

6. Economic Stratification and Living Conditions in the Canadian Arctic⁶³

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6.1 Abstract

This chapter discusses the stratification of contemporary Inuit societies in Canada. An analysis of total individual and household income enabled the authors to determine income distribution among the adult Inuit population across different strata. This analysis made it possible to go beyond merely describing income distribution and to observe a significant but weak relationship between economic stratification and the living conditions thus examined (schooling level, civic participation, social support, satisfaction in relation to certain aspects of community life, and subjective well-being). It also showed that the criteria of social differentiation include – aside from various sources of income – access to and availability of social support, participation in community life, satisfaction, and well-being. All in all, economic stratification appears, all things considered, to

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have a limited impact on the core aspects of life for the Canadian Arctic Inuit. Other processes are thought to interact with stratification to produce and materialize the cohesion required for the maintenance and development of local communities – such as, for example, the strength of social networks, the presence of family, or the principle of reciprocity.

6.2 Introduction

The concept of social stratification refers to the breaking down of a society into several distinct social spaces between which individuals do not all circulate identically. A system of social stratification does not result from biological inequalities but from socially defined criteria and prescriptions, conventionally ascribed meanings, and an unequal distribution of rights, duties and statuses. Each system acquires a particular form – e.g., systems of rank, kinship, order, caste, class, etc. Canada, for example, is characterized by a system of classes based on an unequal distribution of wealth, power, knowledge, status and prestige. According to this view, income, power and prestige are, along with other forms of social capital, the main foundations of differentiation – that is, the movement through which distinctions and the specialization of roles and positions are created in a society. In the literature, some criteria of social differentiation have met with happier fates than others. Such is the case of gender, income, occupation, prestige and mode of consumption, in contrast with ethics, habitat, social relations, etc.

As a field of study, the stratification of Aboriginal societies has, until now, been little developed. The objective of our article is not, however, to fill these gaps by, for example, presenting a study of the historical evolution of the distribution of Inuit populations in Canada's occupational structure. This article analyzes neither the social positions historically occupied by the Inuit, nor their social, professional or intergenerational mobility, nor their elites. Likewise, we will not dwell on the relevance, for Inuit territory, of new developments in stratification studies – e.g., polarization, generational effect, representations of inequalities, exclusion, etc. We instead will perform exploratory work that consists in verifying the current situation of stratification in Inuit societies and, as much as possible, sketching out the model of stratification at which they appear to have arrived.

Several authors have analyzed the processes involved in the phases of change that followed upon boom periods in Arctic energy resource development and whose social and ecological impacts are particularly well known. Klausner & Foulks (1982) described the original mechanisms of stratification of Inupiat society. Starting in the late 19th century, following the arrival of missionaries and the first traders, a class stood out from the rest of society for the first time: its members were educated, able to read and write, and could take part in the activities of the “outsiders”. Similarly, oil drilling in the North Slope region helped create a new class that was highly involved in the establishment of government structures, political organizations and negotiations over self-government. It has been argued that the emergence of this class coincided with the transition from an economy of production to an economy of consumption:

“Class in the North Village is increasingly based on control of distribution of these funds, or the relation to the system of consumption rather than production [...]

The new class system, which is primarily organised with respect to consumption, indeed becomes visible through this consumption, as expressed in income, education, and housing. The levels of income, and thus the level of consumption vary considerably among households, a variability which did not exist in the aboriginal society of hunters.”

Klausner & Foulks, 1982: 53, 61.

Thus, the stratification of this society originated in a stressful collective experience, as a result of which new norms came to redefine forms of hierarchy and solidarity. A reconfiguration of social relations is evidenced by the emergence of local and regional leaders, the permanence of bureaucratic and political functions at the local level (notwithstanding the circulation of the personnel itself) and, in short, the establishment and reproduction of economic and political strata.

In Canada, a study by Marybelle Mitchell (1996) recounted the evolution of the relationships between the players in Arctic energy development and local political leaders, as illustrated in particular by the emergence of a native ruling class. According to her hypothesis, the emergence of this class resulted from the economic development of the Arctic (Mitchell, 1996: 8) and that this

new class was made up of those who speak out on behalf of their group. They were the first leaders confronted with negotiating the terms of energy development in the Arctic with developers and government bodies. Subsequently, they came to constitute the native corporate (and political) elite. In short, they form a ruling class “whose members do not legally own the means of production or labour power but who nonetheless effectively control the process of investment and allocation of resources.” Even if they have alienated ownership of the land, they have preserved a right of oversight (hence authority) over the means of production (specifically, the land) and labour power (Inuit and non-Inuit). The Inuit ruling class thus partakes of a system of class distinctions aligned with the class structure of the dominant Canadian society (Mitchell, 1996: XV).

In addition, attempts by certain policies to reduce economic disparities between Aboriginals and non-Aboriginals – through such things as sedentarization, the commodification of life, and modernization (in relation to the government provisioning of services, the establishment of exogenous institutions, job creation, etc.) – all appear to have heightened disparities in Aboriginal groups: “Thus, some communities that were once relatively economically homogenous are now experiencing groups of haves and have-nots” (Bernier, 1997: 2).

It is one thing to know that a society is stratified; it is quite another thing to know how it is actually stratified. Over the last several years, a number of studies have focused on growing stratification of Inuit and First Nations societies in Canada and the widening gap between the Aboriginal peoples and the Canadian population, or indeed within Aboriginal communities themselves (Bernier, 1997; Maxim et al., 2000). Bernier’s study, for example, describes wage distribution among the Inuit based on data from the Aboriginal Peoples Survey 1991. She shows that wage distribution is considerably more polarized and unequal among the Inuit than among other Aboriginal groups. For example, the wage gap between quintiles shows that mean wage is 34 times higher for Inuit in the top quintile than for Inuit in the bottom quintile (Bernier, 1997: 14). Assuming that these observations are accurate, there are at least three factors that explain wage distribution among Aboriginal population in Canada. To begin with, there are the socio-demographic characteristics of the Aboriginal population – e.g., young, presenting low schooling levels – meaning that it

has a higher proportion of individuals for whom income gaps are larger (inequality due to demographic composition). Second, there are wage gaps between the various groups of the population – for example, the wage gap between secondary school graduates and university graduates may be higher for Aboriginals than for Canadians as a whole (intergroup inequality). And, third, wage disparity within each of the groups of the population is generally higher (intragroup inequality) (Bernier, 1997). Other studies have highlighted this situation, offering evidence of an inequitable distribution of income among the Inuit (Maxim *et al.*, 2000).

