

Globalization and Development in a Post-Nomadic Hunter-Gatherer Village: The Case of Arctic Village, Alaska

STEVEN C. DINERO

The Northern Review #25/26 (Summer 2005): 135–160.

Introduction

The evolving development of a global economy and society is increasingly affecting the Indigenous communities of the North, as Alaskan and Canadian First Nations, among others, settle in permanent villages, enter the wage labor economy, and take on many of the social and cultural interests and values of their neighbors of European heritage. Among such communities now in rapid transition is the Gwich'in Nation, one of the northernmost Aboriginal populations in North America, which resides in a vast area north of the Arctic Circle straddling the Alaska-Yukon border.

Once a nomadic group of hunters and gatherers, the Gwich'in today have settled in small villages. One of these, Arctic Village, Alaska, is home to the Nets'ait Gwich'in sub-tribe. While similar to many such villages throughout the state, Arctic Village is unique when compared to others of its size (pop. 125), in that, over the past decade, it has sought to introduce community planning in an effort to transform the settlement into a more "developed," western-style town.

In the following study, I will discuss a number of interrelated questions about the role of planning in Arctic Village over the past decade. First, to what degree has planning been adopted by the communal governing structure? Second, how has western-style planning been received by the community as a whole? And last, what role does planning have in the present development of the community, and what role might it play in the future?

To address these issues, one must recognize that throughout their history, the Gwich'in were largely independent of others. Thus, an additional question that the paper will raise is the issue of dependency, and the fact that the community now relies increasingly upon external providers for its various basic needs. The potential for resentment that this development entails, combined with the difficult nature of village service provision in rural communities, only further complicates effective service provision.

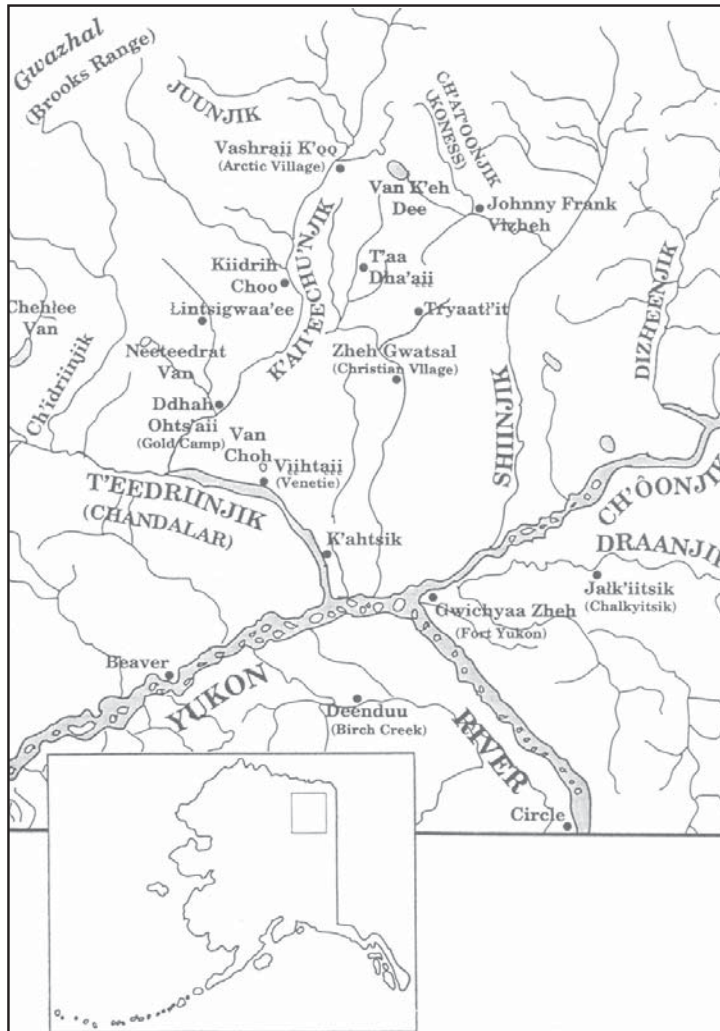
As will be seen below, the process of incorporating planning into an existing Indigenous governing system has produced mixed results. That said, the Arctic Village experience provides an important case study in how one Indigenous northern community has sought to face the challenges en-

countered by post-nomadic hunters and gatherers in an era of globalization.

Alaskan Gwich'in Historical Background, 1850-1990

In order to fully understand the present-day Gwich'in, it is first necessary to give some background concerning this community and how it shifted from a semi-nomadic lifestyle to a more settled communal environment. As will be seen below, the history of this development is significant in helping to explain the level of receptivity to planning in the village today.

The area in which the Alaskan Gwich'in live is comprised of nearly 37,000 square miles of land (Andrews, 1977:103), located in the interior region of northeast Alaska known as the Northern Plateaus Province (Wahrhaftig, 1965: 22; see Map 1). The area experiences extremes in temperatures: 90°F. is possible in summer, while it can reach as low as -50°F. in winter. Winter lasts from mid-September, when the first snows fall, until breakup in mid-June. The region varies from marshy lowland valleys, flats



Map 1. The Venetie Reservation and environs, with English and Gwich'in place names. The Reservation is bordered by Arctic Village to the north, Venetie to the south, and Christian Village to the east. Source: Mishler, 1995:xxix.

foothills of the Brooks Range. These hills generally reach summits no higher than 1,500-2,500 feet. The land is covered with boreal forest (Slobodin, 1981: 514) and is

comprised of permafrost. Flora is limited to lichens, conifers, and the like; fauna includes bear, moose, caribou, and small fur-bearers (Wahrhaftig, 1965: 23).

Historically, the Nets'ait Gwich'in (also referred to in the literature as "Chandalar Kutchin"; see Slobodin, 1981) were semi-nomadic hunters, gatherers and fishers, structured in small groups and bands known as "Restricted Wanderers" (Hosley, 1966: 52). "This community pattern is adapted to scattered or seasonably available food resources" (VanStone, 1974: 38). While larger mammals served as the primary food source, smaller mammals (beaver, hare) were used for clothing and trade (Slobodin, 1981: 515).

Background to Gwich'in Settlement

It is uncertain when exactly the Gwich'in of northeast Alaska were first contacted by Europeans. While some argue that first contact occurred in 1847, with the establishment of Hudson's Bay Company at Fort Yukon (Hadleigh-West, 1963: 21; Nelson, 1973: 13; Slobodin, 1981: 529), others indicate a later period, the 1860s (Caulfield, 1983: 88), when the Roman Catholic Church and the Church of England began sending missionaries to the region.

The Europeans actively introduced social change to the Gwich'in via Church missions and fostered economic change via the fur trade (Hosley, 1966: 165). Schools functioned as the intermediary mechanism between the two as formal education was used to further socialize Gwich'in children with western cultural values (Hosley, 1966: 231) and to follow Christian social mores (VanStone, 1974: 87). The creation of schools and the requirement that all children attend them played a direct role in the settlement process of the community. Similarly, Gwich'in involvement in the fur trade played a role in the decline of their nomadic lifestyle (Hosley, 1966: 153).

