq*, included the whole animal if a seal or caribou, whereas arctic char or ptarmigan sharing invariably included several fish or birds. The household (HH#1) headed by the wife of the recently deceased oldest male of the *ilagiit* was the recipient in 46% of such transfers (29 of 62 total events). However, during the study period, HH#1 gave country food to other households on five occasions (12.6% of the 62 inter-household transfers).

Even within the extended family, there were occasions when *tugagaujuq* involved specialized directed transfers. One such event was observed when a nine-year-old boy from HH#6 shot his first seal. On that occasion, the boy's paternal and maternal grandmothers and the paternal uncle who owned the boat from which the hunt was conducted all received a portion. An aunt who attended his birth and had assumed midwife duties received the skin and a piece of meat. Once the normative obligations attending a first catch were completed as noted above, this first seal was then distributed to neighbors' households, emphasizing the importance of this event in the lives of the boy and his family.

Country food transfers beyond the extended family and close affines, that is for community members in general, were usually announced on the community's FM radio station or transmitted through the FRS hand-held radio present

TABLE 3. *Ilagiit*/household assets and income, 15 May to 17 August 2009.

Household	Cash income <sup>1</sup> (\$)	Snowmobile	ATV	Boat	Cabin	Truck	House <sup>2</sup>
1	16656.00	3	2	0	1	0	0
2	5500.00	2	2	1	1	0	0
3	13010.00	2	3	1	0	access <sup>3</sup>	1
4	8400.00	2	2	1	1	1	1
5	6466.00	1	1	1	0	access <sup>4</sup>	0
6	13320.00	2	1	0	0	0	0
7	5556.00	3	1	1	1	0	0
8	1792.00	1	0	0	0	0	0
9	9070.00	1	0	0	0	0	0
10	3280.00	0	0	0	0	0	0
<b>Total</b>	<b>83050.00</b>	<b>17</b>	<b>12</b>	<b>5</b>	<b>3</b>	<b>2</b>	<b>2</b>

<sup>1</sup> Wages and transfer payments (family allowance, pension, social assistance).

<sup>2</sup> “0” indicates public rental housing, “1” private ownership.

<sup>3</sup> Had general use of employer’s truck.

<sup>4</sup> Had truck that was not operational, but had general use of employer’s truck.

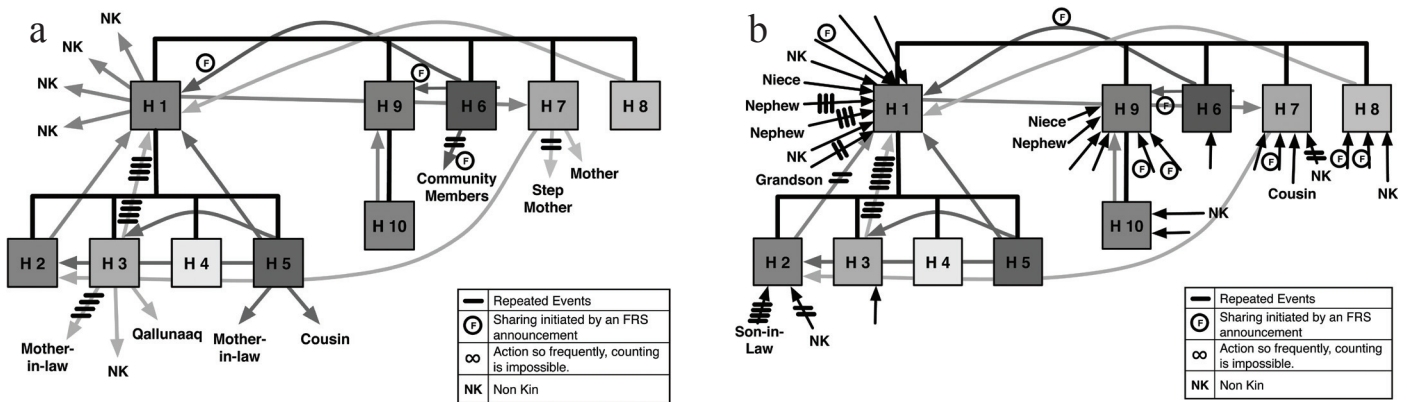


FIG. 2. a) Country food received, 15 May to 17 August 2009; b) Country food given, 15 May to 17 August 2009.

in most homes. Such announcements accounted for 13% of transfers from the study households to non-*ilagiit* recipients. In fact, announcements via FRS or FM radio are the most common means of facilitating generalized traditional food sharing. Sales of country foods that were recorded were either to the owners of dog teams or for community feasts.

*Shared Meals*

Eating food in other households is an important way to access country food on a regular basis, and meals involving participants from outside the hosting household, and even extended family, happen daily and are more common than the removal of country food from a host’s house. The main gathering place for intra-*ilagiit* shared meals is usually the family leader’s home.

In the summer of 2009, there were two such nodes where study family members gathered for commensal meals. These were HH#1, headed by the widow of the brother who succeeded his father, the man who led the family in 1999, and HH#2, headed by the late leader’s oldest brother, who was also the oldest male in the family. In essence, each of

these older persons functioned as the *isumataq* for a segment of the extended family.

Each node drew other *ilagiit* members as meal participants, although considerable differences were recorded with respect to the frequency of meals hosted by each, the pattern of visitation to each household, and, in fact, who in the family visited which house and how often. While close kin accounted for the greatest number of shared-meal participants at both households, each also hosted non-kin. It is also worth noting that neither household head participated in a shared meal at the other head’s dwelling.