This chapter presents an exploratory study of the current model of stratification of Inuit societies in Canada. It examines the distribution of population through income strata. It then scrutinizes the relationships between economic differentiation and living conditions such as social support, civic participation, satisfaction in relation to certain aspects of community life, and subjective well-being.

6.3 Methodology

The present study is based on data from the Aboriginal Peoples Survey 2001 (APS 2001) and the supplement administered to Arctic residents (Survey of Living Conditions in the Arctic – SLiCA). The APS/SLiCA⁶⁴ provided a basis for gathering original data on the objective living conditions of the Inuit of Arctic Canada (e.g., education, language, health, employment, income, housing, etc.), as well as their perceptions of their objective conditions (e.g., participation in hunting and fishing activities, civic and community participation, social support, satisfaction and well-being, etc.).

The analysis is based on a survey sub-sample – namely, 4,700 participants aged 15 and over and declaring only an Inuit identity. The results⁶⁵ concern almost exclusively the Inuit Arctic as a whole.

⁶⁴ Concerning the methodology of this post-censal survey, see Statistics Canada (2001), Morin *et al.* (2010).

⁶⁵ Data were analyzed using the SAS and SPSS packages when there was no risk of disclosure – i.e., when statistical cross-referencing did not compromise rules of security and confidentiality. In keeping with the

Three income variables have been examined in this study. Whenever analysis concerns an attribute or a personal decision of the survey participant (e.g., schooling level, participation in civic activities, etc.), it focuses on the individual total income or employment income. Otherwise, the focus is on family income.⁶⁶ By and large, income has been segmented according to increments of CAD 10,000.

The links between income and the selected variables, with the exception of satisfaction, all produced tests⁶⁷ that were statistically significant at the threshold of 0.05 (chi-squared test). The variables for which strong relationships were observed were education, social support and civic participation. Cramer's V test indicated that the relationships between income and each of the remaining variables were significant but nevertheless of low intensity.

6.4 Results

6.4.1 *Sociodemographic profile of the Inuit population*

Most of the Inuit of Canada live in the country's Arctic regions⁶⁸ (Statistics Canada, 2008). At the time of the 2001 Census, 45,070 individuals – i.e., slightly less than 5% of Canada's total estimated Aboriginal population of 1 million – identified themselves as Inuit. Collectively, they are dispersed across 53 communities in the Canadian Arctic.⁶⁹ These communities generally present low demographic size and density: only 17 of them have an Inuit population of 1,000 inhabitants and over. The highest concentration

rules established by Statistics Canada, publishable data must be weighted and rounded to the closest ten, and each data cell in a table must include, prior to weighting, a minimum of 10 cases.

⁶⁶ In our view, it was a way of taking into account documented forms of solidarity in Inuit households and villages, whenever they applied (see Duhaime, 1991).

⁶⁷ The statistical tests used in this study were the chi-squared test, for the comparison of frequency distributions, and Fisher's F-test, for the comparison of averages. For all of the variables analyzed, a test threshold of under 0.05 indicates significant differences.

⁶⁸ The tendency of Inuit to migrate away from Nunangat accelerated between 2001 and 2006. At this time, according to 2006 Census data, close to 22% of them live in the major metropolitan areas and other urban and rural centres across the country.

⁶⁹ Inuit Nunangat designates the Inuit inhabited regions of the Canadian Arctic. On a regional basis, these communities break down as follows: both Nunatsiavut and the Inuvialuit region are home to six communities, while Nunavik is home to 14 and Nunavut to 27.

is found at Iqaluit, the capital of Nunavut, home to slightly more than 3,000 inhabitants at the time (Statistics Canada 2003). While 80% of this population understood or spoke an Aboriginal language at the time of the Census, less than half that number was able to read an Aboriginal language.

Canada's Inuit population is particularly young: in 2001, the median age was 20.6 years. Adults aged 15 and over accounted for approximately 60% of the total population, whereas the segment of individuals aged 60 and over accounted for less than 10% of the adult population. Inuit youth thus appear to exert strong pressure on the working-age population, as is shown by dependency ratio⁷⁰ of 0.72 for all Inuit regions. In addition, there is agreement between APS-SLiCA and the 2001 Census to the effect that Inuit families rank among the largest in Canada, with one third having at least three children as of 2001.

6.4.2 *Population distribution according to income*

Contemporary Inuit societies are characterized by a marked differentiation of families and individuals according to their income class. There are more individuals among lower income families, and fewer individuals as family income increases (Table 1). If the low income cut-off is calculated using one half of family median income (Table 2), this threshold would stand at a little under CAD 20,000. On that basis, it can be asserted that almost one quarter of the adult population lives in poverty, one half has an income approaching the median income (i.e., plus or minus 50%), and the remaining quarter earns at least 50% more than the median income. Thus, there are significantly marked gaps between ends of the family income distribution.

⁷⁰ This ratio is computed by dividing the number of people under 15 years and over 65 years of age by the number of people of working age (i.e., 15 to 64).

Table 1. Distribution of the Inuit population aged 15 and over according to census family income, Inuit regions and Canadian Arctic, 2001. Per cent

Income (CAD)	Regions				Canadian Arctic
	Nunatsiavut	Nunavik	Nunavut	Inuvialuit	
80,000 and over	4.65	14.95	15.11	20.93	15.49
70,000 to 79,999	13.95	4.67	4.32	4.65	4.45
60,000 to 69,999	9.3	7.48	5.04	4.65	5.94
50,000 to 59,999	9.3	9.35	7.55	6.98	8.06
40,000 to 49,999	11.63	13.08	10.07	11.63	11.04
30,000 to 39,999	11.63	12.15	14.75	11.63	13.58
20,000 to 29,999	11.63	13.08	15.11	11.63	14.01
10,000 to 19,999	18.6	14.95	15.83	16.28	15.92
Less than 9,999	9.3	10.28	12.23	11.63	11.5

Source: Authors' compilation, from APS 2001 and SLiCA-Canada master data file.

