

# Meddelelser om Grønland

**Ammassalik, East Greenland**

**– end or persistence of an isolate?**

**Anthropological and demographical study on change**

*Joëlle Robert-Lamblin*



**Man &  
Society**  
**10 · 1986**

## *Meddelelser om Grønland*

The series *Meddelelser om Grønland* was started in 1879 and has since then published results from all fields of research in Greenland. In 1979 it was split into three separate series:

*Man & Society*

*Bioscience*

*Geoscience*

The series should be registered as *Meddelelser om Grønland, Man & Society* (*Bioscience, Geoscience*) followed by the number of the paper. Example: *Meddr Grønland, Man & Soc. 1, 1979*.

The new series are issued by Kommissionen for videnskabelige Undersøgelser i Grønland (The Commission for Scientific Research in Greenland).

### *Correspondence*

All correspondence and manuscripts should be sent to:

The Secretary

Kommissionen for videnskabelige Undersøgelser i Grønland

Øster Voldgade 10

DK-1350 Copenhagen K.

Questions concerning subscription to any or all of the series should be directed to the agent.

### *Agent*

Nyt Nordisk Forlag – Arnold Busck A/S, Købmagergade 49, DK-1150 Copenhagen K. Tlf. +45.1.111103.

## *Meddelelser om Grønland, Man & Society*

*Meddelelser om Grønland, Man & Society* invites papers that contribute significantly to studies in Greenland concerning human beings (such as anthropology, archaeology, arts, economics, education, ethnology, history, law, linguistics, medicine, psychology, religion, social sciences). Papers dealing with borderline subjects as for instance exploitation of natural resources and environmental research may be referred to one of the series *Bioscience, Geoscience* or *Man & Society* according to what is considered appropriate from an editorial point of view. Papers primarily concerned with other areas in the Arctic or Atlantic region may be accepted provided the observations are considered important in a Greenland context.

### *Editorial Committee:*

Torben Agersnap, Bent Harvald og Inge Kleivan, c/o Kommissionen for videnskabelige Undersøgelser i Grønland, Øster Voldgade 10, DK-1350 Copenhagen K.

This volume edited by Bent Harvald.

*Instructions to authors.* – See page 3 of cover.

© 1986 Kommissionen for videnskabelige Undersøgelser i Grønland. All rights reserved. No part of this publication may be reproduced in any form without the written permission of the copyright owner.



# Ammassalik, East Greenland – end or persistence of an isolate?

## Anthropological and demographical study on change

*Joëlle Robert-Lamblin*

# Contents

Foreword and acknowledgements .....	5	From "Eskimo family" to "Greenlandic family": changes in women's fertility and family structure .....	52
Introduction .....	8	Menarche and menopause .....	52
Geology .....	8	Nubility, age at marriage and sexual freedom .....	53
Climate .....	8	Pair-bonding .....	54
Fauna and flora .....	9	The choice of a spouse or partner .....	54
History and administrative organization .....	9	Marriage prohibitions .....	55
Historical aspects .....	9	Marriage and its evolution through time ..	57
Before 1884 .....	9	Celibacy .....	59
After 1884 .....	11	Marital status of the population at various periods .....	59
Administrative organization .....	13	Women's fertility .....	63
Communications between Ammassalik and the outside world .....	15	Infertility .....	63
I The population: anthropobiological and demographic characteristics .....	16	Motherhood .....	63
The data .....	16	Natural fertility .....	64
Sources and critical examination .....	16	The development of contraception .....	65
Nominative censuses .....	16	Analysis by generation of the fertility of women alive in 1976 .....	66
Data from vital registration .....	17	Women's ages at the birth of the first child .....	66
Administrative and medical documents .....	17	Women's ages at the birth of the last child .....	67
Field work .....	17	Fertility rates .....	67
Genealogies .....	17	Birth spacing .....	69
General evolution in the 20th century .....	19	The biological and social family .....	71
The "prehistory" of the group .....	19	Adoption .....	71
Demographic growth .....	19	The importance of kinship .....	75
Nativity .....	22	II Social life and economic development .....	75
The birth rate from 1894-1969 .....	22	Geographical distribution .....	75
The birth rate after 1969 .....	23	End of winter nomadism: sedentarization and human concentration .....	77
The birth rate and the seasons .....	24	Housing and the break-up of the patriarchal family .....	79
Multiple births .....	25	Summer migrations .....	82
Mortality .....	27	Villages today .....	85
Evolution of the death rate .....	27	Qernertivartivit and Ikkatteq .....	85
The death rate and the seasons .....	27	Qernertivartivit .....	85
Infant mortality .....	28	Ikkatteq .....	86
Mortality after the first year .....	31	Isertoq, Sermiligaaq and Tiileqilaaq .....	86
Life expectancy .....	32	Isertoq .....	86
Age at death (disregarding epidemics) .....	34	Sermiligaaq .....	87
Causes of death: epidemics .....	34	Tiileqilaaq .....	89
Other causes of death .....	36	Kulusuk and Kuummiit .....	91
Causes of death today, according to sex and age .....	38	Kulusuk .....	91
Conclusion .....	39	Kuummiit .....	92
Age structure .....	39	Tasiilaq .....	94
Sex structure .....	42	Activities, resources and lifestyles .....	96
Sex ratio at birth .....	42	Hunting and gathering .....	96
Sex ratio according to age .....	43	The major technological changes .....	96
Recent changes in the genetic pool .....	44	Guns .....	96
Hybridization prior to Holm's arrival .....	44	Nets .....	97
Interbreeding with West Greenlanders .....	45	Motor boats .....	98
Hybridization with westerners .....	45		
Long-distance migrations .....	47		

Hunting, fishing and gathering resources . . . .	100	Meals and taste preferences . . . . .	123
Sea mammals . . . . .	100	Attitudes to money and living standards . .	125
Land mammals . . . . .	107	Family and social relationships . . . . .	130
Birds . . . . .	109	III Evaluation of an accelerated evolution . . . .	131
Fish . . . . .	110	Evolution through education . . . . .	131
Gathering . . . . .	111	Leisure, celebrations and culture . . . . .	133
Commercial fishing . . . . .	112	Religion . . . . .	135
Handicrafts . . . . .	115	Social disorders related to accelerated	
Wage-earning employment . . . . .	116	evolution . . . . .	139
Social security . . . . .	118	Alcoholism . . . . .	139
Old age pensions . . . . .	119	Crime and justice . . . . .	140
Widows' pensions . . . . .	119	Suicide . . . . .	142
Disability pensions . . . . .	119	Aggression and violence: mechanisms for	
Family allowances . . . . .	119	controlling them socially . . . . .	144
Other social benefits . . . . .	119	Conclusion . . . . .	146
The coexistence of various lifestyles . . . . .	119	Notes . . . . .	150
Daily rhythms and annual cycles . . . . .	120	Literature . . . . .	153
Diet . . . . .	121	Index . . . . .	159
Staple foods and their preparation . . . . .	122	Appendices . . . . .	161

*I dedicate this work to the memory of Professor Robert Gessain, who made me discover the population of Ammassalik and shared with me his passionate interest and his deep admiration for this small society to whom he dedicated the major part of his work.*

# Ammassalik, East Greenland

## – end or persistence of an isolate?

### Anthropological and demographical study on change

JOËLLE ROBERT-LAMBLIN

Robert-Lamblin, J. 1986. Ammassalik, East Greenland – end or persistence of an isolate? *Anthropological and demographical study on change.* – *Meddr Grønland, Man & Soc.* 10: 1986-12-31.

This work retraces the various phases of the evolution of a small East Greenlandic society throughout the twentieth century and sums up its present-day transformations as a result of its contact with the western world.

Discovered barely a century ago, the Ammassalik Eskimo ethnic group was in a way a “perfect” model of an isolate – whether from a biological or a cultural point of view. It opened to the outside world, slowly before the Second World War, then consistently faster after the 1940's. This society of nomadic sea mammal hunters underwent a real demographic explosion, became sedentary, diversified its activities and lifestyles and is beginning to show some social stratification.

Demographic analysis, on a genealogical basis, has been at the heart of this research on change; it allows us to appreciate transformations in the biological heritage, as well as in family organization and social and economic structures. This approach draws attention to the existing interactions between the various phenomena which make up the life of a small society and determine its evolution.

In conclusion, the contemporary history of some 2300 Ammassalimmiut of Ammassalik district is placed in the wider context of Greenland's accession to Home Rule (in 1979) and of the unifying movement initiated between three of the territories where the Inuit live today: Alaska, Canada and Greenland.

*Joëlle Robert-Lamblin, Directeur de Recherche au Centre National de la Recherche Scientifique, Centre de Recherches Anthropologiques, Musée de l'Homme, Palais de Chaillot, 75116 Paris.*

## Foreword and acknowledgements

Just over a century ago, in 1884, the Western World discovered the existence, on the east coast of Greenland, of a small Eskimo population living in isolation just below the Arctic Circle – the Ammassalimmiut. This nomadic group of hunters and gatherers had been isolated for several hundred years, caught between the ice pack on one side and the ice cap on the other, a situation which favoured the development and preservation of an original material culture, dialect, oral literature and representation of the world.

From an anthropological and genetic point of view, this little endogamous community was a “perfect” model of an *isolate* of the type studied at the Centre de Recherches Anthropologiques, established in 1959 at the Musée de l'Homme, and directed by Professor Robert Gessain. The word “isolate” was used for the first time in 1928 by the mathematician Wahlund, but it is more

commonly associated with the Swedish geneticist Dahlberg, who defined an isolate in 1929 as the intermarriage zone within which an individual can find a spouse.

Small endogamous populations would seem to be good subjects of research for various disciplines such as genetics, immunology, pathology or anthropobiology. Studies on isolates were considerably developed during the 1950s (particularly in the works of Dr. Jean Sutter) and in the 60s and 70s. The seminar organized by Professor Albert Jacquard in 1975 showed how much interest there was in research on isolates, these “natural laboratories”, as he wrote (1971); but it also drew attention to the limits of such an approach for the study of human populations (Jacquard 1976).

The “boundaries” within which isolates arise can be of various types: geographical, historical, economic, social, religious, etc. In Ammassalik all these coincide:



until recently the Ammassalik isolate regrouped individuals who for historical and geographical reasons shared many common characteristics in their biological and sociocultural heritage.

Demographic analysis on a genealogical basis has been at the very centre of my research. As early as 1962, I participated, with Professor Gessain, in the ordering of the exceptional demographic data through which we have known the Ammassalimmiut since their discovery by the Danish officer G. Holm in 1884 up to the present day. Thus we have been able to follow their evolution throughout the 20th century, and some of the evidence even goes back as far as the beginning of the 19th century (Gessain 1980).

When I started on the present work in 1965, my aim was to analyse the transformations of this isolate through contacts with the Western World. Were we witnessing in Ammassalik, as in most other small endogamous populations of the world, a break-up of the isolate due to an influx of outside genes into the heredity of this small human group? How and to what extent was it opening up to the outside world after such a long period of isolation?

In most cases cultural admixture goes with biological admixture and gives rise to profound socioeconomic upheavals. The observation of the transformations in social, economic and cultural phenomena indissociable from those in demographic phenomena was at the heart of my field work and the research I carried out in the administrative archives of the area.

This work on the Ammassalimmiut population has been linked to the vast International Biological Programme started in 1967 to study, among other things, human adaptability in extreme environments (Milan 1980). Anthro-po-demographic analysis is a means of perceiving the adaptation of a human group to its environment in terms of its aptitude to survive and reproduce in it. It was with this aim in view that I carried out research of a similar type in three endogamous communities living in an arctic or subarctic environment: the Ammassalimmiut of East Greenland (living in Ittoqqortoormiit (Scoresbysund) and Ammassalik) and the Qigeron Aleuts of Southwest Alaska.

In the case of the Ammassalimmiut, the amount and precision of the data collected from parochial, administrative, medical sources, etc. – cross-checked, corrected and completed by a genealogical survey carried out among the population – have allowed me to produce a demographic analysis as complete and detailed as possible, comparable to some extent with studies on the historical demography of ancient European populations. Precise and complete data for more than half, and in some cases almost a whole century, such as we have for this population of arctic hunters and gatherers, probably is unique. And over and above the special case of Ammassalik, this analysis could help elucidate certain aspects of the workings of extinct, or extant but less precisely-known societies.

Any such study, however, has its limits and its faults, first and foremost because of the small number of people in the group. Certain results will seem abnormal, arbitrary or statistically non-significant. As is often the case with the study of isolates there is a reverse side to the picture: against the fine, almost “microscopic” level of analysis we have the small size of the sample, which does not permit the application of certain classic demographic methods worked out for the study of much larger populations.

The material on which the present work is based includes, first of all, the invaluable data collected by Professor Robert Gessain during his first stays in Ammassalik in 1934–35–36, supplemented by him in 1965 and 1966 when he renewed contact with the population to continue his research, and discovered archives dating from the late 19th and early 20th centuries. This information has proved vital for the completion of this study of the evolution of the Ammassalik isolate, and for the comparison of past and present.

In 1966, and on several later occasions, I was able to further my research on history, demography and economics by consulting various organizations in Copenhagen possessing documents relating to this area of Greenland: the Ministry for Greenland, for statistics on population and hunting; the Royal Greenland Trade Department; the Royal Library; and the Arctic Institute. Meetings with administrators and scholars who have lived or done research in Ammassalik contributed further to my data. I cleared up certain historical points by consulting the archives of the Moravian Brethren at Herrnhut in East Germany.

But, first and foremost, field work has been the indispensable method of collecting the data presented and analysed in this work. Throughout twelve years of study (1967–1979), including field trips in 1967, 1972, 1977 and 1979, I have observed and analysed the process of change.

While gathering information on the population itself and its anthro-po-demographic characteristics, I tried during each field trip to register systematically and consistently all the economic, social and cultural data necessary to place the demographic analysis within the context of the accelerated transformation of this small group through its contacts with the Western World.

During field work carried out in 1967, 1972 and 1979, I spent some time in each of the permanent villages of the district and visited several of the Ammassalimmiut's summer migration sites. In 1967 I went to distant migration sites, following some hunters to Umiivik in the south, and staying for a few days at Pikiitsi. In 1977, I observed activities during the winter.

It is essential to mention that this work has benefited from the considerable contribution of numerous Danish, Norwegian, French, German and Dutch scholarly publications concerning this population and its culture. These works, extremely precious for my research, have often provided a frame of reference for the understand-

ing of change. Among other names, those of Gustav Holm, William Thalbitzer, Ejnar Mikkelsen, Knud Rasmussen, Arne Høygaard and Robert Gessain will be constantly quoted in this study.

I would like to express my wholehearted gratitude to the many people whose help has been essential to me in carrying out this study, and to pay a tribute to those who are no longer with us.

In Denmark, my collaboration with Captain Ejnar Mikkelsen, former Inspector of East Greenland, and with Kai Jensen, former Inspector of Ammassalik, was important to my research; as was the help of *kommitteret* Axel Svane, *kontorchef* Otto Jensen, and Pie Barfod, in charge of the Department of Statistics; of Ib Tøpfer and Svend Jensen at the Ministry for Greenland. Colonel Helk, and N. O. Christensen, former Governor of Greenland, have always welcomed me at the Arctic Institute, Charlottenlund, which has extensive archives. I would also like to thank Professor Robert Petersen, Dr. Christian Vibe and Dr. Carsten Smidt for the information and help they gave me during my various stays in Denmark and Greenland.

Sofie Jørgensen and Margarida Hermann from Ammassalik took an active part in my work, and I am particularly grateful to them.

In Ammassalik, the kind welcome from the municipal authorities, particularly the former President of the Municipal Council, Aron Davidsen, and the Mayor of Tasilaq, Ole Mathiassen, greatly helped me in organizing my local research. During my various stays in Greenland, whether in Ammassalik, in Ittoqqortoormiit (Scoresbysund) or in West Greenland, I was always greatly helped by the doctors, nurses and midwives of the Health Service: besides the help they gave me with my work they also on numerous occasions solved problems of accommodation and sea transport.

I would also like to thank, for their cooperation, Captain Niels Underbjerg, former magistrate at Ammassalik, and his successor, Karl Andreassen; John Jensen, former Head Teacher at Ammassalik School, and his successors; Pastor Samuel Biilman; Aage Chemnitz and Emil Motzfeld, former Trade Managers in Ammassalik; Willy Nielsen, former Manager of the Greenland Weather Service; Finn Christensen of the Municipal Office; and Vibeke Heegaard, Head of the Old People's Home.

I am deeply grateful to the people of Ammassalik, who have always given me the warmest of welcomes, and who participated directly in this study. Certain peo-

ple from Ammassalik, besides being friends, have been real instructors. This was the case with Elvira Napajgudlak and Emanueli Kilime, Ipa and Dumidia Singertak, Ippi and Kujoro Josuassen, Josepi and Karen Utuange, Ingemann and Akulo Bianco, Thomas and Suzanne Ignatiussen, Jakob and Elisa Maqe, Odin and Olga Maratse, Haraldi and Mada Harald, Jakob and Aurelia Amataneq, Ani Nakinge and Boas Boassen, Ivani Uitsalikitseq, Milika Kuitse, Samueli Mikaelson, Salomon Manigudlak; and I received generous hospitality and help from many others too numerous to mention.

In Paris, I would like to express my gratitude to Professors Alain Girard and Robert Gessain, who have followed my research from the beginning. I can never forget that Professor Gessain initiated me into Eskimology in 1962, and that for twenty years he has constantly encouraged me in my work. He offered me my first opportunity for field work in Ammassalik in 1967.

My thanks to Mme Sophie Dallier-Augier, demographer, who took care of the data-processing aspect of the work; to M. Gilles Pison of the Institut National d'Etudes Demographiques, who helped with the life-expectancy analysis; and to the staff of L.A.49 of the Centre National de la Recherche Scientifique, who have given me all possible help throughout the various phases of this work; to Mme Henriette Le Sausse and Mme Françoise Branson, who helped with the processing of demographic data, Mme Daniele Fouchier and M. Michel Garcia, who drew the figures and diagrams; Mme Marie-France Leroy did the typing, with the assistance of Mme Monique Olasagasti and Mme Geneviève Simon.

This work was accepted as a Thèse de Doctorat d'État ès Lettres et Sciences Humaines at the Université de Paris V-Sorbonne in November 1983 by a jury comprising Professors Alain Girard, Robert Gessain, Yves Coppens, Albert Jacquard and Jacques Lautman.

The English translation was done by Mme Annie Hubert and M. James Manley, whom I particularly thank. The financial support which made this translation possible came from the Commission for Scientific Research in Greenland, *Grønlandsfonden af 1959*, and the Cultural Service of the French Ministry of Foreign Affairs.

Finally I would like to thank Professor Bent Harvald and Mrs Dagny Rosing from the Commission for Scientific Research in Greenland for their help in editing this work.

# Introduction

## Geology and landscape

The administrative limits of the Ammassalik district are defined by the coastal area enclosed by two glaciers, both called Ikertivaq. North Ikertivaq is at latitude 66°30'N and South Ikertivaq at latitude 65°00'N. Geologically the area is part of the old Precambrian Canadian Shield. The substratum is of crystalline rock (essentially granites, gneisses and granodiorites) and its outcrop is reduced to a coastal fringe of little extension. Westwards, the ice cap soon covers these formations with progressively thicker ice, reaching a depth of 3000 m. The ice flowing towards the sea has heavily eroded the rocks, which mostly appear as rounded relief of low elevation. This type of landscape predominates in the area south of Sermilik.

In the central part of the district, however, we find some sharp relief – heights of 1000, 2000 m or more (the highest point being Mount Forel at 3505 m) – which gives the area a mountainous landscape. It is in this highly indented area, constituted by three principal north-south oriented fjords – Sermilik, Ammassalik and Sermiligaq – and several islands and islets (Fig. 2) that we find the settlements of the major part of this coastal nomadic population of sea-mammal hunters – the Ammassalimmiut.

## Climate

Although situated in a subarctic zone, just below the Arctic Circle, the Ammassalik area comes under the influence of two factors which account for the severity of its climate: the glacial East Greenland Polar Current, which flows down the east coast, leading to the formation of an ice pack up to 100 km wide; and the proximity of the ice cap, which creates a cold air mass blown over the area by western winds.

The climate in the coastal region of Ammassalik is characterized by low annual temperatures, a narrow range of mean annual temperature variation (no more than about 15°C), much precipitation throughout the year, frequent winds and a short summer.

The records of the Danish Meteorological Institute give the following averages for the period between 1895 and 1970 (*Meddr Grønland* Vol. 198.3, 1975: 9):

mean annual temperature	–1.2°C
mean temperature for the coldest month (February)	–8.3°C
mean temperature for the warmest month (July)	+6.9°C

average annual precipitation (mainly snow)	819.5 mm
average humidity, depending on the month, varying between	72 and 83%

For the recent period covering 1961-1973 the monthly temperature and precipitation averages for the area are as follows (*Meddr Grønland*, Vol. 204.4, 1978: 7):

Month	Mean temperature (°C)	Average precipitation (mm)
January	–7.1	144.3
February	–7.9	96.5
March	–8.5	102.3
April	–4.2	71.8
May	0.9	51.2
June	4.4	53.3
July	6.6	43.0
August	6.0	51.5
September	3.2	89.7
October	–1.1	79.9
November	–5.8	84.8
December	–7.7	106.7
Annual average:	–1.8	975.0

The absolute minimum temperature recorded during that period was –25°C (in January 1965) and the absolute maximum was +23.5°C (in July 1963). As the weather is very unstable there can be rapid changes and sudden temperature variations in all seasons (particularly after a foehn).

There is no real polar night at this latitude, but there is a dark period throughout which the sun stays very low on the horizon, hidden by the mountains and invisible to the inhabitants. This dark period lasts from late November to late February, when the days begin to lengthen, until the darkness is completely dispersed during a period from mid-May to late July.

As a rule, snow reaches a maximum in April and a minimum in August. There is a minimum ground cover of 15 cm of snow for 260 days of the year.

Winter, characterized by thick snow on the ground and ice-covered seas, lasts a long time: roughly from mid-November until late May. It comprises, however, two distinct phases which have direct repercussions for the occupations and lifestyles of the inhabitants of the area. These are the “dark” and “light” winters. Summer is not very warm, but perpetually light; the absence of snow on the coastal fringe and the breaking-up and melting of the ice pack provide a sharp contrast to the

long winter period. Spring and autumn are very short, and only last a few weeks.

From early November to late June, the ice pack, which re-forms massively along the east coast of Greenland, isolates Ammassalik by preventing all access from the sea. Before the establishment of an airline, Ammassalik was thus totally cut off from the rest of the world for at least nine months of the year. In the interior of the district, except in the areas where sea currents prevent ice formation, the surfaces of the fjords freeze solid, allowing dog-sled travelling and seal netting from December to May.

## Fauna and flora

In this part of Greenland there is little land life: the fauna is reduced to very few species and individuals; vegetation is scanty and inaccessible for the major part of the year because of the snow.

Today, apart from man, the only inhabitants of the area are polar bears, white or blue arctic foxes and sled dogs. The latter, domesticated descendants of the wolf, well adapted to outdoor life in the cold and snow, live in interdependence with man. The Greenlandic sled dog does not have a scientific name of its own, being classified as *Canis familiaris* (Vibe, in *Grønlands Fauna*, 1981: 376).

The reindeer or caribou, which formerly lived in the area, had completely disappeared until an attempt was made to reintroduce it (in 1971). Likewise, the arctic hare is no longer found in this area of East Greenland. The musk-ox could have been found in former times at that latitude, but its habitat today is further north, beyond the northern shore of Kangerittivaq (Scoresby Sund).

There are a few sedentary birds: crow, ptarmigan and snowy owl; but most birds found in the area are migratory and only stay for a time. These include the eider, wild goose and duck, guillemot, diver, auk, gull, kittiwake, tern, etc.

The flora varies according to whether it is in a coastal area with a more Atlantic climate or in the interior towards the ice cap, where the climate is more continental. On the coastal fringe, islands, islets and mountains, vegetation is fairly sparse and adapted to long periods of snow. In the area further inland subarctic and continental species predominate. On the flatlands, and on the sheltered and sunny hills enclosed by the fjords, one can find a type of vegetation consisting of willow bushes, grassy areas with angelica and alchemilla, and heathlands with crowberry, bog whortleberry and dwarf juniper.

The botanist Böcher (1938) identified 186 vascular species in Ammassalik out of a total of 500 species identified for the whole of Greenland. Down through the centuries the Ammassalimmiut have found food uses for some of them (certain stems, leaves, flowers, roots

and berries) and therapeutic or hygienic uses for some others (mosses). They also used certain species for thermal insulation (*Graminaceae*) or fuel (heathers, mosses and lichens) (Bonneval & Robert-Lamblin 1979).

But today, as in the past, the Ammassalimmiut draw most of their resources from an appreciably richer environment: the sea. For centuries, the essential basis of all their material culture was provided by marine fauna: mammals such as seal, narwhal, beluga (white whale), minke whale (lesser rorqual), walrus and porpoise; fish such as arctic char, capelin, sculpin, cod, redfish, halibut, Atlantic wolf-fish, salmon, shark; and molluscs and crustaceans. To these must be added various species of seaweed, seven of which were used by the Ammassalimmiut in the past, and four of which are still used today.

Finally, the sea also brings driftwood, so precious in the past for building boats, winter houses and summer tents in a treeless country. Actually, birches and willows do grow in these areas, but cannot develop. *Salix glauca*, *Salix herbacea* and *Betula nana* creep along the ground, and even in sunny and well sheltered areas they can only grow to a maximum of 30–40 cm.

A list of various animal and plant species eaten in Ammassalik with their English, East Greenlandic, Latin, French and Danish names will be found in Appendix I.

## History and administrative organization

### Historical aspects

Before 1884

The duration of human settlement in this area of East Greenland is little known as yet. The work of Therkel Mathiassen in 1932 was not followed up by any systematic archaeological research until a new programme was started in 1982. Many hypotheses remain to be verified and many questions await an answer (cf. Gessain 1978 b).

In the present state of our knowledge, it is thought that the ancestors of the contemporary Ammassalimmiut were Eskimos of the Thule culture, hunting whales in umiaks, who became seal hunters (in kayaks) when whales were exterminated by Europeans and disappeared from the area. A few centuries ago these Eskimos would have reached the extreme point of their eastern expansion, coming in small groups and following the Greenland coast, some northwards, some southwards. Ammassalik could have been the meeting point of these two migration routes. This could be the origin of an intra-ethnic division among the inhabitants of the district with Sermilik as the "borderline": but we shall deal with this point further on.

When did these Thule hunters, with their tradition of living in large communal houses, arrive? According to archaeologists, the first waves probably arrived in the 14th century, and later ones after the extinction of the Norsemen in West Greenland in the 15th and 16th centuries. But were they preceded on the southeastern coast of Greenland by populations of the Dorset culture, seal hunters who lived in small houses? Could the two have met? Some elements of Dorset culture were found in the Ammassalik area, according to Mathiassen (in *Trap Danmark* 1970: 631; he also mentions elements of Saqqaq culture) and Meldgaard (in *Grønland* 1975:138, 142). Up until now, however, there has been no archaeological research on the development of Dorset culture in this part of Greenland.

All we know is that the region of Ammassalik has been inhabited for several centuries, even for several thousand years. Indeed the very recent research of Møbjerg (1982) confirms the presence of Saqqaq culture in this area as early as 1885 B. C. But we cannot say anything about the question of continuity or discontinuity between the cultures succeeding one another in the area.

Another question remains open: could Norsemen (coming from continental Scandinavia or Iceland) have reached certain points of the eastern coast of Greenland, and possibly settled there? Between the 17th and 19th centuries several European expeditions to the southeastern coast of Greenland set out with the aim of finding survivors or at least some traces of the presence of Norsemen on the eastern side of the country. But when it was finally established that *Østerbygd* ("the eastern settlement") well known from Icelandic sagas was actually in southwestern Greenland, in the area of Qaqortoq (Julianehåb), the question was considered solved and more or less neglected. Various voyages of exploration in the last century and early in this century revealed no non-Eskimo archaeological remains on the east coast.

Some factors, however, seem to indicate that in spite of the ice pack Norsemen did arrive in the area of Ammassalik or further south, at the landfall closest to Iceland, their point of departure. These were probably isolated visitors, not settlements comparable with the ones that developed in the south-west of the country (*Østerbygd* and *Vesterbygd*). The question of the presence of Norsemen between Ammassalik and Kap Farvel has lately been brought up again by the Danish architect John Andersen, who explored these areas by kayak during the summer of 1982.

To leave archaeology aside (and it is far from having revealed all the secrets of this area) and turn to historical accounts, what is known of the Ammassalik area and its inhabitants before they were discovered and described by Gustav Holm in 1884? Holm remarks that according to the old accounts available to him the first areas of Greenland discovered by Norsemen, more than a century before the arrival of Eric the Red, were actu-

ally on the east coast. Indeed, around 877, Gunnbjörn, son of Ulf Krage, was caught in a storm coming from Norway and was driven off course towards the west. Instead of reaching Iceland, he arrived at some islets behind which was a glacier on the mainland. According to Holm & Petersen (1921: 647) this place, known from then on as Gunnbjörn Skær, was situated precisely in the region of Ammassalik. Almost a hundred years later, two Norsemen named Snæbjörn Galte and Rolf of Rodesand, one of whom had been banished from Iceland for murder, went to look for the place described by Gunnbjörn, taking the shortest route west of Iceland, and spent the winter in that spot.

Some time later, in 982, when Eric the Red in his turn had to leave Iceland, he declared that he was going to look for the country seen by Gunnbjörn when he missed Iceland during a storm.

Norse colonization started three years later in the western part of the country. It appears, however, that in the 11th and 12th centuries the first stage of the route followed by navigators leaving from Iceland was the shortest crossing between Iceland and Greenland. They sailed until they were within view of the mountains of Ammassalik (easily seen because of their height and the east-west curve of the coast at that point); then they skirted the ice pack southwards without losing sight of the coast. This sea route was certainly not the shortest, but it was the safest way of reaching the southern end of the country and sailing round it.

Several ships were probably wrecked by being caught in the ice pack. One such shipwreck is known to have happened in 1028, as Finn Fegin, nephew of King Olaf II of Norway (St. Olaf), lost his life in it. The survivors managed to reach the nearest stretch of coast, and buried their dead on an island they called Korsø, placing enormous stone crosses in a creek they named Finnburdir. Later King Olaf had the bodies brought back. The original burial place, according to Holm & Petersen (1921: 648), may well have been the island of Ammassalik.

This route seems to have been abandoned in the late 12th century in favour of a new one which completely avoided the east coast ice.

Some later accounts indicate that a few isolated travellers could have landed and spent the winter on the east coast. According to Mathiassen (1933: 60) the wealthy Iclander Björn Einarsen Jorsalfar spent the winter in Greenland around 1385–1387, and stated positively that the "Gunnbjörn Islands" were inhabited, and that there were 18 "farms" on the largest one. But Einarsen's men did not dare get closer (the "farms" were very probably large Eskimo houses).

In about 1476 the navigators Pining and Pothorst met some Eskimos, probably in the same area (cf. Holm & Petersen 1921: 650) and traded with them; but later there were violent clashes, and the two men stated that Greenland pirates "attack the vessels in many small craft without keels".



After Dano-Norwegian colonization of the west coast was begun (by Hans Egede in 1721) people living on the east coast were mentioned more frequently. Information about them took the form of rumours relayed gradually until they reached the small stations set up by European administrators or missionaries. In fact, most of this information concerned the small Eskimo groups settled on the south-east coast between Kap Farvel at latitude 60°N and Ittuarsuit at latitude 63°30'N. These groups later resettled on the south-west coast when the Moravian Brethren of Herrnhut opened a mission at Friedrichsthal (Frederiksdal/Narsaq Kujalleq) in 1824 and a trading post was opened at Pamialluk in 1848 (this gradual process of relocation ended in 1900). Meanwhile the inhabitants of Ammassalik remained practically unknown.

The Danish merchant Peder Olsen Walløe, who went on an expedition by umiak from Nuuk (Godthåb) to the east coast in 1751–1753, was the first to mention the inhabitants of Ammassalik specifically. Walløe only went as far up the east coast as latitude 61°N, but gathered information from the local people he met about populations living further north. He met a man called Kingutib who had lived in the area of Sermilik, and also learned that there was a place where capelin (called *ammassar*) were plentiful and where people gathered to catch them. This place was called “Kollosub” (actually Kulusuk, a name used by the inhabitants for the area of Ammassalik Fjord, and still in use when Holm spent a winter there in 1884: “The people who in the past called themselves Angmagsalingmiut are today called Kulusumiut”) (Holm 1887a: 55).

In 1829–1830 the Danish officer W. Graah also went on an umiak expedition along the east coast. He left from the south and reached the southern limits of the Ammassalik district (Ikertivaq) at latitude 65°N. On this very arduous voyage Graah was mainly concerned with taking a census of the population of the south-east, but he heard an old man speak of a place he had visited – Sermilik – about six or eight days’ travel north of Umiivik (1837: 135).

Later information came from direct or indirect contacts (through the people of the south-east) between the Moravian missionary in Friedrichsthal or the administrator at Pamialluk and some Ammassalimmiut who had come south to barter for European goods (cf. Ges-sain & Robert-Lamblin 1974). In 1883 the Moravian Brother Brodbeck attempted a voyage of exploration by umiak along the east coast, but did not quite reach latitude 61°N.

Fridtjof Nansen (1890: 277–289) enumerates countless attempts by European craft to cross the ice pack between 1568 and 1882. Some got fairly close to the east coast, but could not clear the last ice barrier and drifted south. The first modern ship to make land at Ammassalik was the *Sofia*, commanded by the Swede Norden-skiöld. In September 1883 it anchored for the day in the

bay which is now called Tasiilaq; but the crew did not meet a single inhabitant during the expedition.

In 1884, still interested in finding traces of the Norsemen’s “eastern settlement”, the Danish Government asked Captain Gustav Holm to set out on yet another umiak expedition along the east coast. On the 1st of September 1884 he reached Ammassalik Fjord with his travelling companions,<sup>1</sup> and set up winter quarters at Tasiilaartik. Holm found no traces of former Norse occupation, but brought the population here to the notice of the outside world for the first time: its size (413 individuals); its dwellings; the area over which it was spread; its uses and customs. As early as 1880–1881, in the Qaqortoq (Juliane-håb) area, he had heard of this Eskimo population living in East Greenland in a place called Ammassalik (i.e. “the place where there are capelin”) (Holm & Petersen 1921: 656).

Before dealing with the entry of the Ammassalimmiut into western history, I must add a final remark. It is true that, as far as these former periods are concerned, we have the accounts of travellers returning from their expeditions; but what we do not know is the number and stories of those who were shipwrecked in the ice pack, tried to survive by reaching the coast, and never returned home. In the 17th and 18th centuries, whale hunting was intensive off the coast of East Greenland, particularly between Spitzbergen and Jan Mayen.<sup>2</sup> The Dutch, German, British, Danish, Swedish, French and Spanish whalers were followed by seal and polar bear hunters. Britons, Germans, Danes and Norwegians were commercial seal hunters; but by the end of the 19th century only the Norwegians continued to hunt along the eastern coast. It is more than likely that some of these European sea mammal hunters would have been forced ashore for one reason or another, and that they had contacts with the Eskimos of East Greenland. We shall come back to this point later (p. 44).

#### After 1884

When Holm and his crew left Ammassalik in 1885 after 10 months spent in winter quarters, they set off a wave of migration southwards among the Ammassalimmiut, who were tempted to leave by the thought of the material possessions offered by the western civilization they had just discovered.

Upon his return to Denmark Holm devised the project of establishing a mission and trading post in Ammassalik: it took ten years for his plans to be realized. And when C. Ryder, returning from an expedition to Scoresby Sund, spent two weeks of September 1892 in Ammassalik, he found a population reduced to a total of 293 inhabitants. A large number of their fellow Ammassalimmiut had left to settle near the colonized areas in the southwestern part of the country. Ryder told the Ammassalimmiut that within two years a trading post would be opened in their area, and that they should start collecting polar bear pelts for future trading.

Actually, the crew of a Norwegian ship got the pelts. Having reached the Ammassalik coast in 1893, the *Ino*, a Norwegian hunting ship with nine men on board, commanded by Peder Michelsen, came close to the shore to hunt and trade with the natives. We know that they exchanged polar bear and fox pelts for metal implements and clothes, including the crew's old and worn outfits. In *Dansk og norsk Fangstvirksomhed paa Østgrønland* (1939: 15) it is said specifically that this was the first winter spent on the east coast by Norwegian hunters; it also says that the profits from this expedition had been poor.

Because of bad weather the ship had to spend the winter on Kulusuk island: it left exactly three days before the arrival of the founders of the new Danish colony. On the 26th of August 1894 the *Hvidbjørn*, commanded by Gustav Holm, arrived at Ammassalik, and the two people in charge of starting the colonization of the Ammassalik district disembarked: Johan Petersen, a Dano-Greenlander (who had participated in Holm's first expedition as an interpreter), responsible for administration and trade, and the Danish missionary F. Rüttel, in charge of evangelizing. With the latter came his wife and two workmen.

In 1896, hearing of a trading post in their native region, many of the Ammassalimmiut who had migrated decided to come back.

One of the most spectacular effects of this western establishment in Ammassalik was the demographic explosion it brought about. In 1925 part of the population (10%) was transported some 1000 km further north, where, along with some West Greenlandic families, they were to found the colony of Ittoqqortoormiit (Scoresbysund). The establishment, by Ejnar Mikkelsen, of a new Greenlandic settlement on the east coast had a double aim: to alleviate the population problems of the Ammassalik district, already considered to be overpopulated; and more particularly to further the Danish cause in the conflict with Norway over the sovereignty of East Greenland.<sup>3</sup>

Because of the difficulty of access to these areas there would be no contacts between these two related populations in Ammassalik and Ittoqqortoormiit (Scoresbysund) except for a few isolated exchanges.

The first important turning-point in the recent history of the Ammassalimmiut was the Second World War. In the late 1930s few transformations could be observed in material culture, family and social life (Mikkelsen & Sveistrup 1944), but the population was then still being shielded from too many contacts with the outside world by the strict control of the Danish authorities, who wanted to protect this small ethnic group, vulnerable as it was in many ways: particularly biologically, through lack of immunity to disease from outside; and socioeconomically, because of the risks involved in abandoning its traditional way of life.

Protectionism and isolationism could no longer be maintained during the Second World War: East Greenland, cut off from all ties with Denmark and the rest of

the country, was directly dependent on the United States for a period of five years. This area of the world became the most important source of meteorological information for sea and air navigation in the North Atlantic. An American radio-meteorological station was set up at Tasiilaq in 1941. In 1942 a military base was built in the heart of the Ammassalik district, so that planes circulating between Europe and America could refuel in emergencies: up to 800 Americans were based there.

One can easily imagine how much the construction and establishment of the base at Ikkatteq would disturb the life of the local population. Later in this work we shall describe the immediate effects, and the events that followed when the Danes regained control of the area in 1945 and began to settle in Ammassalik in increasing numbers.

The second decisive turning-point in the evolution of the Ammassalimmiut towards western civilization was the period that began in the late 1950s and early 60s. This inaugurated a new era of profound transformations and an opening-up to the outside world through immigration and emigration.

The major events of this particular turning-point were:

- beginning in 1957, the regrouping and increasing concentration of the population into larger villages better equipped for trade and medical, educational and religious services,
- the setting-up of facilities for developing commercial cod fishing at Kuummiit in 1957–1958,
- the construction in 1957 of a radar base for the American D.E.W. Line, and then of an airstrip on Kulusuk island,
- the beginning of commercial aviation in the early 1960s, permitting increased communication with the outside world and the development of summer tourism,
- beginning in 1955, the modernization of the small regional capital, Tasiilaq, and the Danish influx to this settlement which has greatly increased since then.

This new phase of the evolution towards "westernization" among the Ammassalimmiut was to continue throughout the following years, encouraged by educational policies tending to integrate the young into Danish society.

In the late 1950s and 60s the whole of Greenland, in its transition from colonial status (until 1953) to integration with Denmark ("North Denmark"), was caught up in a movement towards urbanization, industrialization and rapid evolution. For the Ammassalimmiut, however, who had just left "prehistory" behind, the rhythm of evolution was much more rapid than it was for most of their West Greenlandic compatriots, who had been subjected, since 1721, to a much more gradual process of western colonization. The adaptability of the Ammassalimmiut is remarkable, particularly as regards

1. The Angmagssalikis should be christianized.
2. The trading intercourse must be established for the sake of the population, irrespective of whether it pays or not.
3. Blubber must not be traded in, in order not to tempt the population to deprive itself of essential hunting products.
4. Trading out must be restricted to firearms, iron-ware, tobacco and a few articles of clothing.
5. Articles of food must not be traded out, as this is thought to be detrimental to the future of the population.
6. Sealskins must only be traded in, in so far as it is estimated that the native population has sufficient for its own consumption.
7. Denmark ought to protect the East Greenlanders against uncontrolled trading intercourse and its consequences..."

As soon as the trading post had been set up in 1894, Ammassalik began to be administrated directly from Copenhagen. It was, however, the *kolonibestyrer*, the local representative of the Danish Government, assisted by the minister, who actually managed local affairs within the framework of the general guidelines laid down in a memorandum from the Greenland Administration dated November 26, 1886. Mikkelsen & Sveistrup (1944: 41–42) sum up its essential points:

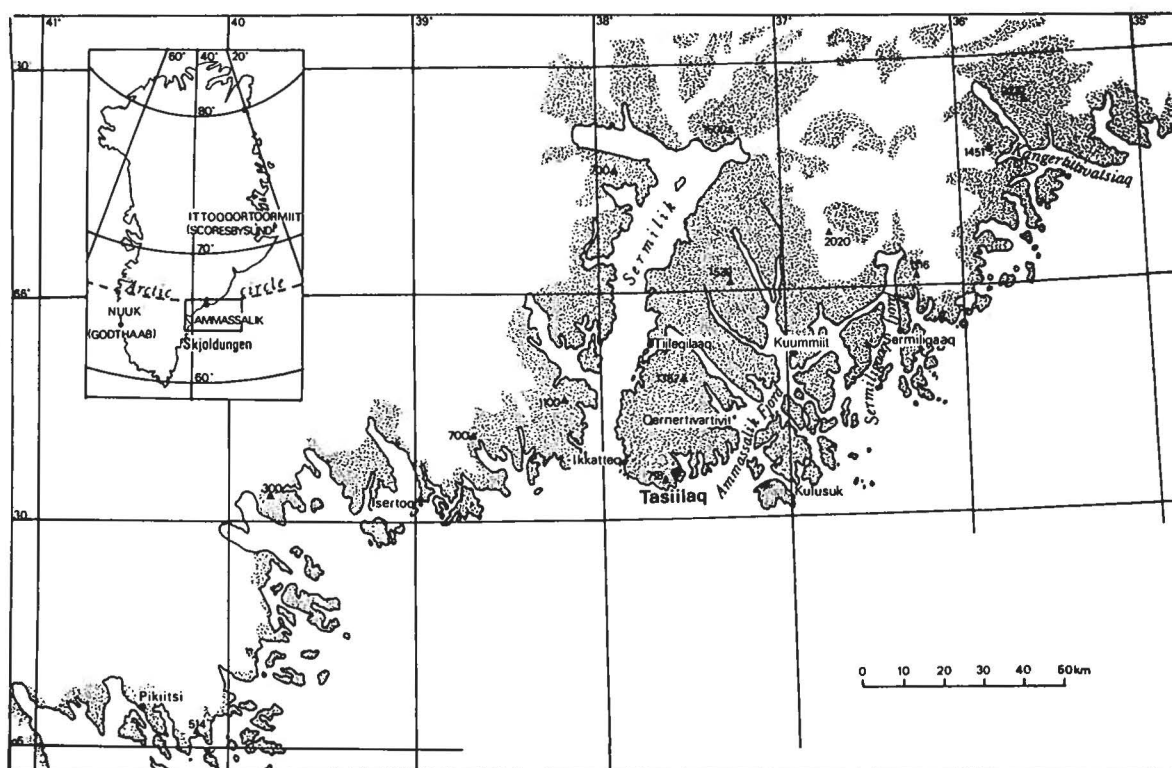


Fig. 2. Map of the Ammassalik area showing localities inhabited today.

Appointed *inspektør* of East Greenland in 1933, Ejnar Mikkelsen supervised the districts of Ammassalik and Scoresbysund until 1950 and came from Denmark almost every year. In 1951 the *kolonibestyrer* responsible for the local administration of each of the two areas became *inspektør* of his area, holding several offices: head of the trading post, treasurer and paymaster-general, magistrate and policeman.

In 1947 the administrative statute of East Greenland, as defined in the *Administrative Bestemmelser for Østgrønland*, made provisions for the creation of a local council, *Østgrønlandernes Råd*.

It included all the people holding important positions: *kolonibestyrer* or *inspektør*, minister, doctor, head teacher of the school, and some Greenlanders nominated for two years by the *inspektør*.

In 1957 this council was transformed into a *distriktsråd* (district council), to which 13 members were elected by the local population of the district in addition to the *ex officio* members (Danes and West Greenlanders holding the above-mentioned positions). Over this local assembly presided the *inspektør*, who sent the demands of the district on to the *landsråd*, the Provincial Council at Nuuk (Godthåb). In Ammassalik, in addition to the *distriktsråd*, there was also the *fangerråd* or council of hunters.

It is only since April 1961 that the districts of Ammas-

salik, Ittoqqortoormiit (Scoresbysund) and Thule have each had their own representative at the *landsråd* (the other areas of Greenland had been represented in this body since 1908). Moreover, these three districts had to wait until August 1958 for the right to take part in the election of the two Greenland representatives to the Danish parliament, while their fellow countrymen had voted for these representatives since 1953.

As of the 1st of January 1963 an elected municipal council was established for the district of Ammassalik, modelled on the municipal councils created in 1950 on the west coast (apart from Thule). In this council, the *kommunalbestyrelse*, ten representatives of the various villages of the area, elected for a period of four years, manage local affairs for the population of the district.

After 1964 the functions of the *inspektør* were divided among various offices: a head of trade (i.e. of *Den kongelige grønlandske Handel* or KGH, the Royal Greenland Trade Department); a *kæmner* (local administrative representative of the state, treasurer, paymaster-general and secretary of the municipal council); the magistrate and police representative. All of these have their own offices and staff. A local court of justice for Ammassalik, identical to those on the west coast, was also established in 1964.

Since 1975 a mayor elected for four years (an East Greenlander who was re-elected in 1979) has been the

chief official of the Ammassalik municipal council. Beginning on the 1st of January, 1976, greater autonomy was granted to the local Greenland councils in the administration of their own budgets. The power of the *kæmner* or central government representative has thus decreased in comparison with the preceding period.

The first party-political meeting ever held in Ammassalik took place in May 1977, when the Siumut party (with socialist leanings and opposed to the Atassut party) opened a local office in the area.

On the 1st of May 1979 Ammassalik, like all the other municipalities in Greenland, celebrated the coming of Home Rule (*hjemmestyre*) to Greenland.<sup>4</sup> According to this new statute, Greenland will progressively take over the management of its own administrative affairs, except for foreign policy and defence, which remain the responsibility of the Danish government. During my stay in Ammassalik in the summer of 1979, it was still too early to observe any obvious signs of the new trend of the country towards "Greenlandization".

## Communications between Ammassalik and the outside world

Until recently the only access to Ammassalik was by sea between July and October, during the short time of the year when the ice pack breaks up, allowing ships to sail in and out. Sometimes during the early years of colonization the ship making the yearly connection with Denmark could not make its way in to the coast, and the district was left in total isolation for two consecutive years.

The ships calling at Ammassalik are freighters chartered by the KGH coming from Denmark (in the past from Copenhagen, today from Ålborg). There is no regular sea link between Ammassalik and other areas in Greenland. The number of freighters coming from Denmark in a year has increased with the volume of imports to five or six, depending on the year.

In the 1960s airline communications were developed between Kulusuk in the east and Søndrestrømfjord (Greenland's international airport) in the west (Fig. 1). This helped to open up Ammassalik to the outside world by allowing the transport of mail, people and goods throughout the year. For a few years there were direct flights between Ammassalik and Denmark via Iceland, but today flights once more take the older, longer and more expensive route via Søndrestrømfjord. During the summer small Icelandic planes come to the area several times a week, but they only carry tourists



The ice-pack in the summer at Ammassalik. To sound the thickness of the ice or to push back blocks that impede circulation by boat, the hunter uses a long pike or *tooq*. (Photo J. Robert-Lamblin, 1967).

who return to Iceland the same day or sometimes spend a few days at the hotel in Tasiilaq.

There are civil flights to the district once a month in wintertime, twice a month in the between seasons and once a week during the summer. However, the American radar base at Kulusuk receives weekly supplies throughout the year and its planes carry the mail for the area.

Until 1975 when one landed at Kulusuk one had to take a boat during the summer or dog sled during the winter to reach the small regional capital, Tasiilaq (Fig. 2). But now that a heliport has been built in Tasiilaq the link is made by helicopter.

In the mid-seventies telephone links were set up to connect Ammassalik with any other point in the country or the world. This has speeded up the exchange of news between this area and the outside world.



# I The population: anthropobiological and demographic characteristics

## The Data

### Sources and critical examination

The sources of data for the study of the detailed demographic evolution of the Ammassalik population since its discovery are particularly numerous. It was possible to establish a demographic file by accumulating and cross-checking the documents. Each individual, identified by a code number, is defined in terms of sex, date of birth, date of death or emigration, and filiation (code numbers of father and mother). One can also find details of marriages and causes of death. This registry, starting from the contemporary period and going back as far as possible in time (6346 individuals for the districts of Ammassalik and Ittoqqortoormiit) was realized through the collective efforts of several members of the staff of the Centre de Recherches Anthropologiques.

The various basic documents used were: the numerous nominative lists; vital registration data (first parish registers, then municipal registers); medical archives; information provided by trade and administrative officials, and genealogical and demographic data collected in the field by several researchers – above all R. Gessain, as well as M. Gessain, P. and B. Robbe, C. Enel, M. Perrot, A. Ducros and myself. We must also mention the very valuable survey of women's fecundity made in 1972 by a former midwife from Ammassalik, Sofie Jørgensen, under the direction of Professor Gessain. This allowed us to fill in the gaps concerning infant mortality in particular.

### Nominative censuses

When he discovered the Ammassalik tribe Holm had the very good idea of establishing a nominative list of inhabitants grouped by locality (in 1884–1885). In spite of omissions and errors, this document is invaluable as a basis for working on. In a way, it is like a photograph of a prehistoric group, showing distribution in space, sex and approximate age, and the balance between producers (mentioned as kayak owners) and consumers, etc.

The next nominative census was done by Ryder in 1892, at a time when part of the Ammassalik population was away, having migrated south. After the setting-up of a trading post in 1894, annual nominative lists were established by the *handelsbestyrer* (trade manager) Johan Petersen, and were made from 1895 until 1899. For later periods we have nominative censuses from Danish

sources or French surveys: these cover the years 1901, 1911, 1921, 1930, 1934 (R. Gessain), 1945, 1951, 1960, 1965 (R. and M. Gessain), 1971 and 1976 (myself).

Processing these data in a genealogical and demographic perspective presented us with numerous problems. In the earliest documents it was sometimes difficult to follow the same individuals from one census to another because they appeared under different Eskimo names. Sometimes it was necessary to look again for the same family nucleus in order to deduce that these were the same persons; but the instability of the couples, the very high death rate among adult males, the frequent practice of adoption, etc., led to a constant restructuration of the sub-groups (the patriarchal large houses) that made up Ammassalimmiut society. The use of different names by one individual was probably due to a notion of personal protection that can still be observed today: a sort of game of hide-and-seek in relation to the outside which can best be understood if one consults the analyses of the signification and transmission of names carried out by R. Gessain (1967 & 1979–80) and P. Robbe (1981).

After the process of christianization was completed in 1921, it became easier to identify individuals in censuses, as parish registers could be used as true vital registration.

As far as more recent years are concerned, other kinds of problems have emerged, connected on the one hand with sexual freedom among the young and on the other with the opening-up of the area to the outside world. The high proportion of children born out of wedlock (more than half of the live births today) makes it very difficult to carry out a study on a genealogical basis. Finally, part of the population is actually hard to locate: young people between 15 and 25, who are not tied to any definite place, are constantly travelling back and forth between their own region, West Greenland and Denmark. As they have neither emigrated nor can be said to be present they elude any satisfactory type of registration.

For each year since 1894 there are also non-nominative statistical censuses of the Ammassalik population. But while a distinction was made in the initial years between the three groups present – Ammassalimmiut, West Greenlanders and Europeans – the West and East Greenlanders were later put in the same group, which made it impossible to distinguish between West Greenlanders temporarily resident in the area and the native Ammassalik population.

## Data from vital registration

Another important source of data was the registration of births, deaths and marriages. At first this was done by the minister in the parish register. But at that time only those who had been baptized could appear in these documents, which accounts for a great many gaps during the first 20 years of christianization. The first baptisms in Ammassalik were performed in 1899. When registering the baptism, the minister inscribed a date of birth (approximate, if the person concerned was elderly). Only the christian dead were registered. As christianization advanced, the recording of demographic events in the church registers improved. And when all the Ammassalimmiut had been converted, in 1921, these registers became reliable documents. From then on births appear in chronological order, and the causes of some deaths are indicated.

Since the 1st of July 1972 the municipality has had its own registry office of the Danish type (the CPR or Central Personal Register). Individuals are identified by their date of birth and place of residence. Information on births and deaths is provided mainly by the hospital.

## Administrative and medical documents

The administrative and medical archives are an interesting source of information, particularly those covering the period around the turn of the century, when vital registration was as yet incomplete. Manuscripts from the trade officials Johan Petersen and A. Hedegaard give numerical data on births and deaths (with their causes) from 1895 up to and including 1929 (with the exception of 1903). Unfortunately these data are not nominative. However, they do give a valuable indication of the health of the population and its reactions to the first imported epidemics. Since there was no trained medical staff whatsoever the trade manager and the minister were in charge of health problems.

The first medical assistance came in the form of doctors' visits to the area, of varying length. Not until the summer of 1946 was a permanent doctor's practice created in Ammassalik. Knud Poulsen, a medical doctor from the Amdrup expedition, spent the winter of 1898–1899 in Ammassalik. Later, Danish doctors paid short visits during the summers of 1903, 1904, 1905, 1927, 1931, 1938 and 1939. During that period two foreign physicians doing research had also spent some time in the area: the Frenchman Robert Gessain in 1934–1935–1936, and the Norwegian Arne Høygaard in 1936–1937. During the Second World War the American doctor from the Ikkatteq base was responsible for medical help.

The first Danish nurse was appointed in Ammassalik in 1932. Previously, in 1916, a Danish nurse Sigrid Bugge had been sent to help with the after-effects of the bad influenza epidemic of 1914–1915; but she left the following year.

Various published medical reports, ranging from the time of the first sporadic doctors' visits to the creation of a real hospital system in Ammassalik, were very useful in completing this work.

## Field work

During my stays in Ammassalik, in addition to the systematic collection of data from local administrative bodies (hospital, municipal council, trade authorities, school, etc.) I had to check some points, fill in some gaps and rectify some errors by making direct enquiries among the population, in particular as regards the paternity of children born out of wedlock, the biological parentage of adopted children, whether children had died in infancy and not been registered, or the circumstances of some deaths.

## Genealogies

Besides the classic demographic study carried out on the basis of all these data in order to clarify phenomena such as birth rates, death rates, natural population growth, age and sex structures, finer and more thorough analyses were made possible by the genealogical method. All the genealogical diagrams first drawn up by R. Gessain in 1934–35–36 were later checked and completed up to the time of the last nominative census taken by myself in Ammassalik on the 31.12.1976.

This genealogical register was so conceived that each individual is immediately situated in relation to his ascendants, descendants, collaterals and spouses. A first listing, obtained by calling the individual's code number, gives the following information: a) the code number and origin of the father and mother of each Ammassalimmiut; b) the date of birth and, if need be, date of death or emigration (keeping the districts of Ammassalik and Ittoqqortoormiit separate).

A second listing, obtained by calling the mother's code number (1305 mothers for both districts) gives all the children born of the same mother, with the identification number of the father. If the mother entered into several unions the different fathers are noted in succession. Moreover, if the father had another wife, her number is given on one side. Finally, a third listing gives the same information when one accesses the father's number (1351 fathers for both districts). Extracts from each of these listings are reproduced in Fig. 3.

With such a system it is possible to find very rapidly, by direct reading or by using specific computer programs, a wealth of information useful for studying genetic peculiarities, analysing family organization, commercial and social exchanges, or the importance of hybridization. This underlines the major interest of using the genealogical method when dealing with isolates, as a preliminary to further analyses in terms of various disciplines.

<b>a</b>	INDIVIDUAL OR.	SEX	FATHER OR.	MOTHER OR.	BIRTH	DEATH OR EM.*
	5989	F	613	758	5.959	.
	5990	F	613	758	12.960	.
	5991	F	613	758	3.963	.
	5998	F	94	468	7.943	.
	5999	M	5268	5998	9.963	.
	6001	F	5799	9905 WG	2.964	07.970*
	6002	M	399	83	11.953	.
	6003	M	267	291	11.940	.
	6004	F	45	583	10.953	.
	6005	M	6003	583	3.961	.
	6006	F	6003	583	2.963	.
	6007	F	6003	583	12.964	.
	6008	F	608	609	3.937	.
	6009	F	6738	6008	6.961	00.000*
	6010	M	292	293	7.945	10.966
	6011	M	292	293	11.947	.
	6012	M	292	293	11.950	.
	6013	F	292	293	11.954	.
	6014	F	292	293	3.960	.
	6015	M	271	270	3.943	.
	6016	F	57627	271	9.957	.
	6017	F	10011 DK	5454	5.963	.
	6018	F	272	844	4.954	.

Fig. 3. Taken from the computer file: a) classified by individuals. b) classified by mothers. c) classified by fathers.

<b>b</b>	MOTHER	FATHER	CHILDREN			FATHER'S OTHER UNIONS	
	878	851	6597 M	6633 M	6641 M		
			6673 M				
	880	879	881 F	882 F	883 F	1156	
			884 F	5092 M	5867 F		
			5868 M	5869 M	5871 F		
			6821 M	6862 F	6889 F		
			6926 M	6985 M	6996 M		
	881	9910	5173 F	5357 F	5358 F		
			5360 M	5361 F	5362 M		
			5363 M	5488 M	7144 F		
	882	184	5791 M	5792 F	5793 M	5024	6862
			5794 M	5795 M	5796 M		
			7121 M				
	883	351	5163 F	5164 M	5165 F	5326	
			5166 F	5167 F	5168 F		
			5169 M	5170 F			
	884	217	5984 M	5985 M	7351 F	528	633
		10087	7032 F				

<b>c</b>	FATHER	MOTHER	CHILDREN			MOTHER'S OTHER UNIONS	
	386	250	5780 M				
	387	77	6786 M			76	94
		6008	5779 F			6738	
	388	23	5285 F	5286 M	5287 F		
			5288 M	6968 M	7099 F		
			7139 M	7376 M	7481 F		
	392	241	5351 F			240	462
		393	394 M	395 M	396 M		
			397 F	398 M	399 M		
			7174 M				
		409	5473 M	6362 M	6364 M	459	
			6365 M	6367 F	6833 M		
	394	206	5785 M	6775 M	6900 F		
			6913 F	6914 F			
	395	447	6240 M	6241 F	6242 F	10047	
			6243 M	6244 F	6245 F		
			6246 F	6247 F	6249 F		

## General evolution in the 20th century

Before we consider the demographic evolution – or rather demographic “revolution” – of the Ammassalimmiut, some knowledge of what preceded this phase of upheavals is essential. Many changes came about when this group entered western history; but what is known of its “prehistory”?

### The “prehistory” of the group

Until they were discovered by westerners, the Ammassalimmiut exhibited the demographic pattern of small nomadic groups of hunters and gatherers, with alternating periods of expansion and high mortality.

In the absence of written evidence or means of measurement, the size of the group and its demographic history can only be estimated on the basis of archaeological data and oral traditions representing the collective memory of the group. Distributed over an immense and inaccessible territory, without any outside assistance, East Greenlanders continually adapted their social structures and technology to the natural resources available in their environment. We know that these resources changed through the centuries for climatic reasons, or because of over-exploitation by other populations (particularly Dutch and Norwegian) hunting along or even in the fragmented ice pack.

It is likely that in the distant past, and up until the 18th century, when East Greenlanders were whale hunters (Gessain 1975: 145), human density was fairly high. The number and size of house remains seem to confirm this hypothesis: whale hunting requires the collective participation of several men grouped together, and the catches can feed a large number of individuals.

But by the 19th century whales had almost disappeared because of intensive European hunting, and East Greenlanders had to turn to the seal as their essential means of subsistence. Hunters were then forced to spread out in order to carry out a more individual type of hunting, and it is quite likely that the number of consumers per producer was considerably lower than in the preceding period.

In the late 19th century the balance between humans and natural resources became extremely precarious, since the large migrant seals (harp seal and hooded seal) were, in their turn, hunted intensively by the Norwegians. Ejnar Mikkelsen (1941: 130) estimates that over a period of 75 years (from 1851–1926) some four million seals of these two species were killed by the Norwegians off the East Greenland coast. These animals, hunted in the summer by the Ammassalimmiut, made up the bulk of their food reserves, and enabled families to survive during the poor hunting periods frequent in wintertime.

During the last century the number of Ammassalimmiut must have fluctuated between a minimum<sup>5</sup> border-

ing on complete extinction (the inhabitants of north-eastern Greenland whom Clavering was the only one to have met, in 1823, disappeared totally in the 19th century) and a maximum which led some of the group to migrate towards new hunting grounds.

Shortly before it was discovered, the tribe had lost some 70 individuals – almost 15% of the population – during a famine in 1881–1882 (Holm 1889: 90; Mikkelsen 1934: 46). Thus in 1884 Holm discovered a numerically weakened group of 413 individuals. As we shall see later from the pyramid based on the figures from Holm's census, the famine took a heavy toll of the 0–4 age group, even if we take into account the fact that some young children were forgotten in this census.

The analysis of this first nominative list and supplementary documents shows that the population was a small one of less than 500 individuals whose rate of reproduction was determined by natural fertility, with a time-lapse between children of 24–26 months due to an extended period of breast feeding. Birth rates seem to have been between 30 and 40 per thousand. Death rates were of the same order, with higher mortality among young children and adult males exposed to the dangers of hunting. Because of the high infant mortality rate only three or four of a woman's eight or nine children would survive.

The group did not control its own reproduction in the sense of intentionally practicing any form of birth control; but it “controlled its survival” in the event of serious famine by letting the old, widows and orphans commit “suicide”, or by infanticide in the case of newborn girls.

In 1884 there were 109 men aged approximately from 15 to 55 out of a total of 413 consuming individuals. This meant that one hunter had to feed an average of three persons in addition to himself. Family groupings, which re-formed every autumn when returning to the great winter house, took this into consideration: there had to be a balance between producers and consumers. New demographic events such as births, marriages and deaths could reshape the modes of association binding nuclear families into extended families, which had to form entirely self-sufficient cells throughout the winter. The society was thus constantly subject to a restructuring process for economic and demographic reasons.

### Demographic growth

When Holm, having spent the winter in the Ammassalik area, left for the south in August 1885, he set off an important phase of emigration. Between a fifth and a quarter of the population of Ammassalik left for the south in successive waves in search of the European goods whose existence they had just discovered.

## Ammassalik population

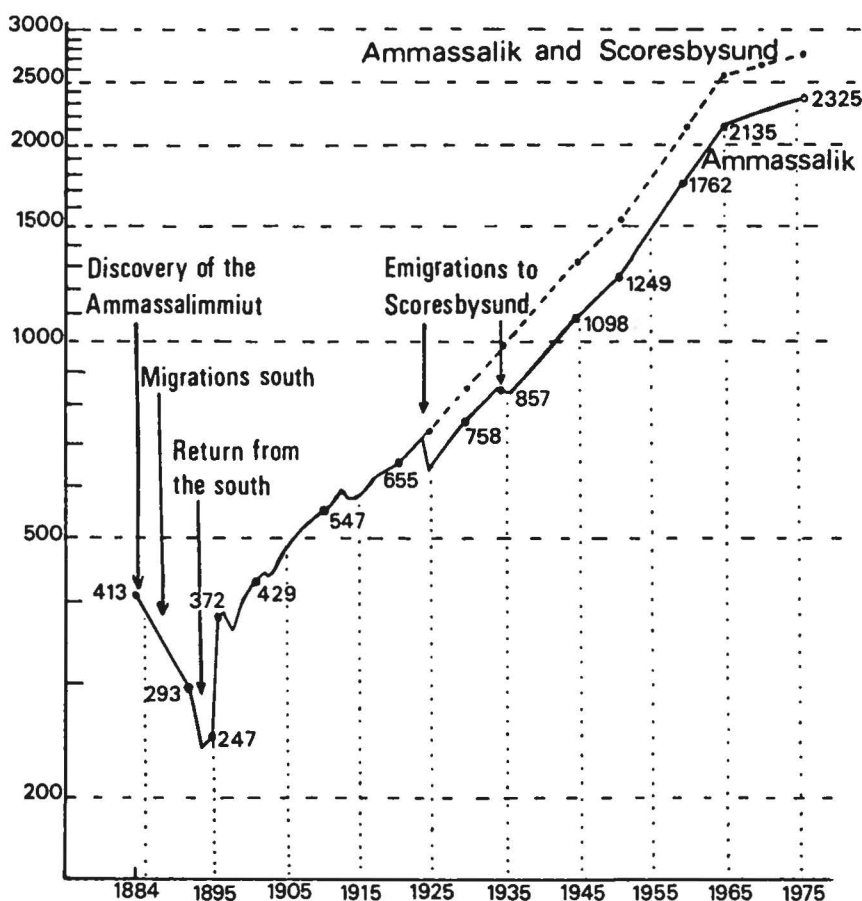


Fig. 4. Evolution of the Ammassalik population since its discovery, from household censuses.

The number of individuals who remained in Ammassalik between 1885 and 1895 was low. During his summer expedition in 1892 Ryder only found 293 persons scattered throughout the district in small groups. Apparently no foreigner had been in contact with them since Holm's departure. After Ryder himself departed he left the Ammassalimmiut with a coryza epidemic which, as Hedegaard tells us, lasted a long time – until the summer of 1893. It was further aggravated by the fact that during the winter hunting had been bad and food was scarce.

Ryder had attempted to stop the movement towards the south which was depopulating Ammassalik by announcing the forthcoming opening of a trading post in the area; but departures went on, and in 1894 only 235 individuals were left in the district. This explains the drop in the curve in Fig. 4, lasting until 1896, when the emigrants and their descendants returned home. However, they had lost many people in epidemics in the Kap Farvel area: the archives of the Moravian Brethren mention in particular the very severe influenza epidemic

of 1892, which took a heavy toll of the population of southern Greenland, and affected the visitors from the east, many of whom died.

The setting-up of a trading post and a small mission at Tasiilaq induced many of those who had emigrated south to return to their native region. In 1896, 120 of them came back: 50 males (22 adults and 28 children) and 70 females (42 adults and 28 children).

Several publications by Mikkelsen and Gessain describe in detail the period of the first contacts between the Ammassalimmiut and westerners. So I will not come back to this period except for the sake of references or comparisons with the following one.

The growth of the Ammassalik population that began within the first few years of colonization was spectacular, despite the heavy death toll taken by diseases introduced by the foreigners, against which the indigenous population had no immunity (Fig. 15).

In the five years between the censuses of 1896 and 1901 the population of Ammassalik showed an average annual increase of 2.85%. Over the 15 years between



Women of Tuleqilaq: Elisa Sigvertsen and her daughters Tomasine and Asta. (Photo J. Robert-Lamblin, 1967).



the censuses of 1896 and 1911 the average annual increase was 2.54%, and over 25 years (1896–1921) it reached 2.2%.

Thirty years after the establishment of a trading post and the return of those who had emigrated south, in the absence of further migration, the number of Ammassalimmiut had doubled. Administrators were already thinking in terms of overpopulation when, in 1925, 70 individuals left for Scoresbysund, 1000 km further north, where the Danish government had decided to establish a new Greenlandic settlement. The study I made in 1968 and 1970 of the demographic and socioeconomic adaptation of these founders of Ittoqqortoormiit (Scoresbysund) was published in 1971.

Without the natural restraints which had operated previously (there were no more serious famines) and despite serious epidemics, the gap between birth and death rates, previously low, non-existent or even negative, was accentuated (Fig. 6). When medical help became more readily available, population growth accelerated even more, reaching an annual average of over 3% and even 4% during the 1960s. In the 20 years between 1945 and 1965 the Ammassalik population doubled, without immigration and despite a sizeable emigration.

Totalling all the descendants of the Ammassalimmiut living in the two districts of Ammassalik and Ittoqqortoormiit (not including those who emigrated), we see that over a period of eighty years (1896–1976) they have become seven and a half times as numerous as their ancestors.

Fig. 4 retraces the evolution of the East Greenlandic population of Ammassalik on the basis of nominative censuses identifying individuals. The curve thus mainly

represents Ammassalimmiut, with the addition of a few West Greenlanders assimilated through intermarriage. West Greenlandic civil servants and their families living temporarily in the area are not represented in these figures. Even though they have been a major influence on East Greenlanders, they were never a very large community, constituting between 1% and 4%, depending on the period, of the whole Greenlandic population registered in the Ammassalik district.

The demographic explosion was not confined to East Greenland. The population of West Greenland also increased rapidly, if not quite as rapidly as that of East Greenland, in the 20th century, up until the 1940s. The Greenlandic population of the whole country doubled in the first fifty years of our century. But in the 25 years from 1940 to 1965 it doubled again. We could say that in 80 years (1896–1976) the whole Greenlandic population quadrupled.

Between 1955 and 1968 the annual rate of Greenlandic population growth was constantly more than 3%, rising above 4% for the years 1959, 1960 and 1961. These rates were close to the world records established by some countries in Africa, the Middle East and Latin America. Danish authorities concerned with the economic growth of their "northern province" were alarmed. In the summer of 1968 a vast birth control programme was started in Greenland, in an attempt to stop this uncontrolled population explosion. This Malthusian policy quickly proved effective, and within four years the drop in the birth rate had brought down the annual natural increase in the population to about 1%.

In contrast to the situation in Greenland, the first contacts between westerners and indigenous populations in other arctic areas (Northern Canada, Alaska,

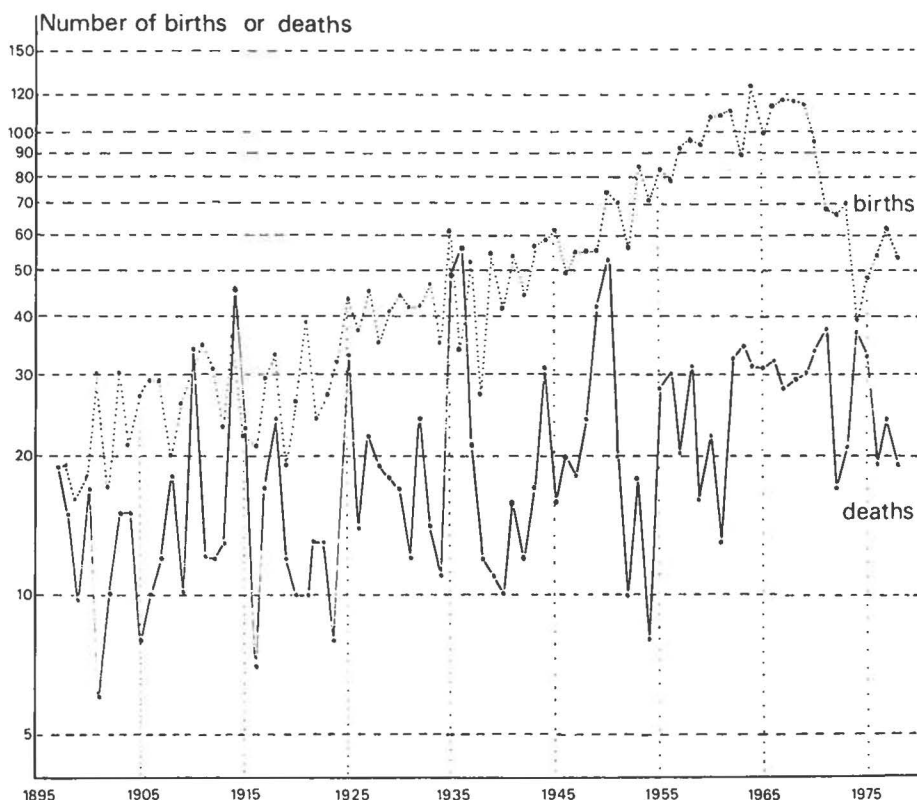


Fig. 5. Annual variations in births and deaths among the Ammassalikmiut of Ammassalik district.

Siberia) had led to a sharp decline in these populations. In Alaska, some fifty years after they had been discovered by the Russians, the Aleuts had been reduced by about 85%, but this is probably an extreme case. From the 1950s onwards the Eskimos of Canada and Alaska, like the Greenlanders, exhibited a very high rate of demographic growth (Bone 1973). In Alaska this was slowed down by a birth control programme begun in the late 1960s.

It would be very interesting to do a comparative analysis of demographic statistics on various Eskimo populations. Unfortunately, the basic data used to compile these statistics vary from one country to another, and comparisons are almost impossible. As Bone points out, even the very definition of an Eskimo varies according to country. In Alaska, since 1960, individuals have been able to choose the ethnic group to which they wish to belong (Indian, Aleut, Eskimo or Caucasian). In Siberia too one may choose one's ethnic "nationality". In Canada, membership of the Eskimo community is determined by the ethnic group of the father and the language spoken. In Greenland official statistics consider as Greenlandic any individual born in Greenland (including a few "westerners").

As far as Ammassalik is concerned, we will analyse in detail the factors that favoured the demographic explosion between 1894 and 1969, and those that slowed it down after that date.

## Natality

### The birth rate from 1894–1969

The very high birth rates for the twentieth century are largely due to the youth of the population; but they also reflect the high fertility of the Ammassalik women. Yet Ejnar Mikkelsen (1944: 35) speaks of the "low birth rate" of the East Greenlandic population at the time of its discovery, and concludes that it would soon have become extinct without Danish intervention. His proof is based on an analysis of the nominative list from 1884, and on the number of births during Holm's stay of ten months. For example, he finds 1.8 children per "married" woman in the 1884 census. Certainly the age pyramid for that period is narrow at the base (Fig. 16); but we must not forget that the population had just come through a very serious famine in 1881–1882. This disaster must have affected young children in particular and had some repercussions, at least temporarily, for the fertility of women who had suffered from malnutrition.

A hypothesis about the reproduction of a small population based on so little information and such a short period – a period which was moreover the aftermath of a disaster – seems doubtful to me.

As we shall see, the death rate (and particularly infant mortality) was high at the time and decreased later, but it is hardly likely that the birth rate would have in-

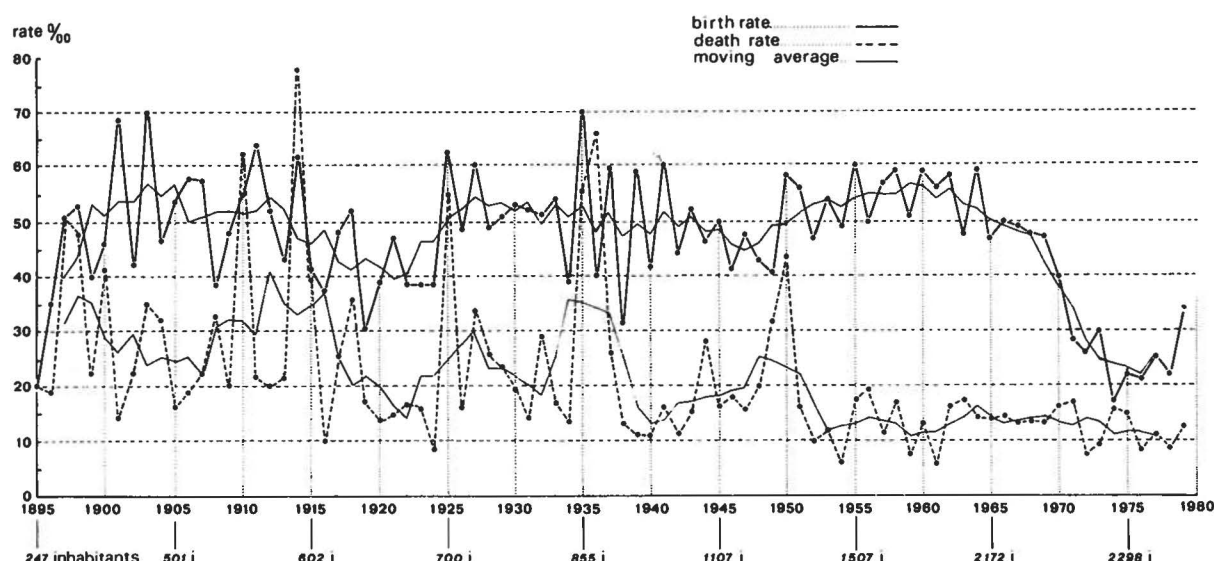


Fig. 6. Movements in birth and death rates in Ammassalik (Greenlandic population).

creased suddenly within a few years to over 35 per thousand as early as 1896, even before colonization had brought about any appreciable changes in material or social lifestyle. On the other hand, during the 20th century a number of factors could have had repercussions for women's fertility: the stabilization of unions, lower marriage age, greater freedom of behaviour among the young, a shorter breast-feeding period, etc.

In the 20th century, up until 1970, the curve for annual birth rates (Fig. 6) rarely falls below 40 per thousand, and never below 30. Several times it exceeds 60, even reaching 70 per thousand. Usually these birth rates were higher than those for the whole of Greenland, although the latter were already very high for the same periods – between 38 and 50 per thousand. For Denmark, the Malthusian colonizer, birth rates were 22.3 in 1921–1925; 17.6 in 1951–1955; and 17.3 per thousand in 1961–1965. However, the age structures of these populations, Greenlandic and Danish, are essentially different.

#### The birth rate after 1969

The birth control campaign which was initiated in all districts of Greenland in 1968 did not actually get started in Ammassalik until 1969 since, according to medical reports (*Landslægens Årsberetning* 1968: 82), the doctors of the district had not received the necessary instructions the previous year. As early as 1970 the Ammassalik birth rate was lowered appreciably, and this trend was further accentuated during the following years.

In Ammassalik, as in the other districts of Greenland, the birth control device usually recommended for women over 18 is the coil (intra-uterine device or IUD).

Installed by the doctor at the Tasiilaq hospital or at the small nursing station in Kuummiit, it proved to be the most efficient and most easily dispensed contraceptive device for the Greenlandic population. According to medical records for 1969 and 1970, 67 IUDs were installed in 1969 and 110 in 1970 (none in 1968). However, in small and remote localities midwives at first used sterilizing injections of Provera, which were effective for three months.

The birth control campaign quickly had an effect on the Ammassalik birth rate. In 1967 there were 116 births; in 1968, 115; in 1969, 113; in 1970, 94; and in 1971 only 67 (Fig. 5).

Interestingly enough, married couples, rather than young unmarried women, were the first to reduce their progeny. (At the time from one third to half of all children were born out of wedlock). This difference of behaviour between married and single women led to an increased percentage of hybridization in the population, most children of mixed blood being born to unmarried mothers.

The birth rate continued to drop when the law liberalizing abortion reached Greenland; in Denmark it had come into effect in October 1973. In Ammassalik, although the number of births was already decreasing rapidly, a sharp drop was registered, from 69 births in 1973 to 39 in 1974 (i.e. a birth rate of 17.1 per thousand in 1974). In the same year the birth rate for the whole of Greenland was at its lowest – 16 compared with 19 for the two preceding years. In Denmark the birth rate for 1974 was 14.1 per thousand.

If birth control was accepted readily by the East Greenlanders, who still remained attached to certain ancestral values, this was not the case with abortions. In conversations I had in 1977 the older people expressed

Table 1. Evolution of abortions in Ammassalik since 1973, according to the hospital's medical statistics (*Landslægens årsberetning*).

Years	Number of legal abortions*	Number of hospital births*	Total number of births in the district	Abortions in relation to live births
1973	17	38	75	22.7%
1974	20	26	45	44.4%
1975	14	34	55	25.4%
1976	22	36	54	40.7%
1977	36	51	66	54.5%
1978	23	44	58	39.7%
1979	21	55	82	25.6%
Total	153	284	435	35.2%

\*including Danish population

sharp disapproval of such practices, which were shocking to their way of thinking. In fact at that time most of those who asked to have their pregnancies terminated were very young unmarried women living in the small regional capital. I was told that in some cases where under-age girls needed their parents' consent, the parents categorically refused and offered to bring up the child themselves.

Table 1 does not differentiate between the Greenlandic and Danish populations, but it shows the decisive role played by the Tasiilaq hospital, where there was one abortion for every two births during the period. In the whole district during the same period one pregnancy in four was terminated by an induced (or legal) abortion.

We arrive at the same overall result for the whole of Greenland during the period 1973–1979. Taking the years in detail, however, the percentage of abortions increases regularly compared with that of live births, whereas in Ammassalik it tends to fluctuate from one year to another, apparently decreasing after 1977.

There was a slight recovery in the birth rate among the Ammassalimmiut in 1979, but it was then still too early to say whether this trend would be confirmed.

We can thus observe three different phases in the history of the Ammassalik birth rate: the non-Malthusian period preceding their discovery; 75 years following colonization, equally non-Malthusian, but affected by change; and the contemporary period with well-developed Malthusian practices. It is interesting to observe the speed with which Danish directives penetrated to, and were implemented in, even the most isolated areas of East Greenland. One of the reasons might be the importance of the medical sector and its impact on the population. Let us recall an extreme case, that of Ittoq-qortoormiit, where the doctor, using his influence on the local population, carried out his instructions from Denmark with such zeal that by the autumn of 1968 he had fitted more than two thirds of the women of reproductive age with IUDs, thus achieving a sudden drop in the birth rate: from 52 per thousand between 1959 and

1968 to seven per thousand in 1969 and 1970. This brought on a climate of worry and incomprehension among the small population of the district (Robert 1970).

In the long term, this policy of putting a sudden stop to demographic growth is likely to create severe imbalances in the age distribution of the population.

#### The birth rate and the seasons

At the turn of the century Bertelsen, who was a doctor of medicine, examined the West Greenland birth registers for the years 1851–1900, looking for a possible seasonal effect on conceptions in the various areas (1907: 531–535). In a work published in 1935 he gives the distribution over each quarter of the year of a total of 387 births in East Greenland for the period 1921–1930. This showed that there were relatively more births in the first and last quarters, and that the second quarter had the lowest number of births (1st quarter, 112 births; 2nd quarter, 69; 3rd quarter 103; 4th quarter, 116 births – where 100 is the average number of births for a quarter).<sup>6</sup> From this he concludes that conceptions are fairly numerous in the first and second quarters, and fewer during the third – a time of the year (July, August and September) which is the period for summer hunting among the outer islets and which can be very hard if the sea remains free of ice. According to Bertelsen, it is the worst period nutritionally as well as the most unfavourable one for the general health of East Greenlanders.

Using the available data I went through the monthly birth distribution for Ammassalik in detail (Fig. 7), since the seasonal calendar does not coincide exactly with the four quarters of the year. I mentioned above that in this area there are two major, contrasting seasons of unequal length: the light summer, when snow melts and the ice breaks up, lasting about three months; and the winter, cold and partly dark, when snow-covered land and sea blend into one another, lasting some seven months. Between these two periods there are two

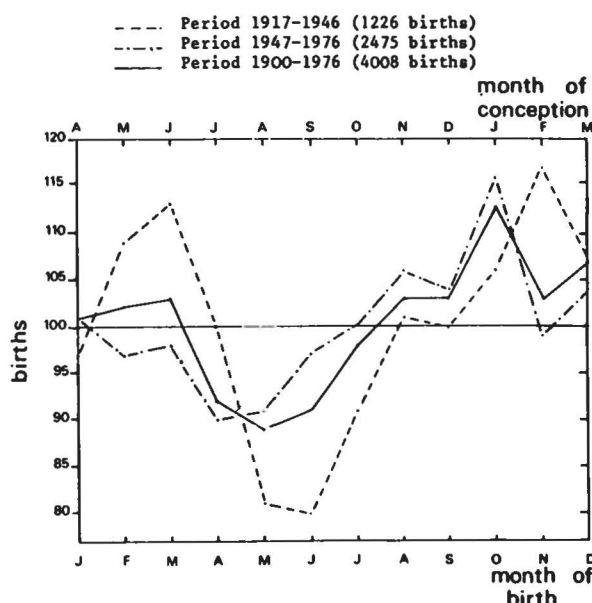


Fig. 7. Seasonal variations in birth rates (Ammassalikmiut of Ammassalik district).  
Percentage of births for the period 1917–1946 for which the month is unknown: 0,6%; for the period 1947–1976: 0,3% and for the period 1900–1976: 3%.

intermediate “half-seasons” of about one month each. In the Arctic, perhaps more than anywhere else, the seasons set the rhythms for various activities. As Marcel Mauss showed in his *Essai* (1906), fundamental changes in lifestyle, affecting not only the type of habitat and various activities but also social and religious life, corresponded to very marked seasonal variations.

For Ammassalik I divided the observation period into two major phases: one when the population was still relatively attached to its traditions, from 1917 to 1946, and another when western influence had a greater impact, from 1947 to 1976, i.e. the post-war period. The curve for births in the more traditional phase shows an appreciable drop in May and June (i.e. a drop in conceptions in August–September, as Bertelsen had shown), and two peaks in winter: one in February–March and one in November (corresponding to numerous conceptions in May–June and February). The range between the two extremes in June and November is 37%.

On the curve based on more recent data, the drop in births moves towards April–May (corresponding to conceptions in July–August) and is less sharp. There is only one peak in winter, which has moved to October (the result of January conceptions). In this more recent period May and June are no longer peak months for conceiving children, and the range between the extremes of April and October has narrowed down to 25%. Seasonal fluctuations have attenuated.

These diachronic changes can only be explained by

changes in lifestyle and economic conditions. Several factors could be involved simultaneously: changes in behaviour (such as increased sexual freedom among the young) and changes in material conditions – for example in types and rhythms of seasonal migration – or the development of cod fishing, which improved living conditions at an otherwise difficult time of the year (from late August to November, when there was a sharp drop in conceptions in the 1917–1946 period). It would appear that the distribution of births is not linked to the effect of climatic conditions on women’s fertility, but rather to lifestyle and state of health, since it was changes in these two conditions that effected alterations in the seasonal distribution of births.

For the whole period under observation, i.e. 1900–1976, we can note a trend towards more conceptions in the winter months and fewer in the summer months.

### Multiple births

It is impossible to know with any accuracy the twinning rate in the pre-discovery phase of this society, since, given the difficult conditions of delivery and survival, twins would most often die at birth or shortly after. In the absence of civil registration for this period, we only know of the ones who survived. In Holm’s censuses (northern group, 413 individuals; southern group, 135 individuals) there were three pairs of twins: two males born in 1850, a male and a female born in 1872, and two females born in 1880.

A few cases are known from the initial colonization period: in 1897 a new-born boy was buried alive with his stillborn sister; in 1909 two twin girls were either still-born or died at birth; in 1915 one of two twin boys died at birth and the other survived.

The percentage of multiple births is only available for the period covered by more complete data, 1917–1976. Of the 3715 individuals born during that period 104 were twins or triplets – 49 twin births (i.e. one twin birth per 75 deliveries) and two cases of triplets.

Periods	Percentage of multiple births per total number of deliveries
1917–1926	1.6%
1927–1936	1.9%
1937–1946	1.8%
1947–1956	1.5%
1957–1966	0.9%
1967–1976	1.3%
Total 1917–1976	1.4%

This overall percentage (1.4%) is the same as the one given by Bertelsen for Denmark in 1901–1910, but it is higher than the one he gives for West Greenland (1%) in 1921–1930. The author mentions, however, that data from parish registers in West Greenland are probably incomplete (1935: 18). In Ittoqqortoormiit the twinning



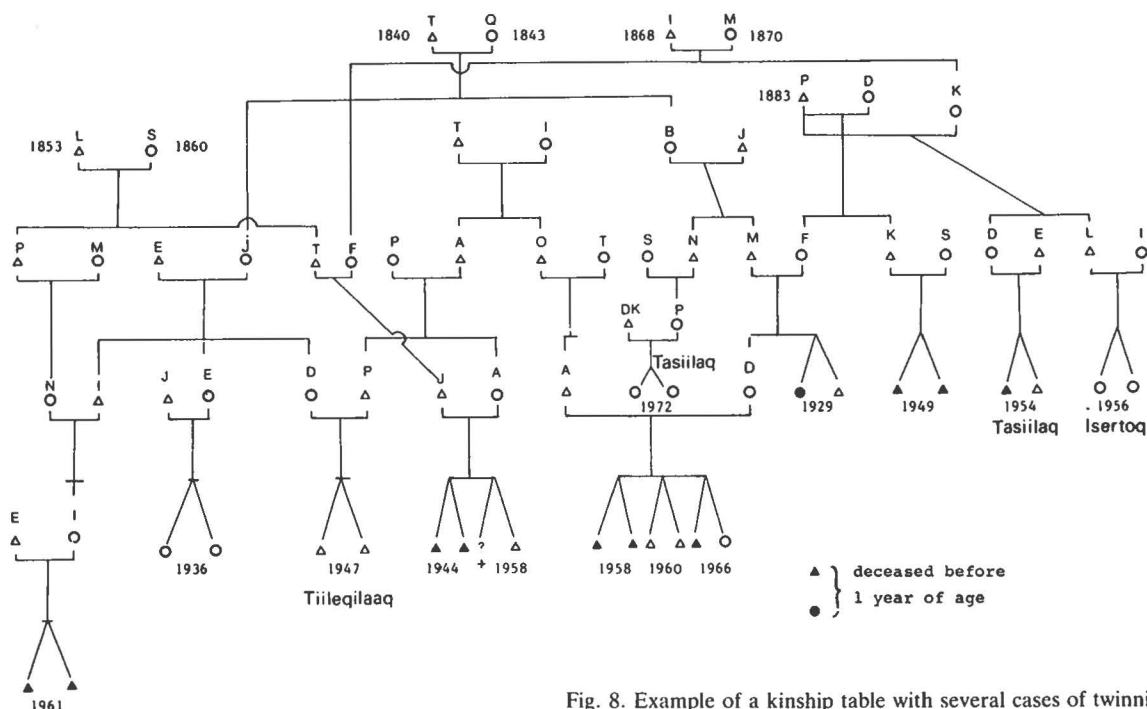


Fig. 8. Example of a kinship table with several cases of twinning.

rate is lower than in Ammassalik. I have only found four cases of multiple births out of 557 deliveries (i.e. one twin birth per 140 deliveries) between 1926 and 1970.

