

Greenland's demography, 1700-2000: The interplay of economic activities and religion

La démographie du Groenland de 1700 à 2000: Interaction des activités économiques et de la religion

Ole Marquardt

Volume 26, numéro 2, 2002

Populations et migrations
Populations and Migrations

URI : <https://id.erudit.org/iderudit/007645ar>

DOI : <https://doi.org/10.7202/007645ar>

[Aller au sommaire du numéro](#)

Éditeur(s)

Association Inuksiutiit Katimajit Inc.

ISSN

0701-1008 (imprimé)

1708-5268 (numérique)

[Découvrir la revue](#)

Citer cet article

Marquardt, O. (2002). Greenland's demography, 1700-2000: The interplay of economic activities and religion. *Études/Inuit/Studies*, 26(2), 47–69.
<https://doi.org/10.7202/007645ar>

Résumé de l'article

Durant la période précoloniale et les deux premiers siècles de son histoire coloniale, le Groenland eut la chasse au phoque comme économie de base. Cette chasse était pratiquée de deux façons différentes. Dans le sud du Groenland, où les eaux sont ouvertes toute l'année, la chasse au phoque en kayak régna. Dans le nord du Groenland, où les eaux sont couvertes de glace durant une grande partie de l'année, diverses formes de chasse au phoque sur la glace s'ajoutèrent à la chasse au kayak. Cette dernière activité comportait des taux de mortalité élevés. La noyade et — encore plus importantes comme cause de mort — les différentes maladies résultant de l'exposition journalière du chasseur à la température et à l'eau froides, ainsi qu'à la pluie et aux tempêtes de neige, causèrent la mort des chasseurs à un âge plus jeune que les femmes. Ainsi le ratio des sexes à l'âge adulte montre une grande majorité de femmes au sud du Groenland et une légère majorité de femmes au nord.

À l'époque païenne, la polygamie et les diverses formes de promiscuité systématique acceptées culturellement aidèrent la société à éviter une situation dans laquelle seul un nombre de femmes équivalent à celui des hommes aurait pu avoir les enfants de ces derniers en tant qu'épouses fidèles des chasseurs. Mais avec la conversion au christianisme, ces institutions sociales furent rapidement abolies. À leur place, la forme chrétienne du mariage — et l'interdiction chrétienne d'avoir des relations sexuelles extra-conjugales — fut introduite. Dans certaines parties du sud du Groenland, le ratio des sexes devint si débalancé qu'il mit en péril la reproduction démographique des communautés locales. Au 20^e siècle, l'importance de la chasse au phoque décrut car de plus en plus de Groenlandais devinrent pêcheurs, fonctionnaires, travailleurs de la construction, etc. En parallèle, le ratio des sexes devint plus balancé et aujourd'hui la population du Groenland a une légère majorité d'hommes. Ainsi, alors que l'exclusif droit d'existence de la forme chrétienne du mariage n'était pas adéquat pour la chasse au phoque dans le sud du Groenland durant les siècles précédents, le Groenland moderne du 20^e siècle a une distribution des sexes qui convient à cette forme particulière de mariage.

Greenland's demography, 1700-2000: The interplay of economic activities and religion

Ole Marquardt*

Résumé: La démographie du Groenland de 1700 à 2000: Interaction des activités économiques et de la religion

Durant la période précoloniale et les deux premiers siècles de son histoire coloniale, le Groenland eut la chasse au phoque comme économie de base. Cette chasse était pratiquée de deux façons différentes. Dans le sud du Groenland, où les eaux sont ouvertes toute l'année, la chasse au phoque en kayak régna. Dans le nord du Groenland, où les eaux sont couvertes de glace durant une grande partie de l'année, diverses formes de chasse au phoque sur la glace s'ajoutèrent à la chasse au kayak. Cette dernière activité comportait des taux de mortalité élevés. La noyade et — encore plus importantes comme cause de mort — les différentes maladies résultant de l'exposition journalière du chasseur à la température et à l'eau froides, ainsi qu'à la pluie et aux tempêtes de neige, causèrent la mort des chasseurs à un âge plus jeune que les femmes. Ainsi le ratio des sexes à l'âge adulte montre une grande majorité de femmes au sud du Groenland et une légère majorité de femmes au nord.

À l'époque païenne, la polygamie et les diverses formes de promiscuité systématique acceptées culturellement aidèrent la société à éviter une situation dans laquelle seul un nombre de femmes équivalent à celui des hommes aurait pu avoir les enfants de ces derniers en tant qu'épouses fidèles des chasseurs. Mais avec la conversion au christianisme, ces institutions sociales furent rapidement abolies. À leur place, la forme chrétienne du mariage — et l'interdiction chrétienne d'avoir des relations sexuelles extra-conjugales — fut introduite. Dans certaines parties du sud du Groenland, le ratio des sexes devint si déséquilibré qu'il mit en péril la reproduction démographique des communautés locales. Au 20^e siècle, l'importance de la chasse au phoque décrut car de plus en plus de Groenlandais devinrent pêcheurs, fonctionnaires, travailleurs de la construction, etc. En parallèle, le ratio des sexes devint plus équilibré et aujourd'hui la population du Groenland a une légère majorité d'hommes. Ainsi, alors que l'exclusif droit d'existence de la forme chrétienne du mariage n'était pas adéquat pour la chasse au phoque dans le sud du Groenland durant les siècles précédents, le Groenland moderne du 20^e siècle a une distribution des sexes qui convient à cette forme particulière de mariage.

Abstract: Greenland's demography, 1700-2000: The interplay of demography, economic activities and religion

In pre-colonial times and during the first two centuries of its colonial history, Greenland had the seal hunt as its all dominant economic base. This hunt was practised in two different ways. In South Greenland where waters are open all year round, the seal hunt from kayak reigned supreme. In North Greenland where waters are covered with ice for a long period of the year, the kayak hunt was therefore supplemented by various forms of seal hunting from the ice.

* Ilisimatusarfik (University of Greenland), P.O. Box 279, DK-3900 Nuuk, Greenland. om.ingreen@greenet.gl

Kayak hunting was a trade which involved high mortality rates. Drowning and — even more important as a cause of deaths — various diseases resulting from the hunter's daily exposure to cold weather and water, and to rain or snow storms, caused the male hunters to die in earlier ages than the women. Hence, the sex ratio in the adult ages displayed a large female majority in South Greenland — and a slight female majority in the North.

In pagan times, polygamy and various forms of promiscuity helped society to avoid a situation in which only a number of women equal to that of men could become mothers who bore their children as lawful wives of a hunter. With the conversion to Christianity these social institutions were quickly abolished. Instead of that, the Christian form of marriage — and the Christian ban on extra-marital sexual relations — was introduced. In some parts of South Greenland, the sex ratio was so imbalanced that it jeopardized the demographic reproduction of the local communities. In the 20th century the importance of seal hunting decreased as more and more Greenlanders were able to find their livelihood as fishermen, civil servants, construction workers etc. Parallel to this, the sex ratio became balanced and today's Greenlandic population even has a slight male majority. Hence, whereas the exclusive right of existence of the Christian form of marriage was unsuited for the seal hunting South Greenland of the preceding centuries, the modern Greenland of the 20th century has a sex distribution which is suited to this particular form of marriage.

Introduction

Our knowledge of indigenous peoples' demographic history is often obscured by the lack of credible historical data from earlier centuries. In that connection Greenland is an exception as we find here an indigenous population of northern hunters-and-gatherers whose demographic profile and evolution has been described in detail for about 225 years. The demographic records produced by the Danish colonial administration since the 1770s allow us to analyze the demographic consequences of the impact of colonialism and modernization on what was originally a traditional hunters-and-gatherers' culture. As it is, they also allow us to analyze how one of the first consequences of colonial rule — namely the christianization of the Native Inuit population — profoundly changed the way in which the Greenlandic society was able to respond to the demographic challenges which confronted it.