The two households showed a number of differences in terms of hosting shared meals. The most obvious was that HH#1 received considerable amounts of country food from the household head’s four adult sons and son-in-law; one son was a full-time hunter, while the other two sons and the son-in-law were sporadically active despite constraints of time (and for the son-in-law, of money). HH#2’s hosting activities were more limited, as only the head and one of his four sons hunted regularly. As a result, HH#1 generally received greater and more regular infusions of country food.

Another difference between the two households was the number of lineal descendants of each household head

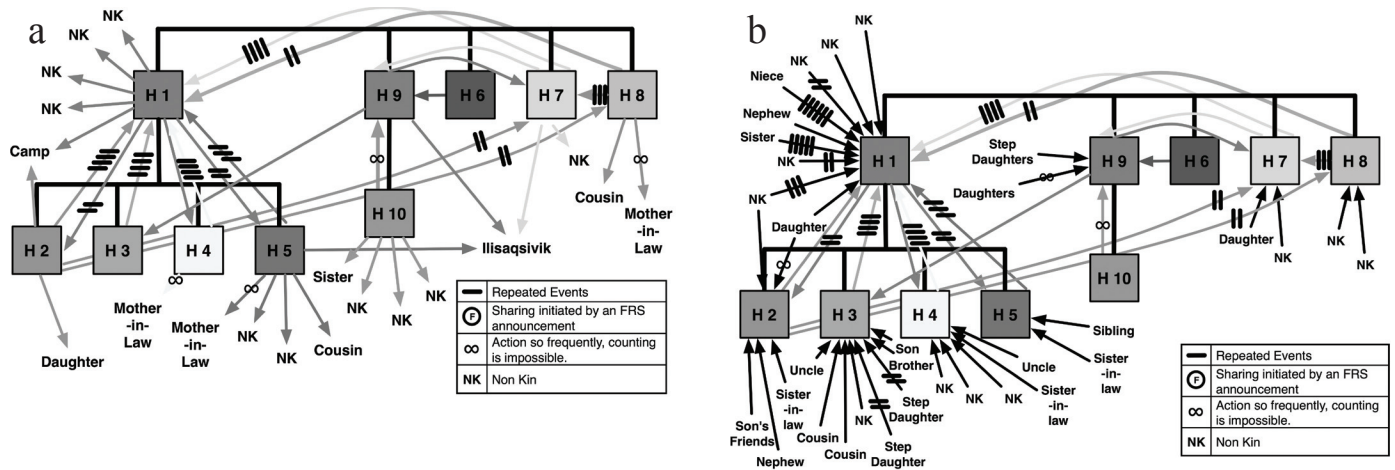


FIG. 3. a) Commensal meals attended, 15 May to 17 August 2009; b) Commensal meals hosted, 15 May to 17 August 2009.

available to participate in shared meals. In this regard, HH#1’s direct close kin included nine children, six of whom had spouses, and 22 grandchildren. In contrast, HH#2 had just six children (none with spouses) and four grandchildren.

While lineal descendants were the attendees of many of the shared meals hosted by both household heads, especially at HH#1 (see Fig. 3a), another difference between the two households was the inclusion of collaterals and non-kin visiting each for meals. Because HH#1 had 13 members, few meals occurred that did not have three or more participants. Therefore, comparing the number of attendees eating in each household is of limited value. A more effective measure is the number of meals that included non-household residents (see Fig. 3b).

Of the 30 shared meals (*ilagiit* total = 84) observed or known to have been hosted by these households (HH#1 = 23, HH#2 = 7), HH#1 had at least one non-household attendee at all 23 (1 person at 7 meals, 2 persons at 5 meals, and 3 or more at 11 meals), while HH#2 rarely hosted more than two non-residents at a meal.

At HH#1, outsiders included the adult children of the household head, their spouses, and their children. Besides these lineal kin, however, other frequent attendees included two of the household head’s brothers-in-law and their spouses, a sister-in-law, and occasionally, non-relative neighbors. One such shared meal that was observed outside the study period included 22 people—nine household residents, seven non-household kin and six non-kindred—who came, ate a fresh caribou, and left during a two-hour period. In total, visitors from 16 different households were observed to attend one shared meal at HH#1.

There were no gatherings of this size at HH#2. The most frequent visitors were a sister-in-law of the head, his sister and brother-in-law, an adult son, and a younger brother with his spouse.

Of the seven shared meals recorded at HH#2, all consisted of either *maktaaq*, arctic char or ringed seal, while 16 of the 23 meals at HH#1 centered on country food and at the other seven meals store food predominated.

Another 54 shared meals were hosted by other *ilagiit* households; however, only HH#3, headed by the eldest of HH#1’s sons, hosted more than nine such meals (17). The next largest number was nine by another son. One household (#9), headed by a young single mother, hosted none. Interestingly, of the meals not hosted by HH#1 or #2, country food formed the main item of consumption at only 16 of 54 meals, and seven of these were at the home of a woman from the study family who had married into another *ilagiit*, which was the source of her country food.

Of the 84 shared meals recorded between mid-June and mid-August, country food was integral to 38 meals, while store food was a feature of 25 meals. At the remaining 21 meals, traditional and store food were both widely consumed. For younger *ilagiit* households, especially for those that did not hunt regularly, eating at one of the two focal households was a very important way of including country food in their diet. Furthermore, many of the women who had married into the study *ilagiit*, besides eating at one or both the focal nodes, would also take meals, often of country food, at their parents’ home, several times a week if not daily.