Table 2. Average and median family income, Inuit regions and Canadian Arctic, 2001

Income (CAD)	Regions				Canadian Arctic
	Inuvialuit	Nunavut	Nunavik	Nunatsiavut	
Average	49,280	44,300	45,500	43,540	44,940
Median	38,320	34,400	39,530	38,910	36,150

Source: Authors' compilation, from APS 2001 and SLiCA-Canada master data file.

Disparities become even more pronounced when only employment income is considered: close to three quarters of wage-earners have earnings under the low income cut-off, close to one quarter have earnings approaching the median income (i.e., plus or minus 50%), and scarcely 4% have earnings of at least 50% more than the median income. The profile remains unchanged when the focus is on total individual income: more than two out of three adults declared not having earned CAD 20,000 in total income, in contrast with only 8% who had total income of more than CAD 50,000.

Table 3. Distribution of the Inuit population aged 15 and over according to employment income class, Inuit regions and Canadian Arctic, 2001. Per cent

Income (CAD)	Regions				Canadian Arctic
	Inuvialuit	Nunavut	Nunavik	Nunatsiavut	
80,000 and over	0.0	1.3	0.0	0.0	1.0
60,000 to 79,999	7.9	4.1	2.4	0.0	3.4
40,000 to 59,999	11.4	7.8	7.1	6.4	7.5
30,000 to 39,999	5.5	5.6	10.7	9.2	7.4
20,000 to 29,999	9.1	6.9	9.3	11.1	8.3
10,000 to 19,999	10.2	9.1	12.8	13.2	10.7
1 to 9,999	27.6	32.6	24.0	25.4	28.9
No employment income	28.4	32.3	33.1	34.4	32.4
Missing value	0.0	0.3	0.6	0.3	0.4

Source: Authors' compilation, from APS 2001 and SLiCA-Canada master data file.

Table 4. Distribution of the Inuit population aged 15 and over according to total individual income class, Inuit regions and Canadian Arctic, 2001. Per cent

Income (CAD)	Regions				Canadian Arctic
	Nunatsiavut	Nunavik	Nunavut	Inuvialuit	
50,000 and over	4.55	4.72	9.42	9.76	7.91
40,000 to 49,999	2.27	5.66	4.71	7.32	4.91
30,000 to 39,999	11.36	13.21	6.52	7.32	8.55
20,000 to 29,999	13.64	12.26	10.51	9.76	11.32
10,000 to 19,999	25.0	20.75	22.1	21.95	22.01
Less than 9,999	43.18	43.4	46.74	43.9	45.3

Source: Authors' compilation, from APS 2001 and SLiCA-Canada master data file.

While the gaps calculated for individual or total earnings are sharper than for census family total income, they only confirm the overall inadequacy of a single earner to support the family budget. Survey data show that the budget of 82% of households is made up of more than one person's wages.

In addition to depending on several income earners, Inuit families (as is true all across Canada) appear to combine several sources of income: wage earnings, transfer payments from public administrations, investment income, etc. More than half of adults declared having other sources of income besides employment income, and one out of five adults declared having received a welfare benefit. That being said, employment income remains the primary source of family income. More than two-thirds of the Inuit population aged 15 and over declared having received earnings in

the form of wages in year 2000. Perhaps that is the reason why the population distribution according to earnings class presents characteristics similar to the population distribution according to census family income class: more individuals are to be found among the lower earnings classes, and fewer individuals are to be reported as earnings increase.

6.4.3 *Economic stratification and living conditions*

Do the living conditions of the Canadian Arctic Inuit population vary according to the economic strata to which various individuals belong? In response to this question, we will explore the way the economic differentiation of Inuit societies is related to education, civic and community participation, social support, social satisfaction, and subjective well-being. In other words, the next paragraphs will explore the correlation between income as an independent variable, and the different conditions we documented through APS-SLiCA, as dependent variables

6.4.4 *Education*

In this study, education is measured by the highest level of schooling achieved. According to the APS data, Canadian Arctic Inuit adults number among those having the least schooling in the country: close to 10% have no schooling and close to 60% have not earned a certificate of secondary studies (high school diploma).⁷¹

The association between education and income have been abundantly documented (see for instance Kruse *et al.* 2008). Membership in an economically disadvantaged environment is generally associated with lower chances of academic success and access to higher education (Drolet, 2005; Duru-Bellat, 2002). A lower schooling level is often related to a lower

⁷¹ A number of qualifications are in order here, as these percentages do not reflect changes that have, over time, occurred in respect of education in Inuit regions. For example, between 1981 and 2001, the proportion of Inuit who had completed post-secondary studies (which includes completed college, trades and university) shot up from 10% to 24%, and that of Inuit with a trades certificate nearly doubled, rising from 6% to 11%. On the other hand, no major change is to be noted during the same period among Inuit with a university degree, with the percentage of 3% holding steady (ITK and DIAND, 2006).

income and a lower social position (Forsé, 2001). The data examined here tend to confirm these hypotheses, showing in effect a significant positive relationship between individual income and level of schooling.

Table 5. Distribution of the Inuit population aged 15 and over according to total individual income class and years of completed schooling, Canadian Arctic, 2001. Per cent

Income (CAD)	Less than 6 years	6 to 10 years	11 years and over	Total
50,000 and over	5.6	50.0	44.4	100.0
40,000 to 49,999	9.1	54.6	36.4	100.0
30,000 to 39,999	10.5	55.3	34.2	100.0
20,000 to 29,999	19.2	51.9	28.9	100.0
10,000 to 19,999	28.0	55.0	17.0	100.0
Less than 10,000	12.1	67.6	20.3	100.0
All income classes	15.8	60.0	24.3	100.0

Source: Authors' compilation, from APS 2001 and SLiCA-Canada master data file.