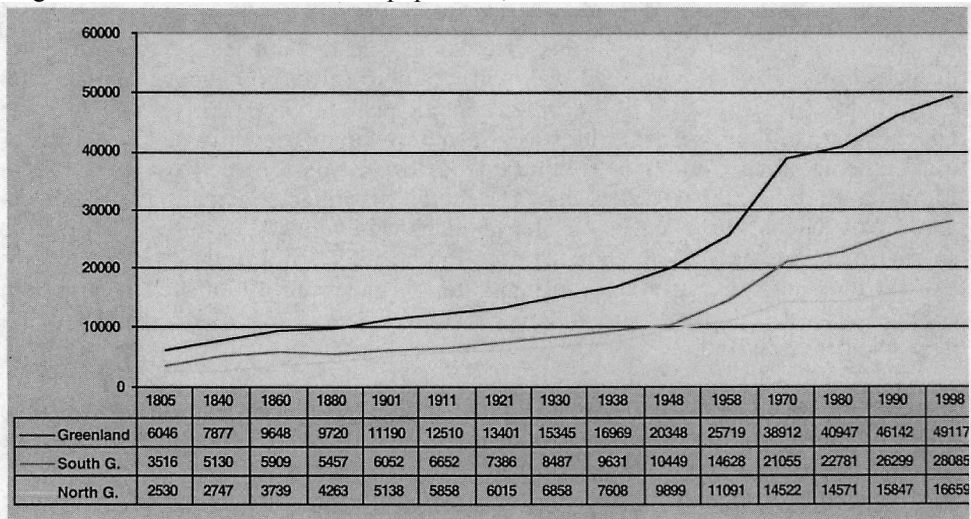
Short survey of Greenland's history from AD 1700 to 2000

Due to the import of smallpox and other epidemic diseases the Native population in West Greenland in the first 75 years of colonialism decreased from probably 8000 in 1721 to just about 6000 in the late 18th century¹. From 1805 and until the mid-1800s

¹ The population in Greenland in AD 1700 is unknown. Some historical sources from the 18th century mention a population of between 10 to 30,000 Inuit in West Greenland when Danish-Norwegian colonialism started. For reasons not to be discussed here (for further information, see Marquardt

there was a steady rise in population in both North and South Greenland. Between 1860 and 1900 the population in South Greenland stagnated whereas that in the North continued to grow. After the turn of the century, the Native population in both parts of West Greenland rose steadily and since the end of World War II even rapidly; and so did the tiny population on the east coast and that in Thule (Avannarsuaq) in the high northwest (Figure 1).

Figure 1. West Greenland's Native population, 1805-1998



Sources: Gad (1976: 111-112); GSK (1990: 44); GSK (1998: 397-410); Statistisk Årbog DK (1948-58: 5); Statistiske Sammendrag om Grønland (1942: 36).

Note: The national figures from 1970 and later include Polar Eskimos (Inughuit) in Thule as well as East Greenlanders. Danes and other Europeans — since 1950 considered equal in size to what the censuses describe as "persons born outside Greenland" — are not included in the numbers.

When Hans Egede came to West Greenland in 1721 the country was home to a hunter-and-gatherer culture. Basically, the local Inuit depended on seal hunting for their subsistence, whereas whaling — particularly the hunt for small whales — and fishing played important but secondary roles. Within their given technological limits the Inuit had developed their seal hunting techniques to a high level of perfection, and during the first 150 years of colonialism the Danish traders and administrators were unable to contribute something which could significantly improve existing techniques. The only exceptions to this rule were the shotgun and the rifle, but for all their positive effects on the efficiency of the seal hunters — and in particular the efficiency of those hunters who hunted seals asleep on the ice — these Western innovations did not

2002b), I consider the figure of 30,000 as far exaggerated whereas a figure of about 8000 may be close to what were the actual facts of the matter.

change the nature of the seal hunt nor its role as the undisputed mainstay of the Greenlanders' economy.

For various reasons, the Danish colonial administration encouraged the Greenlanders to continue their so-called national and ancestral occupation — namely the seal hunt — until the early 20th century. As time went by, an increasing number of Greenlanders found a source of income as salaried employees of the Royal Greenland Trade Department and of the Royal Mission. But to put things in their right perspective, it must be stressed that until the 1920s, the hunt for seals constituted the undisputed mainstay of the Inuit society in Greenland (Marquardt 1996, 1999a).

Whereas the first two centuries of colonial rule did not lead to revolutionary changes in the ways in which the seal hunt was performed in Greenland, things look entirely different if we turn to the nation's intellectual culture. The conversion of the Greenlanders to the Christian faith was affected by the missionaries and catechists of the Lutheran State Church of Denmark (the Royal Mission) and by those of the Moravian Brethren (the Herrnhutians). The Royal Mission operated mission stations in all of West Greenland, whereas the Herrnhutians were allowed to missionize in three southern districts only. Both churches were highly successful in their enterprises. In general one can say that after a mission station had been established in a certain colonial district, it took but one to two generations before every Greenlanders living there had been baptized.

Starting around 1910 the colonial administration introduced with increasing force modern fishing and the industrial processing of fish products as alternative fields of occupation in Greenland. After World War II the commercial and economic modernization of Greenland became the order of the day and today's Greenlandic society is characterized by an economic diversification and by a modern division of labour which allows 80-85% of the national workforce to live by non-foraging activities as entrepreneurs, crew members on modern fishing ships, industrial workers, artisans, construction workers, teachers and civil servants. Today, in the so-called "hunting districts" on the east coast and in the high northwest, seal hunting is still important as a professional occupation, but in the rest of the country — where the bulk of the population lives — the occupational structure is dominated by various forms of wage labour (Lyster/GSK 1994; GSK 1995: 2; GSK 1996: 29).

Demographic characteristics of Greenland's seal hunter culture

Whereas the Indian tribes of North America between the time of Columbus' advent until about 1900 had a majority of male persons among the adults (Jaffe 1992), things were just the opposite in West Greenland — and particularly so in its southern part.

Female majority among adult persons presented by the Greenlandic censuses from 1834/1840-80 confirmed earlier and less trustworthy censuses from 1789 to 1805 (see Table 1). The female majority was considerably greater in South than in North Greenland. The highly imbalanced character of South Greenland's sex distribution

becomes clear when it is compared with the corresponding distribution in Canada, USA and Denmark during the last half of the 19th century. In the years considered Canada and USA both represented young pioneer societies where a majority of men among the immigrants caused the number of males to be slightly greater than the number of females. In contrast, contemporary Denmark — whose demographic structure came close to the European average (Falbe-Hansen and Scharling 1885: 533-536) — represented the typical situation in a "mature and civilized" society with a slight female majority among adult persons. As the distribution between boys and girls was rather even (Table 2), the female majority among adult Greenlanders cannot be explained as a belated result of a corresponding female majority among children.

Table 1. Sex distribution among adult persons of 15-59 years of age: Number of women to 1000 men

Greenland 1840		Greenland 1855		Greenland 1860		Greenland 1880	
North	South	North	South	North	South	North	South
1098	1230	1046	1244	1046	1315	1108	1342
Canada 1861	Canada 1881	USA 1860	USA 1880	Denmark 1860	Denmark 1880		
945	992	947	968	1017	1058		

Sources: Folketælling (1840, 1862, 1883); Historical Statistics (1960: 8-10); Johansen (1985: 108f.); Marquardt (1994: 176-177); Urquhart (1965: 14-16).

