The indigenous people of the North face many complex problems as they learn to cope with an invasion of culturally alien and numerically dominant groups from other areas. Their educational systems have theoretically been organized on principles of democracy and responsiveness to local community needs, but it has become obvious that existing programs are designed to accommodate the language, culture, economic system, and interest of the dominant group from the South. During the mid-1960's, a group of Alaskans and Canadians investigated the conditions affecting educational programs in each of the circumpolar nations with a view to suggesting alternative educational schemes. As a result, in 1969 a conference was held in Canada under the joint sponsorship of the Arctic Institute of North America and the University of Alaska. The conference was organized around 4 basic areas and their relationship to education in the North: (1) Economics; (2) Administration; (3) Pedagogy; and (4) Culture. This book is organized along similar lines, but with modifications that update some elements of the subject. Conference participants came from the 7 circumpolar nations of Canada, Denmark (Greenland), Finland, Norway, the Soviet Union, Sweden, and the United States (Alaska). Part 5 of the report covers UNESCO experiences in cross-cultural education. The appendix lists conference participants. (KH)
EDUCATION IN THE NORTH

Selected Papers of the First International Conference on Cross-Cultural Education in the Circumpolar Nations and Related Articles

Edited by Frank Darnell
Professor of Education
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University of Alaska
Arctic Institute of North America
1972
Preface

The indigenous people of the North face many complex problems as they learn to cope with an invasion of culturally alien and numerically dominant groups from other areas. Formal education systems in the North in all circumpolar nations as one of the several outside elements confronting Native groups have theoretically been organized on principles of democracy and responsiveness to local community needs. But it has become increasingly obvious that existing educational programs are designed primarily to accommodate the language, cultural values, economic system, and general interest of the dominant group from the south.

During the mid-1960s a small number of Alaskans and Canadians were at work investigating this problem and the conditions affecting educational programs in each of the circumpolar nations with a view to suggesting alternative educational schemes. Late in 1967 staff members of the Ford Foundation became interested in this effort and an international conference to take stock of northern educational processes was proposed to Foundation officials.

The conference was held in Montreal on August 18-21, 1969, under the joint sponsorship of the Arctic Institute of North America and the University of Alaska. Financial support was provided in large part by the Ford Foundation with supplemental support from the Province of Quebec, Department of Indian Affairs and Northern Development of Canada, and the Bureau of Indian Affairs of the United States. The conference was organized around four basic areas and their relationship to education (1) the economic situation in the North, (2) the administrative situation in the North, (3) the pedagogical situation in the North, and (4) the cultural situation in the North. This book is organized along similar lines but with modifications and additions whereby some elements of the subject have been brought up-to-date and a degree of continuity established.

Conference participants included individuals from all seven circumpolar nations. A list of those in attendance follows the text of this report as an appendix. Attendance by a group of officials from the Soviet Union is especially notable. Soviet officials are seldom present at conferences in the West and attendance at a meeting in which social values and purposes of education were described was especially enlightening. The delegation from the U.S.S.R. was headed by Dr. Alexander Danilov, Minister of Education, Dr. Danilov's paper, prepared for the conference, and one read by Professor L. Belikov of the Leningrad Pedagogical Institute are the first statements on education in the Siberian North specifically prepared for Western readers.

Usually when a major conference on education is concluded, plans are immediately drawn for a publication reporting and analyzing the proceedings. Plans at the conclusion of the First International Conference on Cross-Cultural Education in the North were no exception. Enthusiasm for the subject as a result of having been part of something completely new and exciting generated unusually demanding plans for a publication. A five-man writing committee was appointed by the conference organizers. The committee members, Bob Arnold, Jamison Bond, Frank Darnell, Andre Renaud, and George Roziers, met several
times in an attempt to draft an original four-part volume organized along the lines of the conference, but more comprehensive with additional material from additional sources. The error of this plan was an assumption that a definitive volume on the subject of cross-cultural education in the North could be drawn from available general material and the papers presented. After a few abortive attempts it became clear that although the conference did force the drawing together of a large amount of previously unorganized material, attempts to draft a truly comprehensive description of the problems related to cross-cultural education in the North were premature. The subject of cross-cultural education anywhere, but especially in the North, is far too complex and its study so incomplete that a definitive statement of any kind at this time is indeed improbable.

Still, much material did come into existence because of the conference, and points of view previously unexpressed have come to light. Although the length of time that has now elapsed since the meeting may dilute the impact of the publication, there are many people unfamiliar with the points expressed and issues raised for whom this volume may prove worthwhile. The material that follows is to some extent the product of efforts by members of the writing committee (especially a special post-conference paper by George Rogers in which he contrasts the Alaskan and Greenland situations from an economist's point of view), but the bulk of the volume is a collection of selected, edited papers from the conference itself. The papers, it should be kept in mind, are in no sense final statements and their selection is necessarily incomplete, but they do represent a base from which a complex situation may someday be better understood.

The problems of cross-cultural education in one nation are likely to be the problems of cross-cultural education in all nations, and the problems of each behavioral and social science are likely to be the problems of all behavioral and social sciences when applied to the cross-cultural educational process. From the beginning, therefore, the conference was planned as an international effort with participants sought from many fields including professional education and the behavioral and social sciences. Participants came from the seven circumpolar nations of Canada, Denmark (Greenland), Finland, Norway, the Soviet Union, Sweden and the United States (Alaska). Scholars and practitioners alike were invited to prepare papers on the premise that people with uncommon professional backgrounds and possibly with divergent views would profit by coming together in quest of a common understanding of their mutual problems. One of the basic purposes of this approach was to provide better communication and the means to fill some of the gaps in our understanding of the issues in the North and hope that an inventory of sorts would emerge. Also, with the conference a forum for the expression and discussion of concepts of cross-cultural education, it seemed certain that many previously unasked questions would emerge. The papers to follow do indeed raise more questions than they provide answers, but if questions are now asked from more enlightened and broader points of view another of the purposes of the conference will have been met.
Concepts from many disciplines applicable to potential cross-cultural educational processes have only recently become factors for consideration by some educational administrators in the development of plans for the educational systems they oversee. A few of those responsible for the design of education programs are becoming increasingly aware of the need to place the processes of education for indigenous people in the North in cultural perspective. It is hoped that this volume will help educationists, their allies in the behavioral and social sciences, and the Native residents to better understand what frustrates the education process in the multi-cultural setting of the North and thereby lead to creation of more positive, alternative educational processes.

Frank Darnell
Editor and
Chairman, First International Conference on Cross-Cultural Education in the Circumpolar North
Acknowledgements

With the publication of a volume reporting on a conference that involved a large number of people and with the work of preparing the volume spread over three years, it becomes obvious that the efforts of many people have contributed to the total process. Much time and energy was expended by members of the Conference Steering Committee and special appreciation is extended to this group; among them specifically the contributions of Brigadier H. L. Love, Director of the Arctic Institute of North America, who was so generous with his time and the resources of the Arctic Institute. Other members of the Steering Committee were:

Professor J. Jameson Bond, University of Alberta
Dr. Norman Chance, University of Connecticut
Professor Victor Fischer, University of Alaska
Mr. Eric Gourdeau, Arctic Institute of North America
Dr. William Loyens, University of Alaska
Father Andre Renaud, University of Saskatchewan
Mr. Don Simpson, Department of Indian Affairs and Northern Development of Canada
Mr. Charles N. Zellers, Bureau of Indian Affairs of United States

Their special skills provided the essential ingredients necessary to the success of the conference. Also, special appreciation is felt for the efforts of Mr. Kenneth de la Barre, Director of the Montreal office of the Arctic Institute of North America.

The editorial committee established to produce a definitive volume on education in the North worked well together and ideas generated by this group contributed substantially to the format this volume has acquired as an offshoot of that earlier attempt. Appreciation is extended to Dr. George Rogers, University of Alaska; Professor J. Jamison Bond, University of Alberta; Father Andre Renaud, University of Saskatchewan and Robert Arnold, Alaska Educational Broadcast Commission for their efforts as members of this group. Appreciation is also extended to Mrs. M. D. Perry who provided especially able technical assistance in the editing process.

It is now clear that many wheels were set in motion because of the conference. This was by no means an easy development to predict when the first glimmer of an idea was set forth that people living in the sparsely populated regions of the far North might benefit by coming together to discuss their common problems. Only because of the special insight of Mr. Ralph Bohrson, Program Officer of the Ford Foundation, and his understanding of problems of education in general and problems in the North in particular was the conference and this publication made possible. Developing the fragmented ideas that times spring from his colleagues in the North must at times be a trying task.
Mr. Bohrson has borne this well and all of us connected with the First International Conference on Cross-Cultural Education in the North are grateful to him for his patience and skill in keeping us moving on the right path.

To all others connected with this effort, the editor is grateful. Of course, errors, omission, or other faults are the sole responsibility of the editor.

Frank Damell
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APPENDIX
Introduction

Norman A. Chance

Norman Chance is Professor of Anthropology and Head, Department of Anthropology, University of Connecticut. The paper, "Premises, Policies, and Practices: A Cross Cultural Study of Education in the Circumpolar North" was written originally as a general position paper setting forth conditions throughout the North as seen by Dr. Chance. By way of drawing the large number of concepts under discussion toward a single point of view and identifying the central issue in northern cross-cultural education as the consequences of governmental programs on the people of the North the paper provides focus on the problems examined in the conference and thereby serves well as an introduction to this book.
The papers prepared for this Conference amply demonstrate that educational and related economic, social and political programs in the circumpolar North vary considerably in their approach and method of implementation. Particularly striking are the value assumptions and premises which have shaped intercultural relations and government policies toward northern minorities from early contact to the present. I would like to undertake a brief cross-national comparison of these value assumptions in the belief that discussion of any proposed changes in existing programs requires a thorough understanding of the premises which underlie them.

Being more familiar with educational and related development programs in the North America Arctic and sub-arctic, I will give greater attention to this area. I hope that my somewhat more limited commentary of the educational approach of the Soviet Union and the Scandinavian countries to their northern minorities will be amplified or corrected by representatives from these countries present at the conference.
THE NORTH AMERICAN APPROACH

A historical study of the Alaskan and Canadian North suggests that most efforts at development of the Native population have been consistently biased in favor of the more industrially advanced southern sector. George Rogers’ paper on the economic situation in the North reminds us that during Alaska’s colonial period, “... the native was treated as part of the environment in which the (economic) exploitation was undertaken.” If the Alaskan natives could not be used, “... they were ruthlessly pushed aside while their traditional resources were exploited to the point of extinction by seasonally imported work forces.” At a comparable period in Canadian history, Frank Vallee states that, “... the traders needed the native peoples to solve their problems of economics and logistics.”

As with any colonial power, this imperialistic exploitation of the Native population was based on a set of moral assumptions, beliefs, and racial myths which together provided the rationale to support the exploitation. The most dominant racial myths characteristic of the colonial period of North American history were associated with fundamentalist Christianity and “social darwinism”, followed more recently by the concept of equality.

Nineteenth century Christian missionaries viewed Alaskan and Canadian Natives as heathens, Uncivilized, dirty, and uninhibited, these people were frequently considered inferior creatures of Divine Creation. Efforts to civilize the Native included attempts at destroying the Native language, culture, and religion, instilling guilt over barbarous customs, and promoting new forms of behavior and thought acceptable to western custom. Government policies of the period stressed education for rapid economic and cultural assimilation.

Although conversion to Christianity removed one bias against the Native, he still found himself relegated to an inferior status through the commonly accepted myth of “social darwinism”. Put most simply, this concept explained the dominance of Euro-North Americans in technological, social and cultural spheres as a result of their natural superiority. As stated by the theory, human beings invariably arrange themselves according to their innate abilities. Since Euro-American and Euro-Canadian society were obviously more advanced than the Eskimo or Indian, this difference must reflect a unilinear law of nature. As in the earlier moral assumption based on the Will of God, man did not choose to exert control or dominance over the Native, it was simply an Act of Nature, an external force.

Failure of the Eskimo and Indian to assimilate quickly into the North American mainstream was easily explained by reference to assumptions of natural inferiority assigned to the Native. In both the United States and Canada, these beliefs helped rationalize the placement of Indians on reserves as permanent wards of the government.

With the industrial growth of America and Canada, man became more concerned with controlling natural forces than being bound by them. Increased technological innovations combined with the rise of bureaucratic social structures provided the impetus for this new trend. By removing the supporting role of the “Will of God” and the “Laws of Nature”, the old racial myths began to lose their raison d’être. New progressive legislation was introduced to assist...
northern Natives. Beginning in the 1930's in the United States and somewhat later in Canada, greater recognition was given to the principle of cultural identification and local self-determination. Educational opportunities were still minimal, however, and largely reflected the desire for rapid assimilation.

The profound changes brought about in the North by World War II and its aftermath are well documented in our Conference papers. The inflow of government, funds and private capital for defense, transportation, housing and related contract industries greatly increased job opportunities for Native peoples. However, as Rogers and others point out, these boom periods were invariably followed by reduced government expenditures with attendant rise in unemployment. Many Natives who moved from their small villages to new construction centers suffered particularly, although all were affected.

The past decade has brought a substantial increase in federal, state and provincial funding for programs designed to improve the educational, economic, and social condition of the northern Native. Arnold's paper on Alaska is particularly instructive in this regard. Along with government expansion of general and vocational education, on-the-job training, health care, and community development programs, innovative efforts have also been undertaken at the university level, including Frank Darnell's Alaska Rural School Project, the work of Lee Salisbury, Father Andre Renaud, and others.

Nevertheless, as Rogers makes clear, the northern Native is still falling further behind his Non-Native counterpart in standard of living, educational achievement and social and cultural development. This underdeveloped condition is maintained both by ecological and social constraints such as geographical isolation in economically unproductive areas, lack of adequate education, and discrimination; and by those Native cultural and psychological traits which promote ineffective and self-defeating behavior, minimizing even those opportunities which are available.

Concern over this widening economic and social gap is reflected in current discussions about equality of minority groups. Statements of government policy continually emphasize the view that Eskimos and Indians should have "equal opportunity," "equal standards of living"; they should be "equal participants in the nation's growth," and they should be "equal before the law".

Strongly endorsing these pronouncements, I have spent considerable time these past few years analyzing government and privately subsidized and supported programs promoting northern industrialization, modernization, and urbanization, and how these programs have affected the Eskimo and Indian in Alaska and Canada. I have studied the impact of the military industry on Native village life, related problems of social control, urban mobility, and traced the result of educational services on Eskimo perceptions of their self-identity. In these and similar studies, the concepts of modernization, industrialization, and concomitant social processes were treated as external forces impinging on the Native, and then their response and mode of adjustment was predicted and tested.

In looking back over this research, it is now possible to detect a hidden assumption of my own that once these problems were solved, equality could be achieved. Instead of analyzing social assumptions behind government laws, I trusted social laws based on government assumptions. I made the by now
classical error of calling on external forces (in this case social rather than religious or natural laws) to account for Native underdevelopment, instead of perceiving them as internal mechanisms capable of modification and change. It was the classical trap of judging a person by what he can do—regardless of his background—in the mistaken perspective that equal opportunity was the sufficient ingredient. It now seems clear that most policy statements regarding equal opportunity are actually perceived to mean: "If people have equal qualifications, they should have the same opportunity for advancement." Unfortunately, this view totally disregards the disadvantageous relationship Canadian and Alaskan Natives have been under vis-a-vis Euro-North Americans for so many years.

This use of the concept of equality carries other hidden assumptions as well. It subtly erodes the principle of compensation for past injustices by questioning the "unequal" allocation of public funds to racial and ethnic groups which are economically deprived. With the recent legislative rejection of the "separate but equal" principle in the United States, another hidden rationalization is provided which can downgrade efforts designed to increase pride in the cultural heritage of distinct minorities. Yet, given the past history of economic and social exploitation, a strong case can be made for preferential treatment of northern minorities in job opportunities and in cultural as well as in education and social development programs. Where past events have provided the Native with less than equal qualifications, he deserves a better than equal opportunity.

Finally, it is appropriate to ask whether the concept of equal opportunity includes Native rights to develop their distinct cultures as well as participate in the economic and social life of the United States and Canada. Full access into the national society is by no means a Native freedom at the moment, but if it were, the implication is still that the industrial sector of North American society has all the advantages and these should be shared equally with the Northern Native. This subtle form of western paternalism is not infrequently a hidden feature of policy statements concerning the theme of "full participation"—a paternalism which continues to devaluate the present and potential contribution of Eskimo and Indian cultural attributes to the larger society, in so doing, negative stereotyping and Native feelings of self-disparagement are further encouraged.

Rogers has pointed out that economic projections for Alaska's future are highly encouraging. Canada's economic future is also cited in Inuit Conference paper. Both stress the trend toward automation in the economic development of the North.

If the value North Americans place on economic incentive is maintained in the future and automation increases as predicted, along with present educational and concomitant human resource development, we will no longer need to discuss how best to incorporate the Natives into the northern economy for he will become obsolete. If we use the external rationalization of automation and "modernization," combined with the myth of "equal opportunity" to justify the Natives' increased integration into poverty, we will also be practicing a form of racial discrimination and cultural genocide based on the same misplaced logic of earlier generations.

At this point we will not be asking what can be done for the Native northerner, but what can be done with him. If the Native response entails violent
protest — and this is already beginning to appear in Alaska and Canada — we are very likely to substitute our concern for economic and social justice with our concern for law and order. It will be ironic indeed, if, in the future, separation turns out to be the “best” answer, culminating in ghetto reserves, gilded with new row houses, community centers; and a destroyed people.

One important step in breaking the northern Native out of his “inclave” economy and society, is through the introduction of a far more effective educational training than he is presently receiving. I hope our workshop discussions will focus in part of the effort needed to restructure the educational system so as to reduce discontinuities in learning, sustain positive affective ties with parents, strengthen the students’ self-image as Eskimo and Indian, and maintain self-esteem, as well as prepare the Native to be economically and socially competent in dealing with the institutions of the larger North American society.

This discussion can include such topics as real rather than “advisory” Native representation on school boards and other associations where content and policy of school programs are provided; the teaching of primary grades in the Native language; the development of more effective adult education programs, and other measures designed to assist the Native to synthesize his involvement in two worlds.

In seeking new approaches to education of northern minority populations, it is helpful to learn how other circumpolar countries have dealt with similar issues. A brief review of the Conference papers by Soviet and Scandinavian participants is most instructive.

THE RUSSIAN APPROACH

The papers by Danilov and Belikov make very clear that the Soviet Union’s approach to the development of their northern minorities has been strikingly different from that of North America. Following the overthrow of the Tsarist regime, the Soviet Union made a massive effort to absorb all their northern Natives into the mainstream of socialist reconstruction. This process of assimilation has emphasized political and cultural as well as socio-economic involvement of the Indigenous population in the socialist state with an accompanying rejection of the old, primitive way of life.

The educational programs established over the past forty-five years give ample evidence of Native involvement in this effort. No other circumpolar country has taken so many steps to train Native teachers, use the Native tongue as the medium of instruction in primary and adult education, translate school texts and other literature into Native languages, offer advanced courses in Native language and culture, and stimulate Native aesthetic expression in literature, music, and art. The principle of teaching northern children in their Native language to “ensure a more conscious and permanent absorption on their primary schooling” appears very effective as does its use in “bringing cultural and political knowledge” to the populace.

The economic development of the Soviet North has also involved active Native participation. Success in this endeavor appears partly related to the expanding general and vocational educational training, and partly to the conscious effort in state planning to incorporate Indigenous labor in various agricultural, industrial and other economic enterprises.
Introduction

The expressed goals of Soviet northern development have a very familiar ring to most North Americans. Having "freed the regions of the Far North" from "exploitation" and "backwardness", the Soviet state has promoted "active participation of the Native population" in national growth, emphasized the "right to self-determination" of its minorities, and stressed the importance of "awakening political and national self-consciousness". Similar statements are commonly expressed by Americans and Canadians about their own northern minority populations.

Of course, we are all aware that the value assumptions underlying these commonly expressed goals and policies differ considerably. The goal of "freedom" in one instance relates more to the individual; in the other to the state. If freedom under the state appears restricting to some, I am sure freedom of the individual to act selfishly, disengage himself from participation in society, or engage in exploitation with minimal constraint appears equally restricting to others.

These contrasting value assumptions also underlie the similarly expressed goals of greater self-consciousness and self-determination. For "individualistic" North Americans, self-consciousness is more a matter of personal identity. Several papers in this Conference written by North Americans deal with this topic specifically. In contrast, Soviet perception calls for greater national consciousness or identification. American and Canadian views of self-determination emphasize personal freedom of choice; Soviet self-determination stresses freedom from constrictions of exploitation which maintained underdevelopment.

These differences help to explain why Soviet efforts at Native involvement in northern development have been far more successful than those in North America. Whereas our northern interest has largely focused on natural resource development for private economic gain, the Soviet's effort at economic development has been closely tied to the building of a political and national consciousness within their Native population. When fully internalized, this new self-consciousness focused on national group identification, participation and cooperation, has released considerable productive human energy. Human and natural resource development have been unified into one on-going program.

However, as more southern Russians move North to participate in the region's economic development, and National Minorities are more exposed to the Russian language at an early age, parents are expressing greater interest in seeing their children learn Russian as their first language and their Native tongue as the second. If this trend continues in the future, the disappearance of Native languages may complete the process of "cultural replacement" referred to in Professor Vallee's paper. While this process may be economically advantageous, the cultural loss is irreplaceable.

THE SCANDINAVIAN APPROACH

Scandinavian approaches to northern education vary considerably. The Norwegian government's policy has been to educate the Lapps for assimilation into their national culture and urban society. Interest in Lapp language and culture in schools was discouraged until 1963, and its use today appears to be
motivated by its greater effectiveness in instilling western ideas and thought in the educational program.

Finland has given relatively little administrative attention to its quite small Lappish population. However, more Lapps are becoming teachers and schools are integrated.

The policies of Sweden and Denmark differ again in that their approach has been more paternalistic and protective of Lapp and Greenlandic Eskimo language and culture. Professor Ruong's tracing of the history of Sweden's policy toward Lapp education and culture gives us a particularly insightful understanding of this approach. Paternalistic support for Lapp cultural and linguistic autonomy through the first half of this century appears to have been based both on "rational economic interest," i.e., Lapps were the only group that would use northern lands for reindeer herding, and a "conservationist ideology" of humanistic pluralism. More recently, the introduction of the permanent (as opposed to ambulatory) "nomad schools" has enabled the Lapp to receive more extensive western-oriented educational training along with considerable instruction in Lapp language, culture, and vocational training in modern methods of reindeer breeding. This attempt at social and cultural synthesis of Lapp and Swedish life-styles through special educational programs should receive major attention by other northern countries facing similar problems. That almost all Lapp students choose the option of maintaining their modified Native way of life rather than select the regular Swedish Senior level program of studies should not go unnoticed.

Also significant are Professor Ruong's highly perceptive comments on the importance of the Native teacher as a cognitive link between Lapp and Swedish culture. Man always strives for a coherent organization of his individual experiences such that he can internally order his phenomena he perceives, and from which he can communicate his ideas to others. Furthermore, language not only enables us to verbalize our sense impressions to others, but it is the primary code by which we initially classify our diverse experiences. It is this principle of cognition which ties language and learning so closely together. Native teachers, familiar with values and norms of Swedish culture and cognitively fluent in their own language and culture, are ideally adapted to instruct primary and secondary school Lapp students.

CONCLUSION

I have briefly tried to show how value assumptions and national premises have influenced educational policies of northern minority populations in quite different ways. However, education must be viewed as part of a broader process of economic, social and political change. Denmark, which has ranked protection and support of its Greenland Eskimos over economic development of the region, now faces serious economic difficulties. The United States and Canada having emphasized economic and industrial development of the North, now face major human problems among their northern minorities. The Soviet Union, having combined human and economic development in their North, have the problems of Greenland or North America. However, cultural quality
of their Native peoples have been partially lost in the process. The future of the Lapp minorities in Scandinavia is unclear although the Nordic Lapp Council should have some influence in promoting their still viable way of life.

Not wishing to close on a pessimistic note, it is nevertheless necessary to remind ourselves that the most ideally conceived and implemented program of education for Native northerners is a program that involves Native northerners in the design planning and execution. Too few are represented here today. If those of us in education cannot revise our assumptions about the importance of Native involvement in northern educational planning, we can hardly expect other less sensitive economic and social institutions to change their approach. Education does not bring an end to the problems of the northern Native. But it can be a beginning.

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1. A more detailed discussion of the ideas contained in the following section is contained in Chance (1969). I am indebted to Sidney Wihelm (1969) for his broader study of American minority group relations. The works of Jennett (1968) and Hippler (1969) are also relevant.

2. The quotations from Rogers (1969) and Vallee (1969) are from papers presented at the Conference.

3. The First Organic Act of 1864 stated: "Education to be provided for the natives of Alaska should fit them for the social and industrial life of the white population of the United States and promote their not-too-distant assimilation."

4. The position was summed up aptly by Col. Nelson A. Miles in 1878. Writing about the Indians of the western United States, he said, "The change (by the Indian) must be gradual, continuous, and in accordance with Nature's laws. The history of nearly every race that had advanced from barbarism to civilization has been through the stages of the hunter, the herdsman, the agriculturist, and finally, reaching those of commerce, mechanics, and the higher arts." (quoted from Fritz, 1963).

5. Of course, any thorough discussion of economic development must include the geographical and ecological dimension. In drawing contrasts between Soviet and other circumpolar countries' economic development, this dimension is particularly important.

6. These quotations are drawn from Danlov's paper presented at the Conference.

7. The present emphasis on "individual freedom" in the United States is hardly surprising in the light of its highly industrialized and bureaucratized (some would say "overdeveloped") state. The emphasis on "freedom within
the state of cooperative groups to work toward national goals is also understandable, given the Soviet Union's underdeveloped condition at the time of the revolution.

8. This is assuming ecological differences and degree of Native-non-Native population distribution is held constant.

9. The Conference paper dealing with use of Eskimo language as a medium of primary school instruction in northern Quebec by Girard (1969) is also instructive.

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Part 1

The Cultural Situation
Part 1
The Cultural Situation

J. Jamison Bond
Four background papers were presented to the conference for its consideration under the general heading of "The Cultural Situation in the North." The paper presented by Danilov entitled "The Development of Education in the Soviet Union's Far North" represents a comprehensive review of education process as it has evolved in the northern 'national territorial unions.' It records an impressive list of accomplishments achieved during the Soviet regime and describes the philosophy and objectives, as well as the particular educational forms and methods which are used in that multi-national school system. The paper is also concerned with a number of other related topics such as educational research and teaching training in northern schools. Danilov provides a valuable data source which indicates quantitatively the scale and rate of growth in educational facilities in the Soviet Far North. The commentary by Hopkins under the title "Decision-Making in Alaskan Native Education" consists of a brief descriptive statement of the history of the Alaskan educational system in relation to the decision-making process. The other two background papers were both prepared
By anthropologists, the first, by Frank G. Vallee, is entitled "Eskimos of Canada as a Minority Group: Social and Cultural Perspectives." This paper is concerned with the social costs of educational policy in Arctic Canada as they relate to individual sense of identity, feelings of community solidarity and as they affect group structure and social processes. The other anthropological paper by Sindell and Wintrobe bears the title "Cross-Cultural Education in the North and its Implications for Personal Identity: The Canadian Case." It examines the ways in which social and cultural trends have affected northern education but lays more emphasis on the effects of an extended period of formal but alien education on the values, attitudes, aspirations and self-esteem of individual students.

The development of any educational system is necessarily intertwined with matters of political strategy and questions of social and economic policy. Earlier traditional methods of education designed to meet the special needs of cultural minorities form a common denominator of experience in the various circumpolar countries. Indeed this experience does not essentially differ from that which is found in other parts of the world where such minorities are similarly undergoing gross social and economic change.