Thus, the Nets'ait Gwich'in founded their first permanent residence in 1908 (Caulfield, 1983; Hadleigh-West, 1963) or 1909 ("Village Focus", 1991; Lonner & Beard, 1982). The settlement was named Vashraii K'oo (meaning "Creek with Steep Bank"; "Village Focus", 1991) after a creek that flows into the East Fork of the Chandalar River (Mishler, 1995: 434). The English name for the town became Arctic Village, although the origins of this name are unknown (Hadleigh-West, 1963: 17).

The village population remained in flux during its first forty years (Figure 1) as people continued to live a semi-nomadic existence. Following the establishment of the Venetie Reservation in 1943 (such reservations were developed to promote social and economic development in the Native sector via "a fixed, limited, and protected land base"; see Hosley, 1966: 206), external political and economic pressures encouraged further settlement.

Thus, between 1950 and 1960, the permanent village population more than doubled. With settlement, temporary tent-like shelters were replaced

by log cabins (Hadleigh-West, 1963: 311), each heated by a wood stove. And yet, as “traditional” nomadism declined, the community still maintained a certain degree of residential mobility.¹

Alaskan Gwich'in Politicization

Politicization of Alaskan Gwich'in interests also increased in the 1950s as the community struggled with the U.S. Federal Government to protect and maintain its traditional lands. The Gwich'in sought to increase the amount of land beyond that initially allotted to the Reservation in 1943. In 1950 and again in 1957, the village petitioned the U.S. Department of the Interior to enlarge the Venetie reserve to the west and north (Lonner & Beard, 1982: 101), but to no avail.

Rather than surrendering land, the U.S. government adopted a different approach to dealing with Indigenous Americans in the early 1960s. The Johnson Administration implemented its Great Society-War on Poverty initiative, which extended into Native Alaska. On the one hand, the Gwich'in of Arctic Village presumably benefitted from this plan, insofar as new housing and buildings were constructed in the village to help improve the communal standard of living (at least, from a western perspective). At the same time, however, the programs appear to have increased dependence on the government, and especially on the cash, wage labor economy (Lonner & Beard, 1982: 131-32).

Soon thereafter, the Alaska Native Claims Settlement Act (ANCSA) was signed (1971). A major outcome of the Act was the creation of thirteen Native regional corporations and 203 village corporations (Arnold, 1976: 146). The role of the regional corporations was to serve as for-profit companies as holders of traditional Native lands and the resources therein and to invest their by-products in order to “promote the economic and social well-being of [their] shareholders and to assist in promoting and preserving the cultural heritage and land base” (www.doyon.com). The village corporations were governed separately from the regional corporations. Moreover, “village corporations [did] not replace village councils or the governing bodies of municipal governments” (Arnold, 1976: 160).

Of the thirty-seven villages included in the Doyon Native Regional

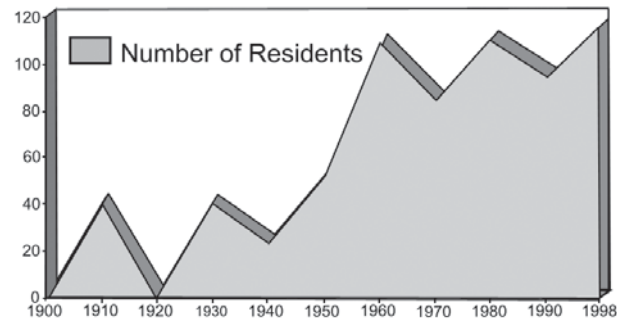


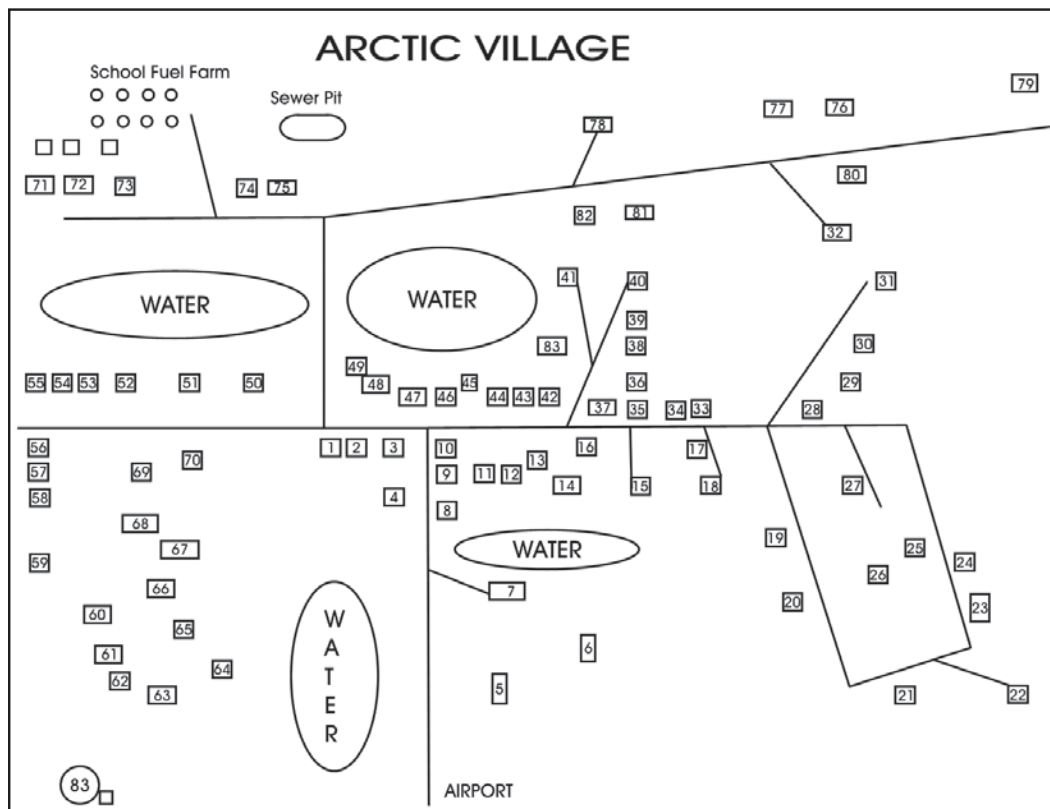
Figure 1. Growth of Arctic Village Population During the Twentieth Century. Source: www.conregaf.state.ak.us/CF_CUSTM.htm

Corporation established in Alaska's interior region, three villages—Arctic Village, Venetie and Tetlin—voted to take title of their own reserves rather than to participate in the land claims settlement. In so doing, the Alaskan Gwich'in opted to take control of the 1.8 million-acre Venetie Reservation from the Federal government. In the words of Alaskan Gwich'in community leaders (DIY, 1991):

Our system of self-regulation and self-determination is based largely upon self-respect and self-esteem, which allows us to then work for the common good of our village.... Our leaders believed ANCSA was a trick to "ripoff" the land from native people. We feel we were right in our decision to stay with the way we know best, our Indian way. (38)

Thus the Venetie Tribal Council (which includes the Gwich'in villages of Venetie and Arctic Village) is independent of the Doyon Regional Corporation, and Doyon has no obligation to it (Arnold, 1976: 200).