Table 2. Sex balance: Percentage of Greenland's Native population represented by boys and girls

Age	1840		1860		1880	
	Boys	Girls	boys	girls	Boys	girls
0-4	8.8	8.2	9.0	8.4	7.5	7.6
0-9	16.1	15.2	14.7	13.9	14.2	14.2
0-14	22.8	21.8	21.7	20.7	20.0	20.1

Sources: Folketælling (1840, 1860, 1883); Gad (1976: 111-112); Historical Statistics (1960: 8-10); Johansen (1985: 108f.); Marquardt (1994: 176-177) and Urquhart (1965: 14-16).

Hence, since it cannot be explained as a belated effect of a deficit of boys among the children, the relative deficit of adult male persons — and the leading role which befell South Greenland in that respect — must be explained as a consequence of that peculiar hunt which constituted the economic mainstay of the local hunter-and-gatherer society.

The two hunting techniques used by Greenlandic seal hunters in pre-colonial times and during the first two centuries of colonialism were the *kayak hunt*, which was used when the sea was open, and the *hunt from the ice* — for instance at the seals' breathing

holes — which was used when the sea was covered by ice. The ice hunt was of great importance for the hunters of North Greenland, where the kayak hunt was normally restricted to the ice free summer and early fall season. In South Greenland, the kayak hunt was all dominant since the seal-rich waters of the skerries and the fjords' estuaries were only on rare occasions covered with ice (Amdrup *et al.* 1921, I, AO: 74-75, 102-106).

The difference in hunting techniques brought about a difference in mortality rates for the hunters of the two regions. Seal hunting from the ice was certainly a demanding activity, but its practitioners were not exposed to the same risks as were the kayak hunters. With a suiting expression, Denmark's Statistical Bureau described in 1860 the kayak hunt as "an occupation involving mortal risks" (Folketælling 1860: 13-22). Firstly, a kayaker could drown if his boat capsized and he was unable to do the "Eskimo roll" and bring it afloat again quickly. Secondly, and more important when it came to causing incidents of deaths, a kayaker was continuously exposed to the freezingly cold water and to snow or cold rain storms when he sailed out to hunt seals. Their permanent exposure to the influences of coldness and humidity caused the kayak hunters to fall victims to tuberculosis, pneumonia and similar diseases which besides being lethal in themselves did also weaken their immunity towards other kinds of diseases (Berthelsen 1935; Børresen 1934-35, 1936).

Reserving the use of the kayak as a means of transportation to cross pockets of open water in the ice and to pick up seals killed (with rifles) from the edge of the ice (Amdrup *et al.* 1921, I, Distriktsbeskrivelser: 31-32; 235-236), the hunters of North Greenland only practised the kayak hunt in the summer and early autumn season. Generally speaking, North Greenland has fewer occurrences of windy and rainy weather than South Greenland. If we add to this the fact that summer and early autumn has normally less stormy weather than the late autumn and early winter, then the favoured position of North Greenland's hunters becomes clear. Late autumn and winter is a very stormy period in South Greenland during which troubled seas and precipitations are the rule rather than the exception. And it was in exactly this period of the year that the southern hunters had to go on hunting seals from their kayaks whereas their northern colleagues could do so from the ice. So, it is small wonder that the seal hunters of South Greenland died in greater numbers than their northern colleagues.

Problems of demographic reproduction

The smallness of the local populations meant that the threat of natural extinction was always imminent in both parts of Greenland². The use of long periods of breast feeding — two to three years seem to have been typical — was a common feature in Greenland until World War II (Berthelsen 1935: 13). The long lactation cycle is well documented in the historical sources from the first two centuries of colonial rule, and

² Jaffe (1992) mentions that a population of less than 5000 people is in permanent danger of dying out because of natural reasons. Among such natural reasons one can mention the incidents of too few births or of too long a period in which the distribution of boys and girls among the newborn babies is too disproportionate. Until the 20th century the population of North Greenland was below the 5000 mark whereas that of the south was around 5000 or a little higher.

there is no reason for assuming that things were different in pre-colonial times. The cultural choice of long breast-feeding periods reduced the fertility of Inuit women to a level below the one which could have been attained if shorter periods had been chosen. Consequently, it represented a dysfunctional cultural habit in a situation in which the smallness of the population required that the number of births should be as high as possible.

Another factor which threatened to drive down fertility rates and to impede the demographic reproduction of the local population was the unbalanced sex distribution among the adults. Whereas the use of long lactation periods was common in all of Greenland, the deficit of male persons was significantly greater in the southern part of the country. In both North and South Greenland, the demographically worst case of childbearing years scenario was a situation in which only a number of women equal to that of men were allowed to experience pregnancy and ensuing motherhood. In such a case the number of births would be smaller than it could have been if every woman was to become pregnant. Due to the greater imbalance of the sexual distribution in their region, the Inuit of South Greenland were to a greater extent than their northern compatriots dependent on the existence of cultural norms which could help them to avoid a realization of the demographic worst case scenario. If such cultural practices were not brought into existence, society would be deprived of a significant number of those new-born children which it needed so direly if the risk of natural extinction should be minimized.

From pagan polygamy to Christian nuclear families

The social institution of polygamy is known from many different cultures. In many places polygamy is a means to display the wealth and social importance of the man who can afford to have several wives. In societies with a female majority, polygamy fulfills an important demographic role as it enables the surplus of women in the fertile age to find themselves a husband to provide for them and their children.

Polygamy was an established institution in Greenland when the first Danish-Norwegian missionaries and traders came to the land. Through the institution of polygamy society avoided a situation in which only a number of women equal to that of men was allowed to experience motherhood within the protective confinements of a lawful and respected marriage.

As almost everywhere else in the world, the typical marriage in traditional Greenland was not the polygamic one, but the one-man-and-one-woman marriage. The number of polygamic as compared to nuclear families in pre-colonial and early colonial Greenland is unknown. In historical time, the number of adult women was about 1.1 (North Greenland) to about 1.3 (South Greenland) times the number of adult men, and therefore it is natural to suspect that from 10 to 30% of existing marriages must have been polygamic. As it is, the only historical source — the same source, by the way, which mentions that the normal form of polygamic marriages was one man to two wives — which actually tries to assess the diffusion of polygamy speaks of only 3-4%

of existing marriages as polygamic ones (Dalager (1915 [1752]): 6). This said, the author in question is not particularly trustworthy when it comes to statements concerning numbers³. In a number of the early 18th century sources "South Greenland," "paganism" and "polygamic marriages" are used synonymously, and I suspect that at least in this part of the country — where the deficit of men was at its greatest — polygamic marriages must have been much more widespread than the just 3 to 4% Dalager referred to.

When the Christian missionaries came to Greenland, they considered polygamy as a pagan institution which was irreconcilable with Christianity. Historical sources show that on various occasions the missionaries actually bowed to the force of Inuit tradition by turning a blind eye to the polygamic facts of life among the members of their flocks. But in general the missionaries were staunch opponents of polygamy. Consequently, as Christianity after a good century of colonialism reigned supreme from Upernavik in the north to Nanortalik in the south, the institution of polygamy can be considered to have been reduced to a few exceptions to the existing rule⁴ or to something which was re-vitalized for brief moments by short-lived chiliastic movements which combined Christianity and paganism⁵.