Thus, lower schooling level is associated with lower total individual income; conversely, higher schooling is associated with higher income. This is by no means a hard and fast rule, however. It is important to recall that the income in question consists more of total income than earnings; furthermore, the other sources of income depend on factors external to the labour market.

As a result, it may well be that for reasons related to life history (e.g., experience, seniority, etc.), a person having a lower level of schooling will have an income larger than that of a person who has several more years of schooling. This would partially explain the presence of Inuit with very low schooling levels in higher income strata. And the converse may hold true as well: A higher level of schooling would not be in itself a sufficient condition of stratification in Inuit societies.

6.4.5 Participation in civic activities

Participation in civic activities refers to public involvement in organizations, events, community assemblies and public assemblies. For the Canadian Arctic as a whole, 38% of the Inuit population aged 15 and over took part in at least one civic activity during the year preceding the survey. The data examined in relation to this point show a significant positive relationship between individual income and civic participation. Thus, lower

total individual income associates with lower civic participation and, conversely, higher income associates with higher civic participation.

Table 6. Distribution of the Inuit population aged 15 and over according to total individual income class and number of civic activities participated in, Canadian Arctic, 2001. Per cent

Income (CAD)	No activity	1 to 3 activities	4 activities and over	Total
50,000 and over	18.2	51.5	30.3	100.0
40,000 to 49,999	18.2	45.5	36.4	100.0
30,000 to 39,999	21.6	51.4	27.0	100.0
20,000 to 29,999	22.0	54.0	24.0	100.0
10,000 to 19,999	30.2	49.0	20.8	100.0
Less than 10,000	32.0	55.7	12.4	100.0

Source: Authors' compilation, from APS 2001 and SLiCA-Canada master data file.

6.4.6 Social support

Social support refers here to the possibility of receiving help from someone when the need arises. The APS-SLiCA measures both the availability and extent of support.

Availability of social support

The availability of social support indicates the possibility of receiving companionship, assistance, guidance or other types of support when a person needs it. For the Canadian Arctic as a whole, almost all Inuit adults say they are able to count on someone else to assist them in times of need. Regardless of the family income class, the availability index⁷² is never below 3.07. That being said, the social support availability index varies according to income. Lower family income associates with lower, yet constant, availability of social support; conversely, higher income associates with higher, increasing availability. While social support is, as a rule, available – applying invariably in 75% of cases – beyond a certain thresh-

⁷² The availability index consists in a scale of 1 to 4 and indicates the frequency with which adults can obtain a form of support when they need it. It is based on a value assigned to the four response options offered to Inuit adults during administration of the APS-SLiCA: 1 = almost none of the time, 2 = some of the time, 3 = most of the time and 4 = all of the time.

old (i.e., median income), it is proportional to family income. The permanent availability of social support increases according to family income.

Table 7. Distribution of the Inuit population aged 15 and over according to census family income and availability of social support, Canadian Arctic, 2001

Income (CAD)	Frequency of availability (%)			Average availability index (1–4)
	Never or seldom	Most of the time	All of the time	
80,000 and over	11	54	35	3.35
70,000 to 79,999	11	56	33	3.34
60,000 to 69,999	16	52	32	3.21
50,000 to 59,999	14	49	37	3.32
40,000 to 49,999	20	52	28	3.17
30,000 to 39,999	20	48	31	3.17
20,000 to 29,999	25	51	25	3.07
10,000 to 19,999	21	58	21	3.08
Less than 10,000	23	53	23	3.08

Source: Authors' compilation, from APS 2001 and SLiCA-Canada master data file.

Extent of social support

The extent of social support⁷³ refers to the number of individuals or groups of individuals on whom a person can rely on for support in time of need, for advice when making an important decision, or for a sum of money. The results show that Inuit adults can count on an average of 1.65 people to borrow a sum of money.

An analysis of the relationship between income and the extent of social support, expressed in terms of the number of people to whom Inuit adults can turn in time of need, brings out a significant variation in relation to income (Table 8). In effect, among the adults who are members of families living below the low income threshold, the more income increases, the less they say they are able to turn to more than one person in time of need. Conversely, among those who live with a family income at least 50% larger than the median income, the more that income increases, the more survey participants said that they are able to turn to more than one person in time of

⁷³ The index used to measure the extent of social support corresponds to the total number of individuals – out of a maximum of 9 choices – to whom Inuit may turn in time of need, for advice when making an important decision, or for borrowing USD 200.

need. Finally, among those whose family income approaches the median income, there is no significant variation. The extent of social support index offers more of a clear-cut picture: although income is not the only factor involved, beyond a certain threshold (i.e., CAD 29,000), social support increases according to family income.

Table 8. Distribution of the Inuit population aged 15 and over according to census family income and extent of social support, Canadian Arctic, 2001. Per cent

Income (CAD)	Size of social support (%)									Index of social support		
	Extent of support in time of need			Extent of support for making an important decision			Extent of support for borrowing \$200			In time of need	Making a decision	Borrowing \$200
	No one	1 pers.	2 pers. and +	No one	1 pers.	2 pers. and +	No one	1 pers.	2 pers. and +	Number of persons		
80,000 and over	8,8	45,6	45,6	10,1	53,6	36,2	10,3	76,5	13,2	1,9	1,6	1,1
70,000 to 79,999	15,0	40,0	45,0	15,0	50,0	35,0	10,5	79,0	10,5	1,8	1,4	1,2
60,000 to 69,999	11,5	46,2	42,3	15,4	57,7	26,9	11,5	69,2	19,2	1,8	1,4	1,2
50,000 to 59,999	10,8	54,1	35,1	11,1	61,1	27,8	16,7	69,4	13,9	1,7	1,4	1,1
40,000 to 49,999	16,3	44,9	38,8	16,7	54,2	29,2	16,3	67,4	16,3	1,6	1,3	1,1
30,000 to 39,999	15,0	46,7	38,3	17,0	55,9	27,1	18,6	69,5	11,9	1,6	1,3	1,0
20,000 to 29,999	14,8	54,1	31,1	16,1	58,1	25,8	17,7	69,4	12,9	1,4	1,3	1,0
10,000 to 19,999	15,5	50,7	33,8	18,3	56,3	25,4	21,1	67,6	11,3	1,5	1,2	0,9
Less than 9,999	16,0	46,0	38,0	22,0	50,0	28,0	20,0	66,0	14,0	1,5	1,3	1,0
Average	13,7	47,6	38,7	15,7	55,2	29,0	15,9	70,4	13,7	1,7	1,4	1,1

Source: Authors' compilation, from APS 2001 and SLICA-Canada master data file.