By 1980, the Alaskan Gwich'in in general, and Arctic Village in particular, had undergone a complete transformation when compared to their



Map 2. Arctic Village in 1999. Source: Arctic Village Council. Key: 1. Clinic; 2. Native Store; 3-6. Residences; 7. Community Hall; 8. Residence; 9. Village Council Office; 10. Passive Solar Freezer; 11-13. Residences; 14. Post Office; 15-44. Residences; 45. Bishop Rowe Chapel; 46-52. Residences; 53. Old Chapel; 54. Cache; 55-70. Residences; 71-73. Schools; 74. Water Plant; 75. Washateria; 76-83. Residences.

condition only twenty years earlier. Caulfield (1983) notes how the changes affected land use patterns in the village, including “the availability of limited wage employment opportunities and government transfer payments, changes in resource distribution, the use of new technology such as high-powered rifles, outboard motors, and snow machines, changing demographic patterns, and resource competition” (101). A preponderance of all-terrain vehicles (ATVs) emerged in the 1980s as well, lending to greater geographic dispersion of the village residences away from the old village center (see Map 2).

Concurrently the Gwich’in leadership increased its efforts to exercise greater power, particularly in relation to the federal and state governments. In large part, this was due to an increasing perception among residents that outside interference and control (seen most clearly, perhaps, in the proposal developed during this period to conduct exploratory oil and gas drilling in the Arctic National Wildlife Refuge, the traditional calving ground of the Porcupine Caribou Herd) were directly endangering their subsistence lifestyle and culture. Indeed, the Gwich’in began to see themselves as a “state-within-a-state” in the early 1980s (Lonner & Beard, 1982: 107), as they sought control over outsider access to the community, its lands, and its resources.

The Gwich’in leadership sought greater centralized control of village resident behaviors as well during this period. The Arctic Village Council, elected annually and comprised of a First and Second Chief, six members, and an alternate (“Village Focus”, 1991) took on the increasing role of providing moral, as well as legal, guidance. Such an authoritarian leadership model was not unlike the Gwich’in’s traditional model, in which large groupings of bands (of ten to fifty unrelated families temporarily organized for major functions such as hunting, warfare or trading), were led by administrator-style leaders, who “directed rather than participated in all major tasks” (Slobodin, 1981: 522).

In essence then, two trends were apparent during the 1980s. First, western elements of “modernity” arrived in Arctic Village, in the form of new technologies, values, and lifestyles. Second, political activity heightened in the village and broader community, as the Alaskan Gwich’in struggled to fend off outside political control of their lives, while exercising social control within the community itself.

Thus, it can be said that while the Alaskan Gwich’in community underwent great change since contact and especially since World War II, it is also clear that the Gwich’in of Arctic Village remained just that—strong and proud members of the Gwich’in people. This sense of Gwich’in identity and purpose stems both from the internal strength of the people and their rich history and culture, as well as from their ability to socially and

politically mold newly imposed western-style values and systems to further their own purposes. Perhaps this is best revealed by the voluntary adoption of a western innovation—community planning—as a vehicle through which to perpetuate traditional Gwich'in values and ideals.

Fostering Community Development Through Micro-Level Planning: A Summary of the "Do It Yourself!" Document

The Arctic Village Council, led by then-First Chief and Episcopalian village priest, Trimble Gilbert, published Nakai' t'iu'in, ("Do It Yourself!"): A Plan for Preserving the Cultural Identity of the Neets'aiti Gwich'in Indians of Arctic Village in 1991. A well-respected village elder, Trimble is also the "patriarch" of the Gilbert family.

The typewritten, spiral-bound report was co-written with members of the Village Council over several months. It is divided into two major parts. The first section, 67 pages in length, presents a plan for the future development and growth of Arctic Village, and includes Council Resolution topics, some already passed, some only suggested, for future community development.

The second part, nearly a hundred additional pages in length, is comprised of various letters, interviews, tribal memoranda, and photo essays, which serve to trace and document the history of the community, its values, attitudes, and concerns, since European contact and settlement occurred during the previous century.

The targeted audience of the document was the villagers themselves, for without their inclusion and participation, the Council believed, any planning in the village in the coming years was destined to fail. The document's purpose was two-fold: first, it laid out those elements that the Council leadership saw as central in defining Gwich'in identity, and what the Gwich'in stood for and believed in. Second, the document attempted to codify areas of need in order to establish a future social planning agenda for the village.

Thus, the document opens with the declaration that "your own self-esteem comes from your past, our past" (3). Emphasis was placed upon self-sufficiency and independence, but at the communal, and not individual, level.

The document noted that in the past, cooperation and respect were paramount. But by 1991, internal conflict and schism were damaging the community. Further, it noted that the villagers did not (and would not) recognize any outside authority besides their own, as "we are a sovereign nation recognizing only tribal laws" (36).

"Do It Yourself" (DIY) sought to emphasize the importance of unity. Its writers admitted to current conflict and urged renewed efforts toward cooperation as the only means to ward off external economic and political powers. It further defined this ideology through "Cultural Policy and Com-

munity Value Statements" (33-35), summarized and paraphrased below:

The Gwich'in community of Arctic Village must:

Speak our own minds, and be honest;

Oppose any efforts by outsiders that threaten our land, animals, or way of life;

Teach our children the values of our people;

Preserve our culture through the teaching of our native language;

Respect and cherish our elders;

Support western-style education of the children, but with a culturally sensitive curriculum.

In addition, "Do It Yourself" made reference to a number of other concerns, most especially, about the village's economy and educational system, its governance, and its infrastructure. In addressing economy and education, the document noted that a stable cash economy was needed in the village, which was lacking in large part due to inadequate wage labor positions (see an extensive discussion in Dinero, 2002). Vocational education was called for as one way of solving the employment issue, but such curricula, it was contended, would likely not be implemented without more centralized local school control. Ultimately, the plan called for economic growth but for it to be undertaken slowly and cautiously (14-20).

As for infrastructure changes, the document recommended the building of a new wash building (Washeteria) and playground, airport improvements, restoration of the old village church, road improvements, and the creation of a day care center and a youth recreation center (28). These were seen as important improvements that could, in part, help to further promote the village as a tourist destination (31; also see Dinero, 2002), a possible source of outside income.

But perhaps most significant of all, the document acknowledged the need for better village governance in order to accomplish such goals. Lack of legal knowledge, business-administrative skills, political savvy, and public relations expertise are all cited as problem areas. In addition, "Do it Yourself" called for the restructuring of the Council to delegate more authority and stated that personal conflicts between villagers further inhibited Council decision-making (20-21). Thus, the problems highlighted in the document reflect problems found in many small, rural communities in the U.S. and Canada today, regardless of their ethnic makeup. In the case of Arctic Village, these concerns were only further exacerbated by the difficulties inherent in the transition from a semi-nomadic, relatively independent livelihood to a settled lifestyle situated within a global economy and society.

What is apparent overall is that "Do It Yourself" was not intended to be merely a blueprint for planning the future development of the village per se, but rather, for the Nets'aii Gwich'in as a people and as a nation. This is no small point. For, while in the nomadic past the social community was

in some ways separable from the temporary physical-geographic place in which the community resided, by the 1990s such a distinction was far less clear. Chief Gilbert and the Council now realized that social, economic, and communal development were all intertwined and that planning was the vehicle that combined all three.

The ideals set out in "Do It Yourself" reveal the concerns and priorities of the community leadership. Still, no implementation mechanism can be found in the document to actualize most of the priorities that are discussed. It is perhaps for this reason, among others, that many of the desires expressed in the document at the beginning of the 1990s had not yet come to even limited fruition by the end of that decade.