Since antiquity, the sacramental union of two and only two persons in a marriage has been the fundamental pillar of family life in a Christian culture. In societies with an even distribution of men and women, the Christian form of marriage has throughout history shown itself to be a most efficient framework for the demographic reproduction of society. But as we will see below, in some parts of South Greenland, the sex ratio was so imbalanced that the *cultural* ban on polygamic forms of marriage added greatly to the already existing difficulties which society had to surmount in its struggle against natural extinction. The natural conditions — *i.e.* the fact that society subsisted by an economic activity which implied a high mortality rate among its performers — caused the number of men to be far below that of women. With the introduction of Christianity and the abolition of polygamy, society was organized in a way which was less functional than it had been in the pagan past. The abolition of polygamy brought about by the missionaries was destined to have a negative impact on demographic reproduction and growth since it denied a number of women the right to live as the lawfully wedded wives of husbands who were already married to other women.

Polygamy was not the only pagan tradition which increased female fertility. Various well established cultural customs — such as wife exchange and the so-called game of the extinguished lamps in which all lights were put out in the longhouses as male and female house mates and occasional visitors had intercourse with each other regardless of existing marital bonds — also meant that the number of births was higher than it would have been if one man was only allowed to make one specific woman

³ The author (Lars Dalager), who in the mid-18th century was a trader and later a chief factor in South Greenland, is also the source for the above mentioned estimate that 30,000 people lived in Greenland when Hans Egede came to the land. For a discussion of the credibility of Dalager's estimates of population sizes, see Marquardt (2002b).

⁴ In this connection it can be mentioned that the census of 1860 describes a man from Aasiaat (in North Greenland) as living in a marriage with his wife and his "co-wife" (Folketælling 1860: 22).

⁵ See the description of the so-called *Habakuk* movement in Lidegaard (1987).

pregnant. Evidently, such examples of what in their eyes were nothing but depraved forms of systematic promiscuity were also banned by the Christian missionaries.

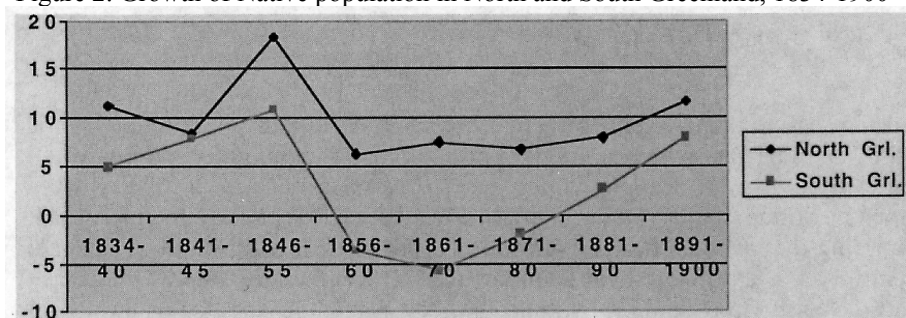
Parallel to their attack on polygamy and fertility raising cultural practices, the missionaries also attacked one of those pagan customs which had an opposite effect on population figures — namely infanticide. The pagan society in Greenland took resort to infanticide when new-born children lost their mother or when they seemed to be simply too fragile for the rough conditions of life which existed among Arctic hunter-and-gatherers. It also took resort to infanticide when hunters' luck failed for so long that the existing stock of provisions became insufficient in relation to the number of people who had to subsist by them.

Thus, through attacking both polygamy, systematic promiscuity and infanticide, the Christianization of the Greenlanders carried demographic consequences which went in opposite directions. As it is, however, the law of the relation between a whole and its constituent parts allows us to conclude that the negative demographic consequences of the ban on polygamy and promiscuity must have outweighed the positive effect of the ban on infanticide. An increase in infant survival caused by fewer incidents of infanticide must namely be very great, before it can neutralize the consequences of just a small decrease in the number of births. Besides, the comparatively high rate of infant mortality which was characteristic of single unmarried mothers in Greenland in the 19th and early 20th century actually makes one suspect that infanticide continued to be among the means which a mother who — because of the ban on polygamy — was unable to bear her child as the lawfully wedded second wife of a providing husband resorted to.

Demographic consequences of religious change

From the first official census of 1834 until 1900, the growth in North Greenland's population was far ahead of that in the South — which even experienced a negative growth between 1855 and 1880 (Figure 2).

Figure 2. Growth of Native population in North and South Greenland, 1834-1900



Sources: Folketælling (1862, 1883, 1892, 1904).

The decline in population in South Greenland between 1855 and 1860 made Denmark's Statistical Bureau calculate the annual average fertility rate in Greenland for the years 1856-60 (Table 3). The Bureau compared its findings with corresponding figures from other parts of the Danish Realm, and the surprising result was that fertility in South Greenland's hunters-and-gatherers' society was not only below that of North Greenland but also below that of Denmark proper.

Table 3. Annual average of fertility rates* in the Danish Realm, 1856-1860

North Greenland	South Greenland	Denmark	Faroe Islands	Iceland
176 births	140 births	166 births	132	192

Source: Folketællingen (1862: 28-29).

*Fertility rates represent the number of births per 1000 women of childbearing years (age: 20-50 years old).

The low fertility in South Greenland compared well with the relatively low number of married women in the district (Table 4). With more than half of the women aged 20 years or more living outside the confinements of a marriage, South Greenland — as was the case with Iceland — represented an extreme case in the Danish Realm.

Table 4. Percentages of married and unmarried persons in the Danish Realm in 1860 (age: 20 years old or more)

	Men			Women		
	Unmarried	Married	Widowers	Unmarried	Married	Widows
<i>North Greenland</i>	25.9	66.7	7.4	20.1	60.8	19.1
<i>South Greenland</i>	26.4	62.7	10.9	29.8	44.9	25.3
<i>Denmark</i>	31.8	62.2	6.0	27.2	59.1	13.7
<i>Faroe Isles</i>	36.0	55.5	8.5	32.0	52.0	16.0
<i>Iceland</i>	37.9	54.8	7.3	38.7	46.5	14.8

Source: Folketællingen (1862: 21).

The difference in demographic structure between North and South Greenland is illustrated by the fact that whereas the married men made up about two thirds of all adult men in both districts, the number of married women made up to 60.8% of all adult women in North but only 44.9% in South Greenland. Under such circumstances it is not surprising that average fertility rates turned out to be low in South Greenland. This fact, however, has been partly obscured by the fact that the birth rate was higher in South than in North Greenland. Thus, both the then managing director of the Royal Greenland Trade Department, Carl Ryberg, in his description of conditions in Greenland 1860-1890, and the grand old man of medico-historical research in

Greenland, A. Berthelsen, used the birth rates from South Greenland to argue that fertility was higher in that part of the country than it was in North Greenland (see Berthelsen 1935: 7-27; Ryberg 1894: 116-117).

A birth rate represents the number of births per one thousand inhabitants in a given society. A fertility rate represents the number of births achieved by a selection of 1000 women of childbearing years. Normally, the two ways of measuring the frequency of births point to the same conclusion, and one therefore can assume that if country A has a higher birth rate than country B, then the women of country A will also display a higher fertility than those of country B. However, if the demographic structure in the two countries is significantly different, problems may arise if parallels are drawn in a too immediate manner. If country B has relatively more women than country A, then the birth rate of B can exceed that of A — at the same time as the average fertility rate of the women of country A can exceed that of the women from country B.

Ryberg (1894) and Berthelsen (1935) mistook the Greenlandic birth rates (Table 5) as a proof of the higher fertility of the South Greenlandic women. They forgot to take into consideration the relative abundance of women in South Greenland. Consequently, a correction which takes this into regard must be made before the figures of Table 5 can tell us something about different fertilities in the two parts of Greenland. In Table 6 this correction has been made. The result confirms the interpretation of Table 3 — namely that the women of South Greenland displayed a lower fertility rate than the women in the north.