The need, therefore, is to design an educational system which will train the individual to live in either of two societies - the dominant society, as well as the cultural environment of an ethnic minority, calls for critical research as well as coordinated planning. This need is particularly the case when the student comes from a society which places high value on group rather than on individual achievement. In training individuals for life in two quite different social milieus, the Russian, and to some extent the Swedish and Danish, experience appears instructive. Since at no other period in the educational process is the interrelationship between home and school greater than in the first few years of training, the practice of instructing in the indigenous language and in focusing on local culture during that period possesses demonstrable virtue. At later stages in the training there is a correlative need to instruct in the language of the dominant society and to emphasize study of the larger, external world as found in the diverse ways of life of other societies.

One of the problems inherent in the development of educational systems in northern North America has been the lack of relationship between curriculum and the real needs of everyday life. More recent evidence, however, suggests that this Malinowskian lack may well be met by following the European practice of providing early training in the indigenous tongue.

Vallee's contribution represents a specific case study of the Eskimos as a particular ethnic group in northern Canada. In their related paper Sindell and Wintrobe discuss northern Native peoples generically but pay particular attention to the Algonkian- and Athabaskan-speaking Indians of the Canadian boreal forest. Taken together these two papers examine the social and psychological implications of educational process among minority groups served by nine different provincial or territorial educational administrations.

Vallee properly defines the agencies of change as committed to a policy of cultural replacement. He notes that although both the federal and territorial governments have made real attempts to involve the Eskimo people in decision-making through service on the territorial legislative council or on local
advisory councils, "representation is one thing, and meaningful participation another."

In using Blau's criteria of social power in groups — namely, numbers, organization and access to valued resources — Vallee remarks that to date most significant decisions in northern communities have been made by non-Indigenous people. So the Eskimos have, in fact, not had substantial access to the sources of social power. In some cases they have accommodated by withdrawal or by passive acquiescence. Such actions inhibit the process of integration among ethnic groups in the Canadian Arctic. This imbalance is enhanced by the expanding power of long-term white residents operating at the political level and by the continuing concentration of economic power outside the region.

Any dominant group which holds the instruments of economic power is unlikely to seek to share significantly that power with the cultural minorities of the region.

Whether northern Canada with communities in varying proportions of Indian, Metis, Eskimo and 'white' residents will achieve the cultural pluralism which is a fundamental part of Canadian political dogma yet remains to be seen. In this process, the nature of the education offered to northern Canadians, and more important, the kind of preparation which such training will provide to its graduates for meaningful participation in either the urban-industrial world of the south or in the more traditionally-oriented life of isolated northern communities, remains a critical question. The dilemma which faces many young people who graduate from the present educational system is the prospect of urban unemployment on the one hand, or alternatively, of unpreparedness for a traditional cum-welfare life which exists in most contemporary northern settlements. In this stressful process of change the sense of identity of the Indigenous people is suffering gross damage as evidenced by growing signs and symptoms of anomie among the residents of these communities.

Perhaps nowhere does the present school system impinge in a more damaging way on the native sense of identity than in the field of language. By definition language is a distinctive human attribute and provides a unique vehicle for communication, as well as a particular way of viewing social and physical reality. Since language also functions as a means of providing group identification and social solidarity, it means that an educational system which fails to provide for the continuity of this fundamental aspect of human culture is indeed, however unintentionally, denigrating that culture. As Sindell and Wintrob have indicated, it also leads to anxiety and instability in inter-ethnic relations and to student alienation from traditional life patterns.

It is all too easy to attack uncritically educational programs in abstraction. Clearly such has not been the intention of the anthropologists who have contributed to this book. However, in the Canadian case the fact that to date educational aims and policies, curriculum and staff recruitment are all provided from within a bureaucratic hierarchy means that the recipients of the system have been able to play no real part in the decision-making process. This fact is reinforced by the absence of teachers of Indigenous background and by the correlative absence of substantial pre-service training for teachers who are immigrant to the region. These difficulties do not appear to exist in the Russian educational system as described in Danilov's paper. In referring to the Russian approach in
the Introduction, Chance says that the policy of assimilation "...has emphasized political and cultural as well as socio-economic involvement of the indigenous population in the socialist state with accompanying rejection of the old, primitive way of life." It has not, however, apparently rejected the values of that way of life.

Nowhere does a policy of cultural replacement find more pervasive application than among teachers who carry with them an implicit and often unconscious attitude of cultural superiority into their professional work situation. As Chance points out, such pre judgements have antecedents in earlier North American history. In the past these attitudes have been expressed in the widespread use of residential schools, and they persist in the curriculum content and in the practice of unilingual instruction.

Cultural conflict and the resulting anomie within the community, as well as loss of identity and self-esteem among individual participants, are inevitable consequences of an educational system which provides temporal discontinuity to two quite different but competing ways of life. Sindell and Wintrob provide quantification of the psychopathology which results from this conflict.

It may be correct to say that a culturally viable way of life is yet more intact among the boreal forest Indians than among the Eskimos, since it may be argued that the ecology is less fragile in forested zones than in the tundra. South of the tree line the hunting, trapping and fishing complex still provides an effective alternative to welfare, at least in the more isolated communities. Sindell and Wintrob have described two major identification models which are open to Cree-speaking children. But both models are handicapped by enculturative discontinuities within the indigenous community on the one hand and intensive exposure to acculturative process within an alien society on the other hand.

In recent years, a number of studies have demonstrated that the present educational environment negatively affects the cultural integrity of both Indian and Eskimo lifeways, despite the intention of government to provide continuity for at least some of these cultural values within a changing social and ideational climate.

Much of this overview has been concerned with the three anthropological contributions to this section of the book. Since two of these papers deal exclusively with the Canadian North and the third treats largely with northern North America, the comparative content of the material in relation to other parts of the circumpolar world is necessarily limited. Had it been possible to arrange for contributions by social scientists from other northern countries, it would have added greatly to the value of the conference and to this book. However, since this was the first international conference of its kind, such an arrangement did not prove possible.

Not surprisingly, the conference disclosed the relatively limited contact which scholars and administrators have with their counterparts in other northern countries. As Darnell indicates in the Preface, one of the major purposes of the conference was to help remedy this gap in communication. It also provides a persuasive reason for publishing this book.

From a review of the material it is apparent that all contributors recognize cultural minorities have special educational needs. The particular policy and
practice adopted by each circumpolar country varies considerably according to political philosophy. The educational system in each region is influenced in part by the form and timing of economic development. Both factors in turn have exerted a pervasive influence on the changing culture of the minority group involved.

Any conference which initiates scholarly enquiry is more likely to raise questions than provide answers. One of the questions which could benefit from further study is posed in the concluding special paper by Cairns in his informative presentation dealing with UNESCO experience in various parts of the world in the field of cross-cultural education. He comments on the factor of isolation as it influences Arctic peoples but notes that "their remoteness may be less geographical than social, psychological, cultural and economic. . . ." He enquires if educational process in the far north differs qualitatively from similar processes among cultural minorities in other regions. Cairns adds a related question by asking if fundamental principles of human learning apply equally "...under very different patterns of child rearing and social expectations."

The education of a cultural minority has as one of its major goals not only preparation for continued learning in a rapidly changing technological society, but also a responsibility to develop a positive attitude on the part of students towards change as a normal and expected process within the local community. With skill and planning these aims can be made consistent with the related objective of protecting and perpetuating the indigenous tongue of the minority group and of the cultural values which it enshrines. The papers in this section have contributed significantly to answering the question as to what happens to certain cultural minorities and to the self-view of their individual members when differing educational policies are applied within the framework of varying social and economic contexts.

REFERENCES

1. Of related interest is the current experimental project being conducted by the Government of the Northwest Territories (Canada) for pre-service training for teachers of indigenous background in situ. The approach and objectives of this experimental program is consistent with similar experience in other parts of the world.


3. In Canada recent changes in the membership of the Northwest Territorial Council show a rapid increase within the elective power structure of the number and status of young representatives of indigenous background, some of whom have considerable formal training.

4. Valley has pointed out Povungnituk in Arctic Quebec as one of the notable exceptions. But this kind of exceptional proof is outweighed by the increasing evidence in many other northern communities of social disorganization and loss of sense of identity.

The Cultural Situation

Frank G. Vallee
It has been shown on innumerable occasions that human behavior which seems odd, inexplicable, or even grotesque becomes understandable when the individuals concerned are viewed in terms of what things look like through their eyes. How persons perceive the world and the meanings they attribute are to some extent a purely individual matter, but also to a large extent determined by their social situation and by the understandings and way of knowing which they share with others. Concrete examples of this point are provided later in this paper. Despite the now common-place character of this kind of observation, it is surprising how in certain fields of endeavor it is ignored in favor of a bias towards viewing happenings solely in terms of individuals taken out of context, much as are rats in experiments. One reason for this bias is an ideological bent toward individualism but I suggest that another reason for this bias is the nature of highly developed institutions.

In modern societies certain services and activities have become so organized, specialized, and professionalized that they lead to an almost autonomous existence. Medicine, for instance, is often viewed as a thing-in-itself, having its in doctors’ surgeries and hospitals and for many purposes isolated from
The Cultural Situation

the world around it. It gets associated with a technological and scientific apparatus, manned by experts. It is a humane service, but the approach taken is perceived as primarily rational. Each patient is viewed as an individual with given defects who, if he cooperates and accepts the right treatment, should get well. The individual psychological aspects of patients are sometimes taken into account, both experimentally and in practice. However, in only a peripheral way are patients viewed in terms of the social and cultural networks in which they are embedded.

Formal education shows many of the attributes of the medical world in modern society and is often viewed in abstraction from its place in the total picture. Thus there is an abundance of research materials on training in classroom situations, on teaching techniques and materials. The pupils are analogous to patients whose individual defects can be corrected in a rational manner through treatments, some of which have been tested in experiments. The focus is on getting the pupils to do what the teachers want done, indeed to want to do what the teachers want done. In this endeavor, individually oriented psychology, to some extent based on animal experiments, is called into play, but only peripheral consideration is given to the goals and values of the groups whose influence contributes so much to the personality and motivation of the pupils.

Some doctors have learned that a knowledge of the social and cultural dimensions of their own and their patients' lives is vital, particularly in situations involving behavioral disorders. Educators, too, have come to realize that an understanding of the social and cultural contexts in which they and their pupils move help them make more sense out of what happens to themselves and their pupils in and outside of the classroom situation: The growing number and significance of courses in the anthropology and sociology of education, and the increase in sociocultural orientation courses for teachers, evidence the awareness of this need for social and cultural perspectives.

There is an awareness of this need in places where the people involved are relatively homogeneous in background, coming from the same linguistic and national groupings, but differing according to social class and other sub-cultural backgrounds. We expect that there would be much more awareness of this need in situations where the educators are of one linguistic and cultural background and the pupils of another. However, in Canada it is only within the past decade that special attention and resources have been channeled into providing educators with this awareness of the significance of social and cultural settings through conferences and courses.

This paper is not simply a plea for the exposure of teachers, administrators and other professionals involved in cross-cultural situations to courses, conferences and reading materials of a social scientific nature. I use the trends in this direction as illustrative of a perceived need for the kind of background insight and information on group structure and processes as distinct from those that focus on the individual as such.

The Canadian Mosaic and the Eskimos

As part of the background picture of affairs in the Canadian Arctic there certain global features of Canadian society and character which should be
sketched in. First, it is important to keep in mind that Canada is a highly industrialized and urbanized country. Until a generation ago, the bulk of the population was in primary and secondary occupations. The trend in this generation is shrinkage in the primary, and a swelling in the tertiary, or service sectors of the economy. There are many pockets in the East and North where the majority are still linked to primary occupations. If indeed they are employed at all, and where the rural, outdoor life enshrined in the stereotypes of Canada still prevails. However, the vast majority are committed to the industrialized and urbanized way of life and hardly conform to the old Canadian stereotype. An important element in this stereotype is the northern frontier and the supposedly consuming concern with conquering and living in it. Actually, the evidence indicates that if large numbers of Canadians are oriented to the northern frontier in sentiment, a very large proportion of those who actually go north to live out this sentiment come from countries other than Canada.

Given the prevalence of a real commitment to the urban industrialized South, it is still true to say that several traits of the rural society partly define the national character. It has often been said, and occasionally demonstrated, that the Canadian character can be described succinctly as a conservative syndrome.

... made up of a tendency to be guided by tradition; to accept the decision-making functions of elites, many of whom virtually or actually inherit their positions; to put a strong emphasis on the maintenance of order and predictability ... This pervasive conservatism is common to both French and English-speaking components in the population and acts as a tie that binds them.

The Canadian way is the pragmatic way of gradual change and is dominated by an almost obsessive concern to maintain unity in the face of regional and ethnic cleavages.

Another feature of the Canadian society of relevance to our concern here is the role of government in administering and planning on behalf of the public. As in modern countries everywhere, so in Canada, governments have been expanding into almost every realm of life. This is not a sudden departure from precedent, for there are many examples from past decades of government intervention in developing and administering certain aspects of industry and communication. Many have remarked on the Canadian combination of free enterprise, capitalism, and public welfare.

It cannot be concluded from this record of government activity that Canadian governments, federal, provincial, and territorial, have deliberately and with long forethought, laid down far-reaching plans in the manner of the five-year plans of socialist countries. As we have said elsewhere, the prominence of government...

... does not imply the prevalence of a socialistic ideology in Canada, an ideology whose adherents feel impelled to deliberately use the state as a positive instrument where other instruments are available. With few exceptions government involvement in development, welfare, and other matters has been due to lack of capital and other resources from the private sectors, or to exigencies that threatened
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The creation and viability of the nation. There has been relatively little long-range, comprehensive planning for the country as a whole, and overtures in this direction are often frustrated by the allocation of authority between federal and provincial jurisdictions. It is especially important to keep these points in mind when comparing Canadian development in its Arctic reaches with development in other countries where, for whatever reasons, governments monopolize control over their northern regions and people.

A feature of Canadian society which many mistakenly think makes it unique is the fostering of cultural pluralism based on ethnic origin, or as it is sometimes called in the United States and Europe, national origin. Our use of ethnicity parallels these usages of nationality. I use the former here because among English-speaking Canadians the term, nationality refers to political citizenship rather than to origin. In my usage,

The ethnicity of a group refers to descent from ancestors who shared a common culture based on national origin, language, religion, or race, or a combination of these. Ethnicity is an ascribed attribute, like age and sex (one is born with such ascribed attributes), defining status and role in certain situations.

An ethnically plural society is one in which ethnic origin is used as an important component of identification and where the ethnic groups have some distinctive social and cultural characteristics. Of course, most modern states are ethnically plural in this sense. In Canada, regional and ethnic diversity co-exist with an overall French-English linguistic dualism. The prevalent sentiment expressed publicly by most national leaders in Canada is in favor of this pluralism, often called the Canadian Mosaic, an important component in the Canadian ideology.

A number of students of Canadian society have concluded that the mosaic is not arranged horizontally as a combination of equal and distinct parts, but is to a large extent hierarchical. John Porter, who invented the term Vertical Mosaic, and others have shown that there is inequality in the distribution of prestige, power, resources and facilities among Canada's ethnic groups. Most pertinent to this paper, on every index of prestige, power and command over valued resources, the Native peoples of Canada are the least advantaged of our ethnic groups. The position of Indians and Eskimos at the bottom of the totem pole mosaic insofar as education, income, health and power are concerned is so well-known that it is unnecessary to document it here.

Even where they form a numerical majority, the Native people occupy a minority status, and are a rural, non-agricultural proletariat. To amplify this point, I cite a formulation of Bierstedt's which I have used in previous publications to put the Native people's minority status into perspective:

As Bierstedt points out, there are three sources of social power for groups: numbers, organization, and access to valued resources (and facilities). All other things equal, the numerical majority is more powerful than the minority. Where two or more groups are equal in number, the one with the most control over crucial resources is more powerful than the other ... In the context of Canada as a whole
the (native people) are a small (feebly organized) minority with very limited access to significant resources. In the context of the local region and community in the Arctic, the (native people) outnumber the non-native, but they are comparatively unorganized and, by and large, have access to little more than subsistence resources. There is little which they can withhold which would cause the non-native people much discomfort, except their services and their cooperation in helping the non-natives achieve their goals.

One consequence of the imbalance between Natives and Non-Natives in access to facilities and resources is the emergence of a kind of Disestablishment. In this respect the situation in Canada's North is a special case of a more general, if not universal, feature of modern society. With rapid advances in technology, thousands become unemployable because the skills they have are obsolete. Should they live in economic backwaters, they become alienated from the mainstream of social and economic life. Those who guide the system attempt in different ways to prevent the disestablished from remaining outside, by giving them a "stake" inside. These ways vary from grassroots community development to large scale retraining programs. The Native population of Canada's North is not unique in being served with such programs, but a special feature of that population is that it is differentiated radically from the non-Eskimo minority in its midst. This physical factor accentuates the cultural, economic, and social distinctions between groups enjoying different levels of prestige, power and well-being in the society.

One further distinction between Eskimos and non-Eskimos is the special legal status of the former in federal statutes. With the exception of Eskimos in Labrador, who come under the jurisdiction of the Province of Newfoundland and who do not have any special politico-legal status, the other Eskimos in Canada are defined for some purposes as a tribe of Indians and for these purposes come under the Indian Act. The legal implications are not our concern in this paper. The point is mentioned only to underline the distinctiveness of the Eskimo element within the Canadian polity and society. Some local implications of distinctiveness and segregation are explored below.

The Ancien Regime in the Arctic

It is now time to narrow our focus more sharply on relations between ethnic groups in Arctic communities. If the things that distinguish Eskimos from their non-Eskimo compatriots are more impressive than the things which unite them, we should not be surprised in view of the historical development of Canadian Arctic society. This historical development should be put into geographical perspective. Much of the Canadian Arctic is a vast and remote desert whose mineral resources are only now being seriously tapped.

The outstanding historical fact distinguishing the Canadian from arctic situations in most other countries is the very long period during which the Canadian Arctic was of little economic, political, and military significance. We must continually remind ourselves of the recency of large-scale Canadian intervention in the Far North. Until about twenty years ago, in most parts of the Canadian Arctic Eskimos had been in contact with only a small and unrepresentative sample of outsiders involved in the fur trade, the churches, and the police.
The Cultural Situation

Apart from sporadic contact with a few explorers, the most sustained of
the earliest contact the Native people had in northern Canada was with whalers
in the early nineteenth century. This contact was mostly limited to Eskimos who
inhabited coastal areas and did not link them into strong chains of inter-
dependence with the outsiders. Eskimos were not needed so much as producers,
for the crews caught most of their own whales in the Canadian Arctic. The chief
influence of the whalers was in the things they introduced, such as liquor,
firearms, and an array of other utensils, dancing and clothing styles. Their
influence was strongest in the Western Arctic. Another result of contact with
whalers was the mixed progeny derived from male crew members and Eskimo
women. However, in terms of basic economic and social organization, the whaler
influence was not as consequential as that of others who came later.

The influence of the fur traders was of broader range and went deeper
than that of the whalers. Although there were scores of 'free' or private traders,
the majority worked for the Hudson's Bay Company. The traders needed the
Native peoples to solve their problems of economics and logistics. The value of
the Natives to the traders was in terms of various roles: producers of furs,
consumers of trade goods and for a small but ultimately influential segment,
intermediaries, guides and servants. Some traders also saw themselves as bearers
of the Christian message, but the evidence suggests that traders had no
consuming interest in deliberately changing the basic way of life of the Native
people. After trapping became the established economic base, it was in
the trader's interest to fight whatever policy kept the Native people away from
trapping and its associated activities. This was the situation until the influx of
other sources of income — from wages; transfer payments and relief, originating
from the south — made the Eskimos valuable as consumers independently of
their role as producers. The process of the changing relevance of the Native
people as consumers went on at the same time as the process of decline in
significance of wild fur as a commodity.

If the intentions of the whalers and traders were not to change the way of
life in a deliberate fashion, the same cannot be said of the missionaries whose
very raison d'être was the selective personal and social transformation of the
Native people. The conversion program was selective in the sense that only those
aspects of the way of life which were judged as inimical to Christianity were to
be transformed. The remainder of the way of life was to be maintained. In terms
of ideology, the traders and missionaries were more conservative than radical,
seeking to alter only those ideas and practices which militated against their
mandate.

The same may be said for the third element in the familiar triumvirate of
non-Native settlers in the north, the Royal Canadian Mounted Police. The pur-
pose of the Police was not only to maintain law and order by checking the few
deviant customs which went against the codes they imported with them. More
important was the purpose of representing the government of Canada as living
symbols of that country's sovereign right to Arctic regions. The Police had no
explicit program of planned change for the Native peoples.

So far I have dwelt on the manifest purposes of the outsiders who made up
the first non-Native settlers in the Canadian Arctic. The intended consequences
of their efforts should be reviewed briefly. As for the traders, in most regions the Native people did become producers of fur and consumers of imported products, adapting certain of their living habits and attitudes in the process. The Native response to the missionary was to become adherent to a denomination and to abandon publicly those practices which were forbidden by church rules, although many such traditional practices survived in a kind of underground. The missions also introduced literacy in the Eskimo languages through the translation of scriptures. Furthermore, a number of Natives accepted the very limited formal education which the churches offered in the absence of government schools. As for the Police, whatever minimal demands they made on the way of life were usually accommodated by the Native people.

These are ‘Big Picture’ generalizations which require much amending and refining in any given local situation. For instance, individual outsiders had personal intentions concerning the Native people which were not actually required of them by the institutions they represented. Thus some undertook to teach, heal, punish, and act in loco parentis, even though they were not, strictly speaking, required to do so. The important thing to note is that there was general compliance with the wishes of the outsiders and certainly no organized opposition to them on the part of the Native people. The outsiders were able to fulfill most of their intentions without seeking a total replacement of the indigenous culture.

Of special interest are the unintended consequences of the settlement of traders, missionaries and policemen. Several chapters could be devoted to this topic, touch on changes in technology, seasonal cycles, health, and a variety of other matters. The chief concern of this section being with inter-group relations within the context of changing community life, the discussion is restricted to this topic, dwelling first on the kind of community which came to typify the Canadian Arctic before the very recent advent of the planned towns and villages.

During the first quarter of the twentieth century there emerged patterns of residence in the Canadian Arctic which would become stabilized and would characterize the human scene in the Arctic for up to fifty years. In other words, during that period there developed what in the 1960’s is regarded as the ancien régime. Dotting the coastal areas and barren lands were scores of tiny settlements, most of them dominated by the trading post. In some of these tiny posts, the trader would be joined in permanent residence by the missionary and policeman.

Reflected in the location of these settlements was the growing significance of the outside world for the Native people. Previous to the fur trade period, the location of Eskimo living sites were determined by whatever animals they were exploiting at a given time. The most important factor in the placing of the trading posts was access to the outside world, places which ships could visit to deliver their goods and to pick up furs.

Actually, only a small number of Native people were encouraged to settle in these places, those who served the outside agencies: the trader’s post servant, the policeman’s assistant or special constable, the missionary’s catechist. The remainder of the population continued a nomadic life in scattered camps, from which regular, but widely-spaced visits would be made to the posts. Some of
the land camps would be visited by traders, missionaries and policemen on their occasional tours between posts.

The trading system introduced an element of structure into Eskimo groupings, such as extended families and camp groups, because the traders preferred to deal with one or a few Eskimos whom they regarded as representatives or leaders of the nomadic people who lived on the land. Some missionaries, policemen and, later, government administrators reinforced this tendency.

Because the Canadian government had scant interest in the Arctic regions until after the Second World War, the matter of Native affairs was left to the agencies with personnel resident in the Arctic, namely the churches, the Hudson's Bay Company and the Royal Canadian Mounted Police. Except for the latter who represented the federal government; and many of whose policemen were Canadian citizens, the outsiders among the Eskimos were mostly from Britain, Newfoundland, and French-speaking parts of Western Europe, with a handful from Scandinavia. They can hardly be said to have been strongly oriented to the Canadian polity. Indeed, the bulk of the Arctic population, Eskimos and outsiders, were Canadian in only the technical sense of inhabiting geographical space to which Canada laid claim. Each of the communities and sub-regions of the Arctic was a self-contained little world whose frail and tenuous connections with the centers of the Canadian polity only highlighted its isolation and autonomy.

In this situation the outsiders interacted directly and personally with the Eskimos in their midst. From this interaction there developed sets of relationships between the settlers from outside and selected Eskimos and their families. The latter became intermediaries, the forerunners of a kind of elite of Native settlement dwellers about whom more will be said later. During the ancien régime these intermediaries broke from their camp and band networks to move from post to post, in some cases ending up in regions far distant from their original homelands. This mobility was in a sense sponsored by the agencies with which the intermediaries were affiliated, thus enhancing the dependence of the intermediaries on their agencies or, more specifically, on the local representatives of the agencies. They were more oriented to the agencies they served than to the communities in which they happened to reside at a given time, the first Eskimo cosmopolitans in the Canadian Arctic.

To summarize, the typical communities into which outsiders moved were isolated, tiny, with only a few Eskimo people sharing living space with the outsiders over most of the year. Each place was dominated by one or two male persons representing outside agencies. Settlement organization was simple. The small population and lack of a complex division of labour required little in the way of coordination and structure.

The Contemporary Arctic Scene

Surveying the scene in the late 1980's we find that many of these small posts have been abandoned; a handful of others survive with minor adaptations to the new world, such as the addition of a new school and nursing station; a few have been modified and expanded beyond recognition; besides, many new settlements have been established, some of them planned by experts. Although there
are no large towns by outside standards above the Tree Line, even places with from 300 to 500 people are "urban" areas by the traditional standards. Most Eskimo people live in settlements of this magnitude. There are four communities with between 500 and 1,000 and two, Inuvik in the West and Frobisher in the East, with more than 1,500 each. By any standards these are small urban centers. This urbanization which channels Eskimos into larger aggregates and sees them settle as sedentary village dwellers is only one, albeit an important one, of the changes which occurred in response to the suddenly heightened significance of the Arctic for Canada as a whole.

After the Second World War, the Canadian Arctic which, as we saw, had been a twilight zone hardly within the span of Canadian consciousness rather suddenly became the center of much attention. The military significance of the Arctic was demonstrated during the War when airfields were set up as part of a staging route for planes and materials between North America and Europe. With the postwar development of tensions between the Soviet Bloc and the West, the Canadian Arctic assumed further military significance as a kind of no-man's-land between the potential belligerents. Defense installations and warning systems were spotted across the Arctic. Military units conducted exercises in the barren lands. The most advanced technology suddenly appeared in more than a dozen places, vastly improving the systems of transportation and communication.

The military intrusion itself, important to be sure, was not as crucial in propelling the process of change as was the advent of government. As the missionary often followed the trader, so the government followed the military and took over direct responsibility for Eskimo affairs, providing facilities and services that touched on every aspect of Native life.

In the material sense, the Eskimo's standard of living has been greatly improved since government intervention. Housing standards are far below those typical of the country as a whole, but are vastly superior to what they were. Famine is a thing of the past, what one hopes to have been the last one occurring in 1959 in an area far removed from a settlement. A sweeping health program cut deeply into the very high death rate, although this is still much higher than for the Canadian population as a whole. The continuing high birth rate and the small amount of out-migration brought the population from about 8,000 Canadian Eskimos in 1948 to about 12,000 in 1968, so that in terms of its traditional wildlife resources, this vast desert region is already overpopulated and will continue to be so until large-scale economic development materializes.