Likewise, the extent of social support, as measured by the average number of individuals to whom Inuit adults may turn when making an important decision, varies according to census family income. In this instance, however, the variation appears to be more tenuous. It is most apparent among those who have no one to turn to: they account for 22% of the first stratum – i.e., the lower income stratum – whereas they account for only 10% of the stratum of adults having higher income. Here again, the index measuring the extent of social support exhibits greater clarity: beyond a family income of CAD 20,000, the average number of people who can be turned to when making an important decision increases according to an individual's family income.

Finally, analysis of the relationship between income and the extent of social support, expressed as the number of people to whom Inuit can turn for borrowing a sum of money, shows that regardless of their family income, only a very low proportion of the adult population can count on three or more individuals. In addition, within the three groups identified up to this point, there is little variation in the extent of social support according to income. Within the group living under the low income threshold, between 20% and 21% of adults have no one from whom they can borrow money – that is, twice the proportion of Inuit adults in families whose income is at least 50% higher than the median census family income. Here again, excepting the Inuit in the first stratum, the number of people on whom adults can turn to for borrowing money increases according to income.

6.4.7 *Satisfaction with aspects of community life*

The calculations⁷⁴ performed using APS-SLiCA data give an average satisfaction index of 70 for all Canadian Arctic Inuit. The population says that it is satisfied with community life overall. Analysis for the Arctic area as a whole nevertheless shows major differences in the results reported for various aspects (see for instance: Poppel *et al.* 2011 and Poppel 2015). Thus, the satisfaction index is high concerning the most recent job (84), the availability of country food (91) and life at present in the community (92).⁷⁵ On the other hand, it is only 52 for housing conditions and a mere 43 for job opportunities⁷⁶.

The data show that the overall index of satisfaction with life at present in the community varies very little according to income. The weak relationship between these two variables is not significant at the threshold of 0.05%. That being said, in the case of adults whose family revenue was at least 50% greater than the median income, the more that income increased, the more the ratio of satisfied people increased too. The level of satisfaction remained constant where the other income classes were concerned.

While there is no significant difference overall, statistically significant results were obtained regarding certain specific aspects of satisfaction. Satisfaction with education and the performance of governments tended to decrease as family income increased, while satisfaction with employment increased in keeping with income.

⁷⁴ Satisfaction of the population is measured using a series of 13 questions bearing on different aspects of community life: job opportunities and most recent job, quality of education, availability of health services, quality of housing and rent or house payments, recreational facilities, freshness of foods in local stores, availability of country food, the performance of government institutions, and overall appreciation of life at present in the community. For each of these questions, a value of zero (0) was assigned to a statement of dissatisfaction and a positive value (1) was assigned to a statement of satisfaction (including both "somewhat satisfied" and "very satisfied"). The sum of these values for each survey participant was divided by 13 and then multiplied by 100 so as to obtain a general indicator of satisfaction ranging from 0 to 100 – with 100 representing the perfect situation in which the participant was satisfied with all of the aspects measured.

⁷⁵ These indices have a coefficient of variation (c.v.) of 30% to 31%, thus prompting us to interpret these data with caution.

⁷⁶ The indices concerning housing and the performance of governments have a high coefficient of variation (c.v.), thus evidencing the considerable dispersion of responses.

It is also possible to analyse satisfaction with various aspects of community life using a comparative index based on census family median income (CAD 36,150).⁷⁷ The results of our tests on satisfaction were significantly influenced by income in respect of satisfaction with job opportunities and the education offered in the community. Thus, those who were satisfied with job opportunities presented a comparative figure of 112 whereas those who were dissatisfied had a figure of 92; those who were dissatisfied with education in the community had a comparative figure of 117 whereas those who were satisfied had a median income similar to that of the population as a whole.

Table 9. Level of satisfaction respecting certain aspects of life and associated median family income index, Canadian Arctic, 2001. Per cent

Aspects of life	Level of satisfaction (%)	Median income = index of 100	
		Very dissatisfied or somewhat dissatisfied	Very satisfied or somewhat satisfied
Job opportunities	43	92,2	112,5
Most recent job	84	91,3	108,0
Quality of education	73	116,6	100,3
Availability of health services	73	102,0	96,0
Quality of housing	52	98,9	93,7
Cost of housing	76	104,6	91,3
Recreational facilities	69	108,9	95,9
Freshness of food in stores	64	98,8	97,1
Availability of country food	91	88,7	97,7
Performance of prov./ terr. gov'ts.	50	109,3	96,4
Performance of local police force	74	104,5	97,0
Performance of courts	61	110,3	94,7
Overall satisfaction with community	92	86,9	104,2

Source: Authors' compilation, from APS 2001 and SLICA-Canada master data file.

On the other hand, the relationship between median income and satisfaction with the work performed by governments and with life at present in the community is not statistically significant, but the gap between the medi-

⁷⁷ For the purposes of analysis, we will consider the median census family income as the baseline and will assign it a value of 100. Thus, a comparative index of 105 will indicate a median family income 5% greater than the median family income for the entire population, while a comparative index of 95 will indicate an income that is 5% lower.

an income of those who are satisfied and those who are dissatisfied is considerable: there is a gap of 15 percentage points regarding satisfaction with the work performed by governments (satisfied = 96; dissatisfied = 109) and a gap of 17 points (satisfied = 104; dissatisfied = 87) regarding satisfaction with life at present in the community.

6.4.8 Well-being

Finally, well-being is defined in terms of the occurrence of certain states of mind. Participants were invited to state whether, in the 30 days preceding the survey, they had felt nervous, calm and peaceful, downhearted and blue, happy, or “so down that nothing could cheer you up.”⁷⁸ The results show that the Inuit present a fairly high well-being level, with an average of 1.99.