The Arctic Village Study: Description and Methodology

In the summer of 1999,² I set out to examine the recent social and communal development of the Nets'aii Gwich'in settlement of Arctic Village in light of the challenges highlighted in the "Do It Yourself" document. Although I sought to measure community views of and satisfaction with planning by using standard planning tools, I combined these with participant observation recognizing that planning methods often have limited use in Aboriginal village environments (see my lengthy discussion of these methodological challenges in Dinero, 1996).

I acquired permission of the tribe prior to entering the village (following Norton & Mason, 1996: 857) by submitting a preliminary proposal both to the Arctic Village Council, as well as the Tribal Council at Venetie. In this proposal I explained to the community why I wished to conduct research in the village and how this research might potentially benefit them in the future (see Norton & Mason, 1996: 859).

Upon receiving permission to visit the village, I began preliminary work on a household survey research instrument. To be sure, I was not the first to use a structured household survey in the Indigenous North; Kruse, among others, has used such tools since the late 1970s in his work among the Inupiat (Kruse, 1982: 5), as has Stabler in the Northwest Territories. Like Stabler, I also used structured interviews with residents and other "informed" individuals (Stabler, 1990: 64-65) in addition to implementing the planning survey.

Using the survey instrument, I posed a variety of questions concerning wage employment, subsistence, community living conditions, personal characteristics, and living experiences and travels outside of the village. I discussed the instrument with a variety of Gwich'in and non-Gwich'in community members prior to implementation in order to avoid asking unnecessary, sensitive, or otherwise problematic questions that could jeopardize the data gathering process.

Following Caulfield (1983: 8-10), the last to conduct a survey in the Summer 2005

Table 1. Descriptive Statistics Concerning the Survey Respondents

Gender			
Male	63%		
Female	37%		
Age	M	F	Total Sample
19-36	41%	85%	57%
37-64	59%	15%	43%
Marital Status	M	F	
Single	32%	54%	40%
Married	27%	31%	29%
Cohabiting	41%	15%	31%
Education	M	F	Total Pop
Did not Graduate High School	14%	15%	14%
High School Grad	36%	39%	37%
High School Plus (college, vocational school, etc.)	50%	46%	49%

town (in the early 1980s), I defined a "household" as an occupied dwelling unit. I surveyed both men and women; as was the case with Caulfield, men are over-represented. There are a number of social and economic explanations for this fact. As Caulfield notes, men tend to play the role of household head in the Gwich'in community. An additional explanation for the present survey is the fact that it was implemented during the summer months, when women often travel Outside with their children for medical and other reasons while men remain at home in preparation for the fall hunt. I also used "information recall" (following Caulfield, 1983) allowing respondents to remember or estimate such information as their percentage of food consumed annually that is harvested from the local land. I interviewed Gwich'in, non-Gwich'in Native, and non-Native village residents (although there are very few non-Gwich'in villagers), in order to gain as clear and complete a picture as possible of present village social and economic conditions. Like Caulfield and Kruse (1982), I paid each respondent a small gratuity (\$10) for their time spent answering the survey questions.

Of the forty dwelling units occupied during the survey period (August 3-19, 1999), I was able to interview formally members of 35 households (87.5

per cent). Upon completion of the survey, all data were analyzed using SPSS 9.0 for Windows. Given the very small size of the data set N , all significance testing was conducted using chi-square analysis, where $p < \text{or} = .05$.³

General Survey Results and Descriptive Statistics

Some descriptive statistics were first gathered concerning the household survey respondents' backgrounds (Table 2). Upon examining this information, three indicators were identified as playing a definitive role in the development of Arctic Village: marital status, gender, and age.

Marital status was broken down into two categories, "single" and "legally married/cohabiting." Married and cohabiting respondents were combined, in that there was found to be no difference in the village between the two from an economic perspective, and indeed even socially, those who cohabited are virtually indistinguishable from those who have gone through a marriage ceremony.

Based on the data results, education levels were divided into three categories (see Table 1). It is seen that, in terms of gender breakdown, the percentage of male and female high school graduates is virtually equal, but males were more likely to continue their educations beyond the high school level.

Forty-six percent of those surveyed were employed in wage labor (Table 2). Women were found to be more likely to be employed in wage labor positions than were men ($p = .01$), though there was no correlation found between highest educational level reached and the likelihood of being employed in wage labor.

Family income was divided into two categories, "less than \$10,000," and "\$10,000 or more." Fifty-seven percent chose the first category, and

Table 2. Economic Indices in Arctic Village

	M	F	Total Pop.
Employed	27%	73%	46%
Not employed	77%	23%	54%
Receive alternative income/transfers			51%
Do not receive alternative income/transfers			49%
Annual family income less than \$10,000			57%
Annual family income \$10,000 to \$20,000			29%
Annual family income over \$20,000			14%

43% chose the second category (29% with incomes between \$10,000-20,000, and 14% over \$20,000). Single respondents tended to have lower incomes than those in marriage or cohabitation relationships, ($p = .02$) regardless of their gender. That said, single men were less likely to be employed than were single women ($p = .02$).

Subsistence plays a major role in the village economy (Table 3; see also, Dinero, 2002). The average estimated percentage of food taken from the land compared to that purchased in the store (what will be referred to here as the "subsistence rate") was 51%.

Education, Health Care, and Social Welfare: Key Social Development Factors Today

Table 3. Percentages of Households Pursuing Various Forms of Subsistence Activity During the Previous 12-Month Period (August 1998-July 1999), and their Overall Estimated "Subsistence Rate"

Hunting/Gathering Food	
Fish	94%
Caribou	89%
Berries	80%
Ducks/Fowl	74%
Small Mammals (hare, ground squirrel)	71%
Moose	66%
Dall Sheep	14%
Cutting/Hauling Fuel	
Fire Wood	89%
Hunting/Gathering Cash Game	
Fur Hunting (muskrat, wolf)	60%
Fur Trapping	31%
Overall "Subsistence Rate" (Estimated by Respondent)	
20-50%	60%
60-90%	40%

The authors of "Do It Yourself" acknowledged that in order to develop, the Arctic Village community needed to emphasize three general areas of planning: education, health care, and social welfare. Additionally, community leaders contended that unless the problem of substance abuse (primarily, though not solely, alcohol abuse) was resolved, future social development in the village would be jeopardized.

Education

As noted above, the establishment of Arctic Village is tied directly to the creation of schools in the early part of the twentieth century. And yet, Gwich'in formal education remains a difficult and controversial subject to this day.

"Do It Yourself" (DIY) identified three areas of concern in educating the village youth. First, the document expressed frustration with the lack of village control over the educational system and a belief that more local centralized curricular development was needed in the village schools. Second, DIY called for more active parental involvement in the schools. Last, as most of the schoolteachers are outsiders, the document suggests that some educators in the village schools are culturally insensitive (23).

In 1999, there was one primary school and one secondary school in the village. The schools had a total of six teachers (one of whom was also the principal); of these, two were community members, and four, including the principal were non-Gwich'in from outside the village. Each teacher taught all subjects for each grade.