Within a generation the whole economic base has shifted. A minority still make a living from the more or less exclusive combination of hunting and trapping. The majority get little from these pursuits and what they do get is supplemented by income from sources which did not exist a generation ago: wages, sales of handicrafts, family allowances and various pensions, and relief. For most Eskimos the economic sphere is unstable, unpredictable. Less than 25 percent can be regarded as fully employed in some occupation. The single largest employer of full-time and casual labor is the federal government. Like the Indians of the Northwest Territories, the Eskimos have been able to take only minimal advantage of mining and other developments taking place on their own doorstep. There are several reasons for this, the chief one being lack of training and experience in industrial occupations.
While there has been a rise in the standard of living, it has been accompanied by a rise in the level and number of wants. The gap between income and wants has been widening. In the settlements where a substantial number of outsiders now live, the Eskimos see what the outsiders regard as a normal 'standard package' of possessions for a family. Furthermore, in the settlements the more acculturated Eskimos, many of them descendants of the intermediaries referred to earlier, enjoy a standard of living which, while inferior to that of the Kabloons in their midst, is far superior to that of the average Eskimo. The latter, and the younger among them in particular, come to compare their lot with the Kabloons and the better-off Eskimos, and while their standard of living is higher than it was a decade ago, they tend to feel deprived.

This is not to say that the contemporary Eskimo is highly-acquisitive and materialistic. I suggest that the gap between the average Eskimo and Kabloon families is of most significance symbolically, in that it serves to mark off groups from one another. To use the terms of an earlier section, the imbalance in access to resources marks off the established from the disestablished.

As long as Eskimos lived in isolation and in contact with only a few outsiders, their distinctiveness from the outside world was of little or no significance to them. But that distinctiveness becomes salient and thrusts into one's awareness in the settlements where Eskimos are exposed to a wide range of outsiders, such as nurses, teachers, administrators, mechanics, anthropologists, engineers, and their families. To these government sponsored outsiders are being added private entrepreneurs, small businessmen, insurance agents, merchants, and so on. The latter are not so numerous in Eastern Arctic communities but are coming to form a sizeable segment of a few Western Arctic settlements. We know that the outsiders are differentiated among themselves in terms of occupation, class, commitment to the North, government department, and so on; we also know that Eskimos in these settlements are differentiated among themselves in terms of region of origin, closeness to the outsiders, religious denomination, and so on. However, more impressive than these internal divisions is the more global, overall division noted by so many writers: to oversimplify, there exist two sub-communities, one Eskimo and the other Kabloon, in the new-style settlements, with the Eskimo definitely subordinate to the other.

In the process of differentiation between groups certain qualities which are used initially to identify one or the other; such as style of life or standard of living, can become relatively fixed attributes, regarded as inherent and inevitable. This is most likely to occur where segregation between the groups prevails. The many studies of Arctic settlements describe the marked tendency to segregate unofficially along lines of Native and non-Native.

Now this would not be so serious if it were not for the fact that individuals and groups have histories. What is meant by this is that individuals and groups have histories. What is meant by this is that once a pattern gets set — say, a pattern of segregation between two groups, one of which looks down on the other — the pattern does not disappear in one generation but survives and even gets nourished in a kind of vicious spiral. Subordinate groups have a way of adjusting to their condi-
tion, to their lack of power, through hostile withdrawal, passivity; submission, fantasy, displaced aggression, and other means. Superordinate groups have a way of accepting the rightness of their advantageous position and of accounting for the imbalance between themselves and the disestablished, sometimes in terms of heredity. The latter, like the established, have families and transmitted to younger generations. In the families of both groups are the subtle ways of accessing and evaluating their social worlds. The vicious spiral, once set, is very difficult to break through.

To some extent this vicious spiral has already been set in motion in the Northwest Territories and Arctic Quebec. I have referred chiefly so far to the economic sphere, perhaps putting too much emphasis on it; but the same point could be made with reference to organization and to participating in decisions that affect one’s family and friends.

Here again there has been a one-sidedness, with the Eskimos usually in a dependent position—almost always the client or go-between, almost never the patron. Deliberate attempts have been made at several levels to involve Eskimo people through having them represented on such bodies as the Northwest Territories Legislative Councils, Community Advisory Councils, and the like, to some extent changing the traditional passive role of the Natives vis-a-vis the outsiders. However, representation is one thing, meaningful participation another, referring here to participation in decisions in many spheres of group life and not only the official ones. In most of the community studies it is the outsiders who are presented as the key decision-makers in a wide range of matters.

This is partly due to the persistence of traditional social patterns. Living in small, egalitarian, nomadic groups the Eskimos had no reason to set up and get enthusiastic about formal organization. The process of formal debate, of voting, of majority rule, which many outsiders take for granted, was unknown and indeed was imposed from outside. The Eskimo style was that of consensus in decision-making. It might take a long time to achieve that consensus on particular issues, but that time would be so invested and what we would regard as highly developed human relations skills brought into play to achieve consensus. In the modern settlements, the imported practice of formal debate and resolution by voting leaves many Eskimos unenthusiastic. Their silence is sometimes mistaken for assent by the outsiders.

Besides the lack of precedent in Eskimo culture and the traditional asymmetric relations between Eskimos and outsiders, another reason for the relative passivity of the Eskimo people has been that the very local affairs about which they could have been deciding were the responsibility of a remote government administration, even for day to day matters, such as the allocation of relief, repairs to small sewers and roads, new windows for the school and so on. While these functions were, and in many places still are, carried out in local settings by government administrators, until recently the ultimate responsibility and decision-making was located in Ottawa. Implied unintentionally in this one-sided allocation of local government functions is that the Eskimos are incapable of even deciding about trivia.

The federal government has recently taken a step to remedy this situation by investing local authorities with more powers and by shifting much of the administrative machinery into the Northwest Territories. The involvement of the people is now very much a matter of how the Territorial Government
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(and in its region the Quebec Provincial Government) and residents in communities respond to this shift in powers. A key element in this situation is the resident non-Eskimo.

As I have already indicated, one reason for the minor role of Eskimos in community affairs was the availability of non-Eskimos who were only too eager to bear the burden of decision-making. In an earlier period these were the traders, missionaries, policemen. In more recent times, in addition to these, there are the government administrators, teachers, nurses, businessmen, and so on, as well as the spouses of some of those. The very presence of people eager to play a role in community affairs militates against Eskimo participation, unless a special bid is made for that participation.

Crucial to the issue of integration of ethnic groups is the way in which people who are from the outside, but who settle permanently or on a long term basis, exert their power and influence. There is a growing significance to those who, unlike most people connected with government and big industry, make such a commitment and regard themselves as Northerners through and through. Many traders, trappers, and missionaries made this commitment in the past, some marrying Eskimo women and raising families. But as noted earlier, there is an increasing number of “new” people who have put down roots in Arctic communities as businessmen, contractors, publishers, and so on. The most common stance of this element is anti-federal government. Within the Territories, many of them are milder equivalents of passionate French-Canadian nationalists in Quebec.

The passion of the New Northerner is correlated with the presence in some communities of people who work for the government and who receive what the non-government people regard as very special treatment: fine housing at low rents, various allowances, linkages to such services as sewers and power. On this particular issue, the New Northerners at times ally with the Eskimos or at least try to see things through the eyes of the latter. On the other hand, there is the possibility that many among the New Northerners, because of their initial head start as controllers of local economies and government, will discourage real Eskimo participation and themselves the power vacuums left by the federal government, creating a kind of settler-Native imbalance familiar to many parts of the world. One can only speculate on this possibility. It is mentioned to drive home the point that issues in the Arctic will be resolved not only in terms of what the Eskimos do as Eskimos, but what they do in interaction with other elements in the population, in particular with those who settle there permanently.

So far I have dwelt on the historical origins of, and the social structural reasons for, the segregation between Eskimo and non-Eskimo people in Canadian Arctic communities. Another dimension which has been only touched upon needs to be added, the dimension of culture. The creation of a true pluralist society, along the lines laid down in the official Canadian ideology, requires the bridging of cultural gaps. This in turn presupposes that the people in whose hands lies the power give some attention, credence, and credit to the culture of the Eskimos.
Aspects of Eskimo Character and Culture

In popular usage, culture is often taken to mean only certain expressive performances and products, such as in architecture, literature, music, and painting. In the anthropological usage followed here, these expressive manifestations are only a part of the totality of culture. In this broad anthropological sense, culture denotes the ideas, values, beliefs and ways of doing things which are shared among the members of a given group and which make that group distinct from others.

In this paper, there is concentration on those aspects of culture which are not readily “visible”, aspects such as values and ways of thinking about the world. I am convinced that it is these aspects which the Arctic Establishment, including educators, tolerate the least. It is all very well to applaud the pursuit by a people of its folklore, Easter-egg painting, folk dancing, and so on, but this does not imply an enthusiasm for, nor an appreciation of, the culture of that people in the sense used here. Indications are that the agents of change in the Arctic are bent upon a policy of cultural replacement. Before plunging into a discussion of this policy, it is well to ask, what culture is there to replace? What are some of the features of the Eskimo way of life and feeling which appear to differ significantly from features which prevailed among the majority? A few generalizations on this score are offered in this section.

These generalizations admit of many exceptions, because Eskimo culture is not uniform over the whole Arctic. Besides, as shown in the preceding section, Eskimo groups are becoming internally diversified, because the process of acculturation is not an even one applying equally to all Eskimos. The features I do present have been gleaned from the literature on the Eskimo of the Canadian Arctic and my own observations. Only those features about which there have been widespread agreement in the literature are brought out in this section.

There is no doubt that the material culture of the Eskimos in Canada is doomed to the museum, with few elements surviving in isolated areas. Even in these areas, items which were widespread only five years ago, such as dog teams, are being replaced by imported vehicles. To the extent that a people’s identity is tied into their distinctive material culture, Eskimo identity is rapidly losing that reference and criterion.

Some material objects with a primarily symbolic or expressive function continue to serve as definers of Eskimo-ness. Carvings and prints deserve special mention, because they are not only objects of economic value, but also symbols of Eskimo-ness. Purists may decry the departures from tradition and the outside influence on styles, claiming that the majority of these objects are not “really Eskimo”, but if the people themselves perceive them as Eskimo, and if the outsiders define these objects as Eskimo, then they are indeed Eskimo in terms of their significance for Eskimo identity. In one community in Arctic Quebec where carving is an economic mainstay, carving as an activity is used to sort out those of Eskimo descent who have abandoned their Eskimo identity from those who, no matter what their style of life, still regard themselves as primarily Eskimo. A man who carves even only infrequently, is an Eskimo in this place. This kind of symbolic significance of activities and objects usually escapes the minds who deal directly with the Eskimos in Canada. I have known teachers
to discourage youngsters from carving on the grounds that the carvings are
imitative of outside influence or that it interferes with their school work. These
outsiders tend to view carving and print-making either from a purely aesthetic or
a purely instrumental point of view.

The same point should be made, even more forcibly, with regard to the
most important expressive aspect of culture—language. On the basis of my
experience, I must say that a majority of educators in the Canadian Arctic regard
the question of language primarily from an instrumental point of view. Illustrated in the question, "How is this language going to help the person making a
living? How is it going to help him fit into the larger society?" These are, of
course, valid and important questions. But language is a fundamental structure
and process. Upon it is built much of the way of experiencing and thinking
about reality. It is also a symbol of group identification and solidarity. Rules
that forbid speaking Eskimo in the classroom or school-yard get across to the
Eskimo child that the language of his home is something to be ashamed of,
something bizarre which, like the spears and kayaks, will survive only in
museums.

Other expressive features of Eskimo culture have been discouraged,
especially by missionaries, who equated them with the manifestations of the devil's
control in pre-Christian times and with what they regarded as an undue preoccu-
pation with "sex".

Because so much of the oral literature, song, and dance had to do
with the supernatural, as defined by the Eskimos, its open
expression is now taboo; again, because so much of this tradition is
now defined as "obscene" by the new moral guardians, those Eskimos
who cherish certain vestiges of the tradition are reluctant to pass it
on to their children and reluctant to express it publicly, i.e., in the
presence of Kabloonas. In short, many Eskimos have become
ashamed of a large part of their own oral and musical tradition.

Very recently there has been a revival of drum dances and other traditional
performances in public, but I have the impression that these have been drained
of their original symbolic meaning and are presented as cultural specimens for
the gratification of outsiders, especially tourists.

So far I have talked about fairly explicit manifestations of what used to
constitute Eskimo culture. Except for the viable language, these are definitely on
the wane, destined to survive as museum pieces and tourist attractions. But how
about the massive part of the iceberg of culture, the part that is submerged and
about which few people are conscious? I refer here to the ways in which people
unconsciously know and evaluate the world around them. Authorities on the
subject agree that these aspects of culture and personality are the most resistant
to change. They also agree that where these basic conceptions differ among
people who are forced to interact with one another, the resulting faults in
communications have serious consequences. Let us look briefly at some Eskimo
ways of knowing and evaluating the world.

Many writers have provided examples of Eskimo ways of thinking about
the world, ways of explaining happenings which are different from the explana-
tions of the outsiders. These ways of explaining things make up what are called
cultural thought models. A favorite example from my own experience will be cited here, paraphrased from another publication. The example pertains to a certain theory of disease held by some Eskimos. If the outsiders in the community concerned had known beforehand about this particular theory, much mis-understanding and tension could have been avoided.

During the late winter of 1962, there was a serious epidemic of rabies among the dogs of an eastern Arctic settlement with a population of about 500 Eskimos and 30 whites. The settlement was only about six years old and, like so many other settlements, was inhabited by people who had formerly lived in small land camps. There was no clear policy about chaining dogs, and some Eskimos new to settlement living refused to chain their dogs, or refused to take precipitate action when a dog broke loose; they had not chained them in the small camps in which they formerly lived. No less than 600 dogs were distributed over an area of just more than a square mile. The spread of the rabid virus among the dogs was speeded by the many loose dogs, and within three weeks of the outbreak, more than 100 had to be destroyed because they were rabid.

The white element in the community and some of the more acculturated Eskimos made passionate appeals to the people to keep their dogs tied. Most responded by making special efforts to do so, but several were indifferent to the pleas and threats. The whites accounted for this indifference in terms of stupidity, hostility, or their own failure to communicate their passion on the issue. Much tension was generated in the community.

Six weeks after the outbreak the epidemic was over, with a high casualty rate among the dogs; but no people had died. As soon as the rabies epidemic subsided, an influenza epidemic broke out; ten people died and scores were violently ill.

It was during the influenza epidemic that I learned about the Eskimo theory of disease.

Some Eskimos in the community, but not all, believe that there is always a constant amount of disease in the world. This amount of disease is channeled onto certain species at a given time for a given period. For example, if there is an inordinate amount of sickness and death among seals for a period, other species will be relatively free of disease for that period. The reasoning seems to be that if one species is under the disease gun, other species should consider themselves fortunate in being outside the range of that gun.

Applied to the situation I described, this meant that while the dogs were overwhelmed by disease, the people were comparatively well-off. The dogs were consuming much of the constant amount of disease in the world. As soon as the rabies epidemic ended, the human species became the biggest consumer of disease — witness the influenza epidemic — and the “fold theory” was thus confirmed for those Eskimos who believed it.

The attitudes and behavior of some of the Eskimos during the rabies epidemic would have been comprehensible in terms of the logic of their way of thinking if the non-Eskimos had understood that way and had taken it into account in their efforts to combat the epidemic of rabies. We conclude then,
that systematic investigation of the thought models of the Eskimos is not just an academic exercise, but has practical value as well.

Certain Eskimo values and character traits can be inferred from behavior. For instance, many have remarked on the value which Eskimos put on independence and autonomy as evidenced by their reluctance to coerce or speak for others. Their techniques, which they employ unselfconsciously, for inducing conformity made little use of overt punishment and much use of nurturance as a "reward". Educators brought up in a society where adults make it obvious who is in-control, where classroom regimentation is viewed as essential; where parents and teachers speak for their children, are often disturbed at what they interpret to be the Eskimo parent's lack of concern for his children. In their opinion the children should not be allowed to stay out so late at night, to accompany parents on just about every kind of event, to stay away from school without a reason acceptable to the teacher, and so on.

In the eyes of the tradition-oriented Eskimo, the Kabloona world is excessively rigid and concerned with discipline, too much ready to invade an individual's zone of privacy. They view the Kabloona as relatively insensitive in the sphere of what we call "human relations". For instance, much resentment is felt over the policy of taking children away from their families and removing them to a distant hostel-school. Should the children be removed and placed with another family, there is little, if any, resentment as long as it is understood that the youngster will return.

The question has been asked on many occasions: Why is it that the Eskimos show so little hostility and resentment openly? As I mentioned earlier, Eskimo silence and show of indifference are often interpreted as positive assent. However, in terms of traditional values it was considered improper to demonstrate overtly strong feelings unless one were extremely frustrated or extremely moved. Eskimos have ways of "reading" one another's behavior and feelings, of course, and the cues used to display feelings are usually unobserved or misinterpreted by the Kabloona. Related to this traditional trait is the oft-noted smiling and happy front which Eskimos display for the Kabloona. It has been suggested that this front is an exaggeration of the traditional one, and is used consciously by some and unconsciously by others to conceal strong feelings, both negative and positive, which if expressed might disturb the kind of accommodation which has been developed between Eskimos and Kabloona.

What is perhaps best regarded as another aspect of the trait of repressing displays of strong feeling, is the stoicism which has frequently been described as an outstanding Eskimo characteristic. This stoicism is inferred from the apparently resigned way with which the Eskimos have accepted terrific hardships and crises. The tendency is to accept things as they are and, to use the English vernacular, to "look for the silver lining", or to be more precise, to give the impression that one accepts things as they are.

Accommodation and compliance with Kabloona rules of the game are widespread, but this does not imply that there has been a wholesale identification with the values which underlie these rules. In fact, Eskimos who comply...

* At times hostility and resentment are expressed openly, a matter which is touched upon in the concluding part of this paper.
with the Kabloona rules at work, in meetings, in school, or in the administrator's office are given to acting out, in the privacy of their homes with their friends, hilarious imitations of what the Kabloona regard as normal behavior.\textsuperscript{12}

This brings up the question, which we cannot answer conclusively, of the extent to which Eskimos do indeed nourish the values attributed to them. If we based our conclusions on actual behavior, then we would have to say that because so many Eskimos in the larger settlements behave in most ways like the Kabloona, they have abandoned their cultural values. Many observers have expressed the opinion that those Eskimos who have had the most contact with the outsiders identify with the Eskimo social groupings but not with the Eskimo culture in the sense used here. They argue that it is only among those families which have only recently moved into settlements and among those who live mostly in isolated camps and small settlements that anything like the traditional cultural values survive. In the absence of systematically gathered data on the subject of values in the Canadian Arctic, one can only guess as to their distribution and viability.

Many more examples could be given of the hardly visible, intangible, subjective values which we infer from behavior. However, I think that enough has been presented to conclude that in Arctic communities account must be taken of more than meets the eye if productive relationships among the different subcultures are to be developed. Individuals have expressed admiration for traditional Eskimo values and have observed that non-Eskimos would be wise to adopt them in their own lives. However, many of the currents running through the mass society in which the Eskimos are moving go in the opposite direction and favor centralization, impersonality, regimentation. The pressure is on the Eskimos to abandon their customary ways of viewing the world. This pressure is deliberately applied in the schools and work places. It is unwittingly or unintentionally applied in most spheres of life and disseminated through the mass media.

**Implications and Applications**

Much of the foregoing discussion on social and cultural matters seems remote from problems of education. Nevertheless these matters are pertinent to such problems for a number of reasons, some of which have already been brought out. The overall theme in the paper has been that of tendencies to social and cultural alienation of the minority Eskimo groupings. In this concluding section I bring out some social-psychological correlates of this alienation and minority status.

First, where a segment of the population feels alienated and without a clear stake in the society, it is rather much to expect them to embrace or even to understand the goals of formal education except for the very limited ones of an instrumental nature, such as reading, writing, arithmetic, and vocational training. There is no questioning the enthusiasm of Eskimo parents for these instrumental features of education. However, beyond this there is little enthusiasm for and understanding of the content and process of formal education. Control over the content and process is overwhelmingly in the hands of the Kabloona, the Eskimos having no voice at all. Until they do get such a voice, especially at the community level, formal education will remain an alien thing.
Second, the position people occupy in the social system has much to do with their sense of identity and self-esteem. The family is the key grouping here, for it is in ebb and flow of everyday life that people get to know who they are and what they can do. The social, and in particular, ethnic is only one of the components which comprise a person's identity, but in cross-cultural situations it is a crucial component. Eskimos with a firm sense of identity probably do not fret over what outsiders think of them. But those who grow up in a world of cultural discontinuity—the majority of the contemporary school population—are not so firmly anchored in self-identity and self-esteem because explicitly or implicitly the parents and their generation tend to be devalued by those who control the system. As I pointed out almost ten years ago:

Although the Kabloona make a favorable, if romantic, judgment on the Eskimo past, this does not prevent them from showing contempt for the living Eskimos they meet, either openly or by implication. Consider what is implied where one learns that untidiness is sinful, and one's parents are untidy; that receiving handouts is a mark of inferior status while one's parents are forced to accept handouts to keep the household going; that self-respecting men are capable of protecting their womenfolk from human predators while one's sisters and mother have to be protected behind a social wall of non-fraternization, erected by the guardians of the predators. Under such conditions it is not unlikely that children will devalue their parents.

The devaluation of parents by offspring who accept, perhaps unconsciously, the Kabloona evaluations of what is desirable and what is reprehensible implies a weakening in the control which parents normally exercise over their offspring. Plausible explanations of the factors which pre-dispose the children of foreign-born in America to delinquency usually include the point that the children, accepting the dominant society's view that the immigrant parent is strange and perhaps uncouth, do not look up to the parents as role-models.13

A third point has to do with incongruence and its consequences. By incongruence we mean lack of fit between parts of something. In the Arctic situation there are many examples of lack of fit, some of which are listed here: between the goals youngsters are encouraged to entertain and the lack of means to achieve these goals; between role demands from the Kabloona system and conflicting demands from the Eskimo one; between one status identity and another that a person is expected to adopt. These and other examples of incongruence arising from the rapid changes discussed earlier are described and analyzed in the literature.14 Associated with incongruence is the phenomenon of marginality. Personal marginality refers to the condition of belonging partly to one and partly to another group, without being fully engaged in either, and is generally regarded as a condition of considerable strain. Group marginality refers to the position of a whole category of persons, a category which is usually in a kind of middleman position between two distinct groups. A good example from Canadian history is the Metis of the Prairies, who mediated between the whites
and the Indians, and who were in the process of developing a solidarity and unity when they were overwhelmed by the westward moving whites. Because a person can identify with a marginal group he is not necessarily in a position of strain, unlike the marginal person whose identity problems are serious precisely because there is no marginal group to identify with.

Recent studies show that there is an incipient marginal grouping in certain Western Arctic communities. But that over most of the Arctic one is pressured to identify with either Kwakwaka’wakw or Eskimo. In its relevance to the educational process among the Eskimos the problem of marginality is not serious until about the age of adolescence when the young person comes to see the world as represented at least in his community, not so much as it had been presented in childhood, but as it is.

It follows that a key factor determining what happens in the process of developing identification and esteem in the character of the community in which the young person grows up. The ideal situation is found in those few communities where the Eskimos have a genuine voice, are involved in making decisions which are important in their eyes, and where the people can choose to follow more than one line of work, combining traditional occupations pursued with the means of modern technology and new occupations associated with the outside world.

The history of one of these communities, Povungnituk in Arctic Quebec, I have described in a recent publication. The outstanding integrative piece of social machinery in that community is a multi-functional cooperative, in the running of which the Eskimos have a genuine voice. Many have noticed the feeling of pride and worth which has been engendered among people in places like Povungnituk, few as they are. This feeling permeates the community and is evidenced by many of the young people who, in other places, are frequently ashamed of their origins.

It is in communities like this that Eskimos do speak out, occasionally expressing hostility and resentment, but pleading their case in terms of constructive development. They have learned about the power of organization and of ‘politics’ in the broad sense, and do not hesitate to play off side against side, the provincial against the federal, the Hudson’s Bay Company against the Cooperative. Acculturated young people, especially in the Western Arctic, have publicly voiced hostility and resentment against “the system”, but little of what they have to say is directly meaningful at the local community level. In that area hostility and resentment is sometimes acted out in spurts of vandalism. I do not have the data to test it, but I suggest that the following hypothesis would be supported by the data: compared with youngsters from other communities of the same size and situation with reference to resources but lacking the integrative machinery to be found in Povungnituk, the youngsters from the latter make a better adaptation educationally, occupationally and psychologically.

Looking at the Arctic social and cultural situation in general, I conclude that there is a far from close fit between the policies required by long-term, large-scale economic development, on the one hand, and the policies required to individual and group deterioration, on the other.
Those whose chief concern is with large-scale development of resources tend to favor cultural replacement; those whose chief concern is with human relations problems tend to favor cultural continuity. The former see the salvation of the Eskimo people in terms of a massive educational program aimed at fitting the younger generation into the modern, industrial society and pay little more than lip service to the needs of community development and adult education. In this "Big-Picture" perspective, the adult generations are by-passed. The costs of such a policy have been the chief topic of this paper.

In the perspective of those whose chief concern is with people here and now there is a tendency to underplay the issues of long-term and large-scale development and to overplay the issues of local compass. Somehow the two perspectives must be brought together into one focus, so that programs of community development which take into account the social, cultural and psychological needs of all generations are not viewed as competing with or conflicting with programs of formal education, designed to prepare people for life in a modern, industrial society.

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The Cultural Situation

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Peter Sindell and R. M. Wintrob are on the faculty of the Programme in the Anthropology of Development, McGill University, Montreal. Drs. Sindell and Wintrob have engaged in various field studies in Canada, especially in the Middle North. It is in the Middle North of Canada that much development is now taking place. The impact of this development on Eskimo and Indian populations and the subsequent emergence of formal educational programs are the subjects of their paper.
Cross-Cultural Education in the North and Its Implications for Personal Identity: The Canadian Case

Professor Vallee's comprehensive paper draws attention to three phenomena which have deeply influenced both education in the North and the psychological integrity of its indigenous peoples. They are the recent large scale governmental intervention; the minority group status of the Eskimo with attendant powerlessness, social exclusion, and economic deprivation; and the commitment of change agencies and their personnel to a policy of "cultural replacement".

Although Professor Vallee discusses the Canadian Arctic, in our view these three phenomena are equally relevant to our understanding of social and cultural change in the Middle North, which in the West is largely populated by Metis and Indian groups speaking Athabascan languages and in the East by Indian groups speaking Algonkian languages. Therefore in this paper we shall discuss both the Eskimo and the Indian populations of the Canadian North, including the Arctic and Subarctic.

First we shall describe the ways in which the social and cultural trends noted above affect northern education. We shall then shift our focus to the individual level to examine the ways in which prolonged exposure to formal
education affects students’ values, attitudes, aspirations and self-esteem; in short their sense of personal identity. For it is ultimately the individual who must decide whether to continue his education or drop out, whether to move South or remain in the North, whether to work for wages in a town or carry on the traditional hunting, trapping and fishing way of life.

In this discussion, findings from our investigation of identity conflict among Cree Indian adolescents from Northern Quebec are presented. Finally we shall consider briefly the implications of our findings for educational policy in the Canadian North.

Governmental intervention, minority group status, and cultural replacement.

Since World War II the pace of change in the Arctic and Middle North has accelerated, especially as a consequence of the development of D.E.W. line military facilities, the expansion of civilian governmental operations, and the growth of northern mining. The introduction and expansion of formal education in these areas has been a key concomitant of these processes.

However, as many authors have noted, northern development in Canada has not proceeded in a orderly, planned manner (Hobart and Brant 1966, Hughes 1965, Jenness 1968). Instead the exigencies of military priorities, the vagaries of mineral exploration and development, and shifts in government policy have been major factors determining the rate, nature and locales affected by development. Consequently communities vary widely in the degree to which traditional subsistence patterns persist, in their degree of contact with the dominant Euro-Canadian society, and in their attitudes toward formal education. Some groups have experienced rapid modernization, while others have remained largely traditional in their orientation. The rapidity of change and its uneveness have resulted in a variety of economic adaptations, with each community displaying a different combination of traditional, modified traditional, and industrially oriented patterns, along with substantial unemployment and under-employment in many areas.