Since the population of Ittoqqortoormiit mainly came from Ammassalik, one wonders why there is such a difference between the two groups. It might be explained by genetic characteristics: those who emigrated to Ittoqqortoormiit may not have come from families where twinning was frequent.

In the Ammassalik district we can observe a higher "concentration" of twins at Tiileqilaq (Fig. 8) and one woman there had twins three times.

Table 2 shows that twins of different sexes are less frequent than those of the same sex, and that male twins are more frequent than female ones.<sup>7</sup>

The two sets of triplets were born in 1930 (one boy and two girls, one of the girls dying at birth) and 1969 (three boys, two of whom died at birth).

Infant mortality, high as it is for the whole population, is even higher among twins. Many are stillborn, die at birth, or die during the first days of life. They are more vulnerable since they are often premature. When carrying out a survey of fertility, the midwife Sofie Jørgensen was told of several cases of twin miscarriages.

Among the 104 individuals delivered in multiple births, 33% did not live longer than one week; 13% died between one week and one year; 54% lived over one year and do not seem particularly vulnerable.

P. E. Victor (1974: 76) transcribed the following story told by Kara in 1936: "After [Yamesi], his mother gave birth to twins, a boy and a girl. The girl was stillborn. But the boy was fat and strong. A man of the house then said that when twins are born with one of them dead, the other should be buried with his brother. And the father of the twins said the same thing. Then they were both tied up in the same *qaaq* (skin on which one sleeps on the platform) and they were put in an old grave ...

Table 2. Twin births in Ammassalik 1917-1976.

	Twins of same sex			Twins of different sex	Sex unknown	Total
	M	F	total			
Number of births	21	16	37	11	1	49
%	43	33	76	22	2	100



they were covered with large stones. The boy died of cold only the day after. They heard his screams all night long".

This is the story of the twins mentioned above, born in 1897. Rüttel (1917: 126) confirms it, and says that it happened at Umiivik; and on the same subject Thalbitzer writes: "If a mother gave birth to twins, one of them stillborn, since all rich food was then forbidden to her because of the death of her child, she would not have enough milk to feed the surviving one; that is why he was buried with his dead twin" (1941: 601).

At that time, when food shortages were still frequent, infanticide was not exclusively reserved for twins. Johan Petersen and Rüttel mention several other cases: children who appeared abnormal or simply weak at birth, children whose father had died, or whose mother had died in childbirth, as well as infant girls. Two old women told me in 1979: "In the past twins rarely survived: the mother drank a lot of water and ate much to have enough milk to nurse them. People knew that if the twins came from the same placenta, and one of them died, the other would die too; but if there were two placentas, one of them could survive". Another woman put it differently: "If the eldest died, the second died too; but if the second died, the eldest could survive".

As for triplets, people do not like to talk about it at all: as few people as possible were told of the two cases of triplets mentioned above, probably from fear of such an unusual and abnormal phenomenon.

## Mortality

### Evolution of the death rate

The detailed study of mortality in terms of its causes and fluctuations is of particular interest for understanding the degree of adaptation of this small society to its harsh environment, and for measuring the importance of changes brought about by western civilization once it had developed in the area.

One of the most striking effects on the Ammassalik population of Danish colonization appears to have been an appreciable drop in the death rate. The disappearance of famine, improvements in hygienic conditions and the development of medical assistance lowered the death rate from more than 30 per thousand at the turn of the century to less than 20 per thousand in the 1950s. Today it is about 12 per thousand (Fig. 6).

This means that the rate has decreased from a high figure of the type found in developing countries to one closer to rates in European countries (in Denmark the death rate was 10.1 per thousand for 1971–1976). We must, however, take the youth of the Greenlandic population into account; because of this age structure, despite an appreciable decrease in the death rate, life expectancy at birth is far from having reached the level of the European populations of today.

The decrease in the death rate in Ammassalik in the 20th century has not been regular. Before the 1950s, as shown in Fig. 6, the death rate fluctuated between eight and 77 per thousand. The population was affected several times by periods of excess mortality. Because of their isolation, the Ammassalimmiut lacked all immunity to diseases imported by foreigners: coryza, influenza, whooping cough, measles, poliomyelitis and smallpox. In some years, such as 1910, 1915 and 1936, the number of deaths was higher than the number of births (Fig. 5).

After 1950, with improved medical help and the introduction of penicillin and other antibiotics, the annual variations in the death rate decreased both in East Greenland (with rates between six and nineteen per thousand) and in West Greenland (Fig. 15). The epidemics which still broke out in the country were no longer fatal. The difference in the birth and death rates then increased greatly, until the effects of the birth control campaign showed positive results. In 1974, with liberalized abortion laws, death and birth rates reached equal figures, as in the past, but at much lower levels.

According to Vallin (1968), the decrease in the death rate, and in particular the decrease in its fluctuations in the second half of the 20th century, is a world-wide phenomenon. On the whole, the gap between "developed" and "underdeveloped" countries has been reduced since the Second World War, thanks mainly to improved sanitary conditions; however, the disparity between various "underdeveloped" countries has become more marked.

### The death rate and the seasons

Like birth rates, death rates can be investigated for seasonal effects by dividing the observation period into two main phases: one based on the more traditional society existing from 1917 until 1946, and the second on the more acculturated one, from 1947 until 1976 (Fig. 9). Again like birth rates, death rates exhibit more marked fluctuations in the more traditional phase: December and January, and even more so August and September, were periods of high mortality. The lowest number of deaths was registered from April to July. The difference between the two extremes (May or July, and September) is over 100%.

Two factors can explain the peaks and drops in the death rate in this early phase: the hunting, fishing and gathering calendar, and the contacts of the population with the outside world. The period from April to July, when light and sun reappear, was a good one for sealing, fishing for arctic char and *ammassat* (capelin), and gathering plants. During these months the nutritional state of the population was generally good, and death rates were low. The dark months of December and January, on the other hand, were not suitable for hunting; and all the other food-gathering activities were impossible. If the food reserves from the summer were insufficient there could be serious food shortages. The ma-

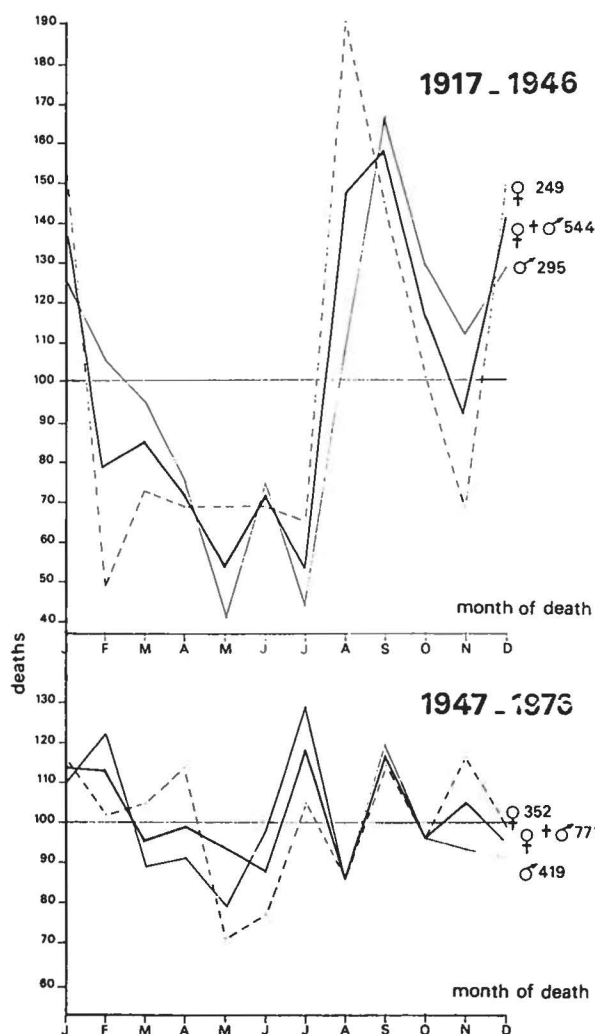


Fig. 9. Seasonal variations in mortality, by sex (Ammassalimmiut of Ammassalik). Percentage of deaths for which the month is unknown: 3.6%.

jority of December and January mortalities were women (Fig. 9).

The August-September peak was mainly due to an outside element: the arrival of freighters from Copenhagen, when the breaking-up of the ice pack allowed them to reach the coast. Before airlines were established this was the only link with the outside world. Regularly, after the departure of each ship, terrible epidemics broke out among the local population. Even common colds brought in by visitors could become extremely serious because they could lead to pulmonary complications. Of course, a poor general state of health had inevitable repercussions for food-gathering activities. Disease and malnutrition were the main causes of mortality in this period of the year.

Finally, if we compare the distribution of conceptions

for this early period (Fig. 7) with that of deaths among women (Fig. 9), we can see that the month with the highest number of conceptions (February) was also the month with the lowest mortality. Conversely, the months with fewer conceptions (August and September) were those with high death rates for women.

The more recent period, 1947-1976, has a completely different annual distribution of deaths. The population is less dependent on hunting and fishing, since there are small shops where some foodstuffs can be bought all the year round (tinned and non-perishable goods, groceries), and monetary incomes are available from other sources than selling skins (wage labour, pensions, child allowances, handicrafts). There is perhaps more resistance to diseases imported by foreigners, or at least treatment of them is better. The difference between extremes - with minimum mortality in May, maximum in July and September - is much lower, i.e. 43%.

### Infant mortality

If the overall death rate for the Ammassalimmiut has come closer to that of European countries, infant mortality, although appreciably lower, remains much higher than in Denmark, where it has constantly decreased and is today one of the lowest in the world: 111 per thousand in 1901-1910; 80 in 1921-1930; 50.2 in 1940; 30.7 in 1950; 21.5 in 1960; 14.2 in 1970, and 8.5 in 1980.

In Ammassalik the figure for infant mortality in 1972-1976 was 84 per thousand, twice as high as for the whole of Greenland. For West Greenland, according to Bertelsen, the figure was 146 per thousand in 1901-1930. The evolution of this rate for the whole of the Greenlandic population between 1952 and 1976 was as follows: 96.6 for 1952-1956; 76.2 for 1957-1961; 73.6 for 1962-1966; 59.2 for 1967-1971; 48.1 for 1972-1976.

During the first ten years covered by our statistics (1897-1906) more than one child in every four born in Ammassalik died before the age of one; in 1962-1966 it was one in seven, and more recently (1972-1976) one in twelve.

The most spectacular drop in infant mortality occurred at the turn of the century (Fig. 10), before the permanent presence of a Danish nurse or doctor. This was mainly due to improved hygienic conditions during childbirth and post-natal care. Before contacts with Europeans the Ammassalimmiut had no midwives (in fact no "official" function was recognized other than that of the shaman). Women delivered their children in very rudimentary hygienic conditions, alone or helped by an elderly female relative; on no account was the umbilical cord to be cut with metal: it was usually severed with a mussel shell, or, if the mother had previously lost several of her babies, she would cut it with her own teeth. No ligature was made on the cord. This was attested by Knud Poulsen (1904: 150), the first doctor to visit the area, in 1898-1899, and by an old midwife from Ammassalik, who confirmed that there was never any ac-

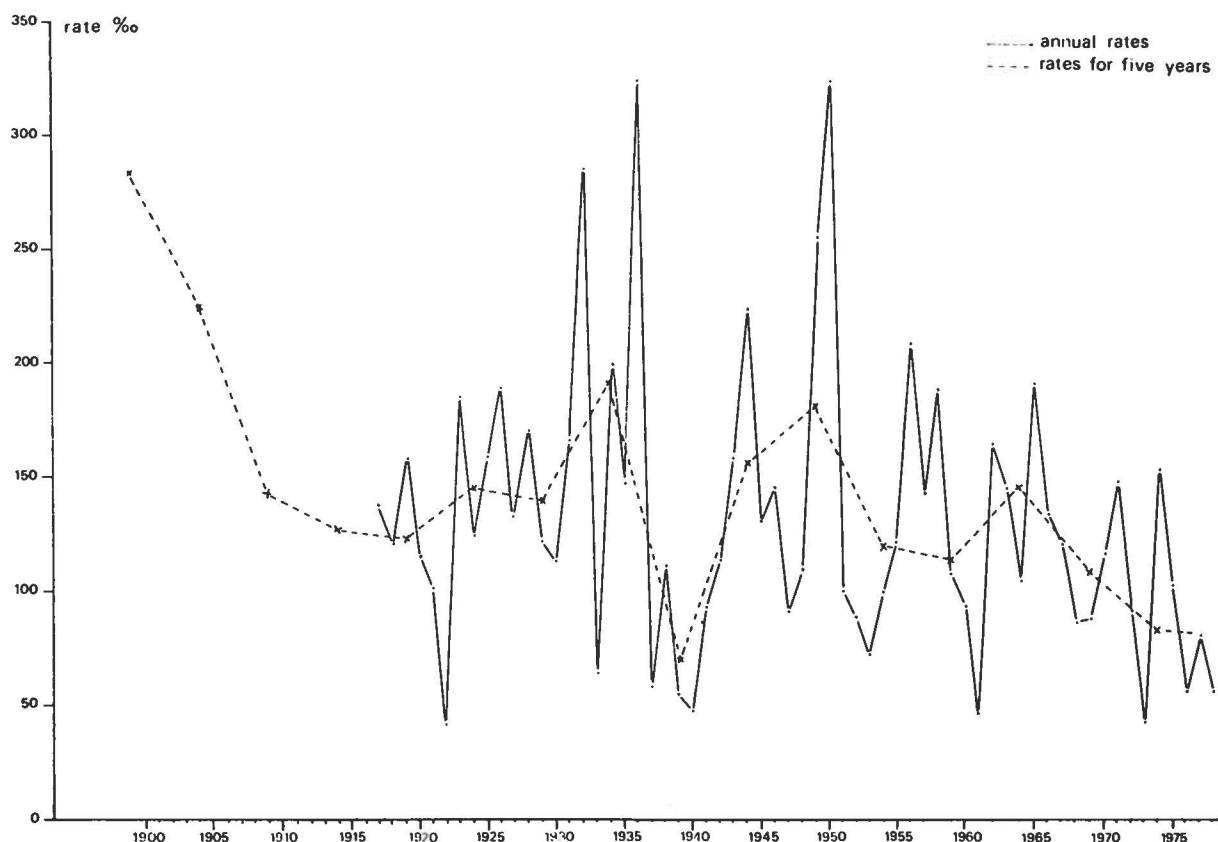


Fig. 10. Movements in infant mortality among the Ammassalik population (Ammassalik district).

tual ligature: the cord just dried by itself. To encourage cicatrization of the navel, a sort of poultice was applied. It was made of a thin layer of fresh seal blubber with its oil pressed out; such poultices were also applied to wounds.

In cases of long or difficult deliveries, an older woman would help with her hands, which would be greased with seal oil. According to Holm, the new-born baby was washed with fermented urine from the household, collected in a large pail.

Quite a few women died in childbirth or shortly afterwards (two between 1885 and 1897 according to Gessain (1975: 142); according to Hedegaard, 26 between 1895 and 1929). In such cases the new-born child was buried, dead or alive, with its mother, since there was usually no one to nurse the young orphan.

One of the first native-born midwives confirmed these customs (except for the washing in urine) and added: "The first thing they taught us was not to rub our hands with seal oil and to wash them". In fact, the first East Greenlandic midwives, trained in West Greenland or in Denmark, along with the West Greenlandic midwives sent to East Greenland, lowered the mortality risk at birth considerably for both children and mothers.

The first midwife arrived in East Greenland in 1906 and was followed by several others (two in 1910, three in 1923). They were called upon for most deliveries.

Fig. 10 shows how much infant mortality in Ammassalik fluctuated in the 20th century and how it was affected by some epidemics, particularly influenza in 1932, 1936 and 1944, and whooping cough in 1950; but not all epidemics had the same effect on young children. In certain years (1897, 1908, 1917 and 1944) diseases specific to infants appeared (Fig. 15); but there were no real diagnoses saying precisely which diseases.

In 1955–1960, once the effects of epidemics had become less serious, the most frequent causes of infant mortality in Greenland according to medical reports (*Landslægens Årsberetning*) were the following: genetic anomalies and prematurity (also responsible for a high rate of stillbirths); lung complaints; diarrhea; and death in bed by asphyxiation. Such accidental deaths of babies are not rare in Greenland. Often a very young child sleeping in the family bed without any separation is crushed by its mother or smothered in the eiderdown. In Ammassalik, six infant deaths (of children from a few weeks to three months old) were registered as "crushed by the mother while she was asleep".

Table 3. Distribution of infant deaths according to age at death among the Ammassalimmiut (Ammassalik district).

Age at death	Period 1917–46		Period 1947–76		For the whole 1917–76	
	Number of deaths	Rate for 1000 births	Number of deaths	Rate for 1000 births	Number of deaths	Rate for 1000 births
birth and 1st day	63	51.0	91	36.7	154	41.4
2–7 days	20	16.2	29	11.7	49	13.2
8 d.–1 month	16	13.0	31	12.5	47	12.7
Total 0 d.–1 month	99	80.2	151	60.9	250	67.3
2–6 months	48	38.9	125	50.4	173	46.6
7–12 months	20	16.2	30	12.1	50	13.4
unknown	4	3.2	6	2.4	10	2.7
Total deaths 0 d.–1 year/births	171/1234	138.6	312/2481	125.8	483/3715	130.0

Danish health authorities have attempted to reduce infant mortality by insisting on the following points in particular:

- Various vaccinations. As early as 1898–1899 Knud Poulsen had vaccinated two thirds of the Ammassalik population (1904: 150). He does not specify the vaccine, but it was probably against smallpox, as this had been used in West Greenland since the early 19th century.

- From 1955 onwards, the distribution of milk to women from the third month of pregnancy and to nursing mothers, so as to avoid malnutrition among these women, particularly during epidemics.

- The development of prenatal care, and the encour-

aging of women to have themselves admitted to hospital for deliveries rather than stay at home in unsatisfactory hygienic conditions.

If we consider ages at death up to one year (Table 3 and Fig. 11) we can see that perinatal mortality (i.e. all stillbirths and neonatal mortalities, according to Pressat's definition in his *Dictionary of Demography*) accounts for the most considerable proportion of infant mortalities in Ammassalik.

On the basis of the birth and death files kept by midwives in small villages it is difficult to distinguish accurately between "true stillborn" and "false stillborn" children, i.e. children who died at birth after having

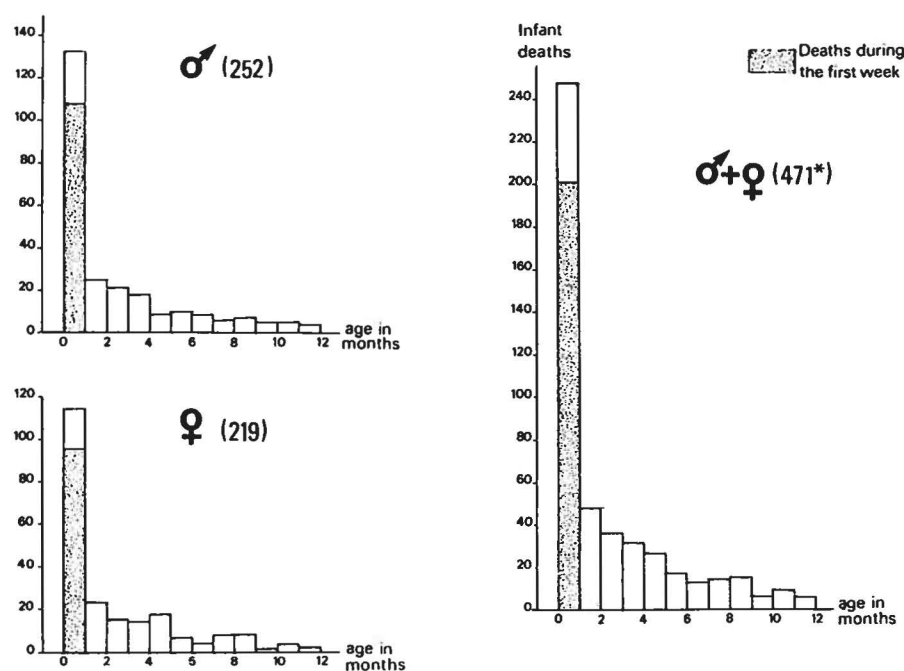


Fig. 11. Infant deaths in the Ammassalik population of Ammassalik district, distribution by sex and age at death. Among the 483 infant deaths for the period 1917–1976, 2 are of unknown sex and 10 of unspecified age (3 boys and 7 girls): i.e. 2.5%.

breathed. So I decided to include in the same category all stillbirths, deaths at birth and deaths on the day of birth. This category accounts for one infant death in three in the period between 1917 and 1976 (Table 3), i.e. a rate of 41.4 per thousand births.

Fig. 11 shows clearly that the critical period for a young Ammassalik boy or girl is the first month of life, more than half of infant deaths occurring during that period.

If we divide the period 1917–1976 into two phases, one before the arrival of a permanent doctor in the area (in 1946) and one after the establishment of a doctor's practice and a hospital (1947–1976) we notice an appreciable decrease in the death rate for the first month of life during the second phase. The rate of first-month deaths per thousand births drops from 80.2 to 60.9. The drop is even more striking for first-week deaths (from 67.2 to 48.4 per thousand births).

Since the 1960s deliveries increasingly take place in the Tasiilaq hospital, not only for townspeople but also for villagers. (Today, those who leave the village before the birth and wait in Tasiilaq until the baby is due are mostly young unmarried women).

Improved medical care has had a strong impact on perinatal mortality by reducing exogenous factors. However, it is still high in our own time, despite a particularly well-developed system of medical assistance. Thus in 1967–1976 there were 47 first-month deaths per thousand births. This is probably an endogenous mortality of genetic origin, perhaps due to the close consanguinity of the group.

There is also evidence of an increase in deaths between the ages of two and six months in the most recent period. These infant deaths are possibly due to the social environment, for example lack of care or family supervision, which is now more widespread than in the preceding period. Several factors can explain this: material and family life have changed profoundly, particularly since the Second World War; the extended family, having broken up into separate nuclear families, no longer ensures the climate of security and care that existed in the past in the context of communal life with grandmothers, aunts and other adult relatives. Today, an older child or a young niece often takes care of the baby when the mother is not there. Since most women have abandoned the use of the *amaarut*, the risk of accidents has increased. This traditional article of clothing (an anorak with a carrying pouch) allowed the baby to remain constantly with its mother when she had to leave the home to perform various tasks. Leaving the children at home led, for that recent period, to nine cases of babies smothered in their eiderdown. Another important factor in the deterioration of family life is alcoholism, which will be discussed later.

It may be noted that males were more vulnerable than females during the whole period under study (1917–1976): there were 113 male infant deaths for every hundred female, although the sex ratio of births in

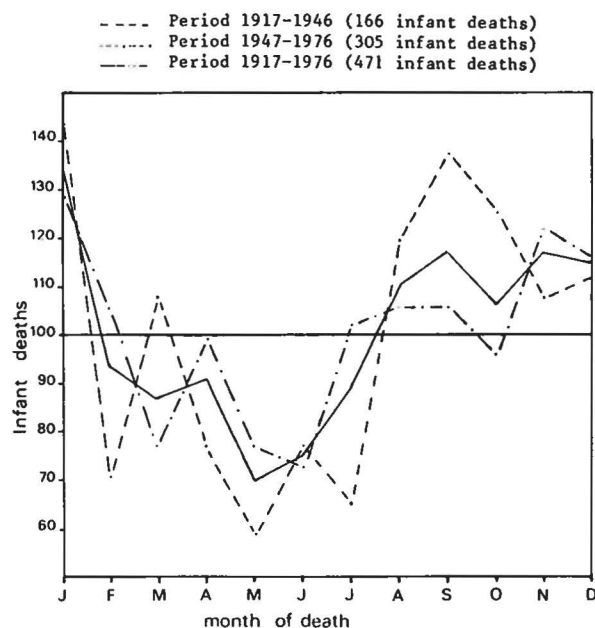


Fig. 12. Seasonal variations in infant mortality (Ammassalikmiut of Ammassalik district).

the period was 102 males per hundred females; in other words, there was an infant death rate of 136 per thousand for boys and 123 for girls.

Seasonal variations in infant mortality are shown in Fig. 12. In the more traditional period the year falls naturally into two divisions: a better one from February to July (excluding March) and a bad one from August to January. In the more recent period the difference is less marked. November–December, and January in particular, remains the worst period; and May–June is still the best. But August, September and October are no longer months of high mortality for infants.

#### Mortality after the first year

Infant mortality accounts for an important proportion of all deaths: 30.3% for 1917–1946 and 38.9% for 1947–1976. But after the first year of life the risk of dying very young decreases.

Childhood after the first year is not a particularly difficult time in that part of the world (as it is, for example, in some African countries). Weaning is very gradual in Ammassalik, and nursing can continue for a long time: it is not uncommon to see a three-year-old suckle his mother, who may also be nursing another, younger child; but other foods are introduced early in the baby's diet. At four or five months he can be given pieces of dried or cooked seal meat or fish, chewed first by the mother.

The closeness of the death rate in Ammassalik to the rate for Denmark during the last 25 years obscures a reality which can only be grasped by comparing the life-



Table 4. Evolution of life-expectancy among the Ammassalimmiut in the 20th century.

Life-expectancy Period	at birth	at 1 year	at 5 years	at 10 years	at 15 years	at 20 years	at 25 years	at 30 years	at 40 years	at 50 years*	at 60 years*	at 70 years*
<i>Males</i>												
1897–1906	38.1	42.2	39.7	36.8	32.3	32.6	29.1	25.1	19.6	12.5	8.4	4.7
1907–1915	30.2	34.4	32.4	28.6	25.0	20.9	17.9	18.3	12.5	12.5	8.4	4.7
1917–1926	32.4	36.2	35.4	31.0	27.9	25.0	24.0	20.7	14.3	12.5	8.4	4.7
1927–1936	25.5	29.2	27.5	23.4	21.2	17.8	16.3	14.2	14.1	12.5	8.4	4.7
1937–1945	34.5	37.3	36.5	32.1	27.8	25.8	24.0	20.4	16.0	14.6	9.8	5.3
1947–1956	38.7	44.2	43.5	39.9	35.4	32.7	30.7	28.4	22.2	16.6	9.8	5.3
1957–1966	44.3	50.7	49.1	45.3	41.1	37.5	34.1	30.3	23.9	15.5	9.8	5.3
1967–1976	42.8	47.7	46.7	42.4	38.6	34.5	31.5	27.2	20.2	12.5	9.8	5.3
<i>Females</i>												
1897–1906	38.8	43.1	42.0	38.4	35.7	30.7	28.5	24.7	17.6	14.0	9.1	4.9
1907–1916	27.9	31.6	30.1	29.0	27.4	24.5	20.2	17.2	14.8	14.0	9.1	4.9
1917–1926	36.4	41.7	38.5	34.6	30.5	26.5	29.2	25.4	18.6	14.0	9.1	4.9
1927–1936	34.3	40.0	37.5	34.6	29.9	28.2	24.4	21.2	19.3	14.0	9.1	4.9
1937–1946	39.7	44.2	42.9	38.5	35.2	31.8	28.2	25.7	19.8	15.8	10.5	5.4
1947–1956	45.1	52.0	50.7	46.5	42.0	37.6	33.3	29.1	22.7	16.7	10.5	5.4
1957–1966	48.1	53.3	50.7	45.9	40.9	36.1	31.3	27.3	20.4	15.4	10.5	5.4
1967–1976	48.7	51.7	48.7	44.1	39.4	35.6	32.0	28.5	20.0	13.9	10.5	5.4

\* The too great uncertainty in the measures of age-specific death rates for the aged (uncertainty of age, lack of or insufficient numbers) led us to adopt for these ages the rates of a standard mortality table. For the period before 1937, the series of rates has been completed above 45 years with those of the Princeton West model mortality table, level 1 ( $e_0=20$  years). After 1937 the rates were completed above 55 years with those of the same table, West model, level 5 ( $e_0=30$  years).

span in these two areas. The age structures of these two populations are fundamentally different, since almost half of the Ammassalimmiut are under 15, compared with 23% of the total Danish population. The youth of the Ammassalik population has an important influence on the crude death rate.

### Life expectancy

From observations of ages at death and of survivors (present or emigrated) we can see that the average lifespan in this small arctic population is well below that of the Danish population.

The life expectancy of the Ammassalimmiut at various ages, as shown in Table 4, was calculated from mortality tables calculated at ten-year intervals from 1897 to 1976.<sup>8</sup> Despite certain random fluctuations due to the smallness of the sample we can make certain observations based on this transversal analysis:

- The various epidemics at the turn of the century had serious implications for life expectancy (Fig. 13). The 1897–1906 period was affected by the epidemics of 1897–1898 and 1900.<sup>9</sup> In the 1907–1916 period there were two severe epidemics, one in 1910 and a worse one in 1914 (affecting women in particular). In the 1917–1926 period, 1925 was a terrible year; and between 1927 and 1936 there was the serious epidemic of 1935–1936. The four following periods were less severely affected by epidemics – except for the one including 1950 – as the population had developed some immunity and the great progress of medical help made it easier to fight and prevent disease.

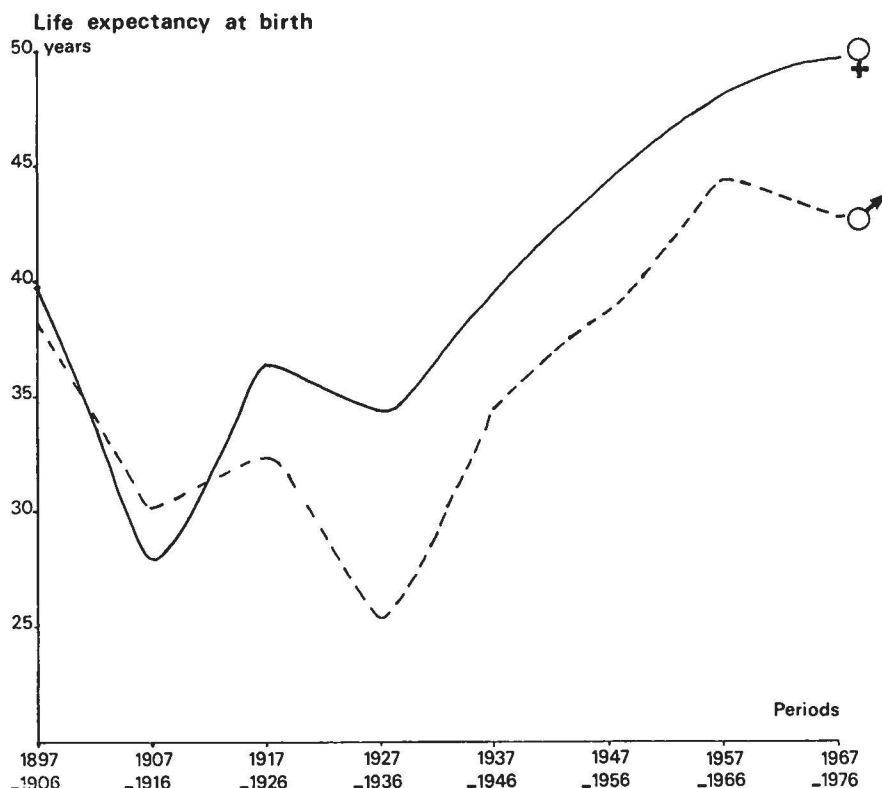
- Life expectancy for the more recent periods is still strikingly low, despite a remarkable standard of medical care. For a population of less than 2500 Greenlanders and 200 Danes the public health service has a staff of 60: two doctors, one dentist, five Danish and Greenlandic nurses, a lab technician, Greenlandic student nurses, as well as Greenlandic midwives and assistant midwives in each village. Medical care is completely free of charge and patients are transported to the 25-bed Tasiilaq hospital by car, boat or helicopter, depending on the season, the weather and the distance. Serious cases are flown over to West Greenland, Iceland or Copenhagen.

Despite all these efforts, the likelihood of living to an advanced age is still low in the area. One must conclude that other problems are involved – climatic, economic or social – which have not been tackled as energetically.

- As in many other populations, the maximum life expectancy is reached at the age of one year. The gain in life-expectancy years between birth and the first birthday can be from three to seven years, depending on sex and the period in question. This confirms previously cited data on the high death risk during the first year of life.
- Excess mortality among males is evident from the difference between the life expectancies of men and women (Fig. 13). This difference ranged from 3.8 to 8.8 years during the periods from 1917–26 to 1967–76; but it was low at the turn of the century (less than a year) and the 1907–16 period even exhibited an exceptional excess mortality among females of 2.3



Fig. 13. Evolution of life-expectancy at birth in the 20th century, in the Ammassalik population of Ammassalik district.



years. The improvement in life expectancy among the Ammassalimmiut is more typical of females than of males. For Ammassalik men it is still very low, and apparently even regressing at present.

Early in the century, the life expectancy of the Ammassalimmiut was fairly similar to those of populations in the Third World, which, according to Vallin (1968: 850), were seldom above 30. But it is surprising to see that Ammassalik has not followed the pattern of several Third World countries since the Second World War by increasing its life expectancy by from one to 1.5 years per year: "Mexico, Jamaica, Trinidad and Tobago, Ceylon... gained in twenty or thirty years as many years of life expectancy as Sweden in a hundred or a hundred and fifty" (Vallin 1968: 848).

According to the official statistics of the Ministry for Greenland, this type of rapid growth is also typical of Greenland as a whole. But if we consider the Ammassalimmiut on their own, we find that they have barely gained three months per year since the Second World War, despite the great progress made by medical services during these years. Once more we observe in this area, despite a net decrease in epidemics, persistent and even developing factors inimical to a real increase in life expectancy: a high endogenous infant mortality; a large number of violent deaths; an average standard of living that is still low; poor nutritional conditions despite the disappearance of famines, etc.

At the opposite extreme, Denmark is among the most advanced countries in the world, with a life expectancy of 70.9 years for men and 76.5 for women in the 1971-1975 period. The progress of life expectancy in Denmark has been as follows:

Period	Men	Women
1895-1900	50.2	53.2
1921-1925	60.3	61.3
1945-1950	67.8	70.1
1971-1975	70.9	76.5

Obviously there is an enormous difference between the two populations, even though the Ammassalimmiut were officially "Northern Danes" between 1953 and 1979. There is also an important difference between life expectancy in Ammassalik and that of the rest of the Greenlandic population, as shown in Tables 4 and 5; but the reasons for this difference are not as obvious.

We may wonder whether the base and method of calculation used by the Ministry for Greenland are similar to the ones we have been using here, or if there really is such a difference between standards of living and development in East Greenland and in the rest of the country, and whether the gap is likely to be closed in the years to come. It is not possible to give a precise answer to this question. It is, however, a fact that even today there are very few old people among the Greenlandic population as a whole: according to the general census

Table 5. Evolution of life-expectancy at birth (in years) of the Greenlandic population living in Greenland.

	1901-30* (West coast only)	1946-51**	1950-52*	1954-58**	1961-65**	1966-70**	1971-75**
		Whole of Greenland					
males	27	32.2	37	50.5	56.7	57.4	59.0
females	33	37.5	40	55.2	63.2	65.1	65.4

\* Sources: P. Barfod 1954: 378. For the 1950-52 period, it is specified that it concerns Greenlandic and Danish populations living in Greenland (*Medicinal Beretning* 1956: 71).

\*\* Sources: Demographic Statistics of Ministry for Greenland (*Grønland*, 1968-1980).

of 31.12.1976 only 6% had reached the age of sixty or over (with only 3% in Ammassalik on the same date, compared with 18% in Denmark on the 31.12.1973).

What about the other arctic populations? Laughlin and Harper (1979: 586) give a comparative table of life expectancy for males, starting at age five, among three small arctic populations: the Aleuts and two Alaskan Eskimo groups. In 1973, Aleut males had a life expectancy of 45.6 years at the age of five; the Eskimos of the Seward Peninsula, including Saint Lawrence Island, had a life expectancy of 35.4 years at the age of five in 1975; and in 1968 the Wainwright Eskimos had a life expectancy of 29.2 years at the age of five. The authors remark that longevity is higher among the Aleuts, despite the fact that the Alaskan Eskimos have easier access to medical care. According to them, this difference is partly due to the different ecological environments of these populations.

For males in Ammassalik life expectancy at five was 46.7 years in 1967-1976. Their situation is thus similar to that of contemporary Aleuts. If longevity can be considered as an indication of the well-being of a population, their situation seems better than that of the Wainwright or Seward Peninsula Eskimos.

#### Age at death (disregarding epidemics)

Here we can compare two periods unaffected by serious epidemics among adults. One covers 1937-1946, when occupations were still traditional and there was no doctor. The other, from 1967 to 1976, covers our most recent data: the population has partly altered its lifestyle and has the benefit of good medical care.

In the 1937-1946 period, 167 deaths were registered among the Ammassalimmiut (91 males and 76 females). The average age at death was 18 for males and 21 for females. If we exclude infant mortality the average age at death after the age of one was 26 for males and 33 for females.

In the 1967-76 period, 286 deaths were registered (162 males and 124 females). The average age at death in this period shows a very small increase for men - 22 if we include infant mortality, and 32 if we count only the

deaths after the first year. For females, the average age at death has increased appreciably - 32 years including infant mortality, and 41 counting only deaths after the first year. In arctic Canada we find similar figures: according to the Annual Report of the Commissioner of the North West Territories for 1966-1967, the average age at death was 21 for the Inuit and 62 for all Canadians in 1966; discounting infant mortality, the average age at death for the Inuit was 30.

Progress made in sanitary conditions seems to have been more beneficial to Ammassalik women than men. However, the sex- and age-specific distribution of deaths calculated per thousand for comparative purposes (Fig. 14) shows an appreciable decrease in male deaths between the ages of 10 and 45 in the 1967-1976 period, and an increase in deaths after 45. In the 1937-1946 period, 48% of male deaths occurred between the ages of 10 and 45, and 9% after the age of 45. In the 1967-1976 period, 30% of male deaths occurred between 10 and 45, and 25% after 45. This development is not only linked to improved sanitary conditions: it is also related to the transformation of male occupations. In the 1960s commercial fishing and various occupations in tertiary industries were developed as alternatives to the high-risk occupation of hunting, formerly the only way of life open to the Ammassalimmiut.

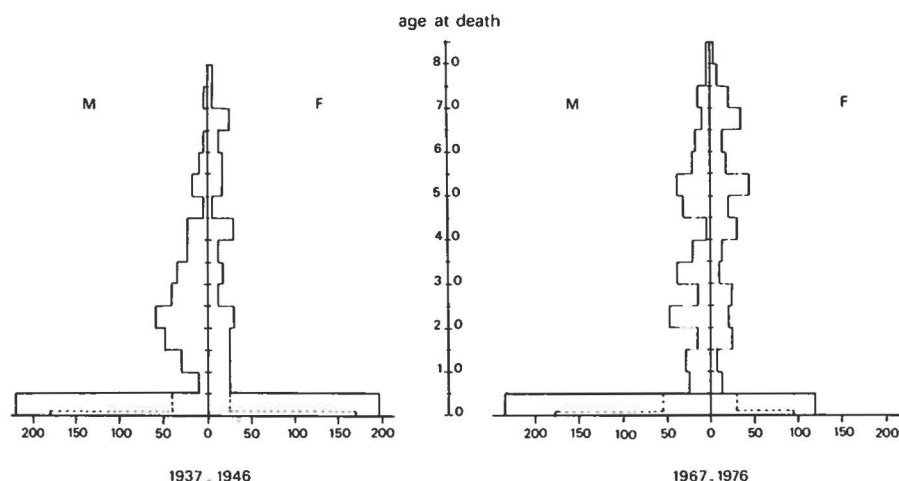
In both periods, the maximum of male deaths occurred between the ages of 20 and 25 years. There was no particular high-risk age for women in the 1937-1946 period, but in 1967-1976 there was a peak between the ages of 50 and 55.

#### Causes of death: epidemics

The first historically-known epidemic in Ammassalik, due to contact with foreigners, occurred after the Ryder expedition, and lasted from September 1892 until the summer of 1893.<sup>10</sup> According to Hedegaard, the common cold seriously affected the population and led to many deaths. Subsequently, diseases imported by foreigners regularly took a heavy toll of this small and isolated population with no immunity to infections previously unknown among them.

Fig. 14. Deaths distribution by sex and age, before and after the permanent presence of a medical doctor and the establishment of a hospital in Ammassalik (per thousand deaths).

Note: During these two periods there were no fatal epidemics among the adult Ammassalimmiut.



To this very day, after the short summer visits of freighters from Denmark, epidemics break out among the Ammassalimmiut. Even common colds can have very serious consequences for them because of pulmonary complications. But epidemics are not as lethal now as they were at the turn of the century.

Fig. 15 shows successive periods of excessively high mortality; the highest peaks are due to the following epidemics:

- Late 1910: whooping cough and influenza; death rate for the year, 63 per thousand.
- September 1914 – June 1915: influenza; death rate, 77 in 1914, 40 in 1915.
- August–November 1925: Spanish influenza and poliomyelitis; death rate for the year, 55.
- September 1935 – spring 1936: coryza; death rate, 54 in 1935, 66 in 1936.
- November 1949 – April 1950: whooping cough; death rate, 31 in 1949, 43 in 1950.

The three last epidemics affected both sexes equally, but the one in 1914–1915 was more severe for women: there were three times as many female as male deaths, and among the dead were many women of reproductive age. In subsequent years this led to a decrease in birth rates, as can be seen from the moving average curve in Fig. 6.

The polio epidemic of 1925 mainly affected adults, particularly those over 40. The coryza epidemic (with bronchopneumonia complications) of 1935–1936 affected all age groups. Among the dead 16% were under the age of one, 12% from one to 19, 41% from 20 to 44, and 31% over 45. During this terrible period the Ammassalimmiut lost 11% of the population. December 1935 and January 1936 were the worst months: 60 deaths were registered.

The whooping-cough epidemic of 1949, which affected the whole of Greenland, reached Ammassalik in November 1949 and lasted until April 1950. It affected few adults, but many young children died: 80% were

under the age of ten (60% of these under one and 12% between one and two).

Generally speaking, the victims of epidemics are mostly the elderly and babies under the age of one; those who resist best are young people from one to twenty.

During periods of severe disease like the ones mentioned above the nutritional state of the population was always poor, active individuals being too weak to hunt or even sometimes to gather food supplements such as mussels, seaweed, fish or plants. In the initial colonization period it was forbidden to sell or distribute food to the local population, so as not to destroy its way of life (see above p. 13: points 4, 5 and 7 of the Administration Memorandum). Johan Petersen mentions this problem several times in his journal. Thus, unfortunately, epidemics and food shortage went together.

During these periods, malnutrition among nursing mothers was probably partly responsible for a high infant mortality.

At the Tasiilaq trading post restrictions on the sale of imported foodstuffs were abolished in about 1915, and according to Ejnar Mikkelsen the Ammassalimmiut increasingly acquired a taste for sugar, flour, oatmeal and other cereals. During the winter of 1935–1936 the population was in such a poor nutritional condition that the Danish administration had to distribute food.

After 1950 epidemics were no longer as serious, since vaccines, penicillin and other antibiotics prevented or reduced the effects of imported diseases. In fact, after that date public health expenditure increased rapidly throughout Greenland. Jenness (1967: 154) mentions the following figures: DKK 2 171 035 in 1949–1950; DKK 2 919 492 in 1951–1952; and DKK 6 320 000 in 1952–1953, when constitutional changes in 1953 made the country part of Denmark. According to Aagaard Olsen (1974), the use of antibiotics increased by 70–80% between 1964 and 1970.

The first measles epidemic in Ammassalik, in July-

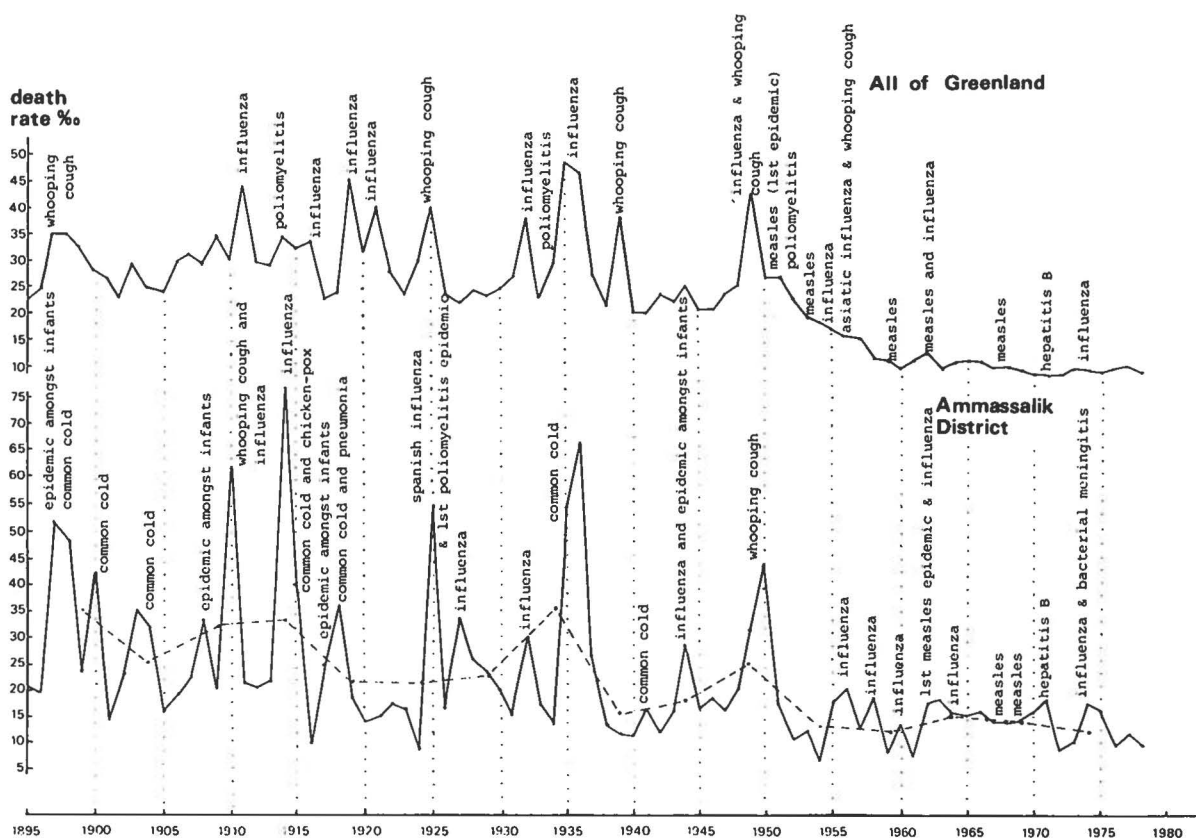


Fig. 15. Epidemics and mortality in the Greenlandic population for the whole country and in Ammassalik district, from 1895 to 1978.

August 1962 (following an influenza epidemic in February-March of the same year), infected 1804 individuals out of a total of 2110 Greenlandic and Danish inhabitants; but there were only 12 deaths – six children under the age of one, and four people over forty (according to *Medicinal Beretning* 1962: 69). In 1971–1972 some 700 persons in the area had infectious hepatitis, but only six died.

As shown in Fig. 15, some epidemics affected the whole country as well as Ammassalik: influenza in 1935–1936; whooping cough in 1949–1950 (4000–5000 cases out of a total Greenlandic and Danish population of 23 000); influenza in 1956 (12 528 out of 27 700 inhabitants); measles in 1962 (10 722 cases out of 34 400 inhabitants) and 1968; infectious hepatitis in 1971–1972 (4187 cases out of 48 000 inhabitants); and influenza in 1974 (7370 cases out of 49 500 inhabitants). But some epidemics in West Greenland never reached Ammassalik.

The Ammassalimmiut are more vulnerable to outside infections than West Coast Greenlanders, who had much earlier contacts with European whalers or administrators, and have thus probably had longer to develop some degree of immunity.

#### Other causes of death

Pulmonary tuberculosis has been a major cause of death in the mid-20th century in Greenland. In 1951–1952 more than a third of all deaths were due to it. Some patients were sent to sanatoria in Denmark for treatment, until the Queen Ingrid Sanatorium, where over 200 patients could be treated, was opened in Nuuk in 1954. In an attempt to control this disease, which then affected from 6–7% of the population, all the district hospitals were equipped with radiology units, and a medical team sailed regularly on board the *Missigssût* along the west coast to examine, X-ray and vaccinate people from small villages. This intensive campaign was successful, and death from tuberculosis decreased appreciably between 1952 and 1956, becoming very rare in the early 1960s.

As far as East Greenland is concerned, Peder Helms in his study of tuberculosis in Ammassalik (1957: 30) mentions a minimum of 48 deaths (25 males and 23 females) due to it between 1937 and 1951, i.e. 15% of all deaths for that period. At the time there was some discussion among physicians and biologists (including R. Gessain, A. Høygaard, P. Tchernia, P. J. Le Méhauté and P. Helms) of whether this disease had or had not

previously been known in Ammassalik. I will not join in this debate, but it does seem that there might have existed a milder form of tuberculosis that cured itself through sclerosis, and that this took a more severe or even fatal form in 1937. Høygaard ventures an explanation of this based on the poor nutritional state of the population after the 1935–1936 epidemic. Indeed, the inhabitants of Tasiilaq, who were most seriously affected, as 23 out of 106 had tuberculosis in 1937, lived on a diet essentially based on carbohydrates. In the other villages, where animal protein food was more plentiful, Høygaard found only 15 cases among 581 individuals.

BCG vaccine was first introduced in Ammassalik in 1945, and was systematically given to babies from about 1954.

During the 1940s, 1950s and 1960s the effects of tuberculosis were equally lethal in other arctic areas, particularly Alaska.

Accidents or violence became the main causes of death in Greenland after epidemic diseases and tuberculosis had been brought under control (i.e., after 1956).

There is nothing surprising in the fact that fatal accidents are frequent in arctic areas. The harshness of the climate creates very specific dangers: the breaking-up of the ice pack makes navigation difficult and dangerous; the ice pack can cave in under the weight of a man or a sled; snowstorms or gales at sea can hit hunters far away from their villages; there is the risk of avalanches, etc.

Men (and some women who have been raised as hunters for reasons discussed below – one of them died in a kayak in 1950, when she was 32) are the ones who must go out in all seasons and find food for the family, and are most exposed to various dangers, which explains their low longevity. In the vital registration of the Ammassalimmiut we find a great many cases of people who disappeared while hunting, particularly in kayaks. Hedegaard mentions 18 cases between 1895 and 1917, and 14 between 1918 and 1929. In more recent periods we find 17 deaths in kayak accidents between 1930 and 1950, and 17 between 1950 and 1970. But with technological advances kayaks are giving way to motor boats and motor boat accidents have been replacing kayak accidents from the mid-60s onwards (seven fatal motor boat accidents were registered between 1964 and 1978, as against only one kayak accident).

The most frequent types of hunting accident are due to navigational difficulties, while accidents due to breaks in the ice pack during springtime sledding expeditions are much fewer.

Other victims of the environment are children and adolescents. As they are left very much on their own in their activities and games by a system of upbringing that gives them much independence and responsibility while still young,<sup>11</sup> they are often the victims of accidents like drowning (especially when they play on the ice when the

ice pack is breaking up), fatal falls while climbing on the rocks, dog bites, etc. Quite a few young people die from accidentally firing hunting guns, in fires started by playing with matches in wooden houses, from ingesting toxic substances left within their reach, etc.

Table 6 shows the importance of risks like these for the young Ammassalimmiut: of the 50 deaths of young people between five and nineteen, 38 were accidental (26 boys and 12 girls), and nine were due to disease (five boys and four girls). The boys and male adolescents are more exposed to dangers, since their games and activities mostly take place outdoors, while girls are more often indoors helping their mothers.

Among disasters known from the 20th century we must mention the disappearance of an umiak in July 1914,<sup>12</sup> resulting in 11 deaths (including four women and six children); ten deaths by drowning in the wreck of a local commercial ship, the *Mikki*, in September 1949; and an avalanche in March 1971, in which a group of four hunters from Sermiligaq were caught. In the traditional society the death of a hunter had terrible consequences for the survival of the family group, since he left a widow and orphans alone without resources in the midst of a small community where the balance between consumers and providers was brutally disrupted. Today, the disappearance of the head of a family is not so tragic, as the insurance and pension schemes of the local authority help the bereaved family.

Finally, we must mention a new type of mortality which appeared in Ammassalik during the 1960s and is becoming increasingly important: violent death due to alcohol abuse. (This problem began earlier in West Greenland, according to Carl Clemmesen's study in *Medicinal Beretning* 1956).

We can observe an increasing number of deaths caused by excessive drinking in Ammassalik over the past twenty years: as a result of assault and battery in the course of heated discussions (manslaughter); drunken men and women drowning; cases of drunken persons who have fallen and been found frozen to death in the very midst of the village; accidents with children due to their parents' drunkenness; suicides committed by adolescents and young adults during the depressive period following the excitement phase of intoxication.

This dramatic increase in alcoholism has led to situations of open conflict and acts of violence, committed against others or self-inflicted; it indicates profound psychological disturbances among many Greenlanders. In Ammassalik, where acculturation has been especially rapid, social, family and economic structures have been brutally shaken. Today's East Greenlanders (to different extents depending on their generation) seem to be having major difficulties relating on the one hand to an ancestral Eskimo tradition which is now disappearing, and on the other to a western modernity which is swallowing them up. (We will discuss this in more detail in Chapter III).

Table 6. Causes of death after age 1, according to sex and age. Ammassalimmiut deceased between 1959 and 1978 (540 deaths, among which 189 infant deaths).

Causes of death	Sex	Age at death										Total
		1-4 y.	5-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80 and over	
1. diseases												
respiratory diseases*	m	2			1	2	4	13	6	2		30
	f	4	1		2	4	13	14	11	6	1	56
tuberculosis	m				1		2	1				4
	f							1	1			2
cardiovascular diseases	m	1	2		1	1	1	4	1	2		13
	f							3	3	3		9
malignant tumours	m				1			1	2	1		5
	f					6	5	3	3	1	1	19
diarrheas, food poisoning	m	1			1	2	1		1			6
	f	1				1	2	1				5
other diseases**	m	11	1	2		2	5	4	4	2		31
	f	2	1	2	1	3	6	3	4	2		24
Total												
	m	15	3	2	5	7	13	23	14	7		89
	f	7	2	2	3	14	26	25	22	12	2	115
2. violent or accidental deaths												
drowned	m	3	3	6	5	6	1	1				25
	f	1	1	2	3			1				8
disappeared	m			3	7	5		1				16
	f			1	2							3
frozen	m			3	1	2		2	1			9
	f			3	2			1	1			7
other accidents***	m	3	4	3	1	3						14
	f	1	3	1	1			1				7
homicide	m			1	2							3
	f					1	1					2
suicide	m			3	7	3						13
	f			1	4							5
Total												
	m	6	7	19	23	19	1	4	1			80
	f	2	4	8	12	1	1	3	1			32
3. old age												
	m									3	1	4
	f											-
4. causes unknown												
	m	4	1	1	2	3	1	1	2	1		16
	f	2		1	2		2	3	3	2		15
Total												
	m	25	11	22	30	29	15	28	17	11	1	189
	f	11	6	11	17	15	29	31	26	14	2	162
	m+f	36	17	33	47	44	44	59	43	25	3	351

\* bronchitis, pneumonia etc.

\*\* hepatitis, meningitis, haemorrhage etc.

\*\*\* burns, dog bites, caught in an avalanche etc.

#### Causes of death today, according to sex and age

Tables 6 and 7 show mortality differentials between the sexes for the 1959-1978 period. The ratio of male to female deaths is 117 to 100 after the first year of life (125 to 100 if we include infant mortality).

Table 6 shows death distribution by age after the first year of life. There are more deaths before the age of

forty among men, and more after forty among women. Deaths by accident or violence are appreciably more frequent among males of whatever age than among females: men who died in accidents were mainly in the age group 10-39. Women, however, mainly die of diseases: over the past twenty years, 71% of female deaths after the first year have been due to disease, more particularly to respiratory complaints (bronchitis, pneu-



Table 7. Comparison of death causes among the Ammassalimmiut at the beginning and the end of observation: 1897–1916 and 1959–1978.

Mortality	Period 1897–1916*		Period 1959–1978					
			Males		Females		Total	
	Number of deaths	%	Number of deaths	%	Number of deaths	%	Number of deaths	%
infant mortality	95	30.5	111	37.0	78	32.5	189	35.0
deaths after 1 year:								
disease	166	53.4	89	29.7	115	47.9	204	37.8
accident	35	11.3	64	21.3	25	10.4	89	16.5
homicide, suicide	6	1.9	16	5.3	7	2.9	23	4.3
old age	5	1.6	4	1.3	—	—	4	0.7
causes unknown	4	1.3	16	5.3	15	6.3	31	5.7
Total	311	100	300	100	240	100	540	100

\* Main data from Hedegaard's manuscript.

monia, etc.). Deaths due to cancer were four times more frequent among women than among men in the same period; and, finally, suicides were more frequent among men.

Table 7 compares types of death in two periods: the beginning (1897–1916) and the end (1959–1978) of the whole observation period. There has been an appreciable decrease in deaths due to disease compared with accidental and violent deaths and even infant mortality.

## Conclusion

I have intentionally dealt at some length with the demographic phenomenon of mortality, which to my mind is a good indicator of the state of physical and mental health of a population. By studying fluctuations in overall death rates and infant mortality, analysing death risks according to age, sex, season and historical period, and enumerating causes of death, we can see both the positive and negative sides of the various aspects of change.

Among the benefits "westernization" has brought to the Ammassalimmiut we must mention medical care and improved hygiene; however, there have also been very negative consequences, such as the introduction of contagious diseases, causing many deaths, and the emergence of social and psychological problems which have caused profound disturbances in the society today.

## Age structure

One characteristic feature of the Ammassalik population is its great youth. The age pyramids are rather striking in this respect, with their very wide bases and narrow tops. The community includes a large number of

children between 0 and 14 and a very small number of adults over 55.

Fig. 16 shows the distribution of the population, divided into five-year age groups, at various points in time (based on censuses). For comparative purposes each pyramid represents a total of 1000 individuals; however, we must keep in mind that ages were estimated roughly for the first censuses.

Both the oldest and most recent pyramids have narrow bases, while all the others have wide bases.

The pyramid based on Holm's census (1884–1885) reflects demographic loss due to the 1881–1882 famine. This disaster took a heavy toll of the younger generation. Quite apart from the decrease in the birth rate which inevitably took place during and after the famine, young children seem to have been severely affected: babies would have been fed with insufficiently nutritious mother's milk; orphans would have been left without support; and in fact it would have affected children in general, since when food is being shared out they are generally served after the adults and have to make do with what is left (sometimes only bones to gnaw).

The pyramid for 1976 also has a narrow base, but for completely different reasons. This is not due to the effects of a natural disaster, but to changes in social behaviour leading to a sharp fall in the birth rate beginning in the 1970s (cf. Appendix II).

Despite the high infant mortality we can see that in all periods except the two above-mentioned ones the proportion of Ammassalimmiut under the age of five is considerable: between 16 and 22% of the total population. (In Denmark the 0–4 years category is never over 7%).

The proportion of elderly individuals remains very low at all periods, despite the fact that their economic situation in society has changed totally. In traditional

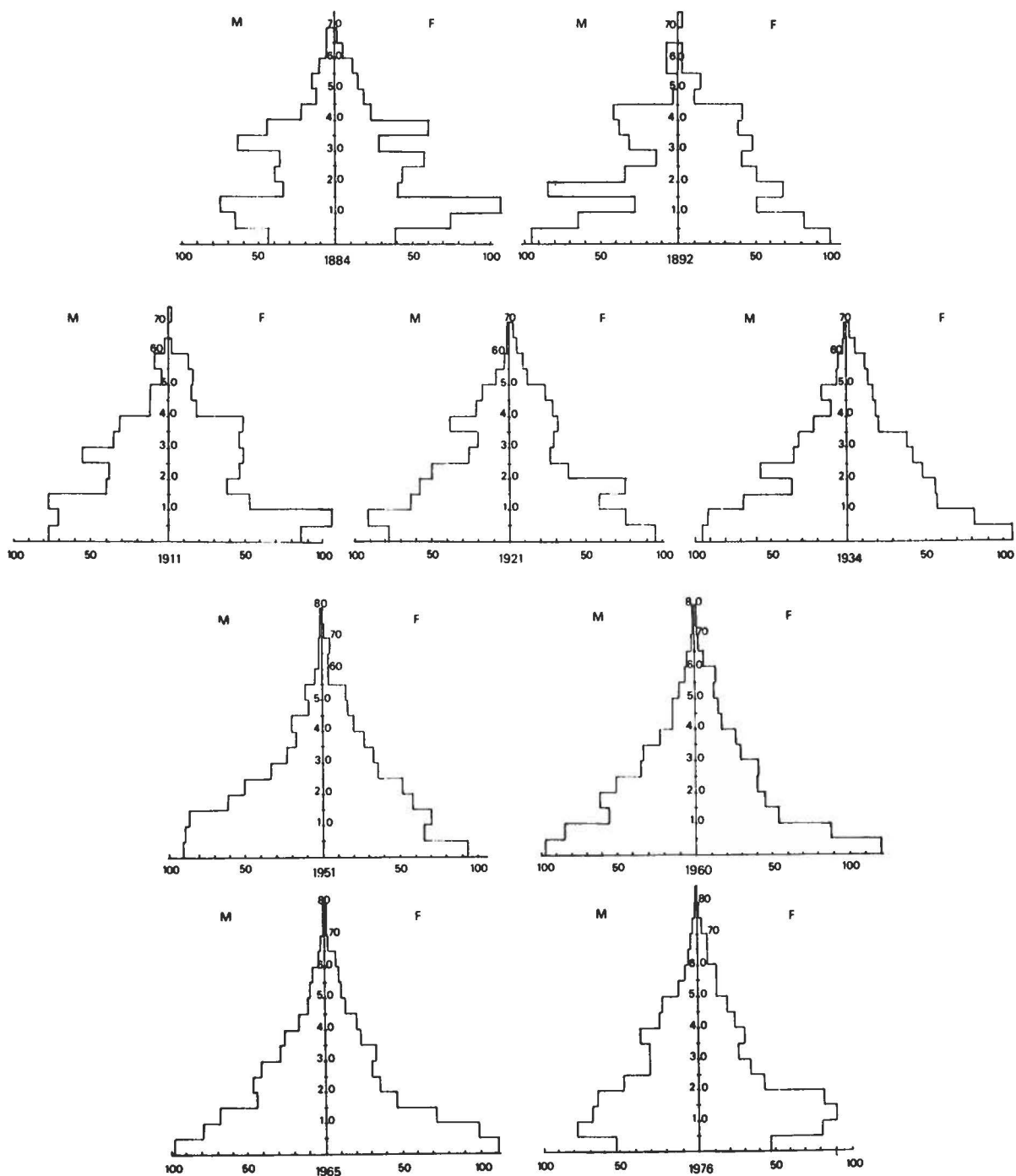


Fig. 16. Age pyramids of the Ammassalik population at various periods (per 1000 inhabitants), Ammassalik district.

Eskimo society, the number of individuals had to remain within the limits imposed by resources, and inactive or old people could become a burden on the group. In times of want they would sometimes take their own lives to allow the survival of the others. But

with the development of Danish welfare, the old, no longer a burden on their families, are helped by a pension scheme (at the age of 60, or 55 for single women) or completely taken care of in the old people's home in Tasiilaq.

Some old hunters still remain active because of the development of winter seal hunting with nets and the now common use of motor boats instead of kayaks for summer hunting. Hunting in kayaks was difficult and dangerous, and could not be carried out by older men without great risks; Ammassalik hunters usually abandoned this type of activity on reaching 50 or 55.

Finally, Fig. 17 represents the development through time of overall age-group structure. It shows an increase in the 0-14 group, comprising over half the total population. It has only begun to decrease recently. Between the beginning and the end of the observation period there is a very small increase in people over 55 (4% in 1884, 5% in 1976). This confirms the tendency of the Ammassalimmiut, mentioned above, not to reach advanced ages, despite all the care and assistance given to the population.

Examining Fig. 17, we can see that despite all the upheavals it has undergone, Ammassalik society has returned to the same age structure as at the beginning of its written history a hundred years ago.

The economic and social consequences of such an age distribution are numerous. Youth favours the accelerated introduction of new trends, while the scarcity of old people leaves little scope for the maintenance and transmission of traditional values; all this leads to a more abrupt transition between two radically different types of society. All these young people – and their numbers are increasing every year – face problems of unemployment. After leaving school they look for jobs in administration rather than becoming hunters or fishermen; and the chances of finding wage-earning positions in the area are very limited.



Summer hunting in a boat with a rifle: Emanueli Kilime of Qernertivartivit. (Photo J. Robert-Lamblin, 1967).

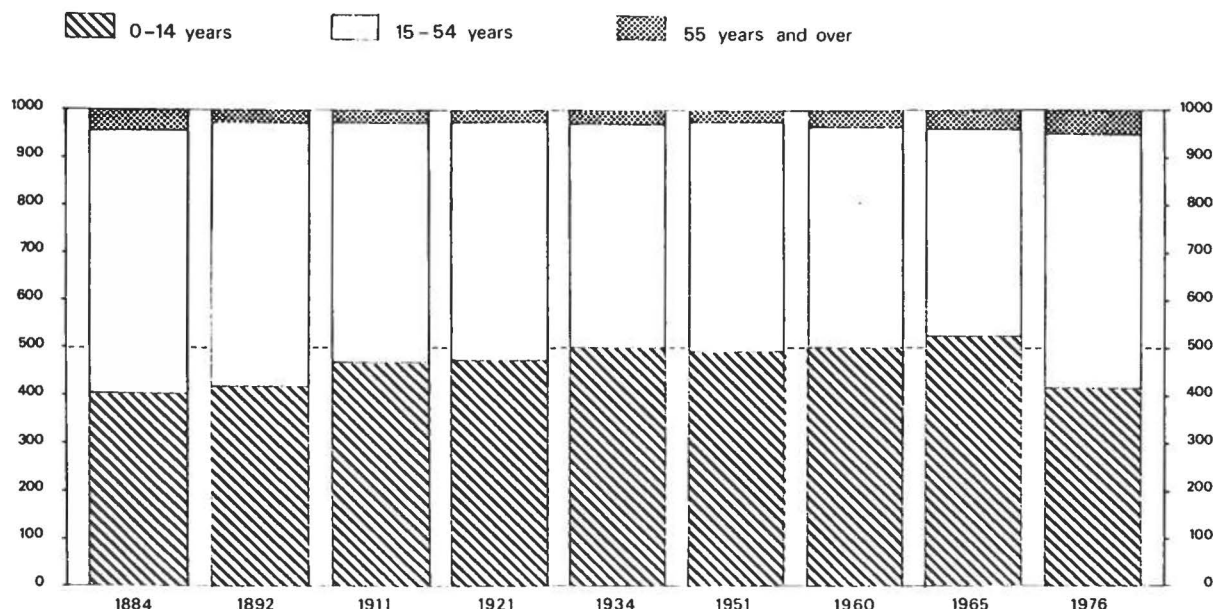


Fig. 17. Age-specific distribution of the Ammassalik population in various censuses (Ammassalik district).

Table 8. Distribution by large age groups of the Ammassalik population, the whole Greenlandic population and the Danish population.

Age groups	Ammassalik population 1976	All Greenlandic population 1976	Danish population 1973
under 20	56.1	51.0	30.2
from 20 to 64	42.0	45.2	56.8
over 65	1.9	3.8	13.0
	100.0	100.0	100.0

Table 8, comparing the overall age-group structures of different populations, shows that the Ammassalimmiut are generally younger, but not very different in this respect from other Greenlanders. There is, however, a considerable difference between the "young" Greenlandic society and the "old" Danish one.

## Sex structure

### Sex ratio at birth

In my study of the Ammassalimmiut who settled in Ittoqqortoormiit (Scoresbysund) (1970, 1971) I observed a marked imbalance in the sex ratio at birth: 90 male births per hundred female in the 1926–1970 period (total, 578 births). But in the population of origin in Ammassalik, in so far as fluctuations could be observed (Table 9), the overall data indicate that there was only a very slight imbalance in the sex ratio: 102 male births per hundred female were registered for the 1917–1976 period (a total of 3715 births).

The very small numerical majority of males over females at birth is lost through male excess mortality. Even in terms of infant mortality, there were 113 male per hundred female deaths in the 1917–1976 period. During this 60-year period 1871 male births and 255 male infant deaths were registered: this means that 1616

Table 9. Variations in sex ratio at birth, over 5 year periods. Ammassalimmiut of Ammassalik district.

Periods	sex ratio at birth	Periods	sex ratio at birth
1917–1921	87	1947–1951	102
1922–1926	108	1952–1956	93
1927–1931	99	1957–1961	89
1932–1936	117	1962–1966	84
1937–1941	119	1967–1971	107
1942–1946	131	1972–1976	126
		Total 1917–1976 (3715 births)	102

boys survived the first year. For 1841 female births there were 226 infant female deaths; in other words, 1615 girls survived the first year. The sex was not specified for three of the births. Thus we can see that as early as the first year of life the slight majority of male births was neutralized by infant deaths.

Among the Ammassalimmiut, as in all other traditional societies, the birth of a boy was welcomed more than that of a girl. Every expectant mother wished above all to have a son, a future hunter and producer, and her own status as a wife was only firmly established when she had brought her first son into the world. The extremely high value placed on male births sometimes led to infanticide of girls during periods of want.

But there was another way of restoring an unfavourable sex ratio in the family: by "changing the sex" of the new-born child; that is, by bringing up a little girl as a boy, or vice versa. Since I have analysed this phenomenon in another publication (1981), I will only describe it here.

In traditional Ammassalik society the roles and occupations of each sex were well defined and separate. One began learning these roles as an infant. Hunting was reserved for men, gathering and domestic chores for women. Given this strict sexual division of labour and the complementary nature of male and female occupations, the family group as a self-sufficient unit had to have a suitable number of males and females.

When the balance was threatened, children could have their sex "changed" at birth by a decision of their parents, and the whole group recognized this new status. From infancy onwards the education of these children prepared them for their future role in their "borrowed sex". There have been several examples of a hunter, lacking enough sons, deciding to initiate one or two of his daughters into hunting, so that they could help him. Conversely, but more rarely, certain boys were "sacrificed" by being given a social status less prestigious than the hunter's, but no less necessary to the family group. They were then brought up as girls to help with the family chores (cooking, sewing, care of children, etc.).

In traditional society, this artificial adjustment of the sex ratio within the family could have been a substitute for infanticide. In a small group, where children's lives were already at risk, the child would be "transformed" in infancy to avoid killing a new-born child of undesired sex. Infanticide would then have been reserved for extreme cases or abnormal situations: children born out of wedlock, of incestuous relationships, children whose mothers had died in childbirth or shortly afterwards, or children born during famines.

There could thus be a "social sex" as a substitute for biological sex, where the family would bring up the child so as to induce the required behaviour and skills. In the demographic records we find the case of a woman born in 1918 who died in a kayak accident at the age of 32. She had never married or had any children: the last-

born in a family of seven with only one boy, she became a woman hunter who contributed to the family unit by bringing home game – a typical male occupation.

This custom is still alive today. I have met some thirty individuals who have had their sex “changed” in infancy; but the custom cannot serve the same purpose today. It would appear to be a residual practice in an acculturated society no longer living in a precarious demographic balance, where adoption is frequent (so why not adopt the son or daughter needed for the well-being of the family?), and where the sexual division of labour is less strict after the development of wage-earning activities open to men and women alike.

The parents of such “changed” children always justify the change by saying that they absolutely wanted a son (or a daughter), and that when the child of the undesired sex was born they decided it would be their son (or daughter) anyway. The terms used for these children are *tikkaaliaq* “made up, transformed into a boy”, or *nuliakkaaliaq* “made up, transformed into a girl”. It could also happen that if the parents lost a young child of the sex they had wished for, the new-born child coming after would be named after the dead child and also take over its sexual identity.

A boy brought up as a girl has long hair, sometimes even in braids; he wears dresses and learns household chores. He stays in the women’s world, confined to a restricted domestic universe. The girl brought up as a boy learns hunting techniques and goes with her father or grandfather on their expeditions. She learns how to aim at a target, care for the dogs and the sled, and eventually to navigate a kayak. Her universe is that of the hunt and the great open spaces outside the home.

Thus the child who has had his or her sex “changed” has the appearance (hair and clothing) and behaviour (gestures and attitudes) of the other children of the “borrowed sex”. In today’s society, however, these children revert at puberty or sometimes even earlier to the physical appearance, and integrate into the adolescent group, of their true physiological sex.

This passage from one sexual status to another seems to make for internal conflict and psychological problems, even sometimes leading to suicide among subjects who undergo it. It seems to be easier for women brought up as men to reconcile both identities and raise a family. On first becoming mothers they take their definitive place in the world of women, but they nevertheless retain a masculine temperament. Men who have had a woman’s childhood and have therefore never learned how to hunt can go into wage-earning occupations today, as servants, employees, catechists, etc. Some remain single, some marry.

The thirty cases I have encountered during my various stays in the villages of the district can be placed in their family contexts – rank in the family, number of brothers and sisters alive or dead preceding the child in question, etc. – thanks to the family-cards established for each Ammassalik mother. The results confirm the

explanation given by the parents in terms of an imbalance between the number of boys and girls, requiring an “inversion” of the sex of one of the children.

Of the seven cases of men brought up as girls during childhood, five were born in second, third or fourth position in families without girls; in one case, as well as an insufficient number of girls, there was a “reincarnation” of the name of a deceased sister.

In the same way, a majority of the girls brought up as boys were born in second, third or fourth position in families as yet without sons, or were among the last-born in families with only one or two boys and several daughters. Five cases combine the “reincarnation” of a deceased son with an insufficient number of boys. Surprisingly, two girls brought up as boys are children of couples where the husband is Danish.

Thus it is rarely the eldest child who changes sexual status, except in the case of a first child of an unmarried woman, adopted and brought up by grandparents among aunts and uncles.

Even without systematic research I was able to record thirty cases in a population of 2300. There are certainly others: this does not seem to be a rare or exceptional phenomenon. But the custom will probably disappear, as it is now frowned upon by some of the Ammassalimmiut, who consider it harmful to the child.

#### Sex ratio according to age

As long as the small Ammassalik population remained closed, with no outside migration to speak of (except for a few West Greenlanders who immigrated to the area and married Ammassalimmiut, and some Ammassalimmiut who emigrated from the district), sex ratios were determined by sex ratios at birth and the difference between the male and female death rate. This can be seen in Table 10, which covers the period up to and including 1951. An imbalance in the sex ratio is particularly accentuated among individuals over the age of thirty, and is linked to the male excess mortality described above. There is a surplus of women in the most productive age groups (from 20 to 54). This surplus of adult women could have created real problems when the group lived in a precarious demographic balance.

Polygamy (and particularly bigamy) was a means of solving the double difficulty inherent in the life of this small endogamous group of hunters, i.e. the survival of women who were alone, and the problem of choosing a spouse when the number of possible spouses was further reduced by forbidden degrees of consanguinity (which in Ammassalik includes first cousins). The inclusion of already-married men in the group of possible spouses enlarged an over-restricted circle of acceptable husbands.

But bigamy was condemned by the first Danish Lutheran missionary,<sup>13</sup> who converted the Ammassalimmiut at the turn of the century; and the custom had totally disappeared by 1915.



Table 10. Sex ratio in large age groups at various periods (Ammassalik population).

Age groups	1884	1892	1911	1921	1934	1951	1960	1965	1976
under 20	83	91	94	92	95	114	96	88	87
from 20 to 54	91	66	77	95	88	83	98	110	107
over 55	100	133	67	36	41	76	68	74	83
All ages	88	81	85	92	90	100	96	95	94

In the late 1950s the district of Ammassalik began to open up to the outside world. The Ammassalimmiut had more and more occasion to spend some time in Denmark or West Greenland for medical treatment, schooling, vocational training, visits, etc. But those who actually emigrated from the district were mostly women. One of the major reasons for this is the search for a European spouse, or the continuation of a liaison with a Dane who has spent some time in Ammassalik and then leaves. In his study of Ammassalimmiut who have emigrated to Denmark, Perrot (1974: 17) estimates that 80% of the emigrants are women and 20% men. I personally verified this phenomenon of female emigration among the Ammassalimmiut of Ittoqqortoormiit, and found similar behaviour among Aleut women in Alaska.

This sexually differentiated emigration developed towards the end of the 1950s, and corrected the Ammassalik sex ratio for the 20–54 age group (Table 10). There was even a surplus of men in this age category in 1965 and 1976. However, not all of this is due to female emigration, as the repercussions of the proportion of males at birth, very high between 1932 and 1946 (Table 9), must also be taken into account.

## Recent changes in the genetic pool

### Hybridization prior to Holm's arrival

We can consider the Ammassalimmiut as an endogenous group prior to their discovery by Europeans, without however excluding the possibility of spouse exchanges with the southeastern tribe during bartering expeditions, or ancient hybridization with European whalers or seal hunters shipwrecked along the east coast of Greenland. On this subject R. Gessain writes: "Another point which must be cleared up is the question of hybridization of the Ammassalimmiut prior to Holm's arrival in the 19th century... Anthropological observations revealed blue eyes, light skins, heights well above the Eskimo average and body hair contrasting with the smooth-skinned Mongoloid type" (1978: 28).

Oral tradition speaks of *qattunaatsiaat*, "light-skinned" individuals, "kind of Europeans", who had reached the area in the past; I collected several such stories during my field trips.

In Holm's nominative list there are four individuals

among the East Greenlanders from Ammassalik named Kavdlunak (an Eskimo word meaning "westerner", pronounced *qattunaaq* in Ammassalik), i.e. numbers 19, 110, 188 and 318 in this census. There are two boys and two girls: two two-year-olds, one eight-year-old and a twelve-year-old. With our knowledge of the system of "name reincarnation" we can formulate the hypothesis that those children were named after a European their parents had met, or who had even been a member of their family who left descendants.

Oral tradition provides some confirmatory evidence for this hypothesis, and it may well be that white hunters or sailors actually left offspring among the Ammassalimmiut. For example, old Greenlanders told me that one of the ancestors of Tigimiartigsak (No. 2 on Holm's list, born in 1859 and baptized Mada) was a *qattunaaq*. Another source confirmed for me that Kagak (No. 30, born in 1868, baptized Ingemann) had a "*qattunaaq* whaler ancestor". Consulting Holm's list, we can see that a child named Kavdlunak (No. 19) lived in the same house as Tigimiartigsak and Kagak. Another example is the family of Ajatakio (father of Alusakat, No. 359, born in 1835) and his sister Ipik (mother of Kunitse, No. 332, born in 1850). According to their descendants today, they were the grandchildren of Europeans. In Holm's data we also find a two-year-old child named Kavdlunak (No. 318) living in the same house as Kunitse; and the genealogies of the Centre de Recherches Anthropologiques show that the girl Kavdlunak (Holm's No. 188) was first cousin to Kavdlunak (No. 318), i.e. that their fathers were brothers.

As further confirmation of the hypothesis of ancient hybridization with westerners we can mention the case of a man from Kuummiit, born in 1915, who said that his mother, Margareta, born in 1892, had *qattunaaq* blood, but was unable to specify how. This woman was the half-sister of Ivani Uitsalikitse, who was born in 1899 and died recently. His physical appearance (long beard and grey hair) was very different from that of other East Greenlanders.

However, even if the possibility of ancient intermarriages must be taken into account, such unions were probably very rare.

We have genealogies confirmed by direct inquiry for historical times, and these give us precise information about elements from outside the area. Two types of interbreeding can be distinguished among the Ammassalimmiut: hybridization with Europeans and Americans;



Table 11. Progression of hybridization in Ammassalimmiut's births. Ammassalik district.

Years	Births (N)	Children of one European or American parent (N)	% of total no. of births	Children of one West Greenlandic parent (N)	% of total no. of births	Children of unidentified father** (N)	% of total no. of births	Grand children of one European or American grand parent (N)	% of total no. of births	Grand children of one West Greenlandic grand parent (N)	% of total no. of births
1932-36*	219	3	1.4	-	-	-	-	-	-	-	-
1937-41	230	3	1.3	2	0.9	1	0.4	-	-	1	0.4
1942-46	268	15	5.6	4	1.5	4	1.5	-	-	3	1.1
1947-51	309	11	3.6	3	1.0	7	2.3	-	-	2	0.6
1952-56	368	10	2.7	4	1.1	19	5.2	-	-	2	0.5
1957-61	492	34	6.9	7	1.4	10	2.0	3	0.6	6	1.2
1962-66	533	59	11.1	13	2.4	8	1.5	6	1.1	5	0.9
1967-71	505	65	12.9	22	4.4	5	1.0	8	1.6	6	1.2
1972-76	274	51	18.6	11	4.0	7	2.5	9	3.3	3	1.1
Total 1932-76	3198	251	7.8	66	2.1	61	1.9	26	0.8	28	0.9

\* For the period before 1932, 4 births with European fathers and 2 births with West Greenlandic fathers are registered.

\*\* Essentially infant deaths (37) or children who emigrated young (13).

and interbreeding with West Greenlanders, themselves often the product of several generations of hybridization with westerners.

#### Interbreeding with West Greenlanders

Greenlanders from the west coast began coming to Ammassalik in 1900. The Danish administration had sent them to help colonize the Ammassalimmiut. There were clergymen and catechists, sent to convert them and teach them to read and write, midwives, etc. Until recently West Greenlanders held the most important official positions after the Danes. These civil servants generally came with their families and stayed a few years before returning west.

In Ammassalik at the turn of the century they were more numerous than westerners: between 1915 and 1924 their number varied between 19 and 27, representing at that time 3-4% of the total population of the area. Some of them (15) left for Ittoqqortoormiit in the summer of 1925, leaving only nine West Greenlanders in Ammassalik (1% of the total population of the area).

Despite their considerable influence on cultural and linguistic changes in Ammassalik, the West Greenlanders were never numerically important. After the Second World War the European population increased in the area (Table 13), but West Greenlanders only constituted 1% of the total population in 1951, 3% in 1960, and 2% in 1976.

Some West Greenlanders settled more permanently in Ammassalik and took East Greenlandic spouses. In this study they appear as "assimilated" to the Ammassalik population, to distinguish them from "passing" West Greenlanders. Thus in the 1951 census there were two

West Greenlanders married to Ammassalik women; in the 1960 census, there were three men and three women from West Greenland with Ammassalik spouses; in 1965, four men and two women; and in 1976, three men and four women in this situation.

As can be seen both from the births (Table 11) and the number of West Greenlanders present in the district at various times (Table 12), interbreeding of Ammassalimmiut with West Greenlanders is far less frequent than with westerners. Some of the offspring of these two ethnic groups have died or left Ammassalik. Of these, 9% were dead and 45% had emigrated in the census I made in 1976.

#### Hybridization with westerners

Few westerners came to Ammassalik before the Second World War. Access to this part of Greenland was then very limited, and strictly regulated by a Danish administration which wished to preserve the Ammassalik ethnic group.

Apart from the administrator, his deputy, the missionary and their families, and later a nurse and a radio technician, only a few foreigners came to the area for lengthy periods, chiefly for scientific purposes. During the summer there were more sporadic contacts between Greenlanders and the crews of Danish freighters or Norwegian hunting boats.

Because of the very limited number of exchanges with the outside world and the Ammassalimmiut's disapproval of extramarital relationships the number of hybrid births remained low until 1942 (Table 11).

As we have seen, the Second World War was a turning point in the history of East Greenland, which had to

Table 12. Evolution in the composition of the Ammassalik population according to its origins (for 1000 individuals). Sources: household censuses and genealogical data. Ammassalik district.

	1884	1892	1911	1921	1934	1951	1960	1965	1976
Ammassalimmiut through all ascendants	1000	1000	994	997	977	966	952	935	893
individuals with a European or American parent	—	—	4	2	2	20	24	37	64
individuals with a European or American grandparent	—	—	—	—	—	—	1	3	10
individuals with a West Greenlandic parent	—	—	—	—	1	5	10	11	13
individuals with a West Greenlandic grandparent	—	—	—	—	—	5	6	7	10
individuals with a West Greenlandic great grandparent	—	—	—	—	—	—	—	1	3
individuals with unidentified father in the genealogies	—	—	2	1	—	2	4	3	4
West Greenlanders established in Ammassalik*	—	—	—	—	—	2	3	3	3
As a whole	1000	1000	1000	1000	1000	1000	1000	1000	1000

\* There are a few West Greenlanders assimilated by marriage to East Greenlanders from Ammassalik.

rely on the United States for its defence and supplies. In November 1941 some Americans came to build a meteorological station near Tasiilaq, and in 1942 a military base was set up at Ikkatteq, halfway between the villages of Kuummiit and Sermiligaaq, with up to 800 American soldiers and workmen. This massive presence of foreign men in the very midst of the district, and the arrival of American ships and planes in this previously remote area inevitably transformed East Greenlandic life.

As far as hybridization is concerned, some children of American fathers were born in this period: seven boys and three girls (one in 1943, two in 1944, seven in 1945), but this is very few considering the number of Americans who stayed at length in the area. However, there had been serious enough problems between the Ikkatteq base and the surrounding villagers for a Danish official to be sent in May 1945 to forbid East Greenlanders access to the base. The Americans were likewise forbidden to go to the villages under threat of severe sanctions. In 1943 there were about 800 Americans, and in 1944–1945 about 400–500. In 1946 there were fewer, and they left finally in 1947.

In 1945 Denmark resumed its links with East Greenland, and the general trend of evolution was accelerated. In 1947 the number of Europeans resident in Ammassalik began to increase (Table 13). The period when the airport and radar base at Kulusuk were being constructed, from 1957 until 1960, also favoured hybridization between East Greenlanders and Americans or Europeans. A large number of seasonal Danish workmen

and some Americans were working there (up to 400 in 1957) and left some offspring (Table 11).

These important events coincided with a shift in moral attitudes among the young Ammassalimmiut. They allowed themselves total sexual freedom before marriage despite the disapproval of the older generations. This considerably increased the proportion of illegitimate births, among which there were several hybrids. As shown in Tables 11 and 12, the increasing short or long-term presence of westerners in the area, and the great popularity of white partners among the Ammassalimmiut women, led to modifications of the Ammassalik genotype.

The abrupt increase in the percentage of hybrid births between 1967–1971 (13%) and 1972–1976 (19%) was due to the fact that contraception was more readily adopted by married women in Ammassalik than by single girls. This is confirmed by the specific character of the 0–4-year-old group as shown on the 1976 pyramid (Appendix II).

Indeed, the majority of children of mixed parentage have unmarried mothers. However, some Ammassalik women have married Danes posted to the area for several years, after having lived with them for some time (16 women in 1976). And recently there has been a trend among Ammassalik men to look for Danish wives. In 1976 two male Ammassalimmiut were married to Danes, and one was living as man and wife with a Dane and married her in 1977.

Looking at Table 12, we can see that, because of the departure of some hybrids, the genotype of the Ammas-

Table 13. Progression of the European population in Ammassalik district.

Periods	% of Europeans out of the total population of the district*	Periods	% of Europeans out of the total population of the district*
1897-1901	0.8%	1942-1946**	1.6%
1902-1906	0.8%	1947-1951	4.9%
1907-1911	0.7%	1952-1956	4.4%
1912-1916	1.2%	1957-1961	6.7%
1917-1921	1.3%	1962-1966	7.2%
1922-1926	1.7%	1967-1971	9.1%
1927-1931	0.9%	1972-1976	9.0%
---			
1937-1941	1.3%	1977-1979	7.8%

\* Only Europeans (mainly Danes) living within the limits of the territory inhabited by the Ammassalimmiut. Europeans from remote stations (Aputiteeq in the north, Timmiarmiit and Qulleq in the south) are not included, since their contacts with the Greenlandic population are almost non-existent. Americans from Kulusuk radar base (built between 1957 and 1960) are not included in these figures. There are no official statistics concerning these about 12 individuals.

\*\* At that time there was also an important American contingent on Ikkattek base, which could take up to 800 men.

salimmiut living in the district had changed little in 1976. This may not last, however, given the increasingly strong exogamous trend. In 1976 there were 149 individuals in Ammassalik with one European or American parent, i.e. 58% of all hybrid births for the area before that date. Among those who could not be found there at the time 11% had died and 31% had left. The reasons for the emigration of people with mixed blood were the same as the ones I have given for people from Ittoqqortoormiit: they were either children of a Dano-Greenlandic couple where the (Danish) father had been posted to another area, or they were children of an unmarried Greenlandic mother, adopted by Danish families preferring the hybrid type to children of pure Greenlandic origin. Finally, integration in Denmark or the west coast is easier for hybrids than for pure East Greenlanders. However, the emigration of hybrids seems to have been more significant in Ittoqqortoormiit than in Ammassalik.

People with mixed blood who stay in their own environment are by no means rejected by the community: they are welcomed by family and friends and admired for their light skin.

Concluding this chapter, we must mention the great difficulties we have faced in carrying out genealogical research today in a society where sexual freedom has become very great, and where the number of illegitimate children is considerable. In certain cases I had to cross-check various sources several times to find out who was the father of a "fatherless" child and reduce as far as possible the margin of error or uncertainty ("unidentified fathers") in our genealogies. Generally speaking, the mother of an illegitimate child and her family know the father's identity. In a few cases, however, where there are several possible fathers, the local

administration tests for paternity to determine which of the men concerned should pay the child's allowance.