Eating meals in another home was also important for households with little or irregular cash income. These households ate in other homes more often when money and store food ran out between social assistance cheques. Sharing as a visitor in meals of traditional or store food was common and expected. However, a visitor taking food home from shared meals, except when hosted by a community institution, was cause for comment.

*Money: Giving and Receiving*

Wenzel (2000) has noted that money, when it did circulate between *ilagiit* members, seemed to be less bound by the social relational strictures that facilitated the flow of country food within the group. Money was not given as freely or as broadly as country food, and its movement was usually limited. Most typically, money passed between close family members, and unlike food, it was generally

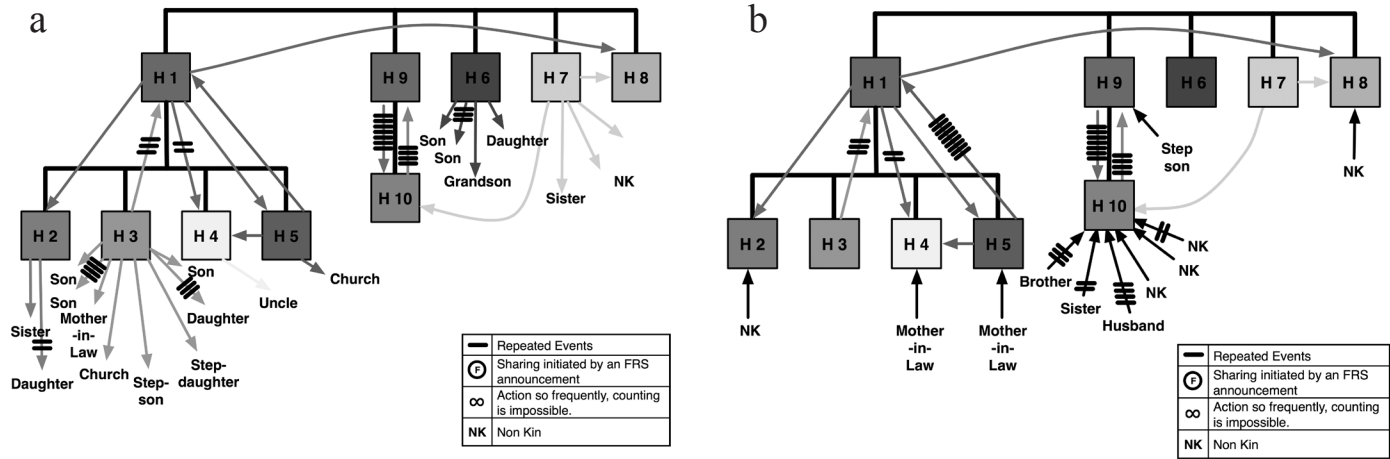


FIG. 4. a) Money given, 15 May to 17 August 2009; b) Money received, 15 May to 17 August 2009.

given only when specifically asked for and for a specific purpose.

The usual direction of movement was from older to younger persons, especially from a parent to a son or daughter (Fig. 4a). However, when money flowed from younger to older persons (Fig. 4b), a formal request was not always needed. For instance, the adult children living in HH#1 occasionally contributed towards household expenses, as did the household head's sons from HH#4 and HH#6, both of whom were full-time wage employed. The head of the other *ilagiit* node, however, occasionally gave small amounts of money to two of his adult sons, who relied on social assistance as their main support.

Other kinds of inter-household transfers of money were rare. Siblings usually only gave each other money in exchange for a service or a needed item. For example, when someone was leaving Clyde River for Iqaluit or Ottawa, a sibling might ask them to bring back a case of soda and would give the traveler money equal to the cost of a case in the community. Invariably, the Clyde River price was above the item's cost in Ottawa and it was expected that the buyer, as "compensation" for her or his effort, would keep the extra money. The only other transfers of money between siblings took place in the form of loans, with repayment always expected at some later time.

The lending of equipment, or its provisioning with ammunition, fuel, or a needed part, was much more common than the actual passage of money between male members of the *ilagiit*. In a sense, because these items have a monetary cost, they have an association with money. However, the fact that money is essential for their acquisition appears to be moderated by their utility for carrying out traditional resource activities. It seems that, unlike loans of money per se, provision of a spare part or a box of ammunition does not demand payment or even return in kind; rather, it seems the expectation is that the recipient of the item will provide assistance at some time in the future if and as it is needed.

On the other hand, the extended borrowing or outright taking of a person's equipment, as will be discussed, had become much less common than at the time of the initial study in 1999. A possible exception could be a father taking a son's snowmobile as his own. While never the norm, "extended borrowing" of gear by older kinsmen from sons, nephews, younger brothers, or sons-in-law was likely even in the early 1990s.

### CLYDE INUIT SUBSISTENCE: COMPARING 2009 AND 1999

Comparison of the data collected in 2009 (Harder, 2010) to those obtained in 1999 (Wenzel and White, 2001) indicates that there has been considerable socio-economic change with regard to the material and social circumstances of the study *ilagiit*. Most basic is that the group has increased in membership, growing from 49 members in 1999 to 69 in 2009. This near 30% increase in extended family size occurred even though several late adolescent males associated with HH#2 and HH#3 were not included in the project. These young men had recently left their natal households and taken residence in the homes of their prospective spouses' parents, which included engaging in close socio-economic relations with their respective parents-in-law. Further, two adult sons from HH#2 did not participate actively in the research.