Nevertheless, it is clear that traditional ways of thinking and behaving remain important almost everywhere. Vallee has cogently illustrated this point with his account of the rabies and influenza epidemics in an Eskimo community, while Honigmann has shown that even those Eskimos who are committed to life in a northern town retain deep positive feelings for the traditional hunting life of the past (Honigmann 1965, Vallee 1969). Thus, Eskimo and Indian parents and children are still influenced greatly by a traditional kin-oriented, subsistence based, way of life. Before they enter school northern children frequently hear only an indigenous language at home and are socialized in terms of traditional goals, values and attitudes. Although Eskimo and Indian children have been superficially exposed to different ways of life through observing whites and the more acculturated members of their communities, before entering school most children have had no meaningful contact with the “Kabloona” or “white” world (Hobart and Brant 1966, Honigmann 1965, Sindell 1968).

Despite the regional diversity in acculturative level and economic oppor-
tunities, schools have generally not adapted their programs to serve local needs.
Thus, students have not been prepared to take advantage of the economic opportunities available in their region. Vailee (1969) notes, for example, that the Eskimos and Indians of the Northwest Territories "have been able to take only minimal advantage of mining and other developments taking place on their own doorstep ... (chiefly because of their) lack of training and experience in industrial occupations." Another example is the governmental policy forbidding vocational training in Indian schools before grade nine, even though many students have begun school as late as age thirteen or fourteen and have planned to stop school after three or four years.

One reason why northern schools have not responded adequately to local conditions is that Indians and Eskimos, because of their minority status, have had little or no authority over the selection of school locations, curricula or personnel. A centralized governmental bureaucracy has controlled the formulation of educational policy and goals, the recruitment of staff and the determination of curricula. Almost all teachers in northern schools are Euro-Canadians, trained in and for southern Canadian institutions. While often very dedicated, most of these teachers have had no special training for northern living or teaching children in a cross-cultural context.

Furthermore, many of these teachers possess negative attitudes toward the cultural patterns which prevail in the Metis, Eskimo or Indian communities they serve (King 1967, Slobodin 1966). Their negative stereotypes have been reinforced because, as Vailee and others have pointed out, social exclusion of segregation is characteristic of northern settlements. Finally, almost all teachers return to southern Canadian schools after one, two or three years in the North.

The dearth of indigenous teachers and the lack of special training for teachers in northern schools reflect a policy of "cultural replacement", or "the attempt, in under-developed areas, to replace the traditional culture with a modern one in a short period ..." (Hobart and Brandt 1966). Many educators admit openly that they want to wean their Indian and Eskimo students away from their cultures (ibid.). This attitude is reflected not only in curricula, which have generally not been adapted to reflect northern realities, but also in the extensive use of residential schools and the virtually exclusive use of English as the medium of instruction (Graburn 1969, Jenness 1968, King 1967). Very recently some efforts have been made to develop instructional materials in Eskimo, but comparable materials in the northern Indian languages are not currently available.

The psychological impact of education

How does this system of education affect the people who pass through it? Many studies report that students learn to devalue their own "Eskimanness" or "Indianness" but lack confidence in their ability to cope effectively with the urban industrial lifestyle to which they have been exposed in school. The policy of cultural replacement has created intense conflicts in self-image with feelings of inadequacy and hopelessness (Berreman 1964, Clairmont 1963, Hobart 1966, Hughes 1960, and Parker 1964). In addition,
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Intergenerational conflict about education is prominent because parents feel that the present educational system threatens the integrity of their way of life and causes their children to become disrespectful, disobedient, lazy, and aggressive (Hughes 1960, Sindell and Wintrob 1969).

Although Indian and Eskimo parents often want their children to attend school for a few years so that they can learn English and have better opportunities for employment, they are ambivalent or opposed to prolonged education because of its negative effects on their children's attitudes and behavior. Intense parental opposition to education frequently becomes the precipitating factor in students' identity conflict. Symptoms of psychopathological significance develop because during adolescence students are forced to decide whether to continue their education in the face of parental opposition or return home to help their parents in the expected manner.

Education and identity conflict among Cree Indian youth

To clarify the origins of these psychological problems and to ascertain how widespread and severe they are, the authors studied virtually all (108) Mistassini and Waswanipi Cree adolescents who attended elementary or high schools in 1967 and 1968.

God gave people some skills so they could support their family and look after them. A long time ago when we stayed in the bush, I didn't know anything about the white man's way. Everything my mother gave me, I appreciated it. My father showed me how to be a hunter. That's what I like to do; my friends too. We want our sons to stay around here, where they were born. And work around here — cutting trees, or in mining. But when they go to school, the young ones, they want to work in town. They just spend their money and drink. They don't help their parents or their small brothers and sisters. Sometimes they don't even have money to come home. So what good does it do to let our children go to school?

This quotation comes from a 72-year-old hunter named Samuel Beaverskin, one of the 1500 Cree Indians of the Mistassini and Waswanipi Bands living in north-central Quebec, south and east of James Bay. Samuel has never been to school himself, but five of his twelve children are presently attending and three more have been to school in the past. The traditional Cree hunting-trapping-fishing mode of life continues to be culturally viable, but as in other areas, acculturative changes are occurring as mining and forestry operations expand, roads and communications are introduced, and fur prices decline (Chance 1968, LaRusse 1968). Concurrently, the traditional patterns of entituration are being disrupted since most Cree children are sent to residential schools in 'southern' Canadian towns for ten months of each year, returning to their families only for the two-month summer vacation period.

The socialization experiences of these children alternate between the hunting-trapping group, fishing camp, and summer settlement, and the white, urban
industrial centers where they attend school. The purpose of our study has been to examine the psychological consequences of the discontinuities in enculturation which Cree students experience as they live alternately in these two very different environments. Our central hypothesis is that identity conflict experienced by Cree students during adolescence reflects their attempts to resolve incompatibilities between the two major models for identification available to them: the "traditional," represented mainly by adult kin, and the "white" middle or working class, represented primarily by teachers, counselors, and foster families.

Data has been collected by means of an Adolescent Adjustment Interview schedule. Consisting of some 100 items the AAI was designed to investigate each student's educational, occupational, and social aspirations, the degree of parental opposition they engendered, the degree of confidence the student had in achieving his goals along each of the three parameters, and the prominence of his feelings of inadequacy, anxiety, and depression. Ethnographic fieldwork from 1966 to 1968 at the summer settlements, in the bush, and in a residential school provided essential background information on the school milieu, Cree enculturation, family interaction patterns and attitudes toward education. Of the group under study ninety-three attended elementary schools, while fifteen students were enrolled in community high schools and lived with white foster families. As in many other northern areas only during the past decade have most Mistassin and Waswanipi children attended school. In the study population the age at school entry ranged from six to thirteen years, with a mean of 8.6 years.

During their preschool years Cree children participate fully in the traditional life of the hunting-trapping group. Models for identification are provided by parents, grandparents, and adults of the extended kin group. Children assume contributory roles and are given responsibility in accordance with their proficiency in performing tasks having a clearly defined usefulness to the family and hunting group (Rogers and Rogers 1963, Sindell 1968). Boys' "play," such as hunting birds and setting rabbit snares, is patterned after the activities of the adult hunter. Girls help their mothers collect firewood, cook and wash clothes. Times for eating and sleeping are determined by individual preference rather than schedule. Children learn through experience that appropriate behavior involves emotional reticence, self-reliance, generosity, and cooperation in play and in the performance of tasks. There is a strong social sanction against the overt expression of aggression, either verbally or physically, and throughout their preschool years competition among peers is criticized. Fighting, quarreling and "talking back" are strongly disapproved. The cultural emphasis on generosity and on effort directed toward the benefit of the kin and hunting group is reinforced by the fundamental Cree belief that the "soul spirit" (Mistabeo) guiding each man's behavior "is pleased with generosity, kindness and help to others" and that such behavior is related to success in hunting (Speck 1935).

With the shift from traditional milieu to white urban residential school setting, Cree children are removed from the families at the time they are becoming competent to assume responsibilities within the hunting group, or for the household and younger siblings. They are required to learn new roles, eat "store food" rather than "bush food" and abide by rules and a
time structure completely at odds with their previous experience (Wintrob and Sindell 1968). Emotional expressivity is encouraged, and so is competitiveness and individualistic achievement in scholastic performance, athletics and extracurricular activities. Overt expression of aggression is tolerated to a much greater degree than is acceptable in their family milieu. Their teachers and dormitory counselors know relatively little about Cree life, its value orientations and belief system, and generally conceive of their role as preparing children for life in a modern industrial society. In the residential schools instruction is in English, the students follow the normal provincial curriculums, and there are no vocational courses specifically oriented to northern economic opportunities.

As their school careers extend over six, eight, ten, or even twelve years, prolonged separation from the life of their family makes it practically impossible for Cree students to learn the skills required for successful adaptation to bush life. At the same time they acquire a growing knowledge of, and some capacity to adapt to, the life-style of the white urban society that surrounds them. Both of these factors contribute to a growing sense of alienation from the traditional life of the Band, although students continue to experience anxiety in their interaction with whites. Through continuing contact with residential school staff, who live in the dormitories with the students and act actively involved with the students' extracurricular activities most Cree children ultimately develop close relationships with one or more of their teachers and counselors. This is particularly true of the high school students, who live with white foster families. In this way the attitudes, beliefs and behavior patterns of their white teachers, counselors and foster families become alternate models for identification which contrast sharply with "traditional" models of the students' preschool and summer experience.

Most Cree adults recognize the usefulness of having some of their children attend school for two or three years in order to learn enough English and French to function as intermediaries in their increasingly frequent contacts with white government officials, tourists and potential employers. However, faced with the great need for skilled help to maintain the continuity and effective functioning of the hunting group, parents exert mounting pressure on their children, beginning early in adolescence, to stop school and return to helping on the traplines and "learn the Indian ways". Those students who persevere with their education in the face of parental opposition characteristically show symptoms of depression and feelings of guilt based on their refusal to comply with the needs of the kin group. Diminution of familial emotional support compounds these feelings. The sense of isolation which results intensifies students' fears of failure in achieving their aspirations of completing high school and going on to become nurses, teachers, secretaries, engineers, bush pilots, mechanics or draughtsmen. It also contributes in a reactive way to their increasing emotional investment in interactions with teachers, counselors and foster families, and to a growing sensitivity to rejection by whites.

Given the types of enculturative discontinuities and intergenerational conflict described, we hypothesized that a large proportion of the AAI protocols would reveal marked identity conflict, as defined by a sharp disparity between student's stated educational, occupational, and social aspirations as
compared with his expectations of achievement, by the student's manifest anxiety in response to his parents' opposition to the various goals he has set for himself, and by a majority of positive responses in that section of the AAI probing feelings of anxiety, inadequacy and depression. On this basis we rated 48 percent of the 108 students as having clearly defined identity conflict.

In an additional 14 percent of AAI protocols indications of identity conflict were sufficiently pronounced to constitute manifest psychopathology or "identity confusion" (Erikson 1968). Thirteen of these sixteen cases were female elementary school students, ranging in age from thirteen-to seventeen, whose AAI protocols were characterized by strong polarization toward a white middle-class life style. Clinically, they could be diagnosed as having depressive disorders with insomnia, loss of appetite, irritability, crying spells, social withdrawal, loss of interest in extracurricular activities, isolation and alienation from friends, family, and school personnel, feelings of rejection, and inability to cope with academic demands. In almost every case these symptoms have been precipitated by confrontation between students and their parents over whether to continue school or return to the family. This confrontation generates intense anxiety as students struggle to resolve conflicting wishes to adopt a white middle-class life-style and yet at the same time avoid total disruption of emotional ties with their parents.

The anguish of identity confusion is dramatically illustrated by the following quotation, taken from the letter of a seventeen year old girl to a white teacher with whom she had related closely in the past:

Could I please work at your place again. It would help me a little to overcome my shyness. Maybe if you gave me extra help it would help me lots. Because right now I can't bear it when people talk about me being shy... I have no definite personality right now, so give me a personality. I know I am asking lots but please help me.

Implications for northern education policy

Spindler has suggested that the search for identity is a constant process "...in all human beings as members of cultural systems" (1968) and that this process becomes acute when divergent cultural systems come into contact. Education in such circumstances can foster identity conflict by forcing people to choose between two contrasting sets of values, role expectations, and models for identification, or it can promote personal and cultural synthesis. Northern education in Canada has been characterized in philosophy by cultural replacement and in practice by enculturative discontinuity. The result has frequently been identity conflict and, in some cases, identity confusion.

What can be done to reduce identity conflict and prevent identity confusion among Indian and Eskimo students? Our findings, in common with those of several other recent studies (Hobart 1968, King 1967, Melling 1967, Sim 1968, Tremblay et al. 1968) suggest that present educational practices jeopardize the continuity, vitality and cultural integrity of Indian and Eskimo life in both indigenous northern groups and the government declare them themselves determined to preserve. Our findings also indicate that the greatest degree of resolved identity conflict is experienced by those students who polarize
most strongly toward the white middle-class identity model under conditions of intense parental opposition to formal education.

Thus two essential principles for the reduction of identity conflict among Indian and Eskimo youth are the validation of the student's self-image and the strengthening of his self-esteem as an Indian or Eskimo, and the effective involvement of Indian and Eskimo adults in the formulation of educational policy for their children. To carry out these principles would require that combined residential day schools be located in northern settlements and be staffed by indigenous teachers and counselors. Teaching in the first three or four grades would be conducted in the children's mother tongue. Thereafter the curriculum would be bilingual but would include instructional materials in the indigenous language on local history, government, and religion throughout the children's school years. School vacations would be scheduled to allow students to spend time with their families in the bush or in the outlying camps in order to retain familiarity with the traditional life style and acquire the relevant skills. Teachers, both indigenous and Euro-Canadian, would receive training in the history, language, and culture of the communities they are to serve. Furthermore, Eskimo and Indian personnel of all ages would be recruited to teach in their local schools. For the upper elementary and high school grades students would attend community schools in northern towns closest to their homes, but the same principles of course content, bilingual curriculums and specially trained teachers would apply. These students would live in cottage-type residences staffed by both whites and Indians or Eskimos until they started high school. During high school students would live with Indian, Eskimo, or white foster families. Provision would be made for regular visits home and for parental visits with their children at school.

At present parents perceive formal education as having limited usefulness and regard it as the white man's attempt to alienate their children from them, their way of life, and the North. Where school programs designed to serve local needs and reflect more adequately the indigenous culture, history, and language, then parental opposition to formal education would be reduced. Were Indian and Eskimo parents empowered to operate their own school districts and be fully participating members of school boards in towns where their children attend community schools, then they would be equipped by experience to understand the purposes of education, would be assured of its relevance, and would come to conceptualize the schools as their own rather than imposed on them. Consequently intergenerational conflict over education would be reduced.

Were policies such as those we have outlined implemented we contend that Indian and Eskimo youths would retain a positive sense of cultural and personal identity and would acquire the linguistic, technical, and behavioral skills they need to participate effectively in the development of the North.

NOTES

1. The term "Middle North" refers to those regions which are north of the settled areas of Canada (as indicated by the lack of railroads, roads, large population centers, and developed land) and south of the high Arctic.
6. Thus it would include the northern portions of the Canadian provinces, the Yukon Territory, and the southern part of the Northwest Territories (Trevor Lloyd, personal communication).

2. There are, of course, important cultural and historical differences between the Arctic and the Middle North but it is beyond the scope and purpose of the present paper to enumerate them.

3. For example in Nouveau Quebec for use in the early primary grades.

4. All personal and place names used in this section are fictitious except those locating the region and identifying the two Cree Indian Bands under study.

5. The term 'white' is used in this context to represent all Canadians of non-Indian (or Eskimo) extraction who are identified and labelled as 'white' by the Cree under study.

6. This subject is discussed in greater detail in Wintrob and Sindell 1969b.


8. Ideally multi-track curriculums could be introduced so that students could choose for themselves between programs emphasizing university preparation and those emphasizing traditional subsistence skills or modern northern vocational training.

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Thomas R. Hopkins

Thomas Hopkins is Chief, Division of Evaluation and Program Review of the United States Department of Interior, Bureau of Indian Affairs. Dr. Hopkins' paper is in part abstracted from his Master's thesis on the History of Federal Education Programs in Alaska and is based on his experience as a village teacher in Alaska, as a supervisor of Bureau educational programs and most recently in the Bureau's central policy making office.
The Federal Government as Agent of Cross-Cultural Education in Alaska

Mr. Vallee has described in his paper the socio-cultural situation among the Eskimo of Canada which, in my opinion, is analogous to the socio-cultural situation among Alaskan Eskimo. Vallee has pointed out that basic decisions have historically been made by outside non-Eskimo officials or individuals in the Canadian North. This hold equally true for Alaskan Natives. I would like to briefly sketch the decision-making process in educational administration in Alaska since schools were established for Alaskan Natives, and conclude with some discussion of what the Bureau of Indian Affairs is attempting in order to change the basic historical pattern.¹

¹This paper is based in part on three sources: (1) Thomas R. Hopkins' "Educational Provision for the Alaskan Natives Since 1867," unpublished Master's Thesis, Austin: University of Texas, 1959, (2) personal experiences in Arctic teaching, and (3) recent program changes sponsored by the Bureau of Indian Affairs, United States Department of the Interior.
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were established for the Eskimo populations of Russian America. Those that were established for Alaskan Natives were mostly in the Aleutian Islands and in the Panhandle and were for the Aleuts and Southeastern Indians, respectively. These schools were for the progeny of mixed marriages, Russian men and Indian women, and taught a form of Christianity and some navigational skills. The decision-making process in the Russian-American schools rested in the hands of the clergy who were backed by the Tsarist Government in Moscow. It was an authoritarian structure that did not include a local voice in any serious manner.

Schools for the far northern peoples did not develop rapidly following the purchase of Alaska by the United States. In fact, the Russian government continued to support its American schools for twenty years after the 1867 sale of Alaska, establishing a curious pattern of spending more for the education of citizens of a foreign nation than that country itself spent. Schools for the Native populations began to be established in the 1880's. This was accomplished largely through the efforts of the first Agent for Education of the Territory of Alaska, Dr. Sheldon Jackson. These first Native schools were run by various Christian missionary groups from the United States which were subsidized by the Federal Government. Dr. Jackson was head of the Rocky Mountain Diocese of the Presbyterian church and at the same time General Agent for Education. Therefore, the early decision-making process for Native schools was controlled by the various Christian missionary groups in the United States, and to a certain extent by the Federal Government. The first Federal grant for education in Alaska, $25,000 in 1884, was administered through the Bureau of Education and went to Native and non-Native alike, much of it through mission schools. This pattern continued until the Federal Government passed legislation against subsidizing missionaries in the schooling of the aboriginal population.

The shift away from the hiring of missionaries to educate Native children started about 1895 and was more or less completed by 1917. The Bureau of Education of the United States continued to administer schools for the Native people in Alaska until March 16, 1931, when the schools were turned over to the Department of Interior, Bureau of Indian Affairs, an organization that had been working with the schooling of American Indians for three-quarters of a century. Under the Bureau of Indian Affairs Alaskan Natives shared in the Indian Reorganization Acts created by the Roosevelt administration's New Deal and administered by Commissioner of Indian Affairs, John Collier.

During the New Deal, two important non-education developments took place in Eskimo villages that have a relationship to current program directions. The Indian Reorganization Acts made it possible for Indian groups to organize "Village Councils" in order to express a concern for local involvement and to begin civil government, non-Native style. Native Alaskans were encouraged to establish cooperative stores, with "Store Councils" to administer them. As would be expected, cooperative Native stores incurred the immediate wrath of local traders.

I will digress briefly to describe the method used to establish cooperative Native stores. First, village teachers and Bureau administrators worked with
Native groups to form a council and to ask for a Government loan to be used for establishing a village store. Second, the Store Council selected a manager from among the village population. Third, the managers ran the store based on policy established by the Council (Store and Village Councils are separate groups).

Store Councils received no training regarding their responsibilities. Neither did the managers. The result was that frequently the stores did not do well and were more often in the red than in the black. The author of this paper served as a teacher in a one-teacher day school in 1954-56 and advised the Store Council. This cooperative Native store, the only business in the village, did not show a consistent profit and had never been able to repay its loan as called for in the original agreement.

It is important to note that the whole idea of Village and Store Councils emanated from Congress and the Bureau of Indian Affairs.

From 1931 to the present, village groups or committees concerned only with education have emerged, but have dealt with the more superficial matters of the school. Today, basic decisions for schools operated for Alaskan Natives are made by Bureau of Indian Affairs' administrators who are advised by their education personnel. Local decisions for schools are made by school building administrators. Above the school building level, decisions are made by non-education administrators who are career Civil Servants. In this respect, educational decisions are still outside of the village and are also outside of the control of professional educators. Top level educational administrators in Federally operated schools for Native peoples in Alaska may make only recommendations concerning school policy.

In recent years the Office of Indian Education of the Bureau of Indian Affairs has been interested in obtaining grassroots Eskimo and Indian involvement in the decision-making process and has started what is called Project Tribe. The ultimate aim of Project Tribe is to establish school boards in all Eskimo and Indian communities and to train the members in the responsibilities of the position. Bureau of Indian Affairs officials are trying to avoid mistakes made at the inception of the cooperative stores project.

An interesting aspect of the establishment of school boards, or local control for Eskimo education in Alaska, is the problem of overcoming a century and a half of authoritarian control of the schools. Alaskan Native people have been taught a certain relationship to their schools that does not include them in any significant manner. The effects a change in the education decision-making process will have on the school achievement of Eskimo children are, of course, unknown; but regardless of the outcome education must be tied closer to the lives of the children whose ancestors lived in the Arctic long before the introduction of schools.
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Alexandre I. Danilov

Alexandre Ivanovich Danilov, Minister of Education for the Russian Soviet Federated Socialist Republic, has had a long and distinguished career in Soviet Education. Dr. Danilov has generously prepared one of the few official policy statements by Soviet officials on education in the Soviet North to appear in the Western press. It is anticipated that this paper makes way for an increasing amount of exchange between the U.S.S.R. and Western countries, both in papers and study-travel by scholars. Since the conference Dr. Danilov has cooperated effectively with Westerners visiting the U.S.S.R. as a result of interest in Soviet Northern education brought about by the conference.
Cultural Situations and Education in the Soviet North

General Outline of Economic and Cultural Development in the Far North in the Years of Soviet Power

The Far North of Soviet Russia stretches from west to east for the most part along the Arctic Ocean coast. It consists of vast areas of tundra and taiga, mainly in Asia and partly in Europe. The population of this vast territory is made up of people from a number of the many nations and nationalities of the Soviet Union, Komis, Yakuts and others, and minor northern groups, the Evenks, the Nenets and others, and also Russians, Ukrainians and Byelorussians.

There are more than twenty minor nationalities, including the Evenks, the Nenets, the Khants, the Mansi, the Koriaks, the Selkops, the Nivkhs, the Same, the Chukchis, and the Eskimos, who continue to use their own languages and keep up special features of their material and spiritual culture. According to the latest statistics they account for about 140,000 of the population.

The origin of many northern nationalities goes back to the neolithic age. Very ancient features can be traced in the culture of the northeastern allies (the Chukchis, the Koriaks and the Itelment) who are evidently
descended from the neolithic population of North Asia. According to Soviet archaeology and anthropology the history of such related nationalities as the Chukchis and the Koriaks embraces a period of four thousand years.

The purpose of scientific study of the Far North in the USSR is for a comprehensive investigation of the history of northern tribes and nationalities on the basis of generalized archaeological, anthropological, ethnographic and linguistic data. Some major research has been carried out in the Soviet Union on these problems in the last fifteen to twenty years and the results have been published in a number of scientific papers and monographs at the appropriate institutes of the Academy of Sciences of the USSR.

The minor northern nationalities dispersed in the most remote and inaccessible parts of Russia for many centuries remained outside civilization. In the recent past the social, economic and cultural aspects of the life of the minor nationalities in the least northern areas of tundra, taiga and the sea coast were bound up solely with such occupations as hunting, fishing, and reindeer-breeding, and traditional historically-established forms of national economy. These basic occupations and obsolete social relations were an indication of a low level in the development of the productive forces which was in general typical of the northern peoples before the socialist transformation of their economy.

Tsarist Russia hindered the economic and cultural development of the minor nationalities in the North, made their backwardness and disintegration into smaller tribes the norm. Frequent outbreaks of epidemics on the northern edges of Russia led to the annihilation of masses of people. For instance, in the Kolyma and Chukot districts the Yukagir people diminished in number by half during the thirty years between the end of the nineteenth and the beginning of the twentieth century; great numbers of Chukchis, Koriaks and Eskimos also died in the same period.

In the years preceding the October Revolution the peoples of the Far North were almost entirely illiterate. According to the official statistics for 1908, literacy among the native population in gubernias and districts of Siberia ranged from 0.5 percent in the Yakutsk Region and the Yenisei Gubernia to 1.2 percent in the Primorye Region. The native population of the Amur Region were entirely illiterate; in tsarist Russia the minor nationalities of the North had neither written languages nor literature.

The Great October Socialist Revolution ushered in a new era in the world’s history. Having overthrown the system of exploitation and oppression, the workers and peasants of multinational Russia guided by the Communist Party started large scale constructive work to transform society along socialist lines. One of the key problems of the Socialist Revolution was the national question: The Soviet Government was the first in the world to proclaim the equality of all nations, their right to self-determination and the unimpeded development of national minorities and ethnic groups inhabiting Russia. The October Revolution aroused the peoples in the Far North just as it did all the other peoples of multinational Russia. These peoples were drawn into socialist construction. Their cultural development was effected so that the local natural conditions and national features of the economy of the native population were taken into consideration.
In the years of foreign intervention and Civil War the peoples of the Far North found themselves under the rule of a White Guard administration. They were cut off from the central regions of Russia and were thus inaccessible to the Government of the workers and the peasants. After driving the Interventionists and the White Guards out of the Far North, the Soviet Government began to render the local population all necessary assistance. By the early twenties Soviet power was established in all parts of the Far North and for the first time efforts were made to bring the minor nationalities in contact with culture and education.

In the North the first national administrative regions of the Russian Federation were formed in 1926-1929 and the national territories with their local party and administrative bodies in 1929 and 1930. The establishment of self-governing national territories completed the creation of the national administrative system for the minor nationalities in the North. It helped to develop their national consciousness, brought them closer together and provided the necessary conditions for socialist construction.

The Soviet Government carried out a great number of social, economic, and cultural transformations in the Far North in which the native population took an active part. Throughout the years of Soviet Government, industry has been set up in the national regions and territories of the North and agriculture and traditional trades are now developing on a new technical basis. Today the Soviet North holds a prominent place in our country's economy. It is renowned for great reserves of timber, in addition to its huge natural deposits of coal, oil, gas, gold, tin, mica, and many other minerals.

In the production of several important items the regions of the Far North occupy first place in the economy of our country. All our reindeer-breeding is carried on here and the cities of Murmansk, Arkhangelsk, Amderma, Narayan-Mar, Salekhard, Khanty-Mansiysk, Norilsk, Dudinka, Mirny, Magadan and Anadyr are industrial centers which have developed extensively.

There is now a broad network of state and cooperative farms engaged in hunting and reindeer-breeding. The historically-established economy of the peoples of the North which could be described as petty, individual farming is now transformed into large-scale socialized farming with up-to-date technical equipment. The state and cooperative farms have highly skilled personnel: drivers, mechanics, navigators, reindeer and furbearing animal breeders, who are from the Native population.

Besides the basic traditional branches of the economy of the North, new branches (fur-bearing animal breeding, agriculture and manufacturing industry) are developing in many regions. In these spheres of production favorable conditions are provided for all-round use of labour reserves of the native population.

The Soviet Government is taking consistent, scientifically-based measures to further the protection and reproduction of biological resources and this makes possible the prolonged preservation of the commercial attributes of vast hunting grounds, pastures, great rivers and lakes.