Enrollment has slowly grown over the past twenty-five years. Between 1976 and 1982, the average school enrollment (for the primary and secondary schools combined) was 38 pupils. During the same period, the average percentage studying at the elementary level was 65%, with 35% studying at the secondary level. Over these six years, only five students graduated from high school—four males, and one female (adapted from Lonner & Beard, 1982: 171). In 1990, the official school enrollment had reached sixty students (Alaska Department of Community and Regional Affairs). Of these, slightly over half were studying at the secondary level (Gildart, July 7, 1999). According to the Arctic Village survey, attendance had reached 100% of all school-aged children by 1999. Of about fifty students in the village, approximately forty were studying in the primary school, and ten were studying in the secondary school.

And yet, village teachers (who are almost all white) report that teaching Gwich'in youngsters is a difficult challenge. One major problem, they con-

Table 4. School Needs Identified by Respondents

New/renovated building	54%
Higher teaching standards	29%
More teachers	17%
New/better materials, equipment	17%
Survival curriculum	11%
Vocational curriculum	7%
Stop truancy	7%

(Open question, respondents may have identified more than one issue. N=30). Note: More local school control, better lunch food, and more Native teachers were also cited by a small number of respondents.

tend, is the lack of a "student ethic." This results in a great deal of tardiness and absenteeism in the schools. In some instances, students will leave school in the middle of the day for lunch and never return (Gildart, July 7, 1999).

The "culture" of western-style education differs in other ways, as well. While teachers and students (regardless of age) interact on a first-name basis, VonThaer found the informality jeopardized his ability to exercise classroom control. He explains (August 3, 1999):

There was no hierarchy in the school when I arrived, so I had to create it. [The kids] like structure, they like having to ask [before doing something]. They've come to look at me as an authority figure. Before, they could do whatever they wanted.

The residents of the village also are concerned with the quality of education found in their children's schools. Despite the fact that all school-aged children attend school, only 34% of those surveyed were satisfied with the provision of this public service. There are a number of reasons for this dissatisfaction.

First, the villagers lack direct control over the schools and their functions. The schools are part of the Yukon Flats School District, which governs their operations from Fort Yukon. A feeling of disempowerment was in fact discussed in "Do It Yourself" (23), as community leaders noted that the District's decisions often do not reflect the needs or interests of the village. There is mistrust of the District leadership as well, which, some believe, have misappropriated funds destined for the Arctic Village community (VonThaer, August 3, 1999).

By the school system acting autonomously, the village (and especially its pupils) don't see the school as truly "theirs." Some see this as the cause of repeated theft and vandalism at the school, especially during the summer months (Jones, August 5, 1999).

The faculty, as noted above, are primarily not community members. While the village is not unique in this regard (statewide only 2.8% of teachers are Indigenous; see Korsmo, 1994:102), villagers find it problematic that most of their children's teachers are not Gwich'in. Indeed, the Village Council charged in "Do It Yourself" that the teachers tend to be "culturally insensitive" (23). They also discussed their desire to integrate vocational training into the school curriculum (20). This would allow students to leave school with the specific skills and preparation needed to work in the local fledgling wage labor economy.

One logical area of study, for example, might be auto mechanics and small engine repair. Given the number of non-operable, abandoned snow machines, ATVs, and other vehicles in the village, such a skill could provide a dual service, providing employment while helping to clean the village of unwanted waste.

Additionally, the leaders stated the desire to incorporate Indigenous

learning, especially survival skills, into the children's educational experience (40). Indeed this is so essential to the continuity of the culture, argued then-Second Chief Raymond Tritt (August 6, 1999), that he takes this role on himself by teaching young children outside the formal classroom: "I take them into the woods...and to the trap line in the winter. I teach them their culture, their heritage, their language, right from wrong. It's a lot of work, but it will pay off in the end."

Parents shared similar concerns in their responses to the village survey (Table 4). And yet, despite all of these criticisms, most villagers appear to have accepted that their children require a formal education in order to ensure their futures. Timothy Sam, father of one, summarized this sentiment cogently, saying (August 19, 1999):

The native way won't last much longer. We have to learn the white culture to live in the white world. We can't rely on welfare - it won't always be there. We need security for the future. Natives think only about today; they don't plan ahead. But we must. The kids must get an education, they need to learn about computers. The parents must push them to learn. It is the parents' responsibility to prepare their kids for the future.

Health Care

Like education, health care provision was recognized by "Do It Yourself" as a crucial component of the Arctic Village social development agenda. "Do it Yourself" acknowledged that the village health clinic had been improved in the late 1980s (27). Still, it was noted that the facility still lacked appropriate equipment, medicines, and adequately trained staff to effectively address the village's health care needs.

And yet, as of 1999, health care provision remained confined to the services of the Arctic Village Health Clinic, offering a very basic level of care. No doctors or professionally trained nurses are on staff there. Rather,

Table 5. Percentage of Respondents Who Use Formal and Informal Modes of Health Care

Consult a Professional for Health Care	89%
Of these, percentage who use:	
Arctic Village Clinic	100%
Doctor(s) in Fairbanks	100%
Doctor(s) in Ft. Yukon	42%
Use Home Health Care Methods	54%
Consult Non-professionals (elders/others) for Health Care	49%

the clinic employs two local women who carry out basic first aid. For any serious ailments or injuries,⁴ residents must fly to Ft. Yukon or Fairbanks (see Table 5).

Despite the high levels of clinic use by village residents slightly less than half, 49%, expressed satisfaction with its services. Survey respondents offered an array of issues they have with the clinic as it currently oper-

ates, as well as suggestions for future improvements (Table 6). While there is a tendency for those dissatisfied with the Arctic Village Clinic to use Ft. Yukon's medical facilities ($p = .03$), Fairbanks's medical facilities are used by anyone who uses a doctor on a regular basis.

Home health care treatments, and alternative health care providers (primarily elders with Indigenous health care knowledge) also supplement health care needs. That said, no correlations were found between use of the clinic or satisfaction with its services, and whether one utilizes alternative, informal modes of health care.

Social Welfare and the Alcohol Problem

Without a doubt, the most problematic issue in the Indigenous North today, cutting across both the realms of public health and social welfare, is substance abuse. Substance abuse in Native Alaska is not a new problem. Today, Indigenous Alaska is recognized as having the highest alcoholism rate in world (Mundt, July 28, 1999).

Explanations for this social problem abound and will not be reviewed here at length. That said, Klausner & Foulks (1982) offer what is perhaps one of the most compelling rationale in their discussion linking economic development, such as that brought to the Indigenous North by the oil industry and others, and how the changes this new-found wealth brings also fosters alcohol consumption. They note, for example, that alcohol use correlates in particular with the acquiring of sudden wealth (5). From their perspective too, Indigenous peoples in the North use alcohol to mediate social tensions. When combined with traditional aggressions usually presented in the hunt,

Table 6. Clinic Needs Identified by Respondents

Running Water	29%
New/renovated building	26%
Better hygiene/cleanliness	17%
More supplies/equipment	14%
Better trained personnel	11%
Better heating of clinic	9%
Dental services	7%

(Open question, respondents could identify more than one issue; N=25). Note: The need for medical services directed to the elderly was also suggested by some respondents.

newly developed aggression towards either or both self and society arises.

Alcohol consumption in Arctic Village appears to fit within this paradigm. A 1935 tribal law prohibited alcohol in the village. This prohibition "worked," Raymond Tritt argues, until the 1960s. At that time, increased wealth among the villagers, and more ability to fly alcohol up from Fairbanks via friends or relatives, changed things (R. Tritt, August 6, 1999):

Then a lot of money started coming in the village. People were making money. So they can order booze...In the old days a plane came up once a week. Today they come 4 or 5 times in a day.