Research like this will undoubtedly be even more difficult in future, as illegitimate births constitute more than half the total number of births (Table 17).

## Long-distance migrations

Because they were gradually sedentarized by converging on a few permanent villages with community facilities (church/school, warehouse for storing provisions, nursing station or dispensary, meeting house), the Ammassalimmiut abandoned winter nomadism, which had allowed them to move every two or three years and exploit new hunting grounds. This sedentarization of the whole Ammassalik population, except for a few, was due to the following main factors: a new type of prefabricated wooden housing bought on credit; compulsory education for children from seven to fourteen; and the reassuring proximity of a shop and nursing station. Nevertheless, a few hunters (including the son of a Frenchman) and their families still continue to migrate as their Eskimo ancestors did in search of sea mammals and other game. For a few years now they have been using modern transportation (Danish freighters) to set up winter quarters as far south as Anoritoq and Puisortoq or as far north as Kangerlussuaq (Fig. 1).

Table 14 (a and b), which is a sequel to the table made by Ejnar Mikkelsen for the period 1883-1938 (1944: 68-69), shows the northern and southern sites of long-distance migrations along the east coast since 1940, and the number of individuals who spent the winter far from their villages each year. Mikkelsen's analysis shows that

Table 14a. Migrations of the Ammassalimmiut along the east coast of Greenland from 1940 to 1979.

Winter locations	Latitude	Approximate distance from Tasiilaq	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
<i>1. North of the district</i>																				
Søkongen Ø	68°10	450 km																		
Kangerlussuaq	68°00	400 km							2	18	18									
Nuugaalik	67°15	300 km																		
Kialineq	66°50	240 km																		
Kangertittivatsiaq	66°15	130 km							20	24	27	28	18	17	18	20	24			
Total for the North									22	42	45	28	18	17	18	20	24			
<i>2. South of the district</i>																				
Pikiitsi	65°00	140 km																		
Umiivik	64°20	200 km																		
Ittuarsuit-Oqqua*	63°35	270 km	}158	160	73	44	45	52	47	51	41	51	41	33	4					
Skjoldungen area* (Akorninaq-Pulaqqavik-Imaarsivik)	63°15	310 km				33	31	27	38	38	40	39	52	32	82	85	67	115	115	114
Uummannaq	62°50	350 km									5	5		13	14	15				
Timmiarmiit	62°35	420 km															33			
Puisortoq	61°50	480 km																		
(Kap Cort Adlaer)																				
Anoritoq	61°35	510 km																		
Total for the South			158	160	73	77	76	79	85	89	86	95	93	78	100	100	100	115	115	114
Total number of individuals (number of families)			158	160	73	77	76	79	107	131	131	123	111	95	118	120	124	115	115	114
% of the Ammassalik population			17%	16%	7%	7%	7%	7%	9%	11%	11%	10%	9%	8%	9%	9%	9%	8%	8%	7%

\* Areas populated since 1938 (162 individuals; 19% of the Ammassalimmiut).

shortly after the establishment of a trading post at Tasiilaq the population of Ammassalik had become dependent on certain European goods and was reluctant to leave for distant sites for fear of running short of ammunition for their new guns or of tobacco, greatly appreciated both by men and women, who would travel far to get some. However, these long trips were vital for hunters, who caught more bears and narwhals than they could in Ammassalik, and hunted the large seals whose skins were used to cover kayaks and umiaks and make boot (*kamik*) soles.

As early as the turn of the century, Johan Petersen organized a loan system – at his own expense, according to Mikkelsen (1944: 68) – so that hunters who wished to leave could afford the necessary equipment. In 1916 his successor was allowed to give loans of DKK 75 (this time out of administrative funds) to any hunter prepared to set up winter quarters for a year or more in hunting grounds outside the district. According to Mikkelsen this incentive was a success from 1916 until 1928, and affected between 4% and 22% of the population, depending on the year. Later, departures of this type became less frequent. Several factors brought this about. First of all, a dynamic section of the population had gone to found the Ittoqqortoormiit colony in 1925 (10% of the total population). Besides, the need for western goods had become much greater, particularly food (cereals, sugar and other groceries). Thus the volume of things one could buy and carry in the umiak on a lengthy trip had increased considerably, compared to the days when a seal caught anywhere along the way provided all that was needed for the survival of the group: food, clothing, heating and light. Finally, the number of umiaks in working order had become very inadequate: in 1938 there were at most 28 umiaks for every 122 hunters (i.e. one for every four families, see below p. 84).

Before the Second World War Mikkelsen remarked: “It seems as if one of the unfortunate consequences of the colonization has been a change in the whole mental attitude towards nomadic existence, and the desire, formerly so pronounced, to trek from one hunting district to another is disappearing, and even seems to be on the point of undergoing a change in the direction of a tendency to secure a permanent abode” (1944: 70). In 1938, nevertheless, there was a great migration southwards (19% of the population) towards Ittuarsuit and Akorninaq (near Skjoldungen). Some families were away for two or four years, others stayed even longer, until the Skjoldungen village was closed down 27 years later in 1965.

Table 14 shows the distribution since 1940 of those who have migrated far from the centre of the district. There are two points to note: the south attracts more hunters than the north; and the general number of people migrating towards remote hunting grounds has been decreasing and was extremely low by the end of the 1970s.

In 1950, when Skjoldungen had practically become a

permanent settlement, a storehouse for provisions was built, and new wooden houses were added in 1958–1959 to replace the older dwellings, now considered insubstantial. But in summer 1965 the whole population of Skjoldungen (111 persons) was forcibly relocated to the centre of the Ammassalik district and rehoused, mostly in Kuummiit. It was thought that the maintenance of a trading post so far from Tasiilaq, the administrative capital, was too expensive. Later we shall see how this shift in the population and relocation of families, now regarded as “foreign” in their own villages, created multiple problems.

Apart from the moving of the Skjoldungen families in 1965 migratory movements along the east coast were effected until 1966 with the Ammassalimmiut’s own means of transportation: dog sleds, umiaks, and from the sixties onwards motor boats: “Towards the middle or the end of July, when the ice situation allows it, people from Umiivik and Pikiitsi... arrive to sell their pelts and buy what they need for the coming year. In 1966 they came in umiaks – the last umiaks...” (Gessain 1969: 124).

In 1966 the Danish authorities tried out an experiment to see if it was possible to encourage the Ammassalimmiut to scatter out along the coast again. They would help them with transportation on their way out and back again by granting them loans so that they could buy the goods indispensable for an 11-month stay far from any shop.

The experiment was successful in Kangerlussuaq in 1966–1967. In August 1967 I watched the return of the first eight families (a total of 65 individuals). During the 11-month trip of this group the 13 hunters over the age of 15 and a few young boys had caught a total of 38 adult bears, 66 narwhals and 1372 seals. On their return they sold some of the pelts to pay back the loans and buy food and other coveted goods. One of the hunters told me that he had left on the 27th of July with 100 kg of sugar. In April there was none left, and there were only four consumers in the family, including a young baby!

The next year several families spent the winter at Umiivik in the same conditions. I was able to find out what kind of goods were bought by each family with the loans granted by the local authority. For example, one of these families, numbering two adults and six children, having borrowed D KR 3000, bought for their stay in this remote area: 4000 cartridges, 147 packs of tobacco, 270 kg of castor sugar, 400 kg of rye flour, 100 kg of wheat flour, not to mention margarine, tea, cereals, sweet biscuits, detergent to wash the skins, string, etc.

We can easily conceive that such a weight and volume of goods, now considered as basic necessities, could no longer be carried by traditional means of transport such as sleds or umiaks; and to the volume of goods we must add everyday articles like clothes, bedding, cooking pots, not to mention sleds and dogs.

The experiment was continued throughout the next few years to the north (Kialineq, Nuugaalik, Kangerlus-

Table 14b. Migrations (following) – Sources: Greenland Ministry Publications from 1940 to 1965, personal data from 1965 to 1979.

Winter locations	Latitude	1958	1959	1960	1961	1962	1963	1964	1965
<i>1. North of the district</i>									
Søkongen Ø	68°10								
Kangerlussuaq	68°00								
Nuualik	67°15								
Kialineq	66°50								
Kangertittivatsiaq	66°15								
Total for the North									
<i>2. South of the district</i>									
Pikiitsi	65°00				16	25	30	24	30
Umiivik	64°20			28	22				19
Ittuarsuit-Oqqua*	63°35								
Skjoldungen area* (Akorninaq-Pulaqqavik-Imaarsivik)	63°15	113	129	129	115	118	108	109	
Uummanaq	62°50								
Timmiarmiit	62°35					5			
Puisortoq (Kap Cort Adlaer)	61°50								5
Anoritoq	61°35								
Total for the South		113	129	157	153	148	138	133	54
Total number of individuals (number of families)		113	129	157	153	148	138	133	54 (9)
% of the Ammassalik population		7%	7%	9%	8%	8%	7%	6%	3%

\* Areas populated since 1938 (162 individuals, 19% of the Ammassalimmiut).

suaq, Søkongen Ø) and the south (Pikiitsi, Umiivik, Ittuarsuit, Akorninaq/Skjoldungen, Timmiarmiit, Puisortoq and even Anoritoq). These areas were known to contemporary Ammassalik hunters or had been visited in the past by their parents. But as a rule it is the same families who are willing to depart every year, or every other year, and in fact this type of nomadism only affects a very small section of the population, from 0.5% to 5% (Table 14b).

We must also mention the case of a family of five or six who lead, alone and without any outside help, a nomadic life between Umiivik, Akorninaq/Skjoldungen, Timmiarmiit, Puisortoq, Kap Farvel and the southern section of the west coast. In 1979, along with three other families, and like their ancestors, they still had "no fixed abode".

Besides the particular case of these few hunting families who perpetuate the tradition of long-distance migrations, the nomadic instinct has not totally disappeared among the other more sedentary Ammassalimmiut. It is obvious in the persistence of summer migrations (which we will be discussing later) and in the numerous trips made by young people within, and especially outside, East Greenland.

In contemporary society young people in particular, but also a few adults, have a desire to see the outside world, and they do so by going on temporary migrations – from a few months to a few years – and then returning

home. But this does not entail a real "drain" of people willing to abandon their home area.

A very few Ammassalimmiut have emigrated definitively and established themselves in Denmark, West Greenland or other places (Sweden, for example), either by marriage, adoption or finding a steady job. In his 1972 survey in Denmark Perrot (1974: 17) estimates the number of immigrants from Ammassalik at only 54 adults (47 women and seven men) and their children (eleven boys and eight girls). People who have emigrated from Ittoqqortoormiit are more numerous, relatively speaking. But there are many students or trainees who are temporarily resident in Denmark or West Greenland. Finally, there is a whole "floating population" of young adults who travel back and forth between Ammassalik, West Greenland and Denmark without actually settling anywhere. It is impossible to know their exact number or trace their various places of residence.

Before the 1950s emigration from East Greenland was very slight: at most a dozen East Greenlanders (mainly women) had left the area. But, beginning in the 1950s, migratory movements out of East Greenland developed and intensified. The first Ammassalimmiut to discover a whole new world were some 100 patients suffering from tuberculosis and other complaints who were sent to Denmark for treatment during the period 1950–1960. It was at this time too that the emigration to West Greenland or Denmark of young Ammassalik women,



1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
65		24 23 17	27	44	9	25	5 3	29	5	20			6
	11				4								
65	11	64	27	44	13	25	8	29	5	20			6
32	27 53	31 21	17 21	15 26	22 14	4 20		33 7	5	11 12	13	14	28
				25	38		17		17 5				9
6	6	5	4	4	24	9	12 19 7	20					
38	86	57	42	70	98	33	55	60	27	23	13	14	37
103 (14)	97 (15)	121 (20)	69 (12)	114 (17)	111 (19)	58 (12)	63 (12)	89 (15)	32 (6)	43 (7)	13 (2)	14 (2)	43 (9)
5%	4%	5%	3%	5%	5%	3%	3%	4%	1%	2%	0.5%	0.6%	2%

in the company of Danish workmen or functionaries they had met in Ammassalik, began. They are the largest category among those who have emigrated to Denmark.

The policy of assimilation actively pursued by the Danish government from the mid-sixties onwards led to an influx into Denmark of young schoolchildren from Greenland, essentially to learn Danish and familiarize themselves with a western way of life.

Thanks to this new policy, 80 Greenlandic schoolchildren from all over the country were sent in 1964 to various schools in Denmark for their final years of school, further education or specialized training. 150 were sent in 1965; 300 in 1966; 320 in 1967; 400 in 1968 and 1969; 590 in 1970; 600 in 1971; 800 in 1972; 737 in 1973; 655 in 1974; 530 in 1975; and about 450 in 1976.

Some young people from Ammassalik were involved in these "operations" (as the groups of students sent to Denmark every year were called – "Operation 300", "Operation 320", etc.). But at the same time some young Ammassalimmiut were sent to schools on the west coast, since it was thought at the time that they would feel less homesick this way. In fact they felt unwelcome and rejected among a West Greenlandic majority and had greater psychological problems than the teenagers sent to Denmark. So the number of departures for Denmark was increased and those for West Greenland decreased.

These are the figures I was able to collect on this subject: in 1966 11 young people from Ammassalik were sent to Denmark; in 1967 16 were sent to Denmark and 20 to West Greenland (Nuuk (Godthåb), Aasiaat (Egedesminde), Qaqortoq (Julianehåb)); in 1971, 63 to Denmark and 30 to West Greenland; in 1975, 80 to Denmark and 20 to the west coast; in 1976, 56 to Denmark and eight to West Greenland; in 1977, 60 to Denmark and 15 to the west coast.

The consequences of these stays far from home, sometimes for as long as four years, with two months' holiday in Ammassalik each summer, will be analysed later. The stays proved problematical, so much so that today it is considered preferable to keep students who want to further their education in Tasiilaq. This has involved enlarging the school and establishing digs for students from other villages. Only a few are now sent to Denmark, after they turn 17.

Since the mid-sixties young adults have had access to periods of training in Denmark (in secretarial work, accounting, trade, navigation, etc.)

The movement towards West Greenland intensified in 1965–1970, not only for schoolchildren, as we have just seen, but also for unmarried seasonal workmen called in by the KGH (the Royal Greenland Trade Department) to supplement the work force in fish and shrimp processing factories and in the harbours. The

trip was free of charge for those who stayed for over three months.

In 1965 there were 58 volunteers from Ammassalik (40 men and 18 women) for this type of seasonal labour in the towns of Qasigiannuit (Christianshåb), Maniitsoq (Sukkertoppen), Narsaq, Aasiaat (Egedesminde), Qaqortoq (Julianehåb) and Nuuk (Godthåb); in 1966, 27 (19 males, 8 females) were employed by the "Godthåb Fiskeindustri" factory; in 1967, 39 (33 males, 6 females) were sent to Qasigiannuit (Christianshåb) and Nuuk (Godthåb); in 1968 there were 20; in 1969, 52; in 1970, 37; and in 1971, 24. The Ammassalimmiut were not well integrated in West Greenland, but these stays allowed them to earn wages, hard to come by in their own area, where unemployment was rampant. This was the time of the great cod boom in West Greenland, and to alleviate economic problems in East Greenland some families from Ammassalik were encouraged and helped to emigrate to towns in the west.

However, the movement westwards did not last, as cod proved less plentiful than was expected at first, and West Greenlanders themselves had to face unemployment problems. Seasonal labour for the East Greenlanders could not be maintained, and families were no longer encouraged to leave.

Today, Ammassalimmiut who have never left their district are very few, most of them having had occasion to leave for health reasons (operations or treatment in Denmark or Nuuk); for educational reasons or vocational training; for seasonal work or for simple visits to emigrated relatives. Women in particular, even those over sixty, do not hesitate to visit a sister or a child in West Greenland, Denmark, Sweden or even the United States. Elderly men, however, do not wish to leave their home area even for a short while.

All these variously motivated comings and goings are extremely difficult to trace precisely. Certain trips are officially registered: the complete departure of a family; the adoption of children by families outside the district<sup>14</sup>; the departure of schoolchildren or young people for periods of training; patients being transferred to another hospital. But departures to visit a relative are not actually registered, nor the return of such travellers, nor of certain emigrants.

Quite often, at the end of their studies, young people stay on in Denmark or settle in a West Greenlandic town rather than immediately returning home.

In late 1971 I estimated that some 200 Ammassalimmiut (i.e. 8% of the total population) were out of the district, supposedly for a limited period of time.

With the political evolution of Greenlandic society which gave the country Home Rule in May 1979 we may expect a change in the direction of migrations: instead of leaving for Denmark, East Greenlanders may prefer to turn towards West Greenland, where all new initiatives will be taken from now on. However, during my field trip in summer 1979 it was still too early to observe any appreciable change.

In short, we must distinguish between three different types of migratory movement among the Ammassalimmiut: seasonal migrations within the district, long-distance migrations northwards or southwards along the east coast and migrations away from the east coast altogether. The two first types are in the tradition of Eskimo nomadism, even if transport conditions and material life have changed; but the third type is totally different, since these "emigrants are all either single, widowed, divorced or have a Danish spouse" (Perrot 1975: 173). They are cases of individual initiative, no longer collective decisions affecting part or the whole of the family.

## From "Eskimo family" to "Greenlandic family": changes in women's fertility and family structure

### Menarche and menopause

It is known that Eskimo women have a late menarche. Previous authors who have recorded the onset of menstruation among women from the Arctic give late ages. In 1882 Van Haven published the menarcheal age for 100 West Greenlandic women: five were under 15; 88 were 15–17; and seven were about 20 (*Ugeskrift for Læger* 1882: 186). Cook (1894: 156), medical doctor in Peary's 1894 expedition, gives the ages 19–20 for Polar Eskimos. Bertelsen (1907: 542), after his survey of 127 women from Uummannaq (in Northwest Greenland) in 1902–1904, records an average age of 15 years and five months, and remarks that if one isolates from this sam-

ple the 42 women of unmixed ancestry the average age becomes 15 years and six months.

For Ammassalik, R. Gessain in his survey of 1934–1935 found an average age of 14 years and nine months in his sample of 96 women (1960: 151). In 1972 a new survey was undertaken by the Centre de Recherches Anthropologiques among women in various Ammassalik villages, with the help of the midwife Sofie Jørgensen. The results provided the basis for Table 15. One may wonder whether changes in lifestyle and diet have had an effect on the menarcheal age among the Ammassalimmiut. The answer appears, so far at least, to be negative.

The group of women born before 1932 reached men-

Table 15. Age at menarche among Ammassalik women. Survey made in Ammassalik in the summer of 1972 with the participation of the East Greenlandic midwife Sofie Jørgensen.

Number of women	Age at menarche									Average age
	11 years	12 years	13 years	14 years	15 years	16 years	17 years	18 years	19 years	
Women born before 1932 (N=107)	1	2	9	37	23	12	16	5	2	15.0
women born after 1932 (N=63)	–	–	12	10	17	8	9	7	–	15.2

arche on the whole before the end of the Second World War; the second group, comprising women born after 1932, has felt, generally before menarche, the impact of the great post-war changes. The following facts emerge from Table 15:

- The group of older women (104 women born between 1897 and 1931) reached menarche at an average age of 15, which completely supports R. Gessain's conclusions. The ages could vary between 11 and 19, but 82% of the women were between 14 and 17 at the time of their first periods.
- In the younger group (63 women born between 1932 and 1954) the average age is 15 years and two months, so they are quite similar to the first group. However, the range is not the same, as it varies between 13 and 18.

At this point, no lowering of the menarcheal age had been observed among Ammassalik women. If the age of the first pregnancy was lower for the younger generation, it was not due to earlier menarche, but to freer morals among the young than among the older generation.

As far as the menopausal age is concerned, Sofie Jørgensen obtained precise answers from 70 women over the age of 40 in 1972. Some women, especially the older ones, could not answer the question; but 34 of them re-

membered the year (or their age) when it occurred; 36 answered that they had not yet reached menopause. Table 16 shows all these answers: among Ammassalik women menopause occurs most frequently at about 45–50.

### Nubility, age at marriage and sexual freedom

No particular ceremony was ever performed to mark menarche among Ammassalik girls, whereas among the Aleuts, for example, the girl was isolated for 40 days and many prohibitions were enforced to preserve the harmony of the group. The same discipline had to be observed at each monthly period: isolation and strict taboos – but only for a few days (Robert-Lamblin 1982b).

In Ammassalik, a young girl simply indicated her change of status on reaching puberty by wearing a skin G-string (*naatsit*) inside the house or tent, instead of going about naked as in childhood, and put her hair up in a bun on top of her head (the *pikkivat*, so characteristic of Eskimo women) instead of letting it hang down her back like a little girl. This was a sign for potential male partners, who at the age of 15 or 16 would also start wearing a G-string inside the house (Holm 1887: 93; Thalbitzer 1941: 604).

Table 16. Age at menopause among Ammassalik women. Survey carried out in 1972 with the participation of Sofie Jørgensen, among women born before 1932.

Number of women	Age at menopause																average age
	40 yrs	41 yrs	42 yrs	43 yrs	44 yrs	45 yrs	46 yrs	47 yrs	48 yrs	49 yrs	50 yrs	51 yrs	52 yrs	53 yrs	54 yrs	55 yrs	
already menopausal (N=34)	2	–	1	2	1	6	3	2	2	1	8	1	3	–	1	1	47.5
Number of women	Age in 1972																
	40 yrs	41 yrs	42 yrs	43 yrs	44 yrs	45 yrs	46 yrs	47 yrs	48 yrs	49 yrs	50 yrs	51 yrs	52 yrs	53 yrs	54 yrs	55 yrs	
non menopausal women born before 1932 (N=36)	–	3	6	2	2	6	2	6	3	2	–	3	–	–	–	1	–

Table 17. Progression of illegitimate births in the Greenlandic population of Ammassalik.

Periods	% of illegitimate births	Periods	% of illegitimate births
1917–1921	0.7%	1952–1956	17%
1922–1926	0.6%	1957–1961	23%
1927–1931	0.5%	1962–1966	26%
1932–1936	3 %	1967–1971	35%
1937–1941	6 %	1972–1976	47%
1942–1946	8 %	1977–1979	58%
1947–1951	13 %		

Note: The progression of illegitimate births has also been high in Denmark since the 1950's but it is still far from being as sharp as in Greenland. Thus, in Denmark:

in 1951–55 = 6.8% of births were illegitimate  
 1956–60 = 7.2%  
 1961–65 = 8.8%  
 1968 = 11.1%  
 1971 = 12.3%  
 1972 = 14.4%  
 1973 = 17.1%  
 1974 = 18.0%

(According to Prioux 1977: 145).

Becoming “marriageable” was a question of more than just attaining physical maturity: first one had to be capable of taking up an adult position in society. A man had to be a skilled enough hunter to support a family, and a woman had to be able to take over all female tasks: cutting up game, preparing meals, sewing clothes and kayak covers skilfully so that they were waterproof, tending the seal-oil lamp – the source of heat and light in the house – etc.

Marriage was possible at about 16–17 for girls and 17–18 for boys. But in Holm's census (keeping in mind that ages were approximate) we observe that few individuals under 20 were married – only two men and two women. In traditional society, premarital sexual relations were frowned upon; they were also sharply condemned by the first generation of baptized Ammassalimmiut, from the turn of the century until the 1930s. This could lead to extreme measures like infanticide of children born out of wedlock: we know of some cases of this. Later, as clearly shown in table 17, where we can observe an increasing percentage of illegitimate births beginning in 1932–1936, there was a progressive liberalization, which has now led to total freedom in sexual morality.

During my stay in 1977, a woman born in 1913 told me: “When I was young, only M. had a child without being married; now girls have children and no husbands – it's wrong”. Another 68-year-old informant said to me: “Young people today have children without being married. In the past, this was not done”. And indeed, the young are totally free today as long as they remain single; some even have sexual intercourse before puberty. The opinion of the old people is unimportant for

them, and illegitimate births have increased since the war from 8% of total births to 58% (Table 17). Surprisingly, this increase in illegitimate births has continued despite all the contraceptive devices that have been made available to Ammassalik women since 1969 and their extensive use, judging from the birth rate curve (Fig. 6). It is indeed a far cry from the times when an illegitimate child was killed by the mother or grandmother, considering that the prevention of unwanted pregnancies which is possible today was not immediately taken advantage of by a large number of young unmarried women.

## Pair-bonding

The choice of a spouse or partner

Because of their geographical isolation the Ammassalimmiut had to choose spouses within the tribe, although we cannot eliminate the possibility of ancient intermarriages (in the 18th or 19th centuries, for example) with groups from the southeast who were to be found at that time in the areas of Ittuarsuit, Akorninaq (Skjoldungen), Uummannaq or Timmiarmiit (Fig. 1). There was some bartering between them and family groups from Ammassalik. The last inhabitants of Southeast Greenland emigrated and settled for good around Narsaq Kujalleq (Frederiksdal) in the late 19th century, except for a group of 12 (six men and six women) who did not stay in this new habitat, but joined the Ammassalimmiut in 1896, going back north after having followed Holm to the south in 1885. These 12 individuals married into the Ammassalik group and merged into the population of the district.

Within the overall ethnic group we know as the Ammassalimmiut there were actually subdivisions which probably corresponded to zones of endogamy within the area. Holm and Garde (1889) made a distinction between people from Sermilik, who numbered 174 in 1884–1885 and lived in four settlements, and those from Ammassalik Fjord, who were more numerous, numbering 225 distributed among seven scattered houses. Finally, he distinguished one other family group of 14 from Sermiligaaq. The last two sub-groups met in early summer at Qinngeq to gather *ammassat* (capelin) and during this meeting, which was important for social and cultural exchanges, marriages would be arranged. These two groups seem to have formed an endogamous circle different from that of the Sermilik people.

Even today, despite ease of communication and the great mobility of the young, there are very few direct contacts between Isertoq in the south and Sermiligaaq in the north. People from each village say of the inhabitants of the other: “These people, we don't know them ...”.<sup>15</sup>

In the matter of choosing a spouse we still find some traces today of the divisions of the past. The greatly increased population has regrouped within a few villages

Table 18. Origin of spouses in the Ammassalik population living in settlements of Ammassalik district on the 31.12.1976.

Villages	Total number of married couples	Number of couples with		
		two spouses from same settlement	one spouse from same settlement*	none of the spouses from same settlement
Tiileqilaaq	28	21	5	2
Isertoq-Pikiitsi	26	17	8	1
Kulusuk	41	22	16	3
Kuummiit	57	24	27	6
Sermiligaaq	23	6	14	3

\* The spouse from outside the village comes from:

- for Tiileqilaaq: Kuummiit (2), Kulusuk (1), Tasiilaq (1) and Denmark (1).
- for Isertoq-Pikiitsi: Tiileqilaaq (4), Ikkatteq (3), Tasiilaq (1).
- for Kulusuk: Tasiilaq (3), Tiileqilaaq (3), Kuummiit (2), Sermiligaaq (2), Isertoq (2), Ikkatteq (1), Qernertivartivit (1), West Greenland (1) and USA (1).
- for Kuummiit: Kulusuk (6), Tiileqilaaq (4), Skjoldungen (4), Qernertivartivit (4), Sermiligaaq (3), Tasiilaq (2), Ikkatteq (2), Isertoq (1), Denmark (1).
- for Sermiligaaq: Kuummiit (7), Tiileqilaaq (3), Tasiilaq (2), Kulusuk (1), Isertoq (1).

Note: among the spouses from outside the village there is a higher proportion of women (2/3 females for 1/3 males). There is a tendency in the settlements to patrilocal unions.

which actually reassemble the descendants of the inhabitants of old related patriarchal “great houses”. An examination of the origins of spouses living in the villages at the time of my 1976 nominative list shows that in Tiileqilaaq, both spouses are of local origin in 75% of the married couples; in Isertoq-Pikiitsi, this is true of 65% of the couples, while 15% have one local spouse and one from Tiileqilaaq; in Kulusuk 54% of the couples are endogamous; in Kuummiit 42%. In Sermiligaaq only 26% of the couples were strictly endogamous: in this village people often took spouses from Kuummiit, as we can see from the fact that 30% of the couples consist of one spouse from Sermiligaaq and one from Kuummiit (Table 18).

The small localities of Ikkatteq and Qernertivartivit, with their very small populations, are mainly open towards the Isertoq-Pikiitsi and Kuummiit-Kulusuk groups respectively.

So as far as most matrimonial exchanges are concerned – and consequently most exchanges, since as a rule one visits one’s relatives – we still find the distinction between “people from Sermilik” (including Tiileqilaaq, Ikkatteq, Isertoq and Pikiitsi) and “people from Ammassalik and Sermiligaaq” (including Kulusuk, Qernertivartivit, Kuummiit and Sermiligaaq).

These small endogamous circles within the district, still partly maintained today, allowed various subgroups to retain certain characteristics, either in their lifestyle, their cultural heritage (tales, songs, etc.) or their language (different pronunciations and sometimes even different terms). This is probably why an inhabitant of Ammassalik hardly ever uses the general terms “Ammassalimneeq” or “Tunumeeq” (name given by West Greenlanders to East Greenlanders, meaning “people from the back”) of someone from his own area.

Most often he will refer to him by a name designating his local origin – Tiileqilaarmeeq, Kulusumneeq, Isertormeeq, Kuummiimeeq, Sermiligaarmeeq – thus placing him in a precise social context.

Finally, Tasiilaq, the regional capital, is a nodal point where contacts can be established among individuals originating in all the villages; or with foreigners – among the 90 married couples living in Tasiilaq in late 1976 20% were “mixed” couples. Fifteen Ammassalimmiut (thirteen women and two men) were married to Danes, and three (one woman and two men) were married to West Greenlanders.

#### Marriage prohibitions

We have dealt with the qualities required (particularly in the past) of a future spouse (skill in hunting and physical strength for men and domestic skills for the women) and with the marked preference for a spouse from one’s own endogamous circle. But even when these two conditions have been met, not all of those who fulfil them are necessarily considered marriageable.

In Ammassalik society there are prohibitions on degrees of consanguinity, up to and including first cousins. These prohibitions seem to have been dictated by a desire to protect against over-close consanguinity: first cousins, crossed or parallel, are considered as close as brothers and sisters, and were previously often raised together. The Ammassalimmiut say “*itterngiit kalitsann-gittat*”, that is, “first cousins don’t marry each other”. The term used for relatives of this degree of consanguinity derives from the word *itteq*, which means both “house” and “shared platform”. One does not marry those who have shared the same house and the same bed. But one can marry one’s *aaviaaq* (5th or 6th degree relatives) or one’s *saparngaq* children of the *aaviaaq*.

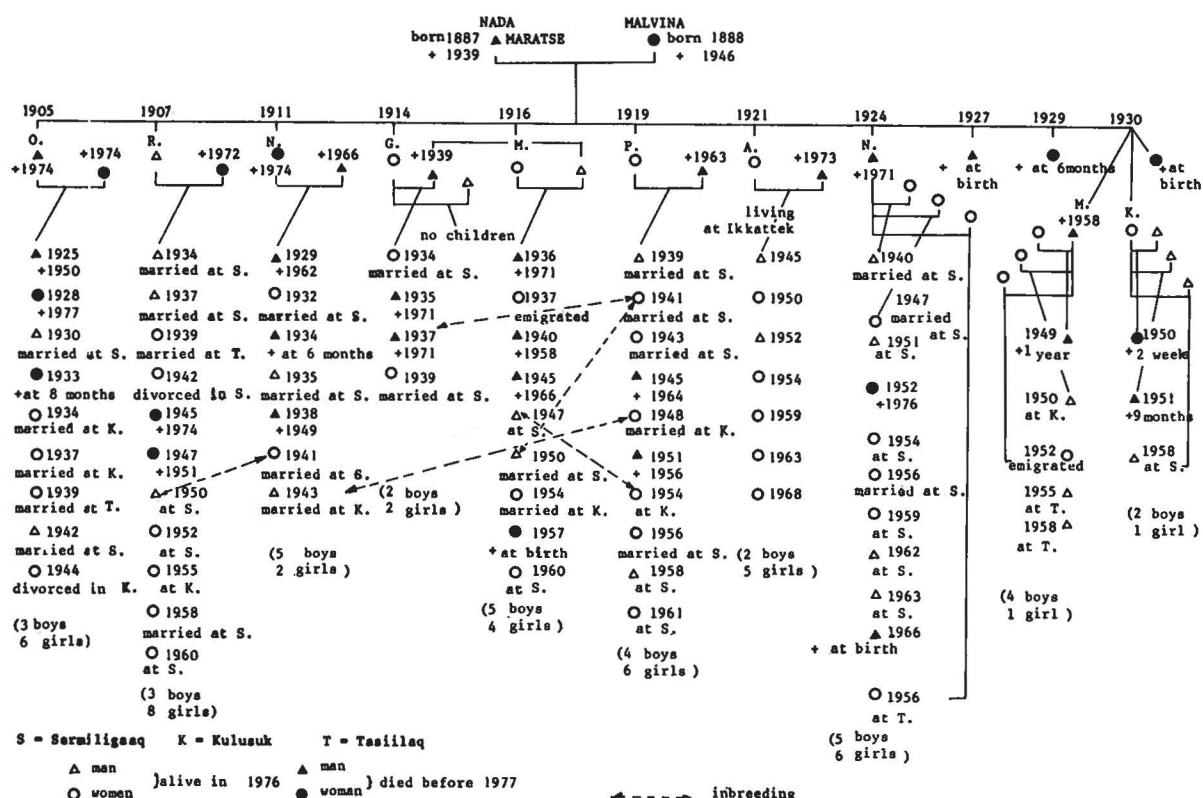


Fig. 18. Descendants of the Maratse family from Sermiligaaq.

Thus one traditionally had to find a spouse outside the house (which, centred on the grandparents, included uncles, aunts, first cousins, brothers, sisters, half-brothers and half-sisters) and, preferably, marry within a well-defined social circle. When the group was small the consanguinity restrictions and traditional preferences must have severely limited the number of potential spouses. This perhaps explains some considerable age differences between spouses found in the censuses, as much as twenty years or more, whether young women with older husbands or young men with older wives.

As with all prohibitions, there are always a few individuals who transgress them, even in the face of strong public disapproval. In 1967, an old woman felt that she was dying and gave a detailed account of her life in my presence. She recalled this: "I found myself widowed when I was still young [her first husband had died in December 1935]. I stayed alone for a long time; then one day, thinking that I was still young and beautiful, I decided to open my door to all men, even my first cousins". After this period of provocative behaviour towards society she remarried, with a man from her own village fifteen years younger than herself.

I was told of several cases of unions between first cousins. Sometimes there were unions without marriage

(seven cases); but official marriages also took place (nine cases). Concerning two of these I was told: "At the time of the wedding, the future spouses did not know they were first cousins, they found out later". In other words, they were illegitimate children who had not been told the identity of their real fathers.

In today's society this customary law has not been superseded by Danish (Lutheran) religious custom or Danish law, neither of which opposes marriage between first cousins. These unions, except in the small community of Sermiligaaq, are still rejected by most Ammassalimmiut.

In several villages I often heard it said: "Here we think one shouldn't marry one's first cousin; but people from Sermiligaaq do it". In 1977 an informant born in 1909 confirmed this: "In the past first cousins did not marry. They were like brothers and sisters. But some young people over there in Sermiligaaq marry their first cousins". These remarks all confirm that close consanguine unions remain rare and exceptional, and that the society as a whole, apart from Sermiligaaq, still disapproves of "incestuous" unions between first cousins.

In Sermiligaaq there are indeed five such unions which have produced children: three legitimate and two illegitimate. The couples in question are men born between 1937 and 1950 and women born between 1941



and 1954. One woman even married twice, each time with a first cousin (Fig. 18). This manifest violation of an ancestral prohibition could be interpreted as a self-defence reflex on the part of this small group (descendants of the Maratses) meant to limit the intrusion of spouses from outside the village, of which there was already a high proportion. After a number of deaths and disasters (such as the avalanche that killed four Sermiligaaq hunters in 1971) a considerable renewal of the population was necessary because of an insufficiency of local spouses. In 1976, among 20 married couples with at least one local spouse there were six "foreign" husbands and eight "foreign" wives. Moreover, three couples then living in the village consisted of two "foreign" spouses (Table 18).

Fig. 18 shows the offspring of the couple Nada<sup>16</sup> and Malvina Maratse, who with their children made up almost the total population of Sermiligaaq for scores of years. Some other families who had shared or had neighbouring hunting grounds had left the area. Some emigrated to Ittoqqortoormiit in 1925, and it is said that they left mainly because of conflicts with the Maratses: the emigrants were Emil, Niels and Manasse (Arke), who were later joined, in 1935, by the Madsens and Dukos. Other families went to settle in Kuummiit during the 1940s, such as the Bajare and the Sikivat-Tudoq.

Thus, after the war, the village of Sermiligaaq was a real fief of the descendants of Nada and Malvina. This very prolific couple had 13 children, 10 of whom had descendants, making a total of 76 grandchildren (35 boys, 22 of whom were still alive in 1976; and 41 girls, 34 of whom were alive in 1976). Transgression of the prohibition of "incestuous" unions between first cousins seems to have been accepted by this family group in order to maintain endogamy and attempt to preserve its identity in the face of exterior interferences which were felt to be a threat to the group.

At the other end of the district, in the small southern community of Isertoq-Pikiitsi, unions between first cousins are not accepted, but there we find the highest proportion of marriages between second cousins: in 1976 one couple out of four (27%, to be precise) consisted of couples related in the 6th degree.

Thus the people of Isertoq, like those of Sermiligaaq in the north, seem to want to preserve their family characteristics, but at the same time strictly enforce the traditional marriage rules without transgressing the incest prohibition.

### Marriage and its evolution through time

In Ammassalik there was no spectacular ceremony to mark traditional marriages. Marriage was not an occasion for celebration or even for a reunion of the families concerned. Usually the young man went to fetch his wife at his future parents-in-law's house, perhaps bringing them some presents (a harpoon, for example) and brought her back to his parents' house. The young wo-

man might simulate refusal to leave her house, or displeasure at following her husband; he would pretend to take her forcibly or even violently (behaviour reminiscent of marriage by abduction). On arrival at the husband's family house, the new couple was welcomed by the groom's father, who pointed out the space reserved on the platform for them and often pronounced a magic formula to ensure them long life and good health (Thalbitzer 1923: 272-273; 1941: 602).

Afterwards the couple's choice of residence was sometimes matrilocal, sometimes patrilocal, according to the economic necessity for a balanced distribution of producers and consumers. This distribution was decided by the head of the family in late summer, at the time when nuclear families regrouped for the winter.

Marriage, then, was confirmed essentially by the acceptance (most often implicit) of the union by each of the spouses' parents and by the start of cohabitation. One possible motive for refusing a future daughter-in-law was laziness: one should not have a lazy wife, because, among other misdeeds, she would neglect the care of the hunting-clothes so necessary for her husband's survival. Today one still hears harsh judgements passed by elderly persons on some young women: "She is a bad wife because she is idle and drinks coffee and play cards all day long".

Holm and Thalbitzer remark that some people married very young, having barely reached puberty; as long as the union had no issue the spouses could separate for whatever motive, even the most trivial. Of these early marriages, which often ended in separations, Holm writes: "We have known cases in which both husband and wife had been married six, seven or eight times" (Holm 1911: 65).

It appears that between the time when they were considered nubile and the time when they became fertile there was a period of temporary sterility, and during this period there could be several "trial marriages". Utukuluk, a woman barely 20 years old, came back to her sixth husband after eight trial marriages (Holm 1911: 73).

The marriage took on a more stable character after the birth of the first child. However, in the literature and genealogies there are cases of separation of couples with children. It could also happen that a hunter would take the wife of another hunter because the latter was less skilled or strong than himself, or simply because he was away from home (i.e. real marriage by abduction, sometimes with the acceptance or even the complicity of the woman's parents).

Two men with friendship ties could also conclude a sort of pact by which they exchanged their wives for a period of time. Most often this was to help another hunter who was leaving on a hunting expedition and could not take his wife along, either because she was ill or about to give birth.

Finally, there were some polygamous unions. When Holm made his census of the population in 1884 there

were nine cases of bigamy, representing 10% of all married men. These polygamous men were skilled hunters, capable of feeding a large family. It seems that two wives was the most frequent number in polygamous unions. Having three wives was very rare at that time: Thalbitzer only mentions one case (1941: 651); but Christian Rosing, the clergyman who succeeded Rüttel in Ammassalik from 1904–1921, writes that “there are many who have two wives, and also some who have three” (1946: 20).

There could be great age differences between two wives of the same man – one older and more experienced in women’s skills, and a younger one of child-bearing age. The ages given by Holm for husbands and wives in polygamous unions are as follows:

Number on Holm’s list	Age of husband	Ages of co-wives	Age dif- ferences
13	50	45 40	5 years
43	60	55 35	20 years
78	50	50 40	10 years
92	35	35 25	10 years
103	40	38 35	3 years
201	40	40 30	10 years
320	45	45 35	10 years
366	35	35 25	10 years
400	40	55 35	20 years

We can see that, except in the last case, one of the wives is roughly the same age as the husband, and the other is appreciably younger. At that time seven of the nine men had an umiak.

From the socioeconomic viewpoint bigamy had certain advantages. A skilled hunter would need a second wife to help the first cut up the game and prepare the skins, etc. When travelling in an umiak, an extra wife was also an extra rower. And if the first wife was too old the younger one could ensure a continuing line of descendants. As far as the women were concerned, even if conflicts and jealousy existed between co-wives, it was essential to have a game-provider to ensure one’s survival. And because of the male excess mortality due to the dangers of hunting there were many widows. Bigamy would help absorb part of this surplus of adult women at the time when the tribe was still totally isolated. In periods of want, surplus women and their young children, unable to emigrate or look for a spouse in another area, had only two choices: marriage (or remarriage) to a man from Ammassalik, or suicide (of which a number of cases are known). According to Damas (1975: 416) it seems that the situation of the Iglulik Eskimos of Canada was identical in this respect.

The genealogies of the Ammassalik population for the first period of its recorded history (the turn of the century) give us a complex picture of society, with several simultaneous or successive unions due either to the fragility of marriage ties – particularly when there was no offspring – to polygamy or to the high mortality which affected many people early, particularly men. As

a rule someone from Ammassalik would have a number of half-brothers or half-sisters on his or her father’s or mother’s side.

Danish colonization, and especially conversion by Lutheran ministers, have changed marriage customs profoundly. Christian Rosing – himself a Greenlander from the west coast, which had been colonized for several generations – denounced the social customs of the Ammassalimmiut roundly in his journal, describing them as “beastly” and “barbarian” (1946: 19). He meant the exchange of women, polygamy, frequent divorces and the “blowing out” of lamps: during certain winter festivals, when visitors arrived, the lamps were put out and everyone changed partners in the dark, single as well as married people (Holm 1911: 69). Rosing also condemned the “lechery” prevailing among these “pagans” and said that they did not understand “that a man must only have one wife”.

This minister set himself the task of establishing monogamy and faithfulness in marriage. First he had to deal with the situation as it was: there were religious marriages to regularize existing situations, but there were also some problems. What was to happen to an extra wife and her children after a man had been officially married according to religious rites with only one of his wives? How was one to consider the children born after an exchange of wives, who belonged, according to custom, “half” to one father and “half” to the other, etc? Thalbitzer wrote of the deep sorrow of Umeerinneq when the time came for him to be baptized in 1906: he had to renounce one of his two wives (the second one), with whom he had children (1941: 653).

In fact we know that although bigamy officially ended with conversion to christianity, it did not disappear as completely as all that. Throughout successive censuses we can note its persistence: in 1884 there were nine bigamous men (one married man in ten); in 1892, 6 (one in eight); in 1901, 3 (one in 22); but no more were recorded from the 1911 census onwards. In this last document, though, we find previously polygamous men living in the same houses as their spouses and with a “widow” or “unmarried woman” (the previous co-wife). Some cases of bigamy are also known from later periods and some even exist today, but it is done very discreetly.

Lutheran puritanical morals introduced a new marriage model: a single union officialized by the minister, indissoluble until death. In 1921 the conversion of all Ammassalimmiut was completed (the last individuals to resist baptism having been baptized in that year); 135 marriages were celebrated with religious rites between 1900 and the end of 1920. Some were regularizations of already-existing unions, others consecrated new couples. “Trial marriages” among young couples ended, and the only motive accepted for remarriage was the death of a spouse.

As we shall see later, one of the consequences of this stabilization of couples was an increase in women’s fertility. The only officially recognized marriage was now

the one celebrated by the minister (until recently there were no civil marriages in Ammassalik) and divorce was forbidden in East Greenland until 1967. This was the case in West Greenland until a new Marriage Act was passed in 1955.

It seems that moral and religious constraints on marriage were strongest among the first-generation christians; then a certain laxity began to appear among the young. From the 1940s on, the increasing number of illegitimate children testifies to the freedom gradually acquired by those who were single, despite the severe disapproval of the older generations. By the sixties, there was total freedom in sexual morals before marriage.

Since 1967 separation and divorce have been legal in East Greenland, and even some couples who had been married for a long time asked for separation. I was in the field when the prohibition ended. Some unhappy couples were very glad to have a new solution to their problems; but even old couples talked of separation as if it was worth trying "for the sake of experience".

This development towards unstable unions among both married and single people can be interpreted as an influence from Danish society (where free unions are numerous and the divorce rate high).<sup>17</sup> But it could also be seen as a return to the ancient Eskimo marriage customs (such as the successive unions mentioned above) that had disappeared with the advent of christianity. Whatever the interpretation – imitation of a western pattern or a return to tradition – it shows a great weakening of the minister's moral and religious influence.

In short, in contemporary Greenlandic society the wedding – that is, the ceremony by which the minister or the council official consecrates the union between two spouses – no longer marks the beginning of the union, as the bride and groom already have one or more children, or even the couple's settling under the same roof, as they may have been living together for several months or even years. There is a very vague boundary between being unmarried and married: on the one hand we have the "genuinely" unmarried as understood in western demography; and on the other, the "pseudo" unmarried, whose union has not been officially registered, living exactly like other married couples with their children, in the young man's or the young woman's father's house. When the spouses decide to go through a civil or religious ceremony the parents organize festivities to celebrate the event socially. Depending on the size of the village or locality, part or all of the population is invited in successive batches to drink tea or coffee, eat cakes, and smoke cigarettes seated around a table. These are social celebrations with no traditional character, copied from a western model, and associated with a ceremony equally foreign to local tradition.

Affective links between individuals (married or not) are strong, and a break-up or the infidelity of one of the partners can evoke strong reactions from the other, sometimes leading to violence (beatings, wounds or attempted suicide).

## Celibacy

In traditional society the interdependence of men and women created by the division of labour and the necessity of reproducing for survival led to conditions where celibacy was inconceivable. One Eskimo legend begins with precisely such an anomaly: a refusal to marry. This legend of the woman who did not want to marry is still told by the oldest of the Ammassalimmiut. It can be found among the texts collected by Knud Rasmussen (in Osterman 1939: 132), and in other Eskimo areas, particularly at Iglulik (as illustrated in the film by B. Saladin d'Anglure, 1976).

Each and every normal individual who had reached physiological maturity and had acquired the technical competence necessary to cope with life was a candidate for marriage.

The acculturation process, developing slowly at first before the Second World War, and then rapidly, introduced a new element: the possibility of men and women's economic independence of one another.

For the section of the population that has abandoned seal hunting and turned to wage-earning activities or commercial fishing there is no longer an indispensable complementarity between the sexes. A wage-earning woman can take care of her own needs and those of any children she may have. And a man earning money can buy things directly from a shop that his wife would have made for him in the past, for example clothes. Even among the Ammassalimmiut who have carried on the seal hunting tradition the interdependence of husband and wife is not as strong as in the past, since the market economy has changed the conditions of domestic economy. Of course, a hunter still needs a wife to cut up the game he brings back to the home and cure the skins; but since the money he obtains from selling skins gives him access to some imported, manufactured goods, he can remain single and fall back on the women in his family for the indispensable chores.

Celibacy (in the strict sense of remaining unmarried), extremely rare not so long ago, is now very common among those between 20 and 30, and today the children of unmarried mothers are welcomed by their families when the mother decides not to bring the child up herself.

In contemporary society marriage is no longer, as in the past, an institution fulfilling a dual function. It is no longer an economic necessity, since spouses can be materially independent of each other; and it no longer has its reproductive function, since the survival of the group is ensured just as well without the institution of marriage (more than half of the births are now illegitimate).

## Marital status of the population at various periods

Table 19 summarizes the preceding remarks. The various stages of this development are well captured in the "snapshots" provided by these censuses. The propor-

Table 19. Marital status of the Ammassalik population (and West Greenlanders assimilated by marriage) through various censuses.

1. Population above 20	1884		1892		1911		1921		1934		1951		1960		1976	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
single																
M	15	14.5	7	13.7	11	10.3	23	18.8	19	11.9	29	13.2	70	20.7	207	39.8
F	4	3.6	6	8.1	22	15.7	12	8.9	22	11.6	52	19.5	58	16.3	153	30.5
all	19	8.8	13	10.4	33	13.3	35	13.6	41	11.7	81	16.7	128	18.5	360	35.3
married																
M	87	84.5	41	80.4	93	86.9	96	78.7	137	86.2	180	81.8	259	76.6	259	49.8
F	96	85.7	46	62.2	86	61.4	89	65.9	125	65.8	168	63.2	254	71.3	268	53.5
all	183	85.1	87	69.6	179	72.5	185	72.0	262	75.1	348	71.6	513	73.9	527	51.6
widowed																
M	1	1.0	3	5.9	3	2.8	3	2.5	3	1.9	11	5.0	9	2.7	28	5.4
F	12	10.7	20	27.0	32	22.9	30	22.2	43	22.6	46	17.3	44	12.4	51	10.2
all	13	6.1	23	18.4	35	14.2	33	12.8	46	13.2	57	11.7	53	7.6	79	7.7
separated or divorced																
M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26	5.0
F	—	—	2	2.7	—	—	4	3.0	—	—	—	—	—	—	29	5.8
all	—	—	2	1.6	—	—	4	1.6	—	—	—	—	—	—	55	5.4
all individuals over 20																
M	103	100.0	51	100.0	107	100.0	122	100.0	159	100.0	220	100.0	338	100.0	520	100.0
F	112	100.0	74	100.0	140	100.0	135	100.0	190	100.0	266	100.0	356	100.0	501	100.0
all	215	100.0	125	100.0	247	100.0	257	100.0	349	100.0	486	100.0	694	100.0	1021	100.0
sex ratio of the population over 20	92		69		76		90		84		83		95		104	
2. Married under 20	N	% of married	N	% of married	N	% of married	N	% of married	N	% of married	N	% of married	N	% of married	N	% of married
M	2	2.3	4	9.8	—	—	1	1.0	3	2.2	1	0.6	0	—	0	—
F	2	2.1	5	10.9	7	8.1	8	9.0	15	12.0	14	8.3	9	3.5	5	1.9
all	4	2.2	9	10.3	7	3.9	9	4.9	18	6.9	15	4.3	9	1.7	5	0.9

Note. The differences between the number of married men and women are due to several factors: to the persistency of bigamy in 1884 (for 9M) and 1892 (for 6M); to the influx of western spouses in 1951 (1M), in 1960 (5M), in 1976 (16M and 2F); or to the absence of a sick spouse (in 1960).

tion of people married, unmarried, widowed, separated and divorced has been calculated for each sex and for the whole group. Important variations have appeared in the course of time. For example, the proportion of married people over the age of 20 was 85% in 1884 and 52% in 1976. This drop was accentuated greatly between 1960 and 1976, because of an increase in celibacy from 9% in 1884 to 35% in 1976. (We must, however, have some reservations about this percentage because of the "false celibates", that is, people in stable, but unofficial unions). Thus, unmarried women, very rare in 1884 (4% of women over 20) constituted 30% in 1976, i.e. one woman in three; and the number of single men increased from 15% to 40%.

Widowhood seems to have been particularly common in 1892: 18% of those over 20 were widows or widowers, i.e. 27% of the women and only 6% of the men. (At that date the sex ratio for the over-20 group was particularly low – 69 men for 100 women). In the following censuses the proportion of the widowed decreased, particularly among the women. We must stress that the situation of widows and their children has changed greatly since social benefits have ensured them a financial minimum enabling them to survive.

Separation and divorce do not appear in the censuses carried out between the end of conversion to christianity (1921) and the lifting of the divorce prohibition in 1967.

We can observe that marriage before the age of 20 has always been rare among men (except in the 1892 census, but this may be due to Ryder's rough estimation of ages). As far as the women are concerned, though, a sizeable number were married before they were 20 in the censuses of 1892, 1911, 1921, 1934 and 1951.

In the 1951 census, which included marriage dates, the average age at marriage was 22 for women and 24 for men. Among the 178 married men only 13 (7%) married before they were 20, whereas 70 (39%) of the 181 married women married before 20, including one at 15, one at 16 and 17 at 17. In 1960 and 1976 ages at marriage were higher.

Finally, the period covered by the 1976 census deserves separate comment, since it demonstrates an abrupt change compared with the preceding situation:

- the proportion of married people under 20 had become negligible (five women and no men).
- among those over 20, only half were legally married; the others were either officially single (35%), widowed (8%), separated or divorced (5%).
- exogamous trends were accentuated, and this continued beyond 1976 (Table 20). In the 1976 list, 22 spouses were from outside the district (four West Greenlanders, 17 Danes and one American). The great majority of these mixed couples live in the regional capital, Tasiilaq (Table 21). Besides these legally married couples there are many informal unions of variable duration between Ammassalimmiut and Europeans temporarily resident in the area. This has

contributed to an appreciable increase in the hybridization of the local population.

- some civil marriages, without religious ceremonies, have been registered, but very few (two in 1973, three in 1974 and one in 1975). These were mixed Dano-Greenlandic couples rather than unions between Ammassalimmiut.
- as a rule, single women over 20 have had one or more children. This is not a new trend, since there were already some unmarried mothers in the 1951 census; but it was accentuated during the sixties and has now become common.
- the increase in the sex ratio among the over-20s (to 104 men per 100 women) reflects the emigration of women from East Greenland. The attraction felt by Ammassalik women for larger and livelier centres is already evident from developments within the district itself if one compares the composition of the population of the regional capital with that of the other villages. In Tasiilaq there are 96 men per hundred women among the Ammassalimmiut over 20, whereas in the other localities the ratio is inverted – 110 men per 100 women (Table 21). In the villages the proportion of single men is very high compared with that of single women: 167 men per hundred women; and in Tasiilaq, 111 men per hundred women.
- the consequences of the legislation of 1967 authorizing separation and divorce in East Greenland were already apparent in 1976. In that year there were 13 divorced and 16 separated women, 13 divorced and 13 separated men.

Table 20. Marriages celebrated among the Ammassalik population between 1967 and 1978.

Year	Total number of marriages	Number of marriages with a foreign spouse
1967	16	1 (Danish wife)
1968	6	0
1969	3	0
1970	5	1 (Danish husband)
1971	10	1 (Danish husband)
1972	11	1 (Danish husband)
1973	8	2 (1 Danish husband, 1 West Greenlandic wife)
1974	19	2 (2 Danish husbands)
1975	11	3 (1 Danish husband, 1 West Greenlandic husband, 1 West Greenlandic wife)
1976	17	4 (2 Danish husbands, 1 American husband, 1 West Greenlandic wife)
1977	10	4 (4 Danish husbands)
1978	18	9 (4 Danish husbands, 1 Swedish husband, 1 Icelandic husband, 2 West Greenlandic husbands, 1 Danish wife)
1967–1978	134	28



To be granted a legal separation the spouses must show that they cannot live together (a frequent case is a woman wanting a separation because her husband drinks). The separation decree does not allow the spouses to remarry, but a year and a half later the separation can be converted into a divorce at the simple request of one of the spouses. To obtain a divorce directly it must be proved that one of the spouses has been unfaithful.

According to the Tasiilaq magistrate (now an East Greenlander) some separation pleas have been dropped or have not been finalized as divorces, and in several cases the spouses have resumed their life together. Also according to the magistrate, there are rarely disputes between spouses over the custody of the children in divorce cases, as they have previously agreed on sharing the children between them. The woman can ask for alimony, but the man must in any case pay an allowance for the children (DKK 2000 per child per year in 1975). In the event of non-payment, the police are responsible for deducting the amount from the father's wages or income from selling skins or fish.

The magistrate reports that those who sue for divorce are mostly couples resident in Tasiilaq, which accords with the data in Table 21. Personally, I would add that there is a higher number of separated couples in Kulusuk than in other small villages. Among the population of over-20s living in the villages (apart from Kulusuk) 3.6% are divorced or separated (16 out of 444); for Kulusuk alone the proportion is 6.2% (11 out of 176), and for Tasiilaq 7% (28 out of 397). Points of similarity between Tasiilaq and Kulusuk are on the one hand the proximity of a larger western population than elsewhere (the Danish airport and an American radar base are

near the small village of Kulusuk); and on the other the lack of employment for part of the population not found, at least to such an extent, in the other small villages still dependent on hunting. This is also true of Kuummiit since the development of cod fishing, although this village has many social problems to overcome, as we shall see later.

In villages which have retained a basically traditional way of life the stability of couples and of the family is greater because each individual knows the part he or she must play in the community. But when these roles are no longer precisely defined, in a destructured society or one functioning on a foreign model, celibacy and disunity between spouses tend to develop. In this respect, Tasiilaq and Kulusuk also share a high proportion of single people in the over-20 group (41% of single people in Kulusuk and 46% in Tasiilaq). It must be noted, however, that Tasiilaq as a small town attracts bachelors and spinsters from various villages in the district, whereas Kulusuk is not a point of attraction.

Contrary to what one might have expected, young couples are not the only ones to separate: among couples who separated or divorced between 1968 and 1976 we find a majority of old marriages contracted 10, 15, 20 or more years before. Some of these couples have several children (seven, eight, nine or even ten). In this generation, born between 1920 and 1940 (and for the most part inhabitants of Tasiilaq) there appears to be a certain desire to break with a past which has lost all reference value.

Today's youth, used to delaying the marriage ceremony, can make several successive attempts at unions which involve no official steps and therefore do not appear in the registries.

Table 21. Marital status of the Ammassalik population by settlement, on the 31.12.1976.

Settlements	Marital status of the Ammassalimmiut over 20										West Greenlandic spouses		Western spouses		
	married		widowed		separated or divorced		single		Total Ammassalimmiut over 20 years						
	M	F	M	F	M	F	M	F	M	F	Total	M	F	M	F
Isertoq-Pikiitsi	26	24	3	3	—	2	11	8	40	37	77	—	—	—	—
Tiileqilaaq	27	28	4	4	2	1	13	3	46	36	82	—	—	1	—
Sermiligaaq	23	22	2	3	2	1	5	4	32	30	62	—	—	—	—
Ikkatteq	5	5	—	1	1	—	4	—	10	6	16	—	—	—	—
Qernertivartivit	3	3	—	—	—	—	1	—	4	3	7	—	—	—	—
of no fixed abode	2	2	—	—	—	—	1	—	3	2	5	—	—	—	—
Kulusuk	39	40	3	10	6	5	39	34	87	89	176	1	—	1	—
Kuummiit	56	56	9	14	2	5	36	17	103	92	195	—	—	1	—
For all villages	181	180	21	35	13	14	110	66	325	295	620	1	—	3	—
Tasiilaq	76	86	7	16	13	15	97	87	193	204	397	1	2	13	2
All of the district	257	266*	28	51	26	29	207	153	518	499	1017	2	2	16	2

\* Five married women are under 20



Table 22. Age difference between spouses in couples censused on the 31.12.1976 (unions where at least one spouse is Ammassalikmееq).

Age difference between spouses	Husbands older than their wives No.	Wives older than their husbands No.
0- 4 years	122	45
5- 9 years	57	19
10-14 years	15	5
15-19 years	4	3
20-24 years	3	—
---		
27 years	1	—
---		
39 years*	1	—
Total	203	72
%	74%	26%

\* Case of a man who, marrying a second time, married his wife's daughter from another marriage. Another man is in the same situation, but with a smaller age difference.

In cases of separation or divorce, one of the spouses often emigrates from the district (women twice as frequently as men), or returns to the family village. In Kulusuk, however, some formerly married couples have stayed in the same village, living in different houses.

We must also mention the category of women who have left to marry in other areas and have come back a few years later after leaving their husbands (usually Scandinavians); this is true of some women in Ammassalik. Greenlandic women who have emigrated to Denmark have for the most part had problems of adaptation to a society which is foreign or hostile to them. They feel a sense of nostalgia for their native country and some of them are prepared to leave everything behind to return to their families.

Age differences between spouses can be very great both ways. Table 22 shows that it is most often the husband who is older than the wife; all the same, the woman is older in one case out of four. Sometimes the difference is considerable: in five unions the woman is 10-14 years older than her husband, and in three she is 15-19 years older (nor was this rare in traditional society). There can also be great differences when the husband is older than the wife - up to 27 or even 39 years. But the latter 39-year difference has always attracted ironic comments in the Ammassalik community: "L., when he married, married a baby..." (She was, moreover, his stepdaughter). When the first child of this second marriage was born, he was 58 and his wife 19; at the birth of their last child he was 70 and she was 31. The number of marriages where the age difference between the spouses does not exceed five years either way is not above 61%. Among the 39% of cases where the difference is more than five years, 29% are couples where the husband is older, and in 10% the wife is older.

## Women's fertility

### Infertility

In Eskimo tradition sterile women had a place apart in society: they lived in insecurity, rejected in some ways by the family group. "A full grown married woman who is unable to bear children is a subject for reproach", writes Holm (1911: 67). It is also known that childless women were barred from the essential role of an Ammassalik wife: the sharing-out of meat cuts from the game killed by her husband. She was replaced by another woman for this very important social act - the hunter's sister, if she was a mother, or his mother or aunt, or any other relative, as long as she had proved her fertility (Thalbitzer 1941: 650).

It is interesting to note, while we are on the subject, that Eskimo marriage did not *ipso facto* give the wife a special status in her husband's family community: for a period his female relatives would retain privileges which would only be conferred on the wife after the birth of her first child (preferably a son).

"In the past, in cases of sterility, one went to see the *angakkeq* [shaman]", say the old people.

### Motherhood

Social recognition of a woman was therefore linked to her capacity for motherhood: the stability of the couple also depended greatly on the same factor. This attitude prevailed for a long time, even during the recent period of social change. Every Ammassalik woman aspired to motherhood. Recent marriages are more often cele-



Young mother nursing her child at Isertoq. (Photo J. Robert-Lamblin, 1967).

brated officially once the couple's fertility has been proven. This is evident from the data in Table 23: in December 1976 the percentage of women over 25 who had no children was very low (4.3%, irrespective of marital status – single, married, widowed or separated). Among the 396 women aged 25 and over there were 17 childless women in the following age groups: four between 25 and 29; three between 30 and 34; five between 35 and 39; two between 40 and 44; one between 45 and 49; and two between 55 and 59.

We saw that the children of unmarried mothers were easily integrated into a family and brought up by their grandparents, aunts or uncles, etc., if their own mothers could not look after them. Thus, until 1970, apart from cases of sterility, every woman became a mother, to the satisfaction of everyone and at an earlier age than in the past, as we shall see in this chapter.

But a change in the mentality of women seems to have set in in the 1970s, and motherhood no longer appears to be as fulfilling for younger women. We can observe that the generations of women under 25, who can now control conception, for the most part use contraception even before having had a child. Among the 292 women between 15 and 24 in 1976, 76% had no children (92% between 15 and 19, and 46.5% between 20 and 24), which is a high percentage, given the total sexual freedom of the young Ammassalimmiut.

#### Natural fertility

The study of the fertility of Ammassalik women must be seen in historical perspective, since the socioeconomic evolution of the population has had appreciable repercussions even for the reproductive behaviour of women.

We can distinguish between two main periods: one when the population reproduced without deliberately limiting the number of births – i.e. before 1969; and one when the use of contraception was actively encouraged, beginning in 1969.

The first period of "natural" fertility, however, itself had two distinct phases: first, a "prehistoric" state, then a period affected by various factors linked with colonization which had an effect on fertility, such as the development of hygiene, the stabilization of marriages after conversion to christianity and shorter nursing periods among women of the younger generations.

In his study of the social morphology of Eskimo societies Marcel Mauss wrote that the Eskimo woman was not very fertile: "The settlement includes few old people and few children; for various reasons Eskimo women only have a small number of children. This has been one of the facts most remarked on in the past ... and it is so striking that there is probably not a single author who has not mentioned it. It is even said that Eskimo women refuse to believe that European women can have ten or twelve children. The maximum seems to be four or five children. The only exception to this in the statistics is a Kinipetu family with eight children (in

Boas) in Captain Comer's 1898 census, but there must have been some error in observation" (1906: 409–410).

Dr. A. Bertelsen (1907: 540–542) argued against this theory of low fertility among Eskimo women as developed by some authors (Rink, Dalager, Glahn, Cranz, Nansen and Bruun), demonstrating the contrary by means of statistics from West Greenland for the period 1851–1900, and presenting his own evidence from the hunting district of Uummannaq. In Uummannaq, out of 127 women (of all ages) who gave birth during Bertelsen's stay, 29% were having their 5th, 6th, 7th, 8th, 9th or even 11th child. Bertelsen concluded: "The assertion of low fertility is totally unfounded, either for the Greenlandic population or Greenlandic women".

In a later publication (1935: 13) he gave the number of births for every woman living in the Uummannaq area on the 1.1.1916 who had been married for over 25 years (and had therefore been born before 1870): the average was 6.2 children per woman (162 births, 26 women); and among these mothers 62% had between seven and ten children.

As far as the population of the east coast is concerned, we can only agree with Bertelsen. At the time of the first contacts with the Ammassalimmiut Holm estimated the average number of children per woman – counting only the ones who survived – at about three or four. But it was not unusual to meet women who had seven or eight children (1911: 67). Genealogical and demographic data collected by R. Gessain for that period confirm these figures.

Using later, more precise and complete data, we can accurately study the "natural" fertility of this small Eskimo group, keeping in mind however that the evolution of Ammassalik society was then already under way. The marriage structures had been modified by conversion to christianity; and the subsequent stabilization of unions, which increased the period of potential conceptions for every woman, must have tended to increase the number of pregnancies. To this we must add improved nutritional conditions (no more famines) and health conditions (better hygienic conditions during childbirth and the decrease in infant mortality).

R. Gessain's results, based on a sample of 147 women born between 1894 and 1928 who had reached 45 or over, concern the generation of women who arrived at marriageable age when the christianization process was in full swing and practically all of the population had been converted. The average number of children for Ammassalik women was 6.9, and 56% of women had between seven and fourteen children (Gessain 1973: 4).

Other factors could have played a role in increasing "natural" fertility, such as lower ages at marriage or shorter periods of breast-feeding.

From the study I personally carried out on women's fertility, for those living in Ammassalik on the 31.12.1976, it emerged that fertility has increased from generation to generation as society changed and acculturation set in. From Table 23 we can see that women

of 50 and over, who did not use contraception, had an average of 7.7 children (91 women). But in the case of the younger generations (for example women born between 1942 and 1946) whose fertile period began earlier and who have shorter intervals between births (due to the shortening of the nursing period), we can estimate that their total progeny would have been 11.1 children (Table 24) if measures had not been taken to lower the birth rate. I was able to make the same observation among the younger generations of Ammassalimmiut living in Ittoqqortoormiit in 1967 (Robert 1971: 55).

In conclusion, these results on the observed or projected total fertility of Ammassalik women, far from suggesting low fertility among Eskimo women, are in complete accordance with other results for populations without birth control. Henry (in Pressat 1971: 76–77), studying various historical populations of Europe, arrives at figures varying between 6.2 and 10.9 children for women married at 20 and still married at 50. Pressat (1971: 76) gives an average of 8.4 live births per woman married at 20, and considers this “the average natural fertility level (average for situations observed in historical European populations and contemporary populations in underdeveloped countries)”.

#### The development of contraception

From the 1930s until the 1970s the high fertility of women, despite an infant mortality rate that was still high – although well under the rate for the turn of the century – led to the spectacular demographic explosion described in a previous section, with children under 15 constituting half or more of the total population. This meant that the size of some families increased inordinately. Of the 260 women over 35 in 1976, 113 had between eight and sixteen children (Table 29), i.e. 43.5% of women in that age group.

Up to a point Ammassalik society dealt with this situation by redistribution of children through adoption: children from large families went to couples with few children. Adoption, which had been very common in traditional Eskimo society, was thus adapted and used in the unusual circumstances of heavy demographic expansion. We shall return to this point later (pp. 71–75).

It was in this context, the exceptional increase in nuclear families adapted neither to traditional lifestyles nor to new economic structures (fishing, tertiary industries), that the Danish birth control campaign began. As we mentioned above, it was successful, and rapidly spread to large centres such as Tasiilaq, Kuummiit and Kulusuk as well as small hunting villages which had retained a more traditional lifestyle.

It seems likely that if women from all the Ammassalik villages were so readily convinced by the birth control campaign (which was certainly well handled by the Danish doctors and Greenlandic midwives), then they must already have been well-disposed psychologically to the idea of reducing their fertility.

Some women had children every 24 months on average, or even more often, and they already had large families. These readily adopted contraception. The behaviour of young single women was different. Some of them used contraception only after bearing one or more children; but the youngest ones took advantage of the possibility of refusing early childbirth, either by accepting abortions or using efficient contraceptives (like the IUD) before becoming pregnant, and at a very young age – 15, 16 or 17.

The use of contraception by very young women is evident from a comparison of their reproductive history with that of the age group immediately preceding at the same age. Of the generation born between 1942 and 1951, 62% were mothers before reaching the age of twenty (Fig. 19c). In the next generation, born between 1952 and 1956, only 39% gave birth before their twentieth birthdays. This percentage still seems to be decreasing for younger women born after 1957. In 1976 there were few mothers in this group: only 11 out of 59 women aged 18 or 19 in that year – i.e. 19%.

Now that Ammassalik women have realized that they can control their own fertility, a different image of the family is bound to prevail. New ideas, inconceivable not too long ago, are taking hold: pregnancies can be refused or postponed; there can be an “ideal size” for a family; children can be “wished-for”, families planned, etc. All this is now replacing the former situation of natural fertility.

Thus, a few mothers who do not wish to have any more children have given their last-born the names of grandparents still alive, making sure ahead of time that they have done their duty as regards “name reincarnation”. This modern “adaptation” of an ancestral custom is, however, still rare, and displeases old people who find themselves “reincarnated” while still alive.

Some women who have lost a child ask for their IUDs to be taken out so they can give the name of the deceased to a new child. Once this duty has been performed they immediately return to using a contraceptive device.

The modern Greenlandic family, then, is undergoing profound changes, moving into a new phase where fewer children are born, but more survive. In 1976 it was still too early to know the size the new Ammassalik family will settle at. Will it be the same as when the Ammassalimmiut were emerging from “prehistory” (4–5 surviving children)? Or smaller, as seems to be the case for the Greenlandic population as a whole? Greenland’s general statistics for 1976 show that the total progeny calculated for 1964 as an average of 7.4 children per Greenlandic woman had decreased to 2.4 children per woman by 1975, that is, a reduction of two thirds after seven years of efficient Malthusianism. According to this document (*Grønland* 1976: 9–10) the annual figure for IUDs installed in Greenland was 1100–1200 for an average total female population of 12 325 individuals over 15, Danes and Greenlanders, for the period 1968–

1972. The percentage of abortions compared with live births was 8–10% in the sixties, but reached 25% in 1970 and about 50% in 1975.

Changes in reproductive behaviour like these raise several questions. Is this a passing or more permanent reaction? Do these upheavals indicate the will to come closer to a western model, or do they express the Greenlanders' worries about their future (which would be something new compared with the life concepts of the ancient Eskimos)? Is the place of the child within the family group and in society changing fundamentally? It will perhaps be possible to answer all these questions after some years have gone by.

#### Analysis by generation of the fertility of women alive in 1976

For each woman aged 15 or over in the census of 31.12.1976 one family card was filed – or several, according to whether she had entered into one or more official or unofficial unions. On each of the cards (the model for which was conceived by L. Henry) various data appear concerning the parents (code number, birth dates, date of marriage and death if required, village of residence in 1976) and details of all children of the couple, whether alive, dead or emigrated, with their code numbers, sexes, birthdates, and dates and causes of death if required. A system of cross-referencing allows one to find, on other cards, their half-brothers or half-sisters on the father's or mother's side. This was used as a basis for elaborating various research themes: the size of families, the number of fertile unions per woman, age of the mother at first and last childbirth, the number of births in the mother's age group, spacing between births, whereabouts of adopted children, etc.

The longitudinal analysis of fertility by generation among the 688 Ammassalik women over 15 in the 1976 census reveals progressive differences in their reproductive behaviour.

First come the women who have ended their fertile period of life without ever having practiced birth control and exhibit a "physiological" pattern of fertility tied to various factors: their state of health, personal capacity to reproduce, time of initiating married life, duration of marriage, and the length of the children's nursing periods. These are the 91 women born before 1927, 89 of whom were fertile.

Then come the generations of women whose fertility has been affected by Malthusian measures (from 1969 onwards) adopted at various stages of their childbearing life – for example after having had several children close together, or having given birth once or twice at an early age, or even as soon as they run the risk of having a child, without ever having given birth.

Given the impossibility of knowing the exact date on which a union was begun – even an official one, since from the 1950s onwards the official wedding has simply been the regularization of an existing situation; and

given the difficulty of telling the difference between real and false celibacy; and, finally, given the number of widowhoods and remarriages, particularly among the older generations, I decided that only a study of women's overall fertility would be feasible. The attempt to differentiate between legitimate and illegitimate fertility or to assess the actual duration of unions would only lead to erroneous results and would not reflect the realities of the Greenlandic way of life. It would be applying foreign concepts to an essentially different type of social reality.

#### Women's ages at the birth of the first child

Fig. 19 shows the distribution of first childbirths in terms of the mother's age for three generations of Ammassalimmiut.

The first group (a) consists of the 89 fertile women born before 1927. For the most part they had their first child before the great upheavals which followed the war, and their upbringing was marked by the rigorous religious morality of the first period after conversion to Christianity: premarital or extramarital unions or liaisons were strongly disapproved of. For this group the first childbirths rarely occurred before the age of 16 or 17 (2.2%). More often they gave birth for the first time between 18 and 23 (76.4%) and quite frequently after 25 (12.4%).

The second group (b) consists of 161 fertile women born between 1927 and 1941; their first children were born at the end of the war or afterwards and they benefited from the greater freedom in sexual morality among young single individuals. In this age group a first child at the age of 14<sup>18</sup>, 15 or 16 was still rare (2.5%), but the frequency increases for the age of 17 (5%), the most usual age for the birth of a first child being between 18 and 22 (75.8%). Among these women late first confinements were rare (5% over the age of 25).

The third group (c) is the 129 fertile women born between 1942 and 1951. For these young women sexual freedom before marriage was total, and for the most part they became mothers before turning to birth control. Their age at first childbirth was appreciably lower: for group (a) the percentage of mothers aged 15, 16 or 17 at first childbirth was 2.2%; for group (b) it was 6.8% but for group (c) it jumps to 31%. In the latter generation the age at the birth of a first child has mostly been between 16 and 20 (75.2%) and late first childbirths have been very rare (0.8% over 25).

If, instead of considering the distribution of first childbirths in terms of the mother's age, we look at the average age of women at their first delivery (Table 25) we can also observe a lowering of the age ranging from 23 for the oldest generation to 19 for the youngest. This decrease in age at first childbirth does not appear to be due to earlier puberty. Since the age at menarche does not seem to have changed, it must rather be a conse-



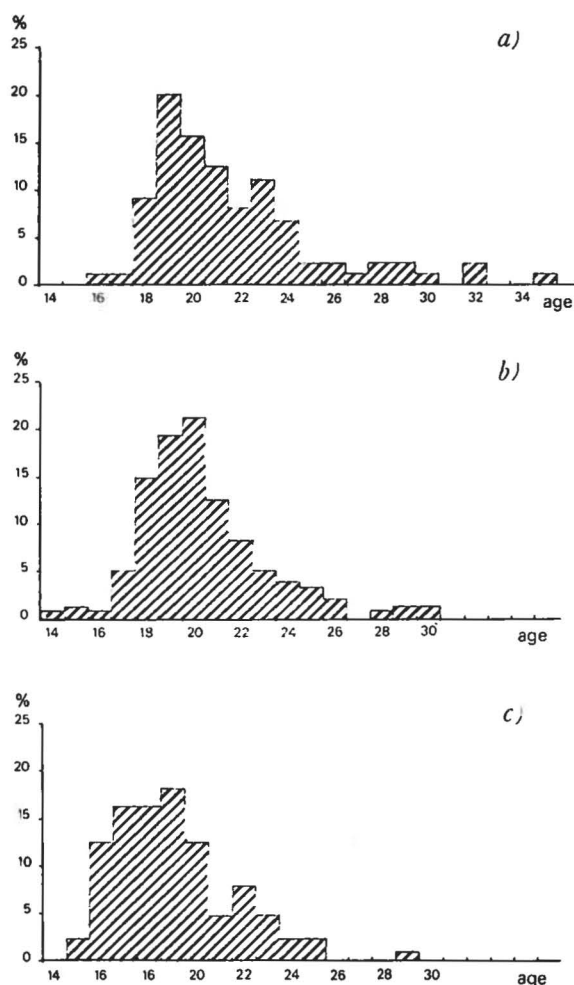


Fig. 19. Age at first childbirth of Ammassalik women alive on the 31.12.1976 in Ammassalik district. a) women born before 1927: 89 fertile women (2 childless, i.e. 2%). b) women born between 1927 and 1941: 161 fertile (8 childless, i.e. 5%). c) women born between 1942 and 1951: 129 fertile (7 childless, i.e., 5%).

quence of the greater freedom in sexual life among the younger generation.

Among women born after 1951 the widespread use of contraceptives should once again raise the age for the birth of a first child since many of them have chosen to postpone the event (see above p. 65).

#### Women's ages at the birth of the last child

Here again we must separate the generations, this time into two groups: those whose fertility was "natural" and those who had means of controlling their reproduction. For the first group (women of 50 and over in 1976) the average age at their last delivery was 39, varying from 37 to 41 as shown in Table 25. The age distribution of the mothers at the time of their last childbirth (shown in

Fig. 20) shows that for 64% of them it occurred between 39 and 43, and later for some: two at 44, three at 45 and one at 46 (6.7% of the women). For some women in these age groups the early end of their fertile life may be due to operations or the after-effects of the venereal diseases which have developed in Ammassalik since the 1950s.<sup>19</sup>

Among the women who could practice birth control we observe a lowering of the average age at last childbirth: 36 for those born in 1927–31, and 34 for those born in 1932–36 (Table 25).

Thus one result of Malthusianism which is already perceptible now is the disappearance of early and late pregnancies.

#### Fertility rates

The evolution of overall fertility in terms of women's ages and generations is shown in Table 23. The fertility rates correspond to the number of births per year for 1000 women of each age group. The following points can be noted:

- What we could describe as the "state of post-contact natural fertility" is represented by the oldest female generations (women born before 1927): their fertility is low before the age of 20, increases appreciably between 20 and 24, stays high and spreads between 20 and 39 – often reaching a maximum between 30 and 34, and remains fairly high between 40 and 44. Moreover, we find some instances of late childbearing among these women – at 45 and 46. Most of their children are born after the women have turned 30: 53% after 30 and 30% after 35.
- The effects of the recent Malthusian policy have already been felt among the women who were between 45 and 49 in 1976 (i.e. born in 1927–31) and who used the first efficient birth control methods after 1969. Comparing them with the previous generations we can observe an appreciable decrease in their fertility at 40–44; at that age their fertility rate is only 77, contrasting with rates of 123 and 200 among the older generations at the same age. Because of this the aver-

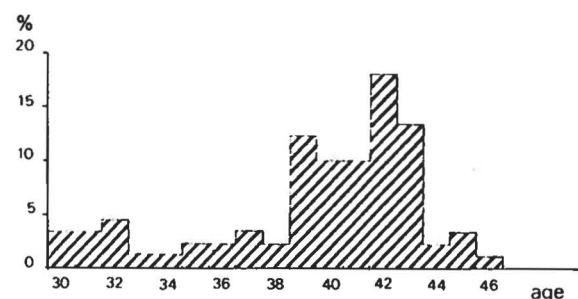


Fig. 20. Age at last childbirth of Ammassalik women over 50 on the 31.12.76. There are moreover, 5 cases of last childbirths before age 30, (at 19, 23, 25, 27 and 29 years) i.e. 6%. Total: 89 women (Ammassalik district).

Table 23. Evolution of fertility among Ammassalik women (Ammassalik district). Analysis by generation for all the women above 15, censused on 31.12.1976 (688 women).

Age group of women alive on 31.12.1976	Total number of women	Overall fertility rates, by age group, per 1000 women*								Number of children per woman**	% of women without children
		under 15	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years		
over 70 (born before 1907)	9	—	44	333	333	356	311	200	22	8.0	—
65-69 years (1907-11)	14	—	57	386	371	329	257	171	29	8.0	—
60-64 years (1912-16)	13	—	62	338	338	308	246	123	—	7.1	—
55-59 years (1917-21)	28	—	64	243	314	357	379	164	7	7.6	7.1
50-54 years (1922-26)	27	—	118	289	311	415	304	141	—	7.9	—
45-49 years (1927-31)	44	—	82	332	350	341	227	77	—	7.0	2.3
40-44 years (1932-36)	56	4	82	318	396	332	146	25	—	6.5	3.6
35-39 years (1937-41)	69	—	130	325	325	174	58	—	—	—	7.2
30-34 years (1942-46)	58	—	172	400	186	41	—	—	—	—	5.2
25-29 years (1947-51)	78	—	185	236	51	—	—	—	—	—	5.1
20-24 years (1952-56)	101	—	95	85	—	—	—	—	—	—	46.5
15-19 years (1957-61)	191	2	15	—	—	—	—	—	—	—	92.2
All women above 15	688	—	—	—	—	—	—	—	—	—	—
All women above 45	135	—	79	311	335	356	284	130	6	7.5	2.2

\* Number of births for one year, among women belonging to a given age group as compared to the total number of women in that age group (per 1000 women).

\*\* Average number of births per woman.

Framed figures show the success of the birth control campaign developed by health authorities in Ammassalik since 1969.

age at childbirth for this generation was lower, having decreased from 30.6 years for the preceding generations (women born before 1927) to 29.6 years (Table 25).

- Women aged 40-44 (born in 1932-36) started a family during the fifties, at a time when the demographic explosion was reaching its apex. Their fertility was high between 20 and 34, with a peak at 25-29, then it showed a sharp decrease.
- The generation aged 35-39 (women born in 1937-1941) lowered the number of births between the ages of 30 and 34 appreciably; and the fertility of women aged 30-34 (born in 1942-46), which was already high when they were aged 15-19, then very high when they were 20-24, decreased sharply between the ages of 25-29.
- Finally, first childbirths before the age of 20, after a sharp increase among the female generations born in

1942-51, are decreasing appreciably among women born after 1952.

Thus fertility rates had become higher at the same age among the more recent generations up until the introduction of contraception, which had spread to all female generations within a few years. For example, the generation born in 1942-1946 was still unaffected by the new Malthusian policy at the age of 24. If we consider that the portion of total progeny produced by the women of this generation by the age of 24 was similar to the one produced by an older generation (women born in 1922-1926, who were unaffected by any birth control measures throughout their period of fertility), we can calculate that the total progeny per woman for the 1942-1946 generation would have been 11.1 per woman without the interference of Malthusian policy (Table 24).

To conclude, then, the modern Greenlandic family has, on average, a younger mother than in the past (Ta-

Table 24. Total number of births (observed or estimated) among two generations of women: born in 1922-26 and 1942-46.

Generation 1922-26 (27 women)			Generation 1942-46 (58 women)	
number of births per woman aged 24 (1)	total number of births per woman (observed) (2)	% (1)/(2)=(3)	number of births per woman aged 24 (4)	total number of births per woman (estimated) (4)/(3)=(5)
2.04	7.9	25.8	2.86	11.1



Table 25. Evolution of fertility among Ammassalik women (Ammassalik district). Analysis by generation for women over 15, having had children, censused on 31.12.1976 (448 women).

Age groups of women alive on 31.12.1976	Number of fertile women	Number of children per fertile woman	No. of fertile unions per woman	% of children having died under 1 year	Average age* at the birth of the first child	Average age* at the birth of the last child	Average age* at childbirth
over 70 (born before 1907)	9	8.0	1.2	11.1	22.8	40.9	31.4
65-69 years (1907-11)	14	8.0	1.4	8.0	21.2	39.5	30.5
60-64 years (1912-16)	13	7.1	1.5	6.5	21.7	37.5	30.0
55-59 years (1917-21)	26	8.2	1.8	14.0	22.0	40.1	31.6
50-54 years (1922-26)	27	7.9	1.3	17.4	21.3	36.8	30.4
45-49 years (1927-31)	43	7.2	1.7	14.2	20.8	35.7	29.6
40-44 years (1932-36)	54	6.8	1.7	9.9	20.7	33.7	28.3
35-39 years (1937-41)	64	5.5	2.1	12.9	19.8		
30-34 years (1942-46)	55	4.2	1.8	12.5	19.3		
25-29 years (1947-51)	74	2.5	1.6	8.2	18.8		
20-24 years (1952-56)	54	1.7	1.2	9.9			
15-19 years (1957-61)	15	1.1	1.0	18.8			
Total	448			12.0			
All women over 45	132	7.7	1.6	13.2	21.4	37.7	30.6

\* in years

bles 25, 26) who has reduced her procreative period and wishes to control the number of her children.

### Birth spacing

In order to arrive at a correct assessment of the intervals between successive births, I selected from the available data cases of complete families with a sufficient number of children from the demographic point of view (following the method outlined in Henry 1967: 97-105). I chose mothers who had reached 45, who were still married and who had at least seven children with the same husband. I did not include large families where the fertile life of the couple had been interrupted by the death of one of the spouses; and I did not count the first interval between births in the cases where the mother had a first child by another man than the one she married afterwards.

Several factors are involved in the duration of intervals between births: the mother's age, the total number of children she has had, the fate of the previous child (whether it has died in infancy or survived), the diet of the new-born child, the use of contraception, etc.

Of the 129 mothers whose families were studied as regards intervals between births (Table 27), the majority did not use birth control devices. Some of the younger ones, however, (those born between 1927 and 1931) may have begun practicing birth control in 1969, when they were 38 and over. The presence of these women in the sample might have decreased the length of the last two intervals (lower part of table 27), but in fact if they were excluded from the sample the results would change very little: the last interval would have become 32.8 months (instead of 32.2) and the second-last 27 months (instead of 26.8).

The upper part of Table 27 shows the averages obtained for each successive interval according to the size of the family. The lower part of the table, regrouping the 129 families, gives the weighted averages for the first and last five intervals. One can observe a two-month increase in the interval after the birth of the second child, then a regular spacing of the subsequent births (intervals of 26-27 months).

As is the case in other populations studied, the last interval is longer by a few months (4-5 months) than the two preceding ones; but the penultimate interval shows no increase: it is even shorter than the antepenultimate one.

It seems that the Ammassalik women of these older generations exhibited no progressive decrease in their fertility with age. Their fertility was regular and high practically up to their last delivery. Among these women the last interval was longer than the first (32.2 months), but it was not as long as those, observed by L. Henry in the Norman population of Crulai (39.7 months) or in Genevan families of the past (37.5 months) (examples cited by Pressat 1961: 223; 1969: 206).

Table 26. Average age of Ammassalik women at the birth of the children born between 1962 and 1976 (Ammassalik district).

Periods	Average age* of the mothers at the birth of children born during that period	Number of mothers
1962-1966	27.3	533
1967-1971	26.5	505
1972-1976	25.8	274

\* in years

Table 27. Average intervals between births by order of birth and number of children in the family, for complete families with 7 children and above. (Ammassalik district).

Number of children per complete family***	Number of families	Average intervals between births (in months)														
		1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16
7 children	18	30.7	26.9	27.2	30.7	26.2	34.2									
8 children	18	27.6	26.3	29.2	25.6	27.6	29.1	35.6								
9 children	34	23.2	27.7	28.6	27.1	27.6	32.2	29.1	32.7							
10 children	23	25.7	26.2	27.1	28.4	27.0	25.9	29.1	25.1	32.3						
11 children	17	23.6	29.1	24.5	24.2	26.6	22.3	24.5	24.8	28.0	34.2					
12 children	6	25.3	31.7	21.7	23.5	24.0	18.5	25.0	28.0	27.2	21.2	28.2				
13 children	7	18.1	26.3	25.6	28.0	22.4	25.9	21.3	23.0	19.0	17.6	27.0	23.3			
14 children	3	20.0	19.3	20.3	20.7	18.7	17.3	14.0	16.0	25.3	26.0	17.0	18.3	18.0		
15 children	2	15.0	23.0	27.0	18.5	24.0	31.0	21.0	24.0	19.5	18.0	22.5	13.0	13.5	52.0	
16 children	1	17	18	0**	20	27	32	23	27	26	0**	24	17	25	22	24
Average number of children for all the families	Total number of families	Weighted average of the first and last 5 intervals														
		1-2	2-3	3-4	4-5	5-6	l.b.4	l.b.3	l.b.2	l.b.1*	last					
9.6	129	24.9	27.1	26.8	26.8	26.5	26.2	25.9	28.1	26.8	32.2					

\* l.b.1=last but one.

\*\* twin births.

\*\*\* family where the woman reached 45 while still married and had at least 7 children by the same father.

Table 28. Infant mortality and intervals between deliveries in complete families of 7 children or more (Ammassalimmiut of Ammassalik district).