Socialist transformation of the economy and increases in labor productivity and the well-being of the Native population were the basis of vital changes connected with their transition to a settled way of life. This
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process of transition of a people who had been nomadic for centuries is a simultaneous process of transforming not only the nomads' life and occupations, but their psychology—a process of breaking with the old, primitive ways.

A steady rise of the economic and cultural levels in the life of the peoples of the Far North has resulted in a steady increase in population. Increases are being registered in all the northern national territories. Thus, since 1959 the Mansi people have increased their number by 26.9 percent, the Khant people by 20.9 percent, the Nentsy by 20 percent and Dolgan people 18.6 percent.

Only under the Soviet Government have the peoples of the North been able to get every kind of medical aid at medical and prophylactic institutions. The network of hospitals, medical and prophylactic institutions, health centers, dental surgeries; maternity consultation centers, etc., has grown year by year. Thus, in the seven national territories of the North the number of beds in hospitals and health centers doubled in the years between 1959 and 1969 alone and by the end of 1967 totalled 7,105. The number of dental surgeries has increased from six to thirty-five. A total of thirty-seven medical aid centers serviced by special aircraft have been set up in the regions of the Far North to provide urgent medical aid.

The medical institutions in the North are now staffed by larger numbers of medical personnel. Altogether 170 young physicians, representatives of the nationalities of the Far North, have graduated from medical institutes in the last few years. At present about 400 representatives of minor nationalities are training at medical institutes or doing the preparatory course.

Extensive work by the medical service has contributed to a decrease in diseases and the child mortality rate in the populated areas of the North.

A great deal is being done to further cultural enlightenment in the Far North. There are 566 clubs, 500 libraries and 650 film projectors functioning in the national territories; radio is installed in most of the settlements, while hunters, reindeer-breeders and fishermen have transistor radios. Television is installed in Chukotka, Taimir, Yamal and the Khanty-Mansiysk territory. Newspapers coming out in the territories and radio programs broadcast both in Russian and Native languages keep all the people well informed about current events in home and international affairs. National amateur entertainment activities continue to develop. The Chukot, Eskimo, Korjak, Mansi and Nenets song and dance companies enjoy wide popularity in our country. Of interest is the original art of Chukchi and Eskimo bone-carvers, handed down from generation to generation. Their wonderful bone-carvings have been displayed at exhibitions abroad.

The cultural revolution awakened the great creative forces of the minor nationalities in the North. These nationalities have their own men of science and culture, among them, talented writers, scientists and artists. Vasily Evachen, M.Sc., an Evenk, is a well-known expert in the history and economy of the Far North who successfully combines his scientific work with extensive party and administrative activities in the Evenk national territory. G.R. Popov, M.Sc., a Dolgan, investigates economic problems of agriculture and traditional trades in the North. Pyotr Inenlikey, a linguist and translator, first M.Sc. among the Chuchs, is a scientific research worker at the Institute of Linguistics of the Academy of Sciences of the USSR and does research into his native language.
In the Soviet period the minor nationalities of the North have begun to develop national literatures. Yakim Samar, a Nanajan, was one of the first writers of the Far North. The works of Yury Ritkeu, a popular Chukot author, are translated into many languages. The talented Mansi poet, Yuan Shestalov, whose poetry reflects lyrical trends in Mansi folklore, the Chukot poets Victor Keulikut and Antonina Klmtival, the Nenetz poet Vasily Ledkov, the Evenk poet and linguist Vasily Lebedev, and other poets and writers who are all representatives of the minor nationalities of the North, are clear indication that the new socialist culture of minor nationalities is flourishing.

Because of the tremendous economic and cultural development in the North there is a constant demand for skilled personnel with higher and secondary education. In view of this a good deal of attention is paid to training personnel among this local population with general secondary schools serving as the basis for training Native people for different spheres of material and spiritual life. At present there are 600 general schools in which children of the Native population are educated.

There are also eleven specialized educational institutions for the peoples of the North. In addition, representatives of the Native population receive higher and secondary education in various Soviet cities.

**Short Historical Outline of the Development of Public Education in the Far North**

The first Soviet schools appeared in the Far North in the twenties when a start was made in developing the economy and culture. One of the first Soviet schools for Nenetz children was opened in the Arkhangelsk Region in 1922 on the initiative of the “Nomad” Nenetz cooperative which fully maintained it. In those years the basic type of school which fully corresponded to the specific local conditions was the boarding school, and in the more remote regions with nomadic population there appeared cultural centers which combined a boarding school with hospital facilities and provision for club and study groups. These cultural centers occupied a prominent place in the history of the Soviet Far North owing to the great role they played in the development of the economy and culture of the Native population.

Another special feature of cultural construction in the North were mobile “Red Chooms” and “Red Yarangas” (tents) whose staff travelled with the nomadic people, carrying on political, cultural and enlightenment work among them.

The introduction of compulsory primary education in the national regions and territories of the North in 1930 marked a general advance in public education. A significant role in the implementation of universal compulsory education was played by nomad schools which provided a considerable range of primary education among the reindeer-breeders’ children. During the six years beginning with the 1929-30 academic year the network of schools for the minor nationalities expanded from 123 to 555.

In the period between 1938 and 1941 an almost complete set of textbooks for first- and second-year schoolchildren was published for national schools in the North. Some textbooks for the third and fourth years, syllabuses, aids in teaching methods and children’s books for out-of-class reading were published.
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A total of sixty books on social and political subjects were published in the four years between 1939 and 1941, both in native languages and Russian.

Teaching children of the peoples of the Far North in their native languages in their early school years ensured a more conscious and thorough assimilation of elementary knowledge. Native languages were of paramount importance in conducting educational work among the children, and there was an increase in the number of teachers with a command of local languages with a corresponding extension of the school network and attendance.

The difficult conditions of wartime did not hinder the development of public education in the Far North; the teaching personnel successfully put into practice the law on universal primary education, organizing patriotic activities for schoolchildren who helped their motherland and the army in various ways, and adopted soldiers' and officers' families.

Assistance to the Far North increased after the end of the Great Patriotic War. The Communist Party and the Soviet Government adopted several decrees aimed at further improving public education in the Far North. In the 1945-46 academic year sanatorium forest schools for sickly children were opened in the Far North. Preparatory forms were set up in national schools.

In 1946-1948 Native language textbooks were published for preparatory and primary classes at schools for the peoples of the North who had written languages, and new syllabuses for native language teaching were also worked out, including the Chukot, Eskimo and Koriak languages. The almost total illiteracy of the native population in the North made it essential for the Soviet Government to take special measures to teach the adult population to read and write in their own languages. These were carried out at illiteracy elimination centers, in "Red Chooms" and "Red Yaranas", in both mobile and permanent schools. These organizational forms of eliminating illiteracy were created to suit the working and living conditions of the population. As a result of this cultural and educational work the overwhelming majority of the population in the North has become literate. In a short period conditions were provided for implementing universal compulsory eight-year schooling and a further improvement of secondary education.

Network of Schools and Numbers of Pupils

At present all the three basic types of schools provided by the Soviet public education system, primary schools, eight-year schools, and secondary schools with a ten-year period of schooling, are functioning in all the national regions and territories. Due to local conditions the most widespread are school boarding-houses, boarding-schools and schools with after-school groups. A further rationalization of the school network by closing small primary schools and merging full-size primary, eight-year and secondary schools has continued in the last few years with a view to providing maximum facilities for successful teaching.

Thus, although in the 1929-30 academic year the number of national schools in the whole of the Far North totalled 123, in which only 20 percent of children of school age were educated, in the 1967-68 academic year the number of schools in the national territories alone amounted to 523 with a total of 600 pupils, including 23,000 children of the minor nationalities.
All the children in the regions of the Far North whose parents are engaged in hunting, reindeer-breeding, fishing and other trades are lodged, equipped and boarded free in school boarding-houses or boarding-schools which have well-ordered hostels, classrooms, study rooms, gymnasiums, instructional workshops, medical inspection rooms and dining-rooms.

Schools with after-school groups give much help to parents in the upbringing of their children. Here the children stay after school hours; they do their homework and enjoy recreation under the teachers' guidance. The following data show how the number of schools of this type has increased. In the 1962-63 academic year there were sixteen schools with after-school groups with a total of 1,312 pupils; in the 1967-68 academic year the total number of such schools was 149 with the total of 7,696 pupils. The dense network of schools of various types helps implement the school law of 1958 on universal compulsory eight-year education.

Implementation of universal compulsory eight-year education lays the foundation for the introduction of compulsory secondary education, which has become essential because of the advance in science and technology in our country. Transition to universal secondary education is planned for completion in the USSR by 1970. Favorable conditions are created in the Far North as in all the other parts of the country for all teenagers with eight-year schooling to continue their studies and receive a secondary education. The youth of the northern nationalities receive secondary education in general secondary schools, vocational technical schools and secondary specialized schools both technical and pedagogical; it is possible for youngsters who are working to complete their education at evening and correspondence schools.

For instance, in the Khanty-Mansyisk national territory there are twenty-one young workers' schools with a total number of 3,372 pupils; consultation centers have been opened at sixty-two children's general secondary schools for 768 young workers who study by correspondence.

Specific Features of Education and Teaching Methods in National Schools in the Far North

Public education in the Far North of the RSFSR is not an isolated system; it is a component part of the single state system of public education in the USSR, although the unified content and level of primary and secondary education do not rule out specific features and teaching methods in national schools in accordance with specific features in the economy, life and culture of various nations and nationalities.

The main feature of school education of the minor nationalities of the Far North is that the pupils are taught in their Native languages in the initial stage of elementary training which gradually develops into parallel interconnected instruction in Native languages and Russian which continues until the completion of elementary education. Instruction in Native languages in national schools of the Far North is the necessary foundation upon which is built the entire system of elementary education of children of minor nationalities. It lays the basis for literacy and speech and shapes the initial stock of the child's notions of the surrounding world. Many years' experience of school instruction in national
The cultural situation of schools in the Far North has shown that young northerners master the initial practical skills of reading, writing, counting and speaking successfully only when taught in their own languages, which, to a considerable extent, make it easier for them to master, Russian and creates favorable conditions for transition to secondary education and a systematic study of the fundamentals of sciences.

The Russian language as a language of intercommunication and cooperation between all the peoples of the Soviet Union is of particular importance for the minor nationalities of the Far North due to their backwardness in the past. It has become one of the most important means of bringing them into contact with modern culture and science at a time of tremendous advance in society, science, and technology.

These objective factors strengthen the desire of the minor nationalities, particularly the youth, to master the Russian language which has become a natural component part of their life today, with Native languages still being used not only in their homes, but in all spheres of their life.

Native languages are also an indispensable means of carrying on cultural and political information work among the population. This is clearly seen in the large numbers of textbooks, works of fiction and political books published by the central and regional publishing houses in the languages of the Northern peoples, and also in local newspapers and radio programs in Native languages in the national territories.

Instruction in Native languages with a gradual transition to teaching Russian is provided in primary schools in the Far North by a five-year term of schooling: the preparatory form and the first, second, third, and fourth forms with special syllabuses, textbooks and appropriate teaching methods. In the preparatory grade instruction begins in the Native language with a short rudimentary course. While learning to read and write, pupils develop their own speech, writing, and reading skills. In the first form work is continued to develop their habits of oral and written speech and reading textbooks in Native languages specially compiled for each nationality. Teaching aids are published for each of the Native languages to help the teacher.

As early as in 1935 and 1936 special syllabuses in Native languages were worked out for primary schools in the Far North. They took into account specific features of language structure and the way of life. In primary schools in the Far North arithmetic is also taught in a Native language at the initial stage. In the languages of peoples belonging to the palaeoastatic group there is a different counting system so the development of counting skills according to the decimal system takes into account this peculiarity of the Native languages.

Special courses and textbooks designed for the teaching of Russian to the northern nationalities also take into consideration the peculiarities of the national languages. Aids dealing with methods of teaching Russian and national languages are systematically published with a view to attaining the necessary scientific and methodical level of instruction in the national schools of the Far North.

All the general educational subjects in the fifth through tenth forms are taught in accordance with unified syllabuses and textbooks which are in use throughout the RSFSR. However, teaching methods in the middle and senior forms also have some peculiarities dictated by the local conditions.
General education is not the only type of education provided in Soviet schools, which are also general labor polytechnical schools. One of the main aims of Soviet schools is to introduce pupils to the fundamentals of industrial production, so that they will be fitted for work in one of the branches of the national economy.

Some specially equipped schools with a general and polytechnical background train radio-operators, drivers, fitters, electricians, bookkeepers, and also workers for fur-bearing animal breeding farms, fishing cooperatives and bone-carvers from the Nentz, Khanty-Mansyisk, Taimyr, Evenk and Chukchi national territories.

Labor training is organized according to the children's age group and standard of knowledge. In the junior and middle grades schoolchildren acquire initial technical, agricultural and household habits and skills. Optional subjects and practical training in the school workshops and laboratories are introduced in the senior grades and at this stage schoolchildren can make a thorough study of the technology of production in a particular branch of industry. Labor and polytechnical training makes it possible and expedient in national schools to achieve a vocational bias with a view to training the pupils to work in certain local branches of the economy.

Out-of-class and Extra-curricular Activities

Soviet schools teach pupils the fundamentals of science, develop their communist world outlook, instill working habits, cultivate their aesthetic tastes, teach them good manners, and train them to be physically fit.

National features are given much attention in the teaching of hunters' and reindeer-breeder's children in schools of the North, in extra-curricular activities, in the work of children's organizations such as the Young Pioneer and Komsomol—Young Communist League—with a view to the correct development of their intellectual, moral and physical qualities. Early at school they learn to observe and understand natural phenomena and make simple hunting and fishing tools.

Educational and feature films and tape-recordings of songs, stories and poems are widely used in educational work. School-teachers make constant use of local material to broaden the pupils' general outlook and instill in them love for their country.

The aesthetic education of schoolchildren includes music lessons, drama groups, song and dances ensembles, and drawing classes at schools. The popularization of fiction, popular science and socio-political literature both in national languages and Russian is an important part of educational work. The best works of Russian, Soviet and foreign authors have been translated into the languages of the peoples of the Far North in the years of Soviet Power.

In the period between 1946 and 1955 alone sixty books were published in Nanalan with a total print of 81,000; forty-one books in Nentz with a total print of 60,000; and seventy-one in Chukot with a total circulation of 106,000. Books in the Evenk, Even, Khant, Mansi, Eskimo and Kortak languages have also been published. The teaching of Russian in schools in the Far North enables the pupils to read Russian, Soviet and foreign classics. School and children's libraries carry thematic work to popularize books among their young readers.
In the last few years extensive work has been done in schools of the Far North, as in all the other schools of the RSFSR, to stimulate the pupils' interest in science and technology and develop their technical creative activities. For instance, in the Chaplinsk eight-year school in the Chukot national territory where Eskimo children are educated, there is a club whose members build models of boats, houses, clothes, footwear. Groups at which youngsters can learn the arts of driving and bone-carving exist at the Uelen eight-year school for Chukot children.

The nature of the Far North determines the type of experimental work done by young naturalists. Schoolchildren participate in the work of reindeer-breeding farms and in haymaking; they carry out tasks for scientists growing frost-resistant plants. In many schools in the Far North there are groups which go on excursions to study the history and natural life of the locality. In the Yamal-Nenets and Khant-Man Sel national territories hundreds of schoolchildren are taken out to camping centers during their summer holidays. Despite the long distances from great cultural centers and the special features of the work with children of the minor nationalities, schools in the Far North successfully solve the problems of aesthetic education.

There are 100 music schools, twenty-one art schools and thirty-four secondary specialized educational establishments of the Ministry of Culture of the RSFSR in the Far North. There are seventeen children's music schools in the Magadan Region alone and nineteen in Kamchatka. In these schools the children of minor nationalities study the theory of music, tonic solfa and choreography and learn to play the piano, the accordion and stringed instruments.

The general school, however, plays the main role in the aesthetic education of the children of the northern peoples. The development of national dancing and singing has become typical of many schools. In the boarding school at Tur, a settlement in the Evenk national territory, for example, there is a choir and a dance group performing Evenk national dances and songs as well as songs of various other nations. The pupils give concerts to hunters, reindeer breeders and workers at remote trading stations.

Schoolchildren have special classes on the applied arts of the minor nationalities. National embroidery classes and modelling, wood- and bone-carving groups exist at many schools, clubs and Houses of Culture.

Physical training in various forms is a matter of profound concern in national schools in the Far North. At present there are fifty-seven children's sports schools in the northern regions with about 4,000 children engaged in various sports. Traditional national games which promote the development of speed, dexterity and endurance enjoy wide popularity with schoolchildren on all the national territories.

Particular attention is being paid by the educational authorities to the organization of summer recreation for the children. Schools are key points everywhere for keeping youngsters healthy. They also see to it that schoolchildren have interesting and enjoyable summer holidays. School summer camps are now very widespread. The network of Young Pioneer summer camps is extending year by year. Every summer thousands of schoolchildren spend their holidays at sanatoria and pioneer camps in the southern parts of the country.
Training Teaching Personnel for National Schools of the Far North

In the national territories of the Far North there are 5,950 teachers with higher or secondary education, including 1,500 teachers who come from the northern nationalities. These teachers at the national schools have been the main supporting force in the cultural revolution. Thus many capable statesmen and party workers who are successfully working in their national territories, many talented scientists and writers, came from the ranks of teachers in the North who had received a higher education at the institutes in the capital and various regional centers.

Thousands of teachers of different nationalities of the Soviet Union who have devoted themselves to cultural and educational activities among the minor nationalities are working side by side with teachers of the northern nationalities. They are, as a rule, great lovers of teaching.

National teaching personnel are trained at secondary pedagogical educational institutions and pedagogical institutes.

The training of primary school teachers from the northern nationalities began in the thirties at national pedagogical schools in the regions of the Far North and at the Institute of the Peoples of the North in Leningrad.

At present 700 students from the local population are being educated at eight national pedagogical schools. Their upkeep is paid for in full by the state. Pedagogical schools with a four-year term of training take in youngsters with eight years of schooling. The term of training for those who have finished ten-year general secondary schools is three years.

Each year sees a further increase in the number of students from the nationalities of the North. Their enrollment in pedagogical schools has risen two and a half times in the last twenty years. Pedagogical schools train teaching personnel for primary schools and teachers for nursery schools. Training here is conducted according to a special curriculum worked out for the national pedagogical schools in the Far North.

A logical sequence in the study of vocational and general subjects is observed in the curriculum. Subjects relating to the art of teaching are concerned with teaching methods in the primary forms. A good deal of attention is given to teaching national languages, national and children’s literature. On top of that a special course in economic and cultural development of the Far North was introduced recently in pedagogical schools.

Museums of local studies have been set up at a number of pedagogical schools where the exhibits show the present and the past of the minor nationalities of the North. There are music, dancing and sports groups functioning regularly at pedagogical schools; prospective teachers are trained to give aesthetic education and physical training.

The teaching staff of the pedagogical schools are highly qualified teachers with higher education in this sphere. From time to time they may take refresher courses at the Central Advanced Training Institute for Teachers in Moscow or at advanced training institutes in regional centers. In the last two years alone 252 teachers have taken such courses.

The material facilities of pedagogical schools are constantly strengthened and added to. Study rooms have various mechanical teaching aids: film-strip
projectors, film-slide projectors, cinema projectors, tape-recorders, record-players and a number of pedagogical schools have language laboratories.

Graduates of national pedagogical schools are sent to work in the areas from which they came.

The systematic training to teaching personnel with higher education for eight-year and ten-year schools began in Leningrad in the thirties. It was mostly concentrated at two higher educational institutions — The Institute of the Peoples of the North for students of the northern nationalities and Leningrad Pedagogical Institute named after A.I. Hertzen for representatives of other nationalities of the USSR, mostly Russian.

In 1949 on a Decision of the Soviet Government, a Department of the Peoples of the North was organized at the Hertzen Pedagogical Institute in Leningrad with a view to providing permanent teaching staff from among the northern people themselves for national schools. Entrance examinations to this department are held locally at local pedagogical institutes and sometimes at pedagogical schools.

The upkeep of the students of the northern nationalities who lodge in a boarding-house is paid for in full by the state; i.e., they are lodged, equipped and boarded free during the entire term of training.

At present students from the northern peoples are being educated at five faculties where they study related professional subjects: Russian language and Literature, languages and literatures of the peoples of the North, Mathematics and Physics, Geography and Biology, Drawing, Draughtsmanship and Handwork, Physical Training. There are special curricula for philological subjects, mathematics and physics at the Department of the Peoples of the Far North; all the other subjects are taught according to the general curricula of the faculties concerned.

For teaching students at this department the faculty boards appoint highly qualified and experienced lecturers. As a result of its fifteen-year experience the department now has a permanent teaching staff engaged in working out effective methods of teaching non-Russian students and carrying on systematic educational work among them. The Institute has also a special section whose teaching staff provide instruction for students in the languages, folklore and literature of the peoples of the North.

In twenty years the Department of the Peoples of the Far North at the Leningrad Pedagogical Institute has trained 775 teachers in various subjects for the Far North, including 649 representatives of the nationalities of the North and 126 representatives of other nationalities living in the Far North. All the graduates of the department work, as a rule, in the national territories, regions and autonomous republics from which they come.

Conditions for improving scientific and professional standards are provided for all the teaching and administration personnel working in schools of the Far North. This work is carried out by teachers’ committees on methods, regional methodological centers and republican advanced training institutes for teachers. In several territories and regions the advanced training institutes for teachers have special committees responsible for the organization of refresher courses for teachers at national schools in the Far North.
In the 1957-58 academic year the Department of the Peoples of the North at the Hertzen Pedagogical Institute in Leningrad organized refresher courses for primary school teachers in the Far North with a total annual intake of about seventy-five teachers. So far 683 teachers have attended the courses in the twelve years of their existence. The courses are conducted by highly qualified lecturers and experts in methods of primary school teaching.

It should be noted further that the educational staff in the Far North enjoy special privileges of increments to their basic pay amounting to 10 percent every six months, up to a maximum of 300 roubles per month, and extra regional pay in the ratio of 1.1 to 2.0. Also they have paid vacations of sixty-six working days during the summer holidays.

At age fifty-five men may retire and women at age fifty on pensions.

Pre-School Education

Altogether there are 600 nursery schools in the Far North with a total of 25,000 children, including about 8,000 children of minor nationalities. The upkeep of children of the northern nationalities is paid for in full by the state. Twenty-four hour and all-year nursery schools are set up for children whose parents are engaged in such local branches of economy as reindeer-breeding, hunting and fishing. They are housed generally in light, spacious, standard type buildings.

The nursery school network is growing yearly. Enrollment at nursery schools is also increasing, mostly by the intake of larger numbers of children of the northern nationalities. The following figures show the growth of the network of pre-school establishments and their contingents in the Evenk national territory in the last thirty-eight years. In 1930 there was only one nursery school for fifteen children; in 1968 there were twenty-three with a total enrollment of 1,000 children.

Pre-school educational establishments in the Far North as in all the other parts of our country provide social upbringing of children from two months to seven years. The principal task of pre-school education is the all-round development of the child, his physical, intellectual, moral and aesthetic qualities and his ability to work. One of the most important objectives of the nursery school is the preparation of children for school, taking into consideration the specific national features of the native population.

Nursery schools in the Far North are staffed with 2,500 nursery school teachers with higher or secondary education. Their professional standards are constantly improving which makes it possible to raise the level of educational work in nursery schools.

Research helps National Schools in the Far North

Large scale efforts are being carried on in our country to solve the problem of education in national schools in the Far North.

A special group of scientists at the Institute of National Schools of Academy of Pedagogical Sciences of the USSR do research work on the problems of the extent and content of the teaching of national languages and Russian, and of teaching, particularly in the initial stages at school.
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A research staff at the Institute works on the general principles of the methods of teaching national languages and Russian in national schools of the Far North and solving various methodological problems of training in schools for the northern nationalities, particularly the Evenks, Evens, Chukchis, Koriaks, Khanty and Nenets. They compile syllabuses, primers and textbooks for schools in the North and special methodological aids which are very helpful to the teachers.

A.F. Boytsova, D.Sc., has published the monograph, "Linguistic Principles of Teaching National Languages and Russian in Evenk Primary Schools" which is the result of many years' painstaking research on education in schools for Evenk children.

Linguistic research work concerned with the phonetic, grammar and lexicons of the languages of the minor nationalities of the Far North is conducted in two departments of the Institute of Linguistics of the Academy of Sciences of the USSR. The Institute's scientific-workers have carried out extensive investigation of the languages of the peoples of the North. Well known in our country and abroad are the works of such linguists as V.I. Tzitzlisch and V.A. Avrorin on the Tunguso-Manchurian languages; P.Y. Skorik on the languages of Chukotsk and Kamchatka, G.A. Menovshchikov on the language of the Asian Eskimos and many others.

The research work of Soviet scientists in connection with the Far North is closely linked with practical activities in national schools. They take an active part in compiling textbooks and syllabuses in the languages of the northern nationalities. For example, the linguists I.S. Vdovin, P.Y. Skorik and O.A. Menovshchikov are the authors of almost all the textbooks for Chukot and Eskimo primary schools.

Education research and scientific research in the folklore and literature of the peoples of the North are being carried out mostly in the section of languages, folklore and literature of the peoples of the North at the Leningrad Pedagogical Institute named after A.I. Hertzen. On the teaching staff are such prominent scholars as Professor M.G. Voskoboynikov concerned with Evenk language and folklore and Professor Z.N. Kupriyanova studying Nenets language and folklore. M.P. Baladina (Mansi and Khant languages) and M.Y. Barmish (Nenets language), both of whom are from northern nationalities, are on the staff as lecturers, and are engaged in successful educational and research work at the Institute.

Some lecturers are authors of textbooks and translators of works of fiction for Evenk schools, such as Professor M.G. Voskoboynikov, and for Chukot schools Assistant Professor L.V. Belikov, as well as of teaching aids for pedagogical schools in the Evenk, Nenets and Mansi languages and in the Evenk and Nenets folklore.

Tremendous social transformations have changed much of the Far North into regions with a well-developed economy, flourishing culture and total literacy. The new Soviet man has appeared in the Far North, a man with broad, many-sided interests, a true internationalist and a staunch fighter for Communist ideals.
Robert Arnold has spent many years in Alaska as teacher, administrator of State social programs, elected school board member and most recently as Executive Director of the Alaska Educational Broadcast Commission. His varied experiences have given him the necessary background to speak with authority on Alaskan Native issues. His contribution as one of the authors of Alaska Natives and the Land is considered one of the basic sources of materials that led to the enactment of the Alaska Land Claims Act. In the following pages Mr. Arnold has provided an overview to the Administrative Situation developed since the conference and his paper on and the Administrative Situation follows.
Overview

Administration of the affairs of Lapps, Greenlanders, Eskimos, northern Indians, and Aleuts by institutions not formed by these peoples for themselves began almost two centuries ago in the northern western hemisphere, and in Fenno-Scandia, perhaps ten centuries ago.

It was in the ninth century, according to the Icelandic saga of Egill Skallagrímsson, that Lapps of what is now Swedish Lapland and Norwegian Finnmark were asked to pay taxes to a Norwegian merchant in the name of the King of Norway. As the years went by Lapps continued to pay taxes - sometimes to more than one government. As early as 1328, Sweden-Finland adopted a regulation declaring that the Lapps were not to be hindered in their hunting, and that Finnish hunters and fur traders visiting the Lapps were not to be molested.

In the northern western hemisphere, however, even the beginnings are historically recent developments.