And yet, by the early 1980s, alcohol was recognized in the village as "only an occasional problem, as limited privacy in the village discourages it" (Lonner & Beard, 1982: 177). Also, even though the village is not truly "dry," alcohol problems are seen to be far more severe in those Native villages where no prohibition is in place (Landen, et al., 1997), perhaps making the problems in the village look small by comparison.

This was to change by the early 1990s when the village leadership made clear in "Do It Yourself" the concern that alcohol had become a substantial problem in the village that could no longer be ignored:

We, the Gwich'in Indians of Arctic Village, recognize the threats of alcohol and drugs to our people. We will never allow alcohol and drugs into Arctic Village legally. If any tribal member has knowledge of drugs or alcohol being in Arctic Village, it is their duty to the tribe to report this to the Chief and the Council. It is the Council's duty to hand out punishment for the offense. There will be no exceptions made or excuses accepted for poisoning our people with drugs or alcohol (35).

But controlling alcohol consumption in the village is not easy for logistical and social reasons. First, controlling the flow of alcohol into the community is difficult. It would mean checking bags as residents and visitors alike land at the airport, a responsibility few village members would want (R. Tritt, August 6, 1999).

Second, other community members often protect those who do access alcohol from sanction. Family ties within the community greatly discourage whistle blowing, as "they don't want to turn their relatives in" (Martinez, August 4, 1999). Last, while sanctions against drinking in town are strict, some who wish to drink go up to Dachenlee, a series of hills southeast of the village frequented by hunters pursuing caribou. There, villagers drink freely, with little fear of discovery.

The end result is that with increased income in the community, alcohol now enters the village on a substantial scale. The problem, in turn, correlates with increasingly common incidences of petty theft, family violence, injury, and even death (see Note 4, below). Council interest in hiring a tribal policeman is thus on the increase (Martinez, August 4, 1999). A U.S. Department

of Justice grant of \$140,000 to provide policemen for Venetie and Arctic Village (“COPS Grant”) may provide some assistance in this problematic area.

Infrastructure Planning and Other Concerns

Last, “Do It Yourself” noted that Arctic Village had limited physical infrastructure. Ten years later, little had changed in this regard. And yet, few of the villagers view this as a high priority issue (Table 7). Even though their satisfaction ratings of the town infrastructure are generally low (see below), the highest priority issues were all social concerns.

Electrification and telephone service have existed in the community only since about 1980. That said, the streets of the village remained unpaved in 1999, and homes were still heated by wood stove. The village had no sewerage system; residents utilized outhouses and honey buckets.

There is no running water in the village. A water purification plant was built on the village periphery, to which a single tap is connected. Residents acquire their water in large plastic buckets, usually transported by ATV. Not all residents purchase this water, however. Some, for example, collect rainwater and melt snow for their water needs.

The purification plant is connected to the “new”

that Arctic Village had limited physical in-

Table 7. Village Problems and/or Planning Needs Identified by Respondents

Problem	Percentage Identified
Village Council is ineffective	37%
Substance abuse	26%
Need local job opportunities	26%
Outside government (Juneau, Washington is ineffective)	14%
Need a bag checking system at airport	14%
Need youth educational/recreational activities	14%
Need running water	11%
People are obsessed with money/stealing	11%
Need a police department	9%
Need to deal with trash problem	9%
People have no work ethic	7%
Poor parenting	7%
Cost of living is too high	7%
Cost of air freight is too high	7%
Community has lost its elders	7%

(Open question, respondents could identify more than one issue; N=32). Note: The need for services directed to the elderly, new infrastructure/roads, a fire department and a new airport were also suggested by some respondents.

Washeteria (1990) that replaced the old Washeteria, built in 1972 (DIY, 1991: 26). The old building still stands, now empty and abandoned, in the center of the village. Only the schools are connected to the new Washeteria-purification plant, and thus have running water, flush toilets and showers.

Overall, the housing stock in the village is a mixture of old and new. According to the 1990 census, 50 houses existed in the village, of which 36 were actually occupied at the time, and 14 were vacant. The median value of these homes was \$16,900 (Alaska Department of Community and Regional Affairs).

In the 1950s and 1960s, the villagers built their cabins collectively, using a sawmill that today lies abandoned next to the Community Hall. No housing was then built in the village until the early 1990s, when the U.S. Government's Housing and Urban Development program (HUD) and the U.S. Department of the Interior's Bureau of Indian Affairs (BIA) began providing partially prefabricated housing to villagers at low or no cost (Jones, August 5, 1999).

A priority list developed by the Village Council determines who qualifies for HUD housing. In 1997, two houses were built, and in 1998, four houses were built. Only one HUD house was built during the summer of 1999.⁵ In the future, only one HUD house is to be built per year, although residents can also approach the BIA individually for new housing assistance (Martinez, August 4, 1999).

In part, this cutback is in response to problems that have developed out of the new housing initiative. For example, the demands and costs of home maintenance are new to most villagers. New houses frequently degenerate under lack of care. Indeed, some houses built by HUD in the 1990s already required overhauling only three or four years after they were erected.

In summary, while the authors of "Do It Yourself" strove to make the document a user-friendly plan for the future, the novel nature of village service provision has made its implementation problematic. Historically, the Alaskan Gwich'in provided everything they needed themselves; they did not rely on an external provider for their various basic needs. Now that outsiders provide for most of their planning needs, a level of dependency—and indeed, resentment—has arisen in the community.

The results of the ideas introduced by "Do It Yourself" are therefore mixed. For while residents appear to be better off in western terms than their grandparents (or even parents) due to the variety of services now available to them, there is a growing sense of frustration in the village. Significantly, this anger is aimed primarily at the local Village Council, outside government agencies, and indeed, one's fellow village residents. Indeed, when asked to rate the village services, villagers rated the services most directly connected to the Council lower than other services in the village

(Table 8). While respondents' ratings were found to correlate with various personal traits (age, gender, marital status, education, and frequency of time spent outside of the village), criticism of the Village Council and its policies was found to cut across all village strata.

Table 8. Percentage of Respondents Expressing Satisfaction with Various Village Services

Water	69%
Air Service	63%
Electricity	51%
Clinic/Health	49%
Sanitation (solid waste)	37%
Schools/Education	34%
Federal/State Programs (BIA/HUD Housing, weatherization, etc.)	26%

This dynamic is a common one in small rural communities, and is a difficult mold from which to emerge. One possible solution has come through the election for First Chief in 2001 of a community member who only recently returned to the village after having spent considerable time away in Fairbanks and elsewhere in the state. His familial connections in the village are crucial to his acceptance as a model leader. At the same time, however, he has brought new ideas and innovations to the governance of the village. While it is too soon to evaluate his effectiveness, it is clear that such a model may prove somewhat more effective than those of the past, insofar as he is neither a typical "insider" nor "outsider" to village political developments.

Discussion: The Future of Community Development in Arctic Village

The 1991 "Do It Yourself" document presented the priorities of the Arctic Village Council leadership at that time. The document was innovative in the Gwich'in community, in that it verbalized, perhaps for the first time, a sense of Gwich'in identity and purpose; it was a testament to Gwich'in values, beliefs, and ideals.