Family size	Number of families observed	Normal average interval (in months)	Average interval after death of the preceding child (in months)
7 children	11	30.9	22.5
8 children	11	31.1	21.7
9 children	21	29.2	19.8
10 children	13	28.2	20.8
11 children	12	28.4	18.8
12 children	5	28.1	17.2
13 children	6	26.5	15.7
14 children	3	24.6	15.4
15 and 16 children	3	23.4	15.4
Total	85		
Weighted average		28.4	19.3

Breast-feeding appears to play an important role in the spacing between pregnancies, since there is an appreciable difference in the length of the interval between births according to whether the preceding child survived and was breast-fed, or died shortly after birth, prematurely interrupting the mother's milk production. Table 28 shows differences from 7.4 to 10.9 months, according to the size of the family, between the normal average interval and the average interval after the early death of a preceding child. Both intervals were found among the families chosen for this analysis (the weighted average of normal average intervals is 28.4 months, and that of average intervals after the death of a preceding child is 19.3 months, i.e. there is a difference of 9.1 months).

The fact that breast-feeding can act as a factor delaying the return of ovulation has been noted among other

populations. I made the same observation among Ammassalimmiut from Ittoqqortoormiit (Robert 1971: 55–56). It must also be noted that these two populations, which share the same origin, are not subject to traditional prohibitions forbidding sexual relations during the mother's breast-feeding time.

In my opinion, if women from the younger generations have shorter spacing between births and a consequently increased number of children, this is because they have shortened the period of breast-feeding appreciably (from several years to a few months). This change, which has been observed by older women, can be explained by the availability of powdered milk and baby cereals imported from Denmark.

### The biological and social family

#### Adoption

We have just reviewed the main factors affecting the reproductive life of Ammassalik women. Table 29 shows the number of children brought into the world by women over 15 in the nominative list of 31.12.1976. Even though some of these children have died or left the area, many mothers still have a large number of living descendants in Ammassalik.

But the social reality is different from the biological one, as the Greenlandic nuclear family often does not group all of a woman's, or even all of a couple's children in the same house. A certain number of children are distributed among the community according to other patterns than direct filiation. This common practice could be called adoption, although it does not have the complex official characteristics of adoption in western society.

The following course of events can often be observed in Tasiilaq: a woman asks the authorities for a child allowance, but she is met with total incomprehension from the staff, since no child of that name and age ap-

Table 29. Total number of children born to Ammassalik women censused on the 31.12.1976 (Ammassalik district).

Age of the woman in 1976	Number of women having had the following number of children:																Number of women per age group	Average number of children per woman	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			16
over 70 years		1				1			2	3		1	1					9	8.0
65-69 years						2	2	1	3	3	1	2						14	8.0
60-64 years		1		1	1		2	1	2	1	4							13	7.1
55-59 years	2				3	1	2	2	6	4	4	3			1			28	7.6
50-54 years		1	2	4	1	2	1	1	1	3	2	4	1	1	1	1	1	27	7.9
45-49 years	1	2	1	9	1	1	4	1	6	5	5	4	1	2	1			44	7.1
40-44 years	2	4	1	6	1	4	8	10	4	5	3	5	2	1				56	6.5
35-39 years	5	4	5	7	8	9	11	7	5	3	2	1	2					69	5.1
30-34 years	3	6	6	7	15	6	5	8	1	1								58	4.0
25-29 years	4	27	18	10	10	5	2	2										78	2.4
20-24 years	47	30	14	7	3													101	0.9
15-19 years	176	14	1															191	0.1
Total	240	90	48	51	43	31	37	33	30	28	21	20	7	4	3	1	1	688	3.3

pears in the official documents as her son or daughter. Finally, the woman explains: "Of course, he is my grandson (granddaughter, nephew, niece, etc.), but he was given to me. Now he is mine, he is my child". The administrative staff, who register biological parentage for every birth, or adoption when it is done according to the rules established by Danish institutions, are greatly disconcerted by situations like this, where children change families for good without any official trace of the event. The "Greenlandization" of institutions will perhaps lead to greater administrative understanding as far as this practice is concerned.

Adoption is an institution well known throughout the Arctic, in traditional Eskimo communities as well as acculturated groups. Marcel Mauss writes (1906: 468–469): "The Eskimos are the people among whom adoption is carried furthest". He justifies the practice in the following manner: "Adoption would not be either possible or useful if the winter regrouping lasted all through the year, because on the one hand orphaned children, as members of the egalitarian extended family, would be brought up by the whole community ... On the other hand, for the same reason if the nuclear family did not periodically take the place of the extended one, there would be no reason for married people without children to worry about their future, whether moral or material; they would feel no need to adopt a young relative or stranger to ensure their existence in old age, and, later, the worship of their souls". This text shows the various social functions of adoption in traditional society. From the adopted child's point of view, he cannot survive, particularly during the summer dispersal, unless he is cared for by a particular couple rather than the whole community. The adoptive parent's point of view has two aspects, one material and one spiritual. He realizes that the adoption of a child represents an economic burden; but he has the incentive of future help when the child becomes an adult and in his turn cares for his adoptive parents. The spiritual aspect concerns the reincarnation of the "name-soul", which is an important problem for people without progeny. When the demographic balance is precarious, and births are sometimes not as frequent as deaths, adoption can be a means of ensuring the continued transmission of the ancestor-names one carries.<sup>20</sup>

In traditional Ammassalik society, adopted children were usually orphans since, as we have seen, the surviving children in each family were few and the birth of an unwanted child (cases of incest, birth out of wedlock, the birth of a daughter in times of want) could result in infanticide.

The fate of orphans (children with no mother, and even more so with no father, since hunting accidents resulted in a high mortality rate among men) was a hard one. If the child did not die in a collective suicide with his widowed mother he had to lead a harsh life: he would be poorly fed and dressed and would have to do a

disproportionate amount of collective chores (collecting ice for drinking water, feeding the dogs, preparing baggage for trips, carrying heavy loads, etc.).

An old Ammassalik man, still alive today, described to me the terrible period of hunger and cold he suffered when his father died. This was in 1912, when he was 12 years old. In order to eat he dug up roots, gnawed on bones and even sometimes chewed on pieces of seal leather. It is said of another man, born in 1906, whose father had also died, that he was heard outside calling tutelary spirits to help him. Adoption by a hunter and his family was the only chance of survival for an orphan.

In Holm's 1884 list few individuals were known or stated to be adopted: five girls and two boys out of 413 persons. However, in the next census, taken by Ryder, the number of adoptees was much higher, i.e. 15 (eight girls, an adult woman<sup>21</sup> and six boys) out of a total of 293 persons. In 1901 the number of adoptees was 17 (eight males, nine females) out of 428 people; and in 1911 12 were adopted (ten men and two women) out of the 547 individuals figuring in the census.

Mauss's analysis remains valid in today's Greenlandic society. Now that winter regrouping has been abandoned and the extended families have been broken up into nuclear families the older people are often left alone. They then try to adopt, if possible, a little girl who will later take care of the household chores, and a little boy who will hunt or work for them when he becomes an adult. Their means of subsistence are an old age pension and allowances for children up to 15 years old.

Among elderly Ammassalimmiut and childless couples we also find the same preoccupation as in traditional society: the wish to ensure spiritual and material support in old age – loneliness is dreaded.

The frequency of adoptions has changed since the abandoning of infanticide (which was in fact never very widespread), the decrease in infant mortality, and the development of new moral attitudes among the young. Without including adopted orphans, we can observe a socioeconomic distribution of children in contemporary society which is different from natural distribution.

Table 30 shows that among children aged 0–14 in December 1976, 577 (60%) lived with both their biological parents, 239 (25%) lived with one of their biological parents, and 149 (15%) lived with neither.

The change of family can be done in three different ways: the child can be abandoned by its mother; it can be "given" by her; or it can be asked for by the adoptive parent.

The abandonment of a young child is usually due to special circumstances: the mother may be physically or materially unable to take care of it, or there may have been a break in the affective ties between mother and child (for example, if the child has spent some time in hospital shortly after birth and the mother considers it a stranger when it is returned to her and does not wish to

keep it). Most adoptions of young Ammassalimmiut by foreigners happen under such circumstances (see p. 151, note 14).

Orphans, or children neglected by their parents whom no one in or outside the district has asked to adopt, are sent to the Tasiilaq orphanage or institutions in Denmark. However, since 1971 the Ammassalik local authority places some orphans or children requiring care in families, paying them a fairly large allowance considering the Ammassalik standard of living (in early 1977 the allowance paid by a divorced father was DKK 167 per child per month, and the allowance paid to a family caring for an orphan was DKK 892 a month).

This new method of caring for children, where financial interests can be involved, has led to quarrels between families claiming the same child. If orphans in traditional Eskimo society survived with difficulty and were practically rejected by the community, orphans placed in families today by the local authority live well and are even in some demand as an extra source of income.

The "gift" of a child from the biological mother to an adoptive family occurs most often without any formalities, on the birth of the child or during the very first months of its life. Sometimes the decision is even made during pregnancy. This particular kind of "gift" is mainly given among kin, and most frequently on the mother's side.

The "given" child then belongs to its new family, although he does not always take their patronymic name. He retains no particular ties with his biological mother, although he knows who she is.

When people wish to adopt a child by "request", they express their wish to the mother-to-be, and she is very often persuaded to agree to their wishes and "give" her child. Such a request, sometimes an outright "order", always comes from members of the family – childless couples, couples with very few children, aging parents wishing to replace their own adult children with a younger generation. Sometimes parents who have "given" one or two of their children "request" others a few years later.

This type of adoption is described in a married woman's words to me in 1977: "When we had our first child we knew that my mother (a widow) wanted it;<sup>22</sup> but we were attached to him and kept him. We had several children, and then Palo was born. The winter following his birth, my mother, who lived in a small, remote village, came to spend the winter here in Tasiilaq. Then at Christmas we decided that Palo, who was almost six months old, would be my mother's Christmas present. We wrapped him in a large white cloth and my niece brought him to my mother. I was breast-feeding him, but he lived at my mother's and loved her. The following summer, my mother had to take a motor boat to return to her village. She told me: I will not take Palo away now, because he is still too young and I might not

know how to take good care of him. But when the time to leave had come, Palo clung so hard to his grandmother's clothes that we decided he should go anyway. All of a sudden I found myself with milk and no child to nurse. I was almost ill. I don't understand how mothers can give children to anyone else but their own mothers. It is too hard to part from them. The only reason I could accept it was that it was my own mother who was taking him". Palo (and one of his girl cousins) stayed with his grandmother, far away, until she came back to live in Tasiilaq, where she died. For a while the young "orphan" Palo lived with his maternal uncle from the same small village, with his cousins whom he regarded as brothers and sisters. A year ago his biological parents had taken him back, although they said he was completely alien to them and his biological brothers and sisters: "We don't know him and we don't understand him. He disappears for whole nights and we don't know where he is". (Palo was then 14). A change of adoptive family happens fairly often, particularly when the adoptive parents are the grandparents.

This type of "adoption" without official formalities is especially common among the families of unmarried mothers. In many houses there is a close continuity in age between the last-born child of a mother and the first children of her eldest daughters, born out of wedlock and given to the grandparents to be brought up among the other children (uncles and aunts of the adoptees). Meanwhile the young mothers keep their freedom and mobility.

A woman from a small village told me how glad she was to have had many daughters, because later she would have many grandchildren in her house. This explains why parents on the mother's side often refuse to let an under-age daughter have an abortion, saying that they will raise the child themselves.

To attempt to measure the significance of this social phenomenon I examined the family context in which every Ammassalik child under 15 in the 1976 census had been brought up. This category covers toddlers, preschoolers and schoolchildren (education is no longer compulsory after 14). The results are shown in Table 30.

Table 30 shows that children are more often brought up in their mother's than in their father's family. Among those who had been adopted by their grandparents 83% were with their mother's parents and 17% with their father's. Of those who had been adopted by aunts and uncles 70% were adopted on the mother's side and 30% on the father's. There was very few cases of adoption by more distant relatives. Generally speaking, the child and its adoptive parents have close kinship ties. Children who are not related to their adoptive families are for the most part orphans or the care cases mentioned above, or have been adopted by a Dane.

Table 30 also demonstrates what was said about the couple and the family. Tasiilaq and Kulusuk had the highest proportion of children living with their unmar-

Table 30. Family context in which Ammassalik children aged 0 to 14 were raised in 1976 (Ammassalik district).

Villages (Total number of Ammassalik inhabitants)	No. of children living with their father and mother		No. of children living with their mother				No. of children living with their father		Children living with their grand- parents*	Children living with their uncle or aunt**	Children living with distant relatives	Children unrelated to their adoptive family	Total No. of children 0-14 years
	married	co- habiting	re- married	widow	divorced or separated	un- married	divorced or separated	widower					
Tasiilaq (826 inhab.) %	151 48.55	16 5.15	24 7.72	9 2.89	15 4.82	35 11.25	6 1.93	2 0.64	8 2.57	14 4.50	5 1.61	26*** 8.36	311 100.00
Kuummiit (461 inhab.) %	123 62.12	6 3.03	7 3.54	9 4.54	7 3.54	13 6.57	— —	6 3.03	16 8.08	5 2.53	2 1.01	4 2.02	198 100.00
Kulusuk (401 inhab.) %	78 48.15	5 3.09	8 4.94	10 6.17	6 3.70	30 18.52	5 3.09	5 3.09	3 1.85	7 4.32	2 1.23	3 1.85	162 100.00
Small settlements (637 inhab.) %	198 67.35	— —	14 4.76	7 2.38	3 1.02	13 4.42	1 0.34	4 1.36	31 10.54	13 4.42	7 2.38	3 1.02	294 100.00
Total (2325 inhab.) %	550 57.00	27 2.80	53 5.49	35 3.63	31 3.21	91 9.43	12 1.24	17 1.76	58 6.01	39 4.04	16 1.66	36 3.73	965 100.00

\* Living with maternal grandparents: 83%. Paternal grandparents: 17%.

\*\* Living with a maternal uncle or aunt: 70%. Paternal uncle or aunt: 30%.

\*\*\* 9 children out of these 26 are at the orphanage "Børnesanatorium".



ried mothers and the lowest number living with married parents. These two localities had the highest percentage of children living with one divorced, separated or remarried parent. In Tasiilaq 14.5% of the children were in this situation; in Kulusuk, 11.7%; in Kuummiit, 7.1%; and in the small villages there were 6.1%.

In Kuummiit and the small villages we find the highest proportion of children brought up by their married parents, and here too adoption by grandparents is most frequent: in these places family ties are still strong.

We can observe that the system of adoption, which redistributes a certain number of children among the community, is not only due to the wish to preserve a good balance between producers and consumers, since adoptive parents may actually be poorer and less capable than the biological ones (particularly when the adoptive parents are elderly people): it is rather a new social distribution, different from the biological one, preferably within the context of the old, extended patriarchal family.

The natural affective ties between mother and child, considered by western society to be powerful and universal, have less meaning and seem more relative in this context. However, the recent and general spread of contraception may change this social practice fundamentally. If behaviour as regards motherhood can change, it can also change as far as adoption is concerned.

## II Social life and economic development

### Geographical distribution

In Ammassalik the traditional habitat was closely related to environmental conditions and demands. Two fundamental requirements determined the ethnic group's occupation of space.

The first was that individuals had to be dispersed in family groups distant enough from one another for each to have a sufficiently productive hunting ground. The size of these family units could vary between ten people and several times that number.

Secondly, regular nomadism on the one hand required the patriarchal family to change its winter quarters every two or three years within its hunting grounds, so as not to exhaust the resources of the same place; and on the other required nuclear families to disperse every summer towards migration areas visited by seals, arctic char, *ammassat*, etc.

It should also be mentioned that winter quarters were preferably set up near a location where sea currents prevented the formation of an ice pack. This way seal hunting conditions in winter were vastly improved.

### The importance of kinship

Despite the great transformations which the traditional family has undergone since western penetration into the area, and despite its break-up into smaller units, the family, as a group including grandparents, uncles, aunts and first cousins etc. (in fact all those who formerly lived in the large traditional patriarchal houses) today remains a privileged community within which practically all exchanges and communications are realized.

Hospitality and visiting, help and the sharing of food (although their importance has decreased considerably) are almost exclusively confined to kin. And it is within the same group that adoption by "giving" the child occurs.

Among the Ammassalimmiut, to have many relatives is to be well integrated socially: rights and obligations existing among relatives afford a certain security in this hostile environment. To have few relatives is to be doomed to loneliness and having no help other than one's own. For example, even today one does not go to a village if there are no relatives there to welcome one.

On the other hand, in a society tending to evolve towards a western model, where thrift and provision for the future are privileged qualities, having a small family enables one to accumulate goods and wealth without being obliged to share them and can become an advantage in the new pattern of "social success".

The great mobility of the Ammassalimmiut and the constant restructuring of the extended family during winter regrouping gave the impression that the social rules of the community were loose, anarchic or non-existent (Hughes 1958).

We have mentioned the division of the Ammassalik ethnic group into several sub-groups. This subdivision corresponded to certain geographical areas within which families belonging to the different endogamous circles would move about. The territories occupied by these various family groups were first and foremost the areas around the fjords of Sermilik, Ammassalik and Sermiligaaq, with a few extensions south of Sermilik towards Toqqulaaq, Nattivit, Iissalik or Isertoq, and some extensions north of Sermiligaaq towards Anaana, Tasiilaq or Kangertittivatsiaq.

Sometimes there were also more distant expeditions beyond the acknowledged geographical boundaries of the Ammassalik district.

Since the establishment of the colony in 1894, Danish

Table 31. Geographic distribution of the Ammassalik population in the first years of the historical period. (Table established from data gathered from the manuscript of the administrator Hedegaard: Angmassalik, 1894–1919, Arktisk Institut, Copenhagen; the numbers for the locations refer to map drawn by Karl Andreassen, p. 168).

	1884	1894	1895	1896	1897	1898	1899	1900	1901	1902	1904
<i>Sermiligaq fjord</i>											
7. Nunakitseq	14	47	32	32	–	39	19	18	31	–	26
9. 'Utoqqarmiit', Sermiligaq	–	–	–	–	–	–	17	–	–	–	–
<i>Ammassalik Fjord</i>											
17. Noortiit	25	–	–	–	–	31	–	–	–	–	–
22. Suunaajik	–	–	–	–	–	–	–	–	–	21	–
24. Kangertik	34	19	38	32	51	18	35	36	–	41	–
26. Nunakitseq	–	–	–	–	44	43	–	36	–	–	–
27. Kulusuk	–	–	12	–	–	–	–	–	–	21	–
29. Siaqqitteq	–	–	–	–	–	33	27	38	28	29	22
30. Kiittaajik	–	34	–	28	–	–	–	–	–	–	–
32. Umiivik	19	–	–	–	23	28	–	–	19	–	29
34. Ikaasak	–	–	–	–	–	–	25	–	–	–	–
35. Immikkerteq	37	–	–	–	–	15	–	–	–	–	–
36. Quarmit	28	–	–	–	14	11	–	14	29	22	26
38. Kangertik	–	–	–	13	–	–	–	–	–	–	39
40. Noorajik	47	–	–	29	–	–	–	25	26	26	16
44. Ileqqit	–	–	–	–	–	12	32	–	15	23	18
48. Qinngeq	–	–	–	–	–	–	–	–	–	21	–
55. Qinnaajivit	–	9	34	–	31	39	40	19	–	–	–
59. Ikaasattivaq	–	–	–	–	–	7	28	19	31	–	–
60. Qernertivartivit	–	–	30	–	16	–	–	–	17	–	29
62. Qittalivaajik or 'Kasigarmiut'	–	–	–	–	17	–	–	–	–	–	–
63. Tasiilaartik Kangitteq	35	–	–	14	–	–	–	–	–	–	–
64. Tasiilaartik Kitteq	–	–	–	33	36	–	–	–	–	–	–
65. Amitsivartik	–	26	6	11	8	–	–	15	–	–	–
67. 68. Tasiilaq, 'Itimiin'	–	–	11	24	18	16	17	39	33	32	53
? 'Itteqavak'	–	–	–	45	–	–	–	–	–	–	–
? 'Seerak'	–	44	34	–	–	–	21	–	–	24	20
<i>Sermilik Fjord</i>											
73. Savanganaartik	31	–	–	–	–	–	–	–	–	20	37
74. Ikkatteq	58	13	27	45	22	–	–	15	33	29	44
75. Ittitalik	–	–	–	16	42	22	–	–	–	24	26
78. Sivinganeq	31	43	22	32	50	13	34	44	15	9	30
82. Akernernaq	12	–	–	–	–	–	26	23	–	–	–
85. Sarpag	–	–	–	18	–	22	30	32	67	49	–
Tiileqilaq	–	–	–	–	–	–	–	–	37	–	–
91. Innartalik	–	–	–	–	–	–	–	23	–	–	–
92. Qeertartivatsiaq	–	–	–	–	–	8	34	12	–	12	–
94. Kakalik	–	–	–	–	–	–	18	–	–	–	–
? 'Qeertalik'	–	–	–	–	–	–	–	–	33	7	–
? 'Tanertoq'	–	–	–	–	–	–	–	–	18	–	–
<i>South of Sermilik</i>											
Qeertaalaq	–	–	–	–	–	–	–	–	–	–	24
Iissalik	–	–	–	–	–	–	–	–	–	–	16
Toqqulaaq	–	–	–	–	–	–	–	–	–	–	13
<i>Outside the district</i>											
to the south: Pikiitsi	–	–	–	–	–	–	–	–	–	34	–
to the south: Umiivik	42	–	–	–	–	–	–	–	–	–	–
Total population	413	235	246	372	372	357	403	408	432	444	468
No. of inhabited locations	13	8	10	14	13	16	15	16	15	18	17

administrators in office at Tasiilaq, for example Johan Petersen and A. T. Hedegaard, have left valuable data on the annual distribution of the Greenlandic population over various sites in the area. With the help of other documents<sup>23</sup> this type of information can be followed up to the present day, apart from a few gaps in

the 1930s. These statistical data are invaluable for studying traditional habitats, providing information about locations, duration of stays and population density. They also enable us to follow the evolution of the distribution of the population in the district throughout the century.

Table 31 gives an accurate picture of the traditional modes of habitat among the Ammassalimmiut at the beginning of the historical period: it shows the discontinuous occupation of various locations, some of which were only occupied for one or two winters. Others were inhabited more consistently for several consecutive years – then there would be a gap of one or two winters so that “the smell of man” could disappear from the place, allowing sea mammals to return confidently to the nearby waters.

When the inhabitants abandoned the great house, built half underground with stones and clumps of earth, they generally removed the roof. Thus the houses would be aired and washed by the rain in the interval. When they came back, the ruined house could quickly be repaired and occupied again.

Around the turn of the century the most inhabited area in any given year was occupied by a maximum of 20% of the total ethnic group. The locality changed every year: in 1884 Ikkatteq was the most highly populated area (with 14% of the total population); in 1894 it was Nunakitseq (20%); these were followed by Kangertik in 1895 (15%); ‘Itteqavak’ in 1896 (12%); Kangertik in 1897 (14%); Nunakitseq in 1898 (12%); Qinnaajivit in 1899 (10%); Sivinganeq in 1900 (11%); Sarpag in 1901 (15%) and 1902 (11%).

Then the small administrative centre of Tasiilaq became a pole of attraction drawing East Greenlandic families towards the nearby settlement at Itimiin: from 1904 until 1922 Tasiilaq and Itimiin together made up the most densely populated location in the district (Figs 23–24). The area was then supplanted by Kulusuk from 1923 until 1938, and by Kuummiit from 1939 until 1952. Since 1953 Tasiilaq has once more become the most densely populated Greenlandic settlement in the district, with 37% of all Greenlanders living in the whole area living there in 1976.

## End of winter nomadism: sedentarization and human concentration

Data from the end of the 19th and the beginning of the 20th century show that the sites inhabited in winter by the Ammassalimmiut between 1894 and 1920 were distributed as follows:

- 2 in the area north of Sermiligaag
- 4 at the fjord of Sermiligaag itself
- 1 between the fjords of Sermiligaag and Ammassalik
- 33 at the fjord of Ammassalik
- 19 at the fjord of Sermilik
- 8 in the area south of Sermilik

This gives a total of 67 sites sporadically inhabited during the winter by a nomadic population moving about in small groups over a geographical territory which ap-

pears to be subdivided in terms of the sub-groups of the Ammassalimmiut mentioned above.

Fig. 21 shows that in the period in question the number of sites inhabited simultaneously varied from eight to 24, depending on the year, and that the average number of inhabitants was somewhere between 22 and 34 per site occupied during the winter.

Between 1920 and 1930 there was a certain tendency towards sedentarization as regards winter quarters. Some sites were now inhabited regularly every year: Ikkatteq, Tiileqilaaq, ‘Utoqqarmiit’ (Sermiligaag), Suunaajik, Qernertivartivit and the three settlements of Kulusuk, Kuummiit and Tasiilaq. Yet a large section of the population still continued to lead a nomadic life, changing their living quarters as their ancestors had done. During these ten years 13 different sites were employed as winter quarters at Sermilik, 10 were occupied south of the fjord, 22 at Ammassalik Fjord, three at the Sermiligaag fjord and four north of Sermiligaag (according to Mathiassen 1933: 128–131).

However, the still-nomadic section of the population had halved by the beginning of the 1920s and had dropped to a third by the early 1930s. It was during that period, in 1925 to be precise, that the colony of Scoresbysund (now Ittoqqortoormiit) was founded with a group of 70 Ammassalimmiut, among other reasons to alleviate the overpopulation problems already affecting Ammassalik.

The most alarming concentrations have been at Tasiilaq-Itimiin since the turn of the century, at Kulusuk since the 1920s, and at Kuummiit since a short time afterwards.

Tasiilaq, the small colony where the administrative, trading and religious activities of the district are concentrated, was not founded on a traditional hunting ground of the Ammassalimmiut. The site was chosen in 1894 by the Danish authorities in charge of colonization, in the belief that the fjord could offer a sheltered harbour to ships coming from Denmark.

And, beginning at the turn of the century, it was on this spot, where hunting possibilities had always been mediocre and became worse, that Ammassalik families converged, attracted by curiosity about anything new (a trading post, western buildings etc.), and were kept there by the Lutheran missionary for religious instruction. This generally lasted two winters, which the would-be converts (who might number 50 or 60 persons) would spend at Itimiin in wooden houses surrounded by earthen walls. There they were about ten minutes’ walk from Tasiilaq, which was at first only inhabited by Europeans and West Greenlanders – the administrator, the missionary, the catechist and their families, as well as some East Greenlanders employed as *kippat* – servants.

Mikkelsen (1944: 58) mentions, however, that if it was relatively easy to attract the Eskimos to the area of the Tasiilaq station, it was much harder to get them to leave once they had been baptized – so much so that in

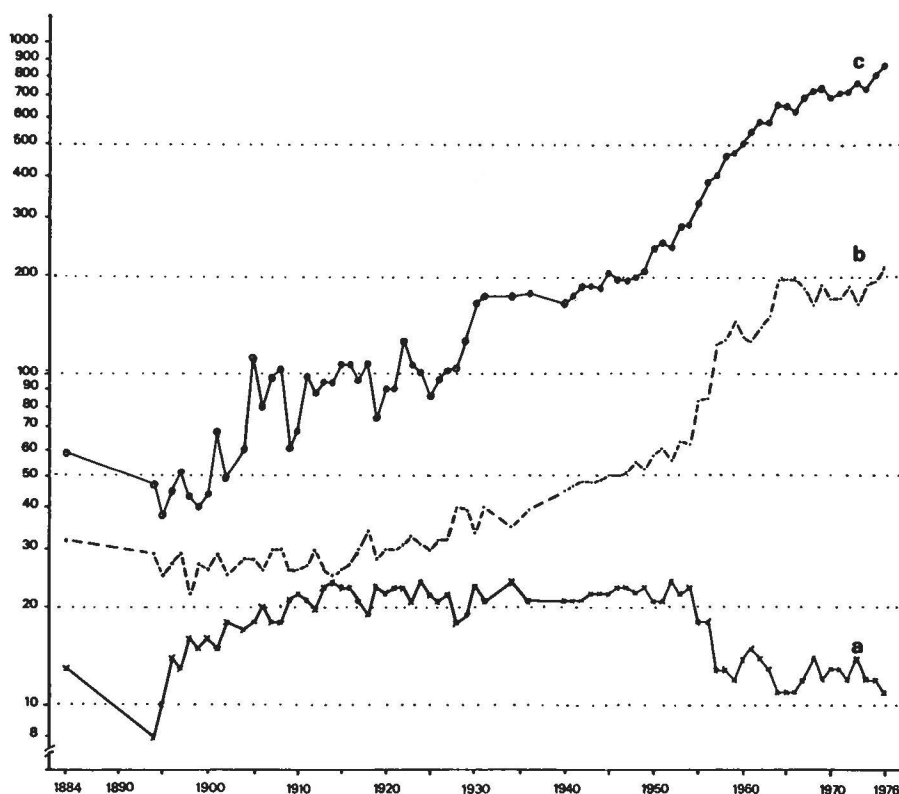


Fig. 21. Yearly distribution of the Greenlandic population in the district: a) number of inhabited locations\*. b) average number of inhabitants per location\*. c) population of the most populated location\*.

\*Europeans and Americans not included.

about 1905 a new regulation was passed forbidding any East Greenlandic family to settle for more than two years near the station. This regulation, enforced with more or less consistency for a while, was abandoned, but was reintroduced in the thirties. Mikkelsen points out that there was a difference of opinion between the clergy, who wished to keep the population as close as possible to the church, and the administrator, who wanted the population to spread out towards the best hunting grounds.

In 1909 the founding of a church/school at Kulusuk run by a West Greenlandic catechist started off a similar type of converging movement, attracting families previously scattered about the area. Then in 1915 it was the turn of Kuummiit, where a church/school was established with an East Greenlandic catechist in charge. In the next few years this became another pole of attraction for the inhabitants of the area around Ammassalik Fjord.

By the end of 1919 the Ammassalimmiut were spread out over 23 settlements, 20 of which, in traditional fashion, consisted of only one house. But built-up areas were beginning to appear in Kuummiit, Kulusuk and Tasiilaq, consisting respectively of two houses (for 47 Ammassalimmiut); three houses (for 67 Ammassalimmiut); and four houses (for 62 Ammassalimmiut); the housing for East and West Greenlandic civil servants has not been included in the count (one at Kulusuk, one

at Kuummiit and four at Tasiilaq) (Holm & Petersen 1921: 589, 642–647).

By December 1936 houses for Ammassalimmiut had become numerous in these villages: Høygaard mentions 17 in Kuummiit (for 137 Ammassalimmiut); 12 in Kulusuk (for 171 Ammassalimmiut); and 17 in Tasiilaq and Itimiin (for 110 Ammassalimmiut). Other small centres appeared: Ikkatteq with five houses, Tiileqilaq with four, Sermiligaq with three, Isertoq and Akernernaq with two; while there were 13 other inhabited sites which still only had one communal house each.

The increasing number of houses in one locality did not necessarily indicate demographic expansion: Ikkatteq with its five houses sheltered only 40 people in 1936, while 58 people lived there in 1884, all under the same roof. In this case it was the sign of an important change in lifestyle, notably the fragmentation of the patriarchal family.

As for Kulusuk, Høygaard wrote during his stay in 1936–1937: “The settlement at Kulusuk ... is overpopulated, and periods of famine recur every winter without fail” (1941: 14). At the time Kulusuk had the largest concentration of Greenlandic population in the district (Figs. 23–24). According to the same author the Kuummiit area, with its fishing possibilities, did not suffer from the same economic difficulties at that time.

Until 1954 the dispersal of the Ammassalimmiut within or outside their district (and especially the set-

tlement of the Skjoldungen area in 1938) still ensured a large number of East Greenlandic families an existence based on hunting. With demographic growth the average number of inhabitants per site increased from 40 in 1936 to 62 in 1954 (Fig. 21). Around the fjord of Sermilik the number of sites simultaneously inhabited during those years varied from four to seven; around Ammassalik Fjord from seven to nine; and in the area of Nattivit-Isertoq as many as three different sites were occupied in the same winter (see Appendix IV). Kulusuk and Kuummiit have each had a shop since 1951.

In 1955 a new policy of population regrouping was initiated by the Danish authorities to enable the Ammassalimmiut to benefit more from the services thought to be indispensable for the wellbeing of Danish citizens: schooling, hospital services, a church and shops. The number of winter settlements decreased and within five years the average number of inhabitants per site rose from 62 to 146 – an increase of 235%.

To replace the old Greenlandic houses, now considered insanitary, new wooden houses imported from Denmark and built by Danish workmen were erected in the small centres of Tasiilaq and Kuummiit, at Tiileqilaaq, Isertoq and Skjoldungen, and later at Kulusuk.

Community buildings such as shops, schools, dispensaries, meeting halls, codfish drying racks and radio installations to ensure communications between the villages and Tasiilaq completed the process of sedentarization and concentrated the Ammassalimmiut in the seven main settlements served by the KGH transport system<sup>24</sup> and with administrative services: Tasiilaq, Kuummiit, Kulusuk, Tiileqilaaq, Isertoq, Sermiligaaq and Skjoldungen (Saqqisikuik).

Eventually the settlement at Skjoldungen was deemed too expensive and not profitable enough for hunting and fishing industries, since it was 300 km from Tasiilaq. Despite the sums invested in the building of 17 new houses in 1958–1959 the whole population was brought back to Ammassalik against their will in the summer of 1965, 27 years after the departure of the first settlers. The inhabitants of Skjoldungen were for the most part resettled in Kuummiit, which had become a fishing village some years before.

However, such are the contradictions in policy-making that as early as 1966, perhaps because cod fishing was less promising than anticipated, the population was again encouraged to disperse along the coast. To this end annual long-distance migrations towards the north or south were organized, incurring very high transport costs.<sup>25</sup> Thus some families went back to spend the winter in Skjoldungen, which they had only left a few years before.

Today a return to the ways of the past is practically unthinkable for most of the East Greenlanders, despite the dynamism exhibited by the few (less than 5%, as shown in Table 14b) willing to spend the winter in hunting grounds well stocked with game and far from any settlement.

Two small settlements of less than 50 people, Ikkattek at the mouth of Sermilik, and Qernertivartivit on Ammassalik Fjord, have managed, despite everything, to sustain themselves up to the present day. This may be because they are close to Tasiilaq, which can easily be reached both in summer and winter.

Tracing these developments has shown us that the two fundamental principles that formerly determined the Ammassalimmiut's living patterns – the dispersal of the ethnic group in family units and nomadism – have both been abandoned. There are no longer discontinuities in the occupation and exploitation of various territories; and the annual population per inhabited site has reached, and sometimes exceeded, an average of 200 since 1963 (Fig. 21).

## Housing and the break-up of the patriarchal family

The great patriarchal houses, built half underground, of the type Holm saw on the shores of the fjords in the Ammassalik area at the end of the 19th century, consisted of one large, almost rectangular room, from 8–10 m long and about 5 m wide. Access was by a low passage several metres long turning in the opposite direction to the prevailing wind. The construction material was provided by the environment: stones and sods for the walls; driftwood for the roof structure and platform posts; flat stones for the floor and platforms; sealskin for insulating the inner walls and waterproofing the roof; seal gut, sewn into thin, translucent strips to cover up the openings used as windows; and, finally, pieces of seal fat to plug holes in the roof.

Inside, a large portion of the room was taken up by the platform (50 cm high), which took up the whole back wall and projected about 2 m into the communal space, dividing the house in two. The platform itself was divided up by semi-partitions some 50 cm high, which defined the space allotted to each couple, their young children and unmarried daughters. Young unmarried men and visitors slept apart on small platforms built under the windows on each side of the entrance to the passage leading out. In front of the space allotted on the platform to each married woman there was a stone lamp set on a stand – her own private property.

Thus in the midst of winter communal life the nuclear family still had a private domain: a few square metres of platform on which to spend the day and sleep the night, extended into the communal area by an individual "hearth" – the stone lamp, source of heat and light. Høygaard calculated that the average width allotted to each individual on the platform was 53 cm (1938: 87). The personal belongings of each nuclear family (clothes and the implements of the man and woman) were stored under its section of platform. I will not here go into the details of daily life in the winter house at the time the



Interior of a house in Sermiligaaq where the communal platform is still in use. (Photo J. Robert-Lamblin, 1967).

Ammassalimmiut were discovered, but will refer the reader to the very lively description given by R. Gessain (1969: 11-69).

The number of occupants in each of the 13 winter houses in Holm's 1884 census varied between 12 and 58, with an average of 32 occupants per house. On the west coast at the same period the average number was nine. At the beginning of the 20th century the Ammassalimmiut in turn evolved towards the use of smaller houses, sheltering one or two families instead of six, seven or eight as in the past. But this evolution was not uniform: when Høygaard made his study of the habitat of the Ammassalimmiut in 1936 he found great variations between the number of occupants in each house. The

smallest number of people in one house was six, the largest 27 (1938: 81-87).

By collating information from Hedegaard's manuscript, from Holm & Petersen (1921), from Høygaard (1938) and from the nominative census of 1951, we were able to draw up Table 32. West Greenlandic civil servants living in wooden administrative housing were not counted. The evolution clearly shows the break-up of the patriarchal family.

After a trading post had been set up at Tasiilaq new building materials were integrated into the houses: wooden boards to line the inner walls, floor and ceiling; glass panes for the windows; and tar paper for the roofing. These materials were expensive and almost impos-

Table 32. Evolution of the average number of inhabitants per house in Ammassalik (Ammassalik population).

Years	Ammassalik population	Number of houses inhabited by this population	Average number of Ammassalimmiut per house
winter 1884-85	413	13	32
winter 1894-95	235	8	29
winter 1904-05	468	18	26
winter 1914-15	581	27	22
winter 1919-20	623	30	21
winter 1936-37	812	75	11
winter 1951-52	1249	179	7



sible to carry around. Thus houses became fixed, private property, whereas the previous large houses had been common property (except for the driftwood used in construction, as each nuclear family brought its own along with its personal belongings and took it away again at the end of the winter). So winter nomadism gradually disappeared and the great patriarchal family broke up into smaller units. Communal life was not, however, abandoned completely, since food-sharing and mutual help still existed – as they do today – in the villages between houses occupied by close kin. But the yearly restructuring of the family group, as decided by the head of the extended family according to hunting conditions, the distribution of game providers and the number of mouths to feed, was abandoned as permanent settlements developed. This restructuring had been the basic principle of social organization for the Ammassalimmiut. The authority exercised by the head of the extended family, who had to make all the important decisions on, for example, the choice of winter quarters, the size and composition of the family group in the winter, the allotment of space to couples on the platform and the time for summer dispersal, was weakened by this fundamental transformation in living conditions.

The transformations in building techniques hardly seem to be improvements, except for the better light provided by glass window panes, which are superior to seal gut, and the illusion of comfort provided by wood panelling. In actual fact the houses had lost much of their heat insulation and water-tightness. The long low passageway giving access to the house, dug lower than the floor of the actual room, which ensured ventilation without loss of heat, was quickly abandoned (at the end of 1931 only two houses still had such a passage), to be replaced by a simple wooden door which did not shut properly most of the time, or sometimes by a small porch with double doors. The windows, with badly fitted frames and often broken glass, also let the cold in. Finally, the tar paper used on the roof did not ensure as efficient waterproofing as the old umiak or tent-covers made of hairless waterproof skins, which used to cover the old great houses.

Inside, the communal room shrank, becoming small and very low (with an average ceiling height of 1.7 metres), so that each inhabitant had less surface and volume than in the past. During the winter of 1936–1937 Høygaard measured 35 houses in villages where buildings were starting to develop: 17 houses in Kuummiit; 12 in Kulusuk; six in Itimiin; five in Ikkatteq; and four in Tiileqilaaq. The average interior volume of these houses was 25.4 cubic metres, and the average number of occupants 11.1; this allowed 2.3 cubic metres per person (1938: 82). Thalbitzer, who had measured five great houses in 1906, had arrived at an average interior volume of 58 cub m, giving 3.9 cub m per occupant.

Imported wood became increasingly important for Ammassalik housing. The first entirely wooden houses

appeared in the 1930s. But these were surrounded by thick walls made of sods to protect them from the wind and cold. Therkel Mathiassen mentions some of these houses that were built for the East Greenlandic civil servants in Tasiilaq. One was also built at Kulusuk and another at 'Utoqqarmiit' (Sermiligaaq). The latter, dating from 1931–1932, belonged to the hunter Hjalmar Maratse. These new houses, difficult to heat with simple seal oil lamps, had stoves; but the owners had to be able to buy and transport coal, or find firewood in a treeless country.

The interior remained more or less similar to that of the patriarchal houses, with a large communal platform where all the members of the family slept together (with their heads towards the centre of the room, and their feet towards the wall opposite the entrance) and where the women sat to work and the small children played. The space underneath was used to store all sorts of odds and ends, and young puppies went in there to seek shelter.

The Ammassalimmiut, whose ancestors had built winter houses remarkably well adapted to cold, windy conditions, have abandoned what their natural environment has to offer (stone, for example) and now depend entirely on imported building materials, which are fragile, expensive and dangerous, since they catch fire easily. Moreover, they are badly adapted to the climate: if we consider thermic insulation, for example, how can a wooden wall a few inches thick compare with the stout stone and earth walls of the past, sometimes over a metre thick?

In 1949, after the Second World War, when the American base at Ikkatteq was definitively abandoned, the population of the district was allowed to come and salvage building materials. The villagers of Kuummiit and Sermiligaaq, who lived closest to the base, benefited most from this.

After the war the Danish commission responsible for reporting on the state of development in three isolated hunting districts in Greenland – Thule, Ittoqqortoormiit and Ammassalik – remarked on the wretched housing conditions in East Greenland compared with those on the west coast (*Grønlandskommissionens Betænkning* 1950: 43–44). But at the same time the commission wondered how the East Greenlanders, with their very small incomes, would ever be able to pay back the loans necessary for acquiring new European-style housing.

In 1956, during the visit of a Danish minister to the Ammassalik district, the problem of the insanitary state of a large number of houses in the district was once again brought up. It was thought to be the cause of the spread of tuberculosis. A plan to renovate the housing in the district, starting in 1957 with Isertoq, Tiileqilaaq and Skjoldungen, was agreed on. Next in turn would be Tasiilaq and Kuummiit, and lastly Kulusuk.

These renovation plans coincided with a rise in the incomes of hunters, since fur prices had increased appre-

ciably during the 1950s (Fig. 30), and there was a real prospect of developing cod fishing, particularly in Kuummiit and Skjoldungen.

The first houses built in the villages for the local population, not by the inhabitants themselves but by Danish workmen sent over every summer to assemble the prefabricated panels, were small one-level wooden ones. The living area was 27 sq m, usually divided into two rooms, a living room and a bedroom, the kitchen being part of the main room. The area between the ceiling and the slightly inclined roof could be used as storage space, and had exterior access. There were no special inside facilities: the houses had no running water or electricity. In 1956 the little town of Tasiilaq was the only one to have electricity; in Kuummiit villagers had to wait until 1979, and in Kulusuk this modern convenience did not arrive until 1980.

Later, other types of prefabricated houses were put up;<sup>26</sup> some had a small entrance hall, others a separate kitchen, others again an upper floor with several bedrooms (altogether 72 sq m living space) and chemical toilets (these only in large settlements with an organized system of refuse collection, usually by trucks).

Since no one has the right to own land in Greenland, the problem of purchasing a plot to build on does not arise. The only thing the would-be houseowner must finance is the building itself and the work of constructing it. But these houses, transported from Denmark and built by highly-paid workmen (doing intensive seasonal work far from home) are very expensive, and Greenlanders get heavily into debt. In fact the buyer only pays part of the expenses, depending on how many children he has: if he has none or one child, he will pay, over 35 years, a maximum of 60% of the total price of the house. With six children or more he will only pay the minimum – 22.5%. (The state pays 7.5% of the total cost per child).

A wage-earner whose income is stable over several years will find it easier to pay his annual instalments than a hunter or fisherman whose uncertain income depends on climatic fluctuations and his own physical condition.

If the occupant of a house does not pay his instalments they are deducted from his wages or his sales of fur or fish – up to a third of his income. In principle, people who do not pay are supposed to be evicted; in reality this is never done, but a family may be rehoused in a smaller and less expensive dwelling belonging to the local authority.

In the 1970s some East Greenlanders were eventually employed on building sites, trained by Danish contractors. This provided a few jobs for young unemployed people. But the most recent system for acquiring individual homes, developed in 1974, seems better suited to the wishes of some Ammassalik families. These are the “do-it-yourself” houses that come in kits. Everything is provided for the buyer: building material, tools, and assembling instructions; and he builds the

house himself. The net cost of this type of housing is far lower than that of houses constructed under the previous system.<sup>27</sup> Moreover, the owners feel great pride in having built their own homes. Family cooperation between sons, sons-in-law, brothers and brothers-in-law comes back to life today for this kind of operation, recalling the collective repairing of the old patriarchal houses at the beginning of winter.

The old system left the families heavily in debt for several years, and at the same time the state had to assist them anyway with a considerable sum. This new system only requires the Ammassalimmiut to save some money (10% of the price must be paid on purchase or borrowed from the local authority over ten years) and pay off a smaller debt over a few years. Moreover, the great manual abilities of the Greenlanders are usefully employed and their self-esteem preserved.

During my stay in the Ammassalik region in 1979 I saw some of these houses being built almost everywhere, except in Tasiilaq, where, curiously, they were forbidden. It was only later that it was permitted to build them in the small capital.

## Summer migrations

If practically all the Ammassalimmiut have abandoned winter nomadism, except for a few families who still leave on long-distance winter migrations, summer nomadism has not disappeared. It is not practised as systematically as in the past, and the period during which people are away from the winter house is not as long, but the need for mobility during the beautiful days of spring and summer remains a deeply rooted instinct.

The reasons for this summer change of place are numerous, and among them the search for seasonal resources ranks high. Migrant seals, arctic char, *ammasat*, migrating birds, angelica and wild berries are important supplements which improve and diversify the diet, and are useful for putting aside food supplies for the autumn and winter when there is a surplus. Other motives are also involved: in particular the pleasure of changing one's lifestyle, of leaving village or town life behind to experience nature again, to live in a tent and be isolated (without any obligation to share) or to regroup differently from during the winter. Certain related families living in different villages meet every year at the same arctic char fishing or seal hunting grounds.

Today each village has several special areas, within a greater or smaller perimeter, where the same families usually go every year to spend a few days or a few weeks if nothing prevents them from doing so, such as illness or the preparations for a confirmation (this religious ceremony always takes place in the summer so that the minister can travel about easily, and it requires a great deal of preparation, particularly of clothing and food). These village summer locations are a few hours away by boat from a permanent village.<sup>28</sup>

Table 33. Evolution of the two main elements required for summer migrations: tents and boats (Greenlandic population of Ammassalik district).

Years	Tents			Family summer transportation			
	skin*	cloth*	No of** inhabitants/ No of Tents	umiak*	wooden* boat	motor* boat	No of** inhabitants/ No of boats
1884	37		11.2	28			14.7
1894	23		10.2	11			21.4
95	19		13.0	12			20.6
96	26		14.3	20			18.6
97	27		13.8	20			18.6
98	27		13.3	18			19.9
99	30		13.4	21			19.2
1900	29		14.2	24			17.1
01	34		12.8	27			16.1
02	35		12.8	28			16.0
03	37		11.6	29			14.8
04	39		12.2	30			15.8
05	40		12.5	35			14.3
06	45		11.6	38			13.7
07	47		11.5	36			15.0
08	46		11.8	34			16.0
09	45		12.3	34			16.3
1910	47		12.0	35			16.1
11	48		12.0	36			16.0
12	49		12.1	35			14.1
13	51		11.8	35			17.2
14	51		11.7	34			17.6
15	55		10.9	32			18.8
16	56		11.0	27			22.8
17	57		11.0	29			21.6
18	56		11.4	34			18.7
19	61		10.5	36	1		17.4
1920	62		10.7	37	2		17.0
21	59		11.6	34	2		18.9
22	59	1	11.8	40	2		16.8
23	63		11.3	37	2		18.2
24	62	2	11.5	38	3		17.9
25	51	2	12.4	34	1		18.8
26	57	1	11.7	33	1		19.9
27	58	2	11.6	38	2		17.5
28	57	2	12.1	38	2		17.8
29	67	3	10.6	38	1		19.0
1930	49	9	13.3	40	1		18.8
31	61	8	11.6	41	1		19.1
32	55	36	9.0	39	1		20.5
33	46	27	11.6	30	1		27.3
34	57	33	9.7	35	1		24.3
35	43	35	11.0	32	2	1	24.4
36	42	34	10.9	31	2	1	24.4
37	38	54	9.3	27	2	1	28.6
38	20	81	8.6	28		1	30.1
39	12	112	7.3	32	1		27.3
1940	6	96	9.2	28	1		32.4
41	4	88	10.7	26	1		36.4
42	5	96	10.1	21	1		46.2
43		122	8.7	23	2		42.2
44		117	9.2	24	5		37.1
45		106	10.4	28	4		34.6
46		52	21.9	27	4		36.8
47		53	22.2	26	5		38.0
48		60	20.1	29	3		37.7
49	3	49	23.3	27	6		36.6
1950	1	49	24.4	28	8		33.9
51	2	77	15.9	22	23	1	27.4
1958		100	16.7	14	97	4	14.5

\* Data from "Statistik Protokol" of the Ministry for Greenland for the period 1894–1935 and from "Beretninger vedrørende Grønlands Styrelse" for the years 1935–1958.

\*\* Ratio of total number of inhabitants to total number of tents or boats.

Between the end of May and September most of the villages are deserted by part of their population: they can be found up in the fjords, close to the streams visited by arctic char, or spread out among the numerous islets near the coast, on the lookout for large seals (hooded seal and bearded seal) which drift out on the fragmented ice pack at that time of year.

The economic benefits gained by the Ammassalimmiut from these summer migrations should not be minimized. By drying arctic char and seal meat in the sun they can accumulate food reserves that are far from negligible when they have to face the hardest times of the year such as autumn and the beginning of winter. Moreover the sale of large sealskins can be an important source of income. In some years this type of seal hunting can be very profitable. In July I have seen hunters who could catch ten such seals a day.

It was precisely the loss of economic activities like these (involving food, fuel in the form of seal fat, and skins) that affected some Ammassalik families towards the end of the 1930s. Lacking adequate means of transportation for the family, they were condemned to spending the summers in the village.

In fact, given the data in Table 33 and the numbers of the population, we can deduce that the building of umiaks did not keep up with the demographic explosion after the 1930s. The evolution of the number of umiaks per inhabitant was as follows:

1894–1896	one umiak	per 20 people
1897–1901	–	18 –
1902–1906	–	15 –
1907–1911	–	16 –
1912–1916	–	18 –
1917–1921	–	19 –
1922–1926	–	19 –
1927–1931	–	19 –
1932–1936	–	25 –
1937–1941	–	32 –
1942–1946	–	44 –
1947–1951	–	46 –

Kulusuk in particular was one of the first settlements to suffer from the lack of umiaks. As early as 1936 Høygård mentioned the insufficient number of these indispensable boats for family summer migrations. Ejnar Mikkelsen writes that in 1937, of the four umiaks to be found in Kulusuk for a total of 206 inhabitants, only two were in working order (1944: 219).

The decline of the umiak seems to have been due to the shortage of the large sealskins needed to cover the hulls. And this created a vicious circle: since there were no large sealskins there were no umiaks; and without umiaks the Ammassalimmiut could not hunt the large seals whose skin was needed to cover the family craft.

When the East Greenlanders obtained new means of group transportation such as rowing-boats in the 1950s,

motor boats, and more recently speedboats, summer migrations took on renewed importance.

Tasiilaq, the centre of administrative and other public services, inhabited only by civil servants, wage-earners and the unemployed, plays a particular role in the municipality. It is far from deserted in the summer, although a few families do leave; for the summer is the best time for seasonal work, unloading ships, transporting goods to the villages, construction work and other types of public works in town, since the ground is free of snow at that time. So in the summer Tasiilaq becomes a pole of attraction for other inhabitants of the district, since the shops then fill up with all sorts of new goods every time a freighter arrives from Denmark.

Once East Greenlanders were able to afford speedboats, distances were greatly reduced. For example, in the summer of 1979 I went with a young hunter and his family from Tasiilaq to Mannginnerseerpik, a traditional seal hunting ground; it took us only forty minutes. In the speedboats bought on credit by the Ammassalimmiut it takes one hour to get from Sermiligaaq to Kuummiit, and the trip between Sermiligaaq and Tiileqilaq takes two and a half hours; in an umiak it would have taken at least two days.

In Tasiilaq the most active of the wage-earners can also hunt or fish during the clear summer nights or at weekends. They either fill up their home deep-freezers with food for the winter or sell fresh fish and seal meat to other townspeople. They have the advantages of both lifestyles, benefiting both from the seasonal resources of the environment and the security of a wage-earning activity.

Qinngeq, the great traditional spring meeting place for *ammassat* fishing, has now lost its attraction. Some families still come from Kuummiit to catch capelin, but it is no longer the social and cultural feast of the past, where all met again joyfully after a long winter of isolation. The explanation today is that "there haven't been any *ammassat* for a long time now at Qinngeq – that's why we don't go any more". There may be another explanation: with the growth of permanent villages winter isolation has ceased to exist, and this means that the fundamental need to create occasions for meeting has disappeared too.

In a way the Tasiilaq of today has replaced the Qinngeq of the past. At one time or another during the summer the whole population converges in the small town. People meet and exchange news outdoors near the main shop. Sometimes two drunken men will act out a singing "duel". Itimiin, near Tasiilaq, had become a sort of summer camp where visitors came from all directions to spend some time every year.

Tents are no longer made from sealskins. In the early 1930s imported cloth began to replace the skins, and within a few years skin coverings had become the exception (Table 33). This shows how fast the acquisition and spread of new materials could happen in this small society. Certain tents, however, kept the traditional

Table 34. Distribution of the Ammassalik population in settlements in 1976.

Place of residence	Percentage of the Ammassalik population living there	Regrouping by type of location
Tasiilaq	35.5%	town (over 800 Ammassalimmiut) 36%
Kuummiit	19.8%	large settlements
Kulusuk	17.3%	(from 400 to 500 inhabitants) 37%
Tiileqilaaq	8.6%	medium size settlements
Isertoq	8.2%	(from 150 to 200 inhabitants)
Sermiligaaq	7.3%	24%
Ikkatteq	1.8%	small settlements
Qernertivartivit	0.9%	(less than 50 inhabitants)
of no fixed abode	0.6%	3%

wooden structure and conical shape, where the canvas is held to the ground by a circle of stones. I had the opportunity of seeing this type of tent in 1967. Inside, a low wooden platform covered with skins was the family's communal bed, where everyone slept with their feet towards the back of the tent and their heads towards the entrance. During the day the women sewed on it, seated cross-legged. Some of them even had seal oil lamps made out of biscuit tins – hardly traditional material!

But on the whole western cotton tents were adopted, and primus stoves replaced oil lamps. For a few years now Greenlandic civil servants in Tasiilaq have been buying nylon tents with windows and small curtains of the type that can be seen on European camping sites.

At certain summer sites (Mannginnerseerpik, for example) a communal hunting house may shelter up to three families at a time. In other places where families come back regularly hunters have built themselves small permanent wooden shelters the size of a tent.

## Villages today

In 1976 the distribution of the Ammassalimmiut by usual place of residence, not counting temporary migrations, was as appears from Table 34.

We can see that the population today is distributed among four types of site. A good third lives "in town", another good third is settled in two villages with several hundred inhabitants, and a quarter lives in three medium-sized villages. A very small number have remained in small settlements with very low population densities. From studying this distribution we can understand the differences in occupations and lifestyles of the Ammassalimmiut today in terms of their places of residence. Each village has its own history, often linked, as we shall see, with particular local events.

## Qernertivartivit and Ikkatteq

The inhabitants of these two small settlements, who live essentially by hunting seal, have been exceptional in their resistance to two things. One was the regrouping of the population in small towns encouraged by the Danish administration in 1955, and the other was the powerful attraction of these centres for other families who lived in the Sermilik area like the people of Ikkatteq or in the Ammassalik area like those from Qernertivartivit.

These two villages only have a warehouse for storing supplies (which are often used up well before the end of the winter) and medicine. An East Greenlandic "reader" or catechist (who is also a hunter) is in charge of children's schooling and is alone in teaching all subjects except Danish. This is an important point, since in the context of today's policy of extended schooling these children are at a disadvantage compared with those in other villages with a better-trained West Greenlandic catechist and one or more Danish schoolteachers (as is the case in Tasiilaq, Kuummiit, Kulusuk and even Tiileqilaaq). On the other hand this might be these children's only chance to continue their ancestral way of life, since they are not so strongly subjected to the "break" in lifestyle that schooling entails for their counterparts in towns and larger villages.

### Qernertivartivit

Qernertivartivit ("the place where there are black spots") on Ammassalik Fjord, is 35 kilometres by boat and 28 by sled from Tasiilaq.

This site has been continuously inhabited since 1919 (Fig. 23) but the population has never exceeded 45. The commercial warehouse dates from 1959. Three wooden houses stand close to an old house of stone and earth.

Before helicopters could bring plane passengers landing at Kulusuk to Tasiilaq, Qernertivartivit was a winter halting-place for sleds carrying passengers, luggage and mail. Since 1975 dog sleds have been replaced by heli-



copters. Qernertivartivit is no longer visited by foreigners, but the small village is far from being truly isolated: dog sled links with Kulusuk, Kuummiit and Tasiilaq remain frequent during the winter. In the summer the village is usually deserted, as its inhabitants go to live in tents near Kulusuk and Kuummiit, or visit Tasiilaq.

According to the 1976 census the 21 inhabitants of the village are close kin. The three heads of families are a hunter, his brother-in-law (wife's brother) and son-in-law.

### Ikkatteq

Ikkatteq ("the place where the water is shallow") at the mouth of the fjord of Sermilik, is 24 km by boat and 30 km by sled from Tasiilaq.

It has been continuously inhabited since 1914, the population having reached a maximum of 73–84 inhabitants in 1955–1959. The first East Greenlandic midwife in the district took up residence there. Oline Mathiasen, who was born in 1885 and died in 1965, practiced in the region of Ammassalik from 1906 onwards after two training periods in Denmark. A church/school was built in 1937 and a commercial warehouse was added in 1950. One of the six wooden houses that can be seen there today has kept its earthen wall as the best protection against wind and cold.

Ikkatteq is an area passed through frequently in summer and winter by people travelling from Tasiilaq to Isertoq, or from Tiileqilaaq to Isertoq, or even from Tasiilaq to Tiileqilaaq (by sea, and only in summer).

The 42 inhabitants registered in the 1976 census have kinship ties ranging from half-brother and half-sister to brother-in-law and sister-in-law or first and second cousins.

Some of the former inhabitants of Ikkatteq now settled in Tasiilaq like to return in summer to this area, which abounds in game. During these visits they live in tents or in old wood and stone houses they have built themselves. The people of Ikkatteq also go on summer migrations, particularly to Mannginnerseerpik.

## Isertoq, Sermiligaaq and Tiileqilaaq

These three localities, essentially hunting villages, have grown through demographic expansion supplemented by the arrival of related families who came to settle near these small centres when they acquired a church/school, a shop and a meeting house.

In these villages the population has grown to well over a hundred inhabitants, numbering today between 150 and 200 people. This increase necessitated some diversification of occupations. Besides hunting, commercial fishing was developed, especially in Tiileqilaaq and somewhat less so in Sermiligaaq. The people of Isertoq remain reluctant to develop this economic sector.

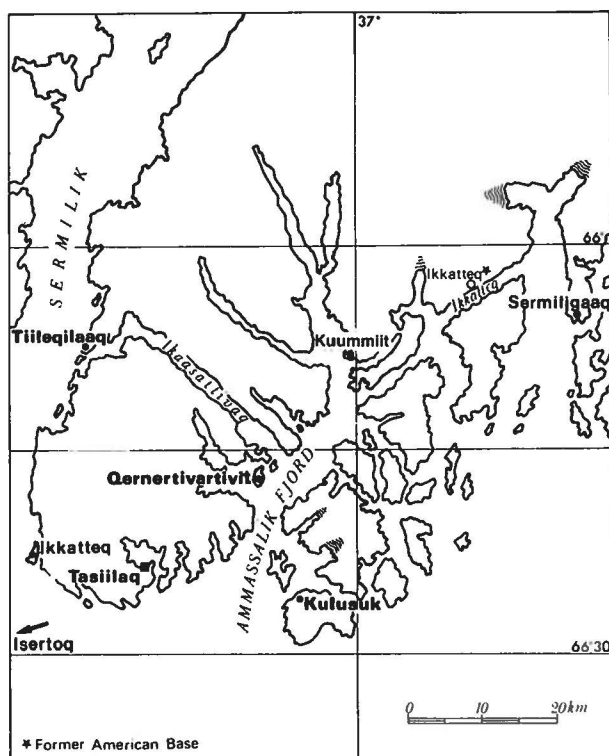


Fig. 22. Location of today's villages in Ammassalik municipality.

### Isertoq

Isertoq ("the place where there is mist") is the southernmost permanent village of the district, 80 km by boat or sled from Tasiilaq.

The village became permanent in 1942. As housing was entirely renovated in 1957–1958 by the building of 16 two-room wooden houses, the population of the village increased by 24%. At the same time a shop, a warehouse and a nursing station were set up. Later other buildings appeared, including a church (triangular in shape, with the roof reaching down to the ground) which was also used as a schoolroom until a real school building was constructed, a shed for boat repairs and some more houses. Recently, in the late 1970s, the village has expanded further: about ten do-it-yourself kit houses constitute a new neighbourhood today. Since 1978 a meeting house has been used for showing films and dancing two evenings a week. Finally, a children's playground has been built, with swings and other accessories.

An East Greenlandic catechist is in charge of schooling, although several attempts have been made since 1972 to get a Danish schoolteacher.

In 1972 a hunter and his family still lived some distance from Isertoq, at Iissalik ("the place which will be populated"); but the aging head of the family decided to



give up living in isolation and settle in the village. On the other hand, since 1961 some people from Isertoq have taken to spending the winter 60 km to the south at Pikiitsi (the name, sometimes written 'Pikkiitit' or 'Pikiiti', comes, it is said, from *pikkisorpoq* "the place where one gathers birds-eggs"). There are only five wooden houses here, built with materials salvaged from a small American base used as an airstrip for the area during the war (between 1941 and 1946). At Pikiitsi these families from Isertoq meet other hunting families from the district coming for a year of long-distance migration. When the indispensable imported goods have been used up in March or April the people of Pikiitsi go by sled to Isertoq to sell the skins collected throughout several months and buy the things they need – ammunition, tobacco, coffee, tea or sugar.

In 1976 the 190 people of Isertoq lived in 24 houses. During the summer most of the inhabitants leave the village and spread out in small camping sites of two or three tents.

When I first went to Isertoq in 1967, Samuel Mikaelson (Samueli), aged 66, was the patriarch of this small community. He was surrounded mainly by his family – children,<sup>29</sup> grandchildren, nephews and nieces, and his wife's family (cf. Gessain 1968: 262–263). Since Samueli's death in 1968 the village has retained its distinctive character, maintaining endogamy to a certain extent. Marriages between second cousins are numerous. For example, of Samueli's five married grandchildren in 1976, four had married their second cousins.

Finally, we must mention the presence of a NATO station, which functioned for 20 years a few kilometres from Isertoq at Orsuiattivaq ("the place where there is much feldspar"). The station, built in 1958–1959 as an aid to sea and air navigation, was run by between 20 and 26 Europeans, and two or three Greenlanders worked there as *kippat*. The proximity of this small base, occupied by men, generally without their families, made for frequent contacts with the small Greenlandic village of Isertoq. But the Orsuiattivaq station, abandoned in 1978, has now become a ghost town. Some of its buildings have been dismantled to be transported elsewhere (for example the meeting house, now set up at Isertoq), and access to the station is still forbidden to the population. Since the closing down of "Orsu" Isertoq has relapsed into a certain isolation. The Isertormiut miss this small station, which was also a source of income for some soapstone carvers.

Although geographically remote from the rest of the district, the people of Isertoq have regular contacts with their kin in Tiileqilaq and Ikkatteq, as well as with some related families at Kulusuk.

#### Sermiligaaq

Sermiligaaq ("the place near the glacier") is the northernmost permanent village of the district. It is 78 km

from Tasiilaq by boat and about 90 (via Kuummiit) by sled.

It has been permanently occupied since 1922. From the 1940s onwards the population began to increase unevenly: the fluctuations reflected the fact that there was still a certain amount of mobility among some small family groups. Two sharp increases in the number of inhabitants appeared, however, in 1955 (32%) and 1969 (24%). The first increase was probably due to the resettling in Sermiligaaq of some family groups who had left for Kangertittivatsiaq in 1946 and returned in 1955; the second was due to the arrival of families from Kuummiit.

The lifestyle of the people of Sermiligaaq and Kuummiit has been most disturbed by the American presence during the Second World War; so much that, instead of spreading out during the summer to gather food reserves, they would come and pitch their tents near the American camp. This camp, however, had been set up in the precise neighbourhood of a lake and stream full of arctic char to which the inhabitants of Sermiligaaq used to come during the spring. In May 1945 a Dane, Poul Hennings, was asked to prevent the Greenlanders from approaching the base. He threatened to confiscate their sleds and the women's *kammitt* (boots) if they trespassed. This way he succeeded in re-establishing the former pattern of life in the small surrounding villages, and was thanked by the old Malvina Maratse for having "brought the hunters back to Sermiligaaq".

Some years after the Americans had left Ikkatteq the Greenlanders were allowed to go into the base to take away what they could use for their own housing. In 1967 the village of Sermiligaaq still retained a peculiar appearance. More than half of the houses had been built by their occupants, combining materials salvaged from the base. Some of them were still surrounded on three sides by earthen walls. In most houses the communal platforms had been kept. One of them was occupied by three related families, sharing the same platform, separated by semi-partitions as in the traditional houses; but a stove and paraffin lamps had replaced seal oil lamps. The village was not completely renovated in the 1960s, like the other settlements of the district (Isertoq and Tiileqilaq). However, some buildings were put up at that time: the church/school (1958), a shop (1958), three government-owned houses (for the catechist, the midwife and the shopkeeper) and five hunters' houses.

Important housing renovations began at Sermiligaaq in 1969 with the building of five new houses, the demolition of the old ones and the acquisition, starting in 1974, of do-it-yourself house kits. A combined meeting house, dance hall and cinema was built in 1978, as were a new shop and fish drying racks.

In 1976 the 169 inhabitants of Sermiligaaq lived in 24 houses and subsisted essentially on seal and bear hunting. Cod fishing was developed in 1977 and some years later began to become increasingly important for the income of the Sermiligaarmiut.

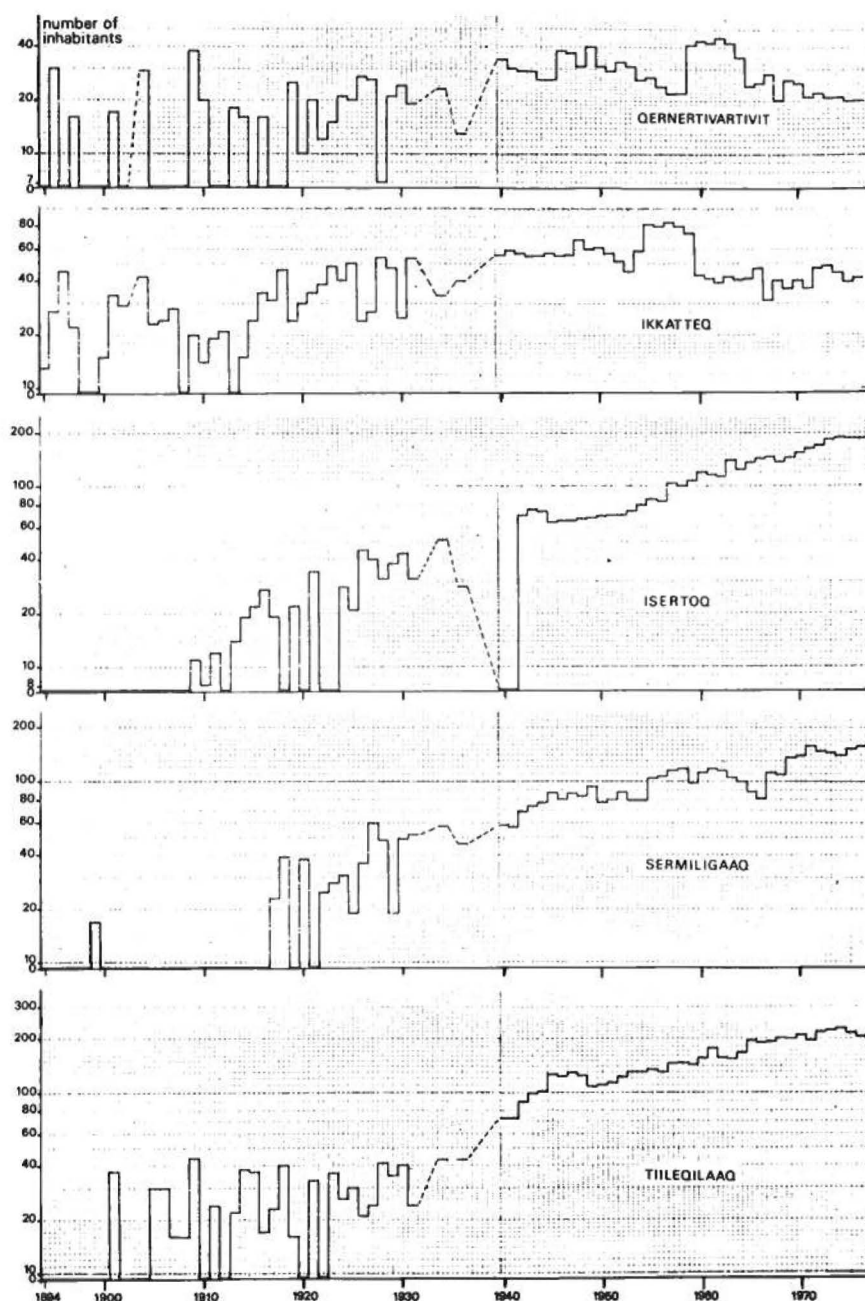
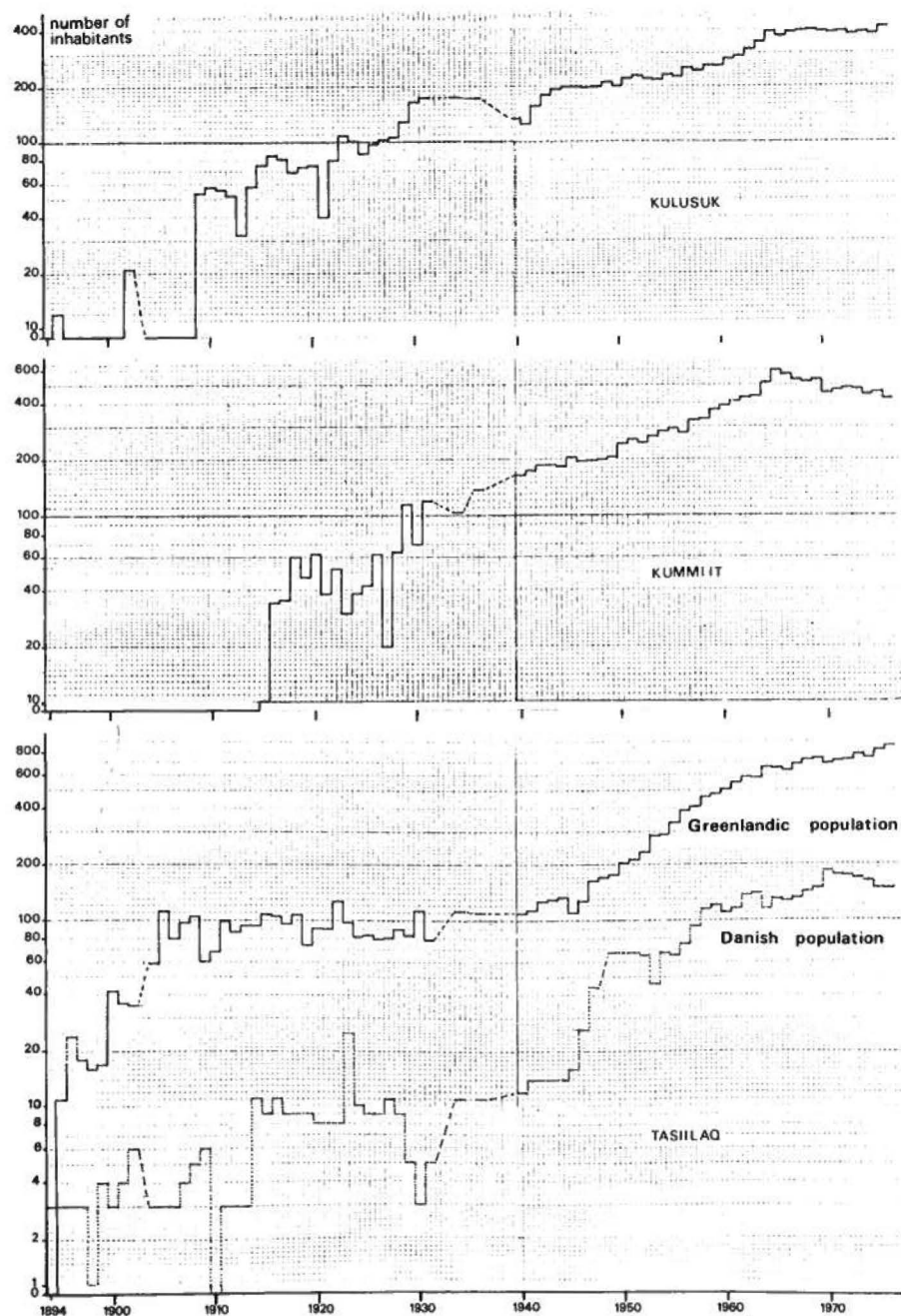


Fig. 23. Evolution of Greenlandic population in today's major settlements of Ammassalik district. The lower curve p. 89 indicates the evolution of the Danish population residing in Tasiilaq.

An East Greenlandic "reader" is in charge of schooling: he is one of the hunters of the village – a good hunter – and at the same time he manages to teach school as well as catechism. Besides this he is an artist and paints good pictures. No attempt was made to recruit a Danish schoolteacher to the area.

The village, rather isolated from the rest of the district, mainly has contacts with Kuummiit and some families in Kulusuk.

The Maratse family, mentioned above, has retained its pre-eminence in the small village community, which for the most part consists of relatives. But in 1974 the oldest member of the family, Odin Maratse, whose authority and prestige were acknowledged by all in the village, died, taking with him part of the soul of Sermiligaaq. He was 69 and a great hunter and storyteller. His repertoire of tales, legends and songs (some personal ones and others inherited from his ancestors) was exten-



sive. Family members liked to gather round him to evoke and pass on this common cultural heritage to the younger members.

We have previously mentioned the strong endogamous tendencies developed among this family group. Matrimonial behaviour like this appears to be a means of preserving traditions and customs peculiar to this family.

#### Tiileqilaq

Tiileqilaq ("the straits that are uncovered at low tide") is on Sermilik, near a point where it branches off (Ikaasattivaq), making it possible for it to rejoin Ammassalik Fjord, the other great fjord system of the district (Fig. 22). This village is 45 km from Tasiilaq by sled and about 55 by boat. There are two possible boat routes: the shortest by the mouth of Sermilik and then up the



Kayak hunt at Tiileqilaaq. The hunter uses a harpoon and a rifle at the same time. (Photo J. Robert-Lamblin, 1972).

fjord; but this is often obstructed by icebergs; the other route, somewhat longer but generally free of ice, uses Ammassalik Fjord, then Ikaasattivaq.

Tiileqilaaq became a permanent village in 1923. As various small settlements along the shores of Sermilik were abandoned, the population of Tiileqilaaq increased: the last wave of migration, from 'Umittivartivik' on the opposite shore of the fjord, took place in 1965. In 1944 the Tiileqilaarmiut already numbered over 100, and since 1970 there have been more than 200. Of the three villages described in this section, Tiileqilaaq is the most densely populated and the one where fishing (shark and cod) is most developed, although seal hunting still remains the main occupation.

As early as 1950 the village had a small church, also used as a school. Housing renovation began in 1955, and by 1960 all the buildings had been replaced with 26 prefabricated two-room wooden houses. In 1957 a shop was set up, and later on other houses were added to the village. In the meeting house, dating from 1972, the population meets regularly to see films or dance. The first wooden house to be built entirely by its owner was erected in 1976.

Tiileqilaaq had, and still has, Danish residents: Poul Hennings was in charge of trade between 1966 and 1973, and since 1967 several Danish schoolteachers have succeeded one another in the village. Previously, an East Greenlandic reader was in charge of schooling.

In 1976, the 201 Tiileqilaarmiut lived in 34 houses. Every year in June and July some of the villagers leave

the settlement and go seal hunting or fishing for arctic char, which are plentiful in several parts of Sermilik.

The people of Tiileqilaaq are all close or distant kin, which ensures a certain cohesiveness in the small community, although it is not entirely without its tensions. The social structure of the village is different, however, from that of Isertoq or Sermiligaaq. These two settlements have a majority consisting of the descendants of one pair of ancestors and their spouses, and can be seen as extensions of the old patriarchal great house, fragmented into small groups because of demographic growth and a new type of housing.

Tiileqilaaq differs from this in the sense that it groups several large families who were settled in the past on the shores of Sermilik. Among them we find the Jonathan-sens, descendants of Jonathan (1883–1945) and his two successive wives, Judithe (1985–1915) and Helga (1897–1975); the Tarqisimats, descended from Alperti (1897–1933) and his wife Pernille (1900–1944); the Umerinek-Larsens, the Akipes, the Boassens, the Kajamats, Kristiansens and Singertaks. Marriages can thus be arranged within the village among these various families without having to face too great a problem of close kinship between spouses.

None of these families, or of the individuals who are part of them, appear to exert any real predominance, extended over the whole village. There are rather several circles of influence which can overlap one another, and several forms of recognized "authority", depending on the level of competence in question. Nooter (1976)

shows how the influence of various personalities in the village manifests itself according to whether it is a question of decisions relevant to the family group, to hunting and migration, or to the modern organization of the small society (trade, teaching, church, council business, health). The author thus distinguished several "leaders" who are called upon and listened to as circumstances demand.

## Kulusuk and Kuummiit

These villages are much larger than the preceding ones. They are no longer hunting communities, but are closer to being small towns with numerous families and several hundred inhabitants.

The attraction held by these sites is not a recent phenomenon, since as early as the 1920s they had overtaken, in terms of Greenlandic population, the small regional capital of Tasiilaq. This numerical superiority lasted until 1952 (Fig. 24). However, before the opening of small missionary posts they were hardly ever visited by hunters (Figs 23 and 24), which well illustrates the artificial character of these settlements and explains the economic difficulties which were later to face their inhabitants.

Indeed, as much for reasons of location as because of the density of the population, hunting can far from ensure the whole population a subsistence: as Fig. 28 shows, the total yield of seal hunting in these two locations is well below that of villages with less than half or a third of their populations.

Kuummiit and Kulusuk had to diversify their activities and sources of income. Besides hunting, other economic sectors were developed: commercial fishing, particularly in Kuummiit; handicrafts, especially in Kulusuk; and some wage-earning occupations ensure a small number of families a living.

But in these large villages, socially as well as within the family, individuals feel less integrated than in smaller communities, still essentially orientated towards hunting and relying on the still widely-observed ancestral rules of mutual help and sharing. When the community becomes too important and new social categories lacking traditional models appear (fishermen, craftsmen, wage-earners, pensioners) rights and duties are reduced or abandoned. This is why some of these small-town dwellers have feelings of depression or moral isolation which can find expression in various ways: idleness, alcoholism, violence or even suicide.

### Kulusuk

Kulusuk (an old word, unknown to the young people today, meaning the breastbone of a fowl) in Greenlandic – formerly called Kap Dan in Danish – is a village situated on an island bearing the same name (Kulusuk), 30 km

by boat or sled from Tasiilaq. It was the first permanent settlement created after Tasiilaq in the district.

In the past this particular site was hardly ever visited by the hunters of the area. The settlement began its life with the setting up of a small mission post to convert the local families without having to move them over to Tasiilaq for two consecutive winters. A long building was erected on the site in 1909, one end being used as a home for the West Greenlandic catechist (Sejer Abelsen) and his family, the other as a church/school. This particular spot was chosen not for its hunting possibilities but because of easy access and shelter for boats larger than the umiaks of the Ammassalimmiut.

From 1909 onwards families that were spread out along the eastern shore near the mouth of Ammassalik Fjord began to converge on the new mission, and settled permanently close by – so much so that in 1923, after an abrupt population increase of 35%, Kulusuk became the most highly populated place in East Greenland, with 108 inhabitants, i.e. 15% of the whole East Greenlandic population (Fig. 24).

In 1930 a further increase of 28% meant that the village was now overpopulated and led to the impoverishment denounced by Høygaard and Mikkelsen. In 1930–36, from 20–22% of all the Greenlanders of the district were concentrated in this poor hunting area, and summer migrations had been almost completely abandoned because of the shortage of umiaks.

After a slight decrease, the population growth in Kulusuk increased regularly from 1943 on, and today there are nearly 400 Greenlandic inhabitants.

The construction of an American radar base for the DEW line in 1957, and of an airport serving the Ammassalik administrative area, set off great disturbances in the village. All this construction work brought in a considerable number of Danes and Americans over a period of several years. The airstrip at Ikkatteq had been brought back into service in 1956, and in 1958 a large American ship had come to deliver vehicles and materials for the construction work. During three summers (1958, 1959 and 1960) between 300 and 400 men were brought into the region to work a few kilometres from the Greenlandic village until the radar station and the airstrip were operational in 1960. Access to the military base of the DEW line with its 15 Americans is forbidden to Greenlanders, but the airport is a civilian zone with between 12 and 14 Danish staff, and is about 40 minutes' walk from the village. Moreover, Americans frequently leave the station to visit the village.

From then on the people of Kulusuk, who are gifted sculptors, began to develop a "souvenir industry" based on handicrafts solely geared for sale to foreigners living on their island, or to passengers in transit to Kulusuk, or even to the KGH, which buys some articles for export.

Having become a civilian airport, although financed and maintained by the US Army, Kulusuk has since the 1960s become the gateway to the Ammassalik district for all travellers coming by air from Denmark, Iceland



or West Greenland. Depending on the season, planes land monthly, bi-monthly or weekly. Tourist trips starting from Iceland several times a week are organized every year in June, July and August, bringing groups of tourists from all over the world to discover, for two hours, "life in an arctic hunters' village". Altogether about 50 groups come each season. The tourist circuit includes the walk from the airport to the village, a visit to the Lutheran church built in 1924, an old-style earthen house reconstructed for the tourists, a kayak demonstration (including the complete turn-over if the demonstrator knows this technique), and a small show of songs and dances accompanied by the drum. These groups of 30 tourists, equipped with all types of cameras, take photographs of everything, buy souvenirs, mostly from the village children sent out by their parents, then go back to the plane, which returns them to Iceland the same day.

The first buildings erected in Kulusuk after the Second World War were a shop, in 1951, and a dispensary and house for a midwife in 1955. Housing renovation for Greenlanders came later than it did in the other villages, probably because the poverty of the Kulusumiut did not allow them to buy imported houses on credit. Six new houses were built between 1961 and 1963. A few years later additional dwellings were planned for families brought back from Skjoldungen/Imaarsivik: 30 houses were thus built in 1965–1966. But in the event the inhabitants of Skjoldungen were for the most part relocated in Kuummiit, and some in Tiileqilaq or Tasiilaq. After that only nine other houses were built, apart from two "kit" houses in 1976.

In 1976 there were 401 Ammassalimmiut in Kulusuk village. The whole settlement, numbering about 60 houses, is actually divided into three distinct neighbourhoods on a north-south axis: Kulusuk, the most modern area, is located near the harbour; 'Iliagajik', an "in-between" neighbourhood, is built along a small valley leading away from the coast; and Kangeritvartik, an extension of 'Iliagajik', rejoins the water at another shallower bay where buildings have been set up for cleaning and drying cod. The smaller and older houses and most of the poorest dwellings are found in these last two neighbourhoods. In the harbour area, which is more highly developed and renovated, we find all the community buildings (a large KGH self-service supermarket, a repair shop, the school, the meeting house) as well as all the government houses for schoolteachers, the midwife and the trade manager. Greenlandic houses there are generally larger and more comfortable than in the two other areas.

Since 1958 Kulusuk has had a few European residents, but they have never accounted for more than 4% of the total village population. Their numbers have varied between one and fifteen in different years. For the most part they are Danish schoolteachers (four in 1979) and their families, and some unmarried foreign workmen.

It is in Kulusuk that social and economic problems seem to be worst, and this is as true today as it was in 1936. The settlement has become too densely-populated to subsist on hunting, and it has not, like Kuummiit, adjusted to fishing. Moreover, unlike Tasiilaq, it can only offer a very small number of wage-earning jobs. Finally, the handicrafts developed in the sixties have not reached a sufficient production level to be an important source of income. Some of the community live in unemployment and poverty. The proximity of the American base and the flood of tourists in the summer only add to the psychological difficulties experienced by many Kulusumiut.

### Kuummiit

Kuummiit ("the inhabitants of the stream"), the second most important settlement in the district, is 55 km by sled or boat from Tasiilaq.

The settlement began with a small Lutheran mission in 1915. A building, half residential, half church, was set up for Kårale Andreassen, the East Greenlandic catechist in charge of converting the small groups spread along the inner reaches of Ammassalik Fjord, not far from the Kuummiit of today (at Noorajik, 'Ijerquatsat', Simiilaq and Ileqqit – numbers 40, 41, 43 and 44 respectively in Appendix IV). Little by little the inhabitants of the area converged on the small mission to settle there permanently. In 1929 a sudden increase of 81% brought the population up to over 100 inhabitants.

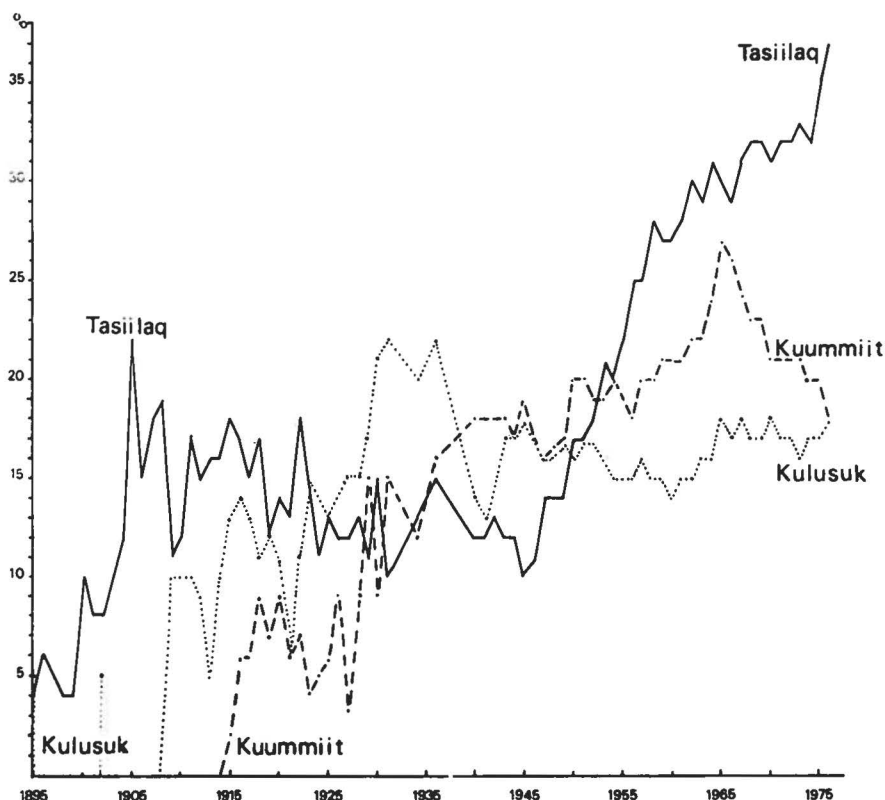
As early as 1936, Høygård mentions the high population density in Kuummiit but he thought that the situation in this village was less alarming than in Kulusuk, since there were good fishing possibilities. Around 1900 small polar cod were found in great quantities near Kuummiit. Then, because of a rise in sea temperature, another larger variety of cod appeared in about 1915–16. The amounts of these large cod varied according to the year and the season: they were a good supplement to the diet of the people of Kuummiit replacing seal meat when seal hunting was poor. Some of the fish were sold to officials and Danish residents in the area, but until the 1950s there was only a very limited local production and no exploitation geared to export.

Towards 1940 Kuummiit became the most densely populated village in the district (with 18% of the total East Greenlandic population of the area). It remained the most important Greenlandic settlement in the area until 1952. A meeting house and a shop were built in 1950–51. Later Tasiilaq regained its pre-eminence, but the Kuummiit population is still increasing more rapidly than the rate of natural demographic growth. The number of inhabitants doubled between 1955 and 1965 until one Greenlandic in four in the district lived in Kuummiit, a small town in the process of rapid transformation.

In 1958 the Danish government decided to develop a new resource: cod fishing. In Kuummiit this meant the



Fig. 24. Percentage of Greenlandic population regrouped in each of the three main settlements of Ammassalik district.



setting up racks for drying fish, a building for washing and salting the cod, and a wharf. Rowing and motor boats were also imported, and several dwellings were constructed for Ammassalik fishermen and their families. Hitherto the village houses had been built by their owners with stones, clumps of earth and such materials as could be recovered from the old military base of Ik-katteq. By the end of 1958 there were 326 Greenlandic inhabitants and no permanent Danish residents.

A vast construction programme was set up to transform this village of sea mammal hunters into a small cod fishing town: between 1959 and 1966, 68 houses were built for the East Greenlanders, as well as government housing for Danish and West Greenlandic civil servants resident in the village for trade administration, education and health purposes.

In 1965 Kuummiit reached a maximum population of 596 Greenlandic inhabitants. That year, a majority of the families brought back from Skjoldungen were resettled in Kuummiit to pursue the fishing activities they had begun to develop in a minor way in Skjoldungen. But the arrival *en masse* of these people, transplanted against their will into an area already seriously overpopulated, and their having to face the unpredictable fluctuations of cod fishing, generated tension. They were rejected by most of the people of Kuummiit who said "These people – we don't know them!", and the new ar-

rivals reacted with helplessness and apathy. Some of the people from Skjoldungen went back temporarily to their region when the opportunity presented itself a few years later, and other inhabitants of the small town migrated, also for one winter, towards the north. This explains why Kuummiit unlike other large villages where population went on increasing, showed a decrease after 1965 (Fig. 23). In 1976 there were about a hundred houses in the village for 450 Greenlandic residents. The building of new dwellings has practically stopped since 1971.