Table 5. Annual averages of birth rates* in Greenland, 1861-1900

	North Greenland		South Greenland	
	Absolute figures	Per 1000 persons	Absolute figures	Per 1000 persons
1861-70	128	33	207	36
1871-80	145	35	224	41
1881-90	151	34	216	39
1891-1900	190	41	235	41

Sources: Folketælling (1862, 1883, 1892 and 1904: 30).

*Birth rates are the number of births per 1000 inhabitants.

To sum up then, a sample of one thousand people in South Greenland produced more births per annum than a sample from North Greenland. But the reason for this was not — such as Ryberg and others erroneously believed — that the South Greenlandic women were more fertile, but that there were so many women in the south that this more than neutralized their lower fertility.

Table 6. Adjusted version of Table 5: Birth rates in Greenland, if South Greenland had displayed the same balanced distribution of the two sexes as in North Greenland

	North Greenland — births per 1000 inhabitants	South Greenland — births per 1000 inhabitants
1861-70	33	29
1871-80	35	34
1881-90	34	32
1891-1900	41	35

Christianity, surveillance of morals and demographic reproduction

The fatal combination of an imbalanced sex distribution among adult persons and a ban on polygamy and sexual promiscuity might well have caused the average fertility of South Greenland's women to fall to even smaller figures. That this did not happen was due to the fact that the ban on sexual promiscuity issued by the two missions was not as effective as the missionaries had wanted.

The relatively high number of illegitimate births in South Greenland known from historical time shows that the abolition of polygamy as a legitimate form of marriage was not tantamount to condemning the existing surplus of women to a life without pregnancies and birthgivings. The missionaries and catechists fulminated against the carnal lust which lured the members of their flocks to enter into extra-marital sexual relations, but the respect paid to the ban on polygamy was not accompanied by a like respect for the ban on extra-marital sex. For all their zealous care the missionaries and catechists in Greenland had to learn the same lesson as Christian priests had learned for centuries in Europe — *viz.* that it is far easier to prevent incidents of polygamy and bigamy than to prevent sexual relations between two persons who are not married to each other.

On the annual average, the number of illegitimate births made up 7.4% of all births in South Greenland between 1901 and 1930 whereas it made up only 3.9% in North Greenland. Existing evidence suggests that between 1851 and 1900 it also made up 7-8% in the South but only 2-3% in the North (Berthelsen 1935: 19). According to the missionaries the illegitimate births demolished the morality of their flock. But at the same time they caused the population to rise to a level which was above what it would have been if everyone had acted in accordance with the clerical admonitions. This holds true, even if the group of children born outside wedlock displayed a thought provoking high infant mortality.

The above percentages were calculated from the numbers of illegitimate births recorded in the ecclesiastical sources. Since children who died before they were baptized remained unrecorded (Berthelsen 1935: 16), and since the conditions awaiting children born outside wedlock were certainly not inviting, one can — particularly as concerns the situation in the 19th century — safely assume that an unknown number of illegitimate births went unrecorded as the mothers discreetly did away with their

newborn offspring. Evidently, it is only to the extent that they are discovered and described that incidents of infanticide will leave their traces in the historical sources. In Denmark, infanticide was a capital crime in the 19th century — even though the culprit in almost every case received a Royal pardon and ended up by serving a lifetime of forced labour in prison. Since they were crimes, the unveiled acts of infanticide in Denmark were described in the judicial sources of the time. In Greenland, the Native population was not submitted to the Danish criminal code, and infanticide was not a crime even if it was condemned by the missionaries. For this reason, acts of infanticide went unnoticed in the sources which were produced by the colonial authorities.

In Greenland, stillborn babies were registered by the midwives. One can safely assume that to the number of stillborn babies recorded by the midwives, one can add an unknown number which remained unrecorded because the mother in question gave birth without the assistance of a midwife and could dispose of her child without the interference of this local representative of the colonial power's public health system. However, the very fact that between 1901 and 1930 not less than 7.9% of the (registered) illegitimate births in Greenland resulted in (registered) stillborn babies — whereas the corresponding figure for legitimate births was only 3.4% — suggests that unmarried mothers to a greater extent than the lawfully wedded ones did away with their newborn babies (Berthelsen 1935: 17; *Folketælling* 1860: 30). To put it in the words of Berthelsen (1935: 17): "The high proportion of stillborn babies among children born outside wedlock necessitates an increased attention to the fact that women who bear children under such circumstances seem to hold the life of their babies in low esteem."

The religious curb on society's demographic reproductive capacity in colonial times was of minor importance in those parts of Greenland where the sex distribution was only moderately imbalanced. But in some parts of South Greenland, where this distribution was very imbalanced and where the high number of religious servants⁶ facilitated the latter's strict surveillance of the moral and sexual practices of the members of their congregations, serious problems with the demographic reproductive capacity of the local population arose during the second half of the 19th century.

Many of the unmarried or widowed women who through the ban on polygamy were unable to become second wives of a male provider were originally offered room and board by the Christian missions. Later on, the Royal Greenland Trade Department took over most of the social aid obligations connected to keeping alive those who were without an able seal hunting provider. But for one reason or another, many single women of adult age continued to live close to the local mission stations. And it goes without further saying that when the possible sinners are settled just outside the doorstep of the missionaries, the latter's struggle to prevent the former from falling victim to the sinful temptations of extra-marital lovemaking will have a better chance of meeting with success.

⁶ According to the censuses of 1855 and 1860 there was one religious servant (missionary or catechist) to every 61 (1860) or 85 (1855) inhabitants in North Greenland whereas corresponding figures from South Greenland were one to 44 (1855) or 43 (1860) (*Folketælling* 1855 and 1860). Corresponding figures from Denmark at the same time (1840-1880) are from 20 to 40% of the Greenlandic ones (Bergsøe 1844: 415ff.; Falbe-Hansen and Scharling 1885: 662 ff.).

Regarding the concentrated settlement of unmarried women near the mission stations, the Herrnhutian mission in South Greenland was in a class of its own. Among the Herrnhutian congregations in the huge Qaqortoq district, the sex distribution was actually more balanced than among those Greenlanders who adhered to the Royal Mission. But at the two northernmost mission stations of the Herrnhutians, Lichtenfels (Akunnaat) near Qeqertarsuatsiaat and Neu Herrnhut (Noorliit) near Nuuk, the female majority among the adults rose to extremes. At these two places the local population came during the 19th century to experience something which came close to the above mentioned demographic worst case scenario. At one and the same time one could at these places find a) a high level of concentrated settlement around the mission stations; b) a high number of missionaries and other religious servants; c) a uniquely great surplus of women in the adult ages. It had to go wrong — and it went wrong.

Table 7. Sex balance in South Greenland in the last half of the 19th century: Number of women to every 1000 men

Year	Qaqortoq		Paamiut	Nuuk & Qeqertarsuatsiaat		Maniitsoq	Sisimiut
	Royal Mis.	Herrnhut.		Royal Mis.	Herrnhut.		
1861	1270	1165	1208	1065	1585	1079	1070
1871	1301	1189	1154	1193	1304	1074	1077
1881	1225	1134	1213	1091	1672	1092	1021
1891	1206	1198	1263	1031	1533	1051	980

Source: Ryberg (1894: 120).