Another change is in the demographics of the *ilagiit*. In 1999, the group's two senior family members were the *ilagiit isumataq* and his spouse, who were both in their 70s; today, the oldest person is the female head of HH#1, who is in her early 60s. Also, in 1999, 57% of the residents in the study households were under 18 years of age; in 2009 non-adults comprised only 44% of the membership of participating households. However, the demography of the *ilagiit* may move closer to the 1999 profile as the "expatriate" sons noted earlier reintegrate socio-economically into their "natal" *ilagiit* and have children of their own.



TABLE 4. *Ilagiit* income summary during the 1999 and 2009 study periods.

Households/persons	Total cash income	Total country food edible weight	Total country food income	Total income	% income from country food
<b>1 June–15 August 1999:</b> 9/49	\$43685	864 kg	\$10800	\$53899	20
<b>15 May–17 August 2009:</b> 10/69	\$84359 <sup>1</sup>	1332 kg	\$15363	\$99722	15
<b>15 May–17 August 2009 (less DEW Line income):</b> 10/69	\$66079	1332 kg	\$15363	\$81442	19

<sup>1</sup> 2009 dollar values have been adjusted for inflation to 1999 dollar values in this table.

Perhaps the most apparent difference is that substantially more money is present in the *ilagiit* in 2009 than was the case in 1999 (Table 4). During the summer 1999 study period, the average amount of money available per *ilagiit* household was \$4853; in 2009, the average was \$8435. However, as Harder (2010) makes clear, in 2009 there was an inordinate amount of seasonal employment available to Clyde River Inuit, principally work removing contaminants from the former United States Coast Guard installation at Cape Christian and at several Distant Early Warning radar sites, and several of the group availed themselves of the opportunity. When that seasonal income is removed from the 2009 study period total, the amount of money entering the *ilagiit* fell to \$6608 per household, or \$826 per household per week.

It might also seem that in 2009 the men of the group were more involved in traditional resource harvesting. Certainly a greater amount of edible biomass (1337 kg, 19.3 kg per person) was harvested in 2009 than in 1999 (864 kg, 19.3 kg per person). However, this difference is at least partially accounted for by the difference in natural conditions between the two times. In 1999, numerous wide leads in the landfast ice platform, coupled with lake-like conditions on the sea-ice surface, limited hunting mainly to ringed seals, while persistent ice and late break-up delayed narwhal hunting. These conditions also inhibited journeys overland for caribou or to fishing rivers as they made both over-ice snowmobile and boat travel laborious at best and sometimes dangerous. In 2009, as the summary income tables (see Tables 5 and 6) show, a more varied spectrum of species was captured, including narwhal and caribou, mainly because earlier open water made boat hunting of narwhal and travel to caribou areas possible. Consequently, the amount of edible biomass entering the *ilagiit* was more substantial (2009 = 134 kg per HH, 1999 = 96 kg per HH).

Despite this difference in total production and the amount of country food available per household, comparison of the harvesting data from the two periods reveals the economic importance of traditional food activities: in terms of the overall economic well-being of the group, traditional foods, when shadow priced, contributed almost exactly the same proportion of income to the *ilagiit* in 2009 (19%) as in 1999 (20%).

A notable difference between the periods relates to who (that is, which households) contributed to the traditional

food sector. Comparison of the harvesting activity in 1999 to that of 2009 shows that in 1999, six of the nine participating households were actively engaged in hunting and contributed traditional food, while in 2009 only four households hunted successfully, and one of these four captured only a single ringed seal. While two of the six households hunting in 1999 were also minimal contributors, the fact remains that more households contributed to the traditional food sector of the group in 1999 (two-thirds of the study households) than in 2009, when just three households produced all but about 20 kg of the traditional food available to the group. (The totals from both 1999 and 2009 do not include traditional food items entering the group through the largesse of non-members; in both periods, these items were limited to less than a dozen arctic char.)

The last major point of comparison between 1999 and 2009, but perhaps the most significant, is the apparent change in the group's socio-economic relations. In 1999, the household of the extended family head (HH#1) was the node for virtually every traditional resource transfer and for the redistribution of money (albeit limited to a few transfers) within the *ilagiit*. Indeed, the group's socio-economics in 1999 exactly fit the form described by Damas (1972) for Iglulingmiut.

The research from 2009 clearly identifies the existence of two economic nodes, one centered on HH#1, the widow of the man who headed the *ilagiit* after the 1999 extended family leader passed away, and the other on the oldest surviving son (HH#2) of the 1999 head. In terms of what was observed during the 1999 study, what Damas described, and what was earlier observed by Wenzel (1991, 1995) at Clyde River, this is a marked change and contrasts to what might be structurally expected. The head of HH#2, as the oldest male in the *ilagiit*, would be expected to fulfill the economic responsibilities of *isumataq* and become the focal point for resource allocation within the group.

The data recorded during 2009, however, show that for a large proportion of the group, the head of HH#2 is less significant in economic terms than the head of HH#1. It is the latter head that both received the greatest amount of traditional food from subordinates and, in turn, hosted the greatest number of commensal meals. In contrast, the head of HH#2 (the minor node household) received very little material support from his adult sons and was, in fact, their main supplier of country food. It is also the case that he hosted

TABLE 5. Cash and country food income, 1999 (Wenzel and White, 2001).