An effort was made to urbanize Kuummiit by building roads for a few lorries to drive on, a new cemetery, a new and larger supermarket and meeting house, and a sports ground. In 1972 the school building was enlarged to four times its former size. Electricity was installed in Greenlanders' houses in 1979. (Previously, only public buildings and government housing had been supplied with current).

The resident Danish population increased sharply between 1964 and 1973, decreasing slightly later on. The Danes are schoolteachers (6 in 1979) and their families, a nurse and a contractor.<sup>30</sup> This small European colony never represented more than 5% of the total population of Kuummiit, and is far from being as important as the one in Tasiilaq.

The rapid transformation of this village has brought

on great changes in the lifestyle of its inhabitants: changes in the calendar and occupational rhythms; the adoption of new techniques of acquisition and of new rules for sharing the fruits of production; transformations in the division of labour between men and women; changes in diet, etc. The conversion of Kuummiit to a fishing economy was dependent on an increasing influx of cod; but the annual and seasonal fluctuations in fish populations proved to be considerable, and the fishermen of Kuummiit go through periods of serious economic difficulties.

## Tasiilaq

Tasiilaq ("the bay which is like a lake") was officially called "Ammassalik" for several years, and is the administrative capital of the district. It is very different from other settlements in the area.

Originally it was a small centre exclusively reserved for the Danish and West Greenlandic agents sent to colonize, and was to be a link between the Ammassalimmiut spread out over the area and the outside world. Indeed, before the opening of the airport at Kulusuk some 20 years ago all traffic went through the Tasiilaq harbour.

A small administrative centre and trading post was set up here in 1894 by Gustav Holm at a site which seemed to provide a good harbour for ships coming from Europe and to occupy a central position in the district, halfway between the two great fjords, Sermilik and Ammassalik Fjord. There was no trace of traditional housing to indicate the previous presence of Ammassalik hunters, and it was never meant to be a point on which the Ammassalimmiut would converge and settle.

In August 1894, Johan Petersen, in charge of organizing trade, and the Rev. Rüttel, a missionary sent to convert these Greenlandic pagans, founded the small colony of Tasiilaq – at the time a rough trading post and two houses. Later the station grew with the addition of administrative staff: a deputy head of trade, a catechist to help the minister, and their families; a West Greenlandic midwife; and finally some East Greenlanders employed by these families. At the turn of the century the residents of Tasiilaq were still for the most part West Greenlanders (between 12 and 15) and Europeans (from three to six). But the attraction of the new was soon to draw in the East Greenlanders and their families: they had come to prepare themselves for baptism, but now they were unwilling to return to their hunting grounds. In 1899 a shop had been built in Tasiilaq; the church, also used as a school, was begun in 1905 and completed in 1908.

Between the winters of 1904 and 1905 the numbers of Greenlanders resident in Tasiilaq and Itimiin rose sharply by 88%. The 111 inhabitants represented 22% of all the Greenlandic population living on the east coast. But Tasiilaq and the areas around it were poorest

in game in the whole district. Despite the efforts of the trade manager to incite the population to spread out, and despite the establishment of two small mission posts at Kulusuk and Kuummiit, Tasiilaq remained the most important settlement in the district until 1922 (Fig. 24).

After that date first Kulusuk, then Kuummiit, had a larger Greenlandic population than Tasiilaq, but Tasiilaq regained its original importance in 1953, as the number of Greenlandic inhabitants there increased rapidly at the end of the 1940s. This number doubled between 1947 and 1955, then redoubled between 1955 and 1964. The Danish population also increased regularly between the end of the war and 1970, and then decreased slightly (Fig. 23).

Urbanization began very early in Tasiilaq. The possibilities offered by some wage-earning activities, for example working as a *kippaq* (odd-job man or house servant) with the Danish civil servants allowed some East Greenlanders who had difficulties with their home environment to find a new way of life. The new lifestyle was adopted by their descendants and also attracted other people from the district. In 1938 Ejnar Mikkelsen deplores the fact that the children of wage-earning Ammassalimmiut tend to stay in Tasiilaq, despite the difficult living conditions they have to face; yet these children had no chance of experiencing a hunting existence as a model to follow. At the time, Mikkelsen already sensed the beginnings of a proletariat: "In this manner a proletariat is being created – or has in fact already been created – which can only exist by means of their earnings from more or less casual work and by public aid, which may be obtained in times of need" (1944: 59). The author adds that this regrettable development is not likely to be stopped, and that there will be more and more people living in Tasiilaq.

And indeed, this is the course the history of Ammassalimmiut has taken. Tasiilaq, a small and unproductive centre, functioning on the basis of salaries or special security benefits, has never ceased to attract people from other villages, particularly young people, and mostly women. In 1955 one Greenlandic family lived in the Ammassalik district lived in Tasiilaq; today almost 40% of the population are town-dwellers.

One of the factors that explains the attraction of town life is the more modern and comfortable living conditions that exist there than in the villages. Town-dwellers have had electricity since 1957–1958, and all the houses have had running water since the end of the 1970s. Most wage-earners have since then bought electrical appliances, impossible to use in other areas: refrigerators, freezers, washing machines, stereo systems, film projectors (Super 8 mm) and televisions. Moreover, the best shops, those with the greatest range of goods, have always been in Tasiilaq. In order to have a choice, or just to get what one wants to buy, one must usually go from the village into the town – until the day one decides to settle there for good.

Many young people prefer life in Tasiilaq, because it

seems less dreary than in the villages. Some of them come to visit a relative and never go back. After a while they try to find a source of income in town, and ask for a place to live when they have started a family. This is a common pattern for settling in town.

As an attempt to reduce this movement of villagers towards the town, the local authority has for some years now been making efforts to modernize the villages: electricity came to Kuummiit in 1979, to Kulusuk in 1980 and to Tasiilaq in 1982. A telephone system eases communications between the villages and the town. The shops in Kuummiit and Kulusuk have been enlarged; the water supply and road systems have been improved; the council has installed communal freezers, etc. But improvements like these were costly for the council, and for the villagers, who have got into debt with telephone and electricity bills, which are difficult to pay on their own irregular incomes. There are also the instalments they have to pay on their houses and motor boats.

Up to the end of the Second World War the number of Danish residents in Tasiilaq was no more than 15. After the difficult period of the war it increased appreciably. Between 1941 and 1943 an American meteorological station with about 20 men was set up at Tasiilaq, where a radio station had been functioning since 1925. At that time Tasiilaq was still a small settlement where about 110–130 Greenlanders lived. Some of them still remember the impression made on them by the arrival of the first planes in their area: "We were terrified", they say. Later, when the base and the landing strip at Ikkatteq had become operational and a small meteorological station (which remained secret) had been set up on the island of Kulusuk in the summer of 1943, the American forces discontinued their activities in Tasiilaq.

At the end of the war Denmark resumed its links with Ammassalik, and an ever-increasing Danish colony settled in Tasiilaq to work on the extension and modernization of the small town. There was a 69% growth of the Danish community in Tasiilaq between 1946 and 1947, from 26 to 44 residents. In 1949 it reached 67; in 1957, 93; in 1959, 120; in 1963, 149 and in 1970, 183. Since then there has been a decrease to 149 in 1976.

Towards the end of the 1950s the Danish policy of rapid development for Greenland and the regrouping of scattered populations towards the centres with the best health and educational facilities furthered the process of transformation. It was during this period that the water and electricity supplies and a fire station were organized in Tasiilaq. A hospital, a school, the *Børnesanatorium* or orphanage, a kindergarten and an old people's home were built. A municipal laundry with public showers was set up, and some kilometres of road and a wharf were constructed so that larger ships could dock. Along with the building of these collective facilities individual housing (houses to be bought on credit) was developed for the local population. The number of dwellings for ci-

vil servants from outside the area was increased: two small buildings several storeys high with 14 flats date from 1960.

Later the town continued to expand: there were new neighbourhoods served by the recently-built road system, a telephone network, a large KGH warehouse near the harbour, a large KGH self-service shop two storeys high, a building with 18 low-rent flats, a sports ground, etc.

On the 7th and 8th of February 1970 a violent north-west wind (the *pilaraq*) destroyed part of the town and several public and private buildings had to be wholly or partially reconstructed. The cinema, meeting house and school were thus rebuilt in a larger and more comfortable form than in the past. This unfortunate event (particularly so for the schoolchildren who had to continue their schooling in Denmark) nevertheless had some beneficial consequences: local workmen could take part in the construction and reconstruction of buildings, and this led to a decrease in the seasonal immigration of Danish workers.

The small capital developed further in the 1970s with the opening of a KGH bakery, a very modern dental clinic in the school building, a private hotel/restaurant and the construction of a heliport in 1975. This new means of transportation (compared with dog sled or boat) between Kulusuk Airport and Tasiilaq, and between Tasiilaq and the other villages, made it considerably easier to multiply exchanges and communications within and outside the district, especially in winter and spring. The helicopter is an expensive form of transport, and Greenlanders cannot often afford it, but it is extensively used by all institutions for postal purposes, by the health services for emergencies, and by the police when searching for lost or missing persons.

All the social, sanitary, educational, religious, legal, commercial, financial and technical organizations for the Ammassalik district are concentrated in Tasiilaq. The occupations of the townspeople are mostly related to local administration. Salaried positions have multiplied in the various institutions that need men and women in offices, shops, workshops, the harbour, the hospital or the school. Moreover, a small number of private Danish enterprises offer other wage-earning opportunities. But the number of new jobs cannot keep pace with the constant arrival of young people on the labour market and the continuing influx of villagers to the town. There are serious unemployment problems in Tasiilaq, more particularly in the winter – from November until May – when traffic to and from the outside world and construction work slow down.

This exodus of young villagers towards the town is a danger that local elected representatives are well aware of. They warn against it, but certain policy decisions only encourage the persistence of this movement: for example, the creation of a boarding school in Tasiilaq, so that pupils from small villages can be better and more extensively educated and become future candidates for

white-collar jobs. Similarly, three hostels for single people have been built which can house 9, 14 and 20 young people looking for work in town.

## Activities, resources and lifestyles

It has emerged from what we have said above that there is a great diversity of lifestyles today among the Ammassalimmiut, depending on their place of residence or main occupation.

On the one hand we find family groups who still essentially live by hunting and gathering like their ancestors: they live in tiny settlements, often of fewer than ten hunters, like Qernertivartivit, Ikkatteq or Pikiitsi. On the other hand we have stable salary-earners living mainly in Tasiilaq, whose lifestyle is very close to that of westerners. Between these two extremes there are numerous intermediate categories: fishermen, hunters/fishermen, hunters/wage-earners, fishermen/wage-earners, craftsmen or hunters/craftsmen and old age pensioners or those living on social security.

The existence of a hunter is greatly dependent on climatic variations and snow and ice conditions. Others, like cod fishermen, depend on the tides. Wage-earners are, as in any other part of the world, dependent on the official calendar and a set pattern of working hours. The craftsmen can be dependent on external factors like the arrival of a planeload of tourists.

As a rule the main occupation of the head of the family determines the daily rhythms of activity for the rest of the household – eating habits, the lifestyle in the home and social relations with other more distant members of the family.

In the following section we will try to define and analyse the differences that exist among the various economic groups in Ammassalik today.

## Hunting and gathering

Hunting was the ancestral occupation which up to fairly recently supplied the East Greenlanders with all the necessary elements of life. It is still practiced by part of the population. However, it underwent important transformations in the course of the twentieth century, and today young people are no longer attracted by it. This could lead to its being abandoned as a main occupation.

So this traditional activity has also been affected by the general evolution of Ammassalik society: on the one hand technological changes have transformed hunting techniques and yields; on the other a market economy has made the Ammassalimmiut, who had always lived in a system of almost total self-sufficiency, dependent on money.

## The major technological changes

### Guns

The gun was one of the first foreign acquisitions. Very rapidly it became part of the usual hunting equipment, taking its place among various harpoons and spears, as the hunters immediately realized the usefulness of this new weapon, which could hit an animal from a greater distance than they could with traditional means.

For the first few years after the creation of a trading post at Tasiilaq the Ammassalik hunters mainly bought hunting weapons and ammunition there. However, at that time a gun cost DKK 32, the equivalent of either 71 fjord seal skins, 16 white or five blue fox pelts, and almost the equivalent of a polar bear pelt.

In the first five years of trading in Ammassalik (1894–95 until 1898–99) 85 guns were sold. Purchases of gunpowder rose from 55 to 127 kg a year, and the annual purchase of cartridge cases increased from 17 500 to 57 000 (Mikkelsen and Sveistrup 1944: 150, 161).

If we compare the number of guns used with the number of kayaks we can see how fast firearms were integrated into the personal hunting equipment of the Ammassalimmiut:

Year	Number of guns	Total number of kayaks*
1894	15	49
1895	31	48
1896	37	69
1898	72	79
1904	111	107

\* i.e. the total number of kayaks belonging to adult men and young boys (data from the *Statistik Protokol* of the Greenland Ministry)

Table 35. Evolution of hunting equipment: kayak, rifle, seal net, in Ammassalik district during the 20th century (from annual data of "Statistik Protokol" of the Greenland Ministry, for the years 1905 to 1934, and of "Beretninger vedrørende Grønlands Styrelse" for 1935 to 1951 and 1958).

Periods	Male population over 12 (N)	Average number of kayaks*	Average number of rifles**	Average number of seal nets
1905–1909	143	120	133	0
1910–1914	155	130	153	0
1915–1919	170	138	155	68
1920–1924	197	147	210	58
1925–1929	203	149	197	47
1930–1934	216	154	209	56
1935–1939	209	154	238	70
1940–1944	268	171	285	98
1945–1949	323	184	317	70
1950–1951	357	154	332	86
1958	433	171	404	146

\* All kayaks belonging to adult hunters and young boys.

\*\* Total number of hunting rifles.

The situation has rapidly developed that every East Greenlander, from adolescence or even childhood on, has owned one or several guns of different calibres, depending on the size of the quarry – birds or various types of sea mammals (Table 35).

Today some hunting firearms are very sophisticated, with loaders or telescopic sights. The price of a gun today (between DKK 1300 and 1900 in 1979) is not as high for a hunter, relatively speaking, as at the beginning of colonization. It would cost him between seven and ten fjord seal skins.

However, if the gun has been a real technical improvement for arctic hunters, it also has major disadvantages compared with the harpoon. It lacks a system for locating and holding wounded animals, whereas the harpoon, with its point linked to a float by a long strap, allows the hunter to follow the wounded animal and prevents it from sinking. Firearms have certainly helped to increase the hunters' profits, but they have also increased wastage: every year hundreds of seals hunted during the summer in ice-free waters sink before the hunter can get near them. This is why some hunters went on using gun and harpoon together – especially for hunting in kayaks – for a long time, using the former to wound the animal from a distance and slow down its escape, and the second, thrown from nearer at hand, to ensure its capture.

Another disadvantage of this technological change is that money is needed to buy ammunition, which leads to dependence on the trading post.

Today the gun is definitely replacing the harpoon. This ingenious throwing weapon, so typical of Eskimo civilization, has been almost totally abandoned in the area, as it has in all other arctic territories. During my various stays in the Ammassalik district I observed the decline, and then the almost total disappearance, of this traditional hunting weapon.

In the summer of 1967 one hunter in two was still using the harpoon in the small villages: 16 were using it in Tiileqilaaq and 9 in Sermiligaaq. In the summer of 1972 there were still 13 hunters in Tiileqilaaq using it, but Sermiligaaq had almost entirely abandoned its use. Only two hunters still had one.

In the summer of 1979 only guns were being used in Sermiligaaq and only six Tiileqilaaq hunters kept a harpoon. Elsewhere the harpoon was a thing of the past, except for a few hunters prudent enough to take one along on long-distance migrations in case they ran out of ammunition.

## Nets

Another revolution in the techniques of catching sea fauna was the introduction of the net (*qatsulit*). Unknown in East Greenland before 1915, it was introduced from the west coast by the administrator Hede-gaard. It was not, however, as immediate a success among the East Greenlanders as the gun (Table 35).



The wife of a hunter from Sermiligaaq removing the blubber from a seal skin with her special knife, the *sakkeq*. (Photo J. Robert-Lamblin, 1967).

The dissemination of this new technology took longer,<sup>31</sup> but once it had been understood and adopted by the Ammassalik hunters it first changed seal hunting in the icy season considerably, and later arctic char fishing in free waters.

This new means of catching seal with a net set under the ice has replaced the traditional winter seal hunt at the breathing holes. The latter was hard on the hunters who had to stay out in the cold on the lookout for hours on end waiting for the possible appearance of a seal coming up to breathe at one of the many different holes it could use.

The first seal nets were made of rope by the hunters themselves. "When we had learned how to use it the net saved our lives," an old man born in 1909 said, "because we could catch many more seals in the winter. Before that, when the snow was too thick, we died of hunger".

I saw the same thing among the Ammassalimmiut who had emigrated to Ittoqqortoormiit (Robert 1971: 70–71): their winter catches increased appreciably when



they learned to use seal nets, and the dark winter period, often a period of want in the past, has become rather a good one in the annual calendar thanks to this innovation. It must be stressed that this hunting technique is particularly well adapted to the Ittoqqortoormiit area, which has a long period of winter glaciation.

In Ammassalik seal nets can be set under the sea ice in the fjords and bays as soon as it is thick and solid enough. This normally happens in December. The nets can stay in place until the ice pack starts to break up in May or June. A storm or early breaking-up of the sea ice can carry the nets away, meaning a total loss for the hunters.

Nets are generally used in the area for five or six months of the year. Some hunters own several nets, but rarely more than six or eight, since they must be checked regularly – daily, or every two or three days – in case captured seal are devoured by certain small crustaceans (Gammarids) which attack the skin and flesh of the dead animal.

The best place to set a seal net is at a point where the ice breaks, for example around an iceberg caught in the pack, or at the crack made by the tide along the shore, since such places are visited by seals coming to breathe. To set the net three holes must be dug through the sea ice with a long pike called a *tooq*. The net is then run under the ice from one hole to another and stretched out with a rope over eight or ten metres so that it hangs, weighed down with stones, in the water under the ice.

In small, isolated settlements with few inhabitants the nets can be set near the houses. Then it is easy to check them. But near large villages with many hunters the icy area where the nets are stretched is of course much larger. For some hunters the sled drive to check the nets is long and hard in bad weather. In the more populated areas a sort of customary law has developed concerning rights to net-setting locations along the shore near the village. Each hunter knows his own and his neighbours' places; but outside the coastal area the ice belongs to everyone.

Although net hunting has become fairly important during recent decades it is not the only sea mammal hunting technique used in the winter season. The most skilful hunters still go by sled to the areas where sea currents have prevented the formation of ice. There they watch for seal and shoot from the edge of the ice as the animals come to the surface to breathe.

One cannot know exactly how many catches each hunter makes with the net, but as an indication we can mention the case of I. B., a skilled hunter from the district, who caught 70 seals during the winter of 1971–1972 with his six nets, working from Pikiitsi. This amounted to a quarter of his total catch for the year (see Fig. 31).

Nets for catching arctic char are used in the ice-free water from the end of June until September. Salmon nets won slower acceptance in the Ammassalik region than seal nets. But they have now definitively replaced

the harpooning of arctic char in the streams practiced by Ammassalik hunters in the past.

These finely meshed nets, 20 to 25 metres long, are set at the branch of a fjord at right angles to the shore and near the mouth of a stream used by the arctic char when they swim out to sea, or in the spawning season when they swim up towards the lakes. The nets are taken up twice a day, following the tides, or more often if the fish are plentiful. In the course of a few days, sometimes a few hours, several hundred kilograms of fish can be caught. The fishermen then leave to sell their fresh catch, or to freeze it if they have the facilities. Part of the catch is also dried in the sun as food reserves for the autumn or winter.

In the summer of 1979 a nylon salmon net cost DKK 175, and a rope seal net could be bought for DKK 25–30.

### Motor boats

We have mentioned how important the acquisition and increasingly frequent use of motor boats has been for the resumption and intensification of summer migrations among the Ammassalimmiut. But for hunting too the introduction of this means of summer transport, faster than the kayak, has considerably extended the territory a hunter can cover in a day away from his village or summer camp.

Ammassalik hunters started buying boats in the 1960s. At first only a few hunters were able to obtain a medium or long-term loan from the council to buy a boat with an inboard motor where the covered part of the small deck served as a shelter or berth. In summer 1967, only 48 East Greenlanders in the whole district possessed such a craft (8 in Tasiilaq, 14 in Kuummiit, 6 in Kulusuk, 3 at Tiileqilaq, 4 at Sermiligaaq, 11 at Iser-toq and Pikiitsi and 2 at Qernertivartivit). These boats cost between DKK 10 000 and 25 000 in 1967. Some other Ammassalimmiut began at the same time to put small outboard motors on their rowing boats, but they were still very few.

During the 1970s a new type of boat appeared, with plastic or fibreglass hulls and more powerful motors. They spread very rapidly. In 1967 only Danes in Ammassalik owned this noisy type of speedboat, and the hunters seriously disapproved of their use, saying that the noise and vibrations caused under the water by the motor would frighten the seals away. They even obtained a ruling from the council forbidding speedboats access to certain areas, particularly up in fjords where they usually went seal hunting. But only a few years later they took up speedboats themselves and all prohibitions were removed.

This massive conversion to speedboats accelerated the abandonment of kayaks, even in villages essentially dependent on seal hunting.

In a series of papers on Ammassalik kayaks R. Ges-sain (1968 and 1969) analyses the transformations and disappearance of "this machine, marvellously adapted



Table 36. Number of kayaks in the various localities of Ammassalik, in 1967, 1972 and 1979.

Settlements	summer 1967	summer 1972	summer 1979
Tasiilaq	1	0	0
Kuummiit	17	6	2
Kulusuk	25	14	10
Tiileqilaaq	29	23	6
Sermiligaaq	13	9	0
Isertoq and Pikiitsi	22	12	10
Ikkatteq	5	5	3
Qenertivartivit	3	1	2
Total	115	70	33

to the subarctic environment of Ammassalik" (1968: 248). He also mentions that some kayaks were still being used in 1966. Table 35 shows the progressive abandonment of this hunting craft, which has not kept pace with demographic growth, especially since the Second World War. In the first three five-year periods in the table we find one kayak for every 1.2 men over the age of twelve; in 1920–1924 the number rises to 1.3; in 1925–1939 it is 1.4; in 1940–1944 it is 1.6; in 1945–1949, 1.8; in 1950–1951, 2.3; and in 1958 it is 2.5

In the course of the 1960s kayaks practically disappeared in the small capital of Tasiilaq, which was by then orientated towards wage-earning employment. In Kuummiit the kayaks were replaced by rowing and motor boats for commercial fishing. The large village of Kulusuk had very few kayaks left, but the other small settlements still used this traditional individual wooden-framed craft covered with skins, not only during the summer when the ice pack broke up, but also in the winter when they took it by sled out to the areas of ice-free water.

Table 36 shows the choices made by various villages during the 1970s. Isertoq and Pikiitsi, deciding on the motor boat, had abandoned an important part of their kayak fleets by 1972. The Sermiligaaq and Tiileqilaaq kayaks began to decline in 1972 and disappeared very rapidly, since we find none at Sermiligaaq in 1979, and only six at Tiileqilaaq.

It seems certain that the days of the Eskimo kayak are numbered in Ammassalik, as in the rest of the Arctic. The first motor boats were not a direct threat to the kayak, since they were mostly used to reach hunting grounds faster, and then the kayak, transported on board, was used for hunting locally.

But the arrival of small and easily manageable speedboats meant the extinction of the kayak. The new generations greatly prefer this new hunting craft, which is less dangerous than a kayak and requires practically no training.

We find very few young people among the last kayak users: most of them are over 35 (Fig. 25).

Apart from a few rare cases, hunters today no longer

teach their sons how to manage a kayak. This training is actually becoming an optional subject in school.

The motor boat seems to have increased hunting yields during the summer (Fig. 27) as the hunters are now able to go much farther away than in the past. This is particularly true of the hunting of the large migrant seals that drift on the ice in July. At Sermiligaaq it is not unusual to see speedboats returning in that month with eight or nine seals.

Thus, the hunting territory around each settlement has been greatly enlarged, which was probably necessary anyway in the face of demographic growth. Another positive aspect of these boats is that they have made it possible to bring back a larger catch than one could with a kayak.

This recently imported technology, quickly adopted by the majority of Ammassalik hunters, is far from having nothing but advantages: the boats are expensive to buy and to run, and the user is totally dependent on fuel sources. Indeed, every trip must be planned according to the amount of fuel taken along or the opportunities for buying some along the way.

In 1979 a speedboat with a 65 h.p. motor cost DKK 20 000 from the KGH (equivalent to 100 top-quality seal skins). A boat like this needs 60 litres of petrol (at DKK 2.75 a litre) for a trip from Tasiilaq to Tiileqilaaq and back. On the one hand we have technical progress, on the other indebtedness and dependence.

We must also mention the fact that, even if the hunters of Ammassalik have responded favourably to the introduction of some foreign inventions – arms, traps, motor boats – which they have adopted and sometimes also adapted, considering them superior to their own, they have not however changed their own means of transport on ice and snow – dog sleds. Snow scooters have not even begun to replace them.

Although the majority of the other Inuit populations have adopted this new western vehicle, the Ammassalik

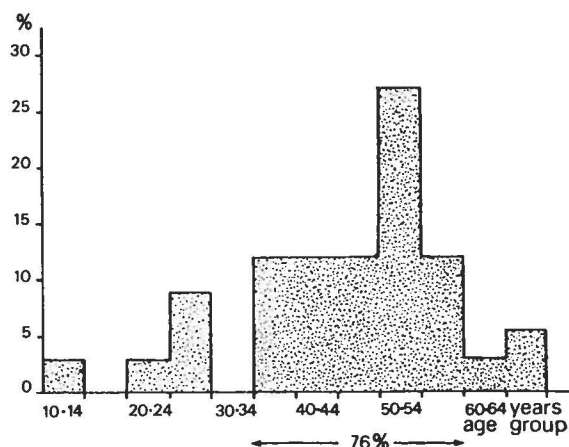


Fig. 25. Age distribution of kayak owners in 1979 (33 hunters). Ammassalik district.

hunters have refused to use the snow scooter, which they think fragile, expensive and dangerous. "The machine will leave you stranded on the spot if it breaks down, but the dogs always bring you back home", say the hunters. Also, the hills and mountains of the area are difficult ground for this type of machine. However some Ammassalik wage-earners, like the Danes residing in the region, own one.

## Hunting, fishing and gathering resources

Among the different types of flora and fauna eaten or used in various ways by the Ammassalimmiut some are particularly important for those who have remained attached to a traditional life of hunting and gathering: either they are an essential part of their diet or they are sold and bring in a monetary income that has grown increasingly indispensable as the Ammassalik hunters have changed their weapons, their houses and their means of summer transport, etc.

### Sea mammals

The seal (*puileq*) has ensured the survival of small human groups in several inhospitable areas of the Arctic, providing man with the essentials: meat, fat and blood for nourishment; fur or skin to protect him from the cold and wet; fat for light and warmth. It is still the principle quarry of Ammassalik hunters. In the society of today, fat is no longer used for fuel and lightning, and skins and furs are less often used as protection against the cold or as a watertight covering for boats. But seal meat remains the stable food for all hunting families, and the sale of pelts has become all-important at this stage of their evolution.

Among the five types of sedentary or migratory seal found in the area the most commonly hunted is the fjord or ringed seal (*Pusa hispida* Shreber, locally called *natsiaq*).<sup>32</sup> This is a resident seal and can be caught all the

year round, although the techniques differ according to the season. There are three basic hunting techniques today: trapping (under the ice); lying in wait for the quarry (at the edge of ice-free waters); and stalking (on the ice).

Trapping with nets during the winter, when the sea is covered with ice, has been described above. Lying in wait consists of waiting and looking out from a fixed point (the edge of the ice pack in winter; a promontory islet or iceberg in the summer) for the appearance on the surface of the water of the head, or sometimes even only the nose, of a seal, then shooting it or pursuing it by boat until it can be caught. Generally the hunters have a kayak or motor boat close at hand into which they jump quickly to chase the quarry. If several hunters are gathered together, the first one to see the seal has the right to fire the first shot; but if he misses the other hunters can try to kill the seal for themselves if they can.

Stalking on the ice is only done at the time of the year when the sun comes back, towards the end of winter. In about April or May seals come out and lie on the ice to warm themselves in the sun (they are then called *qat-simaleq*). The hunter attempts to get close enough to shoot without being seen, heard or scented by the animal, which would otherwise disappear under the ice.

Hidden behind a white screen (fixed on a small sled – the *qamulit* – which carries the gun), advancing against the wind so as not to be scented by the seal, the hunter crawls closer, imitating the seal's own movements. When he is near enough he shoots, trying to kill it with one shot, as a wounded seal may have enough strength left to dive into the water and disappear.

Most of the fjord seals killed in the Ammassalik region are considerably smaller than the ones hunted near Ittoqqortoormiit. They are young seals, less than a year old, measuring about 80 cm or a metre, and weighing about 40 kg. This represents on average 20 kg of meat according to Ejnar Mikkelsen's estimates (1944: 100)

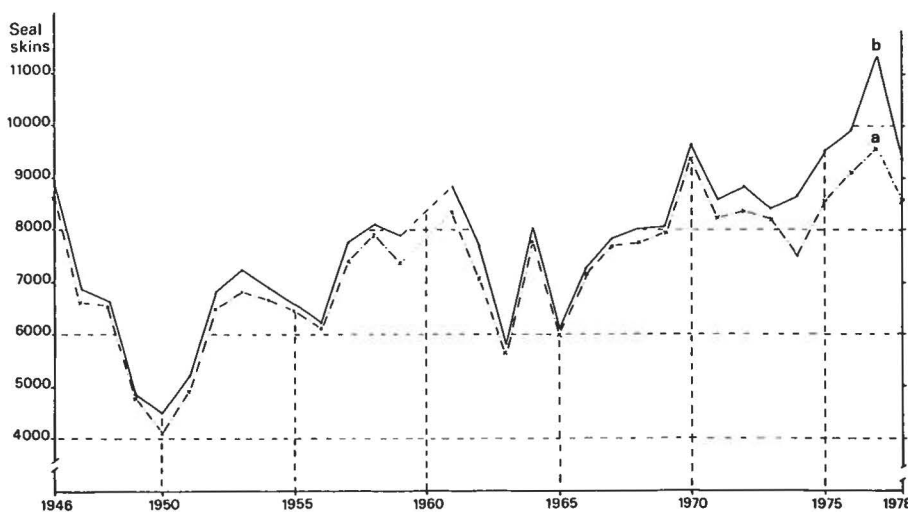


Fig. 26. Number of seal skins bought yearly by the KGH (for all Ammassalik district). a) fjord seals. b) all species of seals.



In Kuummiit, a polar bear pelt washed and scraped is set out to dry in the sun, stretched on a wooden frame. (Photo J. Robert-Lamblin, 1972).

and the Ministry for Greenland hunting statistics. The weight of the fat varies according to the season. In summer seals are lean, which is why they tend to sink when they have been killed and some animals shot by the hunters are lost.

Fig. 26 shows the sales curve for seal skins sold to the KGH by the Ammassalimmiut. The KGH sends the skins to Denmark and takes charge of dressing and selling them at the twice-yearly international auctions. The curve does not give a perfectly accurate picture of the yearly catches in the area, since a certain number of skins are kept by the population for their own use and are not entered in the totals. We can however take these sales figures as a better reflection of the annual number of seals caught than the data given by official hunting statistics. For few hunters from Ammassalik regularly take the trouble of filling in the forms given to them, on which they are supposed to note each fortnight the number and species of sea mammals they have caught. This lack of reliable registration leads to a total official number of catches well below skin sales. The hunting statistics department of the Ministry for Greenland is well aware of these deficiencies and in its publications adjust the total accordingly: for example they adjusted the total for fjord seals by 5500 in 1975, 400 in 1976, 3000 in 1977 and 1700 in 1978.

Given this lack of precision I have preferred to refer to sales figures rather than hunting statistics, although I am aware that the former figures are slightly below the real ones.

When Ejnar Mikkelsen tried to calculate the total number of seals hunted annually in Ammassalik in the first decades of the twentieth century he had to consider the relative importance of the skins of various seal species used by the Ammassalimmiut for clothing (anoraks, trousers, boots and mittens), their boats (kayaks and umiaks), their tents, implements or parts of accessories of all kinds (straps, floats, skin bags), or for their home comfort (wall hangings, blankets for the platform, for partitions) etc.

This is how he evaluated the annual fjord seal yields for the various periods (Ejnar Mikkelsen 1944: 86):

<i>Fjord seal skins</i>	1898–1910	1910–1920	1921–1930	1931–1938
sold	893	1770	3304	5354
used	3006	2128	1636	1102
Total	3899	3898	4940	6456

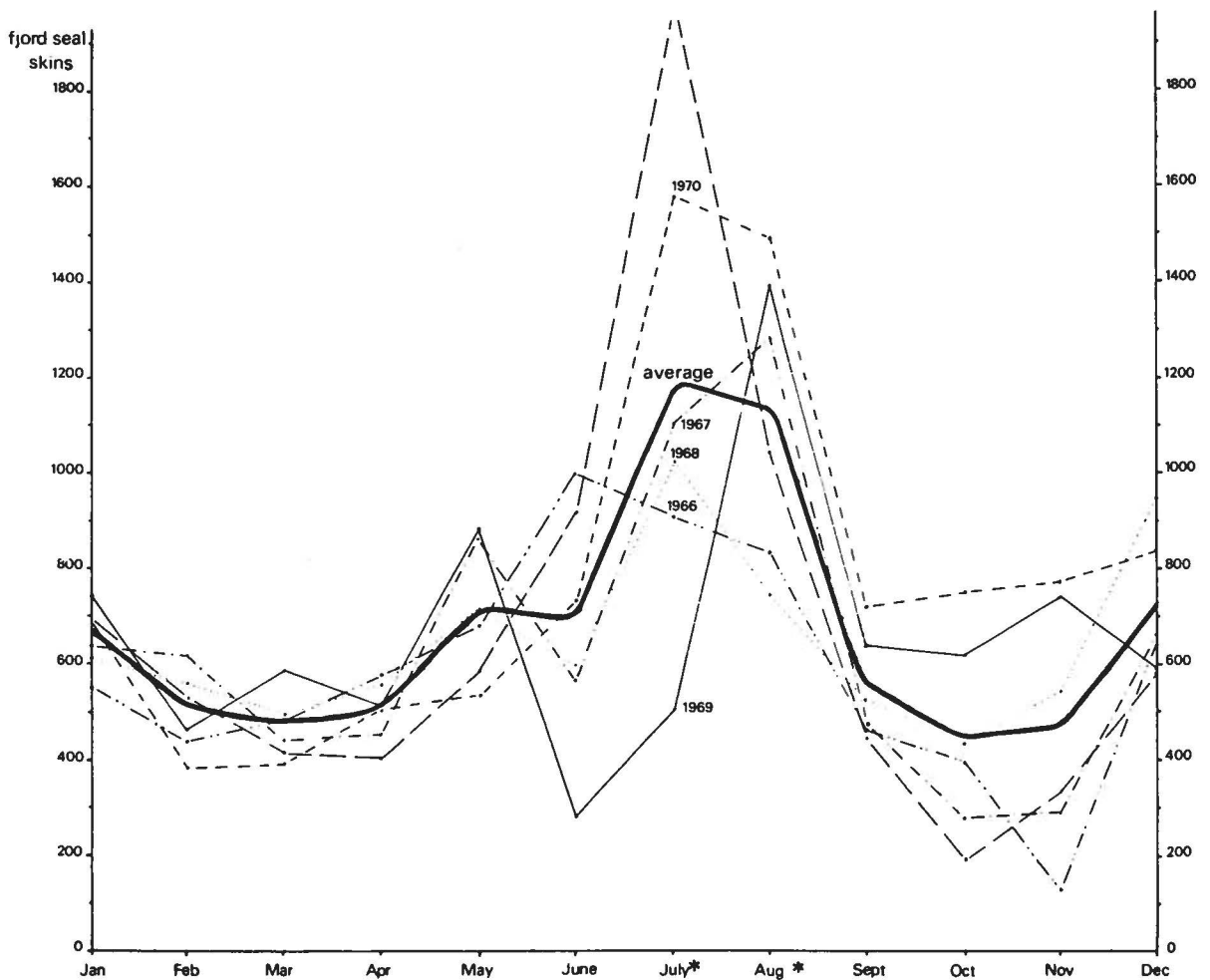


Fig. 27. Monthly variations in the purchase of fjord seal skins by the KGH, from 1966 to 1971 (all Ammassalik district).  
\*The high figures for July and August are partly due to sales made by hunters returning from distant migrations.

These figures clearly show the decrease in the local use of skins as sales to the shop increased, which in turn implied a preference among the Ammassalimmiut for manufactured goods over traditional home-made implements.

After the war, and especially at the end of the 1950s, when the purchasing price for seal skins was increased regularly by the KGH, this tendency was accentuated. The closer we get to the present day, the more we find the local use of skins decreasing and the closer the sales curve gets to the actual number of catches.

The curves in Fig. 26 show the irregularity of catches according to the year. Decreases from one year to another could represent as many as several thousand animals, and this could have serious repercussions for the way of life of the population. It is also clear that the yields from seal hunting did not keep pace with demographic expansion in Ammassalik – at a time when other occupations like cod fishing, tertiary industries or handicrafts for the tourist trade had not yet been developed.

The monthly curve for fjord seal skins sold by Greenlanders to the local KGH shop (Fig. 27) cannot be considered as the real curve for seasonal catches, as the massive sales by families returning from long-distance migrations increase the figures for July and August abnormally instead of being distributed over the year according to the actual time of catching. The average curve does show, however, two difficult periods for Ammassalik hunters – between February and April and between September and November. The former is the coldest period, when snow and ice can lie very thick; the latter is a time when the sea is free of ice (the Greenlanders say “When there is no ice there are no seals”) and bad weather makes navigation difficult.

After these two “tide-over” periods, December/January and May/June are better months. The former is a good time for netting seal under the ice, which is not yet too thick, and the latter is a time for *qatsimaleq* – seals that have come out to bask in the sun on the ice pack.

Towards the end of June and during July the hunters

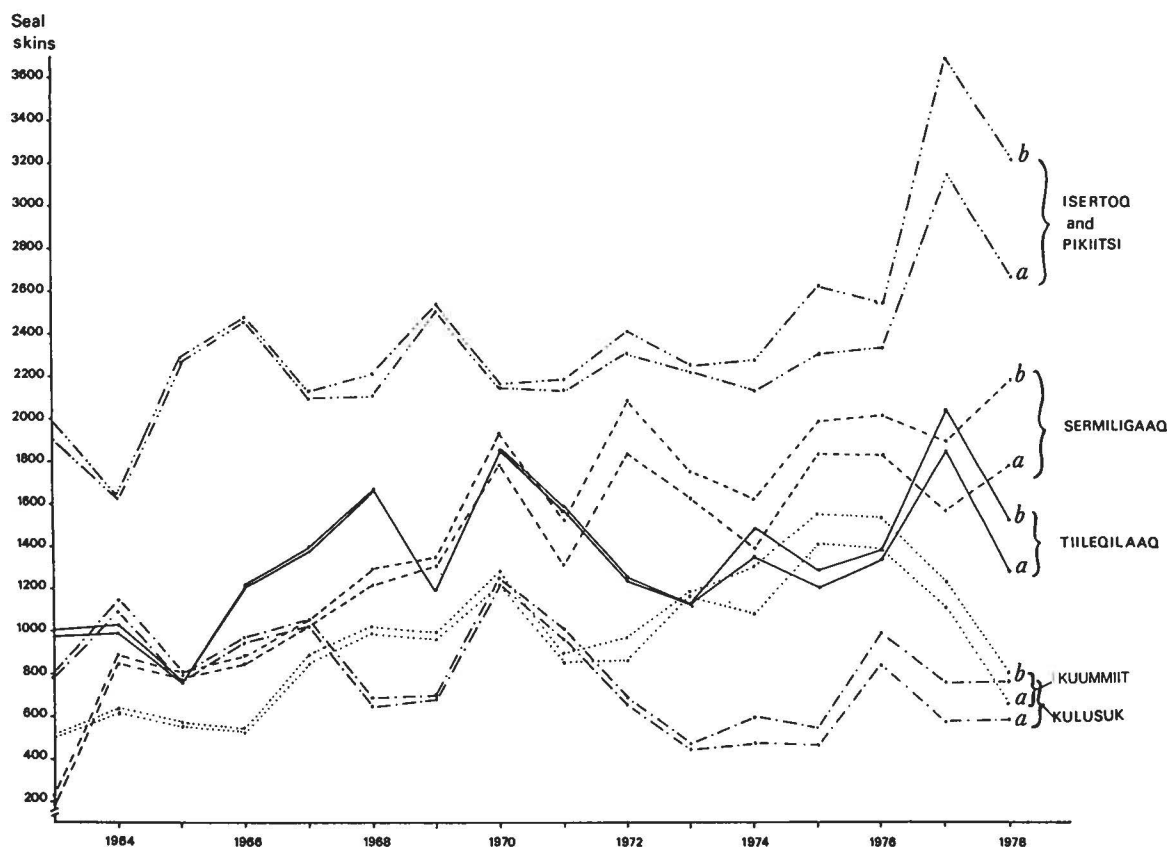


Fig. 28. Number of seal skins purchased yearly by the KGH in various settlements of Ammassalik district. a) fjord seals. b) all species of seals.

pursue the migrating fjord seals and bring back a considerable number of skins as well as meat and blubber reserves for the autumn and winter.

A more detailed analysis of seal catches by locality confirms the fact that the more important the village, the less the population actually depends on sea mammal catches. This can be seen not only by comparing the number of seals caught with the number of active males or number of inhabitants (Table 37 for 1976) but also by comparing the absolute number of catches for each locality (Fig. 28).

In Kulusuk the situation seems disastrous, since apart from handicrafts sold to the tourists or the KHG and a little cod fishing the major part of the scanty resources of the village come from seal hunting.

We have similar figures, perhaps slightly higher, for Kuummiit, but we should not forget that the majority of villagers have gone over to cod fishing as their sole occupation.

The figures for Tiileqilaaq lie between those for the large villages (Kuummiit and Kulusuk) and those for the settlements with the highest hunting yields (Sermiligaaq and Isertoq/Pikiitsi). The people of Tiileqilaaq have an additional resource over and above seal hunting – some cod and shark fishing.

Finally, the two extreme outposts of the district, with the most isolated populations – Sermiligaaq in the north and Isertoq/Pikiitsi in the south – represent the fraction of Ammassalik society that has remained closest to the ways of its ancestors. In 1976 the average number of seals per inhabitant in these settlements was identical to Mikkelsen's estimate (1944: 86) for the Ammassalimmiut living at the turn of the century, i.e. 12.2 seals per inhabitant for the period 1898–1910. The consumption of meat is still very high in these villages (Table 40).

In the society of today the dressing of skins is still very important, since it does much to determine their cash value. When a KGH agent buys seal skins from a hunter, he looks not only at the size and quality of the fur and the number of wounds, but also at the way the skin has been scraped, washed and stretched by the woman who has prepared it. For once he has come home the hunter has no more to do with the catch. The seal now belongs to his wife (or his mother or sister, if he is single). With her special curved-blade knife – the *sak-keq* – she separates the skin from the blubber and flesh, cuts up the meat and shares it out according to pre-established rules, cooks it or preserves it. Once the thick layer of blubber has been separated from the skin a remaining thin layer of fat must be carefully detached



Table 37. Seal hunting yields by settlement in 1976. Global figures for various seal species; averages per active male and per Ammassalik inhabitant (from skin sales).

Villages	Number of men aged from 15 to 59	Number of Ammassalik inhabitants	Total number of seals for the year	Average number of seals per male between 15 and 59	Average number of seals per inhabitant
Kuummiit	120	461	1541	12.8	3.3
Kulusuk	115	401	985	8.6	2.5
Tiileqilaaq	58	201	1385	23.9	6.9
Isertoq and Pikiitsi	46	190	2546	55.3	13.4
Sermiligaaq	39	169	2022	51.8	12.0
For all Ammassalik district	632	2325	9919	15.7	4.3

from the inner layer of skin with the aid of the *sakkeq*, while the skin is spread out (inside-out) on a slanted wooden board called the *qapiarpik*. The woman's skill lies in the way she can completely remove the fat without cutting, thinning down or otherwise damaging the skin. After this the skin is washed with detergent bought from the shop (in the past this was done with urine) and scraped with a shell-shaped scraper called the *kiliilarnaq*. Small slits are then made all around the edges and the skin is stretched out with a rope on a wooden frame to be dried outdoors, or indoors near the stove. It is then soaked a second time, and scraped again with the *kiliilarnaq* to extract the remaining oil. When it has been washed and rinsed once more and partly dried, the woman works it over with her hands and teeth, stretching it in all directions. The holes made by taking out the flippers and by the hunter when he wounded the animal are sewn up. The skin is stretched out again on a wooden frame and placed out of the reach of the dogs. Sometimes, if the dogs are kept far away, the skin is stretched outside, pinned to the ground by small stakes. When drying, the skin side is exposed to the source of heat (sun or stove) longer than the fur side. Once dressed in this manner, the skin is ready to be sold.

The price paid by the KGH, sometimes with a bonus,<sup>33</sup> can vary greatly, depending on the quality of the cleaning and pre-tanning of the skins.

Obviously, hunting will bring in a low income in homes where the women do not know how to dress skins properly, or do not want to; but in households where the real traditional techniques of skin dressing have been passed on from mother to daughter the income from fur sales can be very high indeed.

From the detailed data I could consult locally at the KGH offices, beginning with 1967 (data could not be compared for the preceding years as the KGH then used a different type of classification), it appears that the fjord seal skins sold by hunters are mostly in the "large" category. The percentage of this category for the whole district varies between 56% and 69% depending on the year. Between 22% and 30% are "medium-size" and 8–15% are "small" (Table 38).

As far as quality is concerned, top-quality skins, of

whatever size, vary between 9% and 27% for the whole district depending on the year. Second-grade skins vary between 30% and 38%, and 36–59% are third-grade.

Actually, there are variations in time, and differences between villages. Since 1974, for example, Sermiligaaq has supplied a majority of top-quality skins. This was not the case in previous years. Most skins sold to the KGH by Isertoq are second-grade. Most of those from Tiileqilaaq, Kuummiit and Kulusuk are in the third category.

Among other seal types hunted in Ammassalik we must mention bearded seals, common seals, hooded seals and Greenland seals; but far fewer of these are caught than fjord seals.

The bearded seal (*Erignathus barbatus*, locally called *anneq*)<sup>34</sup> is a resident species. Much larger than the seals described above, it can measure over two metres and yield about 110 kg of meat (according to the hunting statistics department of the Ministry for Greenland). Ejnar Mikkelsen mentions that this seal was very common at the beginning of colonization, but it rapidly became very scarce near the settlements. However, hunters who went south could find these animals, whose skin was used to cover their umiaks and kayaks. The author adds that catches were numerous in the areas of Umiivik and 'Akorninarmiut'/Akorninaq (1944: 91).

The skin of the bearded seal, very thick and resistant, was not only used to cover the boats, but also to make various straps for sleds, dog harnesses, lines connecting harpoons to the floats, whips etc., as well as for the sole of the traditional double-lined boot, the *kamik*.

Today its domestic use is mostly limited to the making of straps or boot soles. In 1979 one of the Pikiitsi hunters, however, was still keeping his umiak in working order. The women in his family, especially his mother, wife and daughter, re-covered it every four or five years, using seven bearded seal skins.

Since 1975 the KGH has bought a few dozen skins a year, mainly from Sermiligaaq and Isertoq: 32 in 1975, 103 in 1976, 141 in 1977 and 81 in 1978; the prices ranged from DKK 70 to DKK 210 in 1976, depending on size and quality.

Bearded seal is an important quarry, like walrus or

Table 38. Percentage distribution by size and quality of fjord seal skins purchased by the KGH in Ammassalik district. Depending on the year the number of purchased skins varies from 7600 to 9600).

Years	Distribution by size* (%)				Distribution by quality** (%)			
	large	medium	small	total	first	second	third	total
1967	56	30	14	100	15	38	47	100
1968	60	28	12	100	23	32	45	100
1969	62	27	11	100	22	32	46	100
1970	60	25	15	100	22	30	48	100
1971	69	23	8	100	19	30	51	100
1972	69	22	9	100	13	31	56	100
1973	68	23	9	100	9	32	59	100
1974	60	27	13	100	18	36	46	100
1975	57	30	13	100	24	34	42	100
1976	63	23	14	100	27	35	38	100
1977	59	27	14	100	27	37	36	100
1978	57	29	14	100	25	37	38	100

\* Size: large: length+width=180 cm or above  
medium: length+width=between 160 cm and 180 cm  
small: length+width=under 160 cm

\*\* The quality depends on the colour and thickness of the pelt, on the number of wounds and the dressing of the skin.

narwhal, and they are shared collectively when several hunters work together. This is not true of small fjord seals, which are the hunter's individual property. The skin of the bearded seal is handed over to the hunter who wounded the animal, but hunters who are present and have touched the seal directly or indirectly have the right to some of the meat when it is shared out (there can be as many as five shares). According to the sexual division of labour among the Ammassalimmiut large animals like these are cut up by the men, whereas the small seals are done by the women.

The third resident type, the common or harbour seal (*Phoca vitulina*, locally called *qitalivaq*)<sup>35</sup> has practically disappeared from the area. According to what the oldest Ammassalimmiut have heard, they were numerous in the past, but today they are no longer seen, except, some say, in the Skjoldungen area.

The two migratory types of seal, the hooded seals and Greenland seals, are not found in the region for part of the year, particularly when the ice pack is there.

The hooded or bladdernose seal (*Cystophora cristata*, locally called *niiniarteq*)<sup>36</sup> generally migrates from the area between January and late June. This large seal, over 2 metres long and yielding an average of 85 kg of meat, can be seen in late June, among fragments of pack ice drifting south along the east coast. At that time of the year many Ammassalik hunters come down the fjords in search of these seals around islets and ice floes along the coast or in the large mouths of the fjords. Catches are particularly plentiful in July and early August. However, some hooded seals can be caught later up in the fjords.

The skin of this large seal, like that of the bearded seal, was of great importance for the Ammassalimmiut,

who used it for their umiaks and kayaks, for clothing (boots and waterproof anoraks), and their houses (covers for the platform). But the intensive hunts carried out by the Norwegians in the last century and at the beginning of the 20th century in the Denmark Strait, and even off the Ammassalik coast, have dramatically reduced migratory seal catches for the Ammassalimmiut.

Very precise Norwegian statistics for hooded seal show that 265 195 of these animals were killed in the Denmark Strait between 1924 and 1930 (the carcasses with the meat were left behind). This is an average of almost 40 000 a year during that period (statistics from Fridtjov Isachsen, cited by Mikkelsen 1944: 131). This over-exploitation greatly impoverished the Ammassalimmiut, who were very dependent on the seal for food – meat and fat reserves – and for renovating their boats. It certainly played a part in the sedentarization of the Ammassalimmiut. Generally speaking, an umiak was re-covered with new skins every four or five years and needed seven or eight large skins. A kayak had to be re-covered every two or three years, and needed two large skins.

In 1958 and throughout the 1960s the local commercial KGH boat, the *Ejnar Mikkelsen*, went on a hooded seal hunting expedition for a few weeks every July, bringing back several hundred. The skins were for the KGH, and the meat was sold very cheaply to the people of Tasiilaq and to institutions like the hospital, orphanage and old people's home, which were particularly short of meat. However, these expeditions were considered too costly, and had to be stopped.

Today a few hundred hooded seal skins are sold to the KGH by Ammassalik hunters every year – occasionally as many as a thousand. In 1974, 1025 were sold (376

pups and 649 adults); in 1977, 1388 (269 pups and 1119 adults); in 1978, 1345 (466 pups, 879 adults). Young hooded seal skins, long and lightly coloured, are particularly appreciated on the international market.

The number of catches seems to have increased with the acquisition, ever more common, of motor boats; but as yet it is too early to know precisely how much. Also, since 1974 the increase in the buying price of this type of skin, as compared to that of fjord seals, may have been an incentive for people to sell them rather than keep them for their own use.

The villages that supply most hooded seal skins are Sermiligaq, especially since 1970, and to a lesser extent Isertoq and Kuummiit since 1974.

To conclude this inventory of the seals found in the Ammassalik area we must mention the Greenland seal or harp seal (*Pagophilus groenlandicus*, locally called *nalanginnaq*).<sup>37</sup> This animal, smaller than the hooded seal, reaches a size of about 1.6 metres and yields an average of 30 kg of meat. It has also been extensively hunted by Norwegians and others. It has become a rare catch for Ammassalik hunters. They say that Greenland seals migrate twice: they arrive first at the beginning of June, leave, come back in October, and go off again towards December when the ice pack solidifies. However, it sometimes happens that a few isolated seals spend the winter in the fjords.

In Danish there are terms to distinguish between the "blueskins" (*blåside*) and the "blackskins" (*sortside*): young Greenland seals have a blue shade on their sides, and the adults have black contours on their backs which look to some people like the shape of a saddle and to others like a harp or lyre.

Greenland seal skins sold to the KGH by Ammassalik hunters amount to a few dozen a year, rarely more than 100. There was a progression between 1976 and 1978: 137 skins in 1976; 180 in 1977; and 331 in 1978. Isertoq is the major supplier of this type of skin, followed by Sermiligaq.

Some other sea mammals such as narwhal, beluga or white whale, little piked whale or Atlantic walrus are hunted far less than seal in the Ammassalik area. To catch such a large animal is a real stroke of luck, not only for the hunter and his family but for the whole village community, since all usually benefit from the sharing out of such a large mass of meat. However, these catches hardly count in the overall hunting yields for the district, since they remain exceptional.

The narwhal (*Monodon monoceros*, locally called *qialivaq*) is the least scarce of these large mammals. It can sometimes be seen in the summer, isolated or in small schools, penetrating into the interior of the fjords.

The incisor, which usually develops asymmetrically on the upper left jaw of the male, forming a twisted tusk sometimes over 2.5 metres long, is much sought-after. (In exceptional cases the right and left incisors can develop to equal lengths). In the past the hunter used this ivory to make his hunting implements, particularly his

harpoon. Today he can keep it to carve small statues for sale, or sell the whole tusk, in which case he prefers to sell it to a private buyer, who will generally offer an appreciably higher price than the KGH, which purchases narwhal tusks at weight prices for ivory. (Prices vary according to whether the tusk-tip is intact or damaged).

Greenlanders consider narwhal skin (called *mattak*), eaten raw, to be a great delicacy. When they can get some, Tasiilaq townspeople pay high prices for portions of *mattak* a few inches long. Besides the skin, which is very rich in Vitamin C, narwhal meat is also appreciated, boiled or dried, as is the blubber. This animal can be 4–5 metres long and yield some 225 kg of meat.

In the Ammassalik area most narwhal catches are made in Sermilik. Almost every year people from Tiileqilaq go out hunting them in kayaks, sometimes killing a dozen or more. However, the best area for narwhal hunting is farther north on the east coast, around the great fjord of Kangerlussuaq (Fig. 1). The families who choose to leave on long-distance migrations to this northern area appreciate the great number of narwhals and polar bears to be found there. On their migration of 1966–67, which lasted 13 months, the Ammassalik hunters caught 66 narwhals.

This animal, like the white whale, the walrus, the polar bear or the bearded seal mentioned above, is shared out among the hunters in a particular way. P. Robbe (1975) describes it as practiced at Tiileqilaq in 1972. Customary rules stipulated that a large animal was shared out among a greater number of people than the small catches. It is as if society prevented an individual and his kin from suddenly dominating the others through the possession of exceptional riches. Thanks to the sharing rules for large animals, non-kin can also benefit from food sharing, either because they were in at the kill (i.e. if they helped, or were just present on the hunt and touched the animal when it was caught) or because they helped to cut up the carcass. However, this egalitarian approach is only applied to food: the skins of bearded seals or polar bear pelts, narwhal or walrus ivory belong to one person only. In the case of polar bears, the pelt belongs to the person (man, woman or child) who first saw the animal. With other quarry, it belongs to the hunter who first wounded the animal. In the society of today the persistence of such customs, which developed at a time when the survival of the group was everyone's business, may seem surprising, since no similar rules of sharing are applied to other economic activities developed more recently like fishing or wage-earning.

The beluga or white whale (*Delphinapterus leucas*, locally called *qialivarnaq*) belongs to the same family as the narwhal in local terminology, and can be found swimming in schools with the latter. This animal, which can be up to four metres long, is appreciated just as much as the narwhal for its *mattak* and meat, but catches are even more infrequent.

The little piked whale, also known as lesser rorqual

(*Balaenoptera acutorostrata*, locally called *tigaanguttik*) is a small whale, measuring an average of six or seven metres. It is hunted with special equipment: a larger motor boat than the ones used by the Ammassalimmiut, and a harpoon gun. In summer of 1967 the great whaling expert Johannes Sonja-Larsen came at the expense of the KGH to try to develop this kind of hunting in the Ammassalik area, using the same techniques as in South or West Greenland. The village of Kuummiit was given a boat, the *Kunuzi*, fitted out for this type of hunt. The aim was to provide enough meat to feed this large village, which had been facing recurrent economic problems. A whale like this can yield about 2000 kg of meat. Unfortunately the experiment, which lasted only five years, was unsuccessful, as only a few whales were caught. Some years later a hunter from Sermiligaaq (with the help of two other East Greenlanders) decided to try hunting whale and narwhal so that he could sell the meat in the area. He began paying instalments on the boat with the harpoon gun, but in 1975, 1976 and 1977 he caught few whales and later abandoned the project.

The Atlantic walrus (*Odobenus rosmarus*, locally called *aaveq*)<sup>38</sup> is a mammal that can be up to three metres long, and whose tusks (hypertrophied canine teeth of the upper jaw) are as feared by hunters in kayaks as coveted for their ivory. It is rarely hunted in Ammassalik today. The old Ammassalimmiut say that in the past these animals were more plentiful. One or two walruses are caught every year. When several hunters team up the first one to see the animal has the right to shoot first.

The meat (about 225 kg) must be boiled for a long time because of the risk of trichina. The skin can be eaten raw after having been preserved in melted blubber.

#### Land mammals

Among land mammals economically important for the Ammassalimmiut today, we must first mention the polar bear.

The polar bear (*Thalarctos maritimus*, locally called *naneq*)<sup>39</sup> is a dangerous predator – a seal hunter – up to three metres long. It comes down from the north on the drifting pack ice, and is the most prestigious catch an Ammassalik hunter can make. The East Greenlanders find more excitement in hunting the polar bear, an animal as fast on land as in the sea, with teeth and claws feared by both men and dogs, than in hunting any other quarry. Normally it is the only catch the Ammassalik hunters keep records of throughout the years. It is not unusual to hear a hunter say proudly: "I had so many bears during my life". No such reckoning is made of any other type of catch.

The *nannitteq*, "the one who has the bear", is the first person to have seen the bear or discovered its footprints in the snow (it can be a woman or a young child) and

starts off the pursuit by sled or boat that ends in the killing of the animal. The *nannitteq* gains public esteem, the prestigious pelt and the best meat, even if he has not taken part in the hunt. For example, during one of my stays the *nannitteq* of a polar bear caught near Isertoq was a four-year-old girl. The person who gives the fatal wound to the animal is not considered as "the one who has the bear" if he was not also the first one to see it. In the process of collective sharing he receives the normal share allotted to all who have touched the bear during the pursuit or at the kill. The animal is divided into a maximum of five parts. These do not include the portion given to the *nannitteq*, who gets the skin, head, neck, backbone, sternal ribs and innards. The first one to have touched the bear before the skinning gets the right hind leg; the second gets the left hind leg, the third the right foreleg and the fourth the left foreleg, and the fifth is given the part including the pelvic belt and the tail (cf. the film made by R. and M. Gessain in 1966). The same general pattern is observed in the sharing-out of a narwhal, white whale or walrus. Extra shares may also be given to those who have helped to cut up the animal: some of the ribs and abdominal muscles.

Often the hunters cut the bear up on the spot, ostensibly to facilitate transport, as it is easier to carry chunks of meat than the whole animal. But the real reason may be to avoid having to share out pieces that would have gone to helpers in the village.

A bear hunt can last hours, or even days. But the actual skinning and cutting up, done with great skill by the men, takes very little time. The complete skinning and sharing-out of a bear killed in the summer of 1972 south of Isertoq took less than half an hour.

The white meat of the bear, representing an average weight of 120 kg, has a taste totally different from that of sea mammals, and is greatly appreciated, along with the fat, by the Ammassalimmiut. The meat is boiled for a long time, as it may carry trichinosis. The liver, over-rich in Vitamin A, is known to be dangerous poison, and is never eaten.

The pelt of the polar bear, which is particularly thick and warm, had always been considered very valuable, even before the existence of a trading post. It was used to make the warmest clothes (hunters' trousers) or as a valuable object of barter in the south.

After a trading post was established at Tasiilaq in 1894 hunters came more and more to exchange their polar bear pelts for western implements, especially hunting weapons, ammunition, hardware, cloth, wood and tobacco. Since then the selling price of polar bear pelts has been so high that hunters prefer to sell them rather than keep them for their own use. Mikkelsen (1944: 93) mentions that 3295 bear pelts were exported from Ammassalik to Denmark between 1898 and 1939. This figure is close to the total number of polar bear catches made in the area.

The settlement of Ammassalik hunters in Scoresby-sund in the autumn of 1925 apparently led to a decrease



in polar bear catches further south in the Ammassalik area. Before the Scoresbysund colony was founded the annual number of catches in Ammassalik (given by the *Statistik Protokol* of the Ministry for Greenland) could vary between a minimum of 43 (in 1923) and a maximum of 183 (in 1920). The annual average between 1901 and 1924 was 96.5 bears. After some hunters went to settle in the north the annual average dropped to 41.3 bears for the period between 1926 and 1938 (with a minimum of nine in 1930 and a maximum of 70 in 1938).

Around 1910 the catches represented an annual average of one polar bear per six inhabitants; towards 1930 it had dropped to one bear per 19 inhabitants, and in the early seventies it was one bear per 40 or 50 inhabitants. Thus, at the turn of the century, when bear hunting was good and the population of Ammassalik smaller, with no competition from Scoresbysund, the sale of bear pelts increased the purchasing power per inhabitant considerably (a top-quality pelt was worth DKK 40 in 1894, DKK 60 in 1906, DKK 75 in 1919 and DKK 100 in 1938). Later, decreasing catches and the demographic explosion lowered this source of income per inhabitant. However, the price of the pelts continues to rise, and this type of hunt has never ceased to be very lucrative for the *nannitteq* (who gets the pelt) and his family.

In the late 1950s and early 1960s the Ammassalimmiut felt that the KGH was not paying good enough prices for their bear pelts,<sup>40</sup> and that they could sell them more advantageously to visiting foreigners or Danes living in the area. Between 1956 and 1966 the KGH bought a yearly average of 11.8 pelts, but official hunting statistics give an annual average of 39.4 catches for the same period.

After the mid-sixties the commercial value of these pelts increased spectacularly. Particularly high prices were paid for winter pelts, which are longer, whiter, thicker and sturdier. (Prices at auctions reached DKK 25 000). This explains why hunters still prefer to sell directly, when they can, to a private buyer prepared to pay a high price in ready cash, despite the fact that the KGH raised its purchasing price sharply in 1967, offering DKK 1500 (instead of DKK 500) for the best pelts. A bonus which can double or treble the amount can be added later. In Sermiligaaq, in the north of the district, where bear catches are frequent, orders for bear pelts come directly to the hunters by telegram from the west coast. This leaves some gaps in the official sales statistics and prevents us from knowing the exact number of bears caught today in the area. Between 1967 and 1977, that is since the prices were raised (on the 1.1.67), the KGH has bought an average of 33 bear pelts a year. Official hunting statistics give an average of 44.7 bears a year for the same period (with a minimum of 30 in 1975 and a maximum of 69 in 1967).

Polar bears are often found in the Sermiligaaq or Kulusuk areas, but the Ammassalimmiut also find them throughout the rest of the district. Sometimes bears come prowling near small villages or camp sites, at-

tracted by the smell of seal skins or *panerteq* (dried meat) hung out to dry near the houses. This explains why a woman or child can become a *nannitteq*. But the best areas for finding bears are remote from permanently inhabited sites, mainly in the north of the district. Families from Ammassalik who spend the winter in the Kangerlussuaq area, halfway between Ittoqqortoormiit and Ammassalik, make very good catches (38 bears during the 1966–1967 winter migration). Families who migrate south can also find good hunting: during the winter of 1971–1972, 63 people lived at Skjoldungen and caught 16 bears. A family that spent the winter alone near Timmiarmiit in 1962–1963 managed to catch 15 large bears.

Productive winters like these represent a considerable cash income for the families when they come back. Some hunters can thus pay their debts or obtain loans to buy a very expensive boat.

After an international ruling was passed in 1974 protecting polar bears throughout the Arctic (Vibe, in *Grønlands Fauna* 1982: 387) prohibitions have been imposed (by the Provincial Council in Nuuk) on the population of Ammassalik which they definitely do not appreciate.<sup>41</sup> Bear hunting is now totally forbidden in August and September. She-bears with cubs cannot be hunted at any time of the year. Moreover, hunting permits have been issued restricting this kind of hunting to Greenlanders over twelve years old who depend exclusively on hunting for their living. Thus not only foreigners but also East Greenlandic wage-earners are not allowed to hunt bear. Anyone who does not respect this rule must pay a fine, and the skin and meat of the bear are confiscated.

The Ammassalimmiut cannot really understand this ruling, which is difficult to enforce and contrary to local custom. What happens, for example, if the *nannitteq* is a wage-earner without a hunting permit? As *nannitteq* he should traditionally receive the pelt, but the ruling forbids him to earn anything on its sale.

Other resources of the natural environment are less important for the Ammassalik economy than those mentioned above, as they only represent means of getting some extra food or income.

The arctic fox, white (*Alopex lagopus lagopus*) or blue (*Alopex lagopus caerulescens*), locally called *orer-sernaq*, has very rarely been eaten (only in times of want), and has never really interested the Ammassalik hunters. It is apparently not very frequent in the area.

One would have thought that when this kind of fur was fashionable in the west the regular price increases offered by the KGH<sup>42</sup> might have given some hunters the incentive to set fox traps; however, this type of hunting never really developed. Mikkelsen (1944: 94) mentions 355 blue foxes and 1398 white foxes hunted in Ammassalik between 1898 and 1938 – an average of 8.8 blue and 34.9 white foxes a year. The figures for later years are even lower, despite the high prices paid for these furs: 2.9 blue foxes and 25.7 white foxes a year be-





Winter landscape at Ammassalik: Sermilik fjord. Ingemann Bianco's sled has stopped before starting off on the descent towards Ikkatteq. (Photo J. Robert-Lamblin, 1977).

tween 1938 and 1948. In 1963 the prices of seal skins caught up with those of fox pelts, and this further reduced the already weak incentive to hunt the foxes. Today the number of pelts of both fox types bought every year by the KGH is less than a dozen.

The reindeer or caribou (*Rangifer tarandus groenlandicus*, locally called *tuttu*) had totally disappeared from the area before Holm arrived. Archaeological traces of low walls for caribou trapping show that this animal was hunted by the ancestors of the Ammassalimmiut. In 1971 they were reintroduced into the Sermilik area. It was planned to authorize the hunting of the caribou in 1981, but by 1982 permission had not been given and was postponed until the following year. If the species develops well in this environment it could represent an important additional source of food for the Ammassalimmiut in future.

#### Birds (*timmittat*)

The bird fauna is not very important in the Ammassalik area, and hunters do not give it much thought.

Among the few sedentary species (crow, snowy owl and ptarmigan) only the ptarmigan (*Lagopus mutus*, locally called *nagalarngaq*), which turns white in the winter, is edible. However, many consider the bird too small and not worth preparing as food. Young boys play at catching these easily approached birds.

East Greenlanders are heavy meat eaters, and they feel that the flesh of birds, whatever the size of the bird (including the great wild geese weighing two or three kilos), is insufficient in quantity and nutritiousness compared with sea mammal meat, which is rich in calories and makes one feel really "full up". When eaten, birds are always boiled, sometimes with some rice cooked in the broth, and they do bring some variety to the diet. But for those Ammassalimmiut who have kept to traditional ways it will always only be an occasional extra dish.

The following migratory birds are hunted (with guns) and eaten in the area:

Eider (*Somateria mollissima*, locally called *maleersartaq*) are present from April to November and nest throughout the area.

The white-fronted goose (*Anser albifrons* or *nerteq*) is present from April to October and nests at Kangerlussuaq.

Mallard (*Anas platyrhynchos* or *pigivaarnaq*) are present from June to September.

Black guillemot (*Cephus grylle* or *norniarngaq*). These leave when there is "ice all over" and return in March. They are "quasiresident".

Brünnich's guillemot (*Uria lomvia* or *saarngittik*).

Red-throated diver (*Gavia stellata* or *qaqqaqqaq*). Fairly rare, present from June to October. The old people used to say that it "leaves when its feet get cold".

Great northern diver (*Gavia immer* or *qartiimoor-toq*). This large bird is not common in the area. It arrives in June and "leaves when its feet get cold".

Little auk (*Alle alle* or *kutsuulaq*).

Long-tailed duck (*Clangula hyemalis* or *atteq*).

Kittiwake (*Rissa tridactyla* or *taalaqqaq*).

Glaucous gull (*Larus hyperboreus* or *quseeq*). This bird can be eaten when young and tender. It only leaves the area for a very short time, one or two months at most. It nests in June. The eggs are collected and eaten hard-boiled by some Ammassalimmiut.

Great black-backed gull (*Larus marinus* or *quseer-naq*).

Arctic tern (*Sterna paradisaea* or *immeqqilaalaq*). The black eggs of this bird were formerly eaten more often than today.

Fulmar (*Fulmarus glacialis* or *qarattuk*). This is rarely eaten. The eggs are sometimes collected.

Few people in Ammassalik collect birds' eggs. Those who do, during the month of June, look for gull, kittiwake, guillemot, tern or fulmar eggs, which they normally eat hard-boiled. Families from Pikiitsi gather birds' eggs.

#### Fish (*aalisakkat*)

In the traditional Ammassalik economy fish mattered little, except for arctic char and capelin, which were part of the seasonal resources. Catching them was an occasion for joyful collective reunions lasting a few days, and allowed important reserves to be put aside for the frequent difficult periods in autumn and winter.

The arctic char (*Salvelinus alpinus* or *kaporniarnaq*) is a small salmonid. In the past, men caught it in the streams with their harpoons or leisters. Today it is caught with nets placed in the fjord arms at right angles to the shores, not far from the mouths of the streams.

In the August spawning season these fish swim upstream towards the mountain lakes. In June the next year the young fish swim downstream to the sea. Net fishing in free waters gives good results in the several periods between June and September when the fish migrate between the lakes and the sea. In May arctic char can also be caught in the lakes with lines through holes dug in the ice.

The Ammassalimmiut love to exploit this seasonal resource. It is an occasion for them to leave the village and their winter quarters and return for some time to the freedom of living in tents in small camps. Families like to isolate themselves or meet in small groups, changing sites to increase the catch. Each village has its favourite spots for catching arctic char. There is hardly any of this type of fishing, however, in Kulusuk.

Arctic char, with its pink and tender flesh, is greatly appreciated by the Ammassalimmiut. As soon as it has been caught they boil it and eat it. Or they cut it open and leave it flattened out in the sun to dry.

This seasonal food cannot be considered as a major element in the economy of Ammassalik hunters. It is important, however, as catches can be plentiful and what is not eaten on the spot can be preserved for later use or for sale in the district.

Capelin (*Mallotus villosus* or *ammassaq*, pl. *ammassat*) were so plentiful at the turn of the century that the area was called "Ammassalik", meaning "the place of the capelins" by the people of South Greenland. Today it is only caught in small quantities. "There are no more *ammassat* today", say the Ammassalimmiut; and at Qinneq, where in the past a great social reunion brought everyone together for capelin fishing every year in May or early June, only a few tents can be seen now during the season. Dry *ammassat* was formerly an important food for the children, who chewed some as a snack at all times of the day, or it was used to feed everyone in times of want. It is no longer important in the Ammassalik diet.

In periods of poor hunting the wives and children of the hunters try to find supplementary food. They catch some fish to make up for the lack of meat. Using a fish-head or entrails as bait, they fish with lines through holes in the ice during the winter, or from boats when the water is ice-free, for the following species, found all year round in the area:

Sculpin (*Myoxocephalus scorpius*, locally called *qivaareq*). The fish are boiled immediately after being caught, and served in their broth.

Polar cod (*Boreogadus saida* or *uuvaq*). This small cod, some 25 cm long, lives in cold waters. It is also boiled immediately and eaten, or else preserved by drying.

Redfish (*Sebastes marinus* or *suluppaavaq*). This is a large red fish with tender, greasy flesh, and is always boiled.

Fish are considered to be poor in nutrition value, and are not appreciated by hunters. Dried or boiled, they must be eaten with raw seal blubber to make up a really filling, calory-rich meal.

Before people could buy cow's milk at the local shop, fish broth was given to babies whose mother had died or did not have enough milk.

The Greenland shark (*Somniosus microcephalus* or *niialingaq*) must be considered separately, since it is food not for humans, but for dogs. Indeed, its flesh, which tastes strongly of ammonia, is not edible for humans. Before it can be fed to the dogs it must be dried in the sun and wind in order to lose its toxicity. Good hunters, however, believe it is not even good food for dogs and prefer to feed their sled animals with other types of meat and fat (from sea mammals). In times of famine the Ammassalimmiut were formerly sometimes driven to eating dried shark.

Shark is fished collectively with sections of the village community, men, women and children, taking part. Having made an opening in the sea ice, they bait their lines and try to draw these enormous animals, three or

four metres long and living more than 200 metres deep, to the surface.

Formerly the KGH used to buy shark livers, as the oil could be used as fuel. This lasted from 1937 until 1961. In 1957 the KGH bought 46 tons of shark livers from the Ammassalik district alone.

### Gathering

To conclude this inventory of local resources still used today by the most traditional Ammassalimmiut we must mention the things collected during gathering activities. These are of two kinds: they come either from the sea (shellfish, crustaceans and seaweed) or from the land (berries, leaves, stems and roots).

Apart from the gathering of angelica, which sometimes requires a men's boat expedition, gathering is generally done by women and children. Elderly men sometimes collect seaweed and mussels on the seashore.

Although the food obtained by gathering is mainly considered by the Ammassalimmiut to be substitute food useful in times of want, supplementary food or ways of varying the daily staple diet, it can be eaten in great quantities on certain occasions. This is the case with mussels and crowberries.

Things gathered from the seashore (called *sittamiittit*) can be collected at low tide at certain spots. These are chosen according to their exposure to air and sunshine: it is considered dangerous to eat seaweed, for example, if it has remained uncovered too long at low tide. Gathering may also be done where the ice pack breaks. The following items are collected and eaten by the Ammassalimmiut:

Mussels (*Mytilus edulis* or *kiliittat*) are the most important items. They are eaten raw, often on the spot, or brought back home in a large pail. It is said that mussels can renew one's strength in the spring when one feels tired. Nursing mothers are also given mussels to increase their milk.

Blunt gaper (*Mya truncata* or *paaq*).

Whelks (*Buccinum* sp. or *pusingaleq*).

A small white shellfish called *sittarteq* (*Hiatella* sp. ).

A small fine-shelled mollusc, the *sorngujoq* (*Musculus laevigatus*).

Sea urchins (*Strongylocentrotus* or *arsaq*) are eaten rarely.

Sea anemones (*Actinia* or *uversarteq*) are also eaten but rarely.

A lugworm (*Arenicola* or *qumaartertuaq*) is sometimes eaten.

Seaweed is relatively important in the Ammassalik diet for those who remain attached to their ancestral ways. It is a good source of Vitamin C and can be gathered in all seasons. Most often, it is rinsed in soft water and eaten raw. Sometimes it is scalded by plunging it in seal broth while boiling. The four species eaten in Ammassalik are as follows:

*Ascophyllum nodosum* or *misarngarnat*.\*

*Fucus vesiculosus* or *missaqqaq*.\*

*Rhodomenia palmata* or *imertikkat*.

*Alaria pylai* or *kipilatsat*.

Those marked \* are the most frequently collected.

As for land vegetation (*naasut*), plants can only be gathered during a very short period of the year, when the ground is free of snow. They have always played a minor role in the economy of the Ammassalimmiut (Bonneval & Robert-Lamblin 1979). Their importance was further reduced when regular cargo traffic developed between Ammassalik and Denmark, since the boats bringing fresh fruit and vegetables from Europe arrive precisely at the time when the vegetation appears in Ammassalik, and keep coming until the end of the season (from June to mid-October). Nevertheless, for reasons of taste as much as cost, the local plants have not been completely neglected by the East Greenlanders, especially angelica, rose-root (or stone-crop), wild sorrel, crowberry and bog whortleberry (or arctic bog-bilberry). People gather them in large quantities and take them home. Other plants are eaten on the spot, gathered casually on walks or around summer camps.

The following plants are eaten:

Angelica (*Angelica archangelica* or *kuanneq*). This is very popular.

Rose-root (*Rhodiola rosea* or *torteernaq*).

Dandelion (*Taraxacum croceum* or *nunat*).

Wild sorrel (*Oxyria digyna* or *nutsungaaq*).

The young leaves of arctic or dwarf willow (*Salix herbacea* or *quttungaleq*) and of alpine bistort (*Polygonum viviparum* or *ittormiilaq*).

All plants are eaten raw, and are considered to taste better and be more nutritious if eaten with pieces of raw seal blubber ("*aammaqqaartungu*").

Roots, which were still eaten not too long ago as winter reserves, are hardly ever eaten today.

The gathering of berries – crowberries and bog whortleberries – is still very popular, as much for the pleasure of gathering the only fruit produced by the Greenland soil as for the social occasion it is. In the autumn (late August and September) groups of women and children carrying pails go up to the hills where berries are plentiful and pick them as they joke, exchange news and chatter gaily.

The most common species is crowberry (*Empetrum nigrum* or *pukukkaq*). Bog whortleberry or arctic bog-bilberry (*Vaccinium uliginosum* or *kilaarnaq*) is found in smaller quantities and only in a few spots.

The black, sour crowberry can be eaten fresh in large quantities as soon as it is picked. The old people consider that it tastes better when eaten with *aakkaa*q (seal blood dried in a seal intestine). This berry is often preserved ("*iinnermi*") in a skin bag or other receptacle full of seal oil (*immingaq*), where it macerates for weeks or months, often mixed with rose-root and wild sorrel. These are the "*quujuut*" or plant preserves laid by for the winter.

## Commercial fishing

When Holm discovered the people of Ammassalik in 1884 they had no fishing technology as such. At that time hooks and lines were unknown to them and the only fish caught were arctic char, bull rout (or sculpin) and shark, which they killed with leisters and harpoons (a technique closely related to hunting); capelin was also caught, in a manner comparable to gathering techniques. Several types of harpoons with barbed points were used for catching bull rout and arctic char (the type of harpoon differed for spring catches in the streams and winter catches through the lake ice) (Thalbitzer 1911: 438–439). The *ammassat* were caught in a sort of spoon-net with long handles, with a “scoop” made out of fine wooden slivers and seaweed (Holm 1911: 53–54).

Fishing with hook and line had probably been known to earlier generations of East Greenlanders than those discovered by Holm. It is likely that it had developed at a time when fish (halibut, redfish, atlantic wolf-fish and cod) had been more plentiful in the area. At the end of the last century, however, the ichthyofauna of Ammassalik seems to have been particularly poor. Holm mentions the lack of interest shown by the inhabitants in the fishing hooks he had brought with him to barter with (1911: 55).

At the turn of the century an influx of polar cod (*Bo-reogadus saida*) and the seasonal presence a few years later (1915–1916) of large cod (*Gadus morhua*) in August, September and October near Kuummiit prompted the Ammassalimmiut to do some fishing with hooks imported by the trading post.

For many years cod fishing was of little importance. It was an occupation for women and children, or for men who were unfit for hunting. It covered family needs in periods when there was a shortage of meat, and cod were sold for personal consumption on a small scale to the few people employed by the local administration at the beginning of colonization.

Until the late 1950s the Ammassalimmiut who lived on the natural resources of the environment had essentially remained dependent on sea mammal hunting, showing little interest in fishing. But from the 1950s onwards, at the initiative of the Danish authorities, who wished to draw Greenland into modern economic activities that could compete on the international market, cod fishing was intensively developed. The main areas involved were the west coast south of Disko Bugt, and the district of Ammassalik on the east coast. The rise in sea temperature of one or two degrees that began in the 1920s had brought a large influx of common cod to Greenland and had made the seals retreat towards the north. The temperature rise continued and seemed to be lasting (see Smidt in *Grønland* 1975: 123–124, and Muus in *Grønlands Fauna* 1982: 68).

This social and economic revolution marked the sixties, since the cod industry brought about a regrouping

of the population near salting or freezing factories and the modernization of fishing techniques, transportation, etc.

In East Greenland, after several surveys of prospects had been made, some Ammassalik villages were encouraged to develop cod fishing. These included Skjoldungen, Tiileqilaaq and Kulusuk; but the main efforts were concentrated on Kuummiit.

Within three years commercial fishing had made great progress. The yield for 1956 was 22 tons, for 1957 66 tons and for 1958 474 tons. After a slight decrease in 1959, 1960 continued to give high hopes for the cod industry in Kuummiit, with an exceptional yield of 984 tons (Fig. 29).

The cod-drying racks built in 1959 were extended in 1962. At first salting was done on board a factory ship, the *Kaskelot*, which anchored at Kuummiit from the end of July until mid-October every summer between 1958 and 1962. But in 1963, after new investments had been made by the KGH, salting could be done locally. The building of a small salting factory created a new type of wage-earning employment for the people of Kuummiit. The factory employs six or seven people all the year round, and about 24 in the high season from July until late October. Certain employees have been trained in Nuuk and specialize in fish salting techniques.

The village fishermen sell their cleaned fish to the local factory. The KGH employees split the fish lengthwise and wash it, then dry or salt it. This is done in two steps: a first salting lasts a week, and a second one takes three or four weeks. The fish is then sent by freighter to Ålborg in Denmark.

Cod fishing can be done all year round, and thus represents an almost continuous source of income. But the two best periods are the autumn, between August and November, when fishing is done from small boats, and the winter, in February and March, when fish are caught through the ice if it is not too thick. The best catches are made in the autumn. The low season usually lasts from April to August.

The fish caught in the autumn are almost exclusively reserved for salting, and are sent quickly to Europe by freighter. The catches of the rest of the year are mostly dried on large wooden racks holding up to 400 tons of fish. The drying time depends on the weather: a perfect drying takes several months. Initially, apart from a few years (1958, 1961 and 1962) Kuummiit produced a higher tonnage of dried than salted cod. But since 1973 the proportion has been reversed (except for 1976) and the production of salted fish can be twice or four times as high as that of dried fish. The demand for salted fish comes mainly from Spain and Portugal, whereas Africa and the Arab countries import dried fish.

Since 1977 Kuummiit has been producing a little frozen fish, but this remains low compared with salted and dried fish. In 1978 the KGH in Kuummiit bought 527 tons of cod for salting, 132 for drying and only one and a half tons for freezing.



In order to export these new products – dried, salted or frozen fish – successfully, important changes had to be made in the lifestyle of the inhabitants of Kuummiit: “urban” regrouping around technical and commercial installations; the adoption of new fishing techniques; changes in the calendar and the rhythm of activities; transformations in the organization of family labour and production sharing; and dietary changes. Such have been the various aspects of this socioeconomic transformation required by the outside world.

The progressive disappearance of kayaks observable throughout the district, including the small hunting villages, was particularly rapid in Kuummiit (where there were 17 kayaks in 1967, six in 1972 and two in 1979). This craft, designed for individual hunting, turned out to be inadequate for a new type of fishing demanding certain yields. Boats with capacity for larger quantities of fish were quickly adopted.

As early as 1958 the newly developing commercial fishing industry led to the introduction of several rowing boats. About 20 of these were brought on board the *Kaskelot* to supplement the local fleet of kayaks and umiaks in Kuummiit. In 1963 there were 32 rowing boats in Kuummiit harbour, and in 1965 there were 40. Motor boats with built-in motors developed equally rapidly: the first one was introduced in 1959 and there were 11 in 1963 and 14 in 1967. Then the rowing boats began to be equipped with outboard motors. By 1979 motorless boats were very rare, and speedboats made their appearance in the small bay close to the village. Motor boats have great advantages over rowing boats: fishermen can go out farther and faster to find places where fish are plentiful. The cost is the only drawback, i.e. the instalments on the loan taken for buying them, and fuel expenses. As far as these expenses are concerned, rules concerning the sharing of income from the catches have been agreed on between the owners and users of the motor boats.

Fishing tackle includes lines and hooks of the western type bought at the local shop. Some lines have several hooks. Very long lines holding up to 40 hooks, and weighted so as to fall vertically, are used for winter fishing through the ice. They are baited with pieces of fresh fish, heads of either polar or common cod. Salmon nets can also be used to catch cod, but this technique is not very widespread.

The modernization of tools and sea transportation has not encountered any major obstacles among the Ammassalimmiut, who are generally receptive to technical advances and adapt to them quickly. However, things are different as far as mental attitudes and social customs are concerned. Change is resisted. The changing of hunters into fishermen was badly received in the beginning. Fishing, as we have shown above, was either a seasonal occupation (in the case of arctic char and capelin) or a “lowly” activity confined to women, elderly men and those unfit for hunting. And even then it was restricted to periods when food supplements were

needed (e.g. cod and sculpin). It was inconceivable for a man in top physical form to work full time at such an occupation.

The KGH representative in Kuummiit, a West Greenlander, had real problems in trying to convince the men to spend most of their time fishing instead of hunting. According to him (he was in charge of trade at the time) half the adult men had become fishermen by 1958 and 75% by 1960. The older men, however, never actually stopped hunting. They became “hunters/fishermen” and called themselves hunters. Some of them even totally refused to fish for cod.

In the summer of 1967, about ten years after the start of this new economic activity, I was able to assess from data gathered locally the distribution of the male population of Kuummiit according to activities or sources of income as follows:

Fishermen	73%
Hunters	6%
Wage-earners	11%
Pensioners	10%

Despite the reluctance of several men to adopt a status considered low until then, this shift from hunting to fishing was completed in a relatively short time, probably because fishing techniques required practically no training, while hunting techniques and knowledge of the behaviour of the animals hunted require a long period of learning, and experience is an important factor for success. Among this new economic class of fishermen age and experience are no longer determining factors of success.

The rhythm of daily life for a fisherman is very different from that of a hunter. It is regular and depends on the tides, since it is said that the currents bring the cod in at high tide. The fisherman does not go far from his village, and comes back the same day to sell his catch.<sup>43</sup> Remuneration for the daily work is immediate. The fisherman is paid as soon as he comes back, whereas for the hunter the sale of pelts is a secondary and ulterior consideration: his first aim is the acquisition of food and the skin must be dressed before he can earn any money from it.

This new activity lacked a traditional model, and there were no social rules for sharing out production. Some fishermen distribute fish to members of their family, but there is no “compulsory” sharing, almost with the force of a law, as in the case with sea mammal catches.

Fishing is mainly carried out collectively: we can contrast solitary kayak hunting with collective fishing in small rowing or motor boats. On a rowing boat, everyone fishes for himself; but with motor boats it is the owner who divides out the total income received for the day’s fishing among the participants (two or three). The owner himself gets two shares: his own and one for the use of the boat. This new custom, probably introduced



from West Greenland, may be of European origin, as it is also found in France.

The division of labour within the family has been modified among the Ammassalimmiut who have become fishermen, since women and children can proceed alone and directly to the acquisition of food and other needs. In hunting families the couple is a cell with interdependent elements complementing each other. The activities of the man and the woman are well-defined and complementary in the production cycle. The man catches animals, the woman transforms them into consumable produce (food, clothes) or into a saleable commodity by dressing the pelts. In fishing families men and women's tasks are totally independent of one another and the roles can be identical: the woman can take the man's place and supply her own needs.

It is important to note that in this new fishing society without any specifically male occupation there is no feeling of strength and personal pride attached to the pursuit of fishing. The fisherman does not establish a real or "symbolic" relationship with his catch, as does the hunter with the seal he pursues. His return home is not followed by long tales of what has happened that day, told with the whole family gathered together. For his close kin, as for himself, the fisherman who has made a good catch does not have the prestige of a hunter coming back victorious after a hard chase. This explains the unwillingness of experienced hunters to abandon their ancestral way of life and all the fundamental values attached to it.

Finally, the dietary changes due to this economic transformation are characterized by a sharp decrease in meat consumption. Meat – the staple diet in hunting villages – has been replaced by a high intake of fresh or dried fish, supplemented by imported foods bought from the shop with the income obtained from fishing: tinned goods, starches, sweets, fruit preserved in syrup, etc.

The fresh fish eaten by the villagers is not necessarily the common cod (*Gadus morhua* or *aalisarngaq*) generally sold to the KGH, but other kinds of fish that the organisation does not buy, e.g.:

Redfish (*Sebastes marinus* or *suluppaavaq*).

Atlantic wolf-fish (*Anarhichas lupus* or *qeerngaq*).

Polar cod (*Boreogadus saida* or *uuvag*).

Greenland halibut (*Reinhardtius hippoglossoides* or *qalarngalik*).

Atlantic halibut (*Hippoglossus hippoglossus* or *nalaar-naq*).