The Herrnhutian congregations in Nuuk and Qeqertarsuatsiaat comprised between 50 (Nuuk) and 75 (Qeqertarsuatsiaat) % of the Native population in the district. The sex distribution displayed in Table 7 leaves no doubt about the uniqueness of the imbalance attained at the Herrnhutian congregations in Nuuk and Qeqertarsuatsiaat. The figures shown in the table include boys and girls as well as men and women over 60 years of age. If only adults are considered, the imbalance is even greater (Marquardt 1994: 179-180).

The great surplus of women among the Herrnhutians in Nuuk and Qeqertarsuatsiaat leads one to suspect that the number of illegitimate births must have been high. But it was not. With only 1.8% of all births made up by the illegitimate ones, the district of Nuuk and Qeqertarsuatsiaat had the lowest rate of illegitimate births in the districts of South Greenland from 1851 to 1900. In Paamiut and Qaqortoq to the south, the rate of illegitimate births was six to seven times higher than in Nuuk and Qeqertarsuatsiaat. In Maniitsoq and Sisimiut to the north it was twice as high (Berthelsen 1935: 19). This low number of illegitimate births in Nuuk and Qeqertarsuatsiaat — which is all the more astonishing if we keep the size of their female majority in mind — must be ascribed to the strict moral censure exercised by the Herrnhutian missionaries. The truth of this allegation is substantiated by the fact that in the year 1900 the Herrnhutian mission withdrew entirely from Greenland —

after having signed an agreement which ensured that the members of its congregations could be incorporated in the ranks of the Royal Mission. The absence of the Herrnhutian missionaries' zealous surveillance during the next thirty years was accompanied by a virtual explosion in the rate of illegitimate births in Nuuk and Qeqertarsuatsiaat. From 1901 to 1930 this rate was almost four times higher than it had been from 1851 to 1900 (Berthelsen 1935: 19).

The efficiency of the missionaries' moral censure caused the average fertility of women to be very low among the Herrnhutian Greenlanders in Nuuk and Qeqertarsuatsiaat. If one considers that these congregations had about 1600 adult women to every 1000 men, then the birth rate of 31 births per 1000 inhabitants which they achieved on a yearly average between 1861 to 1900 (Ryberg 1894: 119) must be reduced to a mere 21 to 22 to make them immediately comparable with the general birth rate achieved in each of the two inspectorates⁷ during the same period (see Tables 5 and 6). If one makes such a reduction, then Nuuk and Qeqertarsuatsiaat in a most conspicuous way illustrate the negative demographic impact which an effective ban on polygamy and extra-marital lovemaking could have on societies which are characterized by a heavily imbalanced sex distribution among adult people. As it was, the fertility rate achieved by a sample of 1000 women in the Herrnhutian congregations in Nuuk and Qeqertarsuatsiaat in the last half of the 19th century was but between 50 to 66% of what one could find in those parts of the country where the female majority was smaller — and the moral supervision of the local religious servants less effective.

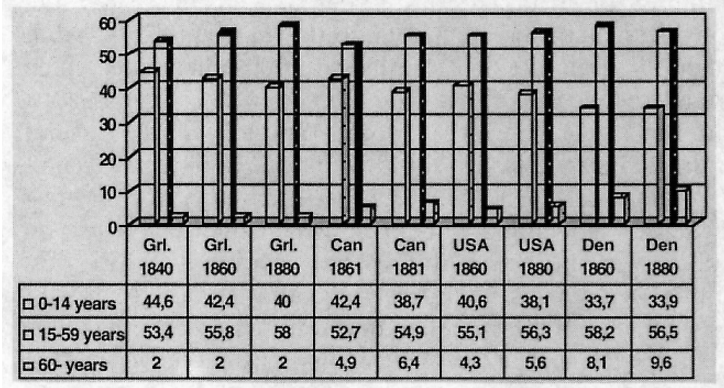
Few children is a consequence of low fertility among women of childbearing years. When Danish and Norwegian missionaries and traders first came to Greenland, they frequently expressed their astonishment at the high number of children which the Inuit settlements contained. The allegation that the Inuit society had a conspicuous juvenile character petrified into common knowledge, and when Danish historian Finn Gad analyzed the early Greenlandic censuses from 1789 to 1805, he felt that his findings substantiated the veracity of this common knowledge. Having analyzed the data, Gad (1976: 111) noticed that "already the first (Danish-Norwegian) newcomers in modern times were impressed by the abundance of children, and this abundance is valid for the period (until 1808) as well." By comparing his findings with the results of the official Greenland census of 1901, which showed that 34% of the inhabitants in the Northern Inspectorate and 32% of the inhabitants in the Southern were below the age of 12, he further concluded that the abundance of children continued throughout the entire 19th century.

The Scandinavian observers of the 18th and 19th centuries had contemporary Denmark and Norway as their standard of reference when they felt amazed at seeing the high number of children in Greenland. Gad's standard of reference was Denmark and Norway as well. As it is, the relative number of children between 0 and 14 years of age in 19th century Greenland was not considerably greater than it was in the

⁷ In 1782, the Danish colonial empire in west Greenland was carved up in two administrative units — called "inspectorates." The Northern Inspectorate covered the west coast from Upernavik in the North to just a little north of the Polar Circle. The Southern Inspectorate covered the region from Sisimiut in the north to Cape Farewell in the south.

contemporary pioneer and immigrant societies of North America⁸ (see Figure 3). One has to go to Denmark — whose demographic structure, as mentioned before, represented the European average at the time — to find an age distribution which warrants the judgement that the Inuit society in Greenland had children in abundance.

Figure 3. Percentages of the population in the age-groups 0-14, 15-59 and 60 or older for Greenland (Grl.), Canada (Can), USA and Denmark (Den), selected years



Sources: Urquhart (1965: 14-16); Historical Statistics (1960: 8-10); Johansen (1985: 108f.); Marquardt (1994: 176-177).

Note: The provinces Newfoundland, Saskatchewan, Alberta and Yukon are not included in Canada's figure. Manitoba is included in 1881 but not in 1861. USA is identical with what at the time were states or territories of the USA.

The not exactly juvenile character of the Greenlandic hunters-and-gatherers' society can also be demonstrated by referring to the age representing the first quarter, median etc. of its population. The figures in Table 8 represent national average figures. The national average is a compromise between fewer children in South and more in North Greenland. Thus, in the 19th century the percentage of the population which represented children from 0 to 14 years of age was from two to four points lower in the south than in the north. In Nuuk the number of children dropped to such low figures that they even were below the corresponding number in Denmark. In 1860 only 36 (Royal Mission) and 32% (Herrnhutians) of the population was below the age of 15 in the Nuuk district. twenty years later the situation had aggravated as but 33% of the Greenlanders attached to the Royal Mission and 28% of those attached to the Herrnhutian one represented children from 0 to 14 years of age (Marquardt 1994: 172-

⁸ A comparison with the results of the two *reconstructed censuses* which demographic historian Jaffe (1992) computed for a) a typical hunter-and-gatherer society and b) a typical forager-and-primitive agriculture society in North America AD 1500, also underlines the surprisingly low number of children in the Greenlandic population. In Jaffe's society a) 54% of the population consisted of children below the age of 15, and 25% consisted of children below the age of 5. In Jaffe's society b) 50% consisted of children below the age of 15, and 22% of children below the age of 5 (Jaffe 1992: 221). Such figures are considerably above the corresponding Greenlandic figures (see Table 2 and Figure 3).

80). The corresponding figure from Denmark is 34% in both 1860 and 1880 (see Figure 3).