Household <sup>1</sup>	Adults/ children	Cash income (\$)	County food <sup>2</sup> (seals)	Country food <sup>3</sup> (kg)	Country food income <sup>4</sup> (imputed \$)	Total household income <sup>5</sup> (\$)
1	4/2	4976.00	5	135	1687.50	6663.50
2	3/3	3984.00	2	54	675.00	4659.00
3	1/3	2607.00	1	27	337.50	2944.50
4	2/3	7146.00	4	108	1350.00	8496.00
5	3/3	2470.00	19	513	6412.50	8882.50
6	2/1	6446.00	0	0	0	6446.00
7	2/4	8617.00	0	0	0	8617.00
8	2/5	3868.00	1	27	337.50	4205.50
9	2/4	2985.00	0	0	0	2985.00
<b>Total</b>	<b>21/28</b>	<b>43099.00</b>	<b>32</b>	<b>864</b>	<b>10800.00</b>	<b>53899.00</b>

<sup>1</sup> Numbers identifying households in the 1999 study do not correlate with numbers used in 2009.

<sup>2</sup> All seals captured were ringed seals (*Phoca hispida*); other country food, captured but not factored in the above calculation, included five common eider ducks and 17 arctic char.

<sup>3</sup> Estimated edible weight based on field calculations of 33 adult ringed seals (Wenzel, Clyde River field notes, 1993–94); figures derived as follows: edible weight (27 kg) = average live weight (45 kg) × .60.

<sup>4</sup> Imputed value calculated as \$12.50 (the average price of the four most frequently purchased imported meats in the Clyde River Northern Store) per edible kilogram of country food (method from Usher, 1976).

<sup>5</sup> Sum of columns 3 and 6 (cash income + country food value).

fewer large meals. It was further notable that there was little significant social interaction between HH#2 and the sons of HH#1's head, despite their subordinate position as HH#2's nephews.

Why this apparent deviation from the described ideal structuring of Inuit socio-economic relations has occurred can only be a matter of speculation. One possibility is that the senior group male has only limited resource capabilities, mainly because of lack of support from his sons. Another is that HH#2's nephews, having reached middle age (three of the four are in their mid-30s and early 40s) and having large families of their own, are less responsive than in the past to *naalaqtuq* as ideally understood (Damas, 1963) between uncle and nephew. Or, in other terms, here mother-son *ung-ayuuq* appears to have superseded the authority dynamic inherent in *naalaqtuq*.

#### IMPLICATIONS FOR UNDERSTANDING ARCTIC FOOD SECURITY

Inuit live in an environment that has historically been perceived as susceptible to dramatic fluctuations in food availability. Resource sharing practices were likely developed at least in part to reduce inequalities between co-resident and cooperating individuals and households, or to maximize the well-being of local social groups, or both. Kinship, as noted by Heinrich (1963) and Damas (1963), provided a structure for managing resource flow within *ilagiit*-based groups. As reported here, this structure remains basic to the contemporary traditional food economy.

In a recent publication on Arctic food security, Egeland et al. (2010) reported that 70% of preschoolers in Nunavut were living in households identified as food insecure.

Similarly, Ledrou and Gervais (2005) found that 56% of households in Nunavut were food insecure compared to the Canadian average of 14.7%. These findings are on their face shocking; however, it is important to consider the basis and assumptions that underlie them in light of the dynamics of Inuit social economy (Wenzel et al., 2000).

The conclusions regarding Nunavummiut food insecurity were derived from statistics acquired through Cycle 1.1 of the Canadian Community Health Survey (CCHS). In the CCHS, a household is identified as food insecure if someone in the household had not eaten the quality or variety of food that she or he wanted, worried about not having enough to eat, or did not have enough to eat in the past year for lack of money in the household (Ledrou and Gervais, 2005).

This definition of food insecurity is inadequate in an Arctic context for a number of reasons. The first is that it assumes a Western economic framework and does not take into account a more nuanced understanding of Inuit economy. As documented, the Inuit economy is not limited to the wage economy, but is based on both food and monetary resources and is driven by a social rationale. Given that money is scarce in Arctic communities, the CCHS framework is a problematic way of looking at food security.

Secondly, households are considered as individual units within the Survey. As a result, interdependence between households is not adequately considered. As discussed above, kinship connections are critical for accessing both country food for those households without an active hunter and store food for lower-income households.

Third, and perhaps most significantly, by focusing on the purchase of food (or, more accurately, the inability to purchase it), one loses the traditional resource aspect of this food system. Inuit food security is more than being able to buy and eat desirable store food; instead, it is critically

TABLE 6. Cash and country food income, 2009 (Harder, 2010).

Household	Adults/ Children	Cash Income via local employment (\$)	Country food (kind)	Country food <sup>1,2</sup> (kg)	Country food <sup>3</sup> (imputed \$)	Total HH income (\$)	HH income (\$) (less DEW line employment)
1	8/5	16656.00	0	0	0	19656.00	16656.00
2	4/3	5500.00	80 char, 1 seal, 1 narwhal, 2 geese	328.8	4767.60	14267.60	10267.60
3	3/2	13010.00	0	0	0	17010.00	13010.00
4	2/1	8400.00	247 char, 4 seals, 5 geese, 3 ducks	754.2	10935.90	19335.90	19335.90
5	3/2	6466.00	0	0	0	6466.00	6466.00
6	2/4	13320.00	1 seal	18	261.00	13581.00	13581.00
7	7/6	5556.00	31 char, 4 seals, 30 clams, 1 caribou	230.7	3345.15	18901.15	8901.15
8	2/1	1792.00	0	0	0	3792.00	1792.00
9	5/3	9070.00	0	0	0	9070.00	9070.00
10	2/4	3280.00	0	0	0	3280.00	3280.00
<b>Total</b>	<b>38/31</b>	<b>83050.00</b>	<b>358 char, 10 seals, 7 geese, 3 ducks, 30 clams, 1 narwhal, 1 caribou</b>	<b>1331.7</b>	<b>19975.50</b>	<b>19309.65</b>	<b>102359.65</b>

<sup>1</sup> Edible weight based on an average of field calculations (Wenzel, Clyde River field notes, 1972); ringed seal: 18 kg, caribou: 45 kg, arctic char: 2.7 kg, narwhal: 90 kg of *maktaaq*, Canada goose: 2.4 kg, eider duck: 1.1 kg. The edible weight of goose eggs and clams was not calculated.