A few years ago, however, the KGH started buying halibut caught at Kuummiit, and encouraged the population to fish (with nets) for great atlantic salmon (*Salmo salar* or *kapisilik*), which are frequent in that area in August, September and October, when the sea is free of ice. Since the mid-seventies the KGH has produced frozen salmon for export (five tons in 1977, seven tons in 1978).

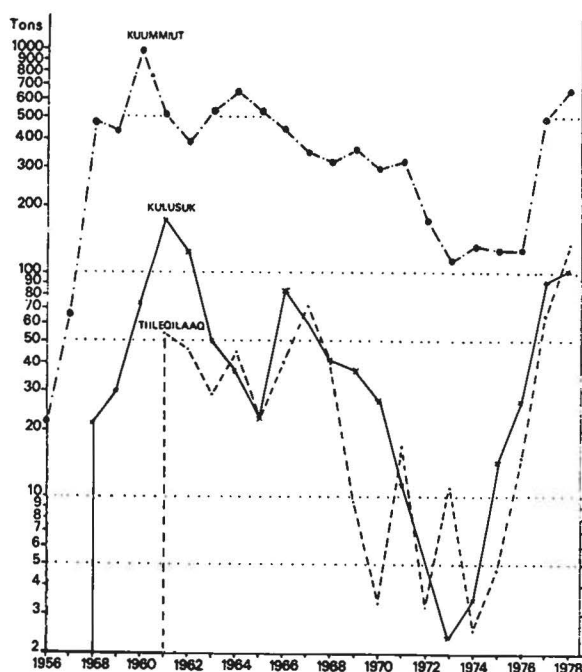


Fig. 29. Evolution of cod production in the three settlements where commercial fishing has been most developed (Ammassalik district).

East Greenlandic fishermen frequently eat dried polar and common cod, preferably served with pieces of raw seal blubber.

Fig. 29 shows that there is cod fishing in other areas than Kuummiit, particularly at Kulusuk (since 1958) and Tiileqilaaq (since 1961), but it has not developed much. These villages only produce dried cod for export, since the villagers mainly turn to fishing when seals are scarce, that is between August and November. Professional fisherman of the type we find in Kuummiit are not found in the other areas of the district.

The Kulusummiut are only occasional fishermen. They have had to diversify their occupations according to needs and the season in order to survive. Their activities range from handicrafts to fishing or hunting.

The people of Tiileqilaaq, however, have remained faithful to sea mammal hunting as a main occupation. For them commercial fishing is only a minor occupation that helps them to overcome financial difficulties. It can even happen that fish sold to the KGH when money is short are bought back when dried for home consumption.

Finally, it seems that Sermiligaaq has begun to fish for cod more efficiently than in the past, since in 1978 production there was 26.8 tons compared with 4.3 tons the preceding year. Isertoq still showed little interest in fishing at the same time (4.6 tons in 1978).

Generally speaking, as can be seen from Fig. 29, the 1960 yields have not been repeated. An appreciable de-

cline in cod production was registered between 1972 and 1976, followed by a rise in 1976. But it seems likely that the great cod production period is now over, and the cooling of the seawater registered since 1969 may herald a dark future for this type of activity.

## Handicrafts

Outside their own area East Greenlanders have required a reputation as sculptors, more particularly as "tupilak" carvers. Most of the small wood or ivory carvings owned by private collectors or acquired by the KGH for sale in West Greenland, in airport shops, or in Denmark, are actually made by Ammassalik craftsmen.

Traditionally the word *tupilak* designated an object prepared by an *ilisiitseq* (person with malevolent powers) to cast a spell on someone. It was usually an incongruous object made of human and animal elements which was thrown towards the victim, "becoming alive" in order to do him harm; or it could backfire on its maker. For foreigners today the word *tupilak* is used of a small carving 10 or 15 cm high representing a grotesque or composite being, stretched and slightly curved, following the shape of the sperm-whale tooth out of which it is carved. Some of these *tupilat* are inspired by mythical themes; others come straight from the imagination of the craftsman.

Ammassalik social organization did not traditionally include the function of "professional sculptor" or craftsman. In this ethnic group, made up of self-sufficient family groups scattered about the territory, every individual produced for his own needs, without having to rely on anyone else specializing in driftwood, bone, ivory or soapstone carving. Every hunter had to make his own hunting weapons as well as his tools, means of transportation for summer and winter, his seasonal housing, domestic equipment, his wife's utensils, his children's toys, and masks and drums for cultural entertainment. What is striking is that besides the purely functional element of these various implements the Ammassalimmiut took great care to decorate every object with small, finely-wrought figurines and inlays of ivory or bone, using "prehistoric" tools. There are collections of implements from the east coast of Greenland at the National Museum in Copenhagen (items brought back by Holm, and archaeological finds described in detail in Thalbitzer 1914: 322–732) and at the Musée de l'Homme in Paris (for the most part collected by the French expedition to Greenland in 1934–1935–1936, and catalogued in Le Mouel 1975: 259–266). Today these collections bear witness to a material culture which within the context of a subsistence economy had a high regard for aesthetics.

From the skill of all the men and women of Ammassalik in working with pelts, skins or solid materials a handicrafts industry was born, stimulated by outside demand. Little by little the artistic element disappeared

from common implements, as these were replaced by imported goods or locally made artefacts devoid of decorative features, to reappear in the form of commercial craftsmanship.

With the demand from Danes and Americans resident in the area or foreign visitors, all avid buyers of souvenirs, a certain specialization developed in handicrafts: men carve statuettes and masks (very few women carve in wood or ivory) and women work with fur, coloured leather or pearls. Seal skins are used to make handbags, slippers and sewing kits. Coloured leather is made from hooded seal skin after the hair has been removed in very hot water and the skin has been scraped for a long time with a shell-shaped scraper (the *kili-larnaq*). Very white skins are obtained by leaving them out to dry in the winter sun, when the weather is cold and dry. They can also be coloured with bought dyes – red, blue, green, yellow or black. Skilful seamstresses can thus make extraordinary "mosaics" of multicoloured leather, sewing tiny leather strips (about 1 mm long) of various colours on to a plain background with minute stitches. These leather "mosaics" decorate the "dress" *kammit* still worn by men, women and children on ceremonial occasions. They can also decorate artefacts made to be sold in the shops: handbags, cigarette cases, needle cases, etc. Throughout the whole district women do beadwork with multicoloured imported glass beads bought at the local shop. They make the "pearl capes" covered with geometric designs used to cover part of the "formal" woman's anorak, as well as all sorts of other artefacts to be sold or given as gifts: doilies, necklaces, candle-holders, picture frames, handbags, ties, etc.

Kulusuk was the first place to make use of the men's carving abilities. R. Gessain mentions this as taking place as early as 1935 (1969: 100). This specialization was further developed when the American base and the airport were built near the village (the work started in 1957) and when the KGH, having decided to buy carvings for export, encouraged the growth of a small handicrafts industry in the village during the 1960s.

During the tourist season women and children come to sell bead or leather work, *tupilat* or small wooden artefacts, hastily made before the arrival of a planeload of tourists ready to buy anything as a souvenir. Throughout the year the KGH provides an income for craftsmen by buying their production, without making distinctions between original carvings and copies, so that many of these pieces are completely identical, sometimes only differing because of the original shape of the material used.

When this type of handicraft first began to be commercialized the Ammassalimmiut used raw materials from their own environment: driftwood, narwhal or walrus ivory, or mammal bones. Later on, the KGH organized imports of sperm-whale teeth to develop the carving trade. The teeth came from Norway, Iceland, Japan or Africa, and were sold by weight to the sculp-

tor, who chose them according to their shape and thickness (avoiding hollow teeth). The sculptor would then sell his work, done at home, to private buyers or the KGH. The price for private sales is normally higher than the price paid by the KGH. There is no rational price scale based on the purchasing price of the tooth and the time spent on the carving. The price depends rather on the needs of the seller and on who the buyer is (westerners are reputedly very rich).

But world restrictions on the hunting of the sperm-whale have put an end to the importing of teeth into Greenland, with hard consequences for those who have lived from selling *tupilat* sculptures. Today craftsmen have to resort to what is left of old stocks of teeth, or other types of material like hippopotamus tusks, reindeer or cow horns, soapstone or imported wood.

In her study of male tourist handicrafts in Kulusuk C. Enel (1981: 125–140) shows that there is actually no “professional craftsman” status in this village community today. In Kulusuk any man can or could produce such artefacts. “In 1977, out of 128 males aged from 15 to 71, 84 can be considered as having practiced handicrafts during the year, and sold all or part of their production to the KGH ... Handicrafts are rarely the sole occupation” (1981: 131). Most of the village men have several occupations simultaneously or successively: hunting, fishing and handicrafts; or wage-earning and handicrafts. A situation frequently found among the village families is that there is a small income derived from handicrafts supplemented by social security benefits. In Kulusuk only about a dozen persons earn enough income from handicrafts to support themselves.

Other East Greenlanders earn some money from handicrafts in Kuummiit, Isertoq and Tasiilaq; but it has never taken on the importance it has in Kulusuk.<sup>44</sup> But Kulusuk which has often yielded to the temptation to do easy work for quick returns has not managed to break into the international “Eskimo art” market. Besides this, the cessation of whale tooth imports has created difficulties for those sculptors who have not yet managed to go over to soapstone carving, as the Canadian Inuit have done. Soapstone can be found in the Ammassalik area south of Isertoq. It was traditionally used to make oil lamps and cooking vessels. Today, one man from Isertoq has specialized in carving bears from it.

Two or three Ammassalimmiut do oil painting, but again we cannot speak here of professional artists making a living from their work. Lithography is unknown in the area.

In short, handicrafts can provide incomes of relative importance (although it is difficult to assess how important, since sales to private buyers are not accounted for) to a certain number of East Greenlanders. But handicrafts are hardly ever a specific occupation for a particular socio-professional category; it is more a matter of a complementary activity practiced alongside hunting, fishing or regular wage-earning employment.

## Wage-earning employment

At the beginning of colonization a new socio-professional category appeared in Ammassalik – the wage-earning employees. It existed alongside the traditional socioeconomic category of hunters/gatherers who lived on environmental resources either directly, by consuming their production, or indirectly by selling or exchanging it.

For many years the Ammassalimmiut only had access to unskilled jobs as all-round handymen, labourers or servants (*kippat*) employed in the homes of Danish or West Greenlandic civil servants.

The hunters, as free and independent nomads without time schedules or regular patterns of sleeping, eating, hunting, working in the home or having fun, were not predisposed to becoming employees working for someone else and keeping regular hours. But this new path, involving wages and purchasing power, found adherents among mediocre hunters, young orphans, single women and widows, who realized that for them it was a chance to survive in a society that could offer them no help.

The small commercial and administrative centre of Tasiilaq was the cradle of this first generation of employees. Later, the development of the colony allowed for a few other more specialized and less centralized jobs – midwives and catechist/schoolteachers, for example – but the opportunities remained fairly limited. A major problem appeared rapidly with the children of the Tasiilaq wage-earners. Very naturally, since they lacked any other family model, they tended to want to make their living as their parents did, by wage-earning activities. But there was no possibility of their finding a niche within the framework of the slow and contained evolution of the colonization of Ammassalik up until the Second World War.

After the war Danish government policy in the area changed radically, and tertiary industries developed very quickly in Ammassalik. However, most of the work requiring qualifications went to Danes or West Greenlanders who were invited to come and stay for a few years. The local population only benefited from minor jobs. This situation, involving the proletarianization of some of the Ammassalimmiut living in the large settlements of Tasiilaq, Kuummiit and Kulusuk, and their domination by immigrants who held all the key posts, is described by R. Gessain in his book, *Ammassalik ou la civilisation obligatoire* (1969). It is true that at that time (1965–1966) only a few Ammassalimmiut were beginning to rise in the social hierarchy of Tasiilaq employees, and the mass of the town-dwellers, particularly the young, were suffering cruelly from under-employment.

Most of the town-dwelling East Greenlanders were reduced to idleness, and existed outside the mainstream of development, which they could only contemplate passively and submit to. Meanwhile, at great expense,

Danish workmen were brought in to build their houses, and West Greenlandic and Danish civil servants were posted there to administrate their health, trade, education, telecommunications and technical services.

According to Gessain (1969: 131) about 50 Ammassalimmiut (men and women) earned regular wages in Tasiilaq during the winter of 1965–66; and the nominative list of Ammassalimmiut in Tasiilaq on the 31.12.1965 gives the following figures:

Men aged from 18* to 59**.....	136
Women aged from 18 to 59.....	121
Total active population of Tasiilaq.....	257

\* Very few young people are employed under the age of 18. Often they prolong their schooling or vocational training or just idle about not doing much at all.

\*\* Everyone over the age of 60 is entitled to a pension.

At the end of the 1960s the Danish authorities were willing to give professional training to the Ammassalimmiut, with teaching being done locally (at the hospital or the radio-meteorological station) or on intensive courses in Denmark or West Greenland (for ships' crews and employees of the trade organization). In the 1970s all the existing means of training the East Greenlanders were intensified. They were taught secretarial work, accounting, management and various technical skills (mechanical and electrical engineering, radio telegraphy). Some of them took over jobs held previously by Danes or West Greenlanders.

It was also conceded in the end that local manpower could be used for construction work. The partial destruction of Tasiilaq after the *pilaraq* of 1970 thus had a positive side to it. It gave some work to the unemployed inhabitants of the town. The reconstruction and modernization of the town became the occasion for a number of men to earn a living and learn a trade (carpenters, bricklayers, woodworkers, plumbers, painters etc.).

During the winter of 1976–1977 I calculated, with the help of the East Greenlandic Mayor of Tasiilaq, that, apart from temporary jobs paid by the hour or week, there were about 200 opportunities of permanent employment for the Ammassalimmiut (men and women) in the town; that is, for one adult in every two. The nominative census for Tasiilaq of the 31.12.1976 gives the following figures:

Men aged from 18 to 59.....	206
Women aged from 18 to 59.....	212
Total active population of Tasiilaq.....	418

This is still far from satisfactory, but it is nevertheless a great improvement on the catastrophic situation in the mid-1960s when only one adult in five had regular employment in the town.

Table 39 shows that the biggest employers are the KGH, and then, rather further down the scale, the

Table 39. List of organizations permanently employing East Greenlanders during the winter 1976–77, in the small town of Tasiilaq. (Total: 195 employments).

Organizations		Number of jobs held by Ammassalimmiut	
– KGH (trade)	office	3	(Total 62)
	shops	18	
	post	3	
	service station	3	
	warehouse and harbour	20	
	bakery	5	
	ships ("Mikkelsen" and "Petersen")	10	
– Health	hospital	30	(Total 37)
	dental clinic	3	
	medical boat ("Signe West")	4	
– GTO (technical organisation)	office	3	(Total 11)
	workshops	5	
	organisation	3	
	ship ("Ulimaut")	3	
– Water and electricity services		8	
– Laundry, shower and bath-house		1	
– School and boarding school		12	
– Nursery school		7	
– Church		2	
– Council office		9	
– Police		3	
– Telecommunications		5	
– Orphanage		5	
– Old People's Home		2	
– Youth club		3	
– Meeting House		1	
– Private enterprises:	hotel and tourist		(Total 27)
	boat ("Timmik")	5	
	coffee shop and bar	2	
	grill-bar	2	
	garbage collection and draining	4	
	public works and construction:		
	various house building activities and taxi	7	
	painting, plumbing, wood-work	5	
	Simon Jørgensen's shop	2	

Health Service. These two organizations also employ people in all the other villages (people in charge of trade, salesmen, labourers, midwives, cleaning women). The school and church also have representatives in the villages: schoolteachers and catechists (the latter are in charge of schooling, religious instruction and Sunday services). However, there is little permanent employment in the villages, which explains why young people come to town looking for jobs with a regular wage.

The summer season offers temporary jobs: loading



and unloading freighters from Denmark, the transportation of imported goods to other places in the district, house repairs or new construction work. Seasonal workers are hired for about four or five months every year.

Most employees are paid weekly wages, calculated on an hourly rate for 40 hours a week. The development through time of the average hourly rate is shown in Fig. 30. The basic rate varies according to qualifications: in March 1977 the hourly rate for non-qualified employees over 18 was DKK 15.30; for people with special qualifications it ranged from DKK 16.00 to 19.00.<sup>45</sup>

Certain employees receive monthly salaries. They are already at a high level in the hierarchy of positions. Their salaries increase according to the number of years they have worked.

Since 1975 incomes have been taxed. Before then Greenlanders and Danes resident in Greenland for over 18 months were exempted from taxes. As a matter of fact, we shall see later that few Ammassalimmiut pay taxes, as their incomes are too low to be taxable.

Wage-earning appears to have a bright future, as its extension is encouraged by the development of educational policies. Also, young people aspiring to a comfortable, unhazardous lifestyle tend to leave the villages for the town to find employment in an organization. However, the dangers of this evolution should not be ignored. Tertiary industries already seem inflated, whether in town (without any productive industry) or throughout the whole district, where the total value of exports only represents a tenth of that of imports.

Apart from taking over positions still held by Danes (doctors, dentist, nurses, laboratory technicians, school head, teachers, officials of the radio service and the GTO etc.) or by West Greenlanders (minister, school-teachers, nurses, KGH manager) which demand an educational level not yet attained by the Ammassalimmiut, it is not desirable that the training of East Greenlanders should lead to an increase of administrative staff.

As far as private enterprise is concerned, some Ammassalimmiut have taken initiatives: carpenters, woodworkers, painters and plumbers have started working privately and have even sometimes employed one or two workers. But these enterprises have not lasted long, their initiators finally preferring to work for a public organization or a Danish private contractor. (These private enterprises are mentioned at the bottom of Table 39; since the 1960s a Danish private contractor has also provided a few jobs in Kuummiit).

The only case of a private enterprise created and managed over a long period by an East Greenlander is that of a shop in Tasiilaq. Up until recently, in fact, it was the only private shop which competed with the KGH. The Ammassalik owner, born in 1930, lost his father when he was 11 and his mother when he was 14, and lived in poverty during his adolescence. He started his business in 1959, specializing in selling the same

goods as the KGH during the latter's closing hours and also offering a different type of goods.

His success (the shop doubled its space in 1968 and a small annexe was opened) came from his familiarity with his compatriots' behaviour: for example, the desire to buy things exactly when they felt like them, and a taste for gadgets and novelties. He found customers among those who needed sugar, coffee, margarine, cakes, mineral water etc. at the last moment – particularly on Sundays, when many visitors come to the house. As far as novelties are concerned, he had some successful ideas, such as taking polaroid photographs of family events (baptisms, confirmations, weddings) at a time when few East Greenlanders owned cameras, and had to wait for months on end to receive the films developed in Denmark; he also sold plastic funeral wreaths for the graves in the Tasiilaq cemetery, and introduced the first taxi cab (in 1972) into the town, which is small but extensive, with a few kilometres of uphill and downhill roads. Meanwhile, his wife had opened a hairdressing shop in her house and started a new fashion for permanent waves among Ammassalik women.

Before concluding this section on wage-earning employment, we must mention that the women of Ammassalik have done well in this sector. Midwives were among the first to receive a salary. Today women are found in various institutions as secretaries, saleswomen, accountants, social workers, telegraphists, nursing assistants, postal clerks, kindergarten teachers, cooks and washerwomen. Financial independence gives them greater freedom in their lives. If they wish, they can stay single, or if married they have the possibility of leaving their husbands.

## Social security

We have mentioned the major difficulties faced in the 19th century and at the beginning of the 20th by the elderly, orphans, widows, sterile women and cripples. Survival was a problem for them in this small community of arctic hunters, totally isolated, rarely having any surplus production and not always able to help these unproductive categories. In periods of want these people were the first to suffer. They sometimes decided to kill themselves to preserve the family group. Thus there was over and above natural selection a kind of social selection of those most likely to produce and reproduce.

Colonization changed the course of Ammassalik history by helping a certain number of those who had been underprivileged in traditional society. Some found a place in the new category of employees; others could benefit from financial help or food distribution. Mikkelsen writes: "When a pecuniary support was absolutely necessary it was at first given privately; but from 1915 grants were authorized at the expense of the admin-



istration, by which means a greater homogeneousness was achieved, and arbitrary help was to a certain extent avoided" (1944: 162). The assistance provided by the administration was considerably improved from 1935 onwards at the initiative of the private association known as *Scoresbysund-komiteén*. This committee was created in 1924 to help with the settlement of the small Scoresbysund colony, and afterwards used some of its funds to "improve living conditions in East Greenland". In 1935-1936 it provided considerable sums for the welfare of the Ammassalik population, which was then seriously affected physically and economically by the *corryza* epidemic, which had caused many deaths. After 1936 the Committee continued to give financial help to the orphaned and destitute, and founded the Old People's Home in Tasiilaq.

Since January 1964, with the introduction of a local authority for the East Greenland districts of Ammassalik and Ittoqqortoormiit, the provision of social security benefits for the aged, children under 16, etc., has been perfectly regulated, following the same model as in the west coast municipalities.

Thus in contemporary Ammassalik society those who cannot support themselves are not condemned to be a burden on their families. As a matter of fact, sometimes these social security benefits not only give some independence to those who receive them, but also help others sharing the same home – spouses, children or grandchildren. The various social security benefits are as follows:

#### Old age pensions

After the age of 60 every Greenlander is entitled to a pension. Single women can have one as early as 55. However, given the low life expectancy of East Greenlanders, few people benefit from this.

In the spring of 1967 the basic pension was DKK 248 a month for a single person and DKK 332 a month for a couple.<sup>46</sup> At that time a total of 64 Ammassalimmiut (out of a population of about 2200) received an old age pension – eight couples and 48 single persons. A few others received a pension paid by the institutions where they had been employed (the KGH and the GTO).

In the summer of 1972 there were 60 old age pensioners in the district. They received DKK 357 a month for a single person and DKK 457 a month for a couple, plus coal for heating and credit to buy clothes. In the spring of 1977 these pensions had risen to DKK 1105 a month for a single person and DKK 1440 for a couple. The extra help for coal and clothes was discontinued, but supplementary benefits for dependent children under 16 were maintained – DKK 178 a month per child.

Another possibility was offered to the elderly: they could have food and lodging at the Tasiilaq Old People's Home, and some pocket money.

#### Widows' pensions

Widows may receive benefits equivalent to old age pensions; but the sums they receive come partly from hunter/fisherman insurance if their husbands were in that category, with a supplement from the local authority. In the case of a workman's widow the local authority pays the whole pension.

#### Disability pensions

Total disability pensions are equal to widows' or old age pensions. There is a descending scale for partial disability. In the spring of 1967, 36 Ammassalimmiut benefited from disability pensions, i.e. 30 men and 6 women (31 were considered to be 100% disabled; three were 75% and two 50% disabled). These were mostly former TB or polio patients. In the summer of 1972 34 disability pensions were being paid in the district.

#### Family allowances

Every three months families receive a sum of money for every child under 16. In 1967 it was DKK 50 per child (plus four boxes of powdered milk a month). This was unchanged in 1972, but by the spring of 1977 the sum had risen to DKK 153 per child for every three-month period.

#### Other social benefits

Various types of aid can be given temporarily in special cases at the discretion of the local authority: for sickness, the absence or unemployment of the head of the family; scholarships for children wanting to further their studies after the seven years of compulsory education while remaining at home; allowances for children placed in care in other families by the local authority (DKK 892 a month in the spring of 1977), etc.

Very often the local authority takes the place of the fathers of illegitimate children when the latter have not been identified or do not pay the required child allowance. In 1972 this amounted to DKK 615.60 a year for each child under 16 born out of wedlock. In the spring of 1977 it reached DKK 2936 a year.

### The coexistence of various lifestyles

The developments described above show how much Ammassalik society has diversified under the double effect of demographic growth and the extension of Danish tutelage.

The small ethnic group discovered by Holm was an assembly of large family groups where each individual of the same age group and sex had the same occupation

and ensured, more or less successfully, the same type of production.

The division of labour was linked to sex, not to social categories. Every adult male was a hunter, that is he produced consumer goods; he also made the house, the means of transportation, tools and hunting equipment. Every adult female had to transform the animals caught into finished products (food, clothes, fuel), take care of the young children and the house, go fishing and gathering, and share out and preserve food.

By the age of seven or eight the children also had a definite role: they had to go to fetch drinking water, feed the dogs, hitch them to the sled, go fishing and gathering and look after the younger children. As a rule the boys helped their fathers and the girls their mothers. Lifestyles within the different family groups were then very similar: the only differentiation was in individual skill.

The only exception to the interchangeability of individuals of the same sex and generation was the specific function of the *angakkeq* or shaman. An *angakkeq* was singled out from childhood by supranatural signs, and the long training for the ecstatic trance was done under the direction of an older *angakkeq* (cf. the chapter on shamans, their activities and their initiation in Rasmussen 1938: 94–129). The very specialized social and religious function of the shaman gave him a place apart within the ethnic group, a place that no non-initiate could ever hold. He was a healer and a mediator between the various forces that govern humans and the universe. Thalbitzer (1908: 62) puts the minimum number of shamans in the ethnic group when it was discovered at ten, i.e. approximately one adult male in ten.

Throughout its evolution Ammassalik society has seen the emergence and development of socioeconomic classes whose lifestyles differ greatly from traditional models: fishermen, wage-earners, and those who receive public assistance. Craftsmen, as we have seen, do not form a special category, since very few of them make a living from handicrafts. They combine this activity with hunting, fishing or wage-earning employment.

#### Daily rhythms and annual cycles

The only rhythms in an arctic hunter's life are those prescribed by the environment (the seasons, snow and ice conditions, wind, darkness, fog, heavy seas, etc.); by the migrations and the behaviour of animals (the longer or shorter time needed to find an animal, the difficulties of catching it); the food needs of his family; and his own state of health. All these components act in various ways, and no regular rules of living or time schedules exist for a hunter as regards when he gets up or goes to bed, eats, or starts or ends any activity. Only the return of the head of the family with a catch is really decisive for the preparation of a communal meal. Besides this, the freedom of action everyone has at the earliest age is such that every member of the family can live at his own

pace. He can sleep when he is tired, even in the middle of the day. He can attend to his chores, or play, at any time of the "night" when it is light during the good season; or demand to be nursed or given a snack at any time a day.

Western civilization put two restrictions on this lack of daily routine in the family life of the hunter, both of which influence life in the winter: one is Sunday rest for the adults, and the other is schooling for the children. The Lutheran service on Sunday is an occasion for some hunters to take a break and stay in the village to visit friends or rest. But schooling is one of the most difficult problems to solve, since schoolteachers are not always helped by the parents to train children to be punctual or to prevent school absenteeism.

During seasonal migrations the ancestral way of life wins out. Far from the catechist and the church, Sunday no longer exists, and children regain total freedom. Some hunters adapt their migration departure dates to school holidays. Others take no account at all of the demands of schooling, and decide to leave with their families when the time is right for seal hunting, catching *am-massat* or arctic char.

The complete opposite of the hunter's life is that of the wage-earning employee, who lives by the clock and the calendar with its weekends and holidays. The seasons, the alternating periods of darkness and light, are of no consequence for the working hours set by the employer. It must be added, however, that a certain number of Ammassalimmiut have great difficulty in respecting these hours over a long period of time.

The rhythms of the small town of Tasiilaq, where most of the wage-earners of the district live, are set by the schedules of workers and schoolchildren. Morning departures, lunchbreaks, afternoon closing time, all fill the few kilometres of road that criss-cross the regional capital with people. In 1967 there was even a siren which announced lunchbreak (accompanied and echoed by the howls of the sled dogs) – the time for the whole town to sit down at the lunch table. Getting up in the morning, mealtimes, shopping hours, weekends, paid holidays – everything is ordered in western fashion, leaving no room for any specificity of climate or environment. Those who long to hunt seal or fish for arctic char must adapt their wishes to working requirements; they must do it late in the evening or very early in the morning and save more distant trips for the weekend or holiday time (three weeks a year in 1967; one month in 1977).

Fishermen, as we have seen, lead a more organized life than hunters, since they are dependent on regular tides and the times when they can sell fish to the KGH. However, the constraints of the climate and the migrations of the marine fauna exert much influence on their activities, and they do not feel their schedules to be as onerous as the monotonous and repetitive one of an office worker. In a way, they remain free and independent.

## Diet

Important transformations in the diet of the Ammassalimmiut followed on the diversification of lifestyles. However, certain dietary changes preceded the break-up of this society into various socioeconomic classes. These were linked to colonization, which brought the Ammassalimmiut, for whom commercial food exchanges were completely foreign up until then, into contact with new imported European goods.

When the trading post was first established in 1894 the traders were formally recommended not to give or sell food to the Ammassalimmiut, so as not to disturb their nutritional balance, which was considered essential for the survival of hunters and gatherers just emerging from "prehistory". The only goods that should be exchanged for pelts, it was suggested, were guns and ammunition, clothes, cloth and tobacco. Mikkelsen says that these measures were strictly enforced for four years, from 1894 until 1898; but after that the population could buy some rice, rye flour, whole grain or broken barley and green peas (1944: 153). The Ammassalimmiut developed a liking – even a mania – for some of these new types of food, particularly sugar and bread, and these foods soon became indispensable along with the products of the natural environment. Mikkelsen shows the enormous increase in starch consumption (rye and wheat flour, ship's biscuit) in Ammassalik during the first forty years of the century: 2.24 kg per person/year in the period between 1899/1900 and 1904/1905; 12.37 kg in 1920/21–1924/25; 28.44 kg in 1935/36–1938/39 (1944: 169–170). There was the same increase in the consumption of sugar products (sweets, brown sugar, castor sugar or lump sugar) in the area in the same three periods – from 0.54 kg per person/year to 3.25 kg, then to 10.99 kg (1944: 173–174). He also mentions the increasing demand for barley gruel, rice and dried fruit (prunes, raisins and figs).

Actually, the distribution of these goods throughout the population was not uniform. Tasiilaq employees and their families were already forming a new wage-earning class and were demanding more of these goods than hunting families remote from the settlement. But the demand had already been created among East Greenlanders in general. There had been food distributions during the bad winter of the coryza epidemic in 1935/36, and this did much to introduce western dietary habits throughout the district.

Mikkelsen (1944: 185) estimates on the basis of his own figures and those of Høygaard (1941) that in 1936/37 the Greenlandic population could be divided into three groups according to the degree of acculturation in their diet:

1. The people from Tasiilaq (about 16% of the population), whose diet consisted of 80% imported European products and 20% local produce.
2. People living less than a day's journey from the shop

in Tasiilaq, i.e. in the Kulusuk area, a stretch of the shores of Sermilik, and Qernertivartivit (about 41% of the total population) whose diet was made up of 25% imported food and 75% local produce.

3. People living further away from the small commercial centre, in the Kuummiit area, Sermiligaaq, a section of the shores of Sermilik and in Isertoq (about 43% of the population), who mainly ate what the environment provided (95%) and completed their diet with about 5% imported foods.

Thus, on the eve of the Second World War various observers had already noted a certain penetration of western foods (particularly carbohydrates) with differences in the extent of penetration associated with the new diversification of lifestyles on the one hand and the distances separating families from the central shop of the district on the other.

During the war, between 1941 and 1945, East Greenland was not supplied with goods from Denmark. Only ships from the USA called in the area. The abundance of consumer goods that the Ikkatteq military base represented for the Ammassalimmiut attracted many hunting families. They set up camp around the base and collected all sorts of things from the rubbish heaps, including left-over food. Spoiled meat obtained this way caused the death of three East Greenlanders. After this serious accident the regulation forbidding the Ammassalimmiut to come near the base was more strictly enforced (information given by Poul Hennings, posted at Ikkatteq in 1945).<sup>47</sup>

After the war the consumption of goods coming from Denmark increased with imports. Until 1954, however, the geographic dispersal was such that many Ammassalik families could still lead a hunting life. But after 1955 the regrouping of the Ammassalimmiut into fewer and more densely populated villages was followed by more efficient distribution of the KGH-imported goods.

Today every locality has a shop, whether it is a small trading post or a real supermarket. Dietary differences are therefore no longer linked to the distance between the shop and the home, but more to the occupation of the head of the family, his wife or his grown-up children, and the purchasing power of the family.

The hunter's staple diet is still sea mammal meat and blubber, particularly from the seal. Only meat from a mammal, served with fat (either raw, cooked or in liquid form), is considered to be a really filling, warming meal. Any other food, whatever the quantity eaten, is not thought to be sufficiently nutritious. Birds, fish, plants, seaweed or eggs "all leave you feeling hungry".

The striking feature of the diet of this category of Ammassalimmiut is the extreme irregularity of meals, their unequal content and the total lack of fixed hours. The return of the hunter and the type of catch he brings back determine the preparation of a main meal. Greenlanders who live on environmental resources live on a diet subject to alternating periods of plenty and want

(and they accept this). Irregularities in the meat supply, partly due to climatic factors and partly to the skill of the hunter, as well as the Ammassalimmiut's natural faith in the future, make them eat enormous quantities of meat at one sitting whenever they have the opportunity, without worrying about the day and the hour of their next meal.

#### Staple foods and their preparation

Almost every part of the seal is eaten.

The meat (*nereq*) can be consumed:

- raw and frozen (*qiitsiaq*).
- raw and dried in wind and sun in the summer (*panerteq*).
- raw and putrefied (*migiaq*).
- boiled in a large pot of water, hardly salted. Sometimes rice or potatoes can be added to the broth.

The blubber (*ammaqqaq*) can be consumed:

- raw, whether frozen or not. It is eaten with *panerteq*, dried blood, berries, plants, roots, dried or boiled cod.
- transformed into oil (*iinneq*) by heating, or by several weeks of maceration in a closed receptacle (skin bag or can). It is then used as a dip for dried fish (*ammasat*, cod), plant food and *panerteq*.
- boiled with seal meat.
- boiled and jellied. The fine fat (*kalannit*) scraped off by the women when they dress the skins is boiled in a small amount of water and forms a sort of jelly (*ittersiaq*) when cool.

The blood (*aak*) can be consumed:

- raw, dried in the large intestine or stomach of the seal (*aakkaa*). It is eaten when it has become completely hard, and goes with berries, seal fat, plants preserved in oil, etc.

The liver (*ilorut*) and kidneys (*uiilat*) are great delicacies, and can be consumed:

- raw and still warm, eaten when cutting up the animal.
- raw and frozen.
- boiled with the meat.

Bearded seal liver, however, is considered poisonous.

The small intestine (*amuaajat*), once emptied, can be consumed:

- raw and dried.
- boiled with the meat.

The head (*suuneq*) and brain (*qaasaq*) can be consumed:

- raw and putrefied (having been kept for a long time in the "larder").
- boiled with the rest of the animal. (The eyes are considered a delicacy).

The flippers (front: *isaattat*; back: *seqqut*) can be consumed:

- raw and putrefied with the fur on; they are good to eat "when the hair falls off" (*ulisimasut*).
- boiled with seal meat.
- boiled and then macerated in seal oil.

The bones are thoroughly scraped of all their meat, and cartilage is much appreciated.

As far as other mammals are concerned, we must mention, in addition to the parts mentioned above, the skin of narwhal and white whale (*mattak*), eaten raw and considered a real treat.

Walrus and polar bear meat (like that of the bearded seal) is boiled for a long time to avoid any risk of infection (trichinosis).

The livers of polar bears, walruses and narwhals are not eaten, since eating them could have very serious consequences (they contain far too much Vitamin A).

Birds are always boiled. Sometimes rice or barley are added to the broth to make a thick soup. Some people add curry powder when cooking with rice.

Birds' eggs are food for the spring. They can be eaten raw or fried, but are most often eaten hard-boiled.

Fish can be eaten:

- raw, split in two and dried, in the case of arctic char, polar and common cod. *Ammasat* are so small that they are dried whole.
- boiled, in the case of the above fish plus sculpin, redfish, halibut and Atlantic wolf-fish. The larger fish are cleaned and cut in pieces. The smaller ones are boiled whole.

Plants and seaweed can be eaten:

- raw, when gathered (angelica, wild sorrel, dandelion, young arctic willow leaves, rose-root, berries and seaweed).
- raw and frozen (crowberry and bog whortleberry).
- macerated in seal oil (this preserve is called *quujuut*) (rose-root, dandelion, wild sorrel, berries).
- raw and washed in fresh water (seaweed).
- parboiled in seal broth (seaweed).

Molluscs are eaten:

- raw, when gathered, or just after being brought home.
- boiled sometimes.

Of the above-mentioned foods, some are quantitatively of little importance (plants, for example). But they represent an important source of vitamins. Others (like arctic char) may be eaten in very large quantities in season, but for a limited period. The constant staple diet of the Ammassalik hunters today is still seal meat and fat, even though there can be great variations during the cycle of the year.



Table 40. Average quantity of seal meat per inhabitant, by different settlements in 1976 (from skin sales to the KGH).

Villages	Fjord seal (1)	Hooded seal (2)	Greenland seal (3)	Bearded seal (4)	Total kg of seal meat (1+2+3+4)	Number of Ammassalik inhabitants	Seal meat: annual average per inhabitant in kg
	No. of seals hunted	No. of seals hunted	No. of seals hunted	No. of seals hunted			
Kuummiit	1399	130	12	–	39 390	461	85.4
Kulusuk	876	86	7	16	26 800	401	66.8
Tiileqilaaq	1342	29	10	4	30 045	201	149.5
Isertoq and Pikiitsi	2343	127	38	38	62 975	190	331.4
Sermiligaaq	1838	136	22	26	51 840	169	306.7

(1) Estimated weight of meat for an animal of this species: 20 kg

(2) – – – 85 kg

(3) – – – 30 kg

(4) – – – 110 kg

(According to the Statistics Department of the Ministry for Greenland).

Table 40 shows the average quantity of seal meat available per person in a year. The figures are not estimated too high, since they have been established on the basis of figures for skin sales, which are always lower than the actual number of animals killed. The fact that dogs are also meat eaters must be taken into account,<sup>48</sup> since Greenlanders say that meat is the best food for them. On the other hand, small children do not eat as much meat as the adults.

In 1976 the settlements at the two extreme points of the district, Sermiligaaq in the north and Isertoq-Pikiitsi in the south, had an amount of seal meat comparable with that of their predecessors at the turn of the century. Ejnar Mikkelsen estimated this at 369 kg per person/year for the period 1900/01–1904/05 (1944: 165).

The other villages are rather less well supplied. Comparing Kulusuk and Isertoq-Pikiitsi, the ratio of meat quantities is one to five. The example in Fig. 31 shows a monthly average of 23–24 seals (about 450–500 kg of meat a month) for a family of ten at Pikiitsi.

For an exact evaluation of this extremely protein-rich hunter's diet we should add the catches of polar bear, narwhal, walrus etc., but it is difficult to find figures for these.

### Meals and taste preferences

When a hunter comes back with a catch, the woman of the house prepares a hot communal meal. Once cooked, the meat is taken out of the broth and laid on one or several communal plates, often placed on the floor, where everyone is seated. The mistress of the house shares out the pieces of meat, serving the men first, then the women, and finally the children. The bits of meat are held in one hand while the other hand is used for cutting with the knife (either the woman's knife, the *sakkeq*, or the man's knife, the *pilaalaaq*). The meat is often cut off at lip level while in the mouth. Raw or boiled fat is an indispensable supplement to any

food. When rice has been boiled with the meat, the soup (*niigaak*) is served in individual plates and eaten with a spoon. Fresh water is drunk with the meal. After eating, all those who have eaten wash their greasy hands. Hands are not usually washed before a meal.

Breakfast usually consists of some tea or coffee, bread and margarine, and sometimes milk and cereal. At other times during the day the family eats the cold left-overs from the preceding meal, or preserved food – often dried products served with blubber or seal oil, laid out on a piece of cardboard placed on the floor.

There are various food-preserving techniques:

- drying in the wind and sun (meat, blood, small intestines, fish).
- preserving in the cold outside the house (fresh meat, dried meat, dried fish, animal fat).
- preserving with seal oil in a skin bag (*immingaaq*) or other closed receptacle (plants, berries, seal flippers, *panerteq*). Such preserves are called *immingarmiit*.
- by putrefaction (seal flippers and heads, whole seals (ungutted), *ilivitseq* – buried for a few months during the autumn).

Preserves are stored in stone caches outside the house or in wooden sheds attached to or included in the house, to keep them cool and out of the reach of the dogs. Things like fresh food, skins and pelts are also kept there.

The Ammassalimmiut do not salt or smoke food, as is sometimes done in some west coast areas.

When there is a shortage of traditional foodstuffs, food preserves are bought from the shop, and if money runs out people can always fall back on bread and margarine.

Coffee or tea sweetened with castor sugar are drunk in great quantities all day long and offered to visitors. Coffee, so popular today, was along with spirits and spices one of the goods strictly forbidden to the Ammas-



salimmiut at the beginning of colonization. In 1940 the trading managers were still prohibited from selling it to the local population. It was only later that the Ammassalik became great coffee drinkers. Tea consumption, still very low in 1940, has been increasing regularly.

Infants (3–6 months) are quickly introduced to solid food. While still being nursed they are given pieces of what the adults eat (boiled seal meat, *panerteq*, seal liver etc.). When a baby is less than a year old these foods are usually pre-chewed by the mother or grandmother. There is no abrupt weaning or special diet during this period of progressive passage from mother's milk to adult food. There are, however, some foods that are more readily given to children at any time of the day than others: dried *ammassat* to chew on or, in today's society, biscuits, sweets, buttered bread, soft drinks, or heavily sweetened tea poured into a saucer to be licked up by the child; fruit preserved in syrup, and fresh fruits, which can be bought individually in the summer (apples, oranges, bananas). People avoid giving certain foods, such as animal fat, to very young children.

In the past, when a mother had no milk and no one could take her place, the baby was fed on fish broth. Today milk and various baby foods are available.

Hunters still prefer the diet of their ancestors, but have added western foods that they have grown to like and cannot do without: coffee, tea, sugar, bread (wheat, rye or barley), margarine, rice and cereals. But tastes have changed and continue to change. On the whole, young people today dislike the *tiperarteq* (strong-smelling food) so appreciated by older people, i.e. any food with a strong smell, such as *panerteq*, or a high, gamy taste like *migiaq*. Young people show a preference for fresh and boiled food. Roots are no longer eaten even by the elderly. They were consumed in the past in times of want, but were replaced by imported products.

Food is still an important matter for Ammassalik hunters. A thin person is pitied, as he must be poorly fed. Plumpness in a woman is a sign of health and beauty: her husband is obviously a skilful hunter who can feed her well. When thinking of dear ones living far away, one hopes that they are not hungry. Although real famine has been unknown in the area since the turn of the century, cases of whole families having starved to death are still vividly remembered. During these terrible periods, of which the oldest people have heard in their youth (particularly the famine of 1882–1883), when there was nothing left to eat – no fat scrapings, no roots, no more bones to gnaw, not even any foul-tasting shark's flesh – the dogs, those indispensable companions of the Eskimo, were killed and eaten one by one. Leather straps, boot soles, clothes and the skin covers of the boats and tents were chewed thoroughly and long. In extreme cases the dead were eaten (according to tradition human flesh is said to taste even better than polar bear meat, and some people are supposed to have

been very fond of it). Some families still go through very difficult periods of need today.

The value given to food is also expressed by the way visitors are honoured by being offered a large portion of meat, or the best one can find to offer them. Similarly, gifts given to relatives or to persons who are "reincarnations" of relatives are usually gifts of food.

As we have seen, the diet of a cod fisherman is essentially based on fresh or dried fish, if possible served with seal fat or dipped in seal oil. The lack of meat can be helped by occasional hunting, or by buying frozen or tinned meat from the shop. For a few years now the KGH at Kuummiit and Tasiilaq has provided frozen seal, narwhal or whale meat from West Greenland. Since 1977 it has also sold local frozen meat; but for many these foodstuffs are too costly. In the summer of 1979 the KGH bought seal meat from the hunters at DKK 4.50 a kilo and resold it frozen in the shops of the district at DKK 13.50 a kilo. Carbohydrate consumption is often very high among those who cannot get food from the environment nutritious enough for them to feel that they have eaten their fill.

Most wage-earners living in Tasiilaq have adopted the diet of the Danes living among them. The staple diet and ways of cooking and serving meals are very close to the European model, although the food is often less balanced and is sometimes supplemented with some Greenlandic products.

Table 41, established on the basis of data from the KGH, shows the food items bought most often and the progressive penetration of imported foodstuffs over thirty years.

Apart from spirits, chocolate and cigarettes, which are very heavily taxed (to promote social welfare in Greenland) and fresh fruit and vegetables, which are expensive, the prices of imported foodstuffs in the KGH shops of Greenland are about the same as in Denmark. Transportation costs are not fully included in retail prices.

Later we will deal with the problem of over-consumption of spirits. Sugar and starch are also eaten in excessive quantities, and this has led to catastrophic dental health conditions for the whole Ammassalik population. In 1934–1935 R. Gessain remarked on the almost total absence of tooth decay among them. Of 627 subjects examined, tooth decay was found among eight coming from small settlements, and among sixteen from the villages of Tasiilaq and Kuummiit. That makes a total of 24 individuals, a mere 3.8% of the population examined (Plenot & Gessain 1975).

Over-consumption of these European foodstuffs, along with a total lack of dental hygiene, have done considerable damage. Many young people are toothless or have dentures. Ammassalik children coming for their first year at school (at the age of seven) hold the record for the worst teeth in the whole of Greenland. Some tentative efforts have been made in the schools to teach the children to brush their teeth. They are given a tooth-

Table 41. List of the ten food items or categories of food most often bought at the KGH shops by the population living in Ammassalik (Greenlanders and Danes) in the years 1945 and 1978. From data gathered by P. Helms (1981b: 10).

year 1945 (1125 inhab.)*			year 1978 (2600 inhab.)**		
	net total (kg)	average per inhabitant (kg)		net total (kg)	average per inhabitant (kg)
1 Sugar	17 296	15.4	1 Beer, wine, spirits	293 499	112.9
2 Rye flour	13 748	12.2	2 Flour, oats, biscuits, bread	151 905	58.4
3 Wheat flour	11 903	10.5	3 Sugar, sweets, soft drinks	136 750	52.6
4 Oat meal	8 250	7.3	4 Meat and delicatessen	69 479	26.7
5 Rice	4 086	3.6	5 Dairy products and cheese	37 300	14.3
6 Ship's biscuit	2 500	2.2	6 Jams and fruit juice	36 920	14.2
7 Margarine	1 028	0.9	7 Potatoes	29 792	11.5
8 Barley	924	0.8	8 Fresh fruit	29 390	11.3
9 Biscuits	868	0.8	9 Pastries	28 135	10.8
10 Raisins	528	0.5	10 Fats, mayonnaise	22 360	8.6

\* In 1945 there were only 16 Danes residing in the area (1.4%).

\*\* In 1978, there were 200 Danes (7.7%) which must have affected the purchase of certain foods.

brush in school and are taught how to use it. But dealing with acquired habits is hard, and it seems to be very difficult to dissuade parents from giving sweets to their children.

The KGH distribution network also bears some of the responsibility, as at the end of winter the shops are always well stocked with sugar, soft drinks and biscuits, while other foodstuffs are lacking. These goods can be bought in any village, even in the evenings and on Sundays, when the main shop is closed. The meeting houses or small kiosks resell at a slightly higher price the KGH goods that are most in demand: cigarettes, sugar, sweets, chewing gum, fruit in syrup, soft drinks. To give some idea of the proportions involved, the 1978 consumption of soft drinks in Kuummiit was 98 760 bottles for 460 inhabitants.

In general, those of the wage-earning population who have a better diet do not rely completely on shop-bought goods; they supplement them with local produce – seal meat and fish. In this respect the arrival of home deep-freezers in the late 1970s was an important event.

Paradoxical as it may seem in a country like Greenland, the purchase of a deep-freezer represents a considerable improvement, particularly for wage-earners in town. The freezer, the modern version of the skin bag or stone shelter, eliminates seasonal factors. The consumer can eat meat, birds, *mattak*, crowberries, fresh arctic char or capelin at any time of the year. Until 1979 only some of the inhabitants of Tasiilaq owned a freezer. These could store and keep what they had caught, fished or gathered during their holidays or weekends, as well as what they received as food gifts.

For this category of East Greenlanders, the freezer has brought nutritional improvements. However, the spread of freezers among hunting families when they have electricity could play a very negative role, socially speaking, by favouring the development of individual

hoarding of foodstuffs instead of the traditional altruistic sharing.

Among wage-earners, acculturation is evident even in cooking methods. Stewing in a pot, roasting in the oven, or frying in a pan have often replaced boiling. Flour-thickened sauces are served with meat and fish. Fruit syrup is often added to the drinking water at mealtimes, etc.

Meals take place at fixed times: in the morning, before going to work, at lunchtime and after work at about six in the evening. Individual plates, forks and glasses are usually used. A European-style meal is eaten around a table with everyone sitting on chairs. But sometimes the family sits down on the kitchen floor to eat some *panerteq*, seaweed or mussels spread out on cardboard. They eat these with their fingers. Several times in the same household I observed totally different gestures and behaviour according to whether the meal was eaten in Greenlandic or European style.

Generally speaking, most of the young people of the town reject Greenlandic food, preferring to eat "Danish-style".

#### Attitudes to money and living standards

Whatever the occupations of the various socioeconomic groups in Ammassalik society today, no one can escape the imperative need for a monetary income, which is essential for living in a modern fashion, whether wished-for or imposed.

The days of self-sufficiency, when everything was produced by the family cell, are now a thing of the past. Until 1894 this small ethnic group was not dependent on any important commercial exchanges with the outside world, as it was completely self-sufficient. Each family group was an autonomous production, distribution and consumption unit.

Some members of the group went on expeditions to the south to barter with the people near Kap Farvel. These expeditions were however few and far between, and even if the goods brought back were of considerable interest to East Greenlanders they were not really vital for them.

We have had the opportunity of presenting what is known about these 19th-century expeditions (Gessain & Robert-Lamblin 1974) thanks to the archives of the Moravian Brethren who settled in the Frederiksdal area near Kap Farvel. Here I will only add some more specific information from the Ammassalimmiut about what they have heard their parents say. These long and dangerous expeditions were undertaken by whole families, in umiaks and kayaks. Each trip took them two summer seasons at least, with a pause for living in winter quarters in between. Their absence would last a total of three or four years. The passage along the front of the Puisortoq glacier (62°N, Fig. 1) was particularly feared by East Greenlandic boat crews. This glacier, always surrounded by fog (from which it takes its name) seemed angry to them, as though it was always ready to punish humans who got too close.

It was necessary to calm its anger with offerings: white, blue and red beads were thrown in the water, as well as a seal's head and flipper skin. Then one had to approach it without a sound – except for pregnant women, or those with a baby in the *amaarut*, who would then have to “get angry at their husbands”. The glacier “listened”, and when these rites had been performed the sea would become calm and the fog would clear. Another danger on these expeditions was meeting some new disease, particularly influenza: many of these travellers from the east died on their journey.

What East Greenlanders went to such trouble to get were European goods imported to the southern trading post that had been opened in 1848 at Pamiialluk (Pamiattik), not far from Narsaq Kujalleq (Frederiksdal). Normally they preferred using Greenlandic go-betweens to going all the way to the KGH agent themselves.

Transactions between East and South Greenlanders traditionally took place on the small island of Aluk, or farther north at Anoritooq (Fig. 1). However, families coming from the Sermiligaaq area, for example, would only travel as far as Umiivik to barter with people who had travelled up from the south east. Thus, bartering took place in several stages along the south east coast among the several small groups settled in the area.

In these transactions East Greenlanders offered the goods their bartering partners were looking for – bear pelts, leather straps and boot soles, sea mammal ivory – in exchange for metal (iron for knife blades, harpoons and spearheads, sewing needles, nails for bow-drills), small glass beads (red, white and blue) and snuff. Some of them had acquired guns this way, but later found themselves without ammunition and took them apart to use the metal.

The value of the goods exchanged was fixed by need (practical use) and desire (the attraction of novelty, as with tobacco, ornaments and beads). These things, impossible to find in their own region, must have been of considerable value for East Greenlanders, since they undertook long expeditions to obtain them. But the survival of their families did not depend on them. They could do without them just as the preceding generations had.

The setting up of a trading post at Tasiilaq in 1894 put an end to the great trading expeditions and decided migrations to the south. The family economy of the Ammassalimmiut was adapted then to a new system beyond their control – the market economy. Animal pelts formerly hunted for their use value suddenly represented a purchasing power fixed by the Danish administration, allowing access to foreign goods the price of which was also fixed by the same outside organization. There were no longer exchanges between two people adjusted on the basis of will or desire, but a value imposed according to criteria totally beyond the control of the East Greenlandic buyer or seller.

The first money used was in the form of small zinc chips. In 1917 a credit system was introduced at the trading post. Finally, special money issued by the KGH, with the same value as Danish money, but restricted to Greenlandic territories, was used. Since the summer of 1968 KGH banknotes have been replaced by Danish ones.

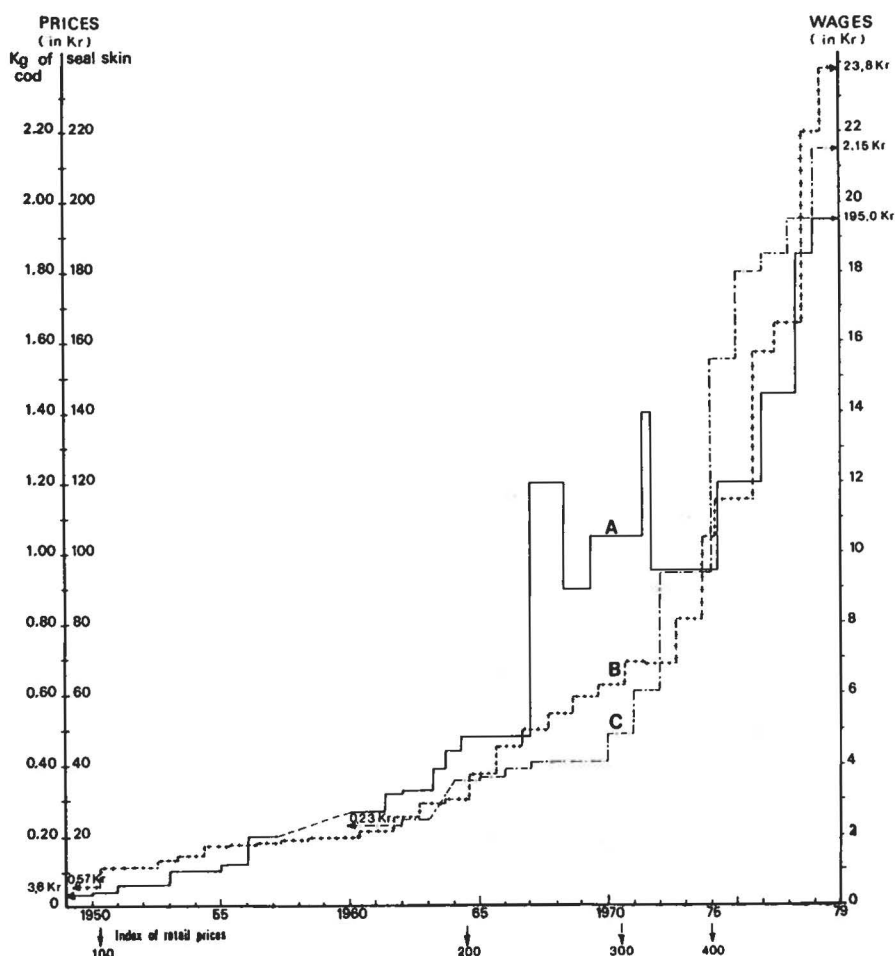
Mikkelsen remarks on the behaviour of the Ammassalimmiut with money at the start of colonization: “At first the East Greenlanders regarded money as a new form of barter” (1944: 158). He observes that instead of deferring some purchases until difficult times the East Greenlanders like to spend their money immediately and buy much more than they need at the time, using up all the money they have received for some piece of work or sale. He regrets that in the 1930s the Ammassalimmiut have not yet understood the benefits (obvious to a westerner) of saving and planning ahead.

In 1935–1936 a Danish administrator decided to start up a savings account system in Ammassalik. According to Mikkelsen twenty such accounts were opened in the district in 1939 (1944: 159).

Actually, the attitude of the Ammassalimmiut to money is part of a complex of traditional behaviour among Eskimos. We already touched on it when we talked about food, and how animals are eaten up after being caught, with no thought for the future. This is typical of the Ammassalimmiut's attitude to life – an attitude of trust in the future.

Knud Rasmussen (in Ostermann 1938: 53) also remarks that in the 19th century, when East Greenlanders decided to go south on a trading expedition, they did so on the spur of the moment, because they “felt a desire to go” without previously having thought about it or gathered together any goods for exchanging. They

Fig. 30. Comparative evolutions of hourly wages and cod and seal skin prices in Greenland. A) Purchase price of fjord seal skins (from KGH tariffs): maximum price for a large first quality skin. Evolution from DKK 3.60 in 1949 to DKK 195 in 1978. B) Average hourly wages for a non-qualified adult Greenlandic employee (from figures published by the Greenland Ministry). Evolution from DKK 0.57 in April 1949 to DKK 23.80 in April 1978. C) Purchase price per kg of cod for drying or salting (from KGH tariffs): maximum price paid for 1 kg of cleaned large cod, with the head, caught in winter near a settlement. Evolution from DKK 0.23 in the winter 1960 to DKK 2.15 in 1978.



would start off, confident of the possibility of finding the necessary goods to barter with on the way.

In contemporary Ammassalik society such attitudes can still be observed frequently. For example a woman, in winter, may feel the urge to visit a relative in another village: so she gets together the necessary amount of money to pay for the helicopter fare (one-way). The problem of how to get back is not even considered. She might win the return fare by gambling, or an unforeseeable opportunity may arise of getting home.

Today this attitude of great improvidence (in western eyes) and blind faith in the future comes up against the problems of debt and financial need linked with the socioeconomic development of the region. All social categories today have the same need for a monetary income sufficient to supply essentials (accommodation, travel, tools, clothes, food) and luxuries (radios, tape recorders, trinkets, tobacco, spirits, etc.).

It is difficult to compare the annual monetary incomes of the various socio-professional categories, as those concerned never try to calculate it themselves,

and there is therefore no way of knowing the total amounts earned. Wage incomes are more fully documented because they are recorded by the organization that pays them. Incomes obtained from fishing, hunting or handicrafts appear in the KGH records if the purchase was made by the KGH. But all production sold directly to private persons – the majority of bear pelts, narwhal tusks, some seal pelts and much of the handicraft work sold to tourists – go unrecorded.

However, in order to make some sort of comparison, we can first observe developments from the early 1950s until the late 1970s in terms of various basic units we can use as reference-points for assessing the incomes of various categories: the average hourly wage, the buying price of fjord seal skins and the buying price of a kilogram of cod (sold gutted, but with the head). The curve for wages (Fig. 30) at first shows a slow rise, corresponding to an equally slow rise in the retail price index. A sharper rise begins in 1965 and accelerates after 1974. The basic price of cod follows the same course on the whole, slowing down however between 1966 and 1971,



then catching up in 1972 and showing a marked development between 1974 and 1977.

The evolution of seal skin prices is much more irregular. The price remained very low until 1955, was adjusted in 1956, and increased regularly until January 1967, when it rose abruptly by 250%. Between 1968 and 1971 quotations fluctuated: in April 1968 it dropped 25%, then in April 1969 there was a 14% rise, followed by a 25% rise in April 1971 and a 36% drop in October the same year. From 1971 until 1973 seal skin prices remained low and constant. Hunters complained that they were suffering from the effects of the Birgitte Bardot campaign against hunting baby seals. Even adult seal skins sold very badly on the international fur market, and prices and bonuses collapsed. Beginning in April 1974, seal skin prices rose by fits and starts; but in 1978 and 1979 they did not follow the same course as the other factors mentioned (hourly wages and cod prices). In the autumn of 1982 a new campaign from the ecologists to save the seals induced a new collapse of skin prices, further endangering the future of the hunting trade, which had already been abandoned by many young people.

Attempting to assess the wage income for the year of East Greenlanders in the 1976–1977 period, we obtain the following figures:

- weekly wage of an unskilled worker (basic wage DKK 15.30 an hour): about DKK 600; total for the year, DKK 31 200.
- monthly wage of a shop assistant: about DKK 3200; total for the year, DKK 38 400.
- monthly salary of a KGH management employee: about DKK 5880; total for the year, DKK 70 600.
- salary of a ship's captain – taking into account the considerable difference in income between the winter months when navigation is impossible (about DKK 4240 a month), and the summer and autumn, which are periods of intensive sailing (about DKK 9330 a month) – a total for the year of DKK 76 300.
- monthly salary of a village trade manager (*udstedsbestyrer*) with some knowledge of radio telegraphy: about DKK 8000; total for the year, DKK 96 000.
- wages of a factory worker in Kuummiit, employed cleaning, salting and drying fish (basic wage DKK 20.10 an hour): paid about DKK 890 a day, including a piecework bonus. The irregularity of fish production prevents us from giving a figure for the year. However, the figures show that this job can be extremely rewarding financially at certain times of the year.

It emerges that wages and salaries paid to Ammassalimmiut for regular full-time work range from a minimum to three times as much depending on levels of qualification and responsibility.

During the same period, to equal the annual earnings of an unskilled wage-earner, a hunter would have to sell 169 top-quality fjord seal skins (at DKK 185 each). A fisherman would have to furnish the KGH with 16 tons of cod (gutted, with the heads, at DKK 1.95 a kilo), and a

craftsman would have to make some 312 *tupilak* or sculptures (sold at an average of DKK 120–150 each) less the price of raw materials (sperm whale teeth at DKK 115 a kilo).

Given the fact that in 1976 the best fisherman in Kuummiit caught ten tons of fish, and that the average number of seals caught in the best hunting areas of the district (Tiileqilaaq, Sermiligaaq, Isertoq and Pikiitsi) was 42 seals per hunter,<sup>49</sup> it is clear that the monetary income of these two categories was well under the minimum paid to a wage-earner. This explains why the young are so attracted by wage-earning activities, which seem better paid and more secure, as money comes in regularly and no danger is involved.

According to the tax authorities, who calculate the total visible wages, and incomes provided by hunting, fishing and handicrafts (including bonuses) for each family, wage-earners make a good living when both husband and wife work. In Tasiilaq five or six couples earned more than DKK 100 000 in 1976.

Only four or five of the hunters had a yearly income between DKK 30 000 and 40 000 in 1976. The ones who reach levels like these are those who go on long-distance migrations, where the total number of seals caught in a year can be as high as 300 or 400. Some 15 hunters had an income close to DKK 20 000, and some had earned between DKK 10 000 and 20 000. But the majority of hunters in the district had not managed to earn an income for the year of DKK 10 000. For some of them, earnings for the year were as low as DKK 2000 or 3000.

As for the fishermen, eleven of them, from Kuummiit, had earned more than DKK 10 000 in 1976, which was a good year for cod fishing (the maximum earned in that year was DKK 18 000). In the same year 350 people had earned an average of only DKK 1800 for combined fishing and handicrafts.

Finally, among the Kulusuk craftsmen, one had made DKK 9000 selling *tupilak* carvings to the KGH, and two others had made about DKK 8000. To this one must add the income provided by direct sales to tourists.

Direct taxation was not introduced in Greenland until January 1975. In 1976, 1200 income tax forms were distributed in the Ammassalik district – 1100 to Greenlanders and 100 to Danes. Income was taxed as follows: annual earnings above an allowance of DKK 24 000 per single person and DKK 36 000 for the head of a family (whatever the number of his children) were taxed at 18%.

Wage-earners have their taxes deducted directly from their monthly earnings, and others pay their tax at the end of the year, when their income has been assessed by the tax authorities. Few Ammassalimmiut actually pay taxes (only four or five hunters, for example, in 1979). The tax-payers in the district are mostly East or West Greenlandic wage-earners (a total of about 200) and Danish residents.

Spending patterns in these various socioeconomic categories are far from identical; comparing their incomes



does not give a proper picture of their different economic levels and lifestyles. Wage-earners must feed their families completely out of their wages, while hunters mainly eat what they have caught (a small fjord seal can feed a dozen people, a large one like a hooded seal can feed fifty). Hunters only supplement their basic diet with imported goods bought with income from the sale of pelts.

People from Tasiilaq complain of the extremely high cost of living. All facilities in the town – water, refuse disposal, sanitation, etc. – have to be paid for. The comforts of modern housing – central heating, baths, toilets and modern kitchens – have affected building costs. Loan instalments have risen steeply.

In 1977 payments on a recently-built house with all modern conveniences were DKK 900 a month – DKK 10 800 a year. We can thus assess the cost of living in town in this type of housing from figures given to me by an employee of the local authority:

loan instalments	DKK 10 800 (childless family)
electricity	DKK 3 400
heating (fuel)	DKK 5 640
water rates	DKK 400
sanitation, refuse disposal	DKK 600
telephone	DKK 1 140
Total for 1977	DKK 21 980

Of course, not all town-dwellers can pay such high prices. Older and less comfortable houses are far less expensive, as construction prices have increased greatly between 1972 and 1977.

One needs more than one wage per household to live in Tasiilaq. One wage-earner, paid the rate for an unskilled worker, complained that he had difficulty supporting the ten members of his household (himself, his wife, their six children, and his wife's two unemployed brothers). Often, both the husband and wife, or the father and one of the children, have to work to support large households; or there may be one wage and a pension (old age or other types of pensions could amount to a yearly sum of DKK 13 260 for a single person and DKK 17 280 for a couple in 1976–1977).

Housing costs are much lower for hunters in a village. Their houses are older and smaller, without modern conveniences (no running water, electricity or chemical toilets). Or they may have built their own modern, far less expensive, "kit" houses. Their main expenses are for equipment: guns, ammunition, seal nets, payments on a motor boat, fuel and food for the dogs.

Fishermen have fewer investments to make: hooks and lines and payments on their boats. The fuel consumption necessary to get to fishing grounds can be minimal, and bait (cod heads and innards) costs them nothing. On the other hand, food costs are higher for fishermen's families compared with those of hunters, as we have mentioned in the section on diet.

In the low-income brackets the use of purchasing power is fairly similar for all socio-professional categories. The tendency to spend money received immediately according to the whim of the moment remains very widespread. When there is no money left, one way of warding off starvation is to borrow money from those who save and plan ahead. Most East Greenlanders thus live from day to day. They spend with pleasure and do not count the money coming in; then they look for an emergency solution to difficulties (selling a hastily-made handicraft item, attempting to catch fish, borrowing money, etc.).

Notions of saving, of postponing purchases or buying on credit have, however, developed among those Ammassalimmiut who have attained a certain level of income: qualified employees who are paid monthly wages; the most skilful hunters, whose wives dress the skins properly; fishermen who try to make bigger catches than are necessary just to survive. In these cases of relative "wealth" the money is spent by the three groups according to very different criteria.

The "successful" wage-earners want to live on the western model represented by the Danes they happen to know. They spend considerable sums on housing, and rather less on clothing. The interiors of certain houses in Tasiilaq, comfortable and well kept, have nothing that reminds one of the (not so remote) Eskimo origins of their occupants, except for some old photographs of parents and relatives hanging on the walls or placed on tables in gilt frames. Everything is perfectly Danish: sofas, armchairs, low tables, chests of drawers, sideboards, wall-to-wall carpeting, lamps, crockery and china, knick-knacks, doilies, curtains and potted plants. Home appliances such as refrigerators, deep-freezers, cookers and washing machines, as well as stereo systems, telephones and colour televisions,<sup>50</sup> complete the picture of western "happiness". Many of the town-dwellers also acquire a motor boat for the weekends and holidays, just as their European counterparts have a car to drive out to the countryside on Sundays.

When a hunter saves money, it is usually not to improve his home surroundings, but to increase his mobility and thereby his hunting yields. The great hunters' houses are not luxurious or well furnished. Among these semi-nomads the bare minimum is enough. There may be a few beds (sometimes one still finds the old communal bed or platform). In the small European beds, 70 or 80 cm wide, two or three people may sleep together. Children often sleep on the floor on an eider-down or a few pelts. There will be a table, some chairs, a clothes-drying rack hanging over the heater, some kitchen implements, ordinary crockery (a few plates), cups and spoons. However, there are always transistor radios, gadgets, knick-knacks and various wall ornaments.

Hunters mainly use their financial surplus to buy motor boats on credit. Their ideal would be to own a real

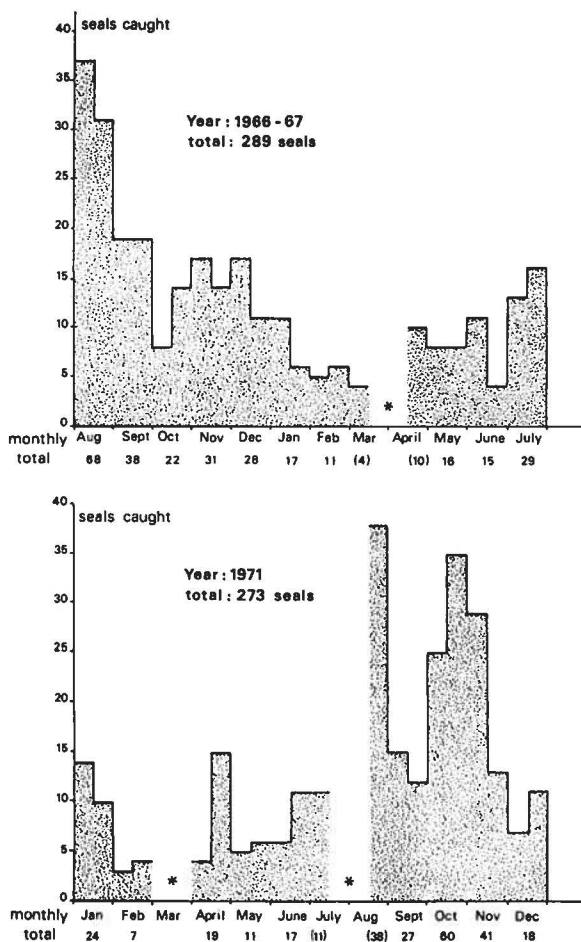


Fig. 31. Variations through two annual cycles of the number of seals caught by an experienced hunter from Pikiitsi (I.B. born in 1928). Number of persons fed by that hunter: 10.  
\*absent from his place of residence.

small fishing boat, 6-7 m long, with an inner cabin and a roof over the instruments, costing about DKK 150 000 in 1977. They could then go on long trips with their families and equipment, and even navigate in difficult conditions. They would also like an outboard motor boat, far less expensive, for shorter, quicker, local trips, for example going hunting near the coast or among the ice floes. In the late 1970s this was the situation of some hunters in Isertoq and Pikiitsi (e.g. the one in Fig. 31), but there were very few cases in other villages.

Finally, fishermen from Kuummiit who had good yields (in the best periods they could land over a ton of fish a day, with the help of their wives and children) and who fished regularly, used part of their earnings to improve their equipment (by buying larger boats, more powerful motors or a second boat for another member of the family) and their housing (by buying furniture and home comforts).

### Family and social relationships

In traditional Ammassalik society the social division of production had its customary rules. We have mentioned some of those connected with the sharing out of large catches, for example the precise rules for the distribution of parts of the animal among those who had participated in the hunt and in cutting it up.

Other rules govern the distribution of sea mammal meat among the family, whether from collective or individual catches. The products of fishing and gathering are not redistributed socially, but the rules of hospitality demand that a visitor be offered whatever is available, so these foods are offered for collective eating (seaweed, mussels, berries, angelica, arctic char etc.).

It is the hunter's wife (if she has proved her fertility) or his mother (if he is single or his wife still childless) who cuts up the smaller animals (such as fjord seal) and who has the great privilege of distributing the portions of meat according to the established pattern she has learned from her elders. The father and mother of the hunter get the sternal ribs of the seal, and the wife's parents are given the backbone. The portions given to parents and parents-in-law are about the same for all other mammals such as bear, walrus or white whale. If a family member has died the portion in question is given to the child who bears the name of the deceased and "reincarnates" him.

In addition to this well defined distribution of portions of meat to the couple's ascendants, there can also be distribution to collaterals - brothers and sisters of the hunter and his wife - and to the "family" (through "reincarnation") of the hunter's children. Thus one of the children may take a portion of meat to his "wife", that is, the widow of the dead man whose name he bears. Finally, if large seals (bearded or hooded) are caught, the circle of distribution can be extended to first cousins, aunts and uncles.

Generally the hunter and his nuclear family are left with the head, the upper part of the backbone, some of the ribs (asternal), the forelegs, sacrum and innards of the seal. As a rule, the skin belongs to the hunter's wife if he is married, unless he decides to give it to his mother, as he did before marriage, so that she can earn some money from it.

All these rules seem to have been created to ensure solidarity among the members of the ethnic group, and involved a sort of "duty" on the part of a skilled hunter towards his kin, who had a "right" to be fed by the one who possessed food. The social redistribution of food no doubt contributed to the survival of this small group when it was threatened with extinction. Numerous relatives were there to provide help in times of misfortune; but this also meant that one was caught in a network of very heavy constraints. As in any other social group, there were those who deviated, who did not share when they had something, but still came to their neighbours for help in times of want. Such persons were well

known, and oral tradition still remembers them. However, no sanctions were ever taken against them.

The only favourable period for building up food reserves was during the summer dispersal, when nuclear families scattered and lived in tents. In this period, free from the obligation to share, they could prepare *paner-teq* for the following winter.

Today, in large villages where the inhabitants seldom leave on spring and summer migrations, individualistic tendencies are developing. Meat distribution is restricted to much narrower kinship circles than it is in smaller villages.

No rules have been established for distributing money earnings among relatives in the newly-developed occupations like commercial fishing, handicrafts or wage-earning activities. Although one receives some portions of meat as gifts through the traditional system of meat sharing, it is completely accepted that one keeps money one has earned for oneself.

However, a male Ammassalik wage-earner often gives money regularly to his mother, as he would have given, had he been a hunter, a sealskin or the food share that would traditionally have been hers by right. Older women often show gratitude towards some of their sons (or nephews) who have been good to them by helping them financially. A son who is still young and living with his mother will often give her the greater part of his wages, so she can plan the budget for the whole family. A married son living in another house will give his mother small sums of money when he goes to visit her.

But family solidarity demands far less of those categories of people who live on monetary resources – since there are no established rules – than of hunters, who still have to bear the weight of tradition. This has allowed some people to accumulate earnings and establish a sort of bourgeois, middle-class lifestyle on the western pattern, with material comforts, trips abroad and the like.

### III Evaluation of an accelerated evolution

#### Evolution through education

Danish educational policy in East Greenland changed radically in the mid-fifties. Until then the administrators had intended to eliminate illiteracy, giving minimal instruction in arithmetic, history, geography, natural history and Bible studies, without further disturbing the small communities of hunters in the districts of Ammassalik and Ittoqqortoormiit. The same policy was applied in Thule.

In Ammassalik, as everywhere else in Greenland, the teaching of basic literacy and Christianity went hand in hand, as they still do, although to a lesser extent, today.

Candidates for baptism (of all ages) were the first to learn to read West Greenlandic (the official language of the country, used in church, and in books and newspapers). Other dialects, such as the Ammassalik one, have taken no written form (see Gessain, Dorais & Enel 1982). First in Tasiilaq, then in Kuummiit and Kulusuk, the missionary (or minister), helped by catechists, fulfilled the double mission of evangelizing and teaching the population to read and write. The church and school would be in the same building. The instruction of children from seven to fourteen became compulsory in 1925. They were taught by the Lutheran mission staff, or, in small, isolated settlements, by a *læser* or “reader”, that is, a hunter in charge of teaching the schoolchildren of the community (most often his own) to read, write and count.

Until 1940 there was one instructor for every 15–20

pupils. Most of the instructors had no special training, apart from three catechists who had been to the teacher training college (the *seminarium*) in Nuuk. The catechists were West Greenlanders; only one East Greenlander (Karale Andreassen) had reached that educational level.

In Tasiilaq between 1938 and 1940 the West Greenlandic minister Otto Rosing trained some teachers from the east coast. He created the “first class” of East Greenlandic teachers/catechists, with six Ammassalimiut, who were to devote themselves to teaching the local population. However, only three of them remained schoolteachers (Mathias Bianco, Gustav Massanti and Valte Taunajik); the others (Valte Ikila, Massanti Akiye and Larsaj Sakariassen) gave it up.

A second “class” of six or seven locally-trained catechists was set up in 1943–45, and a third, for seven new candidates, in 1961–1963. The students in the first two classes had been picked by the minister; but for the third they were chosen from a list of candidates. These locally-trained catechists have to ensure the children’s schooling and religious education and must lead an exemplary moral life.

Until the late 1930s there was an average of 140 schooldays a year depending on the size of the settlement, and in the early 1950s it increased to 200.

In 1953–1954, when Ammassalik got its first Danish schoolteacher, and a new style of education began for

the schoolchildren of Tasiilaq, the total number of Danish schoolteachers in the whole of Greenland was 62. A second Danish teacher was posted to Tasiilaq in 1958, a third in 1961, a fourth in 1962 (in that year there was a total of 147 in the whole of Greenland). Then the villages of Kuummiit (1963) and Kulusuk (1964) got one or more Danish teachers.

In the late 1950s and early 1960s there was a change of policy. To begin with, East Greenlanders were to be treated on the same footing as other inhabitants of the country, and an attempt was made to improve their education so they would reach the same level as their West Greenlandic compatriots. As a second step, education was to become the means of bringing about a real evolution towards the modern world.

In the 1960s the Danish teaching staff increased appreciably: there were seven Danish teachers in 1964 (four in Tasiilaq, two in Kuummiit and one in Kulusuk); twelve in 1966 (six in Tasiilaq, four in Kuummiit and two in Kulusuk); sixteen in 1967 (seven in Tasiilaq, six in Kuummiit, two in Kulusuk and one in Tiileqilaaq). At the same time there were 323 Danish teachers in the whole of Greenland.

In 1966–1967 there were 472 schoolchildren in Ammassalik, of whom 466 followed the seven-year curriculum compulsory for every Greenlander between seven and fourteen; six fifteen-year-olds were furthering their education in Tasiilaq with an eighth year of school. Two special classes were established for Danish children in the small capital.

In the early 1970s there was a radical change in the educational system. Schooling was extended both by the founding of nursery schools for six-year-olds (at Kuummiit and Tasiilaq) and the addition of an eighth, ninth and tenth year to be taken either in West Greenland or Denmark (cf. p. 51). The aim of such educational facilities outside the home area was to favour integration into modern life and eventually professional activities in another area, since a decrease in the population of the Ammassalik district was deemed desirable. The integration of young Ammassalimmiut on the west coast or in Denmark seemed at the time a possible solution to the "overpopulation" of the area. Other suggested approaches were a decrease in the birth rate and a redistribution of the population along the east coast. But we have already seen that real assimilation in West Greenland or Denmark was extremely difficult for most of these young people.

Educational expenditure in the 1970s has been considerable. The school in Tasiilaq was enlarged and modernized a first time after the *pilaraq* of 1970 and a second time in 1979–1980. The Kuummiit school was made four times as big in 1972–1973. The new school in Isertoq was built in 1971. A dormitory with room for 24 was opened in Tasiilaq in 1972 for the children of families going on long-distance migrations and fourteen, fifteen and sixteen-year-olds from small villages (Sermiligaaq, Tiileqilaaq, Isertoq and Ikkatteq) wishing to further or

improve their education, since the quality of teaching in the small settlements was not up to that of the more important centres like Kuummiit or Tasiilaq.

In 1972, of the 41 teachers in the area, 25 were Danes, six were West Greenlanders and ten East Greenlanders. There were some 580 pupils aged from seven to fourteen. In other words, there was one teacher for every fourteen pupils, and one Danish teacher for every 24.

This shows how efforts were being increased to teach the children Danish and make them bilingual.<sup>51</sup> But difficulties arising from complex linguistic problems are a real handicap for some Ammassalik schoolchildren.

In fact, when they first go to school, the young Ammassalimmiut have to learn two new languages: Danish, which is totally foreign to them, and West Greenlandic, which, although it is closer to their own language, is incomprehensible since the vocabulary and pronunciation of West and East Greenlandic are so different. Schoolbooks are written in languages they do not understand and Danish teachers have difficulty communicating with their pupils. They teach mainly Danish, arithmetic, geography, biology, English or German, using audiovisual equipment – indispensable for making themselves understood by the pupils. Greenlandic teachers mainly teach written and spoken Greenlandic, history, religion, music and singing, arts and crafts (sewing skins and beadwork, carpentry, hunting and fishing techniques). As a rule, Danish teachers do not stay long enough in the country to learn the language properly. In East Greenland they stay for an average of two years and then go to a new area or return to Denmark.

Linguistic problems have been variously dealt with in different periods. Before 1963 children began their schooling by learning to read Danish and Greenlandic at the same time. Later, at the request of a committee of parent-teacher representatives, it was decided that they would be taught to read Danish only for the first two years of school. This was because children experienced great difficulties at first, and because Danish words were shorter than Greenlandic ones, so it was assumed that it would be easier for them to learn to read in Danish and postpone learning to read Greenlandic until their third year. This option was discussed and disapproved of in Copenhagen in January 1967, at a conference of psychologists, linguists, educationalists, representatives of the Ministry for Greenland, and Danish teachers working in Greenland. The conclusion of this conference, based on evidence from other countries (the Philippines and the Soviet Union) was that it was inadvisable to begin reading in an unknown language, and that the children should preferably learn to read in their own mother tongue, and that they should begin on spoken Danish but put off learning to read it until later. In 1976–1977 the educational system was as follows: teaching was exclusively in Greenlandic for the first school years in small villages; in villages with Danish teachers teaching was done in both languages, with a



preference for Greenlandic for the first two years. Danish was kept for conversation and teaching arithmetic.

The children of Ammassalik must acquire some knowledge of West Greenlandic before learning how to read and write it. This is why they do not actually learn to read properly until their second year at school.

These linguistic problems are indubitably one of the major reasons for the low educational standards in the district, despite all efforts to improve them. According to the District Education Officer the level of Ammassalik schoolchildren in 1977 was still well below that of any part of the west coast, including small settlements.

He attributed the unsatisfactory results to the absence of an educational tradition in the area. Since school was still a recent institution (essentially post-war) parents were on the whole not really interested in their children's education. They did not encourage them to attend regularly. School absenteeism without reasonable ground (sickness or migration of the parents) is very high, particularly in Tasiilaq and Kulusuk, and teachers have always deplored it. In Kuummiit attendances seem better – apart from some families brought back from Skjoldungen – and in the small villages the teacher can always send for the missing pupils. But in Tasiilaq and Kulusuk unjustified absence is high, particularly among 13–15-year-olds. According to Danish teachers the reason for many school failures is lack of understanding on the part of parents, who ask an adolescent to do housework when he should be leaving for school, or who do not bother to find out if their child has actually gone to school or is off playing somewhere.

Those responsible for education think that these problems will die out in time, and that success in the world today can only be achieved through a stronger educational system. Three optional years have been added to the compulsory seven-year curriculum so that every youth who wishes to further his education can do so, regardless of his capacities. In 1977 the school in Kulusuk could take some 14–15-year-olds for an eighth year. The Kuummiit school had an eighth and ninth year (for 14–16-year-olds) and in Tasiilaq there was a tenth year (taking pupils up to 17). About a hundred young people attended these classes after their compulsory schooling was over.

Going to school in Denmark or West Greenland often posed integration problems for young Ammassalimmiut away from home, and made it difficult for them to feel at ease in their own society when they came back after four years (with two months' holiday a year at home). It was therefore decided that in future young Ammassalimmiut would be kept in Tasiilaq as much as possible. A new hostel was built with room for more than forty students. Only a few young people over 17 would be sent to Denmark, when they were more mature and therefore less vulnerable.

This extension of schooling up to the age of 17 and over (with the possibility of doing an 11th or 12th year and leaving school at 19) delays entry into active life.

For some students the school cycle, with a final exam in the 9th or 10th year, leads to professional training (for secretarial work, accounting, management, administration, navigation, mechanics, electrical engineering, child welfare work, the health or education sectors, etc.). But for others it is just a longer delay before the real life that awaits them as hunters or fishermen.

Even after three years of special preparation, not many Ammassalimmiut reach the level of the Danish secondary school diploma (*realeksamen*). Until the summer of 1967 only four had succeeded (two women and two men). Later some tried to go on to university but gave up after a short time. The personal difficulties they have to face are essentially due to feelings of insecurity and loneliness when living in Denmark.

What is most needed today, particularly since the introduction of Home Rule in Greenland in 1979 and the decision to use Greenlandic as the main and official language of the country, is a sufficient number of Greenlandic teachers at the same educational level as their Danish counterparts. This would provide a new basis for an educational system better adapted to Greenlandic ways of life and thinking than the system specific to western society. The teachers' training college in Nuuk has begun to train the people who will be in charge of Greenlandic education in future. It would be best for the Ammassalik district if it had its own teachers – this would alleviate the linguistic difficulties mentioned above. In 1979 there were only one or two people willing to undertake this type of training.

## Leisure, celebrations and culture

The penetration of western culture into Ammassalik society did not only affect material life: social and cultural life were influenced just as much.

During their lengthy stays abroad young people discovered and took a liking to outdoor sports like football, skiing and skating. They were also won over by modern music and dancing, comic books and all sorts of Danish magazines. Older people, even if they had no opportunity to go abroad, began to develop a taste for the cinema, dancing, and, more recently, television.

Today collective leisure activities are mainly organized either by clubs and associations (women's, hunters' and fishermen's associations, sports clubs, scouts, the *Blå Kors* Temperance League, youth clubs for those from 14 to 18, the Tasiilaq television club) or by winter evening schools (where teachers run adult courses in Danish, Greenlandic, English, arithmetics, the social sciences, home economics, arts and crafts, music and singing, etc.). There are also film shows, bingo evenings and dances at the local meeting houses. Tasiilaq, as the district capital, is best served in terms of the frequency and variety of entertainment, and this is one of the rea-





The district's capital, Tasiilaq, during the winter. While the boats are caught in the ice, the Ammassalimmiut use dog sleds to move about. (Photo J. Robert-Lamblin, 1977).

sons why it attracts young villagers. But villagers also have regular opportunities to see films imported from Denmark, or to go dancing once or twice a week in the meeting houses that have now been built everywhere, except in the very small settlements of Ikkatteq, Qernertivartivit and Pikiitsi.

Visitors are frequent in private houses. Greenlanders spend much of their spare time visiting relatives: everyone meets and exchanges the latest news and gossip over a cup of tea or coffee and slices of buttered white or brown bread.<sup>52</sup> The old competitive games of the past (string games, cup-and-ball games, exercises performed on a sealskin strap stretched across the room) have been replaced by card games. These are often played for money and are extremely widespread. The stakes can sometimes be very high. Women play among themselves for single cigarettes (tobacco and cigarettes are heavily taxed and very expensive in Greenland) or for money – but for smaller stakes than men. The men, once they have lost their cash, may stake personal belongings like watches and cameras, or even their hunting equipment, right up to their motor boats. Since the gambling partners are usually the same people, what is lost one evening can be won back the next, and for the most part the money and goods circulate within the same circle of gamblers.

Among the Ammassalimmiut traditional celebrations

were occasional in the sense that they were promoted by particular events that were difficult to predict – such as the first steps of a child, the first seal or bear hunted by a young boy, the arrival of visitors, etc. The celebration was improvised after the event. Whenever possible, a whole seal (*ilivitseq*) that had been preserved underground for several months would be brought out, and the joy and excitement caused by the intoxicating effects of consuming the raw, semi-putrefied meat (*migiag*) would lead to singing and drum-beating, to short theatrical scenes performed by people with masks and faces blackened with soot from the lamps, grotesque mimicry to make the audience laugh, and the narration of legends and tales of hunting and travel accompanied by traditional gestures vividly illustrating the words. Sometimes these feasts would end with the blowing out of the lamps and exchanges of partners in the dark.

To these spontaneous celebrations, some of which have survived in somewhat altered forms, such as the celebration of the first seal killed by a young hunter (*pi-saarteq*), have been added the various precisely-dated holidays taken directly from the western calendar and western traditions: Christmas, New Year, the Epiphany, Easter, the first day of school (at the age of seven), birthdays, christenings, confirmations and weddings, etc.

Lacking traditional models (except perhaps for some

reminiscences of past celebrations found, for example, in the Epiphany celebrations, see Nooter 1975) these holidays are celebrated in western fashion. Guests are invited, with the time specified. White cloths are put on the tables and candles are lit. Coffee cups, cakes and cigarettes are laid out for the visitors, who follow one another at specified intervals, as the houses are too small to hold everyone at once. The presents people bring at birthdays and confirmations can be of any kind: implements, toys, personal accessories, cosmetics, etc., bought from the shop, or simply some money.

Birthdays can be celebrated in the absence of the person concerned. Parents will invite people on the birthday of one of their children who is away in Denmark, or on the birthday of a child who has died.

Important events like weddings, confirmations or special birthdays (the 70th, for example) are sometimes celebrated sumptuously at great expense in reception rooms: in the villages at the meeting hall, with most of the local population invited; in Tasiilaq at the hotel restaurant or at the "club" (the meeting place of the association for promoting contacts between Greenlanders and Danes).

The formal Greenlandic costume has been borrowed from the west coast, and is worn by some East Greenlanders to church on Sundays, and by others only on special occasions such as important religious celebrations, christenings, weddings or confirmations. For the men it is a white cotton anorak, black trousers and black and white *kammit* (boots). The women wear thigh-length boots made of a combination of fur, leather and embroidery, sealskin shorts and a cloth anorak, covered with a large neckpiece of beadwork, and with a fur collar and cuffs. Children often wear their formal costume on their birthdays and on their first day at school.

Because of the many occasions for meeting and exchanging presents, food and news, Ammassalik social life is very intense, and family ties are constantly reaffirmed and strengthened. But now that there have been so many changes in lifestyle and the Ammassalimmiut have become infatuated with things from abroad, what is left of the Ammassalik artistic and literary heritage that was transmitted in the past from one generation to the next by oral tradition?

The radio plays an important part in the transmission of news and culture from the outside world. In every household, however isolated, there is a transistor radio, and everyone listens with great interest to the world news (in West Greenlandic). Stories, tales or chants from the west coast are also broadcast frequently.