Although settlements had been established by Norsemen in Greenland in the latter part of the tenth century, they were abandoned by the fourteenth century, so it was not until the eighteenth century that foundations were laid for the administrative organization of this enormous island. In Canada treaties were drawn between Indian groups and settlers from other lands.
early in the nineteenth century, but it was not until 1867 that administrative arrangements for Indians and lands of Indians were broadly defined. In Alaska, only a few villages, most of them coastal, were affected by the Russians during their sixty-four years of control; it was seventeen years after the United States purchased Russian America that a beginning was made toward the establishment of administrative arrangements for Indians and other inhabitants of the territory.

Today, in all four areas — Fennoscandia, the nation of Canada, the Danish province of Greenland, and the State of Alaska — descendants of the earliest inhabitants live within a web of administrative arrangements intended to be to their benefit. It is this aspect of the situation of northern Natives which is of interest here.

Population distribution

Of these several jurisdictions, it is only in the Danish province of Greenland that Natives make up a majority of the population. This 840,000 square-mile island is the home of 42,102 persons (1966) of whom 36,308 are Greenlanders - Eskimo-European descendants of the island's Native population. Almost two-thirds of the Greenlanders (20,500 in 1965) live in twelve towns of the fishing districts of the west coast of Greenland, south of the Arctic Circle; nearly half of these people (9,100 in 1965) live in the open-water towns of Frederickshab, Sukkertoppen, Holsternsborg, and Godthaab. Another 2,550 Greenlanders live in towns in the sealing districts — two of which are on the east coast and three of which are north of the Arctic Circle on the west coast.

In Alaska, Eskimos, Indians, and Aleuts make up about one-fifth of the state’s population. Of a total 1970 population of 302,361, Eskimos and Aleuts number 34,609, and Indians number 16,267. About three-fourths of these Natives live in 175 rural villages and four remote towns, all of predominantly Native population. Nearly all others live in the six major cities of the state (where they are minorities) but a few live at isolated homesteads or fish camps. More Natives live in Anchorage, the state’s largest city, than anywhere else in Alaska: 5,032 Eskimos, Indians and Aleuts. Of the state’s twenty-five census districts, ten in northern and western districts are predominantly of Eskimo population.

In Canada, the 450,000 Eskimos and Indians constitute only a small minority — about one percent of the population of the nation. These descendants of indigenous people are counted, for administrative purposes, as registered Indians, non-registered Indians, and Eskimos. There are (1967) about 238,000 registered Indians, of whom almost 162,000 live on 2,274 reserves, about 21,000 of whom live in organized Indian communities on provincial or crown lands, and almost 55,000 who live in other towns or cities. About 9,000 of Canada's 14,800 Eskimos live in Eskimo settlements of twenty-five to fifty people in the Northwest Territories; the remainder live above the tree-line in the province of Quebec, Labrador, and Manitoba. Unregistered Indians and Metis, who number about 200,000 persons, live across the nation in settlements of crown lands, or in towns or cities.

The Lapps are estimated by Karl Nickul, head of the Nordic Lapp Council, number about 38,200 in Norway, Sweden and Finland. They are very much the minority in those lands: 0.07 of a percent of the population in Finland,
about 0.54 percent in Norway, and 0.13 percent in Sweden. In the northern regions of the three nations, where most Lapps live, they make up what Nickul calls "... a considerable part of the inhabitants." In Norway, most Lapps live in the provinces of Finnmark and Troms; in Sweden, Norbotten and Västerbotten; and in Finland, Enontekiö, Utsjoki, and Inarla.

A colonial aspect

Perhaps the most striking feature today of the administrative situation of northern Natives is an aspect that is colonial: the principal administrators of Indians, Eskimos, Aleuts, Greenlanders, and Lapps are seldom themselves descended from the original inhabitants of the North.

While there is very substantial political control exerted by Greenlanders, and other Natives, as will be discussed later, the administrative tasks remain largely in the hands of Danes in Greenland and Caucasians and other non-Natives in Canada and Alaska. Increasing numbers of Natives are being employed by governments — a fact to which their official spokesmen point with pride — but they are employed generally in lower or middle level positions; the higher the government's administrative office, the less likely the holder is a Native of the north.

This is not to say that discrimination by race is practised by government; it apparently is not. But levels of education and skill are generally lower among the Natives than among the general population of the nations governing the Natives. Conferees at a 1962 conference heard Hans J. Ericksen, a Lapp, tell of the situation in his country:

We would like very much to be able to become competent enough to take official posts in communes where the majority of the people are Lapps and in provinces where Lapps form a large part of the population. Hitherto we have not succeeded in doing this. People often have to be brought in from the outside.

Similar situations prevail in the other Northern regions and as a consequence, and because the Eskimo and Indian languages, in particular, are difficult, the language employed in the administration of the affairs of these northern peoples is rarely the language of the peoples themselves. In matters affecting Lapps, the Finnish, Swedish, and Norwegian languages are principally employed; in matters affecting Eskimos, Indians, and Aleuts of Alaska, English is the language; and in matters affecting Eskimos or Indians of Canada, English or French may be employed. Even in Greenland, where Greenlandic may be employed in the rural courts, Danish is the predominant language of the government. And the consequences in Greenland, as Jørgen Pjettersson has told them, may be suggestive of much of the north:

In the daily life of Unamak it is in most cases necessary for a Greenlander to appear before a Danish government official for a discussion of his problems. Already beforehand he seems diffident, and unable to state his business in an effective manner. Most of these people, indeed, have a feeling of being away from their own country when entering the inner administrative offices. In there, the pattern of life is quite different; in there, nobody understands you; in there, the daily activities follow the lines prescribed by the executive powers.
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The man feels a fool until an interpreter is procured. It takes time for the applicant to make his apologies to the interpreter. It takes time to confide in him. It takes time for the interpreter to explain to the man that he has a right to come, and that he is entitled to the services of an interpreter; it is not because the man is stupid, on the contrary ... The efforts made at putting the poor devil at ease humiliate him; he is a poor thing who needs to be comforted.16

In all jurisdictions some efforts are being made to teach, preserve, or restore some of the languages of the people of the north. These efforts are described in discussions of education elsewhere in this volume.

Another feature that suggests a nation-colony relationship is that Natives of the North, or specific Natives at least, have special status, and this will be discussed below.

Citizenship

Generally speaking, Natives of these northern lands are citizens of their nation, province, and borough, commune, or other local subdivision.

In Alaska, for example, Natives vote, serve in the armed forces of the United States, pay taxes, and otherwise accept and exercise the rights and duties of citizens. And, in addition to holding local political offices, five Eskimos, Indians, or Aleuts are presently members of the state’s two-body, sixty-man legislature. None serves in any of the three seats in the U.S. Congress.

Greenlanders, and other residents of Greenland, elect two members to the 179-member Danish legislature, the Folketing, as well as members of the Greenland Provincial Council and local councils. Very few of the Danish residents ever stand for office in the Greenland assemblies, nearly all members being Greenlanders.16

Canadian Indians and Eskimos are subject to general law, subject to provisions of the Indian Act if they are registered Indians. They vote in federal elections on the same basis as other Canadians, and they vote in the provinces where permitted. Any property which is off-reserve is liable to taxation.17

Lapps are full citizens, also, in Norway, Sweden, and Finland, but representation of the Lapps at regional levels has been insignificant, and in Norway, at least, only once was a Lapp sent to Parliament.

Special status of Natives: benefits

Most northern Natives have special status, usually defined in law, which brings with it a few benefits in Fennoscandia, and in the western hemisphere, an extensive array of special programs.

In the provinces of Canada and the State of Alaska, national governments have established special agencies to administer, in some measure, the affairs of Eskimos, Indians, and Aleuts.

Descendants of aboriginal people of Alaska are eligible for a wide range of special services through the U.S. Bureau of Indian Affairs.18 They may attend federal day or boarding schools, and they may obtain tuition, transportation, and subsistence allowances for vocational or college education. They may obtain assistance in finding jobs, borrowing money, devising economic development programs, and in acquiring surplus federal property. They may obtain medical and dental care from the U.S. Public Health Service. From other federal agencies they may obtain assistance in obtaining housing, or waste and water
facilities. If they are not eligible for certain categories of public assistance, they may obtain welfare payments from the Bureau of Indian Affairs.19

But, are there remaining needs? They are numerous, according to Frank Degnan, Inupiat-speaking Eskimo from Unalakleet:

... In my village, and in others, better and more healthful water systems are needed ... Along with this is a terrible need for more adequate housing for my people ... Reliance upon the BIA to achieve something better in the housing field has thus far proved futile.20

John Sackett, an Athabascan Indian from Huslia, a former state legislator, speaks of the Bureau:

The Federal Government has taken upon itself the task of caring for America's first citizens through the Bureau of Indian Affairs, and thinking of the terms that a dollar should bring, the Bureau has been a failure. Our guardian for the past 50 years, the Bureau was supposed to keep us from the ill influences of the Western society; instead the Bureau has kept us 50 years behind the time ...

Look at the program of the BIA in Alaska. What are they doing to draw the Native people into the mainstream of society? Nothing ... True, the Bureau has tried to help, but their policies have not brought the answers ...21

Canadian registered Indians fall under the provisions of the Indian 'Act' which vests extensive control in the hand of the Minister of Indian Affairs. Among other things, it assigns control of Indian lands to "Her Majesty and forbids Indians to bring alcoholic beverages onto Reserves."22

Registered Indians and Eskimos' affairs are administered by the national Department of Indian Affairs and Northern Development. Its Indian Affairs Branch has as its primary function to assist Indians "...to administer their affairs in a manner that will enable them to participate fully in the social and economic life of the country." Offices of the branch throughout the nation have employed specialists in education, economic development, community development, resource management, social welfare, and construction and engineering. In some cases these services — which are financial or technical — may be carried out with provincial authorities. Medical care and other health services are made available by the Department of National Health and Welfare to registered Indians and Eskimos who require such services and who are not provided for by the provincial governments.23

In 1969 the Canadian government announced proposals looking toward new policy on Indian affairs: removal of legislative and constitutional bases of discrimination; recognition of the unique contribution of Indian people; Indian services to come from the same agencies serving other Canadians; new help for those furthest behind; recognition of lawful obligations; and transfer of control over Indian lands to the Indian people.24 But, as the Canadian Friends Service Committee told it, the new policy was greeted "... with a response so negative that one provincial Indian organization has urged reserves to evict Indian Affairs officials who try to enter the reserves to explain the policy." The reason: There
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had been no real consultation with Indians, they said, and some elements, such as transferring authority to provinces and down playing of treaty and aboriginal claims, were proposals known to be opposed by Indians.25

In a brief prepared for the Canadian Senate Committee in 1970, the Department of Indian Affairs and Northern Development said, "Put simply and in human terms, the basic problem confronting the majority of Canada's Indians and Eskimos is that their just and proper aspirations to equality of opportunity in Canadian society are not adequately fulfilled... They believe the assistance currently being provided is inadequate, and we agree."26

As with Alaska, and Canada, to a lesser extent, Greenlanders look to administrators serving the national government for public services, rather than to provincial or local authorities. The governor of Greenland, who is the chief administrator for the province, is an employee of the national government; he is chairman of the Board of Education and the Housing Grants committee.

The Greenland Provincial Council, elected from across the province, advises the Danish government, and has authority in a few areas, including social welfare and protection of wildlife. The extent of the importance of the Provincial Council, however, is suggested in the fact that the Council, had about 14 million kronen under its control (in 1968) but expenditures by the Danish government for running various services in Greenland take more than 500 million kronen,27

Greenland has a unique migration policy devised, according to the Ministry for Greenland, because of the Ministry's contention that the majority of Greenlanders desire to live in larger places. Because of the very great capital investment required for modern industry, there is a need to concentrate industrial facilities. The difficulty and expense of providing adequate medical care, educational opportunities, and social welfare programs at widely scattered settlements also created the need for centralization. Designation of development centers followed.28

Canadian researcher H.J.C. Schuurman, who visited Sukkertoppen in 1969, however, found the centralization policy to be highly controversial among Greenlanders. He reported:

The Danish government, in formulating the policy of centralization, has entirely thought in terms of economic efficiency and the provision of material facilities to ameliorate northern living conditions. The consequences of unemployment, massive breakdowns in social control, and apathy had not been foreseen.29

A Greenlander who found much to praise in the Danish administration of the island — fine houses, factories, harbors, schools, boats — also declared, at a 1969 conference in France, that the administration had failed:

... the major part of the population of Greenland cannot identify themselves with the development in their country, and I for my part, find it understandable. You cannot build a sound, active, and dynamic modern society when the majority of the population is passive, and does not identify itself with the society and does not have its self-respect.30
Another view is that held by Knud Herlting who wrote that, on the whole, "relations between Greenlanders have become much more natural within the past twenty years." He continued, "In the old days the relationship was more like servant and master, whereas nowadays it is one fellow-being to another."31

Lapps do not have special status, generally speaking, except for rights derived from activities of reindeer husbandry. As Swedish jurist Pär Kettis puts it:

... In Norway and Sweden reindeer breeding and the things pertaining to constitute a privilege of the Lapps, who, by reason of their original, and for a long time, uncontested occupation of the Lappmarks, have been granted a special and privileged utilization right to the lands where they live, though they do not possess ownership rights. The Finnish citizens living in the reindeer breeding area are one and all entitled to own reindeer and to carry on reindeer husbandry. ... The Swedish reindeer Lapp, who belongs to a Lapp village, and his Norwegian counterpart, the Nomad Lapp, are the only ones to have complete enjoyment of the rights conferred by the Lapp privilege, such as the right to drive reindeer to graze on another person's land, to take firewood and timber from the forests, to fish and hunt, to build Lapp tents and houses, and to receive compensation for encroachment.32

Lapp matters are a function of the Ministry of Agriculture in Norway and Sweden, and the Ministry of Justice in Finland. In Finland there is an official Lapp delegation, in Norway, a Norwegian Lapp Council and in Sweden, an official committee that deals with reindeer matters. A joint body from the three nations, the Nordic Council, exists to receive information on Lapp matters and to advise the authorities. In addition, there was formed, at the initiative of the Council, a Nordic Joint Committee for Matters Concerning the Lapps and Reindeer Husbandry.33

Discussions of Lapp problems, apart from the threats to Lappish culture, generally relate to threats of encroachment upon reindeer areas by settlers and industry — forestry, water storage areas, and mining. But, one delegate to the 1962 conference of the Nordic Lapp Council, Hans J. Henricksen, expressed his dismay, "We have now heard the rights of the Lapps discussed one and half days. It seems to me rather strange that people always speak about reindeer when discussing Lapps. For Norway in particular this is obviously rather wrong because only ten percent of the Lapps in Norway are actually Reindeer Lapps." He then pointed out that if new industry could be brought to his region that would support its population, the Lapps would willingly give up reindeer. He concluded, "To my kinsmen in Sweden I will say: 'Think well before you press the interests of the Reindeer Lapps so far that you harm the interests of the Lapp People in general.'"34

Land

Despite the fact that they used and occupied northern lands of the western hemisphere for several thousand years before Europeans claimed the New World own, Natives today own or control very little land in Canada, Alaska or
Fenno-Scandia, and none in Greenland. Lands which Natives formerly ranged over or may still range over are now public domain or privately held and controlled by others.

In Greenland, as Governor N.O. Christensen points out, "All land belongs to the public."

The citizen may, by application to a committee, gain the right of use of the land; for instance, a lot on which to build a house. You don't pay for this right. The right of use can be sold and inherited and it is retained as long as the land is used for the original purpose.35

As was noted earlier, Nomad Lapps in Sweden and Norway have an extensive area dedicated to their exclusive use, but they do not have title to it. Approval for entrance by others may be gained from the King, but compensation would have to be paid.36

In Canada, a series of treaties and agreements over a 100-year period resulted in the cession of lands by some Indians in return for establishment of reserves and other benefits. Descendants of these Indians now occupy or have access to 2,274 reserves totalling about six million acres, a miniscule fraction of the total land area of the nation. They make up about half of today's Registered Indian population. These Indians are entitled to surface use of the land which is administered by the federal government, but ownership of minerals under reserve lands generally resides in the governments, provincial or federal.37

The other 300,000 Indians and Eskimos of Canada possess no reserves nor acknowledged land rights. Some few reside on land they have purchased, but the larger number reside on the public domain. Those living on the public domain possess no institutionalized control over the lands they occupy, and indeed, their wishes regarding it may be totally ignored.38

While there is discussion at the federal level of turning over control of reserve lands to Indians, according to authors of the recent study, Native Rights in Canada, the federal government does not have title in major areas, and in some provinces there are reversionary rights. Transferring control to Indians, they point out, would be very difficult. "Any sweeping changes," they caution, "would probably require Federal-provincial cooperation involving provinces like British Columbia and Quebec which have not historically been cooperative in matters relating to Indians."

Some land grants assured in treaties have not been made. There are no reserves in the Northwest Territories though two treaties promised grants later defined to be about 576,000 acres. And the Prairie Provinces were to transfer sufficient land to meet treaty obligations out of unpatented crown lands but "...the matter of settling the outstanding allotments has been overly slow."

Two-thirds of Alaska's 7,500 village families do not own land. Full title is held for about 500 acres by some 1,400 families; another 951 heads of families hold about 16,000 acres in restricted title, a title which cannot be transferred without federal permission. Of the acreage held by Natives, little is held in northern or western Alaska, where more than half of all Natives live.

Since most villagers of Alaska live on the federal-public domain rather than reservations or on land to which they hold title, administration of matters
relating to land and resources is largely the federal government's task. Land used and occupied by these Natives is managed, principally by the U.S. Bureau of Land Management, which classifies land for multiple use, issues permits for wood cutting, reindeer grazing, leasable mineral exploration, or other uses, and issues allotments and village lots to Natives.

Land will soon, however, belong to Eskimos, Indians, and Aleuts of Alaska. By terms of a Bill passed by the U.S. Congress and signed by the President in 1971 into law, Alaska Natives were granted 40 million acres, which they will begin selecting after two years, and which they will own outright. The passage of the Native Claims Bill was the culmination of a six-year intensive struggle, based on claims and protests of countless years ago. The Bill, which settled their aboriginal claims against the United States, also provides for a cash settlement payable over a number of years of $962,500,000. The land awarded to the Natives totals more than one-ninth of Alaska's 375 million acres.

REFERENCES

4. Israel Ruong says there is no doubt that Lapps were the first inhabitants of Finland, and that the theory that Lapps are the primitive population of all of Scandinavia "has again gained ground." The Lapps in Sweden, The Swedish Institute for Cultural Relations with Foreign Countries, Victor Pettersons Bokindustri A B, Stockholm, 1967.
5. The term Native is not a term of disrespect nor opprobrium, at least in Alaska. The principal organization of Eskimos, Indians, and Aleuts in the state was named by them The Alaska Federation of Natives.
12. An exception presently exists in Alaska, where the chief administrator of the Bureau of Indian Affairs is part Athabascan.
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18. Except for public assistance funds, Alaska Natives are also eligible for state and local programs.
19. Parts of this essay which describe the situation of Alaska Natives have been drawn, in part, from the author's contributions to *Alaska Natives and the Land* (U.S. Government Printing Office, Washington D.C., 1968).
27. Hesselbjerg, *op. cit.*
29. Schuurmann, *op. cit.*
32. Nordic Lapp Council, *op. cit.*
According to law professor Peter Cumming, approval of exploration and seismic blasting permits at Sachs Harbor in mid-1970 by the Department of Indian Affairs and Northern Development without consultation with the community of Sachs Harbor and in disregard of the later expressed wishes of the community is illustrative of the "incompetence and indifference" of the Department. ("Arctic Power" in Indian-Eskimo Association of Canada Bulletin, Vol. II, No.4, October, 1970).
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Robert D. Arnold
One hundred years ago, an Indian resident of Sitka, then Alaska's capital city, had virtually no administrative structure to govern or to serve him. The United States, which had purchased the more than half-million square mile Russian possession, two years before, had made no provision for the establishment of government to the territory, and was not to do so for a number of years. In the meantime, national laws — as against smuggling for instance — were to be enforced by the predecessor of what is now the U.S. Coast Guard. There was no state or regional government. But Sitka did have a town council which, by seeking to regulate the activities of Indians, became an administrator of Native affairs. It was slight, but it was all there was. Other Indians — and Eskimos and Aleuts too — who were away from the early established communities, were served or governed by no administrators at all.

Today an Eskimo, Indian, or Aleut residing in one of Alaska's cities finds many administrators at several levels of government who have an interest in his affairs. He is a citizen, and as such, is subject to laws governing all persons, and he is eligible for all benefits that government allocates. From the city, for instance, he obtains permission to construct a dwelling for...
which no other permission is required. He may be subject to city police actions into which no other agency would interject itself. Under the borough government — encompassing an area larger than his city — his children may attend public schools to whose support he has paid taxes. Under laws of the State of Alaska he may receive welfare assistance if he is blind, disabled, old, or has dependent children but is unable to support them. In addition to programs afforded all citizens, he is also eligible — because he is classified as an "American Indian" — for certain programs of the federal government that are administered by the Bureau of Indian Affairs and the Division of Indian Health of the Public Health Service.

But most Eskimos, Indians, and Aleuts are not residents of cities or boroughs. About 37,000 (roughly three of four) Natives live in 180 predominantly Native places — none of which is urban. This overview seeks to portray; then, the activities of the principal public and government — funded private agencies as they directly serve or otherwise directly affect the lives of the larger number of Alaska’s Eskimos, Indians, and Aleuts — Alaska’s villagers — and to do so by agency or level of government, but by program area.

THREE CATEGORIES OF ADMINISTRATORS

For most Alaska Natives — the villagers — the principal levels of government responsible for administration of matters affecting them are the state and federal governments. Of lesser importance but of increasing significance, is a third category of administration — private agencies which are government funded.

The National Government

Despite Alaska’s entrance into the Union as a state in 1959, the national or federal presence in Alaska is of considerable magnitude. In part this may be attributed to its long status as a territory administered by the national government; in part it is, because 97 percent of the land is still owned or administered by the national government; and in part it is the consequence of provisions for federally-administered programs for the Eskimos, Indians, and Aleuts who make up a fifth of the state’s population. Even when “federal expenditures for military purposes are set aside, direct federal spending in Alaska is nearly double that of the state’s budget.

Federal programs, authorized by the Congress of the United States and administered by departments and agencies of the Executive Branch in Washington, D.C., have regional or state offices throughout the country. While many federal programs are administered directly by employees of the nation’s executive agencies, those directly providing health, welfare, and education services to the citizenry are more typically administered by the executive agencies of 50 states. An important exception are those programs administered for American Indians — a category of citizens numbering about 450,000 which includes about 55,000 Eskimos, Indians, and Aleuts of Alaska. The two principal federal agencies in Alaska providing services to Natives are the Bureau of Indian Affairs under the Department of the Interior and the Division of Indian Health, Public Health Service, a part of the U.S. Department of Health, Education, and Welfare. Funding for these programs is authorized from the Nation’s treasury, these agencies, with rare exceptions, provide services in Alaska only to Natives.
All adult Alaskans, including Natives, participate indirectly in the shaping of national policy by participating in elections which send one Alaskan to the 435 member U.S. House of Representatives, two to the 100 member Senate, and in elections which name the President and Vice President of the United States.

For the present purpose and for those unfamiliar with federal systems, it may be adequate to note that the state administrators are not subordinates of administrators employed by the national government, whatever their rank. Each group is employed by different levels of government to administer programs enacted by its respective law-making body. Though state laws may not conflict with the nation's constitution or laws, state governments are free to legislate in most areas of human concern. Largely without the power to tell states what programs to devise, the nation's lawmakers induce states to devise programs or provide services by making grants of money available to states that offer planned programs.

The Government of the State of Alaska

Thus the state of Alaska is responsible for the administration of many programs - commerce, economic development, education, labor, fish and game, health and welfare, highways, and natural resources. Principal offices for departments of state government are in Juneau, the state's capital city, but regional offices are located as necessary throughout the state. Programs conducted are those enacted into law by the state's two-house legislature and approved by the governor. Principal funding sources are state taxes and federal grants. Virtually all programs administered by the state affect Natives because they are citizens, not because they are Natives. But owing to their circumstance, Natives are the principal beneficiaries of a number of state programs.

All adult Alaskans may participate in electing their governor and secretary of state, and their district's legislators to the 40 member House of Representatives and 20 member Senate. In the present legislature five of its members are Eskimos, Indians, or Aleuts.

Other Administrators

Boroughs and cities of Alaska are units of local government which may provide among other things, education, some health services, fire and police protection, water and sewer services, and recreational programs. Only one-fourth of the Natives live in boroughs and cities, and they are — except for some of the federally-administered programs for Indians — rarely served as Natives by local administrators. For these reasons, and because there is considerable variety among the cities and boroughs of the state, these two levels of administration are only slightly and occasionally treated here.

Of greater importance to this survey are private agencies which are altogether or largely funded by the state and federal governments and whose activities are addressed primarily to Natives who are villagers because they constitute the poorest, most disadvantaged sector of the Alaska population. Organization of these agencies - Rural Alaska Community Action Program, Inc., Alaska Village Electric Cooperative, Inc., and Community Enterprise Development Corporation — will be described later as their activities relate to other sectors of action. The Alaska Federation of Natives, an organization different
form government and different from the anti-poverty agencies, will be described in the same pattern.

ELEVEN PROGRAM AREAS

Executive functions of the state government of Alaska are carried out by administrators of 83 divisions or offices within 14 major departments and the office of the governor. In addition there are 65 boards, commissions, or councils which influence state policy in some measure. Executive functions of the federal government in Alaska, with the exception of the Department of Defense, are carried out by administrators of 35 offices and bureaus of 19 departments and independent agencies of the United States. Needless to say, the lives of Alaska’s Native villagers are unaffected or virtually unaffected by many of the activities of these numerous offices, agencies, and bureaus, and are affected only indirectly or in varying degrees by many others. There are some others, however, that have direct and sometimes substantial effects, and it is their functions that have defined the program areas here surveyed.

Education

Education is the most important function to which state and federal program dollars affecting Natives in Alaska are devoted. Although some Natives reside in cities or boroughs, and their children attend schools operated by these governments, it is the state and federal schools which provide education to the larger number of the villagers of the state. Other educational programs are administered in villages by private agencies.

Education of Native children in villages — places of predominantly Native populations — continues to be more a federal function than a state one. In the school year ending mid-1968 about twice as many village children were enrolled in the 73 day schools operated by the Bureau of Indian Affairs as were enrolled in 69 schools operated in Native places by the State of Alaska. Fewer than one in eight of these schools offered work beyond the eighth grade, and not all of these extended through the twelfth grade.

Secondary education for Native graduates of primary schools in villages is also largely a federal function. Boarding schools operated by the Bureau at Mount Edgecumbe, near Sitka, Alaska, and in Oregon and Oklahoma, enrolled in 1968 more than twice as many Native secondary students as state-operated schools.

Kindergartens are even scarcer in village Alaska than secondary school opportunities. Though nearly all of the federal schools do have a beginner class for children who are six-year olds, none operated a program for five-year olds in the school year ending 1968. Only five schools operated by the State in villages offered kindergartens. A private agency, however, which does sponsor preschool education in villages will be mentioned later.

College level study opportunities are open to Natives under two special programs. The Bureau can provide tuition and subsistence allowances to university students, and last year assisted 212 young Natives. The state has a program of loans which under certain circumstances may be forgiven for Alaska high school graduates, including Natives, who go on to attend colleges and universities in Alaska.
While education is but one program conducted by the Bureau of Indian Affairs in Alaska, construction and operation of schools are the ends to which about 90 percent of the Bureau's annual budget goes. Operation of these federal schools is carried out under regulation and guidelines issued by the Washington, D.C. office of the Bureau and under policies and regulations developed within the regional headquarters office of the Bureau in Juneau, Alaska. Direct supervision of the operation of the schools rests with district principals at Nome, Fairbanks, and Bethel, field offices of the Bureau in areas having federal schools.