Furthermore, what is also significant about the document from a planning perspective is that it was largely more reactive to outside forces than proactive or anticipatory. Such a strategy has a long history in the field of planning but it has generally been replaced today by frameworks that seek to prepare for a variety of eventualities, rather than to respond to them after the fact. This is most apparent in the Council Resolutions section of the document (41-42; see Figure 2). In this regard, at least, the document can be seen as a blueprint for perpetuating Gwich'in identity, as opposed to fostering a sense of communal identity within the physical community of Arctic Village.

Indeed, the document well fits community-planning models found in other parts of the North. Copet's model (1992), for example, requires that the strong links between environment, settlement, and community be embraced in order to fully facilitate planning in small Aboriginal communities. His emphasis upon the central role of land, and the bond it forms between the Aboriginal world view and the planning perspective (39) is well represented in the Arctic Village planning case.

But what is not found there is what he refers to under the general rubric of "education":

Education must not end with the "planners." Education should be provided for community residents. Residents should be informed of the forms and functions of community planning and why it is important to "plan" given the complex political and economic forces at work within the different govern-

Figure 2. Arctic Village Council Resolutions

Source: Adapted from "Do It Yourself," 1991.

- The Gwich'in language will be spoken a minimum of two days a week in the village;
- The Village will pursue Federal funds directly, rather than via the BIA or Tanana Chiefs;
- The Village will seek to attain more control at the school, especially regarding hiring and firing of teachers;
- The Village will be kept alcohol and drug-free;
- The Council will send in the mail an explanation of tribal member responsibilities, and their role in the village;
- The Council will oppose gas/oil development in the Arctic National Wildlife Refuge;
- Parents must train their kids;
- The sale of antlers, meat, or hides is banned;
- Sale of Native Allotments on tribal land is prohibited;
- The community will "deal with" the issue of marriage to non-tribal members;
- All projects will be run by the Village Council;
- The Council will create four standing committees:
 - Educational/School Committee
 - Tribal Affairs Committee
 - Culture and Heritage Committee
 - Social and Economic Development Committee
- The Council will designate a "Village Protection Officer," to undertake law enforcement, get parents to control their kids, and investigate complaints.

mental levels present....An integral means of fostering education...is citizen participation. (44, emphasis added)

What also is not taken into account in the “Do It Yourself” document—and indeed what may be the most significant oversight—is what Wharf (1991) calls the “irrational” aspects of planned change. These factors, while difficult to fully quantify or diagram in a logical or rational light, are central to the success or failure of planning in Aboriginal communities, for they are found in every community. They are

the contributions of owed favors, personal relationships, the sudden availability of resources [most especially Federal Government funds in the case of Arctic Village], among other factors. [As a result of these], change at all levels usually proceeds in a ‘muddling through’ fashion whereby small changes occur in an incremental, sometimes planned, but often accidental or fortuitous fashion. (138)

Thus, more than a decade since “Do It Yourself” was published, the Nets’aii Gwich’in community of Arctic Village continues to be transformed within a global economy and society. And yet, while the community is no longer semi-nomadic or entirely dependent upon subsistence (Dinero, 2002), it is apparent too that many villagers have not embraced settled communal village life. While a combination of social and economic factors play a role here, the point is that many do not use the services provided by the Village Council, and thus do not have access to modern accouterments of an urbanized lifestyle. Others, similarly, are not satisfied with the services that they do use.

While from a planning perspective such a lack of integration may appear problematic, the lack of a “community mentality” or sense of singularity of purpose among village residents may stem in part from their Indigenous culture and history. The fact that villagers appear to feel alienated from the village leadership is also significant. Added to this are increasing divisions and resentments between those who work in wage labor or who have obtained western-style education—who often comprise positions of leadership—and those who are less educated or unemployed.

In effect, the more educated and employed—who also have encouraged white outsider assistance in the Council, for example, and who seek to encourage an increase in village tourism—are seen by some within the community as threats to the basic communal fabric, “sell-outs” whose efforts to incorporate western and traditional ways serve to work to the Gwich’in community’s detriment as a whole. And yet, the outsider might suggest that it is these same individuals who are seeking not only to protect Gwich’in identity and the traditional way of life, but also to do so through western means.

To be sure, resident levels of dissatisfaction with a variety of village facilities and services may also be due to a sense of disaffection from the village planning process (Lessard, 1990:70) and a sense that those who follow

the western capitalist path now enjoy access to power and status once dictated by lineage, age, and "wealth" (not monetarily defined, but rather, one possessing "unusual energy, resourcefulness, and industry, ... shrewdness [and] generosity and concern for the common weal" (Slobodin, 1981: 524). The villagers' sense of powerlessness in relation to Juneau and Washington only furthers the inability of the Village Council to implement a future local planning agenda that could potentially please the majority of village residents.

Thus, if Arctic Village is to improve village quality of life for all its residents, it is essential that more villagers begin to discuss how to bridge some of the internal divisions now extant in the community. Such an internal dialogue is essential in perpetuating Gwich'in sovereignty and control over their land, their semi-subsistence lifestyle, and all future planning needs with limited state or Federal interference. At the same time, village council members must become more attuned to some of the ways in which the village could be molded into more of a community.

The Gwich'in of Arctic Village, Alaska seek to maintain a precarious balance: maintaining past traditions and values within an increasingly settled, wage labor-oriented and technologically dependent village setting. And while the Gwich'in may rue the day that the first European set foot on their soil, there is no way to now turn back the clock. "We can not go back to the bow and arrow," one Council leader said in the 1999 survey. "We can only move forward."

In truth, there are few simple answers to the village's social and community planning issues. But after some 10,000 years of survival against the severest of odds, the Gwich'in are most certainly well suited to pursuing their own best solutions to these challenges. "We are survivors," concludes Gwich'in Lois Law. "We can balance the two worlds, go back and forth, and recapture the spirit of what made us who we are."

That said, some Gwich'in have also come to rely on western-oriented planning systems to serve as a bridge between the Gwich'in and white worlds. To date, not all of the community has exhibited a willingness or desire to turn to the ways of the outside world for assistance. From a western planning perspective, however, one may contend that the continuation of this process is crucial to communal development. And yet, one must also see that, in the final analysis, the Council is not using planning in order to further communal development in a manner that will make it more like white America. On the contrary, the Gwich'in of Arctic Village have turned to western-style planning as a way of helping them to continue to be who they are and always have been—the "Caribou People of the Chandalar."

Acknowledgements

The author wishes to thank the National Endowment for the Humanities (Grant #FT-44687-99) and Philadelphia University for supporting this research. I also wish to thank the residents of Arctic Village for their kindness and generosity in opening their homes to me, in particular my "Teacher-Professor," Timothy Sam.

About the Author

Steven C. Dinero is Associate Professor of Human Geography at Philadelphia University, Philadelphia, Pennsylvania, USA.