The older Ammassalimmiut have not forgotten their own culture: in the villages there are still occasions when tales passed down from ancestors are recalled, or the old songs are sung accompanied by a real drum or anything available to beat out the rhythm on. As a rule, such a performance of songs and mimes is started off by someone being slightly intoxicated; the audience increases as the news spreads through the village. During

my first stay, in 1967, I saw several such spontaneous performances in Tiileqilaaq, Sermiligaaq, Kulusuk and Kuummiit. The stock of tales and songs of some of the storytellers was vast: Odin Maratse, Widimai Kunak and Elvira Kuitse were heirs to the culture of ancestors (Kuitse, Kunak and Maratse) famous for their poetry, their "duels of songs", their personalities and their actions. But many other Ammassalimmiut still had a good knowledge of oral tradition, having listened to it all through their youth.

As the old die and the young favour North American folk tradition rather than that of their own culture, the things that are imprinted in the memory only may well die out, unless some young people from Sermiligaaq, Kulusuk or anywhere else manage to start, before it is too late, a new fashion for singing with the drum, tales and short theatrical scenes among their generation.

The traditional hunter's narrative, with abundant detail and illustrative gestures, told when he returns home to his assembled family, is still performed by those who live by hunting. But fishermen and wage-earners do not have experiences worth recalling or that can win the attention and admiration of everyone when they return home.

## Religion

By the mid-nineteenth century, all the West Greenlanders had been more or less exposed to evangelization by the Dano-Norwegian Lutheran Church or the Moravian Brethren (a German religious community with several settlements in Greenland from 1733 until 1900, see Gessain & Robert-Lamblin 1974). Towards the end of the century it only remained to spread the good word to the pagans of the east coast and of Thule. The Moravian Brothers who settled in the south west at Friedrichsthal (later Frederiksdal, now Narsaq Kujalleq) were the first to establish contacts with the East Greenlanders who came to barter at the Pamialluk trading post. As soon as the missionaries heard of the arrival of some umiaks from the east, one of them hurried there to preach the scriptures to the "pagans". But East Greenlanders left quickly once their commercial transactions were over, sometimes promising to come back the following summer.

One of the Moravian missionaries, I. Brodbeck, even intended to set up a new mission on the east coast. In 1881 he went on a voyage of exploration from Friedrichsthal in an umiak. But this extremely difficult expedition took him no further than Kangerlussuaq (that is, Lindenow Fjord, below 61°N) and he met no local inhabitants except two umiak crews returning from Pamialluk. Upon his return, however, he decided to found a mission combined with a Danish trading post in the area of the great fjord he had just visited, thinking that

the inhabitants scattered farther north would converge on that point. Brodbeck died in 1884 without having realized his project.

In the same year Holm discovered the Ammassalimmiut and spent the winter in the Ammassalik area. His travelling companion in the umiak, the West Greenlandic Lutheran catechist Johannes Hansen, also known as Hansêraq, had accompanied him, officially to be his guide, but also to bring the scriptures to the pagan Ammassalimmiut. "Hansêrak preached on the way when they met pagans, and during the winter spent among the pagans. He was thus the pioneer of missionary work on the east coast" according to the Rev. Frederik Balle in his history of the Lutheran mission in Ammassalik (Ludwigs 1921: 95 – quotation translated from the Danish).

Actually, the Danish Lutheran Church was anxious not to let the German Moravian Brethren attract East Greenlanders to Friedrichsthal or set up missions on the east coast. Instead the joint establishment of a trading post and a permanent Danish mission in Ammassalik was realized in 1894, ten years after Hansêraq's "pioneer" work.

The first minister in Ammassalik was a Danish missionary and theologian, Frederik Carl Peter Rüttel. He held his first religious service in 1895 and began teaching religion and general school subjects.

The first baptisms of the Ammassalimmiut took place in Tasiilaq on April the 16th, 1899. There were eight people – seven women and a young boy. Among the first to be converted were two widows aged 44 and 31 and their daughters of 14, 13 and nine; a married woman of 33 and her nine-year-old son (her husband, a shaman, was baptized two years later and asked for a religious marriage ceremony); and finally a sixteen-year-old orphaned girl. Other baptisms followed. The first Christian marriage ceremonies were held on April the 23rd, 1900 (four couples).

Actually, Rüttel's evangelizing seems to have been particularly hard both on himself and on the population. This was due to his own personality, his lack of understanding of a lifestyle he severely condemned as immoral, and his ignorance of the language. In the publication mentioned above the Rev. Balle mentions that before coming to Ammassalik Rüttel had spent two years in Julianehåb (Qaqortoq) learning West Greenlandic. But, as Mikkelsen says (1934: 64), this did not help him to understand the language of the Ammassalimmiut, and he had to be helped by Johan Petersen.

Ejnar Mikkelsen has some harsh words to say about Rüttel, who stayed in Ammassalik alone for six years, from 1894 to 1900, to carry out his mission. After 1900 he was assisted by a West Greenlandic catechist, Henrik Lund. Mikkelsen accuses Rüttel of having destroyed the fundamental ties that ensured the social cohesion of the ethnic group, and of having plunged the East Greenlanders into a state of total confusion reminiscent of the fate of "pieces of driftwood tossed by the seas and

thrown up here and there as it pleased the storms" (1935: 65 – translated from the Danish).

When Rüttel left Ammassalik in 1904 after a stay of almost ten years 62 people had been baptized. He was succeeded by a West Greenlandic minister, Christian Rosing, who stayed until 1922 to further and complete the work of conversion. Until 1910 he was helped by a West Greenlandic catechist, from 1910 until 1914 by two, and from 1914 onwards by three. Among the latter was the first Ammassalik boy to have been baptized, now a catechist (Karale Andreassen).

When the church in Tasiilaq was consecrated in 1908 there were some 200 Christians. The number increased regularly, and on July the 3rd, 1921, exactly two hundred years after the arrival of the Norwegian minister Hans Egede in West Greenland (Godthåbsfjord – the date marks the beginning of the colonization of Greenland by the Kingdom of Denmark and Norway) the last pagans of Ammassalik finally joined the Christian community by being baptized.

The last to become Christians (twelve men and eleven women) were two families from the Sermilik area (one from Qeertartivatsiaq, the other from Toqqulaaq – see Appendix IV). One of the families was descended from Singertak, and consisted of four adults over the age of 20 and five children under 20. The other family was descended from Ujarneq – six adults over 20 and seven children under 20. Moreover, this group included a 19-year-old motherless girl from Suunaajik on Ammassalik Fjord, who had become a servant in the minister's house.

In 1921 the annals of the Lutheran Church in Greenland could proclaim with some satisfaction that ancient beliefs had disappeared among the East Greenlanders, that they were no longer afraid of evil spirits, and that their way of life had totally changed: there was no more exchanging of wives, "blowing out of lamps" or polygamy. Murders, bloody vendettas and "pitiless killings" of children and old people were no longer practised (Ludwigs 1921: 107).

It is absolutely certain that conversion profoundly changed the Ammassalik customs and way of life. We have shown the social and demographic consequences of these changes in the first part of this work. Just as certainly, shamanism has disappeared. There are no more of the ceremonies where the *angakkeq* or shaman called in a trance on his auxiliary spirits to help him re-establish the disrupted order on earth through the various divinities who ruled the outside world. This was done in cases of illness or poor hunting.<sup>53</sup> These practices were combated ruthlessly and have disappeared: shamans and apprentice shamans have died or become Christians. The conversion and baptism of the shaman Maratse in April 1912 were welcomed with particular joy. The conversion of Qio (Georg Qúpersimân) who was undergoing the long training to become a shaman, and who was baptized in February 1915, is of particular interest, since the story of his life when he was still pa-

gan was recorded and published by O. Sandgreen (in Greenlandic in 1972, and in Danish in 1982).

But it appears equally certain that the conversion of the Ammassalimmiut was realized at the expense of a deterioration in the balance between this ethnic group and the world in which it lived, as well as the destruction of many fundamental values. To take just a couple of examples, those who had been baptized were given foreign Christian names, discontinuing the traditions of their ancestors, and the men were made to cut off their long hair. Holm, writing about his stay in Ammassalik, says: "When I asked them for a lock of their hair, they usually said that their father had told them that they were never to have their hair cut ... or they would die" (Thalbitzer 1914: 86). Holm adds that this can be explained by the fear that an *ilisiitseq* would use the hair to make a *tupilak* against its owner.

The distress of the first Christian Ammassalimmiut is expressed by Georg Qúpersimân: "It was very strange, and we were full of doubt when evangelization started here. We had many customs and various habits which we thought we could not abandon; by forsaking them we would have destroyed ourselves" (in Sandgreen 1982: 181 – translated from the Danish). "... It was hard to see that things we had spent such a long time learning with such difficulty were now claimed to be useless. Now they were not useful in any world; we had to stop considering them in any way" (ibid.: 182).

It is very hard to appraise the intensity of religious feelings in contemporary life, but it seems that the pre-war generations were most marked by the influence of minister and catechist. They go regularly to religious services, they have Biblical pictures in their homes, they sometimes talk about God and they have frequent contacts with representatives of the church. Young people, on the other hand, seem to have forsaken religious practices after having been christened in childhood, given religious instruction in school and confirmed at 14. They do not go to Sunday services, except if there is a ceremony connected with their family – a wedding, confirmation or christening. At ordinary Sunday services the congregation consists mainly of older people, a few 40-year-olds and children with their parents and grandparents. Members of the Danish community do not go to religious services.

In the villages, services are held in West Greenlandic by the catechist. He reads psalms and preaches, and the congregation sings hymns. When the minister, who lives in Tasiilaq, goes on a tour of the villages in the summer, he celebrates confirmations and weddings and gives communion. In small settlements the religious ceremonies are better attended than in larger centres like Kuummiit, Kulusuk and Tasiilaq.

The important stages of religious life are baptism, confirmation and the ceremonies for the dead. The wedding is just a regularization in front of the minister of an already existing situation and an occasion for social celebration.

In the baptismal ceremony the representative of the church officially names the small child presented by his parents. (Before its baptism the child has no first name in official records: only its birthdate, sex and the names of its parents are recorded). The religious ceremony functions as a sort of extension of an important and intimate family ceremony when the new-born baby is given its various names by its mother, grandmother, aunt or the midwife who has brought it into the world, and accepts them. If the child cries a lot, it is taken to have refused them. Even today, someone's name (*aleq*) is one of his vital attributes, and is part of his soul. The body (*timeq*) will die, but the name is immortal. It will pass into another body, and then into another, and so on. The principle of the "reincarnation" of the name, which we have mentioned several times, is basic to most social ties even today, and determines the system of family upbringing peculiar to Eskimo culture.

Confirmation marks the end of catechism training and entry into the world of adult Christians. The Ammassalimmiut have assimilated it to a sort of rite of passage from adolescence to adulthood. In fact, until the recent extension of schooling it also marked the end of education for 14-year-old pupils and their entry into active life. This very important religious ceremony is celebrated by a service several hours long, followed by social festivities planned well in advance.

The Christian idea of death and a life hereafter was not an utterly foreign concept to the Ammassalimmiut, whose own concept of the world included two different places (the sky and the bottom of the sea) where the "souls" (*tarneq*) of the dead would go, depending on the life they had led on earth. Today, however, death rituals, prohibitions related to the period of mourning and burial customs are completely different.

In traditional society, as a rule, the body was thrown into the sea. Sometimes it was wrapped in a large seal skin and put in a stone shelter. The deceased was accompanied by his personal possessions, tools, weapons, drum and kayak (see Holm & Thalbitzer 1914: 75; R. Petersen 1966–1967 and 1968).

After a death, the members of the household, particularly the closest relatives of the deceased such as the widow or widower quickly performed purification rites for themselves and the house by pronouncing certain formulas. During the period of mourning they had to follow certain rules of behaviour and respect many taboos. There were different practices for men and women, but it was essential to observe them in order to avoid the numerous dangers that threatened the living until the spirit of the deceased had reached the country of the dead.

These customs were related to ancient shamanism and disappeared with it. Lutheran religion changed burial customs and mourning rituals.

After death, the body is placed in a mortuary chapel to await the religious ceremony. During the service the congregation put little bunches of artificial flowers tied



with ribbons on the coffin, then follow it to the cemetery, where another shorter religious ceremony is performed at the grave. Graves today are marked by a cross and decorated with wreaths of plastic flowers.

A few years ago enclosed cemeteries were established on the outskirts of the towns and villages. Previously, graves were scattered here and there, sometimes among the houses. I remember an old woman, in 1967, who was afraid of being buried in the new Tasiilaq cemetery, far removed from the town, where very few people had as yet been buried. She feared the spiritual coldness of isolation and loneliness and would have preferred to be buried among the houses of the living.

When they feel that death is near, some old people decide to "confess" about their lives for those who are close to them: they reveal in great detail what no one knew about them before. In 1967 I witnessed one of these "confessions". The narrative, told to the serious and silent family who know that the end is near, can last several days. In traditional Ammassalik society public confession was supposed to neutralize the power of things that could otherwise have evil effects – chants, magic formulas or actions. Thus formulas pronounced in front of several people would lose their force. These public "confessions" were made in the face of danger or at the time of death.

The prospect of being reborn in another, young body is seen as something reassuring in the face of oncoming death. It is the duty of the family to make sure that the "name-soul" will not wander in the cold by giving it another body as soon as possible. In the context of demographic expansion this is no great problem, and great personalities have even given their names to a considerable number of children. Thus, up to and including 1976, 21 of the little girls of the district had received, among other names, that of Elvira Napajgutdlak, who died in July 1968. Samuel Mikaelson of Isertoq, who died in May 1968, had 17 babies named after him, and the name of Odin Maratse of Sermiligaaq, who died in April 1974, had already been retransmitted 16 times 21 months after his death.

Finally, it is worth remarking that some older people have still been buried as recently as the end of the sixties with their personal belongings – drums, tools or weapons.

Despite assertions to the contrary on the part of representatives of the Lutheran Church, some ancient beliefs have not disappeared, for example that wandering spirits threaten and frighten the living, especially when they are alone. Curious or disquieting events are often mentioned in conversation, suggesting belief in the presence of, or even meetings with very frightening supernatural beings. Tales of monstrous-looking spirits are often told and taken very seriously. There is the *kii-appak* or "big face" – a mythical being with no body, just an enormous head on legs, who often appears at windows during winter darkness and strikes terror into the household; the *kuupaaieeq* – a monstrous woman

with metallic nails; there are beings that haunt the ice cap, and there are the *qivitteq* – men or women who suddenly disappeared while they were out, but of whom it is said that they are not dead, but live in the snowy mountains; sometimes their footsteps can be seen in the snow years after their disappearance.

These beliefs, with surprising syncretism, combine old Ammassalik notions with new ones borrowed from West Greenland like the *qivitteq*,<sup>54</sup> or even from Christianity (by bringing in the Devil – *diaavulu*). They reveal a need to understand the inexplicable and to put a name to one's fears. The use of charms, the wearing of amulets, the fear of irritating the dead by pronouncing their name before they have been "reincarnated", are all part of Ammassalik daily life.

It is said that the evil magical practices of the *ilisitseq* still lead to tragedies. These people (men or women) are said to use their evil power secretly. In the past their actions were the opposite of those of the shaman or *angakkeq*. However, some shamans were known to have performed both functions, one openly and one in secret. The original *tupilak* was the implement created by an *ilisitseq* from various materials (animal or human fragments, pieces of clothing). It was then "animated" by its creator and thrown into the sea to go and kill the person against whom it was made.

Sudden tragic events like accidental death while hunting, a quick-acting fatal disease or the disappearance of game are still attributed to evil acts intentionally performed by people wanting to do harm by creating a *tupilak*, or by pronouncing certain words with a pernicious influence on human beings or animals.

For example, an old man was considered responsible for the death of a woman's children. A midwife had lost seven of her nine children, either at birth or when they were a few weeks or a few months old – four boys and three girls, born in 1951, 1954, 1958, 1962, 1964, 1966 and 1967. It was said that the old man had dug up a child's body and used it to make several *tupilak* against the woman. The man was still alive in 1979.

Another man was thought to be responsible for the illness and death of a woman in 1960 (according to official records she died of cancer), and for the disappearance of the narwhal after 1956. It is said that he stood on a promontory overlooking the sea and enjoined them to leave the areas close to the villages, and that the "sea goddess" called them all back. The man died in 1973.

A very sick woman in hospital was thought to have provoked the death of someone from her village in order to get well. She actually did recover, and died later in 1970.

This information was mainly collected in 1967. Several other examples could be given of the supposed use of such powers.



## Social disorders related to accelerated evolution

The considerable psychological problems experienced by the Ammassalimmiut in adapting so rapidly to changes affecting all areas of life and values – culture, religion, the family, society, economy, lifestyle – take various forms and sometimes lead to tragic situations. All generations are affected, but to varying degrees.

There are cases of acute anxiety, requiring the prescription of tranquilizers or neuroleptics by doctors and their staff; instability in studies or professional occupations; feelings of helplessness and frustration, leading to passive or aggressive behaviour; the destruction of the family nucleus by the refusal to marry, or by separation or divorce; a strong tendency to alcoholism; and violence committed against others or oneself. All these are expressions of a social unease that affects the population of Ammassalik today, as it does among other arctic peoples with the same cultural and biological background: people from Ittoqqortoormiit, West Greenlanders, Inuit from Canada, Eskimos and Aleuts from Alaska (see for example works by J. and I. Honigmann, Brody, Kraus and Buffler, etc.).

### Alcoholism

In West Greenland alcohol problems are not recent in origin. According to Inge Lynge (1978: 33) the Eskimos of the west discovered the effects of alcohol through contacts with European whalers – that is, before the 18th century – and were exposed to it also after 1721 and the Dano-Norwegian colonization. There seem to have been problems from the beginning: alcohol had to be prohibited in 1782, and later rationed.

Things were different in East Greenland, where the sale of alcohol to the local population was strictly forbidden until 1956. Then it was limited, and finally the ban was lifted. During prohibition, however, Danes and West Greenlandic civil servants could buy spirits for their personal consumption.

The accession of Greenland to the status of a Danish province in 1953 gave the inhabitants the right (from the 1st of January 1955) to buy alcoholic drinks like all other Danish citizens. According to Inge Lynge (1978: 34) the consumption of imported or locally-made alcoholic drinks (for example *immiaq*, made with raisins, sugar, yeast and water left to ferment for several days or boiled for several hours) then became twice as high as in the rest of Denmark.

As we have seen, the small isolated territories of the sea mammal hunters in the north (Thule) or the east (Ammassalik and Ittoqqortoormiit) had in many ways retained a special status as regards the import and sales

of alcoholic drinks. In Ammassalik from 1956 until 1962, beer, wine and spirits were no longer prohibited, but were rationed for everyone, foreigners and locals alike. The ration was 50 bottles of beer and six bottles of spirits a year for everyone over 21. By 1963 these drinks could be sold freely subject to certain regulations on days and places of sale. In 1979, after the introduction of Home Rule, the new Greenlandic government once more started a rationing system.

East Greenlanders quickly learned to like the taste and the pleasures of drinking spirits when they had the opportunity, despite prohibition, to try this new type of drink in the homes of some civil servants. They began making *immiaq* when alcohol was still officially prohibited or rationed for them.

Alcohol consumption became more and more widespread among the Ammassalimmiut after the mid-sixties, and began to create serious problems.

Today alcoholism has become a real social scourge all over Greenland, leading to destitution, delinquency, crime, self-destructive tendencies and the rapid spread of venereal diseases. According to the Greenlandic journal *Atuagagdliutit/Grønlandsposten* of the 19.3.1981, the consumption of pure alcohol per inhabitant of Greenland in 1978 was 19 litres. In 1979 the figure for Denmark was 11.8 litres; for Finland 7.8 litres; for Sweden 7.0 litres; for Norway 5.6 litres and for Iceland 4.5 litres (figures from *Nordisk Statistisk Årbog*).

Several means have been tried to lower the consumption of alcoholic drinks, among others price increases through heavy taxation (which is then used to cover social security costs in the country). But in fact high prices are no deterrent to those who wish to buy something very much, and a large share of incomes goes on drink before other expenses are covered.

Another measure tried was forbidding the sale of spirits on the day family allowances were paid, and on the weekly or monthly payday. But this led to people borrowing at high rates the previous day to buy beer and aquavit, leaving a debt to be paid the next day.

The points system introduced in August 1979 by the new Greenlandic Government led to a serious black market problem, and did not in any way solve the problem of alcoholism. Instead it aggravated social tensions so much that it had to be abandoned three years later. The system was as follows: every month all persons over the age of 18 were allowed to buy 72 "points" of alcohol. The month was taken as beginning with the person's date of birth, i.e. if he was born on the 12th of March, his month would go from the 12th to the 12th. An ordinary 45 cl. bottle of beer represented one point, a normal bottle of wine (12%) six points, a bottle of high-proof wine (20%) 12 points, and a 75 cl bottle of aquavit 24 points. The basic idea was to reduce general consumption and spread purchasing days over the members of the community. But the system, administered by the local authority, proved cumbersome, costly and inefficient in reducing consumption. It led to uncontrol-

led black marketing in points or beer, which could sell for as much as DKK 100 a bottle.

So far, this crucial problem has neither been solved by raising prices, restrictions on days and hours of sale, nor by rationing. Some leaders today are in favour of stopping all alcohol imports to Greenland; but others answer that Greenlanders cannot turn back, that they must learn for themselves how to drink "reasonably" as Europeans have done, and to manage their personal budgets. The problem is in fact very complex. Powerful economic interests are involved. Alcoholic drinks are imported in whole shiploads by the KGH, sometimes taking precedence over the most essential foodstuffs. On the other hand, the considerable sums spent on alcohol are partly redistributed through taxation in the form of social security allowances to the most impoverished families. These are often precisely those who have problems due to alcoholism, so we are confronted here with a vicious circle. The higher the price of alcohol, the more poverty, and the better the financial aid to families suffering from alcohol problems.

Rather than trying to find artificial and apparently inefficient means of limiting alcohol consumption, it might be more constructive to look for the deeper reasons why Greenlanders seek out intoxication at any price. Most drinkers actually drink in order to reach an advanced state of intoxication: they say so themselves when they are sober, and prove it when they have the opportunity to drink. Moreover, they never have any regrets on the following day after a drinking-bout involving fights or other incidents.

East Greenlandic society is practically divided into two groups: those who like alcohol, and who take advantage of any opportunity to get some at any cost, and those who belong to the temperance league (the *Blå Kors* or Blue Cross). Often there are drinkers and non-drinkers in the same family: different choices in the matter of drinking may be made by husband and wife, parents and children or brothers and sisters.

In Ammassalik the introduction of the *Blå Kors* movement dates from February 1958. There are regular meetings in every village, and once a year the *Blå Kors* groups from every village organize a big outdoor meeting with singing, speeches and a picnic at Tasiilaartik (Item 63 on map p. 168, Appendix IV). This impressive meeting, which I witnessed in July 1979, with boats arriving from Tasiilaq, Kulusuk, Kuummiit, Sermiligaaq, Tiileqilaaq, Qernertivartivit and Ikkatteq (but not from Isortoq and Pikiitsi), recalled the ancient yearly reunion of the ethnic group at Qinngeq (descendants of inhabitants of the same localities were meeting now), but instead of "singing-duels" with the drum, the acting out of short scenes, and contests, there were speeches on the evils of alcohol and hymn-singing. Several hundred Ammassalimmiut, men, women and children, were gathered together, going from one group to another for news of distant relatives, joking and eating boiled seal meat cooked over numerous outdoor fires.

It is impossible to know the number of *Blå Kors* members at any particular date, since it fluctuates. The option of being a "drinker" or "non-drinker" is always open. Some have given up alcohol as a result of personal tragedies – a son who sailed out intoxicated and drowned, an accident happening to a child while the parents were drinking, etc. Some *Blå Kors* members lapse from the temperance league and start drinking.

*Blå Kors* members are aware that very great sums of money can be saved by not drinking (it does not prevent some of them from eventually spending the money on gambling), and they also realize the serious evils of alcoholism – absenteeism from work leading to dismissal and unemployment, the break-up of the family, violence, fatal accidents, vandalism.

Curiously, apart from some notorious alcoholic ready to drink anything (even methylated spirits), drinkers agree with the *Blå Kors* league whenever prohibition is suddenly enforced by the decision of the local authority, which has the right to prohibit at any time the sale of alcoholic drinks in the district for a maximum period of one month; but as soon as spirits go on sale again they return to their old ways.

As a rule the Ammassalimmiut drink at home with members of their family. When they begin to get drunk they start to use foreign words when speaking to one another – West Greenlandic, Danish or even English. Often the conversation becomes heated and leads to serious arguments between close kin – husbands and wives, fathers and sons, mothers and sons, brothers and sisters – and sometimes it all ends in physical violence.

Friday and Saturday evenings are the busiest time for the police force and the hospital. A very great number of serious accidents are due to drunkenness – concussions, fractures and wounds due to blows or falls, and violent deaths. Old people have been found frozen to death in the winter a few yards from their home. Other inhabitants of the district have disappeared after taking out their boat while intoxicated. Some fall into the water in the harbour or drown in a mere puddle. Drunken mothers smother their new-born infants.

Table 41 (p. 125) shows the average consumption of alcoholic drinks per individual in Ammassalik for 1978. It must be specified that almost half the population is under 15 and does not drink alcohol, and that there are many *Blå Kors* members among the adults (the only figures I could gather in the spring of 1977 were: between 110 and 120 *Blå Kors* members in Tasiilaq, 101 at Kuummiit and 43 at Tiileqilaaq). This means considerably larger consumption figures for those who actually do drink alcohol.

## Crime and justice

The sharp increase in crime in Greenland in the sixties and its links with alcohol problems are well known (see *Betænkning om det kriminalretlige sanktionssystem i*

Grønland, 1968: 14–23). The same pattern can be observed in Ammassalik – an appreciable increase in criminal cases since 1965, and a direct relationship between increasing crime and the development of alcoholism among the Ammassalimmiut.

Until 1964 the legal system of the two East Greenland districts and Thule was different from that of the rest of the country. Districts on the west coast have had local courts of justice since 1954, but the law in East Greenland, including the settlement of disputes, was administered by the *kolonibestyrer* or *inspektør*, a local representative of the Danish Crown who held several offices – trade manager, paymaster general, judge and policeman. In his capacity as judge he was assisted by three members of the *distriktsråd*. The code of criminal law used in the area in 1947–1964 consisted of a series of rather vague stipulations known as the *Bestemmelser vedrørende Østgrønland*.

According to two former *inspektører* of Ammassalik whom I had the opportunity to meet (Ejnar Mikkelsen, *inspektør* from 1934–1951 and Kaj Jensen, who held the office from 1951–1959) the cases that came up for judgment were actually few and minor matters – some thefts and paternity cases.

In July 1964 a real court of justice with three members and a secretary, much like those on the west coast, was established in Ammassalik. The magistrate (*kredsdommer*) is not a lawyer, and is appointed by the Greenland Chief Justice (*landsdommer*). He is helped by two of the four “assessors” appointed by the local authority for a four-year period. This court deals with all civil and criminal cases – paternity suits, divorces (allowed in the area since 1967), probate matters, debtor cases, traffic offences, abuse of minors (the rape or attempted rape of persons under 15), robberies, assault and battery, homicide or attempted homicide.

Paternity suits involve identifying the father of the child of an unmarried mother. Once found, he must pay an allowance to the local authority until the child turns 16 (unless the mother marries). Twice a year the local authority gives a sum of money to the person bringing up the child, regardless of whether the father has been identified or pays the allowance. The local authority's financial aid to illegitimate children goes back to 1950. In the summer of 1967, 296 paternity investigations concerning children born after 1951 had been initiated in the three preceding years.

Before 1965 inheritance problems were settled directly by the heirs. Since that date, when a married man dies his wife inherits all his property except for his motor boat, kayak or rifles, which may be given to his sons. If both parents have died, an inventory is made, and the sharing-out of property is decided in court. But the judge only intervenes in the case of the house, motor boat or money when disputes arise. Personal belongings are shared among the children, and as a rule the one who uses an object becomes the owner.

Unpaid debts (to the local authority or private per-

sons in Greenland or Denmark) form an important proportion of the lawsuits that have been brought in the last few years. Since legal proceedings are free, anyone can bring a suit to claim a sum that is due, even a minimal one like DKK 20.

When cases are appealed they go to the court at Nuuk, and if necessary with permission from the Ministry of Justice in Denmark to the Supreme Court in Denmark.

The first local magistrate in Ammassalik was a Dane helped by an East Greenlandic interpreter, who succeeded him in 1975. Since then, the magistrate in Ammassalik has always been from the area.

The legal system in Greenland is now identical for the whole territory. Until recently, there was very little crime in Greenland, and legislation on offences and crimes was based on concepts very different from those applied in Denmark.

In Greenland, when sentences are pronounced, the social and economic conditions of the offender are taken into consideration more than the offence itself. Rapid social rehabilitation of the offender is always aimed at, rather than a sentence to a long and harsh term of imprisonment. Because of this principle the Greenland police cannot hold anyone charged with an offence for more than 24 hours, unless the investigation requires a longer delay. The case is taken to court quickly and judgment is pronounced after examination of the detailed police report, in which several possible penalties are mentioned.

Robbery, drunken driving, vandalism, assault and battery, rape or attempted rape, homicide or attempted homicide are subject to the following sentences:

- a fine, the amount depending on the offender's income. The amount varies according to whether it is a first offence or not, and according to the seriousness of the offence. The police are responsible for deducting the amount from the offender's wages or his pelt, fish or handicraft sales. It is also ensured that damages are paid to the victim.
- a ban on drinking alcohol. In this case anyone found selling or giving drink to the offender will have to pay a fine. This penalty is rarely used.
- compulsory use of antabus tablets. Delivered every day by the hospital staff, these prevent the person who takes them from drinking alcohol, which, if ingested after taking the tablet, make one extremely sick. This penalty is not often used.
- sending the offender far away from the scene of the offence. Thus, some offenders have been sent to small villages with an obligation to hunt or fish.
- finally, the more serious cases, like homicides, are sent to Nuuk, where a psychiatric examination determines whether the criminal is to be sent to Denmark for psychiatric treatment or held under arrest for some time before being sent home. This fairly short stay in one of the open prisons of West Greenland (in Nuuk, Qaqortoq or Aasiaat), where the prisoner

works in town or has vocational training during the day, and returns to the prison in the evening, is felt by the Ammassalimmiut to be rather enviable treatment. "To find some work and be fed, clothed, housed and kept warm, one only needs to commit a murder", say some people cynically. This period lasts one or two years; then the criminal goes back home and resumes his normal life. However, there is a closed section in Nuuk Prison, with room for up to six prisoners, for prisoners considered dangerous.

According to the judges who have dealt with the various cases violence and delinquency are mostly due to alcoholism. Robberies are generally committed by men between 18 and 35, looking for alcohol or money to buy alcohol. Usually they break into shops or Danish homes. Assaults, sometimes ending in homicide, are most often committed in a state of intoxication, and the victims are as a rule either close family (often a spouse) or a rival in cases of jealousy. In 1979 there was as yet no aggression towards foreigners, except perhaps verbally: there was never any physical violence against them.

Crime is mainly found among the male population. Robbery, assaults or attempted homicide are rarely committed by women. Most of those who have committed criminal offences are men of 20 to 30. Large centres, in the first instance Tasiilaq, then Kulusuk and Kuummiit, are the places where crime has risen to the highest levels.

Alcohol acts on the individual as a stimulus to aggression, which is normally controlled and restrained. Conflicts, fights and violence arise in those circumstances where the generally acknowledged rules of social control no longer influence individual behaviour.

A spectacular decrease in the amount of trouble can be observed during periods when alcohol sales are suddenly suspended. Personally, I have seen this "social calm" twice. The first time was in May 1977, when a one-month suspension had been imposed following a double murder; the second was in 1979, when the setting up of the new rationing system was preceded by a few weeks' suspension of alcohol sales. People ex-

pressed relief: "We feel secure without alcohol. There are no problems: we don't have to lock the door at night (in Tasiilaq or Kuummiit) because we are not afraid. People don't fight, they talk nicely. It's like the old days when we knew nothing about alcohol". Police calls and hospital emergencies are far fewer during these periods of enforced temperance than otherwise. In the villages, the *kommunefogeder* are in charge of maintaining public order, and midwives of treating light wounds.

Contrary to what was hoped, the rationing system introduced in August 1979 did not reduce crime, neither in Ammassalik nor in the rest of Greenland. Figures for the total number of breaches of the criminal law – robberies, crimes against property or persons, rape or attempted rape, etc., are as follows:

Year:	1978	1979	1980	1981
Ammassalik district	79	74	122	201
All of Greenland	4683	4445	4956	5399

(Figures from "Anmeldelser vedrørende overtrædelse af kriminalloven fordelt efter politidistrikter", *Grønland* 1978, 1979, 1980, 1981)

The quantity of alcoholic drinks allowed was in fact very high (too high, according to some people). In Ammassalik, the maximum yearly allowance per person in 1979 was six times as high as the one that had been decided 23 years before.

## Suicide

The population of Ammassalik is afflicted with another scourge: the increasing number of suicides since the late 1960s (Table 42). As we are dealing with a small population, we must be careful when considering figures and rates; but it is a fact that suicide is today so frequent in East Greenland (in Ammassalik and still more so in Ittoqqortoormiit, where the annual suicide rate was 266/100 000 in 1974–1979 according to Lynge 1981: 92) and other parts of the Arctic – West Greenland, northern Canada and Alaska – that some have spoken of a real "epidemic".

Table 42. Evolution of suicide in the Greenlandic population of Ammassalik and in the whole Greenlandic population from 1961 to 1980.

Years	Number of suicides in Ammassalik	Average annual number of suicides		Annual death rate by suicide for 100.000 inhabitants		Percentage of suicides out of the total number of deaths	
		Ammassalik district	All of Greenland	Ammassalik	Greenland	Ammassalik	Greenland
1961–1965	2	0.4	7.7*	19.7	22.7*	1.4	2.4*
1966–1970	3	0.6	6.8	27.0	17.9	2.0	2.4
1971–1975	6	1.2	14.2	52.7	35.4	4.1	4.9
1976–1980	15	3.0	27.6	124.9	67.5	11.4	7.9

\* 4 year period: 1962–1965, for the figures relating to all of Greenland.



Table 43. Age at death for suicides among the Ammassalimmiut from 1961 to 1980.

Age groups	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	over 50	Total	average age at death
Males	1	4	7	2	3	1	1	1	1	21	27.4
Females	-	1	3	1	-	-	-	-	-	5	21.8
Total	1	5	10	3	3	1	1	1	1	26	26.3

From consulting death certificates in Ammassalik, and enquiring about the circumstances of suicides among the population, I have gained precise knowledge of cases that have ended in death. I have also found out about a number of attempted suicides, but the figures here are incomplete, and do not allow us to measure the full extent of this phenomenon. It is quite likely that attempted suicides that are not fatal are few, as the means used by those who wish to kill themselves are usually effective. However, several young people have survived shooting themselves point-blank in the throat.

The figures for suicide in Tables 42-43 are still incomplete, since in the cases of some people who have disappeared or drowned it is impossible to know whether the death was accidental or intentional: no one, even close family, knows for sure. Of the 26 cases of suicide, 21 were male and 5 female: in other words, four cases of male suicide for every female one.

The means employed were:

	Men	Women
Firearms	12	3
Hanging	5	-
Knife	2	-
Drowning	2	-
Drugs	-	2
Total	21	5

Age-specific suicide rates (Table 43) show that the 20-24 age group is most at risk, as they constitute 38.4% of all such deaths between 1961 and 1980.

The same observation was made by Inge Lynge for the whole Greenlandic population. According to her table (1981: 90) for the 1974-1979 period, 38.4% of suicides were men and women between 20 and 24. There were five times more men than women, both in that age group and among the total number of suicides in Greenland in the same period.

R. Kraus and P. Buffler made the same observations in Alaska: "Figure 14 compares age-specific suicide rates for the Alaska Native and non-Native population and demonstrates clearly the Native pattern of suicide among the young with the age group 20-24 being at highest risk. The Alaska non-Native pattern conforms closely to the pattern observed for the US with the incidence of suicide increasing steadily with age ... Suicide among the young is clearly an emergent pattern man-

ifesting itself primarily after 1965" (1979: 145-146). The term "Native" designates Indians, Eskimos and Aleuts indigenous to the Alaskan territories. Eskimo Yupiks (from the south west) and Inupiat (from the north west) represented 64% of the "Natives" of Alaska in 1974.

This is an interesting point, because it shows a demarcation of the suicidal behaviour of today from both Eskimo tradition and the western model (as represented by the Danes or "white" Americans). Statistics show that, in Denmark as in the USA, suicide rates increase with age. Traditional Eskimo suicide was found among the elderly, who became a burden on the group - for example, men who did not feel able to hunt any more, or cripples. But the group of active males was not affected. We shall come back to this point later.

The various localities in Ammassalik where suicides occurred can be shown thus:

Place	Number of suicides (of Ammassalimmiut)
Tasiilaq	11
Kuummiit	6
Kulusuk	3
Sermiligaaq	2
Isertoq	1
Skjoldungen	1
While staying in West Greenland	2
Total	26

Of those who committed suicide, 73% were single and 27% married.

As regards causes and motives known to us, only one could be said to be a pathological case, the person in question having been treated in a psychiatric ward. In the other cases, suicide was often associated with drinking alcohol - but not always; sometimes suicide coincided with the depressive phase following intoxication. The motives were mostly affective. Suicide occurred after the break-up of a love affair, a fight with a member of the family, the departure of or desertion by a loved one. In this respect, distance from the family or society, for example in the case of young people sent to boarding schools or emigrant workers, increases vulnerability.

Another reason for ending one's life can be the feeling of having no place in society, of being useless. Young single people who often change their places of



residence and try out different lifestyles can be considered as belonging to this "high risk" group. Some situations can also be felt to be unbearable by those who have to live through them. It is said, for example, that a young man killed himself because he had to pay a pension for two illegitimate children.

Suicide also occurs in Ammassalik families who apparently make a successful breakthrough into the modern world.

Once again, Tasiilaq is the locality with the greatest number of cases. It must also be added that it is a place on which many young people converge, attracted by urban life. But the social integration of the individual is weaker here than in small villages where the sense of community is still important. In town, isolation, insecurity or frustration can be felt more acutely. We should also point out that Tasiilaq is the only place in the district where institutions separate the generations – the old people's home, the boarding school, the houses (*Ungbo*) for young single workers, the orphanage and the nursery school all help to isolate these different generations who traditionally lived together in a manner which was secure and beneficial to all.

A comparison of annual suicide rates per 100 000 inhabitants of various countries shows the alarming extent of this phenomenon in the Arctic:

Ammassalik (1976–1980)	124.9
All of Greenland (1976–1980)	67.5
Inupiat Eskimos (NW Alaska) (1970–74)*	65.0
Denmark (1979)	25.8
France (1979)	18.4
United States (1977)	13.3
Great Britain (1979)	8.5

\* according to Kraus and Buffler 1979: 144–145, who point out that these rates doubled a first time between 1960–1964 and 1965–1969, and a second time between 1965–1969 and 1970–1974. The suicide rate among the Yupik Eskimos of SW Alaska has also increased greatly between 1965–1969 and 1970–1974 (it has more than doubled), although it remains well below that of the Inupiat – 20 per 100 000 in 1970–1974. No explanation is offered for this difference.

## Aggression and violence: mechanisms for controlling them socially

The increasing violence developing today among arctic populations is a matter of concern both for the societies themselves and for foreign observers. It appears to be a consequence of over-rapid evolution in these areas, and the after-effect of the shock of the meeting of two basically different cultures – Eskimo and western – reflecting an identity crisis among the Inuit populations. Violence may be a means of expressing feelings of helplessness and insecurity for generations who do not know what values they can turn to, or what their place is in a new era when the present is unstable and the future is uncertain. They do not know what role to play in a situ-

ation they do not control and which others manage for them.

This approach sheds light on some of the difficulties arctic societies have been faced with for some decades; but it does not bring out the relationship between the traditional behaviour of the Eskimos and that of their present-day descendants. Aggression and violence were in fact part of daily life for the ancestors of the Inuit of today. However, they could be expressed in accepted and institutionalized forms, and there were social control mechanisms to prevent unbridled aggression giving way to acts of violence, which were considered as deviations endangering the integrity of the group (cf. Jean Briggs' analysis of two Inuit groups in Canada, *The origins of non-violence: Aggression in two Canadian Eskimo groups*, 1975).

As far as the Ammassalimmiut are concerned, the first foreign observers to make contact with them were particularly struck by the violence they witnessed or were told about. Fights leading to blows and wounds, homicides and suicides, were strongly denounced by westerners, and helped justify their feelings that it was an urgent task to colonize and "pacify" (by conversion) this small society which they thought was in danger not only of extinction by famine but also of self-extinction.

Holm, Thalbitzer, Rasmussen and Mikkelsen write about the brutality of some husbands towards their wives; of rivalries that could be settled by "duels of songs", but which sometimes ended in murder; of family revenge where murder was answered with murder; not to forget cases of death by magic, where "stealing the soul" of an enemy could kill him from afar; and finally, suicides (Holm 1911: 68, 72, 74, 127–129 and 145–147; Rasmussen, in Osterman 1938: 85–89; Mikkelsen 1934: 50–51).

Of violence between spouses Holm writes: "It is true that quarrels between husband and wife are by no means unusual; they are settled by the wife receiving a good whipping, or a knife thrust in her arms or legs. This puts an end to the quarrel, and they remain as affectionate as ever, that is if the wife has children" (in Thalbitzer 1914: 68). Holm gives concrete examples (ibid: 72 and 145), and adds that wives also beat their husbands.

Homicide was said to be frequent in the 19th century: "Homicide was not uncommon among the East Greenlanders. And it was nearly always men who were killed and who did the killing" (Rasmussen, in Ostermann 1938: 85).

The motives for these murderous actions were anger, often sparked off by gossip or calumny, jealousy over a woman, or the obligation of a member of a family to avenge the murder of one of his close relatives (i.e. vengeance of the vendetta type). Before the introduction of firearms, the murder weapons were harpoons, spears or knives.

Holm and Petersen (1921: 618), as well as Mikkelsen

(1934: 51) mention nine homicides in Ammassalik between 1885 and 1893. Two were done with knives, and seven with harpoons while the victims were out hunting in their kayaks. R. Gessain, however, referring to the list of deaths drawn up by Ryder, mentions only three cases of homicide in the period (Gessain 1975: 141).

In fact, among such a small and totally isolated human group living in extremely harsh conditions, the risk of conflict and tensions must have been particularly high, and social rules must have been aimed at controlling any behaviour that might have threatened the balance and security of the group.

The control of emotions, reactions or gestures that might lead to a loss of the *isima* (mind, spirit, that which makes one human) is taught from infancy through the family upbringing and strictly enforced by the family group (cf. Briggs 1978b). Among the types of behaviour aimed at making communal life easier and avoiding clashes are extreme politeness of address, the avoidance of discussions that might lead to arguments ("westerners raise their voices when discussing, and always seem to be angry with those with whom they talk", say Ammassalimmiut), ways of suggesting things rather than giving orders or advice, non-interference in other people's affairs even when something is happening very close by, respect for others and their possessions, praise of other people's qualities while modestly deprecating one's own by speaking of oneself with irony, etc. The giving of gifts, sharing and other types of exchange not only reduced individual inequalities, but may also have been due to the wish to avoid envy, jealousy or dangerous rivalry.

Despite these attempts to control aggression and avoid violence, antagonisms would nevertheless develop. If not too intense, they could be solved by humour, laughing or jokes; but when tensions ran high (as for example after the abduction of a wife by another man) the "duel of songs" was an efficient way of settling conflicts while usually avoiding bloodshed.

This remarkable social institution effected a shift from physical to verbal violence. In front of an audience which was the sole judge of the result of the duel, the antagonists stood face to face with slightly bent knees and derided each other in turn. Each opponent would stand patiently listening to cutting jibes, smiling and feigning indifference, without moving or saying anything while the other hit him on the cheekbones. Then he would answer in turn in the same vein, showering mocking insults on his rival and his family. Of course, the original subject of the dispute would be mentioned during these duels fought to the rhythm of drumbeats; but other facts and occurrences from the lives of the duellists and their relatives would also be brought up. The audience would decide by a sort of tacit verdict which of the two opponents was the winner. The loser came out humiliated by this public disapproval. However, the dispute was not often settled by one duel: they could sometimes go on for several years, each opponent preparing

new verbal weapons for the next time. The legalistic aspects of these "duels of songs" among the Inuit have been studied in detail by N. Rouland (1979).

"Duels of songs" (*ivertit*) were thus a peaceful way of settling disputes. The violence of some of the blows to the cheekbones, however, was such that those who received them had difficulty standing up and were sometimes hurt. In a well known case (described in detail by Rasmussen in Ostermann 1938: 87), at the end of the singing competition one of the combatants drew his knife to kill his rival.

Suicide was also fairly frequent in traditional Eskimo society. One of the main motives for ending one's life was the moral and physical suffering brought on by disease, infirmity, old age or lack of economic support. Suicide committed by the old, the sick or widows, who feel that they have become useless and a burden on the group, comes under Durkheim's category "altruistic suicide" (1897). The decision could be made individually or under social pressure, which could be strong and decisive, as in the example mentioned by Holm (1911: 147): "A man reproached his mother-in-law with being so old that she was no longer of any use in the world, and told her he could not understand why she did not die. After that she went down to the seashore and drowned herself". Sometimes the family would help the person in question to do it, for example by helping an old hunter to climb into his kayak for the last time, or an old woman to reach the shore so she could throw herself into the sea.

R. Gessain (1975: 139–140) analyses the four suicide cases mentioned by Ryder among the deaths occurring in 1884–1892 by placing them in their demographic and social context. There was one man of about 50 and three women of about 60, 35–45 and 14. The author says that two of the women were widows of unprolific families and therefore without the support of kin, and the third was an adolescent orphan. The man comes under the category of aging hunters suffering from physical incapacity and deciding to end it all. To these four cases Gessain added three other elderly people who died from "refusing to take nourishment" (an old couple, the man about 65 and the woman 70, and another hunter over 60 who had just lost his wife).

There are also examples of suicide as an emotional reaction to feeling deserted. Holm (1911: 147) writes of a father who was extremely disappointed by the fact that his daughter, on returning from a long-distance migration, could have chosen to go and live with strangers rather than with him. He was so saddened by this that one very cold night he lay down outside and let himself die of cold. Another example was a young woman who threw herself into the sea when she learned that her mother had taken her son-in law (i.e. the woman's husband) as a lover (ibid.: 64).

The same main causes of suicide are given by Leighton and Hughes (1955: 329): "The usual reasons for giving up one's life were sickness, suffering and the

feeling of uselessness". "A second cause was prolonged grief over the death of a loved one" (ibid.: 333).

Apart from the above-mentioned "exogenous" factors linked with accelerated acculturation leading to an aggravation of social conditions, we might wonder about some of the more "endogenous" factors that have favoured the development of new forms of violence in the last twenty years in Ammassalik. In other words, we could try to understand the internal transformations of social mechanisms that have led to situations where aggressive and violent behaviour is no longer controlled or canalized.

The fragility observable today in the social order can be attributed to several factors:

- within the family, a weakening of the moral authority represented by the "elders" or by tradition, and of the prestige of the old among the young.
- less social integration of the individual into life today, sometimes leading to "selfish suicide". "Altruistic suicide" no longer has any reason to exist in a society which cares for its old, sick, widowed and orphaned members. The social security system is such that these people are no longer a burden on their families. Today, as we have seen, apart from the case of an old man who killed himself because he felt deserted, suicide is committed by people at an active age, especially men.

- the emergence in this small society of new social classes made up of wage-earners who are relatively wealthy and share little. They save, accumulate goods and wealth, hold leading positions (e.g. ship's captains employed by the administration, managers of commercial or administrative services). The old mechanisms for reducing inequalities are therefore disappearing, and this new situation can lead to conflicts.

- finally, the probably weakening influence of the minister and catechists is shown by the recrudescence of suicide and homicide after they had been strongly condemned and practically eliminated by ministers in the first half of the century.

Peaceful means of ending conflicts, like the "duels of songs", no longer exist today, and nothing has arrived to take their place. One of the effects sought out through intoxication may be the feeling of liberation from inhibitions, since drunkenness allows one to shed one's reserve and express what must normally be concealed or contained.

Alcohol, still a fairly new phenomenon in the area, with all the evils it leads to, thus acts as a discloser of tensions, rivalries and jealousies which have no other outlet of expression.

## Conclusion

What, in the end, is the importance of the Ammassalik ethnic group we have discussed here?

In numerical terms the members of this small community settled at the eastern end of the Eskimo chain of migration, which begins in Siberia, are hardly representative of the Inuit community. Today they make up about 6% of the population of the immense and mostly deserted island of Greenland, and not quite 2.5% of the Inuit living in the Arctic between the Bering Straits and Greenland. (The Inuit from Siberia, Alaska, northern Canada and Greenland number about 100 000). However, their recent history, with its "accelerated" events is at once both universal and very particular. It has many points in common with that of other arctic areas, and even with that of various other small populations in the world, formerly isolated and now going through the same process of opening up to the outside world.

The methods used to make this study, the genealogical approach and demographic analysis, have allowed us to search for the causes and mechanisms of the transformation of this isolate since its first contacts with the western world.<sup>58</sup>

Genetically speaking, if we employ the narrow definition of an isolate – an endogamous entity tending towards the genetic homogenization of its individuals – we can conclude that in the 1970s the Ammassalimmiut still constituted an isolate.

Endogamy was maintained in Ammassalik until the 1940s, and despite the prohibition of unions between close kin (including first cousins) this led to a high degree of consanguinity between spouses, due to the smallness of the group and the contracting of preferential marriages within geographically localized subgroups. (An assessment of the genetic kinship of the Ammassalimmiut and its evolution through time has been published in Langaney, Gessain & Robert 1974). A strong natural selection due to the environment and difficult living conditions prevented the development of the serious pathological conditions associated with this type of inbreeding. However, infant mortality, which has remained high, and appears to be irreducible despite the high-quality medical care given by Denmark to the Greenlandic population for over thirty years, indicates that there are probably genetic problems among

the population. Also, the "counter-selective" effect of medical assistance has led to the appearance of cardiac and palatal malformations, etc.

In coming out of their isolation the Ammassalimmiut have had their genetic pool modified by the introduction of foreign genes of various origins: through the immigration of some West Greenlanders who have married and been assimilated into the East Greenlandic population, and the arrival of westerners – Europeans and Americans – in fairly large numbers since the Second World War. These have mostly left descendants rather than actually marrying Ammassalik women.

Until the late 1930s the number of hybrid births (Ammassalimmiut and foreigners) was very low. It increased after the Second World War, and even more so after the 1960s. The most frequent type of interbreeding is with westerners. However, because of the death or emigration of some of these children of mixed parentage one can observe that among the Ammassalimmiut of Ammassalik in the 1976 census, 89.3% still have East Greenlandic ascendants on both sides.

Migratory movements between the district and the outside world and marked exogamous tendencies – particularly on the part of the women – herald an increasing crossbreeding between Ammassalimmiut and non-Ammassalimmiut, which in turn will lead to greater heterogeneity in their genetic pool.

If, besides analysing the changes in the genetic structure of the group, we look at sociocultural aspects – which cannot in fact be strictly separated from biological ones – it emerges that transformations in social structure and cultural changes occurred earlier (paving the way for exogamy) than changes in the genetic pool, and have been shown to be more widespread and important at the time of our last observation. Indeed, just as we can speak of "genetic markers", we can identify "cultural markers" (language, religious beliefs, mythology, literary and artistic heritage) and "social markers" (marriage system, the organization of the family, the system of production).

In the various chapters of this work we have seen how profoundly lifestyles, occupations, family structure, social intercourse, cultural life, religious beliefs, etc. have been changed by the meeting between two entities as totally different as western and Eskimo culture in an environment as specific as the Arctic.

During the period when Denmark, anxious to protect this small ethnic group just emerging from "prehistory", was applying a policy of slow and careful colonization in Ammassalik (that is, between 1894, when a trading post and mission were established, and the beginning of the Second World War) the internal transformations taking place in the still very isolated Ammassalik society were due to three main causes:

- a demographic explosion due to a decreasing death rate and an increase in fertility, which led to the fragmentation of the old extended patriarchal family.
- the convergence of people on the centres with trading

posts and missions, which led to the sedentarization of these nomads.

- conversion to Christianity, which resulted in the abandoning of shamanism and the introduction of new morals, with profound consequences for family life – the end of polygamy and the stabilization of marriages.

The period of the war was marked by a loosening of Danish control and an influx of American troops into the area. The Ammassalimmiut then discovered an astonishing new material culture and technology, until then totally alien to their world.

The late 1950s, the 1960s and 1970s saw a total change in Danish policy. The isolationism originally practiced in East Greenland was given up, and all Greenlanders, whether from east or west, were to become "Northern Danes". The district was modernized, communications were developed, and efforts were made to transform this population into a western-type society through education and vocational training.

However, despite a well-advanced process of acculturation, the Ammassalimmiut have retained a cultural identity which gives them the feeling of belonging to the same "large family" – a fact recognized by the outside world.

This specificity is expressed first and foremost in the persistence of their dialect, even if it has evolved under the influence of the official West Greenlandic language omnipresent in church, school, books, newspapers and on the radio.

A certain number of ancestral social rules have managed to survive despite having undergone some modifications: family solidarity; the communal sharing of the proceeds of the hunt; the "reincarnation" of the names of the dead and the particular system of family upbringing associated with it; and the practice of adoption. Belief in supernatural beings and fear of the evil powers some people are supposed to possess are still strong.

Among the sector of the population that has remained most attached to the hunting life we can find the persistence of traditional food habits, an attachment to summer nomadism and the survival of a technology inherited from the past: dog sleds and whips, the women's knives, skin-scraping boards, bow-drills, adzes, stakes used to soften the *kamik* leather, clothes-drying racks hung over the heater, etc.

In West Greenland the Ammassalimmiut are called *tunumiut* or "back-country people", and along with the people of Thule have a reputation for being the custodians of a cultural tradition otherwise forgotten. Their West Greenlandic compatriots have a complex attitude towards them. On the one hand, there is a dominant feeling of superiority and a certain contempt for these people, whom they consider "backward". But there is also a feeling of envy and admiration, particularly now, when the very westernized West Greenlanders are searching for an identity by turning back to the sources of their culture. At the great summer meetings (*aasivik*)



inspired by the old tribal meetings such as the one at Qinngeq when *ammassat* were caught, organized every year since 1976 and attended by Greenlanders from all over the country and even by Canadian Inuit, the Ammassalimmiut are invited to demonstrate the use of the kayak, to sing and dance while beating the drum, to tell their hunting tales and legends and show their compatriots who have gone further in the process of westernization some of the material culture of their ancestors – harpoons, sleds, kayaks and the everyday implements of the past.

Today, a century after its discovery, the Ammassalik population is going through major social and economic difficulties. These are the consequences of disproportionate demographic growth in the 20th century and of certain political decisions made in Denmark concerning Greenland. The extraordinary demographic explosion of the Ammassalimmiut (in 1976 there were seven times as many as in 1896) linked to the sedentarization and regrouping of these nomadic hunters near trading posts, schools and medical services, has led to the paradoxical situation that can be observed today: in a country practically devoid of human beings, with an infinitesimally low human density, problems of overpopulation are developing.

This demographic expansion, which was not followed by a geographical dispersal towards new hunting grounds, has destroyed the fundamental balance established in the past between humans and natural resources which had ensured the Ammassalimmiut of the past total self-sufficiency. Despite a certain increase in hunting yields due to the introduction of new technologies (rifles, seal nets and motor boats) and the development of a new occupational sector – commercial cod fishing – production based on local resources is far from having kept up with the growth rate of the population.

This lack of balance between production and consumption has led to a pronounced discrepancy between imports and exports in the district. For some twenty years now the KGH sales figures for consumer goods in Ammassalik have been 10–15 times higher than those for purchases of local products (pelts and fish) by the same organization.

New socio-professional categories other than hunters and fishermen have appeared: wage-earners and craftsmen. Old people, widows and the needy are now cared for, no longer by the family group, but by a country-wide or municipally organized system of social security.

Thus the society of Ammassalik has become heterogeneous. It has diversified its economic activities, its rhythms and lifestyles, its social relationships, its leisure activities and cultural interests; and a social hierarchy is beginning to develop. There is already the makings of a bourgeois class of salaried Ammassalimmiut with well-paid positions of responsibility. They share little, save and accumulate goods and wealth, and live in western style.

So many transformations in so short a time have not

gone smoothly. In this work we have mentioned psychological problems and social disorders due to changes which have affected all the domains and values of Ammassalik life – culture, religion, the family, society, economy, lifestyles. All generations are involved to varying extents in this process. Insecurity, anxiety, instability in enterprises, passive or aggressive behaviour, tendencies towards alcoholism – these are various expressions of the social unease affecting the Ammassalik population today.

This small society, which before its contacts with the west managed its own existence and freely decided its own destiny, has all through the 20th century found itself on the receiving end of orders and counter-orders, the logic of which has most often escaped its understanding. First they were to preserve Eskimo traditions; then they were to become Northern Danes. At one point they were to develop fishing at the expense of hunting, at the next they were expected to return to hunting. Now the population was to be concentrated in a few localities, now dispersed again. Some of the population was to be relocated to the west coast, then it was to remain in the east. Young people were encouraged to leave and integrate themselves in Danish society, then they were kept in the area. It was attempted to keep all children, once born, alive by reducing mortality risks, and then reducing the number born by birth control or abortion. At first demands from the outside world for shark livers, seal blubber, fox pelts and sea mammal skins were to be met, later such efforts were stopped.

With the introduction of Home Rule in Greenland (in May 1979) the population of Ammassalik faces a new turning-point in its history. With the “Greenlandization” of institutions, will the east coast population, now confounded by the maze of contradictory political decisions, find its own way while preserving its specificity and taking its future into its own hands; or will it have to obey decisions taken, no longer in Copenhagen, but in Nuuk, the capital of Greenland?

From the demographic point of view growth has been slowed down greatly since 1969 by a birth control programme. The birth rate has gone down from 50 to 23 per thousand for the 1972–1976 period. However, at the present demographic level, and given the new habits acquired through westernization, the Ammassalimmiut must find new ways of increasing their productive occupations so as to be able to meet their own needs and limit outside assistance.

Seal hunting is a main occupation for only a minor fraction of the population. A new dispersal of families along the east coast for a return to sea mammal hunting is hardly conceivable: on the one hand because of most young people's ignorance of the necessary techniques, due to an education which has prevented them from acquiring them; and on the other because of their own disdain for this way of life. Moreover, the drop in seal skin prices observable today on the international market will only hasten the end of this type of activity, since no one



today can escape the absolute need for monetary resources to achieve a level of relative modernity in the home, clothing, transport, tools, food and leisure.

Cod fishing, which boomed at first, is subject to erratic fluctuations which threaten its development. However, there are other species of fish in the area – halibut, Atlantic wolf-fish and Atlantic salmon – which could be exploited industrially.

Wage-earning employment, which is essentially provided by an already overgrown administration, is particularly attractive to young people just out of school. It is unlikely that it could be further developed to provide work for the increasing number of youths on the job market, given the special age structure of the population (56% of the population was under 20 in 1976). Moreover, young people from the villages converging on Tasilaq are already creating problems, and an urgent need in this small administrative capital is the creation of a productive economic sector (for example a fish-preserving plant, a tannery, or an arts and crafts factory).

Local production of handicrafts has never been very extensive and remains an auxiliary occupation. It is mostly a matter of the creation of mediocre-quality souvenirs for tourists, and could certainly be better organized and developed, given the skill of many men and women with bone, ivory, wood or skins. Some craftsmen are even real artists who deserve to be known outside their own area.

In the past the Ammassalimmiut have shown a great talent for adapting their technology, economy and de-

mography to major changes such as converting from whaling to seal hunting and adapting to the scarcity of sea mammals after their over-exploitation by foreigners. Let us hope that the “compulsory civilization” (cf. Gessain 1969) to which they have been subjected for a century has not destroyed the extraordinary dynamism that has allowed them to survive in such climatic and ecological conditions.

The problems of acculturation and development in the Ammassalik district are also found in various forms in all other arctic communities. It is interesting, in this respect, to observe a recent phenomenon in full evolution. Since 1977 the Inuit of various territories (Alaska, Canada, Greenland) have become aware of their biological kinship and cultural affinities, and have decided to meet periodically to discuss their common problems and try to work out a concerted policy for the exploitation of their resources. The Inuit Circumpolar Conference, with its headquarters at Nuuk, is a permanent body created to protect and call attention to the rights and interests of the Inuit at the international level (“Inuit Circumpolar Conference”, *Arctic Policy Review*, 1982, 1: 5). Looking beyond the cultural and sporting exchanges already under way, could a vast “Pan-Inuit” isolate be in the making, abolishing tribal and national borders, favouring economic and social relations, and perhaps in the long run becoming an endogamous zone?

— — —

This manuscript was terminated summer 1983.

# Notes

1. Holm was accompanied by the Norwegian geologist Hans Knutsen, the Dano-Greenlandic interpreter Johan Petersen (Ujuât) who was to become the first trade administrator of the new colony of Ammassalik ten years later, the West Greenlandic guide and catechist Johannes Hansen (Hanséraq), by a man in a kayak and six West Greenlandic women rowers. Altogether they formed the crews of two umiaks.
2. A well known event was the disaster of June 1777 when 27 or 28 European whaling boats were caught in the ice off the east coast of Greenland at about 74°N. Some of them managed to break away from the ice-pack, but others drifted towards the south, sinking one after another not far from the coast. Some 155 men are supposed to have reached the west coast of Greenland, on foot over the ice or in boats, and from there returned to Europe. But about 320 men were lost on this hunting expedition (Nansen 1890: 293–296).
3. Greenland is a former Dano-Norwegian colony which was given to Denmark by the terms of the Treaty of Kiel in 1814, which divided the two kingdoms of Norway and Denmark. Until 1917 Danish sovereignty took in the west coast, and on the east coast only the Ammassalik area. When Denmark wished to extend its sovereignty over the whole island in 1917, Norway claimed hunting and fishing rights on the east coast. In 1924 the two countries agreed to grant Danish and Norwegian hunters free access to the parts of the east coast uninhabited by indigenous populations. This explains the interest of Denmark in starting a small Greenlandic settlement in the Scoresbysund area, north of Ammassalik. In 1931 Norway laid claim to part of the northeast coast of Greenland. The dispute between the two countries was taken to the International Court at the Hague, which recognized Danish sovereignty over the whole Greenlandic territory on April the 5th 1933. However, until 1967 Norway retained the right to fish and hunt north of Scoresbysund. In 1967 a ten-year agreement gave the Danes and Norwegians the same fishing rights along the east coast.
4. In Ammassalik the 1st of May celebrations started in Tasiilaq with a religious service, followed by official speeches made by the Mayor and the workers' representative, then by the workers' march through the streets of the town and a general invitation extended by the municipality to the population to come and drink coffee in the meeting house. Each village had a special budget for the celebrations. The Tasiilaq Danish community did not attend the ceremonies.
5. The concept of "minimum population" was analysed by the Italian scholar Livi (1949). He fixed at 500 the minimum number of people necessary to ensure the demographic continuity of a human group. According to him, with 300–500 individuals a group is in a state of imbalance. Later, this minimum population number was discussed by other authors, including Sutter and Goux, who considered other factors than the total population figure (for example, the number of marriageable individuals forming an isolate).
6. At that time the distribution of births on the west coast was as follows: 1st quarter, 105; 2nd quarter, 90; 3rd quarter, 103; 4th quarter, 102 (Bertelsen 1935: 74).
7. If we calculate the proportion of monozygotic twins, as suggested by A. Jacquard, according to the following formula:

$$P(\text{one sex only}) = \frac{P}{\text{monoz.}} \times 1 + \frac{P}{\text{diz.}} \times \frac{1}{2} = \frac{P}{\text{monoz.}} (1 - \frac{1}{2}) + \frac{1}{2}$$

$$\text{i.e. } \frac{P}{\text{monoz.}} = 2P(\text{one sex only}) - 1$$

– we obtain for Ammassalik:

$$\frac{37 \text{ twins of same sex}}{48 \text{ twins of known sex}}, \text{ i.e. } 77\% \text{ of one sex, } \frac{P}{\text{monoz.}} = 54\%$$

Thus, 26 pairs of twins should be monozygotic and 22 dizygotic, which means that in Ammassalik there should be seven monozygotic twins per thousand deliveries.

This result is very different from the one for the whole human species, which is three per thousand.

8. According to the following formulas:

*Life expectancy at birth:*

$$e_0 = 0.5 + \frac{2.5 S_1 + 4.5 S_5 + 5(S_{10} + S_{15} + \dots)}{S_0}$$

where  $e_0$  = life expectancy at birth

$S_1$  = number of survivors at age one

$S_5$  = number of survivors at age five

$S_{10}$  = number of survivors at age ten

$S_{15}$  = number of survivors at age fifteen

*Life expectancy at various ages:*

$$c_{x+a} = \frac{1}{S_{x+a}} S_x c_x - \left( \frac{a}{2} S_x + \frac{a}{2} S_{x+a} \right)$$

where  $c_{x+a}$  = life expectancy at age  $x+a$

$S_x$  = number of survivors at age  $x$

$S_{x+a}$  = number of survivors at age  $x+a$

$a$  = 1 year, 4 years, 5 years or 10 years

9. For the period 1897–1906, however, the method used leads one to underestimate the effects of the 1897–1898 epidemic. This explains the lack of correspondence between the high death rate and life-expectancy, which seems relatively high for that period.
10. But previously East Greenlandic families who had gone on the long journey south to trade in the Kap Farvel area had been in contact with diseases new to them: coryza, influenza, bronchopneumonia. Many of them died. We know, for example, from the journal of the Moravian Brethren mission in Friedrichsthal that in 1872 four families visiting from the east were decimated by influenza. Likewise in 1892, "pagans of the east" who had emigrated after Holm's departure from Ammassalik were exposed to the severe influenza epidemic in the southern region. Many of them did not survive.
11. The Eskimo system of upbringing, where the child is never subjected to constraints or punishment, and where he learns by being encouraged or advised by the adults, is connected with the principle of the "reincarnation" of the name of a deceased relative in the newborn Ammassalik child. The child "should know himself what he should do" as the ancestor "reincarnated" in the child (who is generally called by the kinship term one used of the deceased – "my uncle", "my mother", "my father", "my husband", whatever the sex or age of the child) is thus actually present once more, with his personal knowledge. This very complex custom has been analysed in several publications (particularly Gessain 1967 and 1979–1980; Robbe 1981),

- and I shall mention it several times, since it is absolutely essential for the understanding of social life among the Ammassalimmiut of both past and present.
12. This traditional Eskimo craft could carry about 12 persons, unlike the individual kayak. It was made of a driftwood frame covered by large seal skins. When the umiak was no longer used by the men for hunting whale (because of the shortage of whales) it became the women's boat. On family migrations women, children and goods were transported in it. The women rowed and one man steered while the other hunters of the family preceded or followed the umiak in their own kayaks.
  13. A Moravian missionary in charge of converting the Greenlanders of the south in the late 19th century wondered about the advisability of stopping this practice.
  14. Cases of adoption in Denmark or West Greenland were numerous in 1970–1974, but were later subjected to restrictions. Different from adoption is the case of children placed in Danish orphanages or in care in private families without having been adopted. After the *pilaraq* of February 1970, which destroyed, among other buildings, the Tasilaq school, 111 children were sent to Denmark while the school was being rebuilt. They came back, with the exception of 26, who were placed in care in Denmark in institutions or private families because they were "neglected" in Ammassalik.
  15. Nevertheless, the Perqisungualik family from the Sermilik area (settled in Isertoq from 1924 until 1935, at least) came to settle in Sermiligaaq in the 1940s. This family consisted of a widow and her children, who later married in Sermiligaaq.
  16. Nada is the only son with descendants of the great shaman or *angakkeq* Maratse (or Maraq), whose strong personality, greatly feared, and actions, are commemorated in oral tradition. Tales told by the old people of other villages and several "duels of songs" attributed to him are treasured by his descendants as their own special "cultural heritage". The shaman Maratse was born in about 1854 and died in 1923, having been baptized in 1912 under the name of Noa. He had three wives. The two first wives appeared as co-wives in the census of 1892, and the two last as co-wives in 1896. With his three wives he had 11 children known in our genealogies: five boys and six girls. But only four reached adulthood – two girls and two boys, Nada and Hjalmar. Hjalmar had no descendants. At their baptism, descendants of Maratse each kept the name of Maratse, which became their patronymic – they were in fact among the first Ammassalimmiut to have one (see Appendix III). In the 1921 census there are only three other family names – Andreassen, Kilime and Kuitse. All other Ammassalimmiut were called by their first name.
  17. F. Prioux mentions Denmark and Sweden as being "ahead of the other Western European countries as far as the propensity to divorce is concerned", and mentions a sharp increase in divorces in Denmark in the years 1971–1974 (Prioux 1977: 144–147).
  18. Motherhood among 14-year-old girls is very rare in any generation: four women born in 1936, 1951, 1957 and 1959.
  19. Venereal diseases were completely unknown in East Greenland before 1943, when the first cases of gonorrhoea were found by the American doctor at the Ikkatteq base (Vest 1948: 52). After the war these diseases spread rapidly, because of the new freer sexual morality of the young Ammassalimmiut. Danish medical reports mention 55 cases of gonorrhoea in Ammassalik in 1950, 109 cases in 1958, 109 in 1959, 151 in 1960, 139 in 1961, 87 in 1962, 82 in 1963, 265 in 1964, 108 in 1965, 291 in 1966, 200 in 1967, 403 in 1968, 398 in 1969, 366 in 1970, 358 in 1971, 537 in 1972, 580 in 1973, 593 in 1974, 956 in 1975, 930 in 1976, 981 in 1977, 965 in 1978 and 775 in 1979. Two cases of syphilis were treated in 1965, three in 1971, eight in 1974, eleven in 1975, 69 in 1976, 52 in 1977, 40 in 1978 and four in 1979. The worst period for these diseases was 1975–1978.
  20. "After the death of the body, the *tarneq* (impersonal life principle) and *aleq* ("name-soul", personal life principle) stay together for a while in the sea or near the grave. It seems that the *tarneq* will only leave the *aleq* when the latter "name-soul" finds a body to inhabit. To express the discomfort of the *aleq* temporarily left without a body the Ammassalimmiut say that the *aleq* is cold and shivers. Listening attentively, he waits for the sound which designates him, the Name, which is the call for him to reincarnate in the body of a newborn child" (Gessain 1979–1980: 408).
  21. For adoption of adults in traditional Eskimo society see Lee Guemple's analysis (1979: 52–61) of the Canadian Inuit.
  22. Lee Guemple mentions a sort of right of pre-emption among certain Canadian Inuit for maternal grandparents: "We also noted that, at Rankin Inlet, Repulse, ... the grandparents have a traditional claim to the first child born to the oldest daughter as a repayment for the mother" (1979: 77).
  23. The different sources of data used in this analysis are: G. Holm, for 1884; A. Hedegaard, for 1894–1917; T. Mathiasen, for 1904–1931; R. Gessain, for 1934; A. Høygaard, for 1936; *Beretninger vedrørende Grønland*, for 1940–1967; the *Grønland* booklets and my personal field notes for 1966–1979.
  24. The KGH (*Den kongelige grønlandske Handel* or Royal Greenland Trade Department) had a monopoly of all trade in the Greenland territory from 1774 until 1950. It handled imports and exports, sea (then air) traffic, postal services (issuing stamps) and the bank system (with its own currency). It lost its monopoly after 1950, and since then has had to compete with a few private enterprises. This organization is nevertheless still very powerful, particularly in East Greenland, where it runs the transportation of goods, passengers and mail, buys and sends to Denmark most of the local production, and sells most imported goods. The KGH has very little competition in the Ammassalik district.
  25. In the summer of 1976 the cost of transporting seven families (43 people) – some of whom were going to spend the winter in the north at Kangerlussuaq, and the others in the south at Pikiitsi and Umiivik – was about DKK 160 000–DKK 170 000. The Danish government subsidized them with 40%, the *Landsråd* (Greenlandic Provincial Council) with 45% and the municipality of Tasilaq with 15%.
  26. The model and size of the house, and therefore its price, depend on the financial means of the buyer. He requests a loan from the local authority. The file is then sent to Nuuk/Godthåb for approval. It often takes about four years to get the loan approved and the house built.
  27. In 1977 a "build-it-yourself" house cost DKK 80 000, and a two-room house put up by workers cost about DKK 300 000.
  28. For example, in the Tasilaq area, Amitsivartik, Mannginnerseerpik, Qinnngaajiva, Sarpakajik; in the Kummiit area, 'Iniliartik', Kiittaajik, Qinngeq, Qinngeertivaq, Tasilaq, Tiileqilaq (an island), Tunu; in the Kulusuk area, Akinaatsiaat, Attereq, Ikaasaartik, Immikkerteq, Ititalik, Kangertik, Noortiit, Nunakitseq, Puulortuluk, Qapiarpik, Qaarseq, Qaartuluk, 'Sitsivaneq', 'Sitsivaraq', Suunaajik, 'Taqqitta', Tasilaalik; in the Tiileqilaq or Sermilik area, Akernernaq, Ikerasak, 'Iliartalik', 'Inertivaq', 'Istua', Kaporniakkat, Kakalik, 'Kuuranek', Kuuk, Meqqivitseq, 'Narsimaleq', Nuuk, Paarnakajit, Pupik, Qipaq, Seeraq, Tasiitseq, 'Umittivartivik'. Uppat; in the Isertoq area and farther south, Ikaasakitseq, 'Ikaasattivaraq', Narsaarti, Nattivit, Nuerniakkat, 'Palilavik', Pamiattilaq, Pikiitsi, Suunikajik, 'Taqqilik', Toqqulaq, Sapangaq, Umiivik; in the Sermiligaaq area, 'Alivartik', Aammaqqaq, Aputiteeq, Ikkatteq (former US base), 'Iliitiartik', 'Putsisangaq'.
  29. Samuelli and Dora had ten children – eight girls and only

- two sons (in 3rd and 9th position in the sibling order). The girls learned to hunt in kayaks and became very good hunters, according to their father. Samuelli added: "It didn't really matter to us that we only had two sons, since the girls were like boys". Moreover, when they married, the daughters gave him six sons-in-law, hunters in Isertoq.
30. The number of Danish residents in Kuummiit in each year was: 4 in 1959, 2 in 1960, 1 in 1961, 2 in 1962, 4 in 1963 and 1964, 6 in 1965, 7 in 1966, 13 in 1967, 16 in 1968, 15 in 1969, 24 in 1970, 21 in 1971, 27 in 1972 and 1973, 19 in 1974, 16 in 1975, 20 in 1976, 13 in 1977 and 1978, and 15 in 1979.
  31. Holm and Petersen mention that in 1920 seal hunting with nets gave good results, but that it was only done from Tasiilaq and the small missions at Kulusuk and Kuummiit by civil servants and a few local people (1921: 625–626). Twelve years later, Therkel Mathiasen remarks that seal hunting with nets is becoming increasingly widespread (1933: 136).
  32. In fact the word *natsiaq* designates the young fjord seal in particular, the kind most hunted in Ammassalik. Hunters use different terms depending on the age of the seal. According to them, fjord seals are born in a kind of den, *natsialivik*, dug deeply into the ice, with long passages leading to it (these dens are much sought after by polar bears). The young seals are born in March or April. Their fur is long, light and woolly. They keep this fur for about two weeks and are nursed by their mothers for about two months (*natsiarnaq*). From the time of weaning until they are about one year old they are called *natsiaq*. At about one year old the young seals shed their fur and are then called *tortuuvatsiaq*, until they change their fur again (at about three or four years old). Then, until the next change of fur some two years later, they are called *sakkatsiaq*. They become adult at 5–6 years old (*sakkaq*) and then change their fur every summer. Their skins are more beautiful in wintertime. Seals of this species live about 40 years.
  33. The KGH prices for fjord seal skins in 1976 were as follows: large skins, DKK 75, 120 or 145 depending on the quality and curing of the pelt; medium-size skins, DKK 65, 100 or 125; small skins, DKK 55, 80 or 105. Each skin bears the personal registration number of the hunter, and he could be paid a bonus if the bids at the auction in Copenhagen were higher than the purchasing price, with the transportation and tanning expenses of the KGH allowed for. A system of compensation allowing for the difference between well-cured skins and those of lower quality can decrease or completely cancel out the bonus. Because of this, some years can be very good and others very bad.
  34. Ammassalik hunters say that these seals are born in March ("like the seagulls") on the ice-pack. They have four terms for the different stages of growth of bearded seals: *an-nerngaq* (up to one year), *angilitsiaq* (from one to about three years old), *unnertaq* (about three years old, when the fur darkens under the front flippers) and *anneq* (when they are fully adult at about 4–5 years old). Unlike other seals, they are very curious: instead of fleeing from a noise that surprises them, they stay and look to see where the noise came from, exposing themselves to a fatal shot.
  35. The various vernacular terms for this type of seal are *teneq* (when they are born in March, on land), *qittalivarnaq* (about one year old – "it is then very beautiful"), *angilitsiaq* (about two years old), *qittalivaq* (an adult about five years old). In the past these seals were also called *sukeq* and *qasingiaq*. In shamanistic language they were called *narnarteq*. Hunters say of these animals that they are very fast and intelligent, and that they are the only seals that close their eyes when wounded.
  36. According to the Ammassalik hunters they are born in March on the ice-peak. The *niiniartivarnak* is a hooded seal less than a year old, the *niiniartivatsiaq* is between one and four years old. Its fur changes slowly, and the *niiniarteq* is an adult seal (four years old).
  37. According to the Ammassalik hunters, these seals are born in March or April on the ice-pack, far from their home area (north of Jan Mayen). There are four main stages in their development: *attatteq nulaaq* (from birth to one year), *attativatsiaq* (when the colour of the fur changes, from one to about three years old), *attatitaaq* (three years old, then the blue-grey pelt begins to darken on the head and the flanks). They are adult at about five years old, and are then called *nalanginnaq*.
  38. According to Ammassalik oral tradition, the walrus and the bear belong to the same family.
  39. Ammassalik hunters have observed that bears give birth to their young (often two cubs) on land. The young bear is called *nanivarnaq*. They also say that "bears grow up like dogs and belong to the same family".
  40. In 1960–1961 top-quality bear pelts were purchased by the KGH for DKK 200, and a bonus as high as DKK 100 could be given later. In 1962 the price increased to DKK 400 (with a maximum bonus of DKK 100). In 1964–1965–1966 the maximum purchasing price was DKK 500, as was the maximum bonus. Between 1967 and 1977 top-quality pelts increased in price from DKK 1500 to DKK 2500, but in April 1977 they fell back to DKK 2000 and the bonus decreased.
  41. In fact, it seems that bears who have got as far as the latitude of Ammassalik are not able to go back to their original habitats north of Scoresbysund (beyond 73°N) and are already lost to the polar bear population. These animals go on drifting south on the fragmented ice-pack and sometimes reach the Nanortalik or Qaqortoq/Julianehåb area on the west coast.
  42. In 1894 a blue fox pelt could be bought for DKK 6.00 (the equivalent of 13 fjord seal skins or 1/5th of a bear pelt) and a white fox pelt only cost DKK 2.00. In 1919 a blue fox pelt (at DKK 15) was the equivalent of 20 seal skins or 1/4th of a bear pelt. A white fox pelt cost DKK 6.00. In 1938 a blue fox pelt cost DKK 30, the equivalent of 15 seal skins or 1/2rd of a bear pelt; white fox cost DKK 15. From 1949 onwards there was one price for both types of fox pelt – DKK 40 for top-quality pelts until 1963.
  43. The purchasing price for a kilo of cod (fixed by the KGH) depends on the season (prices are higher in winter), on the size and quality of the fish (whether longer or shorter than 26 cm) and on the way it has been prepared (gutted, head cut off, etc.). Thus in 1978 prices went from DKK 1.77 (for second-grade gutted cods) to DKK 2.89 (top-quality, gutted, with the head cut off). Most Kuummiit fishermen sell their cod at DKK 2.89 a kilo.
  44. For example, I obtained the following figures from the KGH for 1966: that year in Kulusuk the KGH had bought handicraft work for DKK 171 134, and had only spent DKK 70 194 on pelts and fish. In Kuummiit handicrafts purchases did not go beyond DKK 8629, whereas for pelts and fish they reached DKK 215 228. In Kulusuk in 1977 the KGH had bought DKK 310 000's worth of handicrafts and DKK 263 000's worth of pelts and fish. In 1978 purchases of handicrafts (by the KGH alone) reached DKK 450 000, whereas pelts and fish only brought in DKK 371 000.
  45. To this a supplementary sum can be added for those who speak Danish fluently (determined by a language exam), a premium for seniority (for having worked for 2–8 years, and then after 8 years), paid holidays (9.5% of the wages) and overtime pay for night or weekend work. Employees who are members of GAS (*Grønlands Arbejdersammen-slutning*) are paid insurance money in the event of sickness or pregnancy.
  46. To this sum a monthly supplement can be added of DKK 72.83 per supported child, and if necessary a personal supplement given at the discretion of the local authority. Supplements for heating (DKK 12.50 a month in summer and DKK 31.50 a month in winter) and clothing (DKK 244 a year) have later been reintegrated into the basic pension sum.



47. Ejnar Mikkelsen (1946: 160) puts the figures even higher: seven deaths and 22 cases of severe poisoning.
48. The best hunters of the region have a team of 10–12 dogs for their sleds, plus dogs belonging to their children and some puppies. During the winter of 1976–1977 a normal team consisted of eight or nine dogs. The best treated dogs are fed every two days with seal meat and blubber. But often they only get dried shark meat, food leftovers or dog food bought from the shop.
49. The total number of seals caught in these four villages in 1976 was 5953. The number of men aged 15–59 was 143. The average number of seals per man in that age group was 42 (see Table 37).
50. Cable television came to Tasiilaq in 1977. In the beginning very few people had a private television set. In the autumn of 1978 a television club gave about 140 members the opportunity to meet two or three times a week for a reasonable subscription fee of DKK 30 a month. In 1979 a new taste for TV (a set costs DKK 4000–5000) suddenly drove the wealthier wage-earners to buy a private set, before even having the cable link with the local network. A Danish language programme was broadcast by the network in the evening between 7.30 and 11.30 p.m. It cost DKK 150 a month for private persons.
51. Besides, there was a shortage of Greenlandic teachers to carry out the teaching of the rapidly increasing number of schoolchildren.
52. In the case of marriages between Danish men and Greenlandic women, the women continue their usual visits, but go alone; Danish husbands go with them only if it is a real invitation to a particular celebration.
53. There are several detailed analyses of these old beliefs (Holm, in Thalbitzer 1914: 80–104; Nippgen 1914; Thalbitzer 1930; Rasmussen, in Ostermann 1938: 68–199; Gessain 1973: 153–158; Gessain 1978) which are indispensable introductions to the very complex field of Ammassalik religion.
54. This belief has been introduced recently from the west coast (Gessain 1979: 383). Among the cases of *qivittit* mentioned in conversation, three are men who disappeared in 1947, 1949 and 1950. Their names have been given to newborn children in their respective families. But with the two most recent cases, a woman who disappeared in 1964 and a man who disappeared in 1966, despite numerous opportunities for being “reincarnated”, by 1979 their names had not yet been passed on to children in their families. This could be because they are still considered to be alive; but this explanation cannot be applied to the older cases – the very first *qivittit* of the east coast.
55. In fact it was a trilateral meeting between East Greenlanders, West Greenlanders and Danes. But the West Greenlanders who came to Ammassalik, sent by the Danish government to lay the foundations of European colonization, were themselves already thoroughly steeped in western culture. This colonization by Danes and West Greenlanders – bringing with them their own prejudices and the attitudes of the colonized who have become colonizers – has been analysed by several authors (Gessain 1969; Perrot 1978; and R. Petersen 1977).

## Literature

- Aagaard Olsen, G. 1974. Consumption of antibiotics in Greenland, 1964–1970. – Nordic Council for Arctic Medical Research 8: 48–49.
- Administrative bestemmelser for Øst Grønland 1947. – Kundgørelser vedrørende Grønlands Styrelse 3: 111–132.
- Amdrup, G. 1902. Carlsbergfondets Expedition til Øst Grønland, udført i Aarene 1898–1900 under ledelse af G. Amdrup. – Meddr Grønland 27: 372 pp.
- 1909. The former Eskimo settlements on the East Coast of Greenland between Scoresbysund and Angmagssalik District. – Meddr Grønland 28: 298–328.
- Andersen, S. 1971. – Træk af Angmagssalik sundhedsvæsens historie. – Tidsskriftet Grønland, Maj: 137–158.
- 1981. Greenland medical bibliography. – Nordic Council for Arctic Medical Research 29: 137 pp.
- Angmagssalik, Scoresbysund og Thule 1950. – Grønlandskommissionens betænkning 6: 73 pp.
- Atuagagdluutit/Grønlandsposten. – Godhåb/Nuuk, Periodical.
- Bach, H. C. & Taagholt, J. (eds.) 1982. Greenland and the arctic region. Resources and security policy. – People and Defense, Denmark: 79 pp.
- Balicki, A. 1970. The Netsilik Eskimo. – The Natural History Press, New York: 264 pp.
- 1978. The Netsilik Inuit today. – Etudes Inuit 2 (1): 111–119.
- Barfod, P. 1954. Dødelighed og gennemsnitlig levealder i Grønland. – Tidsskriftet Grønland: 375–379.
- Barfod, P., Nielsen, L. & Nielsen, J. 1974. Grønlændere i Danmark 1971–72. – Nyt fra Samfundsvidenskaberne 34: 589 pp.
- Beretninger og Kundgørelser vedrørende Styrelsen af Grønland fra 1897 til 1939.
- Beretninger vedrørende Grønland fra 1948 til 1967.
- fasc. 1: Almindelig beretning
- fasc. 3: Den grønlandske skole
- fasc. 4: Sundhedstilstanden
- fasc. 6: Årsberetning for den Kgl. Grønlandske Handel
- Berg, H. 1971. Minority problems in the present modernization process in Greenland. – Ethnographic Museum University of Oslo Yearbook: 27–38.
- Bertelsen, A. 1907. Om fødslerne i Grønland og de seksuelle forhold sammesteds. – Bibliotek for læger: 8(8): 527–572.
- 1935, 1937 and 1940. Grønlandsk medicinsk statistik og nosographi. I. Grønlandsk Befolkningsstatistik 1901–30, II. Sundhedsvilkaarene i Grønland III. Det sædvanlige grønlandske sygdomsbillede. – Meddr Grønland 117 (1, 2, 3): 83 pp., 248 pp. & 234 pp.
- Betænkning fra Grønlandsudvalget af 1960, 1964. – Betænkning 363: 258 pp.
- Betænkning om det kriminalretlige sanktionssystem i Grønland 1968. København: 103 pp.
- Birket Smith, K. 1928. The Greenlanders of the Present Day. – Greenland II, Copenhagen and London: 208 pp.
- 1955. Moeurs et coutumes des Eskimo. – Payot, Paris: 291 pp.
- Bohe, L. (ed.) 1927. Peder Olsen Walløes dagbøger fra hans rejser i Grønland 1739–53. – Det Grønlandske Selskabs Skrifter V: 128 pp.
- Böcher, T. 1938. Biological distributional types in the flora of Greenland. – Meddr Grønland 106 (2): 339 pp.
- Bogen om Grønland. Fortid, nutid og fremtid 1978. – Politikens Forlag, Copenhagen (2. udgave): 324 pp.