Local participation in the educational program of the Bureau comes through elected village advisory boards or village councils. The boards to the federal schools were established in late 1967 at the urging of the Bureau to promote local participation in school matters and to provide greater opportunity for the community to learn to exercise their democratic rights and responsibilities. According to the Bureau's Advisory Board Manual, the advisory school board should express the local community's interests, needs, and hopes for education through Bureau officials at the local, district, and state levels, and its recommendations should relate to problems which are subject to local control. No action taken by the advisory group is binding on Bureau school officials. Though the Board is invited to give curriculum advice to the Bureau and suggestions for appointment to positions open to local hire, such as the aides, maintenance men, and cooks, there is no explicit invitation for the Boards to give advice on the appointment of teachers.

Agency advisory committees also have been established in the Nome, Bethel, and Fairbanks areas, as has a state advisory committee. A National Indian Education Advisory Committee has existed for several years, and one Alaska Native serves on it.

Policy for state schools is set by a seven-member school board appointed by the governor. Supervision of the schools is one of the responsibilities of the commissioner of the Department of Education in Juneau, who is named by the governor following a school board recommendation. Operation of the schools is the responsibility of the Division of State Operated Schools located at Anchorage, and direct supervision of the schools is charged to area superintendents located at Tanana, Dillingham, Glenallen, Tok, and Fort Yukon, or to superintendents of single schools such as at Bethel. Advisory boards to state schools also have been established and their powers and authorities are very much like those of the boards advising schools of the Bureau of Indian Affairs.

Transfer of all federal schools to state administration is a goal agreed upon by state and Bureau officials in a formal agreement, and since 1952 thirty schools have been transferred. The basis for the agreement, as explained in state plans and publications, is the inconsistency of the existence of two systems with the tenets of democratic society and the conflict of such a dual system with the state's constitution which calls for the establishment and maintenance of a public school system open to all children of the state. Time-staging of the transfer is made necessary by the inability of the state financially to assume operation of all schools at this time. Under the agreement, the state assumes operation of a school as it meets state facility standards, and the community shows a readiness to accept state administration.
The Administrative Situation

Obtaining community consent to a transfer is occasionally a barrier to the mutually agreed upon plans of state and federal authorities. For a variety of reasons—often relating to the fear of the loss of other Bureau services—villagers may reject the opportunity of having state instead of federal administration. This year eleven schools were scheduled for transfer, but only four communities agreed to allow such transfers to take place.

The other principal agency administering educational programs in Native villages is Rural Alaska Community Action Program, Inc. (RurALCAP), a private, non-profit corporation funded by the U.S. Office of Economic Opportunity to conduct a range of anti-poverty programs in rural areas. RurALCAP operates Head Start, a learning program for preschool youngsters in 35 villages, and a similar program in connection with day-care and parent-child centers in four others. Activities in these classes are like those of kindergarten with some language, art, and music instruction as well as free play. Guidelines for Head Start programs are laid down by the federal funding agency in Washington, D.C., which are interpreted in Alaska by RurALCAP, whose board of directors is made up of government and private agency administrators and representatives of the poor. Policy in Head Start classes is also influenced by village advisory committees.

Another category of administrators of educational programs for villagers are religious organizations. These church-sponsored schools—which had been the principal providers of education in early Alaska—are now established at only eight villages. Their secular curriculum is subject to state guidelines.

Adult Education, Training, and Job Placement

Providing Natives with adult education of all kinds, vocational training, and helping them find jobs are functions shared by federal, state, and private agencies. Only the Bureau of Indian Affairs operates programs covering all three functions and does so for Natives only. Its very modest adult education program usually operates in but two or three villages annually. Its employment assistance program—providing classroom and on-the-job vocational training, relocation allowances, and job placement services—benefits 200 to 300 enrollees each year. In addition, the Bureau can give preference to Native applicants for jobs, and as a result, more than half of its permanent employees are Natives. In school construction, employing about 400 Natives seasonally, the Bureau provides trades training to several hundred.

Another federal agency that gives preference to Natives as job applicants is the Division of Indian Health of the Public Health Service. This agency, which operates hospitals, clinics, and health centers and provides other health services, also provides training to Native health aides, practical nurses, and others.

Other federal agencies in Alaska are now providing on-the-job training in several dozen work categories to Natives recruited and placed with them under the Bureau's employment assistance program. Most government-funded adult education, training, and job placement activities in Alaska are conducted by the State of Alaska through divisions of its Department of Education and Department of Labor—activities serving, of course, all citizens, not only Natives. The state, however, in its Comprehensive
Manpower Plan for 1970 identifies rural Natives as the largest target group whose needs for training, jobs and related supportive services are not being met.

Classroom adult education and training programs administered by the state are conducted in part by the Office of Adult Basic Education, the Division of Vocational Education, and the Division of Vocational Rehabilitation (all within the Department of Education). Other in-class training, under the federal Manpower Development and Training Act is administered jointly by the Departments of Education and Labor. Principal offices of each are in Juneau.

Training sessions for workers in anti-poverty funded programs are conducted by the Alaska Training and Planning Center—a non-profit corporation in Anchorage guided by directors of Community Action agencies. All of the foregoing are largely federally funded.

On-the-job training opportunities are offered by the State Department of Labor, the Federal Bureau of Apprenticeship and Training by the U.S. Department of Labor and by the Alaska Federation of Natives, a non-profit organization whose leadership is elected by regional and community Native organizations in the state. All of these programs are largely federally funded and operate under guidelines established by the United States Department of Labor, operated directly from offices in Anchorage.

Training opportunities also are provided by a work incentive program which is open to recipients of Aid to Dependent Children payments and is operated by the State Department of Labor and the Division of Public Welfare in the Department of Health and Welfare by the Alaska National Guard in two-week training encampments and special schools; by federally-funded job corps centers in other states—residential, educational, and training facilities for disadvantaged young people; and the Neighborhood Youth Corps which provides seasonal work experience projects in Alaska for high school age young people, operated by the State Rural Development Agency.

Instruction in diet and nutrition, homemaking, gardening, and similar subjects is afforded villagers in some areas of the state by employees of the Cooperative Extension Service of the University of Alaska. In Native areas such extension agents are stationed in Nome and Anchorage.

VISTA volunteers serving in villages of the state are usually engaged in activities that might be broadly characterized as adult education. In their efforts at assisting communities they may conduct classes for adults or very informally instruct by acting as resources to village councils. VISTA associates—Natives employed by the state-operated, federally-funded program—are provided formal training before assignment back to their home villages.

Job placement is primarily the task of the Alaska State Employment Service of the Department of Labor through its offices in principal cities and a new outreach program to villagers. Other offices such as centers operated by Rural CAP, however, are making efforts at finding jobs for people and placing them in the jobs.

Health Service

Provision of health care and related services to Natives is very largely a function of the federal government, not the state. In terms of federal dollars for Alaska Natives, it is second only to education.
Except as limited by Congressional appropriations, and the difficulty of delivering services to 180 remote villages, the Division of Indian Health of the Public Health Service undertakes to provide a complete range of health services to Alaska Natives at no cost to them. Administrative headquarters for the Division in Alaska is in Anchorage.

Regional administration is shared by eight service units into which the state is divided. Hospitals at Anchorage, Bethel, Barrow, Kotzebue, Tanana, Saint Paul, Kanakanak, and Mount Edgecumbe serve as regional administrative centers for the respective service units. Health care is also extended to Natives through contracts with private hospitals and clinics in major communities not having an Indian Health hospital. Because there are no doctors in any of the Native settlements which do not have hospitals, the Division employs health aides on a part-time basis.

Health programs of the State of Alaska are carried out by the Division of Public Health which has its principal office in Juneau but operates through three regional offices and thirty service centers. These state services, like all other state services, are delivered to Natives as citizens of the state. The most important part of the program affecting Natives are travelling nurses who visit communities of Alaska on a periodic basis.

The Division of Mental Health, within the same department, administers mental health clinics and the Alaska Psychiatric Institute to which Natives may be admitted.

Welfare

Administration of welfare programs for Alaska Natives is shared by federal and state governments throughout urban and rural Alaska. Both are authorized to provide financial assistance to those persons requiring it, and both employ social workers and administrators to carry out their programs.

The state's Division of Public Welfare, which is within the Department of Health and Welfare, administers the public assistance program of the state—principally by providing grants to persons who are old, disabled, blind, or who have dependent children and are needy, and to persons who do not fall into these categories but who are needy. Except for the last-named group all Alaskans who are eligible are served. General relief applicants who are Natives are referred to the federal Bureau of Indian Affairs.

Owing to a variety of circumstances such as little education or training, residence in areas remote from jobs or other cash-earning opportunity, or accidents which take lives and disable heads of households, Alaska Natives are preponderantly the recipients of state assistance programs. In none of the categorical programs from which they benefit do they make up less than 65 percent of the total number of beneficiaries.

Also administered by the state Division of Welfare are the foster home program for children whose parents cannot care for them and the food stamp program—a plan which has the effect of expanding income for the purchase of food products.

The welfare program of the Bureau of Indian Affairs is almost entirely a program of general relief. Alaska Natives who are not eligible for assistance under
the categorical programs of the state, but who are needy, may apply for and receive cash grants from the Bureau for the duration of their need.

Public assistance payments made by the state are determined by the recipient's need, but since they may not exceed maximum dollar allowances established by the state's legislature, they frequently fall short of meeting the need. The federal agency-administered general relief program for Natives is based upon need, but is not bound by legislative maximum allowances. As a result these temporary assistance grants — to most recipients lasting no more than three months — are larger than they would be to families under the state's categorical programs.

While approving authority for welfare payments ordinarily rests with the respective state or federal administrators, the Bureau last year granted funds to two villages to enable them to administer the temporary relief program. On the basis of that experience, four additional villages received funds for village welfare administration this year.

**Law Enforcement and Administration of Justice**

Maintenance of law and order in village Alaska is largely the responsibility of the Division of State Troopers within the State Department of Public Safety, headquartered in Juneau. As with other departments of the state government, the commissioner is appointed by the governor. State troopers investigate crimes, apprehend criminals, and provide other police services to rural areas. They are stationed in only a half dozen places in village areas (Barrow, Kotzebue, Nome, Dillingham, Aniak, and Bethel) from which they travel to villages in response to calls for assistance. Alcohol-related disturbances or accidents are the most common causes for requests for troopers' visits.

**Local Government**

Although a few predominantly Native communities are incorporated as first-class cities under state law and exercise substantial powers such as providing education, police, and fire protection, and levying property taxes, most villages have only traditional councils or federally-chartered councils governing local affairs. Generally the functions of these councils are very limited, concerned with rule making (such as against the use of alcoholic beverages) and communicating with agencies of government.

Villages that are incorporated under state law are usually fourth-class cities having limited responsibilities. These 31 cities may levy only a sales tax, and do not operate their own schools, but may carry out programs such as garbage removal, street improvement, and other such activities. City councils are, of course, elected by all residents of a village, not only Natives.

The number of fourth-class cities is increasing, in the large part because corporate status is required for participation in the recently inaugurated village electrification program. Since 1967 seven villages have become fourth-class cities.

The state agency charged with assisting villages or other places seeking incorporation is the Local Affairs Agency located within the office of the Governor in Juneau. A federal agency, the Bureau of Indian Affairs, has a tribal
operations branch which may also assist. Once the Local Affairs Agency makes its findings, the state Local Boundary Commission with members appointed by the governor holds a public hearing on the proposed incorporation. If the commission approves the petition, an election is held to determine whether the village voters desire incorporation.

The process of incorporation might be further hastened if one element of one proposal for land claims settlement becomes law because it would provide for grants of land only to incorporated communities.

Land and Resources

Since most villagers live on the public domain — not on land to which they hold title or on reservations — administration of matters relating to land and resources is largely government's task. But events of the last three years relating to Native land claims (as will be noted shortly) give promise of substantial change.

Today land used and occupied by Natives is managed principally by the Bureau of Land Management of the U.S. Department of the Interior which classifies land for multiple use, issues permits for wood cutting and other uses, issues allotments certified by the Bureau of Indian Affairs and village lots to Natives. Most lands which have been acquired by the state and are under its management are not in Native areas. Lands which are state owned are managed by the Division of Lands, Department of Natural Resources.

Over the past three years Native claims to public lands and protests against its transfer to others have resulted in introducing regional Native organizations into the administrative process involving federal land transactions, and such will continue until the U.S. Congress acts to resolve the claims and protests. In illustration, the city of Bethel needed a several hundred-acre tract of federal land adjacent to the city for a housing project; before the Bureau of Land Management could transfer the land to the state for subsequent transfer to the city it was necessary to obtain the approval of the regional Native association — a lifting of the protest against transfer of the specified parcel of land. In the past two years consent to transfers across the state have been asked of Native groups in more than two hundred instances; to date about one-fourth have been obtained.

The substantial change regarding land and its resources, that is in prospect is that which would result from a Congressional act settling the claims of Natives to land. While the specific provisions of a settlement act cannot be forecast with any certainty, it is expected that a Native corporation or corporations would become the owners of several million acres of land, with or without mineral estates, and that some provision would be inserted to insure protection of subsistence resources. The corporation or corporations would also be granted what might total hundreds of millions of dollars over a period of years for lands taken by the act.

Except for federal wildlife ranges and refuges, the wildlife and fishery resources of all lands — state and federal — are under the management and regulation of the State Department of Fish and Game. These resources are the foundation of the villager's subsistence as he harvests wildlife and fishery sources for his own use and for sale. Of continuing concern in the state is the
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protection of resources for subsistence use by villagers in particular. Regulations controlling fish and game harvests are established by the state’s Board of Fish and Game, a ten-member group appointed by the governor.

Planning for Community and Regional Development

While a large number of agencies and organizations provide assistance of one kind or another to planning and development of Native villages, only the Bureau of Indian Affairs and the Bureau of Land Management perform certain services because the village inhabitants are Eskimos, Indians, or Aleuts. Others administer such programs for villages because their inhabitants are citizens of the state or because their incomes are low.

The Bureau of Indian Affairs project development branch may provide technical assistance to a village seeking to plan comprehensively for its future; Bureau officials also are resource persons for a great variety of specific projects sought by a community. The Bureau of Land Management may carry out townsite surveys and grant restricted or unrestricted title to Natives residing on village lots.

Comprehensive planning for communities in Alaska is a function of the Alaska State Housing Authority, a federally-funded, state-operated agency. Most of the plans prepared have been for boroughs and towns larger than Native communities, but plans have been completed for Nome, Bethel; and Teller and will be drawn for Kotzebue and Barrow during the current year.

Planning for development of local and regional economies is now underway in some parts of village Alaska by local groups in cooperation with the Economic Development Administration under the Department of Commerce. In southeastern Alaska five Native communities have active overall economic development planning committees; in western Alaska two economic development planning areas have elected boards which employ full-time Eskimo development planners under Economic Development Administration funding granted to the Alaska Federation of Natives.

Planning and priority setting for village projects—especially those that would be funded with federal anti-poverty monies through Rural Alaska Community Action Program, Inc. (Rural CAP) — is also carried on in nine regions by development corporations governed by boards elected by villages of the regions. These development corporations operate out of regional centers, supported by federal anti-poverty grants, located in Copper Center, Galena, Kotzebue, Juneau, Bethel, Dillingham, Nome, Fort Yukon, and Kodiak. Illustrations of their priorities for projects are cold-storage facilities, water and waste disposal systems, clinics, community halls, and airport improvements.

While not chiefly concerned with community development, other agencies may from time to time address themselves to such problems. One illustration is the Federal Field Committee for Development Planning in Alaska which stimulated, among other things, a multi-agency federal-state housing, training, and development project in the Eskimo community of Bethel.

Community Projects and Public Works

There are four principal agencies that are not elsewhere described here that or carry out community projects in villages of Alaska. Most of these
projects are constructed under funding of the Rural Development Agency of the state or by Operation Mainstream of RuALCAP.

The Rural Development Agency, with headquarters in Anchorage, is authorized by the state legislature to make grants in response to applications for construction of public projects in communities smaller than 2,000 persons. In the summer of 1969, projects such as community buildings, bridges, walkways, and airport improvements were under way in 67 villages. These state grants generally are only a few thousand dollars for each project.

Operation Mainstream, administered by RuALCAP, is funded by the U.S. Department of Labor to provide work experience and training to persons engaged in community development projects. In the present year grants went to eleven villages for projects such as community halls, parks, and playgrounds, hostels, or other community-owned developments.

Since only a dozen villages are on the highway network of the state, little road construction or reconstruction takes place in village areas. When it does take place, it typically involves construction of a road from a village to its airport. This activity is carried out by the State Department of Highways, whose principal office is in Juneau but which has district offices in five cities of the state. The Bureau of Indian Affairs also has a very small program of road building that is carried on in two or three communities each year.

Most villages do have airports, and if constructed by the state, such construction is the responsibility of the Division of Aviation of the Department of Public Works. This year projects were continued or completed in nine villages. Principal office of the Division is in Anchorage.

Loans and Technical Assistance

Economic development loans and technical assistance are available to villages of Alaska, but not to the extent needed. Of principal importance to village areas in the last few years have been loan-grant combinations made by the Economic Development Administration under its authority to provide assistance to economically depressed areas. This federal agency, with its Alaska office in Anchorage, has been responsible for the construction of fish freezing facilities or docks at St Mary's and Yakutat, a housing components factory at Bethel, and other projects as well as a number of technical assistance studies.

Two other federal agencies are empowered to make loans and provide technical assistance and have done so in Alaska's villages. The Farmers Home Administration of the U.S. Department of Agriculture administers a program of economic opportunity loans to individuals for the purchase of boats, nets, or other equipment to improve the borrower's income. It also can lend to production cooperatives, and has made one such loan to a fishery cooperative. This agency has its principal office in Fairbanks. The Small Business Administration, an independent federal agency in Anchorage, may make loans to persons and enterprises when bank financing is not available, and a few of its loans have gone into village areas.

The newest agency providing loans and technical assistance to villagers is Community Enterprise Development Corporation, a federally-funded private
organization intended to stimulate the formation of cooperatives and other enterprises through loans and provision of technical assistance. Since its inception less than a year ago, the corporation has given financial support to seven cooperatives and assistance to other kinds of village enterprises. A board of directors elected by RurALCAP-sponsored regional development corporations and member co-ops sets policy for the Anchorage-based organization.

The State Department of Economic Development, also provides technical assistance to developing enterprises—particularly those involving utilization of resources. Another department, the Department of Natural Resources, may participate in such programs. Offices for both departments are in Juneau.

Technical assistance to reindeer herders on a continuing basis is provided by the Bureau of Indian Affairs, which also directly manages the Nunivak Island reindeer herd and a small model herd near Nome. Bureau project development officers are able in addition to provide general assistance to villagers regarding economic development projects.

One of the oldest sources of credit for villagers is the Alaska Native Industries Cooperative Association, a non-profit purchasing organization of Native-owned stores. Management of the organization is vested in a board of directors, but some supervisory authority is exercised by the Department of the Interior or its representatives. In the association there are 35 village store members.

Housing and Related Facilities

Provision of housing and related facilities is very much the burden of the Native himself, whether he lives in a city, town, or village area, but some programs of government do exist to provide assistance. The only housing program funded specifically for Native housing is administered by the Bureau of Indian Affairs. The program, which provides for purchase and transportation of building materials and for supervision of self-help construction, is coordinated and planned by the Bureau's housing officer in Juneau and carried out in cooperation with regional superintendents in each of five districts.

The most important agency assisting Natives in obtaining decent housing assists them because they have low incomes, not because they are Native. This agency, the Alaska State Housing Authority, located in Anchorage, is funded by the federal Department of Housing and Urban Development, operated by state employees, and governed by a board appointed by the governor of the State of Alaska. It participates in planning for self-help projects in Native communities in cooperation with the Bureau of Indian Affairs, administers a self-help housing program of loans and grants for Natives and others in remote areas, and administers a contractor-built, low-income home ownership project in Bethel. Being funded by the federal government, these housing programs require approval by the U.S. Department of Housing and Urban Development.

Housing loans may be made or insured for Natives as for other persons by state and federal agencies, but it was not until the last three years that the first loans were extended to those in villages—largely because of absence of land title payment ability, or because of construction standards that were difficult or
costly to meet in remote settlements. The principal agency of these is the Farmers Home Administration, a federal agency which has financed construction of 77 homes in Barrow over the past three years.

Clean water supply and sanitary waste disposal facilities for Native villages may be provided by a federal agency, the Office of Environmental Health, which is a unit of the Division of Indian Health, Public Health Service, in Anchorage. Following application by villages, the agency seeks Congressional appropriations for drilling wells, construction of water or sewer systems, or construction of privies or waste disposal bunkers. Priorities for places of construction are generally determined by the length of time the villages have had waiting applications. Some self-help by villagers is required. In the seven years since the inception of the program, 52 villages have benefited from it, but Division officials predict that at present rates of funding, another twenty years will be required to bring clean water and sanitary waste disposal systems to all villages. Two other federal agencies, the Economic Development Administration and Farmers Home Administration, have partially financed sewer and water systems in a few of the larger Native communities.

Electrification of villages is a function of the Alaska Village Electric Cooperative, Inc., a non-governmental agency located in Anchorage, funded by a grant from the U.S. Office of Economic Opportunity and a loan from the Rural Electrification Administration of the U.S. Department of Agriculture. The Bureu of Indian Affairs participates in the program by making grants for house wiring and by contracting to purchase electrical service to its schools. Approval of policies, including decisions as to which villages will be electrified during a year, rests with a board of citizens presently selected by the founding agencies and the state, but soon to be elected by village members of the state cooperative. By the end of this year the cooperative will have constructed electrical facilities at 27 villages. Another 35 villages are slated for electrification next year.

**OBSERVATIONS ON THE ADMINISTRATIVE SITUATION**

Perhaps the most notable trend in the last decade regarding the administrative situation as it affects Alaska Natives is the very substantial expansion in the number and variety of programs affecting them or open to them. There are today far more opportunities for Eskimos, Indians, and Aleuts to obtain health care, education, and training; to gain assistance in finding jobs; to improve their housing and related facilities, and to develop their economies and communities than there were ten years ago.

This expansion of opportunities for Alaska Natives is, in part, the result of new federal programs or increased federal funding meant to benefit American Indians through the Bureau of Indian Affairs and the Division of Indian Health of the Public Health Service. The expansion also results from innovative legislation enacted by the U.S. Congress aimed at improving the circumstances of all Americans who are deficiently educated or lacking skills, jobless or under-employed, in poor health, inadequately housed, or who were living in places of little economic activity. It also results from the ever increasing ability of the government of the State of Alaska to develop new programs and extend
them and other services to the remote communities of the state. And in part it

certainly results from the efforts of state and community Native spokesmen who

are organized to seek change and who are articulate in saying the directions

change should take.

What this expansion has as its consequence is, of course, a near

proliferation of agencies and their administrators. While this situation is

characteristic of the cities and states of the nation generally, it leads some

observers to complain about its effect in small villages in Alaska where it

sometimes appears that there is a continuing procession of federal and state

employees; and anti-poverty agency workers, followed by their senior officials

and evaluators who are reviewing or inspecting programs.

A concomitant consequence of these developments is a reduction in the

relative importance of federal programs such as those of the Bureau of Indian

Affairs and the Division of Indian Health whose authority to provide services is

limited by racial definition. Though their contributions have been enormous

over the many decades when the responsibilities of government to villagers were

almost exclusively theirs, a continuation of such racially defined government

institutions is incongruous with beliefs systems of American democracy. From

time to time critics of these agencies have called for their abolition and the

transfer of their funds to the state for its administration, but as has been noted

in connection with school transfers, Native citizens, themselves may reject such

proposals.

In the more recent years perhaps the most significant trend has been the

increasing participation by Natives in the shaping of policy and the

administration of programs affecting them, and beyond that to the actual

carrying out of some programs. A few examples may suffice. In education both

state and federal schools now have elected advisory school boards affecting, in

some measure, the operation of their schools. In the field of welfare, the Bureau

of Indian Affairs makes grants of money to a half-dozen villages and delegates

authority for the administration of the program to the villagers. In the field of

training, the Alaska Federation of Natives operates as a contractor (with a grant

of almost one-third million dollars) for-on-the-job training programs. And the

Federation administers an innovative project under which the people of two

western Eskimo areas employ project development officers and under which the

Federation itself employs an economic development specialist. In RurALCAGP

planning is proceeding that will result in the allocation of operational authority

for anti-poverty programs over the next five years to nine regional corporations

in rural areas of the state.

Reflecting upon the social and economic circumstances of Alaska Natives,

reviewing the present administrative situation affecting them, and witnessing the

developments of the last few years, it is apparent that the most important

administrative changes that should be made are those that make the relationship

of Natives to their administrations more like those of other Americans. They

should be enabled to plan an ever expanding role in the shaping and

administration of policies affecting their present circumstances and their future.

What this probably suggests, as Professor Victor Fischer of the University

of Alaska points out, is the development of regional units of government within
Alaska village areas that would exercise, insofar as possible, the powers of local government. Such a development would make the administrative situation of villagers more like that of other citizens of the state. Locally elected governments, moreover, would surely be more responsive to the wants and aspirations of the people than those of distant administrators. Regional administrative units, responsible to locally elected bodies, would also help solve problems of overlap created by the proliferation of agencies by becoming the coordinating vehicles for state, federal, and private agency administrators whose programs were being applied in these areas. A further reason—certainly one of much importance—is the personal growth that is encouraged by self-government.

Regional governments for village areas, it should be noted, would require special state legislation, because regional units (boroughs) that may be formed under existing law must assume financial responsibility for education and other functions, and most village areas are sorely lacking in an adequate tax base.

Some might argue that further assumption of responsibility for policy-making and administration would be premature, given the low educational levels of most villagers. Such argument might be given support by citing evidence such as a recent letter from a western Eskimo village to the Bureau of Indian Affairs in which the village's spokesman set out that the people of the village are hunters and fishermen, not educational experts, and suggesting therefore that they not be asked for advice on educational matters. On the other hand, the argument might be countered by citing contrary village views such as contained in a June letter to the president of the Federation of Natives from a leader of a small Interior village:

> In the past the Native people of the Interior have had no voice in the affairs which concerned them; rather they tended to accept the decisions made by the non-Native in Washington and other positions of authority. This old way cannot continue. We need a voice that has a possibility of being heard. We need to be allowed to make some of the decisions which affect our lives and affairs in order to stand as men and women of a proud race and tradition in a rapidly changing world.

If in fact villagers do not want to play a substantial role in fashioning local programs or in administering them, one would be slow to advocate it, but there is increasing testimony that they do. What is desirable is planning for regional units that would be shaped and influenced by local persons. Such planning would properly take into account the varying stages of readiness found in different regions, and it would provide for adult education programs and technical assistance to regional units as they would be established.

The administrative remodelling that should be planned for is not, in itself, going to improve substantially the social and economic circumstances of Alaska Natives, nor would other changes that are only administrative. What is also needed is an increase in funding for programs of demonstrated merit.

While it is not apparent from a recitation of programs and their administrators, there are numerous program inadequacies and gaps. Some of the
principal specific needs of Alaska's villagers are more opportunities to obtain preschool, adult, and vocational education, jobs or other opportunities for earned incomes, decent housing and safe water supplies, imported medical and dental services; and of much importance, reasonably adequate communications facilities. Needless to say, owing to staff or funding limitations, eligibility of persons or places for programs is not necessarily followed by programs being offered to all who are eligible.

An expansion in federal programs or federally-funded programs might come to pass at such time as the Nation's financial commitments for Vietnam would be reduced. State programs affecting villagers might be expanded if revenues from recent oil developments would reach levels forecast by some informed observers. A third possibility is that some major program needs would be met by a Native corporation or corporations, endowed with substantial funding, that would be established as a result of land claims settlement.

While some program needs might be temporarily met by Native corporations receiving compensation for extinguishment of land rights, it is not likely that it would or should continue to do so. Under one proposal for settlement—that of the chairman and staff of the Federal Field Committee—a corporation created would become a public corporation after ten years; its emphasis would very probably be investment, not grants. But, as indicated earlier, it is not desirable to have racially defined institutions doing things that government itself should do for all its citizens.