Analysis of the influence of income on perceived subjective well-being does not allow us to identify a central trend. The results indeed show a major variation between certain income strata but do not provide a sufficient basis for establishing a clear-cut relationship between family income and subjective well-being among Inuit adults. That being said, we note a positive relationship among those living with a family income below the low income threshold and a negative relationship among those living among families whose income is at least 50% greater than the median income.

For Inuit living in a low income family, an increase in income results in a slight increase in the subjective well-being index. Above this threshold and up to a certain upper limit (50% more than the median income), the subjective well-being index would appear to produce a J-shaped curve that increases considerably for a low variation of income and that decreases drastically for the same reasons. Starting from this upper limit (USD 60,000), subjective well-being would appear to decrease as family income increases.

⁷⁸ These responses were reproduced on a graduated scale of declining subjective well-being ranging from 1 to 6, with 1 representing a situation of total subjective well-being followed by five levels (2 to 6) of subjective well-being. An average was established for each survey participant, and on this basis, the index was developed.

Table 10. Distribution of the Inuit population aged 15 and over according to census family income, satisfaction regarding certain aspects of life and well-being, Canadian Arctic, 2001. Per cent

Income (CAD)	Satisfaction with certain aspects of life				Overall level of satisfaction	Subjective well-being index
	Jobs	Education	Government	Life in the community	(%)	(1–6)
80,000 and over	58	69	42	93	70,0	1,89
70,000 to 79,999	48	72	44	93	69,0	2,03
60,000 to 69,999	42	67	30	93	67,0	2,08
50,000 to 59,999	44	70	47	94	70,0	1,94
40,000 to 49,999	38	71	45	92	69,0	2,03
30,000 to 39,999	39	77	48	91	69,0	1,93
20,000 to 29,999	37	74	50	91	70,0	2,07
10,000 to 19,999	35	76	49	91	71,0	2,06
Less than 10,000	43	74	56	88	71,0	2,03

Source: Authors' compilation, from APS 2001 and SLiCA-Canada master data file.

6.5 Discussion

The results show that contemporary Inuit societies in Canada are indeed stratified. Inuit adults do not all share the same living conditions and prospects. They exhibit an unequal distribution of capital (in terms of wealth, income and education) and power. From that perspective, the Aboriginal society inhabiting Inuit Nunangat can be broken down primarily into three distinct economic strata.

Accordingly, the first stratum is made up of Inuit who earn a maximum individual income of CAD 10,000 or a maximum family income of CAD 20,000. It consists primarily of adults who have not completed ten years of schooling and who participate in very few community activities. In time of need, these individuals appear, as a rule, to have few people to turn to for financial assistance. Paradoxically, they most often appear to be satisfied with their lives and to be more likely to take a positive view of their personal well-being. Because they appear to combine several factors of material deprivation, they can be characterized as poor.

At the opposite end of the spectrum, a second stratum would appear to be made up primarily of Inuit who earn an individual income of CAD 50,000 and over or a family income of at least CAD 80,000. For the most part, these adults hold at least a secondary studies diploma, and they participate in a greater number of activities in all sectors of community life.

They appear to be able to turn to someone –and to a greater number of potential individuals – especially for obtaining financial support. Among all the Inuit, their views appear to be more severe regarding certain aspects of their living conditions (e.g., housing conditions, job opportunities, educational offering, performance of governments, etc.). Proportionally speaking, they apparently tend less to be satisfied with certain aspects of community life or to positively assess their well-being.

A third group of individuals can be fit in between these two strata. They earn individual income ranging between CAD 10,000 and CAD 50,000 or a family income in the range of one half to twice the median income. In general, they have a higher schooling level than the poorer Inuit adults, but their social support networks are practically as weak as the latter's. They participate in a greater number of community activities and do so more frequently. They tend to present a certain ambivalence respecting satisfaction with life in their community and subjective well-being.⁷⁹

This ideal-typical model of differentiation nevertheless shows up the limitations of total income as the sole criterion of the stratification of Inuit communities. As a rule, total individual income combines several sources of income (but primarily employment income and transfer payments), whereas total family income combines income from all sources and from all individuals making up the family. Knowing that Inuit families are large, these aggregations make it difficult to distinguish between truly well-off families from those families for whom the weight of numbers is the deciding factor. In other words, the composite nature of Inuit family income foils efforts to define the contours of social strata with precision.

Economic stratification based on income introduces another limitation into the scope of results. This limitation derives from the fact such figures do not factor for the number or the biographical path of the individuals making up households, as higher family income does not always equate with a higher standard of living. In order for family income to be an indica-

⁷⁹ Perhaps it is only a matter of a non-marginal effect of occupationally-related overfilling, underfilling, or recent mobility among certain individuals.

tor of living standard, it would have to be adjusted according to the size of the family and the needs of the individual members making up the family.

The inability to identify over classified families does not invalidate the stratification model presented here for all that. The differences noted between the distribution of individual incomes and that of family incomes shows the extent to which the structure of the employment market is a source of polarization in the Canadian Arctic. If the Inuit were confined only to employment income, the majority would live under the low income threshold and only 4% of them could claim to have an income larger than CAD 50,000. Other sources of income, government transfers in particular, thus have the effect of attenuating income inequalities. However, even after factoring for all other sources of income, polarization remains: the proportion of wealthier Inuit only doubles (8%) and that of the poorer decreases by a quarter (descending from 61% to 45%). Thus, the pooling of individual incomes enables 18% of Inuit adults to amass a family income of CAD 80,000 and over. This observation again testifies to the importance of sharing and solidarity in Inuit households and communities. Networks of solidarity and mutual assistance appear – to a greater extent than government programs – to decrease employment income distribution and the polarization effect it gives rise to.⁸⁰

Does it then follow that the effect of economic stratification on other aspects of Inuit lives has been attenuated? That, at least, appears to be what the data indicate. For example, in the Canadian Arctic, owing to a shortfall of skilled labour, one might expect that those who have a higher level of schooling would earn higher incomes than those with a lower schooling level. While this overall trend is born out by the data, it does not apply absolutely, as is evidenced by the presence of people with little schooling among the higher income strata.