- Bone, R. L. 1973. The number of Eskimos: an arctic enigma. – *Polar Record* 16 (103): 553–557.
- Bonneval, L. de & Robert-Lamblin, J. 1979. Utilisation des végétaux à Ammassalik (Est Groenland). – *Etudes Inuit* (2): 103–128.
- Borchersen, J. 1963. Østgrønland efter krigen. – *Grønland* 6: 201–214.
- Briggs, J. 1975. The origins of nonviolence: aggression in two Canadian Eskimo groups. – In: Muensterberger, W. (ed.), *The psychoanalytic study of society*. – International Universities Press, New York VI: 134–203.
- 1978a. Never in Anger. Portrait of an Eskimo family. – Harvard University Press, Cambridge (7th ed.): 379 pp.
- 1978b. The origins of nonviolence: Inuit management of aggression. – In: Montagu, A. (ed.), *Learning nonaggression*. – Oxford University Press, New York: 54–93.
- Brodbeck, I. 1882. Nach Osten. Untersuchungsfahrt nach der Ostküste von 2 bis 12 August 1881. – Missions Department der Brüdergemeine, Niesky: 88 pp.
- Brody, H. 1975. The People's Land: Eskimos and Whites in the Eastern Arctic. – Penguin, London: 240 pp.
- 1977. Alcohol, change and the industrial frontier. – *Etudes Inuit* 1 (2): 31–46.
- Bugge, S. 1967. Missionssygeplejerske Sigrid Bugges dagbog fra Angmagssalik (1916–1917). – *Meddelelser om den Grønlandske Kirkesag* 104.
- Burch, E. 1970. Marriage and divorce among the North Alaskan Eskimos. – In: Bohannon, P. (ed.), *Divorce and after, An analysis of the emotional and social problems of divorce*. – Garden City, New York: 152–181.
- Caning, K. E. 1979. Personalhistoriske kilder i grønlandske arkiver. – *Personalhistorisk Tidsskrift*: 57–68.
- 1982. Om den grønlandske befolkning historie. – *Forskning i Grønland/Tusaut* 1: 2–5.
- Charcot, J. B. 1926–1937. Rapports préliminaires sur la campagne du "Pourquoi-Pas?" 1925–1936. – *Annales hydrographiques*.
- 1937. Les croisières du "Pourquoi-Pas?" dans la mer du Groenland, complété par la notice bibliographique de l'auteur et le récit du naufrage du "Pourquoi-Pas?". – Duval, Elbeuf, Paris: 302 pp.
- Chasses et collectes 1980. – *Anthropologie et Sociétés, Département d'Anthropologie, Université Laval* 4 (3): 165 pp.
- Chichlo, B. 1981. Les Nevuqaghmiit ou la fin d'une ethnie. – *Etudes Inuit* 5 (2): 29–47.
- Cohn, G. 1933. Statut juridique du Groenland oriental. – *Revue de droit international et de législation comparée* 36 s. (XIV): 557–571.
- Cook, F. 1894. Gynecology and obstetrics among the Eskimos. – *Brooklyn Medical Journal* 8: 154–169.
- Damas, D. 1975. Demographic aspects of Central Eskimo marriage practices. – *American Ethnologist* 3 (2): 409–418.
- Dansk og norsk fangstvirksomhed på Østgrønland 1939. – *Publikationer om Østgrønland* 8: 123 pp.
- Diarium der Gemeinde zu Friedrichsthal von Jahre 1862 bis 1895. – *Archiv der Evangelischen Brüder-Unität, Herrnhut, DDR, R15 J.b.VI*, no. 5–6. Manuscript, 1st and 2nd part: 207 pp and 270 pp. – id., von 1895 bis 1900, R15 J.b.VI, no. 7.
- Dorais, L.-J. 1981. Some notes on the language of East Greenland. – *Etudes Inuit* 5 (Supplem. Issue): 43–70.
- Ducros, A. 1978. Transformations des sociétés eskimo et modifications somatiques. – *Actes du XLII<sup>e</sup> Congrès international des Américanistes*, Paris 1976 V: 13–20.
- Dumbrava, C. 1929. Une année au milieu des Esquimaux. – *La Géographie*, Janv.-Févr.: 10 pp.
- Durkheim, E. 1897. Le suicide, étude de sociologie. – *Bibliothèque d'histoire contemporaine*, Paris: 462 pp.
- Enel, C. 1981. Signification sociale d'un artisanat touristique au Groenland oriental. – *Etudes Inuit* 5 (2): 125–142.
- Festy, P. 1970. Evolution de la fécondité en Europe occidentale depuis la guerre. – *Population* 2: 229–274.
- 1979. La fécondité des pays occidentaux 1870–1970. Présentation d'un cahier de l'INED. – *Population* 1: 163–173.
- Foersom, Th., Kapel, F. O. & Svare, O. 1982. Nunatta Naasui – Grønlands flora i farver (2. udgave). – Pilersuiffik, Nuuk/Godthåb: 176 pp.
- Frederiksen, Th. 1980. Eskimo diary. – Pelham Books, London: 148 pp.
- Gessain, M. 1975. Films ethnologiques et sociologiques français sur la côte est du Groenland. – In: Gessain, R. et Robert-Lamblin, J. (eds.), *Dix années d'enquêtes du Centre de Recherches Anthropologiques – Musée de l'Homme – Objets et Mondes XV* (2): 267–270.
- Gessain, R. 1952. L'ajagaq, bilboquet eskimo. – *Journal de la Soc. des Américanistes de Paris*, XLI (n° sp.): 239–293.
- 1960. Contribution à l'anthropologie des Eskimo d'Angmagssalik. – *Meddr Grønland* 161 (4): 167 pp.
- 1961. Anthropologie, démographie et généalogie pour l'étude des petits groupes. – *Proceedings of the Second International Congress of Human Genetics*, Rome: 190–191.
- 1964. Démographie et généalogie de différents types d'isolats. – *Journal de Génétique Humaine* 13: 76–85.
- 1967. Makout mon frère, fils de mon fils. – *Sciences* 49–50: 35–41.
- 1968. Le kayak des Ammassalimiut. Evolution démographique. – *Objets et Mondes VIII* (4): 247–265.
- 1969. Ammassalik ou la civilisation obligatoire. – Flammarion, Paris: 252 pp.
- 1971. Groupes sanguins des Ammassalimiut en 1935. – *Cahiers du C.R.A.* 11–12, Bull. et Mém. de la Soc. Anthrop. de Paris 8 (XII<sup>e</sup> s.): 169–171.
- 1973. Fecundity of the Ammassalimiut women (Eskimo of the East Coast of Greenland). – *IXth International Congress of Anthropological and Ethnological Sciences*, Chicago: 4 pp.
- 1974. La stature des Ammassalimiut en 1935 et 1965–66. – *Cahiers du C.R.A.* 13, Bull. et Mém. de la Soc. Anthrop. de Paris (XIII<sup>e</sup> s.): 103–107.
- 1975. Essai sur l'ethnonologie des Ammassalimiut au XIX<sup>e</sup> siècle. In: Gessain, R. & Robert-Lamblin, J. (eds.), *Dix années d'enquêtes du Centre de Recherches Anthropologiques – Musée de l'Homme – Objets et Mondes XV* (2): 129–148.
- 1978a. L'Homme-Lune dans la mythologie des Ammassalimiut (côte est du Groenland). – In: *Systèmes de Signes. Hommage à Germaine Dieterlen*. – Hermann, Paris: 205–222.
- 1978b. Questions et hypothèses pour une étude du peuplement ancien de la côte est du Groenland. – *Actes du XLII<sup>e</sup> Congrès International des Américanistes*, Paris 1976: 23–33.
- 1979. La mort du chasseur perdu. – *Boréales*, Revue du Centre de Recherches Internordiques 14: 379–384.
- 1979–80. Nom et réincarnation chez les Ammassalimiut (côte est du Groenland). – *Boréales*, Revue du Centre de Recherches Internordiques 15–16: 407–419.
- 1980. Umivik, maison et parenté chez les Ammassalimiut (côte est du Groenland). – *Objets et Mondes* 20 (2): 71–74.
- Gessain, R., Dorais, L.-J. & Enel, C. 1982. Vocabulaire du groenlandais de l'est. 1473 mots de la langue des Ammassalimiut avec leur traduction en groenlandais de l'ouest, français, anglais et danois. – *Documents du Centre de Recherches Anthropologiques du Musée de l'Homme* 5: 162 pp.
- Gessain, R. & Gessain, M. 1966. Le phoque et l'ours. Chasse d'été des Ammassalimiut. – *Colour film Kodachrome* I, 16 mm, 15 min.
- Gessain, R. & Persson, I. 1971. Interprétations généalogiques et groupes sanguins. Un groupe sérique rare chez les Ammassalimiut (Eskimo de la côte est du Groenland). – *Génétique et Populations* 60: 239–245.
- Gessain, R. & Robert-Lamblin, J. 1974. Migrations des Ammassalimiut au XIX<sup>e</sup> siècle d'après les archives des Frères Moraves. – *Cahiers du C.R.A.* 13, Bull. et Mém. de la Soc. Anthrop. de Paris (XIII<sup>e</sup> s.): 153–159.

- Gessain, R. & Robert-Lamblin, J. (eds.) 1975. Dix années d'enquêtes du Centre de Recherches Anthropologiques – Musée de l'Homme. Tradition et changement au Groenland oriental. – *Objets et Mondes* XV (2): 119–285.
- Gessain, R. & Robert-Lamblin, J. (eds.) 1978. Ecologie, démographie et acculturation en milieu arctique. – *Actes du XLII<sup>e</sup> Congrès international des Américanistes*, Paris 1976 (V): 7–108.
- Gessain, R. & Victor, P. E. 1969. Le kayak des Ammassalimiut. Evolution technique. – *Objets et Mondes* IX (2): 145–166 and IX (3): 225–244.
- 1973. Le tambour chez les Ammassalimiut (côte est du Groenland). – *Objets et Mondes* XIII (3): 129–160.
- Giddings, J. L. 1973. 10 000 ans d'histoire arctique. – *Civilisations du Nord*, Fayard: 497 pp.
- Girard, A. 1964. Le choix du conjoint. Une enquête psychosociologique en France. – *Travaux et Documents I.N.E.D.* 44, PUF: 202 pp.
- Graah, W. A. 1837. Narrative of an expedition to the East Coast of Greenland sent by order of the King of Denmark, in search of the lost colonies. – Parker, London: 199 pp.
- Grønland 1967–1981 see Ministeriet for Grønland (ed).
- Grønland 1975 see Koch, P.
- Grønlands Fauna 1982 see Salomonsen, F.
- Guemple, L. 1979. Inuit adoption. – *National Museum of Man, Mercury series, Canadian ethnology service* 47: 131 pp.
- Guillaume, P. & Poussou, J.-P. 1970. Démographie historique. – *Collection U*, Armand Colin, Paris: 286 pp.
- Hansen, S. 1886. Bidrag til østgrønlandernes anthropologi. – *Meddr Grønland* 10: 1–41.
- 1911. Contribution to the anthropology of the East Greenlanders. The Ammassalik Eskimo: Contributions to the ethnology of the East Greenland natives, Thalbitzer W. ed., 1914. – *Meddr Grønland* 39 (II): 151–179.
- Hansérak, see Rink, S. 1900 and Thalbitzer, W. 1933.
- Hart Hansen, J. P. 1976. Criminal homicide in Greenland. – In: Shephard, R. & Itoh, S. (eds.) 1976, *Circumpolar Health*. – Third International Symposium, Yellowknife 1974, NWT, University of Toronto Press: 548–554.
- Harvald, B. & Hart Hansen, J. P. (eds.) 1981. *Circumpolar Health* 81. Proceedings of the 5th International Symposium on Circumpolar Health, Copenhagen. – Nordic Council for Arctic Medical Research 33: 658 pp.
- Hedegeard, A. T. 1894–1919 & 1924–1930. Angmagssalik, Manuscripts. – Arktisk Institut's Archives Charlottenlund: 90 pp. and 145 pp.
- Helms, P. 1957. Investigations into tuberculosis at Angmagssalik. – *Meddr Grønland* 161 (1): 140 pp.
- 1981 a. Changes in disease and food patterns in Angmagssalik, 1949–1979. In: Harvald, B. & Hart Hansen, J. P. (eds.), *Circumpolar Health* 81. – Nordic Council for Arctic Medical Research 33: 243–251.
- 1981 b. Kostundersøgelse i Angmagssalik. – *Forskning i Grønland/Tusait* 1–2: 10–13.
- Henry, L. 1967. Manuel de démographie historique. – Droz, Genève: 146 pp.
- 1972. Démographie. Analyse et modèles. – Larousse, Sciences humaines et sociales: 341 pp.
- Hiernaux, J. (ed.) 1980. La diversité biologique humaine. – *Collection d'Anthropologie physique*, Masson, Paris: 420 pp.
- Hippler, A. 1976. The demographic "Youth bulge": one reason for acculturative difficulties among Alaska natives. – *Polar Record* 18 (114): 304–306.
- Hippler, A. & Wood, L. 1977. Alaska Eskimo and Indian village populations. The social meaning of demographic change. – *Etudes Inuit* (1): 65–92.
- Holm, G. 1887. Ethnologisk Skizze af Angmagssalikerne. Liste over beboerne af Grønlands østkyst, optagen i efteraaret 1884. – *Meddr Grønland* 10 (II–III): 45–206.
- 1887. Sagn og Fortællinger fra Angmagssalik – *Meddr Grønland* 10 (V): 237–345.
- 1894. Oprettelsen af Missions- og Handelsstationen Angmagssalik paa Grønlands Østkyst. – *Geografisk Tidsskrift* XII: 247–255.
- 1911. Ethnological sketch of the Angmagssalik Eskimo. In: Thalbitzer, W. (ed.) 1914. *The Ammassalik Eskimo: Contributions to the ethnology of the East Greenland natives*. – *Meddr Grønland* 39 (I): 1–147.
- Holm, G. & Garde, V. 1889. Beretning om Konebaads-Expeditionen til Grønlands Østkyst 1883–85. – *Meddr Grønland* 9 (II): 53–143.
- Holm, G. & Petersen, J. 1921. Angmagssalik distrikt. – *Meddr Grønland* 61: 560–662.
- Home Rule for Greenland 1979. – *Polar Record* 19 (122): 504–511.
- Honigmann, J. & Honigmann, I. 1970. Arctic townsmen. Ethnic backgrounds and modernization. – *Centre Canadien de Recherches en Anthropologie*. Université Saint Paul, Canada: 303 pp.
- Høygaard, A. 1937. Some investigations into the physiology and nosology of Eskimos from Angmagssalik in Greenland. – *Skrifter om Svalbard og Ishavet* 74 (1): 14 pp.
- 1938. De hygieniske forhold: Angmagssalik, Østgrønland. – *Det Grønlandske Selskabs Aarskrift*: 79–93.
- 1939. Acute epidemic diseases among Eskimos in Angmagssalik. – *The Lancet* Jan. 28: 245–248.
- 1941. Studies on the nutrition and physio-pathology of Eskimos, undertaken at Angmagssalik East-Greenland 1936–1937. – *Skrifter utgitt av Det Norske Videnskaps Akademi i Oslo* 9: 176 pp.
- Hugues, C. C. 1958. Anomie, the Ammassalik and the standardization of error. – *Southwestern Journal of Anthropology*, University of New Mexico 14 (4): 352–377.
- 1965. Under four flags. Recent cultural changes among the Eskimos. – *Current Anthropology* Feb: 3–69.
- 1974. Eskimo Boyhood. An autobiography in psychosocial perspective. – *The University Press of Kentucky*: 429 pp.
- Indhandlingspriser for grønlandske produkter 1949–1979. – *Den Kongelige Grønlandske Handel*.
- Inuit Circumpolar Conference. Arctic Policy Review 1982. Periodical.
- Israel, H. 1969. Kulturwandel Grönländisher Eskimo im 18 Jahrhundert. – *Abhandlungen und Berichte des Staatlichen Museums für Völkerkunde Dresden* 29: 1–203.
- Jacquard, A. 1971. Les isolats, laboratoires naturels. – *Projet* 60: 1159–1168.
- 1973. Distances généalogiques et distances génétiques. Application aux Indiens du Honduras et aux Eskimo du Scoresbysund. – *Cahiers d'Anthropologie et d'Ecologie humaine* 1: 11–123.
- (ed.) 1976. L'étude des isolats. Espoirs et limites. – *Association Anthropologique Internationale de Langue Française*. E.P.H.E., I.N.E.D., Paris: 334 pp.
- Jenness, D. 1067. Eskimo administration: IV. Greenland. – *Arctic Institute of North America, Technical Paper* 19: 176 pp.
- Jensen, B. 1965. Eskimoisk festlighed. Et essay om menneskelig overlevelsesteknik. – *Udgivet af Folkeuniversitetsforeningen i København*, G.E.C., Gad: 115 pp.
- Jensen, K. 1969. Angmagssalik 75 år. – *Tidsskriftet Grønland* 9: 271–278.
- Jørgensen, J. B., Hansen, K. & Hansen, A. Ø. 1978. Demographic studies in two villages in the Upernavik District. – *Meddr Grønland* 202 (3): 20 pp.
- Kaalund, B. 1979. Grønlands Kunst, Skulptur. Brugskunst. Maleri. – *Politikens Forlag*: 223 pp.
- Kirkebøger. Angmagssalik 1899–1979. Births', marriages', deaths' registry.
- Kjellström, R. 1973. Eskimo marriage. An account of traditional Eskimo courtship and marriage. – *Nordiska Museets Handlingar* 80, Stockholm: 267 pp.
- Kleivan, H. 1964. Acculturation, ecology and human choice: case studies from Labrador and South Greenland. – *Folk* 6 (1): 63–74.

- 1969-70. Culture and ethnic identity. On modernization and ethnicity in Greenland. - Folk 11-12: 209-234.
- Kleivan, I. 1969-70. Language and ethnic identity: Language policy and debate in Greenland. - Folk 11-12: 235-286.
- 1975. Glimt af kvindens rolle i Grønland gennem tiderne. - Tidsskriftet Grønland 8-9: 238-273.
- Koch, P. (ed.) 1975. Grønland. - Gyldendal: 312 pp.
- Kraus, R. & Buffer, P. 1977. Intercultural variation in mortality due to violence. - In: Foulks, E. & al (eds.), Current perspectives in cultural psychiatry. - Spectrum, New York: 81-91.
- 1979. Sociocultural stress and the American native in Alaska: an analysis of changing patterns of psychiatric illness and alcohol abuse among Alaska natives. - Culture, Medicine and Psychiatry 3: 111-151.
- Kruse, Ch. 1912. Rejser og botaniske undersøgelser i Øst-Grønland mellem 65°30' og 67°20' i aarene 1898-1902, samt Angmagssalik-egnens vegetation. - Meddr Grønland 49: 307 pp.
- Landslægens årsberetning for årene 1954-1981, Sundhedstilstanden i Grønland. Annual publication.
- Langaney, A. 1978. De la Sibérie au Groenland de l'est: immunologie et histoire d'une dispersion. - Actes du XLII<sup>e</sup> Congrès international des Americanistes, Paris 1976 (V): 39-45.
- Langaney, A., Gessain R. & Robert, J. 1974. Migration and genetic kinship in Eastern Greenland. - Social Biology 21 (3): 272-278.
- Langaney, A., Robert-Lamblin, J. & Fernet, P. 1974. Généalogies et polymorphismes sanguins des Groenlandais du Scoresbysund. - Cahiers du C.R.A. 13, Bull et Mém. Soc. Anthropol. de Paris 2 (XIII<sup>e</sup> ser.): 147-152.
- Laughlin, W. S. 1963. Eskimos and Aleuts: their origins and evolution - Science 142 (3593): 633-645.
- 1966. Genetical and anthropological characteristics of arctic populations. - In: Baker, P. & Weiner, J. (eds.), The biology of human adaptability. - Clarendon, Oxford: 469-495.
- 1970. The purpose of studying Eskimos and their population systems. - Arctic 123 (1): 3-13.
- 1972. Ecology and population structure in the Arctic. In: Harrison, G. & Boyce, A. (eds.), The structure of human populations. - Clarendon, Oxford: 379-392.
- Laughlin, W. S. & Harper, B. (eds.) 1979. The first Americans: origins, affinities and adaptations. - Gustav Fisher, New York: 340 pp.
- Laughlin, W. S., Harper, A. & Thompson, D. 1979. New approaches to the pre- and post-contact history of arctic peoples. - American Journal of Physical Anthropology 51 (4): 579-587.
- Lee, R. & Devore, I. (eds.) 1968. Man the hunter. - Aldine, Chicago: 416 pp.
- Leighton, A. & Hugues, C. C. 1955. Notes on Eskimo patterns of suicide. - Southwestern Journal of Anthropology, University of New Mexico 11 (4): 327-338.
- Le Mehaute, P. J. & Tcherniakofsky, P. 1934. L'alimentation des Esquimaux. - Bull. de la Soc. Scientifique d'Hygiène Alimentaire 22 (1 & 2): 1-8.
- 1934. Quelques considérations sur la nosologie des Esquimaux du Groenland oriental. - Presse Médicale 24: 1-15.
- Le Mouél, J. F. 1975. Ammassalik dans les collections du Musée de l'Homme. - In: Gessain, R. & Robert-Lamblin, J. (eds.), Dix années d'enquêtes du Centre de Recherches Anthropologiques - Musée de l'Homme. - Objets et Mondes (2): 259-266.
- 1978. "Ceux des mouettes". Les Eskimos Naujamiut, Groenland-Ouest. - Document d'Ecologie humaine, Mémoires de l'Institut d'Ethnologie XVI: 322 pp.
- Livi, L. 1949. Considérations théoriques et pratiques sur le concept de minimum de population. - Population 4: 754-756.
- Ludwigs, Chr. (ed.) 1921. 1721-1921 Tohundredeaarsdagen for den Grønlandske Missions Begyndelse. - Lohse, København: 161 pp.
- Lyng, F. 1977. Tanker i et bulldozerspor. Kulturens betydning for udviklingen i Grønland. - Det Grønlandske Forlag: 156 pp.
- Lyng, H. 1967. Østgrønland og dets kunst. - Nuk: 30 pp.
- Lyng, I. 1976. Alcohol problems in western Greenland. - In: Shephard, R. & Itoh, S. (eds.), Circumpolar Health. - Third International Symposium, Yellowknife 1974, NWT, University of Toronto Press: 543-547.
- 1978. Personal points of view on alcohol problems in Greenland. - Nordic Council for Arctic Medical Research 21: 33-41.
- 1981. Alcohol problems in Greenland. - Nordic Council for Arctic Medical Research 27: 71-75.
- 1981. Suicide in Greenland. - Nordic Council for Arctic Medical Research 27: 88-92.
- Maurie, J. (ed.) 1973. Le peuple esquimau aujourd'hui et demain. - 4th International Congress of the Fondation Française d'Etudes Nordiques. - Mouton, Paris: 696 pp.
- Mandtallister for Ammassalik og Scoresbysund kommuner 1949 à 1965. - CRA's Archives, Musée de l'Homme, Paris.
- Mary-Rousselière, G. 1980. Qitdlarsuaq, l'histoire d'une migration polaire. - Presses de l'Université de Montréal: 186 pp.
- Mathiassen, T. 1933. Prehistory of the Angmagssalik Eskimos. - Meddr Grønland 92 (4): 157 pp.
- Mauss, M. 1906. Essai sur les variations saisonnières des sociétés eskimos. Etude de morphologie sociale. - L'Année sociologique 1904-1905, with the collaboration of Beuchat, H. IX, Alcan, Paris: 389-477.
- Meldorf, G. 1907. Epidemiske sygdomme i Grønland. Influenza og epidemiske katarrhalske affektioner af luftvejsslimhinderne. - Meddr Grønland 33 (VII): 129-304.
- 1912. Epidemiske sygdomme i Grønland. - Meddr Grønland 50: 189-347.
- Meldgaard, J. 1967. Traditional sculpture in Greenland. - The Beaver, Magazine of the North Autumn: 54-59.
- Mikkelsen, E. 1934. De Østgrønlandske Eskimoers Historie. - Gyldendalske Boghandel Nordisk Forlag: 202 pp.
- 1946. De Østgrønlandskolonierne. - Det Grønlandske Selskabs Aarskrift: 155-167.
- 1960. Svundne tider i Østgrønland. Fra stenalder til atomtid. - Gyldendal: 238 pp.
- Mikkelsen, E. in collaboration with Sveistrup, P.P. 1944. The East Greenlanders possibilities of existence, their production and consumption. - Meddr Grønland 134 (2): 245 pp.
- Milan, F. A. 1970. The demography of an Alaskan Eskimo village. - Arctic Anthropology VII (1): 26-43.
- (ed.) 1980. The human biology of circumpolar populations, International Biological Programme 21. - Cambridge University Press: 381 pp.
- 1980. The demography of selected circumpolar populations. - In: Milan, F. A. (ed.), The human biology of circumpolar populations. - Cambridge University Press: 13-35.
- Ministeriet for Grønland (ed) 1967-1981. Grønland. Årsberetning. Annual publication.
- Møbjerg, T. 1983. La préhistoire ancienne du district d'Angmagssalik, Est Groenland. - L'Anthropologie 87 (2): 275-276.
- Monnier, A. 1980. L'Europe et les pays développés d'Outre-Mer. Données statistiques. - Population 4-5: 913-925.
- Nansen, F. 1890. The first crossing of Greenland. - Longmans, London, 2 volumes: 510 pp. and 497 pp.
- Nippgen, M. J. 1914. Les Prêtres payens du Groenland oriental (Les Angakoks). - Herpin, Alençon: 11 pp.
- Nooter, G. 1972-73. Change in a hunting community of East Greenland. - Folk 14/15: 163-204.
- 1975. Mitârtut, Winter feast in Greenland. - In: Gessain R. & Robert-Lamblin J. (eds.), Dix années d'enquêtes du Centre de Recherches Anthropologiques - Musée de l'Homme. - Objets et Mondes, XV (2): 159-168.

- 1976. Leadership and headship. Changing authority patterns in an East-Greenland hunting community. - Med. van het Rijksmuseum voor Volkenkunde, Leiden 20: 117 pp.
- 1980. Improvisation and innovation. Social consequences of material changes. - In: Van Gulik, W. (ed.), From field-case to show-case. Rijksmuseum voor Volkenkunde, Leiden. - Gieben, Amsterdam: 113-121.
- Nordenskiöld, A. E. 1888. La seconde expédition suédoise au Groenland (l'Inlandsis et la côte orientale), entreprise aux frais de M. Oscar Dickson. - Hachette, Paris: 492 pp.
- Nordic Council for Arctic Medical Research 1972-1982. Reports 1-34.
- Ostermann, H. (ed.) 1938. Knud Rasmussen's posthumous notes on the life and doings of the East Greenlanders in olden times. - Meddr Grønland 109 (1): 214 pp.
- (ed.) 1939. Knud Rasmussen's notes on the East Greenland legends and myths. - Meddr Grønland 109 (3): 182 pp.
- Pedersen, P. O. 1949. The East Greenland Eskimo dentition. Numerical variations and anatomy. - Meddr Grønland 142: 244 pp.
- Perrot, M. 1974. Les Ammassalimiut au Danemark, 1972. Etude démographique et psycho-sociologique de l'émigration de la côte orientale du Groenland. - Cahiers du C.R.A. 13, Bull. et Mém. de la Soc. Anthrop. de Paris 11 (XIII<sup>e</sup> sér.): 5-107.
- 1975. L'émigration du Groenland oriental, un nouveau schème culturel. - In: Gessain, R. & Robert-Lamblin, J. (eds.), Dix années d'enquêtes du Centre de Recherches Anthropologiques - Musée de l'Homme. - Objets et Mondes XV (2): 169-176.
- 1978. Relations Est et Ouest-Groenlandais: Tunumiut et Kidiumiut. - Actes du XLII<sup>e</sup> Congrès international des Américanistes, Paris 1976 (V): 67-73.
- Perrot, M. in collaboration with Robert-Lamblin, J. 1975. Publications en langue française concernant la côte est du Groenland. - In: Gessain, R. & Robert-Lamblin, J. (eds.), Dix années d'enquêtes du Centre de Recherches Anthropologiques - Musée de l'Homme. - Objets et Mondes, XV (2): 271-282.
- Petersen, J. (Ujuât) 1957. Ujuâts Dagbøger fra Østgrønland 1894-1935. Ed. by B. Rosenkilde Nielsen. - Det Grønlandske Selskabs Skrifter, XIX, 1: 1-209.
- Petersen, R. 1964. The Greenland tupilak. - Folk, 6 (2): 73-101.
- 1965. Some regulating factors in the hunting life of Greenlanders. - Folk 7: 107-124.
- 1966-67. Burial-forms and death cult among the Eskimos. - Folk 8-9: 259-280.
- 1968. Efter et dødsfald i Angmagssalik. - Jordens Folk 4. Aarg. (2): 242-245.
- 1969. On the variations of settlement pattern and hunting conditions in three districts of Greenland. Circumpolar problems: habitat, economy and social relations in the Arctic. - Wenner Gren Center International Symposium serie 21: 153-161.
- 1972. Acquisition and sharing of the bag in East Greenland. - Inter-Nord, Revue internationale d'Études Arctiques et Nordiques 12: 282-286.
- 1975. On the East Greenlandic dialect in comparison with the West Greenlandic. - In: Gessain, R. & Robert-Lamblin, J. (eds.), Dix années d'enquêtes du Centre de Recherches Anthropologiques - Musée de l'Homme. - Objets et Monde XV (2): 177-182.
- 1977. On the West Greenlandic cultural imperialism in East Greenland. - Transactions of the Finnish Anthropological Society, Helsinki 2: 187-195.
- 1978. On hunting and urbanization in East Greenland. - Actes du XLII<sup>e</sup> Congrès international des Américanistes, Paris 1976 (V): 76-81.
- 1979. Det ændrede samfund og børnenes situation. - Tidsskriftet Grønland 3.4.5.: 75-89.
- Petersen, R. & Rix, L. 1982. Klimasvingninger og grønlandernes forhistorie. - Tidsskriftet Grønland 3: 82-100.
- Pison, G. 1982. Dynamique d'une population traditionnelle. Démographie, apparemment et mariage dans une population d'effectif limité: les Peul Bandé (Sénégal oriental). - Travaux et Documents I.N.E.D. 99, PUF, Paris: 278 pp.
- Plenot, H.-R. & Gessain, R. 1975. Evolution de la fréquence de la carie chez les Ammassalimiut de 8 à 15 ans, de 1934-35 à 1966. - In: Gessain, R. & Robert-Lamblin, J. (eds.), Dix années d'enquêtes du Centre de Recherches Anthropologiques - Musée de l'Homme. - Objets et Mondes XV (2): 183-187.
- Poulsen, K. A. 1909. Contributions to the anthropology and the nosology of the East Greenlanders. - Meddr Grønland 28 (4): 131-150.
- Pressat, R. 1961 & 1969. L'analyse démographique. - PUF, Paris: 402 pp. & 321 pp.
- 1971. Démographie sociale. - Collection Sup, PUF, Paris: 168 pp.
- 1973. L'analyse démographique. Concepts, méthodes, résultats. - PUF, Paris: 321 pp.
- Prioux, F. 1977. La situation démographique des pays nordiques. - Population 1: 139-174.
- Qúpersimân, G. see Sandgreen, O.
- Rasmussen, K. see Ostermann, H.
- 1921. Myter og Sagn fra Grønland. I. Østgrønlandere. - Gyldendalske Boghandel Nordisk Forlag: 375 pp.
- Rey, L. 1974. Groenland, univers de cristal. - Flammarion, Paris: 340 pp.
- Rink, H. 1887. Den østgrønlandske dialekt. - Meddr Grønland 10 (IV): 207-234.
- 1974. Danish Greenland, its people and products. - Mc Gill - Queen's University Press, Montreal: 468 pp (1st edition 1877).
- 1974. Tales and traditions of the Eskimo. - C. Hurst, London: 472 pp. (1st edition 1875).
- Rink, S. 1900. Vestgrønlander Kateket Hanseraks dagbog om de hedenske Østgrønlandere. - Hagerup Forlag, København: 157 pp.
- Robbe, P. 1975. Partage du gibier chez les Ammassalimiut observé en 1972 dans le village de Tileqilaq. - In: Gessain, R. & Robert-Lamblin, J. (eds.) Dix années d'enquêtes du Centre de Recherches Anthropologiques - Musée de l'Homme. - Objets et Mondes XV (2): 209-222.
- 1981. Les noms de personne chez les Ammassalimiut. - Etudes Inuit, 5 (1): 45-82.
- Robert, J. 1969. Banquise d'été (Scoresbysund, été 1968). - Colour film Kodachrome I, 16 mm, 20 min.
- 1970. Démographie et acculturation. Une nouvelle phase dans l'histoire des Ammassalimiut émigrés au Scoresbysund: l'introduction du contrôle des naissances (côte orientale du Groenland, 1970). - Journal de la Soc. des Américanistes de Paris 59: 147-155.
- 1971. Les Ammassalimiut émigrés au Scoresbysund. Etude démographique et socio-économique de leur adaptation (côte orientale du Groenland, 1968). - Cahiers du C.R.A. 11-12. Bull. et Mém. de la Soc. Anthrop. de Paris 8 (XII<sup>e</sup> sér.): 5-136.
- Robert-Lamblin, J. 1975. Eskimo Ammassalimiut et Aléoutes Qigeron: différences écologiques, historiques, démographiques. - L'Anthropologie 79 (3): 519-536.
- 1979. Endogamy and exogamy in two arctic communities: Aleut and East Greenlandic Eskimo. - In: Laughlin, W. S. & Harper, A. (eds.), The First Americans, origins, affinities and adaptations. - Gustav Fisher, New York: 293-307.
- 1979. Quelques pratiques médicales traditionnelles des Ammassalimiut (côte orientale du Groenland). - Boréales, Revue de Centre de Recherches Internordiques 14: 389-391.
- 1981. «Changement de sexe» de certains enfants d'Ammassalik (Est Groenland), un rééquilibrage du sex ratio familial? - Etudes Inuit 5 (1): 117-126.



- 1981-82. Interactions entre structure démographiques et structures sociales à Ammassalik (Est Groenland). - *L'Anthropologie* 85 (2): 299-306.
- 1982a. An historical and contemporary demography of Akutan, an Aleutian village. - *Etudes Inuit* 6 (1): 99-126.
- 1982 b. Woman's role and power within the Aleut society. - *Folk* 24: 197-202.
- , Lecomte, D., Lathrop, M. & Langaney, A. 1983. Epidémies virales et rapports de masculinité des naissances: des données divergentes. - *Population* 1: 162-165.
- Rosing, Chr. 1946. Østgrønlanderne. Tunuamiut. Transl. by K. Rosing, comm. by W. Thalbitzer. - *Det Grønlandske Selskabs Skrifter* XV: 150 pp.
- Rosing, J. 1960. Isimardik, den store drabsmand. - *Det Grønlandske Selskabs skrifter* XX: 89 pp.
- 1963. Sagn og Saga fra Angmagssalik. - Rhodos, København: 308 pp.
- Roulant, N. 1979. Les modes juridiques de solution des conflits chez les Inuit. - *Etudes Inuit* 3 (hors série): 171 pp.
- Rüttel, F. C. P. 1917. Ti aar blandt Østgrønlands hedninger. - Gyldendal, Copenhagen: 253 pp.
- Ryberg, C. 1898. Fra Missions- og Handelstationen ved Angmagssalik. - *Geografisk Tidsskrift* 14: 116-123.
- Ryder, C. 1895. Beretning om den Østgrønlandske Expedition 1891-1892. - *Meddr Grønland* 17: 374 pp.
- Saladin d'Anglure, B. 1970. Nom et parenté chez les Esquimaux Tarramiut du Nouveau-Québec (Canada). - In: Pouillon, J. & Maranda P. (eds.), *Echanges et Communications. Mélanges offerts à Claude Lévi-Strauss*. - Mouton: 1013-1039.
- 1976. Igloolik. Colour film 16 mm, 1h 55 min. Treguer, M. real. - Co-production Serddav-FR3, France.
- 1981. Esquimaux. La mythologie des Inuit de l'Arctique central nordaméricain. - In: Bonnefoy, Y. (ed.), *Dictionnaire des mythologies*. - Flammarion: 379-385.
- Salomonsen, F. (ed.) 1981. Grønlands Fauna. Fisk, Fugle. Patedyr. - Gyldendal: 464 pp.
- Sammendrag af Grønlands fangstlister 1954-1977. - Ministeriet for Grønland: annual publication.
- Sandgreen, O. (red.) 1982. Georg Qupersimán. Min eskimiske fortid. En østgrønlandsk åndemans erindringer. - *Det Grønlandske Forlag*: 184 pp.
- Shephard, R. & Itoh, S. (eds.) 1976. *Circumpolar Health*. - Third International Symposium, Yellowknife 1974. NWT, University of Toronto Press: 678 pp.
- Skeller, E. 1954. Anthropological and ophthalmological studies on the Angmagssalik Eskimos. - *Meddr Grønland* 107 (4): 231 pp.
- Smidt, C. 1968. Østgrønlands problemer. Grønlands problemer. - *Tidsskriftet Grønland* maj: 143-150.
- Statistisk Tabelværk. 1965. Grønland, Folketællingen 1960. Ægteskaber, fødte og døde 1952-60. - Statistisk Departement, København: 85 pp.
- Statistik Protokol. Angmagssalik Distrikt 1894-1945. - Ministeriet for Grønland.
- Sukagsaut, Angmagssalik 1934-1982. Periodic.
- Sutter, J. & Goux, J. M. 1961. L'aspect démographique des problèmes de l'isolat. - *Population* 3: 447-462.
- Sutter, J. & Tabah, L. 1951. Les notions d'isolat et de population minimum. - *Population* 3: 481-498.
- Svarlien, O. 1964. The Eastern Greenland case in historical perspective. - *University of Florida Monographs, Social sciences* 21: 74 pp.
- Sveistrup, P. 1967. The economy of Greenland. - *Meddr Grønland* 182 (1): 218 pp.
- Taagholt, J. 1980. Greenland and the future. - *Environmental conservation*, 7 (4): 295-299.
- 1982. Greenland's future development: a historical and political perspective. - *Polar Record* 21 (130): 23-32.
- Tchernia, P. 1942. Considérations d'anthropologie physiologique sur les Esquimaux: alimentation, maladies des voies respiratoires, groupes sanguins. - *Bull. et Mém. de la Soc. Anthropol. de Paris*, III: 44-55.
- Thalbitzer, W. 1908. Eskimokulturen ved Angmagssalik (Ammassalik). - *Geografisk Tidsskrift* 19: 56-69.
- (ed.) 1914 & 1923. The Ammassalik Eskimo: Contributions to the ethnology of the East Greenland natives. - *Meddr Grønland* 39 & 40 (I, II & III): 752 pp. & 294 pp.
- 1921. Language and folklore. - In: Thalbitzer, W. (ed.) 1923, *The Ammassalik Eskimo: contributions to the ethnology of the East Greenland natives*. - *Meddr Grønland* 40 (3): 113-564.
- 1930. Les magiciens esquimaux, leurs conceptions du monde, de l'âme et de la vie. - *Journal de la Soc. des Américanistes de Paris* XXII: 73-106.
- (ed.) 1933. - *Den Grønlandske Kateket Hanséraks Dagbog om den Danske Konebådsekspedition til Ammassalik i Østgrønland 1884-1885*. - *Det Grønlandske Selskabs Skrifter* VIII: 248 pp.
- 1941. The Ammassalik Eskimo: contributions to the ethnology of the East Greenland natives. Social customs and mutual aid. - *Meddr Grønland* 40 (4): 571-739.
- Trap, J. P. 1970. Grønland. - In: *Danmark* 5. udgave. - Gad, København, XIV: 689 pp.
- Ujuat see Petersen, J.
- Vallin, J. 1968. La mortalité dans les pays du Tiers Monde: évolution et perspectives. - *Population* 5: 845-868.
- 1976. La mortalité infantile dans le monde. Evolution depuis 1950. - *Population* 4-5: 801-838.
- Vest, S. 1948. Sundhedsvæsenet i Angmagssalik. - *Det Grønlandske Selskabs Aarskrift*: 39-53.
- Vibe, Chr. 1967. Arctic animals in relation to climate fluctuations. - *Meddr Grønland* 170 (5): 227 pp.
- Victor, P. E. 1938. Le bilboquet chez les Eskimo d'Angmagssalik. - *Journal de la Soc. des Américanistes de Paris* XXX: 299-331.
- 1940. Les jeux de ficelle (cat's cradle). Jeux d'enfants et d'adultes chez les Eskimo d'Angmagssalik. Contribution à l'ethnologie des Eskimo d'Angmagssalik. - *Meddr Grønland* 125 (7): 212 pp.
- 1974. Boréal. La joie dans la nuit. - Gautier-Languereau, Paris: 270 pp.
- Walløe, P. O. see Bobe, L.



# Index

- Aasivik* 147–148  
 abortion 23–24, 27, 65–66, 73  
 accidental or violent deaths 29, 31, 33, 37–39, 121, 136, 138, 140–146  
 administration 12, 13–15, 35, 45, 49, 71–72, 73, 76, 77, 79, 81–82, 93, 94–96, 117, 119, 121, 126, 131–132, 139–142, 146, 147, 149  
 adoption 52, 65, 71–75, 151  
 age pyramids 19, 22, 39–40, 46, 163  
 age structure 23, 32, 33–34, 39–40, 46, 65, 149, 163  
 aggression 57, 93, 139–142, 144–146  
 air communications 12, 15, 85–86, 87, 91–92, 95  
 alcohol/alcoholism 31, 37, 91, 124–125, 139–142, 143, 146  
 Aluk 13, 126  
*amaarut* 31, 126  
 Ammassalik Fjord 8, 11, 54–55, 75–77, 78–79, 85, 90, 91, 92, 166–168  
 Ammassalik dialect 5, 55, 131–133, 136, 147  
*ammassat* (capelin) 11, 54, 84, 110, 112, 113, 122, 124, 161  
*angakkeq* (shaman) 28, 63, 120, 136, 138, 151, 153  
 Anoritoq 13, 47, 48, 50–51, 126  
 Aputiteeq 13, 47, 151, 166–167  
 arctic char 82, 90, 97, 98, 110, 112, 122, 130, 151, 161  
 arctic fox 9, 12, 96, 108–109, 161  
 bartering 11, 12, 44, 107, 112, 126–127  
 BERTELSEN, A. 24–25, 52, 64  
 bird fauna 9, 109–110, 122, 161  
 birth rates 19, 21, 22–27, 35, 39, 148, 150  
 birth spacing 19, 65, 69–71  
 blowing out of lamps 58, 134, 136  
 breast feeding 27, 29, 30, 31, 64, 71, 111, 124  
 capelin (see *ammassat*)  
 caribou (reindeer) 9, 109, 161  
 celebrations 57, 58, 59, 84, 110, 133–135, 137, 140, 147–148, 153  
 celibacy 54, 59–61, 62, 64, 65, 73, 118  
 censuses 16, 19, 20, 22, 39, 44, 54, 57–58, 59–61, 71, 72, 80, 117, 163  
 child birth 28–31, 86  
 childlessness (infertility) 57, 63, 73, 118  
 christianization 12, 16–17, 43, 58–59, 66, 77–78, 82, 91, 92, 94, 117, 131, 134, 135–138, 144, 146, 147, 151  
 climate 8–9  
 clothes 31, 49, 53–54, 100, 101, 105, 107, 115, 124, 129, 135, 149  
 cod 25, 52, 90, 92–94, 110, 112–115, 122, 124, 127, 149, 152, 161  
 communications 9, 13, 15, 28, 34–35, 45–46, 85–86, 87, 88, 94, 95, 111, 135, 150  
 contraception 21, 23–24, 27, 46, 54, 64, 65–69, 75  
 criminality 136, 139, 140–142, 144–145, 146  
 cultural life 54, 55, 84, 88–89, 114, 115, 133–135, 140, 145, 147–148, 151  
 customary law 75, 79, 81, 98, 100, 105, 106–107, 108, 113, 130–131, 141, 145  
 death rates 19, 21, 22, 23, 27–39, 57, 58, 119, 126, 140, 141–146, 150  
 demographic growth 19–22, 83, 84, 86, 94, 99, 102, 138, 147, 148–149  
 diet 27–28, 31, 33, 35, 37, 39, 49, 72, 82, 84, 92, 98, 100, 102–104, 105, 106–107, 109–111, 114, 120, 121–125, 129, 130–131, 134–135, 139–140, 149, 161–162  
 delivery, age at first 43, 57, 63, 65, 66–67, 68, 69  
 delivery, age at last 67, 69  
 divorce (separation) 57–63, 74–75, 118, 139, 141  
 driftwood 9, 79, 81, 115  
 dog 9, 99–100, 110, 123, 124, 153  
 dog sleds 15, 37, 49, 85–86, 98, 99–100, 147, 153  
 Dorset (culture) 10  
 “duel of songs” 135, 140, 144–145, 146, 151  
 education 41, 50–51, 85, 86, 95, 99, 118, 119, 120, 131–133, 137, 148–149, 153  
 endogamy 5–6, 44, 54–57, 75, 87, 89, 146, 149  
 epidemics 20–21, 27–28, 29, 32, 34–37, 119, 121, 126, 150  
 ethnic subdivisions 54–55, 57, 75, 146  
 exogamy 21, 44–47, 54–55, 60–62, 147, 164  
 family upbringing 31, 37, 42–43, 120, 124, 133, 137, 145, 146, 150  
 famine 19, 22, 27, 39, 72, 97–98, 110, 124  
 fertility 19, 22–23, 35, 58, 63–71, 130, 151  
 fertility, completed 22, 64–65, 67–69  
 fire arms 49, 96–97, 100, 126, 143  
 fish fauna 9, 92, 94, 98, 110–111, 112, 114, 122, 124, 149, 161  
 fishing 25, 78, 82, 84, 92, 94, 98, 110–111, 112, 113, 120, 124, 130  
 fishing, commercial 12, 51–52, 82, 86, 87, 90, 91, 92–94, 99, 103, 112–115, 120, 127–129, 130, 131, 149, 152  
 Frederiksdal/Friedrichsthal 11, 13, 54, 126, 135–136, 150  
 gathering 42, 96, 111, 112, 120, 130  
 genealogies 6, 16, 17, 18, 44, 47, 56–57, 58, 87, 90, 151–152  
 geology 8  
 geography 8, 100  
 GESSAIN, R. 5–6, 16, 17, 20, 29, 36, 44, 52, 64, 80, 98–99, 115, 116–117, 124, 145, 149, 151  
 gifts (social exchanges) 54, 57, 73, 75, 81, 91, 106, 118, 124, 125, 130–131, 134–135, 145, 146, 147  
 Godthåb/Nuuk 11, 36, 51–52, 112, 131, 133, 136, 141–142, 148, 149, 151  
 GRAAH, W. 11  
 handicrafts 87, 91–92, 96, 106, 115–116, 120, 127, 128, 131, 149, 152  
 HANSEN, J. (HANSËRAQ) 136, 150  
 harpoon (and leister) 57, 97, 98, 110, 112, 126, 144–145, 148  
 HEDEGAARD, A. 17, 20, 34, 76, 80, 97, 151  
 HELMS, P. 36, 125  
 historical accounts 9–15, 19–21, 75–79, 135–136, 147, 150–151  
 HOLM, G. 10–12, 16, 19, 20, 29, 39, 44, 54, 57–58, 63, 64, 78, 79, 80, 94, 112, 115, 136, 137, 144–145, 150, 151, 152, 153  
 Home Rule 15, 52, 133, 139, 148, 150  
 housing 10, 19, 47, 49, 55, 57, 75–82, 87, 92, 93, 94–95, 100, 101, 117, 123, 125, 129, 130, 135, 149, 151  
 HØYGAARD, A. 17, 36–37, 78, 79, 80, 81, 84, 91, 92, 121, 151  
 hunting 9–10, 19, 34, 37, 41, 42–43, 47–50, 75, 87, 91, 96–110, 113, 120, 121, 122–123, 127–131, 134, 135, 136, 138, 145, 147–149, 152, 153  
 hunting, by westerners 9, 11–12, 19, 105–106, 150  
 hybridization (interbreeding) 23, 44–47, 61, 147, 163  
 Ikkatteq (American base) 12, 17, 46, 47, 81, 87, 91, 95, 121, 151, 166–167  
 Ikkatteq (village) 55, 62, 76, 77, 78, 79, 85–86, 88, 96, 99, 166–168  
 Ikertivaq 8, 11  
*ilisiutseq* 115, 137, 138  
 illegitimate birth 16, 23, 46–47, 54, 56, 59, 61, 64, 72, 73, 119, 141  
 inbreeding 31, 33, 43, 55–57, 87, 90, 146  
 infanticide 19, 25, 26–27, 29, 42, 54, 72, 136  
 infant mortality 19, 26, 28–31, 33, 34–35, 39, 42, 65, 71, 138, 146  
 infertility (see childlessness)  
 interbreeding (see hybridization)  
 Inuit Circumpolar Conference (ICC) 149  
 isolate 5–6, 17, 146–147, 149, 150  
 Isortoq 54–55, 57, 62, 75, 76, 78–79, 81, 85, 86–87, 88, 98–99, 103, 104, 106, 114, 116, 121, 123, 128, 130, 151, 152, 166  
 Itimiin 76–78, 84, 94, 166–168  
 Ittoqortoormiit (Scoresbysund) 6, 11, 12, 13, 14, 20–21, 25–26, 42, 44, 45, 47, 49, 57, 65, 71, 77, 97–98, 100, 107–108, 139, 142, 150, 152  
 Ittuarsuit 11, 13, 48–51, 54  
 JØRGENSEN, S. 16, 52–53  
 justice 14, 62, 140–142, 145  
*kamik* 49, 104, 115, 135, 147  
 Kangerlussuaq 13, 47, 48–51, 106, 108, 151  
 Kangerittivatsiaq 48, 50–51, 75, 87  
 Kap Farvel 10, 11, 13, 20, 50, 126, 150  
 kayak 9, 37, 41, 92, 96, 98–99, 101, 104, 105, 113, 137, 148, 151  
 Kialineq 13, 49–51  
 kinship 19, 55–57, 63, 73, 75, 81, 82, 86, 87, 88–89, 90, 124, 130–131, 134–135, 137, 140, 142, 143, 144, 146, 150, 151–152, 164  
 kongelige grønlandske Handel, Den, KGH (national trade company) 14, 51, 79, 91, 100–106, 108, 109, 111, 112–113, 114, 115–116, 117, 121, 123, 124–125, 126–128, 148, 151  
 Kulusuk (airport/American base) 12, 15, 46, 47, 62, 91–92, 115  
 Kulusuk village, Kap Dan 11, 12, 55, 62–63, 73–75, 76–77, 78–79, 81, 84, 85–86, 87, 88, 89, 91–93, 95, 99, 103–104, 114, 115–116, 121, 123, 128, 131–132, 133, 142, 151, 152, 166–168  
 Kuummiit 49, 55, 62, 74–75, 77, 78–79, 81, 85–86, 87–88, 89, 91, 92–94, 95, 99, 103–104, 106, 107, 112–114, 116, 118, 121, 123, 124, 128, 130, 131–133, 142, 151, 152, 166–168  
 leister (see harpoon)  
 leisure time 87, 90, 129, 133–134, 149, 153  
 life-expectancy 27, 32–34, 150

- mammals, land 9, 107–109, 122, 152, 161  
mammals, sea 9, 19, 100–107, 122, 152, 161  
MARATSE 56–57, 81, 88–89, 135, 136, 151  
marital status 59–63, 64, 73–75  
marriage 53–63, 64, 66, 73–75, 136, 137, 151  
marriage prohibitions 43, 55–57  
MATHIASSEN, Th. 9, 10, 11, 76, 77, 81, 92, 151, 152, 166, 168  
mating 43–44, 46, 54–57, 61, 146–147, 151  
MAUSS, M. 25, 64, 72  
medical assistance 17, 21, 23–24, 27, 30, 31, 32, 34–37, 39, 64, 65, 86, 117, 146–147  
menarche (puberty) 52–53, 54, 57  
menopause 53  
MIKKELSEN, E. 12, 13–14, 19, 20, 22, 35, 47, 49, 77–78, 84, 91, 96, 100, 101, 104, 105, 107, 108, 118–119, 121, 123, 126, 136, 141, 144–145, 153  
money/monetary income 28, 49, 59, 73, 81–82, 84, 87, 92, 94–95, 96–97, 99–100, 104, 106, 107–108, 112, 113, 115–116, 117–118, 119, 124, 125–131, 134, 139, 146, 148–149, 151, 152  
Moravian Brotherhood, Missions 6, 11, 126, 135–136, 150  
motor boats 37, 41, 83–84, 93, 98–99, 108, 113, 129, 130, 141  
multiple births (twinning) 25–27, 70, 150  
name (reincarnation of the) 16, 43, 44, 65, 72, 124, 130, 137, 138, 147, 150, 151, 153  
narwhal 9, 49, 106, 107, 115, 122, 127, 130, 138, 161  
nets (see salmon and seal)  
nomadism, winter 47–51, 75–77, 79, 87, 93, 106, 108, 128  
nomadism, summer 50, 72, 75, 82–85, 86, 87, 90, 99, 105, 110, 120, 131, 151  
Norsemenn 10–11  
nubility 53–54, 57  
nuclear family 19, 31, 65, 71–72, 75, 78, 79, 90, 130  
Nuugaalik 13, 49, 50–51  
old age 19, 32–34, 38, 39–42, 72, 73, 118–119, 131, 136, 140, 143, 144, 145–146  
old age pensions 40, 119, 129, 152  
orphan 27, 29, 37, 72–73, 116, 118–119, 145, 146  
outside migrations 10, 11, 12, 16, 19–20, 44, 46–47, 50–52, 54, 57, 61, 63, 95, 126, 132, 133, 135, 143, 147, 148, 150, 151  
Pamiialuk/Pamiattik 11, 126, 135, 150  
patriarchal family 19, 54–55, 56, 57, 72, 75, 78, 80–81, 88–89, 90, 119–120, 125  
patronymic name 73, 151, 164–165  
pensions 47, 62, 73, 119, 129, 141, 152  
PETERSEN, Johan (UJUAT) 10, 11, 12, 16, 17, 27, 35, 49, 76, 78, 80, 94, 144–145, 150, 152  
Pikiitsi 6, 50–51, 55, 57, 62, 76, 87, 96, 98–99, 103–104, 110, 123, 128, 130, 151  
pilaraq 95, 117, 132, 151  
plants, land 9, 82, 111, 121–122, 124, 130, 162  
platform 55, 57, 79, 81, 85, 87, 101, 105, 129  
polar bear 9, 11, 12, 49, 96, 106, 107–108, 122, 124, 127, 130, 152, 161  
polygamy 43, 57–58, 60–61, 136, 147, 151  
POULSEN, K. 17, 28, 30  
prehistory 9–10, 19, 75–77, 109  
prices 81–82, 96–97, 98, 99, 102, 103–104, 106, 108–109, 116, 124, 127–129, 130, 134, 139–140, 148, 151, 152, 153  
puberty (see menarche)  
Puisortoq 13, 47, 50–51, 126  
qattunat (westerners) 11–12, 20, 34–35, 44, 45–47, 55, 60–62, 82, 86–87, 89, 90, 91–92, 93, 94–95, 115, 116–118, 128, 131–133, 135–136, 141, 145, 146, 150, 152, 153  
qattunasiq 44  
Qernertivartivit 55, 62, 76, 77, 79, 85–86, 88, 96, 98, 99, 121, 166–168  
Qinngaq 54, 76, 84, 110, 140, 148, 151, 166–168  
qivittaq 138, 153  
Qulleq 13, 47, 166–167  
RASMUSSEN, K. 59, 120, 126, 144, 145, 153  
reincarnation (see name)  
reindeer (see caribou)  
rhythms of activity 72, 75, 82, 94, 96, 113, 116, 120, 121–122  
rites and beliefs 26–27, 28–29, 53, 57, 63, 72, 77, 115, 120, 126, 130, 134, 136–138, 144–145, 147, 150, 151, 152, 153  
row boats 83–84, 93, 99, 113  
ROSING Chr. 58, 136  
ROSING, O. 131  
RÜTTEL, F. 12, 27, 58, 94, 136  
RYDER C. 11–12, 16, 20, 34, 61, 72, 145  
salmon (arctic char) net 98, 110, 113, 114  
Saqqaq (culture) 10  
Scoresbysund (see Ittoqqortoormiit)  
seal 9, 19, 49, 82, 84, 100–106, 122–124, 127–130, 152, 153, 161  
seal net 9, 41, 97–99, 100, 102, 152  
sea shore produce 111, 122, 130, 161–162  
sea weed 9, 111, 122, 130, 162  
seasonal effects 8–9, 24–25, 27–28, 31, 50, 82, 84, 98, 100–101, 102–103, 111, 112, 114, 117–118, 120, 150  
sedentarization 47, 49, 77–79, 81, 91, 92, 105, 121, 148  
separation (see divorce)  
Sermiligaq 54–57, 62, 76, 77, 78, 79, 81, 85–86, 87–89, 97, 98–99, 103–104, 106, 107, 108, 114, 121, 123, 128, 151, 166–168  
Sermiligaq fjord 8, 54–55, 75–77, 126, 166–168  
Sermilik fjord 8, 10, 11, 54–55, 75–77, 79, 85–86, 89–90, 106, 109, 121, 136, 151, 166–168  
“sex changing” 42–43  
sex ratio 31, 42–44, 58, 60–61, 151–152  
sexual division of labour 42–43, 54, 58, 59, 72, 94, 103–104, 105, 107, 110, 111, 112–114, 115, 118, 120, 123, 130  
sexual freedom 25, 46–47, 53, 54, 59, 66–67, 151  
shaman (see angakkeq)  
sharing of game 63, 75, 81, 82, 91, 103, 105, 106, 107, 123, 125, 130–131, 145, 147  
sharing of fish and wages 75, 91, 113–114, 131, 146  
shark 90, 110–111, 112, 124, 161  
skin curing and work 54, 59, 103–105, 115, 129, 152  
skins and pelts 49, 79, 81, 83–84, 96, 100–106, 107–109, 115, 124, 126, 127–128, 130, 135, 137, 148, 152  
Skjoldungen 13, 48–51, 54, 55, 79, 81–82, 92, 93, 105, 108, 112, 133  
social control (of aggression) 142, 144–146  
social exchanges (see gifts)  
social welfare 37, 40, 72, 73, 82, 118–119, 129, 139–140, 141, 146, 148, 152  
Sokongen Ø 50–51  
southeastern tribes 11, 44, 54, 126  
standards of living 33, 73, 82, 84, 92, 94–95, 99, 107–108, 116, 118, 125, 127–130, 139–140, 141, 145, 146, 148–149, 153  
suicide 19, 37–39, 43, 58, 72, 91, 142–144, 145–146  
Tasiilaq 12, 15, 24, 31, 55, 61–62, 73–75, 76–79, 84, 85–86, 89, 93, 94–96, 99, 105, 116–118, 120, 121, 124, 125, 128–129, 131–132, 133, 135, 136, 142, 144, 149, 150, 151, 153, 166–168  
television 129, 133, 153  
tent 82–85, 101, 110, 131  
THALBITZER, W. 27, 57–58, 63, 81, 112, 115, 120, 137, 144, 153  
Thule (culture) 9–10  
Tiileqilaq 26, 55, 62, 76, 77, 78–79, 81, 85–86, 87, 88, 89–91, 95, 97, 98–99, 103–104, 106, 112, 114, 123, 128, 151, 166–168  
Timmiammiit 13, 47, 48, 50–51, 54, 108, 166–167  
tourism 12, 15, 91–92, 115, 127  
trade company (see KGH)  
tuberculosis 36–38, 50, 119  
Tunumeeq (plur. Tunummiut) 55, 147  
tupilaq 115–116, 128, 137, 138  
twinning (see multiple births)  
Uummannaq 13, 48, 54  
umiak 9, 11, 37, 49, 58, 83–84, 91, 101, 104, 105, 126, 151  
Umiivik (southern) 6, 11, 13, 49–51, 76, 104, 126, 151  
urbanization 12–13, 93, 94–95, 113, 120, 133, 142, 144, 149  
venereal diseases 67, 151  
violence 57, 59, 91, 136, 139–142, 144–146  
vocational training 51–52, 82, 112, 117, 118, 133, 141–142  
wage earning occupations 41, 51–52, 84, 91, 94, 95–96, 112, 116–118, 120, 127–129, 146, 149, 152  
WALLØE, P. O. 11  
walrus 9, 106, 107, 115, 122, 130, 152, 161  
westerners (see qattunat)  
West Greenland 14, 21, 24, 25, 27, 28, 34, 36, 51–52, 64, 65–66, 80, 97, 112, 113–114, 117, 132, 135, 136, 138, 139, 141–142, 147–148, 149, 150, 151  
West Greenlanders (in Ammassalik) 12, 21, 29, 45–46, 55, 58, 61–62, 77–78, 91, 94, 113, 116–118, 128, 131, 132, 135, 136, 138, 147, 153  
whale hunting 9, 19, 107, 151  
whale, little piked (lesser orqwal) 106–107, 161  
whale, white (beluga) 9, 106, 107, 122, 130, 161  
wife exchange 57, 58, 136  
World War (Second) 12, 17, 45–46, 87, 95, 121

*Appendix I. Names of various animal and plant resources consumed in Ammassalik; English, East Greenlandic, Latin, French, Danish*

*Sea animals (imarmiut)*

seal	<i>puileq</i>	<i>Phocidea</i>	phoque	sæl
ringed seal	<i>natsiaq</i>	<i>Pusa hispida</i>	phoque annelé ou marbré	ringsæl, netside
(fjord seal)			(phoque de fjord)	(fjordsæl)
bearded seal	<i>anneq</i>	<i>Erignathus barbatus</i>	phoque barbu	remmesæl
harbour seal	<i>qittalivaq</i>	<i>Phoca vitulina</i>	phoque veau marin	spættet sæl
(common seal)			(phoque commun)	(spraglet sæl)
hooded seal	<i>niiniarteq</i>	<i>Cystophora cristata</i>	phoque à capuchon	klapmyds
(bladdernose seal)			phoque à crête	
harp seal	<i>nalanginnaq</i>	<i>Pagophilus groenlandicus</i>	phoque du Groenland	grønlandssæl
(Greenland seal)				sortside, blåsede
Atlantic walrus	<i>aaveq</i>	<i>Odobenus rosmarus</i>	morse	hvalros
whale	<i>arpeq</i>	<i>Catacea</i>	baleine	hval
lesser rorqual	<i>tigaanguttik</i>	<i>Balaenoptera acutorostrata</i>	petit rorqual	sildepisker
little piked whale			baleine à rostre	vågehval
narwhal	<i>qialivaq</i>	<i>Monodon monoceros</i>	narval	narhval
beluga	<i>qialivarnaq</i>	<i>Delphinapterus leucas</i>	bélouga	hvidhval
white whale			baleine blanche	

*Land animals (nunamiut)*

Polar bear	<i>naneq</i>	<i>Thalarctos maritimus</i>	ours blanc	isbjørn
			ours polaire	
Arctic fox	<i>orersernaq</i>	<i>Alopex lagopus lagopus</i>	renard polaire blanc	polarræv, hvid
		<i>Alopex lagopus caeruleus</i>	isatis, bleu	blå
reindeer, caribou	<i>tuttu</i>	<i>Rangifer tarandus groenlandicus</i>	renne	ren, rendyr

*Fish (aalisakkat)*

arctic char	<i>kaporniarngaq</i>	<i>Salvelinus alpinus</i>	omble chevalier	fjeldørred (laks-ørred)
capelin	<i>ammassaq</i>	<i>Mallotus villosus</i>	capelan	lodde
sculpin	<i>qivaareq</i>	<i>Myoxocephalus scorpius</i>	cotte, chabot de mer, scorpion de mer	almindelig ulk
polar cod	<i>uuvag</i>	<i>Boreogadus saida</i>	morue polaire	polartorsk
Atlantic cod	<i>aalisarngaq</i>	<i>Gadus morhua</i>	morue commune	torsk
redfish	<i>suluppaavaq</i>	<i>Sebastes marinus</i>	sébaste	stor rød fisk
Greenland halibut	<i>qalarngalik</i>	<i>Reinhardtius hippoglossoides</i>	flétan noir	hellefisk
Atlantic halibut	<i>nalaarnaq</i>	<i>Hippoglossus hippoglossus</i>	flétan de l'Atlantique	helleflynder
Atlantic wolf-fish	<i>qeerngaq</i>	<i>Anarhichas lupus</i>	loup de la mer	stribet havkat
Atlantic salmon	<i>kapisilik</i>	<i>Salmo salar</i>	saumon atlantique	skællaks
sand dab	<i>oquutaq</i>	<i>Hippoglossoides platessoides</i>	balai de l'Atlantique	håising
Greenland shark	<i>niialinga</i>	<i>Somniosus microcephalus</i>	lémarginé du Groenland	havkal
			requin du Groenland	Grønlandshaj

*Birds (timmittat)*

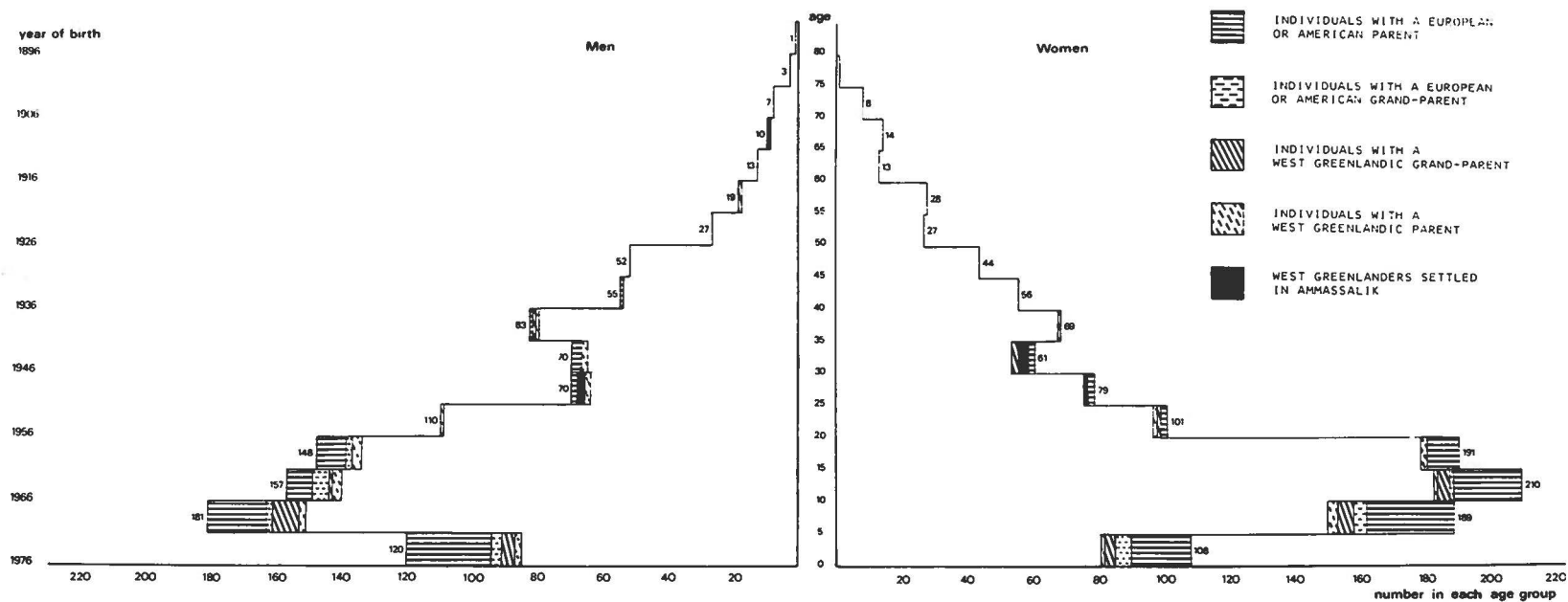
ptarmigan	<i>nagalarngaq</i>	<i>Lagopus mutus</i>	lagopède des Alpes	fjeldrype
eider	<i>maleersartaq</i>	<i>Somateria mollissima</i>	perdre des neiges	edderfugl
white-fronted goose	<i>nerteq</i>	<i>Anser albifrons</i>	eider à duvet	blisgås
mallard	<i>pigivaarnaq</i>	<i>Anas platyrhynchos</i>	oie riuse	gråand
black guillemot	<i>norniarngaq</i>	<i>Cephus grylle</i>	canard colvert	tejst
Brünnich's guillemot	<i>saarnigittik</i>	<i>Uria lomvia</i>	guillemot à miroir	kortnæbbet lomvie
red-throated diver	<i>qaqqaqqaq</i>	<i>Gavia stellata</i>	guillemot de Brünnich	rødstrubet lom
great northern diver	<i>qartiimoortoq</i>	<i>Gavia immer</i>	plongeon catmarin	islom
little auk	<i>kutsuulaq</i>	<i>Alle alle</i>	plongeon imbrin	søkonge
long-tailed duck	<i>atteq</i>	<i>Clangula hyemalis</i>	mergule nain	havlit
kittiwake	<i>taalaqqaq</i>	<i>Rissa tridactyla</i>	hareld de Miquelon	ride (tretået måge)
glaucous gull	<i>quseeq</i>	<i>Larus hyperboreus</i>	mouette tridactyle	gråmåge
great black-backed gull	<i>quseernaq</i>	<i>Larus marinus</i>	goéland bourgmestre	svartbag
arctic tern	<i>imeqqilaalaq</i>	<i>Sterna paradisaea</i>	goéland marin	havterne
fulmar	<i>qarattuk</i>	<i>Fulmarus glacialis</i>	sterne arctique	malle muk
			petrel fulmar	

*Produce of the shore (sittamiit)*

mussel	<i>kiliittaq</i>	<i>Mytilus edulis</i>	moule	blåmusling
blunt gaper	<i>paaq</i>	<i>Mya truncata</i>	mye tronquée	sandmusling
whelk	<i>pusingaleq</i>	<i>Buccinum sp.</i>	buccin	konk
(small white shell-fish)	<i>sittarteq</i>	<i>Hiatella sp.</i>	(petit coquillage blanc)	
(small mollusc with thin shell)	<i>surngujoq</i>	<i>Musculus laevigatus</i>	(petit mollusque à coquille fine)	
sea urchin	<i>arsaq</i>	<i>Strongylocentrotus</i>	oursin	søpindsvin
sea anemone	<i>uversarteq</i>	<i>Actinia</i>	anémone de mer	søanemone
lugworm	<i>qumaartertuaq</i>	<i>Arenicola sp.</i>	ver de sable, chétopode	sandorm

knobbed wrack bladder-wrack dulse kelp	<i>misarngarnat</i> <i>missaqqat</i> <i>imertikkat</i> <i>kipilatsat</i>	<i>Ascophyllum nodosum</i> <i>Fucus vesiculosus</i> <i>Rhodomenia palmata</i> <i>Alaria pylai</i>	algues (4 espèces)	buletang blæretang søl vingetang
<i>Land plants (naasut)</i> angelica rose-root Lapland dandelion mountain sorrel herblike willow, alpine bistort crowberry bog whortleberry	<i>kuanneq</i> <i>torteernaq</i> <i>nunat</i> <i>nutsungaq</i> <i>quttungaleq</i> <i>ittormiilaq</i> <i>pukukkaq</i> <i>kilaarnaq</i>	<i>Angelica archangelica</i> <i>Rhodiola rosea</i> <i>Taraxacum croceum</i> <i>Oxyria digyna</i> <i>Salix herbacea</i> <i>Polygonum viviparum</i> <i>Empetrum nigrum</i> <i>Vaccinium uliginosum</i>	angélique orpin pissenlit oseille sauvage saule herbacé renouée vivipare camarine airelle bleue, orcette	fjeld-kvan rosenrod mælkebøtte fjeldsyre dværg-pil topspirende pileurt fjeld-revling mosebølle

---



## Appendix II

Age pyramid: Ammassalik 31.12.1976. Ammassalik population: men 1126, women 1199, total 2325.



### *Appendix III*

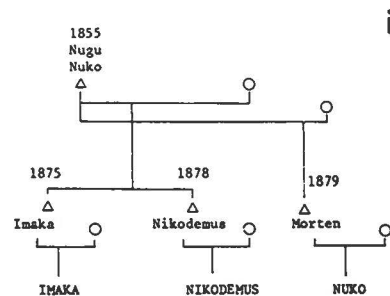
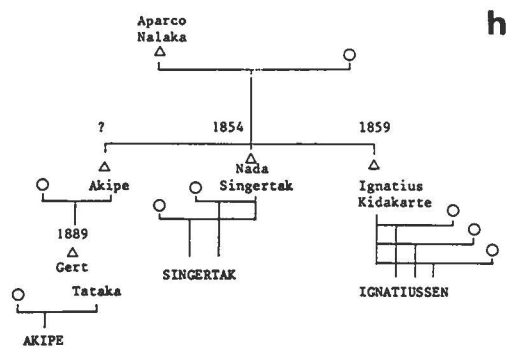
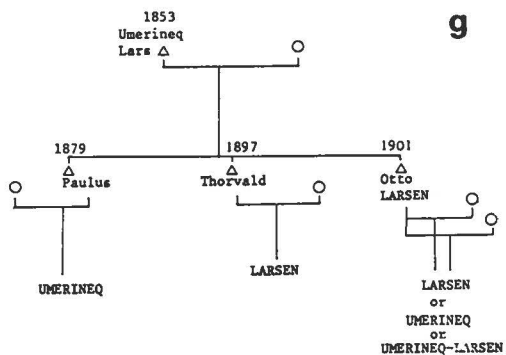
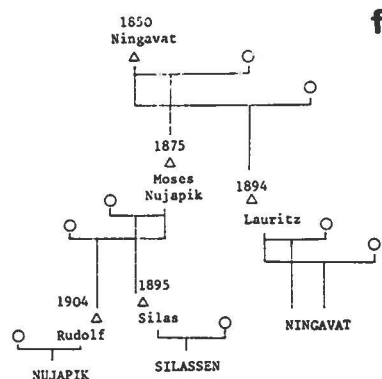
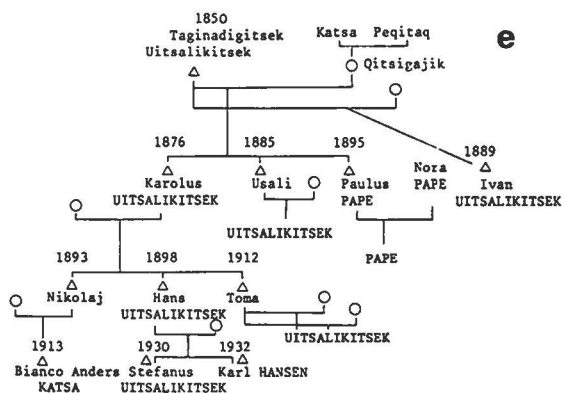
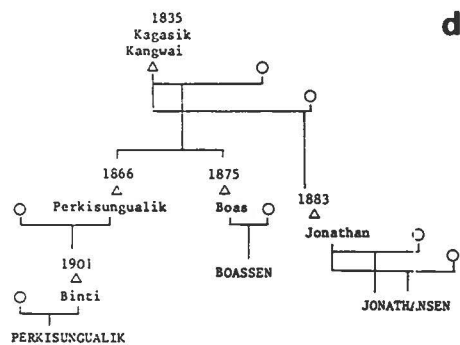
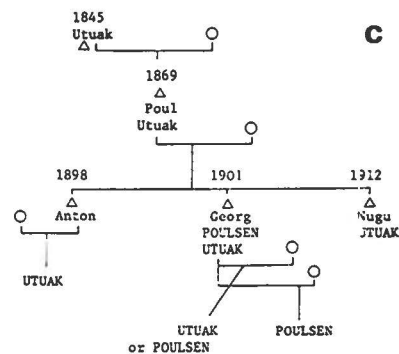
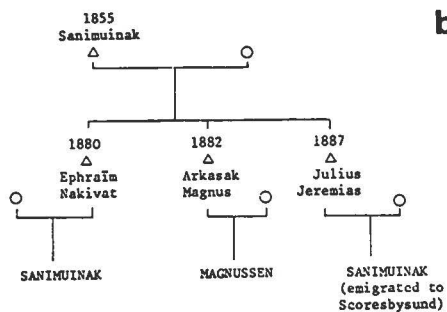
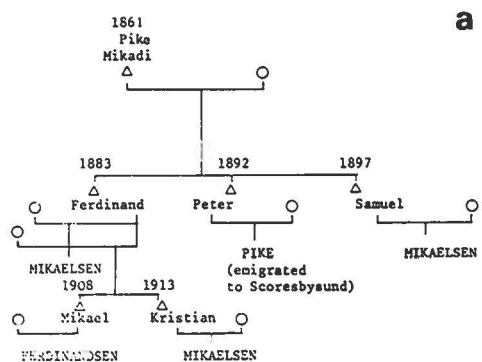
Genealogical diagrams showing the diversity of patronymic names chosen by some Ammassalik families.

Family names became generalized in Ammassalik during the 1950s. Traditionally the Ammassalimmiut had no patronymic name. Each individual had several personal names, inherited from his ancestors. When the different families took patronymic names, they chose the first name of a family head: some took Eskimo first names such as Amataneq, Kunak, Kuitse, Manikutdlak, Singertak etc. Others made their family name following the Danish custom, that is, taking a Christian first name and adding 'sen' to it, for example, Mikaelson, Josuassen, Kristiansen, Poulsen, Sigvertsen etc. Sometimes some of the descendants of the same ancestor chose his Eskimo name, while the others took on

his Christian name: thus the Utuaks and the Poulsens are all descendants of the same man, Utuak, christened under the name of Poul. Several similar cases can be found in the district; the Umerineks and Larsens, the Ingemanns and Kakaks.

The diagrams show how some of today's patronymic names appeared. We observe that brothers can have chosen different family names. As a rule, the wife takes on her husband's patronymic name, but there are a few exceptions to this rule, like Pivat and Pape (e) where the woman has given her family name to her husband and children.

In 1976, among the different family names figuring on the nominative list I made, 55 are local names, the others coming from marriages with Danes or West Greenlanders. Among those 55 names, 33 come from Eskimo first names and 22 from Christian first names.



Appendix IV. Geographical distribution of the Greenlandic population in Ammassalik district from 1935 to 1979. Table established in the same manner as that of T. Mathiassen (1933: 128–131) for the years 1905–1931, and referring to the same map (p. 168).

	1934	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
<i>Sermiligaaq fjord</i>																		
9. 'Utoqqarmiit'	57	58	57	69	74	77	87	80	86	83	94	77	80	88	79	79	104	107
Sermiligaaq																		
<i>Between Sermiligaaq and Ammassalik Fjord</i>																		
*Ikkatteq (base)	–	–	–	–	–	–	–	–	2	7	7	8	8	9	8	8	8	–
<i>Ammassalik Fjord</i>																		
20. Immikkoortoq	–	–	–	–	–	–	–	9	10	7	8	8	8	8	–	–	–	–
21. Akinnaatsiaat	19	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
22. Suunaajik	7	15	8	8	8	8	13	19	14	16	6	5	7	8	15	10	–	–
23. Tittingaleq	24	17	22	21	21	20	26	18	18	18	17	–	–	–	–	19	21	16
27. Kulusuk (Kap Dan)	174	133	124	156	179	182	195	195	192	195	208	197	217	225	218	216	230	226
30. Kiittaajik	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
36. Quarmiit	–	36	54	32	20	31	17	13	–	–	–	–	–	–	–	–	–	–
40. Noorajik	11	8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
42. Kuummiit	103	164	173	186	186	182	206	194	194	199	204	242	253	246	264	281	293	275
43. Simiilaq	7	11	20	18	26	25	25	26	20	17	21	33	34	18	24	25	27	29
48. Qinneq	–	–	–	–	–	–	–	–	–	–	–	–	–	–	8	9	9	10
60. Qernertivartivit	23	34	30	29	29	26	26	38	37	31	40	31	29	33	31	26	27	24
65. Amitsivartik	–	–	–	–	12	14	10	–	–	–	–	–	–	–	–	–	–	–
67. 68. Tasiilaq and Itimiin	112	109	113	127	129	132	110	128	163	170	175	202	212	234	284	288	331	385
<i>Sermilik fjord</i>																		
74. Ikkatteq	33	56	59	57	55	55	57	55	56	68	60	61	57	51	45	59	82	80
78. Sivinganeq	14	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
81. Ukiverajik	19	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
82. Akernernaq	–	7	11	16	11	11	10	–	–	–	13	10	15	15	17	14	14	12
83. Pupik	21	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
85. Sarpaq	15	–	8	–	6	–	–	–	–	–	–	–	–	–	–	–	–	–
Tiileqilaq	43	73	73	89	99	102	126	122	129	124	108	110	113	122	130	130	133	130
Paarnakajit	17	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
'Umittivartivik'	16	31	38	31	25	20	20	13	12	49	20	18	21	22	27	26	26	22
91. Innartalik	–	9	14	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
92. Qeertartivatsiaq	7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
94. Kakalik	10	16	14	14	19	20	16	26	17	–	–	–	–	–	–	–	–	–
<i>South Sermilik</i>																		
Isertoq	51	–	–	70	75	74	64	65	65	67	68	69	70	70	74	79	86	83
Iissalik	–	–	–	15	–	15	–	8	9	–	8	8	9	9	16	16	10	14
Nattivit	28	–	–	–	–	–	18	26	23	24	25	25	28	22	20	17	–	–
Toqqulaaq	20	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
<i>Locations remote from these three fjords</i>																		
north**	22	–	–	–	–	–	–	22	42	45	28	18	17	18	20	24	–	–
south**	18	158	160	73	77	76	79	85	89	86	95	93	78	100	100	100	115	115
others***	–	–	–	–	–	–	–	–	–	–	4	5	4	4	3	1	–	2
<i>Total population</i>	871	935	978	1011	1051	1070	1105	1142	1178	1206	1209	1220	1260	1310	1384	1427	1507	1530
<i>Number of inhabited locations (including places of distant migration)</i>	25	21	21	21	22	22	22	23	23	22	23	21	21	24	22	23	18	18

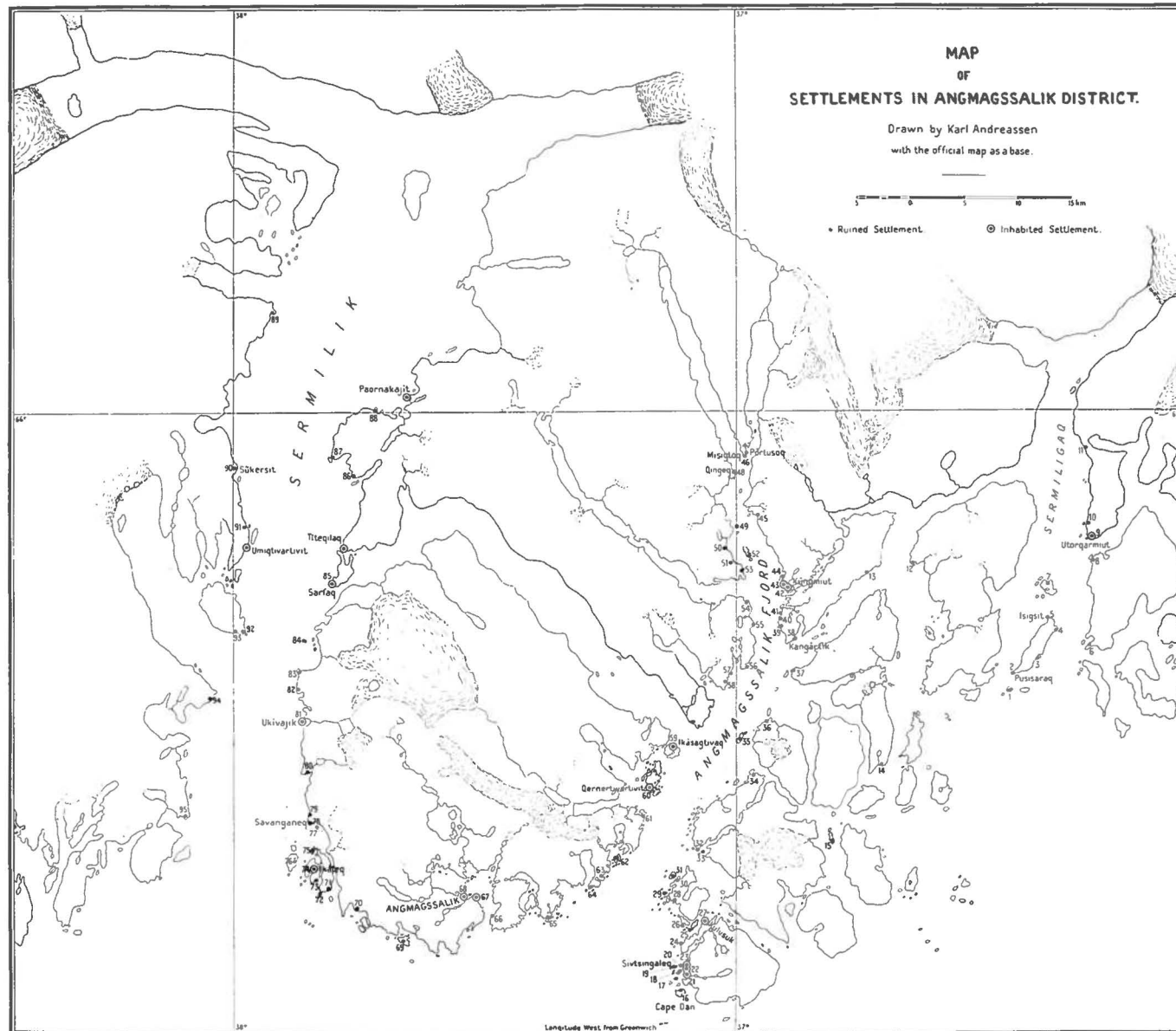
\* American base (cf. Fig. 22)

\*\* details on temporary settlements are found in Table 14 a and b.

\*\*\* Greenlanders working at the meteorological stations of Aputiteeq, Orsuiattivaq, Timmiarmiit and Qulleq.

\*\*\*\* Migrants are numbered in their village of origin for the years 1977–78–79.

57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
115	118	98	112	117	114	105	100	88	81	111	109	135	139	157	147	144	139	152	156	165	168	170
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	21	23	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
249	243	258	257	278	287	316	342	387	364	388	392	397	390	384	392	378	386	380	412	399	406	382
-	-	-	-	23	23	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
321	326	368	388	408	430	432	509	596	565	527	518	529	455	469	483	476	445	460	423	459	467	459
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	22	41	43	42	45	42	35	24	25	28	20	26	25	21	22	21	21	20	20	21	21	17
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
405	462	476	502	544	585	579	659	654	633	687	721	736	688	715	720	769	739	815	862	888	935	954
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
84	80	73	43	41	39	42	41	41	47	31	40	36	40	36	47	48	44	39	41	37	39	44
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
145	146	143	154	177	157	152	166	192	188	191	200	199	208	192	219	221	226	214	205	212	190	202
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	18	28	26	17	26	25	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
103	100	107	120	116	112	140	124	136	143	145	137	144	155	163	169	183	187	186	185	191	183	185
9	9	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
114	113	129	157	153	148	138	133	54	65	11	64	27	44	13	25	8	29	5	20	} - **** -		
-	-	-	-	-	-	-	-	-	38	86	57	42	70	98	33	55	60	27	23	2	1	-
-	-	-	-	-	-	-	-	-	-	1	2	3	2	1	-	-	1	-	2	-	-	-
1599	1668	1755	1826	1916	1966	1976	2131	2172	2149	2206	2260	2274	2216	2249	2257	2303	2277	2298	2349	2373	2409	2413
13	13	12	14	15	14	13	11	11	11	12	14	12	13	13	12	14	12	12	11	10	10	12





## Instructions to authors

Two copies of the manuscript, each complete with illustrations, tables, captions, etc. should be sent to the Secretary, Kommissionen for videnskabelige Undersøgelser i Grønland. Manuscripts will be forwarded to referees for evaluation. Authors will be notified as quickly as possible about acceptance, rejection or desired alterations. The final decision on these matters rests with the editor.

Manuscripts corresponding to less than 16 printed pages (of 6100 type units) including illustrations are not accepted, unless they are part of a special theme issue. Manuscripts that are long in relation to their content will not be accepted without abridgement.

## Manuscript

Language. – Manuscripts should be in English (preferred language), French or German. Authors who are not writing in their native language must have the language of their manuscript corrected before submission.

Place names. – All Greenland place names used in the text and in illustrations must be names authorised by The Greenlandic Language Committee. Authors are advised to submit sketch-maps with all required names to the Secretary for checking before the manuscript is submitted. Names of Greenland localities outside the area with which the paper is concerned should be accompanied by coordinates (longitude and latitude).

Title. – Titles should be as short as possible, with emphasis on words useful for indexing and information retrieval.

Abstract. – An abstract in English must accompany all papers. It should be short (no longer than 250 words), factual, and stress new information and conclusions.

Typescript. – Typescripts must be clean and free of handwritten corrections. Use double spacing throughout, and leave a 4 cm wide margin on the left hand side. Avoid as far as possible dividing words at the right-hand end of a line. Consult a recent issue for general lay-out.

Page 1 should contain 1) title, 2) name(s) of author(s), 3) abstract, 4) key words (max. 10), 5) author's full postal address(es). Manuscripts should be accompanied by a table of contents, typed on separate sheet(s).

Underlining should *only* be used in generic and species names. The use of italics in other connections can be indicated by a wavy line in pencil under the appropriate words.

Use at most three grades of headings, but do not underline. The grade of heading can be indicated in soft pencil in the left hand margin of one copy of the typescript. Avoid long headings.

References. – References to figures and tables in the text should have the form: Fig. 1, Figs 2–4, Table 3. Bibliographic references in the text are given thus: Shergold (1975: 16) ... (Jago & Daily 1974b).

In the list of references the following style is used:

- Boucot, A. J. 1975. Evolution and extinction rate controls. – Elsevier, Amsterdam: 427 pp.  
Sweet, W. C. & Bergström, S. M. 1976. Conodont biostratigraphy of the Middle and Upper Ordovician of the United States midcontinent. – In: Bassett, M. G. (ed.). The Ordovician System: Proceedings of a Palaeontolog-

ical Association symposium, Birmingham, September 1974: 121–151. Univ. Wales Press.

Tarling, D. H. 1967. The palaeomagnetic properties of some Tertiary lavas from East Greenland. – Earth planet. Sci. Lett. 3: 81–88.

Titles of journals should be abbreviated according to the latest (4th) edition of the World List of Scientific Periodicals and supplementary lists issued by BUCOP (British Union-Catalogue of Publications). If in doubt, give the title in full.

*Meddelelser om Grønland, Bioscience (Geoscience, Man & Society)* should be abbreviated thus: *Meddr Grønland, Biosci. (Geosci., Man & Soc.)*

## Illustrations

General. – Submit two copies of all diagrams, maps, photographs, etc., all marked with number and author's name. Normally all illustrations will be placed in the text.

All figures (including line drawings) must be submitted as glossy photographic prints suitable for direct reproduction, and preferably have the dimensions of the final figure. Do not submit original artwork. Where appropriate the scale should be indicated on the illustration or in the caption.

The size of the smallest letters in illustrations should not be less than 1.3 mm. Intricate tables are often more easily reproduced as text figures than by type-setting; when lettering such tables use "Letraset" or a typewriter with carbon ribbon.

Colour plates may be included at the author's expense, but the editor must be consulted before such illustrations are submitted.

Size. – The width of figures must be that of a column (76.5 mm), 1½ columns (117 mm) or a page (157 mm). The maximum height of a figure (including caption) is 217 mm. Horizontal figures are preferred. If at all possible, fold out figures and tables should be avoided.

Caption. – Captions to figures must be typed on a separate sheet and submitted, like everything else, in duplicate.

## Proofs

Authors receive two page proofs. Prompt return to the editor is requested. Only typographic errors should be corrected in proof; the cost of making alterations to the text and figures at this stage will be charged to the author(s).

Twenty-five copies of the publication are supplied free, fifty if there are two or more authors. Additional copies can be supplied at 55% of the retail price. Manuscripts (including illustrations) are not returned to the author after printing unless specifically requested.

## Copyright

Copyright for all papers published by Kommissionen for videnskabelige Undersøgelser i Grønland is vested in the commission. Those who ask for permission to reproduce material from the commission's publications are, however, informed that the author's permission must also be obtained if he is still alive.

**Meddelelser om Grønland**

**Bioscience  
Geoscience  
Man & Society**

**Published by  
The Commission  
for Scientific  
Research  
in Greenland**