<sup>2</sup> In 1999, the edible weight for seals was calculated as 60% of live weight, in 2009 this was decreased to 40% of live weight. This change reflects the decrease in the amount of the animal that is used.

<sup>3</sup> Imputed value calculated as \$14.50 (the average price of the five most frequently purchased imported meats in the Clyde River Northern Store) per edible kilogram of country food.

linked to social access to culturally important country food. In Clyde River, country food is not “commercialized”—that is, sales of seal and other traditional foods among Inuit are virtually non-existent and subject to social stigmatization.

Egeland et al. (2010) acknowledge in a footnote the limitations of only measuring a household’s financial means to buy store food, and they mention that daily contact by a household with extended family, as well as participation in traditional food-sharing networks, helps households cope with shortages or limited access to store food. Considering that the Inuit economy is widely characterized as a mixed subsistence economy and that research has identified Arctic food security as contingent upon access to traditional food (Lambden et al., 2007), these statistics present a significant shortcoming in understanding the current state of food systems in Inuit communities.

Our findings support the call for a more nuanced understanding of food security in Arctic communities, one that takes into account both the underlying social dynamics and the socioeconomic context of the food system. It is clear from our analysis that households do not function independently of each other. Active hunters not only produce more country food than is needed by their households, but also provide for more people than the household.

The Clyde River data also indicate that access to traditional foods strongly correlates with Inuit social structural dynamics. Thus, while the lower-income households (as measured in actual dollars) have become increasingly dependent on *ilagiit*-affiliated higher-income households, this social connectivity ensures that food needs are met.

Further, learning how this is accomplished requires looking beyond what may be found in the larders of subordinate households, as the members of “junior” households regularly eat at the home of an older kinsperson who serves

as the economic node for affiliates. It is equally clear, as shown by comparison of the *ilagiit* harvest data from 1999 and 2009, that food security for lower-income households increasingly depends on these customary sharing mechanisms and relationships. In no small way, traditional food security relates more to the capacities within the *ilagiit* than to individual household income. But, as the case material also shows, dynamics within the extended family (see Nuttall, 2000; Wenzel, 2000) can affect access to traditional resources and, ultimately, food security.

## CONCLUSIONS

The research presented in this paper on traditional resource relations is limited to a comparative snapshot of economic flows within one *ilagiit* in one Nunavut community in the Qikiqtaaluk Region at two periods in time. Thus it cannot assess resource sharing in all the regions occupied by Inuit (see, especially, Collings, 2011, re resource relations in Ulukhaktok, Northwest Territories), nor is such a broad examination its intent.

The results do not speak to all the circumstances Inuit encounter with respect to food security. However, the findings contribute to a further understanding of the underlying social dynamics that structure and can fundamentally affect individual and household food security in Eastern Arctic communities. In broad terms, these data suggest that a culturally appropriate assessment of Arctic food security must include the societal context in which economic activities occur—that is, how the movement of resources (whether seal meat or dollars) is socially structured and organized—and whether the economic features that facilitate the flow of the traditional “currency” (for instance, seal

meat) adequately structure other currencies that may be present. In this regard, at Clyde, the economic system functions well for transfers of traditional resources and less well for transfers of money, although this situation improves to a degree as money transforms into items that have meaning for the acquisition of seals, caribou, and other culturally valued traditional foods.

Food security among Inuit is critically tied to the production of country food. The fact that country foods continue to comprise a substantial part (approximately 20%) of overall *ilagiit* income argues that traditional resources be included in determinations of food security or its lack. It is also clear that money is important, not least because the production of traditional foods very much depends on the means to purchase and operate the equipment that harvesting from a centralized village requires (Wenzel, 1991). The fact is that focusing only on the traditional resource component or only on the cost of imported foods, which together form the contemporary food system, can obscure how resources move between producers and consumers.

The emphasis throughout this paper has been on how social relations, especially those based in primary kinship, facilitate the access of individuals and households within the *ilagiit* social unit to food and other needed resources. Foci that address only the production or only the consumption components of the food system, but omit how resources are transferred, necessarily limit the assessment of Inuit food security.

The data suggest that evaluation of Arctic food security should include an assessment of the social relational, notably kinship, assets available to individuals and households. Especially with regard to traditional resources, a wealth of social relations can mitigate food insecurity for individuals and households (see Smith et al., 2010). At the same time, these data make it clear that disparities in material resources between households within an *ilagiit* place a greater burden for traditional resource provisioning on those individuals and households that are “better off” in formal economic terms.

Comprehensive understanding of the food system necessitates understanding both the number of people actively engaged in harvesting and the socioeconomic connectivity between these producers and potential consumers before the extent of the buffer against insecurity in the traditional resource sector can be assessed. At the same time, it must be recognized that the *naalaqtuq* and *ungayuyq* precepts that structure interpersonal behavior can situationally conflict, resulting in socioeconomic tension.