All in all, while there is a link between income and an individual's ability to rely on some form or other of social support, to participate in civic activities or be satisfied with various aspects of community life, this

⁸⁰ It is important to add a qualification here. We have clearly demonstrated that families have managed to increase their purchasing power by pooling their individual incomes. That does not mean, however, that the distribution of this purchasing power proceeds equitably within households.

link nevertheless remains tenuous when tied to position in the Inuit's economic stratification.

If the results we have arrived at are accurate, they show that beyond a certain threshold, a noticeable increase in the income of the wealthier Inuit adults also appears to produce a comparable increase in the availability and extent of the social support that they may avail themselves of, whereas the relationship between income and dimensions of social support appear to remain constant for the less well-off. Thus, social support appears to be sensitive to the solvability of beneficiaries – i.e., their capacity to respond in like for what they have received. Solidarity appears to lessen as the poorer individuals manage to emerge from their difficulties, but tends to increase whenever the better off are confronted with hardship. The question then arises as to whether this pattern is an indication of the way that forms of solidarity contribute to the social reproduction of inequalities.

The Canadian Arctic Inuit participate in the construction of their world. They are encountered in the position of both the governed and the governing (or as voters and as elected representatives); they take an interest in their communities. In varying proportions, they are involved in all sectors of community life: economic activities, associations (volunteer activities), politics, cultural activities, sports and recreation, etc. Those who earn higher incomes are more inclined to take part in this process. However, there is every reason to believe that other intervening variables are at stake in both the income of the wealthier individuals and their greater civic participation.

The data pertaining to satisfaction and subjective well-being among the Inuit has helped to bring out an apparent paradox: it seems that those Inuit who enjoy better material living conditions are also those who are less satisfied and less inclined to report feelings of well-being, whereas the less well-off individuals appear to be more satisfied. In addition, a relative improvement of standard of living among the less well-off tends to produce a stronger feeling of satisfaction than does a comparable advance among the better-off. This paradox suggests that the wealthier individuals bear aspirations that cannot be satisfied in the conditions currently prevailing in the communities. Thus, in comparison to others, they appear to be more severe regarding the sectors of life where they have experienced better – i.e., areas over which they do not

have control but in which human action can have a decisive influence, such as housing conditions, job opportunities, educational offering, etc. The factors that escape the control of the more affluent individuals would thus appear to have a negative impact on their self-perceived well-being. That should be used as a hypothesis for further research.

6.6 Conclusion

During the last several decades, numerous factors have triggered transformations in the material and symbolic living conditions of the Canadian Arctic Inuit. The institutions and customary forms of Inuit social organization have been transformed by exogenous forces that have gradually penetrated the territory, such as the mechanisms of the market economy (including monetization and wage labour), political relations with the various levels of government in Canada, and cultural pluralism. Endogenous social dynamics have, in turn, developed in response to new requirements, aspirations and constraints, such as the need to redefine roles and statuses and to reendow a changing world with meaning (Damas, 2002; Édouard, 2008). Stratification can thus be viewed in terms of one of the perceptible consequences of these deep transformations.

This study has described the current stratification model of Canadian Arctic Inuit societies but has, at the same time, highlighted the limitations of income as a criterion for breakdown purposes. Our analyses have made it possible to go beyond merely describing wage distribution and to incorporate such differentiation criteria as access to and availability of social support, participation in community life, satisfaction in relation to several aspects of community life, and well-being. We have established that economic stratification has, all in all, a limited effect on the core aspects of life in the Arctic. Other processes would appear to interact with stratification to produce and materialize the cohesion required for the maintenance and development of local communities – for example, the strength of social networks, the presence of family, the principle of reciprocity, the gift system, etc. To a greater extent than income – or, more precisely, position in the economic stratification – these processes appear to provide more of a basis for explaining major phenomena that are currently affecting the

society under study, such as sustained demographic growth, out-migration of a growing proportion of the population from Inuit Nunangat, the preservation of a sense of identity, and the desire for self-government. The interrelationship of these processes could be examined as part of an in-depth study performed using data from the APS/SLiCA 2006.

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6.8 References

- Bernier, R. (1997). *The Dimensions of Wage Inequality among Aboriginal Peoples*. Ottawa: Statistics Canada, Analytical Studies Branch - Research Paper Series, No. 109.
- Chabot, M. (2004). *Standard of Living of Nunavimut. Considerations for Social Policy Development*. Paper presented at the Forums régionaux sur l'avenir du Québec, Kuujuaq, 17th June 2004.
- Condon, R.G. (1987). *Inuit Youth: Growth and Change in the Canadian Arctic*. London: Rutgers University Press, 252 pp.
- Damas, D. (2002). *Arctic Migrants/Arctic Villagers. The Transformation of Inuit Settlement in the Central Arctic*. Montreal and Kingston: McGill-Queen's University Press, 277 pp.
- Diener, E. & Suh, E.M. (2000). *Culture and Subjective Well-being*. Cambridge: MIT press.
- Drolet, M. (2005). Participation in Post-secondary Education in Canada: Has the Role of Parental Income and Education Changed over the 1990s? Ottawa: Analytical Studies Branch, *Statistics Canada catalogue no. 243*, February 2005. Available at <http://www.statcan.gc.ca/pub/11f0019m/11f0019m2005243-eng.pdf>
- Duhaime, G. (1991). Le pluriel de l'Arctique. Travail salarié et rapports sociaux en zone périphérique. *Sociologie et société*, 23(2): 113–128. <http://dx.doi.org/10.7202/001212ar>

Duhaime, G. (2007). Profil socioéconomique du Nunavik 2006, Québec City: Canada Research Chair. In *Comparative Aboriginal Conditions*, Université Laval, 65 pp. + appendices [Also published in English as Socio-economic Profile of Nunavik 2006.] Available at <http://www.chaireconditionautochtone.fss.ulaval.ca/documents/PDF/147.pdf>

Duru-Bellat, M. (2002). *Les inégalités sociales à l'école. Genèse et mythes*. Paris: Presses Universitaires de France, collection Éducation et formation.