Table 8. Age representing the first quarter, the median, the third quarter and the ninth decil of the population

	Greenl. 1840	Greenl. 1860	Greenl. 1880	Denm. 1860	Denm. 1880	Canada 1861	Canada 1881	USA 1860	USA 1880
1. quart.	7.8 ys.	8.6 ys.	8.7 ys.	10.5 ys.	10.6 ys.	8.1 ys.	9.3 ys.	8.6 ys.	9.3 ys.
Median	17.4 ys.	18.2 ys.	19.9 ys.	24.3 ys.	24.2 ys.	18.3 ys.	20.1 ys.	19.4 ys.	20.9 ys.
3. quart.	31.2 ys.	32.3 ys.	33.6 ys.	42.0 ys.	43.3 ys.	33.0 ys.	36.1 ys.	34.3 ys.	36.7 ys.
9. decil	45.6 ys.	44.9 ys.	46.2 ys.	59.4 ys.	59.4 ys.	49.9 ys.	53.3 ys.	49.3 ys.	52.7 ys.

Sources: Urquhart (1965: 14-16); Historical Statistics (1960: 8-10); Johansen (1985: 108f.); Marquardt (1994: 176-177).

Fertility and demographic structure in the 20th Century

After the end of World War I, Greenland abandoned its hunting-and-gathering past in favour of a modern combination of hunting, modern fishing and various forms of wage labour. Parallel to this a more balanced distribution between the two sexes has emerged (see Table 9).

Table 9. Sex distribution in Greenland's Native population (age: 15-59 years old)

	1901	1911	1921	1930	1950	1960	1970	1980	1990	1997
men	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
women	1230	1209	1116	1140	1068	1069	1038	947	932	919

Sources: Statistiske Sammendrag om Grønland (1942: 43); GSK (1990: 345); GSK (1997: 17); Statistiske Oplysninger (1948-58: 4); Beretninger (1962: 10), Gad (1973-72: 93); Statistisk Årbog DK (1982: 523).

Note: The figures from 1960 and 1970 represent the distribution of people 14 or more years old.

In sharp contrast to the conspicuous majority of women which was characteristic of the old seal hunters' society, today's Greenland has a slight majority of men in the adult ages. In modern Greenland the existence of a Christian culture in which the nuclear family constitutes the normal framework for family life⁹ does not impede demographic growth by condemning a high number of women to a life without a providing husband. The disappearance of the kayak hunt in South Greenland has over the years eliminated the former deficit of men among adult people. Besides, starting

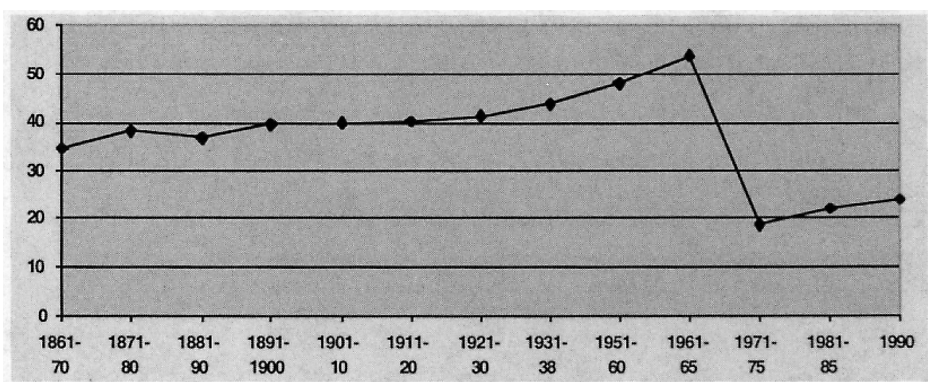
⁹ Since the 1970s many families in Greenland have consisted of a man and a woman who co-habitate, but who are not formally married. This modern secularization of family life does not change the nuclear family's dominant position in society.

with the introduction of wage labour in semi-industrial fish processing plants which took part in South Greenland in the 1920s (Andersen 1993; Thorleifsen 1999), the introduction of modern Western forms of occupation in Greenland has enabled single women to provide for themselves and their "illegitimate" children.

As everywhere else in the world, the introduction of hygienic measures and public health services in the 20th century drove down mortality rates in Greenland, but at the same time fertility rates rose as society left its seal hunting past in favour of a future based on a modern combination of hunting, modern fishing and wage labour. In the first third of the century birth rates rose slowly but steadily above what they had been in the previous century (Berthelsen 1935: 7-27). After World War II they rose rapidly for about two decades — following the rapid social and economic change which the nation underwent in the 1950s and 1960s, and the international baby boom trend of the post-war years. As a consequence of this, children came to constitute an ever growing %age of the national population, and in 1970 there were more children in Greenland (47.7 %) than there probably had ever been.

To avoid the occurrence of the typical "developing country problem" — *i.e.* a situation in which the number of people in the productive and providing ages is very small in relation to the number of those (children and disabled persons) who require providing care — a family planning campaign was launched in the late 1960s. A few years later (1975) abortion was legalized. These measures soon caused the birth rate to drop to less than half of what it had been in the mid-1960s (see Figure 4).

Figure 4. Birth rates* in Greenland from 1860 to 1990



Sources: Berthelsen (1935: 7-8); Statistiske Sammendrag om Grønland (1942: 45); Kleivan (1984: 707); GSK (1990: 44 and 54).

*Birth rates are the number of birth per 1000 inhabitants.

Consequential to the decrease in the birth rate brought about by the legalization of abortion and by family planning, the group of children came to represent a smaller proportion of the Greenlandic population than it had done — not only in the 1950s and 1960s but also in the hunters-and-gatherers' society of the preceding century (see Table 10).

Table 10. Percentage of the population represented by children (0 to 14 years old).

Age	1901	1911	1921	1930	1950	1960	1970	1980	1990	1998
0-4	14.5	15.0	15.2	18.0				9.4	11.2	10.4
5-9	13.1	14.3	14.4	12.9				8.0	9.3	10.6
10-14	10.9	12.6	12.7	12.2				13.3	7.3	8.8
all	38.5	41.9	42.3	43.1	43.2	44.3	47.7	30.7	27.8	29.8

Sources: Beretninger (1962: 10); Grønland (1973: 93); GSK (1990: 345); GSK (1998: 404); Statistisk Årbog DK (1982: 523); Statistiske Sammendrag om Grønland (1942: 43).

Note: The figures from 1950 and 1960 represent children between 0 to 13 years of age.

At the turn of the millenium, in 1998, children in Greenland made up 30% of the national population. This is way below the 40-45% of the national population which it made up in the 19th century (see Figure 3). But it is also above the merely 28% which in 1880 constituted the fraction of central South Greenland's Herrnhutian population which consisted of children. It testifies to the radical character of the demographic reproduction crisis which ravaged the Herrnhutian congregations in Nuuk and Qeqertarsuatsiaat during the second half of the 19th century, that today's Greenland — in which legal abortion as well as modern family and career planning put heavy curbs on the inclination to raise big families — is actually richer in children than were the same congregations 120 years ago.

Conclusion

In conclusion we can say that the demographic structure of South Greenland was during the first two centuries of colonialism unsuited for the introduction of the new Christian version of marriage and sexual morality. The combined influence of existing natural (the high mortality rate for the male kayak hunters) and cultural circumstances (the conversion to Christianity and the Christian moral codex) drove down the number of pregnancies and births — thereby impeding a possible enhanced growth in the size of the population and in some extreme cases even jeopardizing society's demographic reproduction

The last 50 years of the 19th century were tough years for the seal hunters' culture in South Greenland. A change in climate caused the conditions of the kayak hunt to deteriorate as temperatures grew warmer and the incidents of stormy weather and troubled seas became more frequent than they used to be (Marquardt 1999b). Those

South Greenlanders who adhered to the Herrnhutian mission did as a rule depend more entirely on the seal hunt than their compatriots from the Royal Mission (Marquardt 1996). For this reason, the already greatly imbalanced sex distribution which characterized the Herrnhutian congregations in central South Greenland rose to extremes during these years. But the problems which confronted the demographic reproduction of these congregations were not unique. Since a female majority among adult persons could be found in other districts in West Greenland, and since the missionaries' uncompromising battle against polygamy and extra-marital sexual relations was fought in every corner of the land, the situation among the Herrnhutians of Nuuk and Qeqertarsuatsiaat was but an extreme case in a more general trend.