Endnotes

1. In some ways, the community has never fully "settled" in the western sense of the word. Even today, movement between residences in Arctic Village, Venetie, Fairbanks, Fort Yukon, and hunting camps in the region is prevalent.
2. A methodological caveat concerning conducting summer research is perhaps in order here. While logistically, summer is a preferred time to undertake research in such a severe climate, it must be recognized that the observations discussed here were made when weather conditions, food availability, wage labor job availability, and transportation-communication links both within the village and between the village and the outside world were at their optimum. Responses to some of the questions posed may be more positive or optimistic than might otherwise be the case if given during the cold, dark winter months.
3. In other words, a .05 significance or less indicates a likelihood that the data tested could appear by sheer chance. For example, a .05 significance suggests that there is a 5% chance that the statistics tested could create such a chi-square simply by chance without any association existing between them.
4. While living in the village, I was privy to information regarding two unrelated accidents requiring emergency care. In the first instance, an old oil barrel exploded as a middle-aged male resident attempted to use a blow torch to remove its lid; he was air lifted to Fairbanks with serious burns to his face and upper body hours after the incident occurred. In the second incident, a twenty-year-old male fell while drinking heavily, sustaining a blow to the head. He died before help could be reached.
4. This house was unique in two respects. First, it was the only turquoise blue home in the village. Second, it was the only home equipped with a handicap ramp, as its new owner had been partially disabled in a traffic accident in Fairbanks some months earlier.

Bibliography

Published Sources

Andrews, Elizabeth F. (1977). "Report on the Cultural Resources of the Doyon Region, Central Alaska, Vol. 1." Occasional Paper No. 5. Anthropology and His-

- toric Preservation. Fairbanks, AK : Cooperative Park Studies Unit, University of Alaska, Fairbanks.
- Arnold, Robert D., et al. (1976). *Alaska Native Land Claims*. Anchorage, AK: The Alaska Native Foundation.
- Caulfield, Richard A. (1983). "Subsistence Land Use in Upper Yukon Porcupine Communities, Alaska" (Dinjii Nats'aa Nan Kak Adagwaandaii). Technical Paper No. 16. Fairbanks, AK: Alaska Department of Fish and Game, Division of Subsistence.
- Copet, Wayne. (1992). "An Approach to Community Planning in Aboriginal Settlements." *Canadian Journal of Native Studies*. Vol. 12(1):37-50.
- "COPS Grant to Let Venetie Hire Two Police Officers." (May 13, 1999). *Fairbanks Daily News-Miner*.
- Dinero, Steven C. (2002) "Analysis of a 'Mixed Economy' in a Native Alaskan Settlement: The Case of Arctic Village." *Canadian Journal of Native Studies*, 23(1): 135-164.
- Dinero, Steven C. (1996). "Observation, Advocacy or Interference? Undertaking Research in a 'Fourth World' Community." *Humanity & Society*, 20(3): 111-132.
- Hadleigh-West, Frederick. (1963). "The Netsi Kutchin: An Essay in Human Ecology." Unpublished doctoral dissertation. Department of Geography and Anthropology. Baton Rouge, LA: Louisiana State University and Agricultural and Mechanical College.
- Hosley, Edward H. (1966). "Factionalism and Acculturation in an Alaskan Athapaskan Community." Unpublished doctoral dissertation. Department of Anthropology. Los Angeles, CA: University of California at Los Angeles.
- Klausner, Samuel Z. and Edward F. Foulks. (1982). *Eskimo Capitalists: Oil, Politics And Alcohol*. Totawa, NJ: Allanheld, Osmun & Co. Publishers, Inc.
- Korsmo, Fae L. (1994). "The Alaska Natives," in *Polar Peoples: Self-Determination & Development*. Minority Rights Group (ed.). London: Minority Rights Group.
- Kruse, John A. (1982). *Subsistence and the North Slope Inupiat: The Effects of Energy Development*. Man in the Arctic Program. Monograph No. 4. Anchorage, AK: Institute for Social and Economic Research, University of Alaska.
- Landen, Michael G., et al. (1997). "Alcohol-Related Injury Death and Alcohol Availability in Remote Alaska." *Journal of the American Medical Association*, 278: 1755-58.
- Lessard, Marie. (1990). "Environmental Quality of the Relocated Cree Village of Chisasibi as Perceived by the Residents." In James S. Frideres and Joseph E. DiSanto (eds.) *Natural Resource Development and Social Impact in the North*. American University Studies. Series XI: Anthropology and Sociology, Vol. 42, pp. 63-74. New York, NY: Peter Lang.
- Lonner, Thomas D. and Stuart Wilson Beard. (1982). "Part II. Arctic Village." In *Sociocultural Assessment of Proposed Arctic National Wildlife Refuge Oil and Gas Exploration*. Prepared for the US Department of the Interior by the Arctic Environmental Information and Data Center. Anchorage, AK: US Department of the Interior.
- Mishler, Craig (ed.). (1995). *Neerihinjik: Johnny Sarah Googwandak (We Traveled From Place to Place: The Gwich'in Stories of Johnny and Sarah Frank)*. Fair-

- banks, AK: Alaska Native Language Center.
- Nakai' t'iu'in, ("Do It Yourself!"): A Plan for Preserving the Cultural Identity of the Neets'aiti Gwich'in Indians of Arctic Village. (1991). Arctic Village, AK: Arctic Village Council. (DIY).
- Nelson, Richard K. (1973). *Hunters of the Northern Forest*. Chicago and London: The University of Chicago Press.
- Norton, I. M., and S. M. Manson. (1996). "Research in American Indian and Alaska Native Communities: Navigating the Cultural Universe of Values and Process." *Journal of Consulting and Clinical Psychology*, 64(5): 856-860.
- Slobodin, Richard. (1981). "Kutchin." In June Helm (volume ed.), *Handbook of North American Indians: Subarctic*. Vol. 6: 514-32. Washington, DC: Smithsonian Institution.
- Stabler, Jack C. (1990). "Dualism and Development in the Northwest Territories." In James S. Frideres and Joseph E. DiSanto (eds.) *Natural Resource Development and Social Impact in the North*. American University Studies. Series XI: Anthropology and Sociology, Vol. 42: 11-42. New York, NY: Peter Lang.
- VanStone, James W. (1974). *Athapaskan Adaptations: Hunters and Fisherman of the Subarctic Forests*. Chicago, IL: Aldine Publishing.
- Wahrhaftig, Clyde. (1965). *Physiographic Divisions of Alaska: Geological Survey Professional Paper 482*. Washington, DC: United States Government Printing Office.
- Wharf, Brian. (1991). "Community, Culture and Control: Themes for the Social Services in Northern Communities," in *The Northern Review* (Summer), No. 7: 132-42.
- "Village Focus: Vashraii K'oo – Arctic Village." (1991). In *The Council*. pp. 4-5.

Personal Communications and Web Sites

- Gildart, Bert. (July 7, 1999). Arctic Village high school teacher 1991-93.
- James, Sarah. (August 8, 1999). Arctic Village Council Member, Spokesperson, Gwich'in Nation.
- Jones, Gary. (August 5, 1999). Site Foreman, Tanana Chiefs Conference.
- Law, Lois. (June 27 and July 29, 1999). Social Work Student, University of Alaska, Fairbanks.
- Martinez, Shawn. (August 4, 1999). Arctic Village Council Member and Council Administrator.
- Mundt, Valerie V. (July 28, 1999). Economic Development Specialist, Planning and Development, Tanana Chiefs Conference.
- Sam, Timothy. (August 8, 10, 19, 1999).
- Tritt, Raymond. Second Chief, (August 6, 1999).
- VonThaer, Jack. (August 3, 1999). Arctic Village High School teacher 1998- .
- Alaska Department of Community and Regional Affairs. <http://www.comregaf.state.ak.us/CF_CUSTM.htm>.