Édouard, R. (2008), *Le développement inégal et la production des conditions de vie*. Le cas des Inuit de l'Arctique canadien, PhD Thesis, Québec City, Université Laval, 393 pp.

Forsé, M. (2001). L'évolution des inégalités des chances sociales et scolaires en France au cours des quinze dernières années. In Boudon, R., Bulle, N. and Cherkaoui, M., *École et société: Les paradoxes de la démocratie*. Paris: Presses Universitaires de France, (Collection "Sociologies").

Hobart, C. W. (1968). The Influence of the School on Acculturation with Special Reference to Greenland. In Gooderham, G.K.: *Proceedings of a Symposium on the Educational Process and Social Change in a Specialized Environmental Milieu*. Edmonton: Boreal Institute: 43–63.

Inuit Tapiriit Kanatami & INAC (2006). *Gains réalisés par les Inuit en matière de formation et de fréquentation scolaire, 1981–2001*.

Ottawa: INAC, Strategic Research and Analysis Directorate, Catalogue: R2-452/2006F. Last retrieved online on January 6, 2012 at http://publications.gc.ca/collections/collection_2007/inac-ainc/R2-452-2006F.pdf [Also published in English as Gains Made by Inuit in Formal Education and School Attendance, 1981–2001. Ottawa: INAC, Strategic Research and Analysis Directorate, Catalogue: R2-452/2006E. Available for viewing at: http://publications.gc.ca/collections/collection_2007/inac-ainc/R2-452-2006E.pdf.]

Klausner, S.K. & Foulks, E.F. (1982). *Eskimo capitalists: Oil, Alcohol and Social Change*. Montclair (NJ): Allenheld and Osmun.

Kruse, J., Poppel, B., Abryutina, L., Duhaime, G., Martin, S., Poppel, M., Kruse, M., Ward, E., Cochran, P. & Hanna, V. (2008). *Survey of Living Conditions in the Arctic, SLiCA*. In Møller, V., Huschka, D, and Michalos, A. C. (eds.), *Barometers of Quality of Life around the Globe*. Springer Social Indicators Research Series. Springer Verlag, pp. 107–134.

Maxim, P., White, J & Beavon, D. (2001). Dispersion and Polarization of Income among Indigenous and non-Indigenous Canadians. *Canadian Review of Sociology and Anthropology*, 38 (4), pp. 465–476. <http://dx.doi.org/10.1111/j.1755-618X.2001.tb00982.x>

Maxim, P. et al. (2000). *An Analysis of Wage and Income Inequality Dispersion and Polarization of Income among Aboriginal and Non Aboriginal Canadians*. PSC Discussion Papers Series: 14(9), Article 1. Last retrieved online on January 6, 2012 at: <http://ir.lib.uwo.ca/pscpapers/vol14/iss9/1>

Mitchell, M. (1996). *From Talking Chiefs to a Native Corporate Elite. The Birth of Class and Nationalism among Canadian Inuit*. Montreal: McGill-Queen's University Press.

- Morin, A., R. Édouard & G. Duhaime (2010). Beyond the Harsh. Objective and Subjective Living Conditions in Nunavut. *Polar Record*, 46(237): 97–112.
<http://dx.doi.org/10.1017/S0032247409990131>
- Poppel, B. (2015). Living Conditions and Perceived Quality of Life Among Indigenous Peoples in the Arctic. In: Glatzer, W., Camfield, L., Møller, V., Rojas, M. (eds.) *Global Handbook of Quality of Life - Exploration of Well-Being of Nations and Continents*. Springer Science+Business Media Dordrecht. pp. 715–747.
- Poppel, B. (ed.), Kruse, J., Broderstad, A. R., Eliassen, B.-M., Jensen, C., Martin, S., Melhus, M., Olsvig, S. & Westin, C. (2011). *Arctic living conditions. Survey of Living Conditions in the Arctic. Major SLiCA findings presented to the Arctic Council Ministerial meeting*. 6 pages. Nuuk.
- Statistics Canada (2001). *Enquête auprès des peuples autochtones de 2001 (Adultes de 15 ans et plus)*. Questionnaire [http://www.statcan.gc.ca/imdb-bmdi/instrument/3250_Q3_V1-fra.pdf] [Also published in English as Aboriginal Peoples Survey 2001 (Adults 15 and over). Questionnaire. Available at: http://www.statcan.gc.ca/imdb-bmdi/instrument/3250_Q3_V1-eng.pdf.]
- Statistics Canada (2003). *2001 Aboriginal Community Profiles*. Ottawa. Statistics Canada, [available for viewing online at: <http://www12.statcan.ca/english/Profil01/PlaceSearchForm1.cfm>.]
- Statistics Canada (2006). *Activités de récolte et bien-être de la collectivité dans l'Arctique canadien: constatations préliminaires de l'Enquête auprès des peuples autochtones 2001 – Enquête sur les conditions de vie dans l'Arctique*. Ottawa: Statistics Canada, no. 89-619-XIF [Also published in English as Harvesting and Community Well-being Among Inuit in the Canadian Arctic: Preliminary Findings from the 2001 Aboriginal Peoples Survey - Survey of Living Conditions in the Arctic, Ottawa: Statistics Canada, no. 89-619-XIE. Available at http://www.statcan.gc.ca/access_acces/archive.action?loc=/pub/89-619-x/89-619-x2006001-fra.pdf; and <http://www.statcan.gc.ca/pub/89-619-x/89-619-x2006001-eng.pdf>
- Statistics Canada (2008). *Peuples autochtones du Canada en 2006: Inuits, Métis et Premières nations, Recensement de 2006*. Ottawa: Statistics Canada, no. 97-558-XIF [Also published in English as Aboriginal Peoples in Canada in 2006: Inuit, Métis and First Nations, 2006 Census. Ottawa: Statistics Canada, no. 97-558-XIE. Available at: <http://www12.statcan.ca/census-recensement/2006/as-sa/97-558/pdf/97-558-XIF2006001.pdf>; and <http://www12.statcan.ca/census-recensement/2006/as-sa/97-558/pdf/97-558-XIE2006001.pdf>