Acknowledgements

Preliminary versions of this paper were presented at the conference *Nature, Society and History. Long Term Dynamics of Social Metabolism*, in Vienna (Austria), in September 1999 and at the symposium *Memory and History in the North*, at the Lac Delage (Canada) in November 2001. A different version was also published in Danish (see Marquardt 2002a).

References

- AMDRUP, Carl Christian *et al.* (eds)
1921 *Grønland i Tohundredeaaaret for Hans Egedes Landing, I-II*, Copenhagen, Meddelelser om Grønland, 60-61.
- ANDERSEN, Vinnie
1993 *Fra fangst til fiskeri*, MA thesis, Copenhagen, University of Copenhagen.
- BERETNINGER,
1962 *Beretninger vedrørende Grønland*, Copenhagen, Ministry for Greenland.
- BERGSØE, Adolph Frederik
1844 *Den danske Stats Statistik, vol. I*, Copenhagen, Bergsøes Forlag.
- BERTHELSEN, A.
1935 Grønlandsk medicinsk statistik og nosografi. Undersøgelser og erfaringer fra 30 Aars grønlandsk lægevirksomhed. Bd. I: Grønlandsk befolkningsstatistik 1901-30, Copenhagen, *Meddelelser om Grønland*, 117: 1.
- BØRRESEN, Peter
1934-35 Undersøgelse af befolkningens levealder i Godthåbs lægedistrikt, *Grønlandske Selskabs Aarsskrift*: 93-102.

- 1936 Undersøgelse af dødsårsagerne inden for de herrnhutiske menigheder ved Nyherrnhut og Lichtenfels fra 1738 til 1900, *Grønlandske Selskabs Aarsskrift*: 94-117.

DALAGER, Lars

- 1915 *Grønlandske Relationer indeholdende Grønlændernes levnet, deres skikke*
[1752] *og vedtægter samt temperament og superstitioner tillige med nogle korte reflectioner over missionen*, Copenhagen, Det Grønlandske Selskab.

FALBE-HANSEN, Vilhelm and William SCHARLING

- 1885 *Danmarks Statistik, vol. I, Første Bind*, Copenhagen.

FOLKETÆLLING

- 1840 *Folketællingen i Grønland*, Original handwritten records on microfiche in Nunatta Katersugaasivia Allagaateqarfialu, Nuuk, National Museum and Archives.
- 1862 *Folketællingen i Grønland 1860*, København, Meddelelser fra det Statistiske Bureau.
- 1883 *Folketællingen i Grønland 1880*, København, Statistiske Meddelelser (3. række; 6. bd.).
- 1892 *Folketællingen i Grønland 1890*, København, Statistiske Meddelelser.
- 1904 *Folketællingen i Grønland 1901*, København, Statistiske Meddelelser (4. række; 14. bd.; 5. hæfte).

GAD, Finn

- 1976 *Grønlands historie, vol. III*, Copenhagen, Nyt Nordisk Forlag.

GRØNLAND

- 1973 *Grønland 1971-72*, Copenhagen, Ministry of Greenland.

GRØNLANDS STATISTIKE KONTOR (GSK)

- 1990 *Grønland 1990 Kalaallit Nunaat*, Nuuk, Statistics Greenland.
- 1995 *Rapport om Arbejde og Ledighed i Grønland*, Nuuk, Statistics Greenland.
- 1996 *Rapport om Indkomstforhold i Grønland 1993*, Nuuk, Statistics Greenland.
- 1998 *Grønland 1998 Kalaallit Nunaat*, Nuuk, Statistics Greenland.

HISTORICAL STATISTICS

- 1960 *Historical Statistics of the United States. Colonial Times to 1957*, Washington, D.C., Bureau of the Census.

JAFFE, Abram J.

- 1992 *The first Immigrants from Asia. A Population History of the North American Indians*, New York/London, Plenum Press.

JOHANSEN, Hans Christian

- 1985 *Danmarks Historie bd. 9: Dansk økonomisk statistik 1814-1980*, Copenhagen, Gyldendal.

KLEIVAN, Helge

- 1984 Contemporary Greenlanders, in David Damas (ed.) *Handbook of North American Indians*, vol. 5, Arctic, Washington D.C., Smithsonian Institution: 700-717.

LIDEGAARD, Mads

- 1987 Profeterne i Evighedsfjorden, *Grønland* (special issue).

LYSTER, Per and GSK

- 1994 *The Economic Conditions for the Greenlandic Hunters and Some General Structures of the Profession*, Nuuk, Statistics Greenland.

MARQUARDT, Ole

- 1994 Demografisk profil for den indfødte befolkning i Vestgrønland og i Godthåb (Nuuk) kolonidistrikt i Rink-tiden, in J. Rygaard *et al.* (eds), *Grønlandsk kultur & samfundsforskning*: 167-190.

- 1996 The Employees of the Royal Greenland Trade Department 1850-1880, Québec, *Études/Inuit/Studies*, 20(1): 87-112.

- 1999a An Introduction to Colonial Greenland's Economic History, Esbjerg-Hull, *Studia Atlantica*, 4: 7-17.

- 1999b A critique of the common interpretation of the great socio-economic crisis in Greenland 1850-1880: The case of Nuuk and Qeqertarsuaat, *Études/Inuit/Studies*, 23(1-2): 9-34.

- 2002a Demografi, fertilitet og religion: demografiske konsekvenser af overgangen til kristendommen og kristne ægteskabsformer i Grønland, in J. Rygaard *et al.* (eds), *Grønlandsk Kultur- og Samfundsforskning 2000-2001*, Nuuk: 115-129.

- 2002b The Importation of European Diseases to Greenland and the Great Smallpox Epidemic in the Nuuk Region in 1733-34, paper presented at the 1st IPSSAS Conference, Nuuk, June 2002.

RYBERG, Carl

- 1984 Om Erhvervsog Befolkningsforholdene i Grønland, *Geografisk Tidsskrift*, bd. XII: 87-131.

SKYDSBJERG, Henrik

1999 *Grønland — 20 år med Hjemmestyre. En samtidshistorie om Grønlands udvikling under Hjemmestyret*, Nuuk, Atuagkat.

STATISTISKE SAMMENDRAG OM GRØNLAND

1942-47 *Sammendrag af statistiske Oplysninger om Grønland*, København, Grønlands Styrelse.

STATISTISK ÅRBOG DK

1982 *Statistisk Årbog for Danmark 1982*, Copenhagen, Statistiske Oplysninger.

STATISTISKE OPLYSNINGER

1948-58 *Statistiske Oplysninger m Udviklingen i Grønland 1949-1958*, Copenhagen, Ministry of Greenland.

THORLEIFSEN, Daniel

1999 The Prelude to Greenland's Commercial Fishery, Esbjerg-Hull, *Studia Atlantica*, 4: 62-83.

URQUHART, M.C.

1965 *Historical Statistics of Canada* (ass. edit. K.A.H. Buckley), Toronto and Cambridge, Cambridge University Press.