Finally, concepts of food security developed in and for a non-Aboriginal context need “recalibration” if analyses are to take into account the full suite of what comprises Inuit subsistence—that is, the harvesting and sharing, as well as consumption, of traditional foods (Power, 2008). Inuit household food security is a nuanced concept that rests on material and social capacity. Food security in Clyde River, and by extension in other Nunavut communities, is

contextualized by the structural concomitants particular to a community and even to an extended family.

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## REFERENCES

- Abele, F. 2009. The state and the northern social economy: Research prospects. *The Northern Review* 30:37–56.
- Andersen, T., and Poppel, B. 2002. Living conditions in the Arctic. *Social Indicators Research* 58(1-3):191–216.
- Bodenhorn, B. 2000. It’s good to know who your relatives are but we were taught to share with everybody: Shares and sharing among Inupiaq households. In: Wenzel, G.W., Hovelsrud-Broda, G., and Kishigami, N., eds. *The social economy of sharing: Resource allocation and modern hunter-gatherers*. *Senri Ethnological Studies* 53. Osaka: National Museum of Ethnology. 27–60.
- Chabot, M. 2003. Economic changes, household strategies, and social relations of contemporary Nunavik Inuit. *Polar Record* 39(208):19–34.
- . 2004. Consumption and standards of living of the Quebec Inuit: Cultural permanence and discontinuities. *Canadian Review of Sociology and Anthropology* 41(2):147–170.
- Chan, H.M., Fediuk, K., Hamilton, S., Rostas L., Caughey, A., Kuhnlein, H., Egeland, G., and Loring, E. 2006. Food security in Nunavut, Canada: Barriers and recommendations. *International Journal of Circumpolar Health* 65(5):416–431.
- Collings, P. 2011. Economic strategies, community, and food networks in Ulukhaktok, Northwest Territories, Canada. *Arctic* 64(2):207–219.
- Collings, P., Wenzel, G.W., and Condon, R. 1998. Modern food sharing networks and community integration in the Central Canadian Arctic. *Arctic* 51(4):301–314.
- Damas, D. 1963. Iglulingmiut kinship and local groupings: A structural approach. Bulletin 196. Ottawa: National Museum of Canada.
- . 1972. Central Eskimo systems of food sharing. *Ethnology* 11(3):220–240.
- Dowsley, M. 2010. The value of a polar bear: Evaluating the role of a multiple-use resource in the Nunavut mixed economy. *Arctic Anthropology* 47(1):39–56.

- Duhaime, G., and Bernard, N., eds. 2008. Arctic food security. Edmonton: CCI Press and Quebec: CIÉRA.
- Duhaime, G., Chabot, M., and Gaudreault, M. 2002. Food consumption patterns and socioeconomic factors among the Inuit of Nunavik. *Ecology of Food and Nutrition* 41:91–118.
- Duhaime, G., Dewailly, E., Halley, P., Furgal, C., Bernard, N., Godmaire, A., Blanchet, C., et al. 2008. Sustainable food security in the Canadian Arctic. An integrated synthesis and action plan. In: Duhaime, G., and Bernard, N., eds. Arctic food security. Edmonton: CCI Press and Quebec: CIÉRA. 73–104.
- Egeland, G.M., Pacey, A., Cao, Z., and Sobol, I. 2010. Food insecurity among Inuit preschoolers: Nunavut Inuit Child Health Survey, 2007–2008. *Canadian Medical Association Journal* 182(3):243–248.
- Ford, J.D. 2009. Vulnerability of Inuit food systems to food insecurity as a consequence of climate change: A case study from Igloolik, Nunavut. *Regional Environmental Change* 9(2):83–100.
- Ford, J.D., Smit, B., Wandel, J., Allurut, M., Shappa, K., Ittusarjuat, H., and Qrunnut, K. 2008. Climate change in the Arctic: Current and future vulnerability in two Inuit communities in Canada. *The Geographic Journal* 174(1):45–62.
- Giffen, N.M. 1930. The roles of men and women in Eskimo culture. Chicago: University of Chicago Press.
- Gombay, N. 2003. Making a living: Place and the commoditization of country foods in a Nunavik community. PhD dissertation, Department of Geography, Queen's University, Kingston, Ontario.
- . 2005. Shifting identities in a shifting world: Food, place, community and the politics of scale in an Inuit settlement. *Environment and Planning D: Society and Space* 23(3):415–433.
- Harder, M. 2010. Traditional and monetary resource sharing in an Inuit “Ilagiiit”: Socioeconomic relations in Clyde River, Nunavut. MA thesis, McGill University, Montreal, Quebec.
- Heinrich, A.C. 1963. Eskimo-type kinship and Eskimo kinship: An evaluation and a provisional model for presenting data pertaining to Inupiaq kinship systems. PhD dissertation, University of Washington, Seattle, Washington.
- Hovelsrud-Broda, G. 2000. “Sharing,” transfers, transactions and the concept of generalized reciprocity. In: Wenzel, G.W., Hovelsrud-Broda, G., and Kishigami, N., eds. The social economy of sharing: Resource allocation and modern hunter-gatherers. *Senri Ethnological Studies* 53. Osaka: National Museum of Ethnology. 193–214.
- Kishigami, N. 2000. Contemporary Inuit food sharing and the hunter support program of Nunivik, Canada. In: Wenzel, G.W., Hovelsrud-Broda, G., and Kishigami, N., eds. The social economy of sharing: Resource allocation and modern hunter-gatherers. *Senri Ethnological Studies* 53. Osaka: National Museum of Ethnology. 171–192.
- Lambden, J., Receveur, O., and Kuhnlein, H.V. 2007. Traditional food attributes must be included in studies of food security in the Canadian Arctic. *International Journal of Circumpolar Health* 66(4):308–319.
- Langdon, S. 1991. The integration of cash and subsistence in Southwest Alaskan Yup'ik Eskimo communities. In: Peterson, N., and Matsuyama T., eds. Cash, commoditisation and changing foragers. *Senri Ethnological Studies* 30. Osaka: National Museum of Ethnology. 269–291.
- Ledrou, I., and Gervais, J. 2005. Food insecurity. *Health Reports* 16(3):47–51. Statistics Canada, Catalogue 82-003.
- Lévesque, C., de Juriew, D., Lussier, G., and Trudeau, N. 2002. Between abundance and scarcity: Food and the institution of sharing among the Inuit of the circumpolar region during the recent historical period. In: Duhaime, G., ed. Sustainable food security in the Arctic: State of knowledge. Edmonton: Canadian Circumpolar Press. 103–115.
- Myers, H. 2008. Food production and sharing in Nunavut; not only discourse, but reality. In: Duhaime, G., and Bernard, N., eds. Arctic food security. Edmonton: CCI Press and Quebec: CIÉRA. 121–138.
- Natcher, D.C. 2009. Subsistence and the social economy of Canada's Aboriginal North. *The Northern Review* 30:83–98.
- Nuttall, M. 2000. Choosing kin: Sharing and subsistence in a Greenlandic hunting community. In: Schweitzer, P.P., ed. Dividends of kinship: Meanings and uses of social relatedness. London: Routledge. 33–60.
- Parry, J.P., and Bloch, M. 1989. Introduction: Money and the morality of exchange. In: Parry, J., and Bloch, M., eds. Money and the morality of exchange. Cambridge: University of Cambridge Press. 1–32.
- Power, E.M. 2008. Conceptualizing food security for Aboriginal people in Canada. *Canadian Journal of Public Health* 99(2):95–97.
- Riches, D. 1975. Cash, credit and gambling in a modern Eskimo economy: Speculations on origins of spheres of economic exchange. *Man* 10(1):21–33.
- Simmel, G. 1978. The philosophy of money. London: Routledge and Kegan Paul Ltd. First published in 1900.
- Smith, E.A., Borgerhoff Mulder, M., Bowles, S., Gurven, M., Hertz, T., and Shank, M.K. 2010. Production systems, inheritance, and inequality in pre-modern societies. *Current Anthropology* 51(1):85–94.
- Tait, H. 2001. Inuit in Canada: Findings from the Aboriginal People's Survey – Survey of living conditions in the Arctic. Harvesting and country food: Fact sheet. Catalogue 89-627-XIE - No. 1. Ottawa: Statistics Canada.
- Usher, P.J. 1976. Evaluating country food in the northern Native economy. *Arctic* 29(2):105–120.
- Usher, P.J., Duhaime, G., and Searles, E. 2003. The household as an economic unit in Arctic Aboriginal communities, and its measurement by means of a comprehensive survey. *Social Indicators Research* 61(2):175–202.
- Van de Velde, F. 1956. Rules for sharing the seals among the Arviliguarmiut Eskimo. *Eskimo* 41:3–6.
- Wenzel, G.W. 1981. Clyde Inuit adaptation and ecology: The organization of subsistence. *Canadian Ethnology Service Paper* 77. Ottawa: National Museum of Man.
- . 1991. Animal rights, human rights: Ecology, economy and ideology in the Canadian Arctic. Toronto: University of Toronto Press.

- . 1995. *Ningiqtuq*: Resource sharing and generalized reciprocity in Clyde River, Nunavut. *Arctic Anthropology* 32(2):43–60.
- . 2000. Sharing, money and modern Inuit subsistence: Obligation and reciprocity at Clyde River, Nunavut. In: Wenzel, G.W., Hovelsrud-Broda, G., and Kishigami, N., eds. *The social economy of sharing: Resource allocation and modern hunter-gatherers*. *Senri Ethnological Studies* 53. Osaka: National Museum of Ethnology. 61–85.
- . 2008. Sometimes hunting can seem like business: Polar bear sport hunting in Nunavut. Edmonton: Canadian Circumpolar Press.
- Wenzel, G.W., and White, L.-A. 2001. Chaos and irrationality(!): Money and Inuit subsistence. Paper presented at the International Congress of Arctic Social Scientists, 16–20 May, Québec City.
- Wenzel, G.W., Hovelsrud-Broda, G., and Kishigami, N. 2000. Introduction. The social economy of sharing: Traditional subsistence and modern resources. In: Wenzel, G.W., Hovelsrud-Broda, G., and Kishigami, N., eds. *The social economy of sharing: Resource allocation and modern hunter-gatherers*. *Senri Ethnological Studies* 53. Osaka: National Museum of Ethnology. 1–6.
- Wenzel, G.W., Dolan, J., and Brown, C. 2010. A (raw) diachronic look at food security in the Qikiqtaaluk region of Nunavut. Paper presented at the 17th Inuit Studies Conference, 28–30 October, Université du Québec en Abitibi-Témiscamingue, Val-d'Or, Quebec.