At the same time that one expresses the hope for racially undefined public administration, one does not look to the abandonment of the character and quality of Eskimo, Indian, and Aleut life. Full participation by villagers in shaping and administering policies that affect them will help insure that cultural traits of persisting value will be preserved; at the same time such participation will produce more effective administration.

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The Administrative Situation


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Karl Nickel has been associated with the movement to improve conditions in Lapland for several decades. Dr. Nickel is retired from his earlier professional life, but presently serves as Secretary of the Nordic-Lapp Council and speaks often on issues affecting the welfare of Lapp populations, including a recent lecture tour in the U.S.S.R.
The Lapps constitute only 0.07 percent of the population of Finland, about 0.64 percent in Norway and 0.13 percent in Sweden, but, because they occupy chiefly the northern regions of the countries, they comprise a considerable part of the inhabitants. In Norway they are in majority in four communes, in Finland, in one. The total number of Lapps can be estimated at about 40,000, together with the 1,800 Lapps on the Kola Peninsula in the Soviet Union. Although the Lapps comprise a small minority they are not a shrinking minority. Their number is now greater than ever before. This is a result of modern health care and of improved communications in our days. It is for instance now common that children are born in maternity or other hospitals, and infant mortality has in consequence of this decreased.

About 500 years ago the Lapps were the almost sole inhabitants of Lapland, but in the seventeenth century a very active colonization of the region was started. Earlier the Lapps had been taxed by Denmark-Norway, Sweden-Finland and Russia; but gradually the states widened their sovereignty to the northern regions and the state frontiers were fixed. When the frontier between Denmark and Sweden-Finland was determined in the Treaty of Strömstad in
It was stipulated that the Lapps, who were nomads, should still, according to old custom, have the right to move with the reindeer across the frontier and make use of the reindeer pastures in the neighbouring country.

State measures were usually dictated by the care of the reindeer husbandry of the Lapps. The dominating thought was that the Lapps were and would ever be keepers of reindeer. Literature about the Lapps in older times and the archaeological findings give a rather scanty conception of the life of the Lapps. Traces left behind by the nomads are rare because they needed all that they had. The findings on the places of sacrifice tell, however, about early contacts between the Lapps and strangers, most of the latter probably fur purchasers. From the seventeenth century the written sources become richer. It is evident that the Lapps in old times had only few reindeer. They were fishermen and hunters, but when the game diminished they enlarged their reindeer keeping for slaughter, and now the production of meat for sale is in first place.

The Lapps formed small societies with a structure suited to the subarctic environment. In the wilderness it was necessary to stand on one's own feet and they became very individualistic. Lapps are peaceable, and as long as there was plenty of space they retired from the intrusive colonization. Also game vanished to the north, and the withdrawal of the Lapps could occur with the Lappish self-esteem intact. Asking for protection against intruders, the Lapps appealed sometimes to the Kings and Tsar, who generally were in favor to the Lapps, but far from the administrative centers this was not of great importance. The measures to the benefit of the Lapps were half-hearted and the colonization of the region was a state interest. However it can be mentioned that the Swedish King Johan III proclaimed in 1584 that the colonists had not the right to make use of some areas in present Enontekiö, and it is noticeable that Peter the Great, although the tsars usually supported the church, in 1697 rejected the claims made by the Petsamo monastery to the old-salmon fishing places of the Skolt Lapps on the River Tuloma. He established the rights of the Skoltos to the area, which "may not be sold nor hired". In the course of time the Lappish societies, the alas, were transformed into the existing social models in each country.

Many state commissions have been concerned with Lapp matters, but their proposals have not always been carried out. In Finland a state commission considering Lapp affairs worked in 1949-1951 and suggested among other things that the Lapps of each commune in the north should elect a Lapp council, which should deal with specific Lapp matters, and an office for Lapp affairs should be set up to assist the cabinet in questions concerning the Lapps. In the office should be two officials: a Commissioner of Lapp Affairs as the head, and a representative of the Lapps as his assistant. The suggestion was not carried out. A similar commission worked in Norway in 1956-1959, but the recommendations of this commission have also stayed on paper. In Sweden many state investigations have been performed, but their mandates have been limited to special particulars, such as reindeer husbandry, school, etc., and the Lapp problem as a national Lappish interest has not been investigated. It has been more a subject of conversation in the organizations.

The Nordic countries are the promised land of organizations, but among individualistic Lapps organizations have not been established until this cen-
Kati Nickul

It was a great improvement when the first Nordic Lapp Conference was held in Jokkmokk, Sweden, in 1953. There a comprehensive inventory of Lapp matters was made, and on the second Nordic Conference in Karasjok, Norway, the Nordic Lapp Council was founded. In the Council there are five members from Norway, four from Sweden, and three from Finland. The Lapp Council arranges every three years a Nordic Lapp Conference in turn in Finland, Norway and Sweden. The latest Conference, 1968, in Enontekiö in Finland, was attended also by four scientists from the USSR. The Lapps have always constituted the majority on these Conferences, but the authorities have shown a great interest and have been well represented. At the 1968 Conference there were over 300 participants, 23 from far-away countries.

The resolution from the Conferences go to the government authorities, but when there have not been persons specially engaged in Lapp matters, the resolutions have not always gained sufficient attention. An essential improvement in this respect has occurred as the Nordic Council, a joint organ of the parliaments and government in the Nordic countries. In 1962 the Council recommended that the governments in Finland, Norway, and Sweden set up a special joint body to handle questions concerning Lapps and reindeer husbandry. This body was founded in 1966. The wishes of the Nordic Lapp Council are now channelled through this body to the deciding authorities, but it has itself taken initiatives. Among other things a program for research concerning reindeer husbandry has been executed, and the various tasks for research have been distributed among the countries. A Nordic school for reindeer herdsmen and advisers in reindeer husbandry has been planned, and attention has been paid to Lappish handicraft and Lappish place names. The body has also given support to Lapp youth conferences and to teachers' meetings.

In this body, set up by the governments, the ministries handling Lapp matters are represented. In the first line are the Ministries of Education and Agriculture, while some of the members are active persons in the Lapp organizations. Reindeer husbandry is attached to the Ministries of Agriculture in all the countries. Lapp matters in general stay in Finland under the Ministry of Justice, in Norway and Sweden under the Ministries of Agriculture. Lapp matters are of course handled also on the local level by the provincial governments in the administrative districts with Lappish population. Since 1960 there is in Finland an internal official Lapp Delegation with the governor of Lapland as chairman and six members, three of them representing the Lappish organizations and the other three representing the Ministries of Justice, Education and Agriculture. Since 1964, Norway has an official organ, the Norwegian Lapp Council with eight members, to coordinate Lapp matters. In Sweden there is an official committee for matters concerning reindeer husbandry. In the district governments in the reindeer breeding area there are, moreover, advisers in Norway and in Sweden. In Finland these matters are attached to a half-official society, Pallskuntain Yhdistys, where the Ministry of Agriculture has a representative. The society arranges each year a so-called reindeer parliament, where all the pallskunnat, the reindeer owners' districts, are represented.

According to law the Lapps have the same status as other citizens. In an extensive area is detached for exclusive use by the Lapps and intru-
The Administrative Situation

After approval of the King and must be compensated to the Lapps. In Sweden reindeer husbandry is reserved for the Lapps, also in Norway, but not so strongly. In Finland it is a free occupation to all citizens in a certain northern area. The Lapps have been observed by the state to a greater extent in Sweden than in the other countries. This happened before ethnographic research had given its contributions to the handling of questions like this. The state measures have therefore often been dictated by a non-objective mixture of well-intentioned and guardian-minded reasons, which strengthened the social passivity of the Lapps. There was the desire to preserve the Lapps and, according to the school reform of 1913, the schools for the children were to have the shape of a Lapp tent. In the summers they were located in the vicinity of the camping places and in winter in the church villages. In this way one tried to maintain the children's interest in reindeer husbandry, but the language of instruction was Swedish. Essential changes have occurred since that time. Modern boarding-schools were built in the 1940's. Earlier only children from nomad families attended these schools, which were compulsory for them, but now it is a voluntary matter. Also children of settled Lapps can attend the nomad schools. There are seven such schools with six classes and from all these the pupils are gathered to a common three class school in Gallivare. They can go over to other schools, but usually they continue in Gallivare and further in upper schools and trade schools. In the first and second classes Lappish is the language of instruction; later it is a subject taught under the heading, "Lappish Language and Culture." In addition Lappish matters are integrated in other subjects in the school.

In Norway the Lappish school has developed rapidly. Earlier, Lappish was permitted only when utterly necessary, but in the last decades the system has been completely changed. The first teaching can be given in Lappish and there are some schools where Norwegian will be introduced as the first alien language during the second half of the second school year. This autumn an upper-school class with Lappish will be started at the 'gymnasium' in Karasjok. The Lappish language is taught as a subject throughout the school up to the matriculation examination.

The new language policy is not entirely accepted by the minority itself, which is anxious to let the children learn the language of the majority. Many parents have tried to train their children in the majority language, but as they speak it erroneously it becomes a still greater work in the school to eliminate errors in words and phrases in the pupils' speech. According to researchers in bilingualism the teaching in the mother tongue is a prerequisite for proficiency in other languages. Investigations made earlier in Finland and Sweden have shown that in regions where Lappish is endangered parents want school teaching in Lappish, but in pure Lappish areas they want school teaching in the majority language. They say that the children know Lappish, but they need to learn the language of the majority. The new school policy needs therefore intensive explanation among the people to avoid misunderstandings.

More Lappish speaking teachers have been trained in Finland during recent years. Lapp children attend the same schools as the Finns and, because Lappish and Finnish are related languages, the transition from Lappish to Finnish is
easier than the transition to the Scandinavian languages. In Finland, Lappish may be taught as a voluntary subject and the Board of Education is inclined to promote the use of Lappish in the school.

The Lappish language is a very expressive and diversified language with an extensive vocabulary, but it still lacks words for modern concepts, for thoughts, which a Lapp in our days needs. This is why the Nordic Lapp Council has set up a Nordic committee to construct such words on Lappish bases. The language is thoroughly investigated but it is an arduous work to create new words and to enrich the literary language with words from the Lappish dialects. In the Lappish cultural work the numerous dialects cause difficulties.

The administration of the education of the Lapps follows generally accepted lines. In Finland the Ministry of Education, the Board of Education, the Inspectors and the local school committees are engaged. In Norway the administration is a task of the Primary School Council and the Directors of the school districts. The Council has in recent years arranged special courses for teachers in the Lapp area and teachers' meetings of the Nordic Lapp Council take place. Such meetings, where the teachers from the Lappish schools can discuss common problems, are very important. Sweden has had a special organization for the Lapp schools with its own Inspector directly subordinate to the National School Board.

In the foregoing I have touched only upon the Soviet Union where there also are Lapps on the Kola Peninsula. Unfortunately I so superficially knew the circumstances that I cannot give a precise picture. During the tsarist era the Lapps were a neglected group, observed only by good-hearted philanthropists. But the Lapps could live there rather untouched and for this reason Lappish conceptions have survived among them better than in the West. Christianity was probably introduced with greater understanding for the Lapps' individuality than in the western regions, where everything Lappish was marked as pagan. The 1917 revolution signified a great change in the backward conditions of the Kola Lapps from an economic, political and cultural point of view. Young Lapps were educated at the Institute of Northern Peoples in Leningrad and later at the northern department of the Hertzen Pedagogical College in Leningrad and the Pedagogical High School in Murmansk. In 1936 and 1964 I visited the two first named institutes and met their Lappish students. Now there are Lapps in responsible posts in their native places, as teachers, physicians, etc. Newspapers and periodicals reach the homes. The Lapps conduct themselves better than before in the cultural contact with the other peoples on the Kola Peninsula: Russian, Ziryanians (Komi), Karolians, etc. Reindeer keeping also has made progress because of intensified research.

The theme of the latest Nordic Lapp Conference — 1968 — was "Have the Lapps a future in the North?" The activity which we have observed in the last years justifies a positive answer. The Lapps have been paralysed by outside intrusions, which they have accepted in peace and quiet. But they begin to become steeled and to think on their future. Also the majority peoples now have greater understanding and I believe that the future is brighter for the Lapps.
The Administrative Situation

N. O. Christensen

N. O. Christensen was trained as an administrator in the Danish government and served as Governor of Greenland for many years until his retirement in the summer of 1972. Governor Christensen speaks with the authority of many years experience as the chief administrator for Greenland.
This paper has been developed to establish a comparison between the administrative situation in Greenland and the Alaskan situation described by Robert Arnold. The difference in the situation in Alaska and in Greenland is not so great as one might believe and it is therefore possible to follow Arnold’s systemization. I have only a slight knowledge of the conditions in Alaska, but it is my impression that with regards to politics and administration, the situation in the two countries is very much the same.

Denmark is a state, not a federation. Greenland is not, like Alaska, a state in a Union. Consequently we do not operate with the terms federal, state, and local, but only with state and local. It is of no vital importance, but it should be borne in mind when operating with the terms of administration.

And now just a short description of the form of government in Greenland. Until 1953, Greenland was a colony of Denmark, but it has since 1953 been an equal, integral part of the Kingdom of Denmark. The Danish constitution is valid in Greenland. Two regular members of the single house of the Danish parliament were elected in Greenland. Voting rights extend to men and women over 21 of age.
The local governing body is the Provincial Council which at present is composed of seventeen members elected in the same manner as the members of Parliament. Until 1967 the Governor, as the Danish Government's highest official in Greenland, was chairman of this council and his offices took care of the council's administrative matters. But since June, 1967, the Provincial Council has elected its own chairman and developed its own secretariat. The Governor is a member of the council and is entitled to speak, but not to vote. Greenland is divided into districts, each of which has its own publically-elected council.

Many Danish laws are valid in Greenland but, in certain cases, there are laws or ordinances passed specifically for Greenland. Most important of these is one allowing the Provincial Council to act as a consulting body for the Danish Government and Parliament. In this capacity it participates in the formulation of laws relating to Greenland and, thus, has more power than comparable local governing boards in the counties of Denmark.

Political interest in Greenland is great, not least because of the new law whereby the Provincial Council elects its own chairman. Though the trend is toward increased self-government, this cannot be interpreted as an anti-Danish tendency. While desiring to continue their close ties with the Danish people, the Greenlanders, who live so far from their mother country and who have their own language, simply wish to have a greater responsibility in their own local affairs. And here we come to a distinction between Greenland and the other Arctic territories, which it is important to realize.

Greenland is an Island which lies several thousands of miles from its mother country, and which until 1953 was a colony. Its population is not yet a natural element of the Danish people because of differences in economy, politics and national character. It is a Danish province where the predominant part of the population has the Greenlandic language as its natural medium of expression, where the Danish — or if you like Danish-speaking — element form a minority, and of which the majority are in Greenland to serve in public administration in its widest sense, including education, health service, communication, and building activities.

It is a geographically isolated province, where the majority of the population are "Natives". This word is used with the same meaning as Arnold does in his background paper. The economic situation has not yet developed so far that people in great numbers have immigrated to settle for good. A few Danes, especially workmen, have, however, made their homes and founded families in Greenland. Greenland differs in this way from Alaska and other northern territories, where "the Natives" now form a minority with a lingual, cultural and social character.

The state management of Greenland is attached to a Cabinet Minister of Greenland. The present Minister is Minister of Fisheries as well, under whom belongs a Ministry for Greenland, henceforth called the Greenland Department, which may be compared to the American federal Bureau of Indian Affairs. Directorates under this department are: The Royal Greenland Trading Department, a state-undertaken working concern which handles a great part of the supply service and productive activity, Shipping, the postal service and other...
services, and The Technical Organization for Greenland, a public building authority, which in addition takes care of the greatest part of public construction and working concerns, including telecommunication, in many cases as the actual executing contractor.

There are other Ministries of the Danish Government active in Greenland. The police come under the Danish Police Forces, the inspection of shipping and supervision of air traffic under the respective authorities in The Department of Commerce and The Department of Transport and defense under The Department of National Defense. Other examples might be given, but the greatest part of political control belongs under the Greenland Department, with headquarters in Copenhagen.

The Governor is the Government's highest official residing in Greenland, but he is under normal conditions only the direct superior to the lesser part of the state management. He is, for instance, not superior to the two almighty executive political concerns, The Royal Greenland Trading Department and The Technical Organization, which are managed from Copenhagen, but as the chief administrator he is the highest public authority in Greenland.

In contrast to Denmark in Greenland all education, with exception of a private folk high school, is controlled by the state under a 1967 law. Administration is managed by the School Director, and a Board of Education, with headquarters in Godthaab, Greenland, is in charge of management. With the Governor as chairman the board consists of government officials and an elected element as two members are nominated by the Provincial Council. Regional school boards and parent-representative at each single school involve the popularly elected element in the educational work.

The educational system belongs under The Greenland Department, not the Danish Department of Education. A transfer has been planned, but it is uncertain when it will take place. In the educational office of The Greenland Department the educational contribution to the Danish yearly budget is prepared, and among other assignments this section provides for the many young people seeking education or training in Denmark. Yearly there are more than 1,000 young Greenlanders in Denmark attending classes from short courses to university education.

Nursery schools are widely distributed with at least one nursery school in each town and the schools have begun so-called nursery school classes, i.e., preparatory schooling for the six-year-old children. Actual schooling begins in Greenland as in Denmark at the age of seven and compulsory education lasts until the end of the seventh year of school. There is no illiteracy.

Adult Education, Training and Job Placement

Vocational training in Denmark is confined within strict limits with traditions far back in the past although modernization has started. A complicated legislation directs this department, a legislation which to a great extent applies to Greenland, notwithstanding the general agreement that a less troublesome system would have been preferable. The reason for this is the demand that Greenlanders who have received education or training must be able to compete on equal terms with Danes and be able to settle in Denmark. They not meet the objection that their schooling has not fully passed the mark.
The Danish strict and uniform examination requirements at graduation from secondary schools have the same effect on child education, which has to provide teaching in such a manner that the young people leave the "realskole" (the secondary school) after having passed an examination which is identical with the one passed by Danish schoolchildren. Otherwise they run the risk of being rejected when they later on seek further education or jobs and the aim of the Greenlandic school to make young people seek an education or training commensurate with their abilities and interests without being hampered linguistically would not be reached. A second-class schooling is not accepted. In this way heavy demands are made on Greenlandic youth for whom Danish is a foreign language.

The state and private organizations manage a widespread activity of courses, and the state educational system runs evening classes and continuation schools. Assignment of work is in its first stage and has as yet not assumed its definite shape. It belongs under social welfare and is managed by the Welfare Department which is placed under the Provincial Council. The costs are met by the Provincial Council with a certain refunding by the state.

**Health Services**

Greenland's health service is managed by a Chief Medical Officer who is appointed to this job by the Danish Health Service under the Ministry of Home Affairs, but who belongs under the Health Service of the Greenland Department. All medical attendance and medicine, including hospitalization and treatment by specialists, together with dental treatment, are free. Apart from the Chief Medical Officer's salary and a few other expenditures in connection with his post, all the expenses of the Health Service are administered by the Greenland Department, which maintains a very high standard.

**Welfare**

Social welfare has by tradition been the Greenlanders' own problem, beginning a hundred years ago when the first small elected councils were founded. With very slight guidance they managed to support the needy with what small means they had at their disposal. Out of these councils grew the local self-government which today consists of the Provincial Council and the Regional District Councils.

Until two years ago social welfare expenses were paid by the Councils own funds and administered by the Councils themselves under the guidance of the Governor. When the Provincial Council acquired its own Secretariat in 1967 a Welfare Board for Greenland was established, with the head of the Provincial Council as chairman and among others some elected members. The Governor is a member of this department. The decisions of the Welfare Board are administered by a welfare department which is a provincial council affair, consequently altogether local self-government. A system of local social workers is being established, and the state refunds 30 percent of all social expenditures to the local council.
Law Enforcement and Administration of Justice

The police are completely under the Danish State Police which comes under the Department of Justice. Most of the rank and file policemen in Greenland are Greenlanders, but in a few years some of the highest appointments will be taken over by Greenlanders. The organization is so new that the Greenlandic policemen are not yet old enough to be superior police officers. The police have managed, however, better than any other branch of administration, to train a Greenlandic personnel and establish an almost entirely Greenlandic police staff.

Law service under the Greenland Department differs considerably from the Danish. Even the criminal code is different and applies to all people who live in Greenland. It is managed by a Justice with a law degree, but most of the magistrates are Greenlanders.

Local Government

The 17 members of the Provincial Council are elected by general direct suffrage. All the present members are native Greenlanders, but occasionally immigrated Danes have been members of the Council. In addition to being an advisory body to the Danish government and parliament, the Council also operates a number of functions of local character, on which it spends its own funds raised by indirect taxes, on tobacco, alcoholic beverages, and sweets.

The country is divided into regions, each region including a town with from 500 to about 7,000 inhabitants plus a number of villages. The district council has members both from the town and the small villages.

The individual councils are in part economically dependent on the Provincial Council, but this system is just now under readjustment, after which the local councils will be released to manage their own administration of their share in the duties and taxes. Income tax is yet unknown but this blessing is expected to be introduced in 1972. The revenue is expected to go entirely to the treasuries of the Provincial Council and the District Councils, just as the indirect taxes.

The Provincial Council is under the supervision of the Cabinet Minister for Greenland; the local councils are supervised by the Governor. It is in accordance with the constitution that the municipal self-government is subject to the supervision of the state.

The provincial Council has a considerable influence on the administration by the state, for one thing the Provincial Council makes nominations for important committees and boards. In this way the council has members in the board of education, the board of the housing loan fund, the state radio broadcasting board and several other important boards. Also the local councils have a certain influence, on the state administration, for instance by the very important local board which decides the allotment of sites for building in the towns.

Land and Resources

In Greenland all land is public. The citizen may by application to a public body gain the right of use of the land, for instance a lot on which to build
a house. He does not pay for this right. The right of use can be sold and inherited, and it is retained as long as the land is used for the original purpose.

With the rapid urbanization, the land in the towns has acquired a site-value, which can be capitalized, for instance by offering houses for sale. Conditions today may be called rather chaotic, and legislation is being prepared to remedy the situation.

Mining in Greenland is developed only in a slight degree, but a bill was passed a few years ago with the aim of encouraging the prospecting and exploiting of minerals and to ensure that the community gains a fair share in the profits. Something similar to Alaska's Native Land Claims is not known in Greenland, but the mining act is worked out in such a way that society's share in prospective mineral riches can find its way into the treasury of the Provincial Council. Mining legislation is administered by the Ministry for Greenland.

Planning for Community and Regional Development

Comprehensive planning for communities in Greenland is a function of The Technical Organization which is a department under the Greenland Department. All public building and construction work is managed and administered by this organization which also manages the power stations, the waterworks and the public roads in the towns, and carries out the official inspection of all buildings. To a certain degree the organization also performs the actual building operation itself, but for the most part it leaves the work to private contractors, who are made up of a steadily growing local group of artisans, both Greenlanders and immigrated Danes. The organization has an administration of vast dimensions in all Greenlandic towns.

Planning and coordination of all public investments including the Provincial Council and the local councils and, taken as a whole, all the long-term programs of politics, are managed by a permanent council, The Greenland Council, which was established by law in 1966. This very influential council consists of five members of Parliament representing the five greatest Danish political parties, and the two Greenlandic members of Parliament plus three members of the Provincial Council.

The Chairman of the council is appointed by the King and the administration of the council is executed by a secretariat, which is a department in the Ministry for Greenland. The council usually has three yearly sessions in Copenhagen, but the next session in January, 1970, will be held in Greenland. The five Danish members of Parliament are usually the spokesmen for their parties during the debate of a bill concerning Greenland.

Loans and Technical Assistance

Each year a Government grant bestows loans and subsidies to fishing in particular, as this is the principal industry. Loans and subsidies are granted for fishing boats and tackle and for industrial plants for fishery products including cold storage plants. The grant is administered by a board which has the Governor as chairman and in which the Provincial Council has one member. By the usual hierarchical system in Danish government the decisions of this board can be overruled by the Greenland Department. The fishing boats and works which are
national property can be made over to private hands. Some line fishing boats
which originally had been purchased by the state have been made over with the
help of loans and subsidies to Greenlandic fishermen. For instance, the biggest
plant for the fishing industry was originally built by the state but has now been
handed over to a corporation in which the state, the Provincial Council, and
several Danish fish exporters own stocks.

Cooperative stores have only lately been established, and several are now
running or being set up. The instigator in this case is the Danish Union of
Cooperative Stores, which acts in an advisory capacity and makes experts
available.

Money matters were until lately arranged by the Royal Greenland Trading
Department, which also ran a savings bank. The Danish currency was first
introduced a few years ago. At about the same time one of the largest Danish
savings banks opened a department in Greenland and a newly established bank,
the Greenland Bank, started shortly after. By Danish law there is a well defined
distinction between savings banks and banks.

Housing and Related Facilities

The situation in Greenland is quite different from the one in Alaska. We
cannot say as Arnold does that, “provision of housing and related facilities is
very much the burden of the Native himself.”

Out of the about 340 million kroner (seven Danish kroner to a dollar)
which every year is invested in Greenland by the Danish state, about 75 million
kroner goes to housing. More money is spent on this than on any other
investments in Greenland. Each year a government grant is received and these
funds are used for financing housing. The funds are administered by a board
with the Governor as chairman and include a representative of the Provincial
Council.

Loans are granted on very fair terms to houses of a formerly approved
type. Saving is unnecessary— which is very unfortunate. Nearly all over
Greenland there is a housing shortage but one cannot better his position in the
waiting line by saving. The housing policy is conducted in a farsighted manner.
Loans are given with the aim of encouraging the concentration of the population
in the larger towns in the middle section of West Greenland, where the sea is free
of ice the year round and where all year fishing and fishing industry can be
developed.

This concentration of the population, which incidentally has been going on
for many years without being pushed by the housing policy, has brought
about a rapid urbanization with the subsequent demands for better facilities for
sanitary waste disposal and all modern conveniences. To acquire this in the most
economical way, most of the housing in the towns is concentrated in apartment
buildings with electricity, water and sewer supplies, and central heating.

These apartments are leased by the state. This is not the time and place for
those lamentations which I, as the managing civil servant might be tempted to
utter. Let it be enough to say that the state is not a very capable caretaker for
apartments, at least not in Greenland. The payment of interest and sinking fund
as well as the rent is greatly aided in proportion to the number of children in the
The Administrative Situation

As before mentioned the electricity works, the water and sewerage system, etc., in the towns are purely an official business. The local authorities have in reality no influence whatever on the pace of the investments and the management. Renovation, including removal of night soil in non-serviced areas and water supply by tank truck in the towns, is generally a municipal affair. In the villages, the renovation is very primitive, that is, if there is any, and here the state will not provide electricity except for its own institutions, for instance the school: In these places, local people with initiative are starting modest electricity work on a cooperative basis.

Observation on the Administrative Situation

I hope that from these rather scattered pieces of information about the administrative system in Greenland it is apparent that we have a long-standing tradition of attempting to give the Greenlander his share in the responsibility of governing himself. For over a hundred years, Greenlanders have elected representatives for boards and assemblies. In the beginning the assignments were on a very modest scale and the insight the equivalent. Development however has been going on these many years, although slowly.

It is now a fixed aim of the long-term policy that the Greenlandic population's voice in the management and its share in the responsibility must be increased. This must be done at the same time as we aim to make Greenland an equal integral part of the Kingdom of Denmark, as far as it is possible when one considers the country's geographical position, climatic and physical conditions and the cultural and social state.

It is also a part of this scheme when the Provincial Council in 1967 instead of the Governor had its own elected chairman and its own secretariat, and it is a result of this policy that now a Bill has been introduced which will give the Greenlandic local councils an independent status which will make them as much counterparts of the Danish councils as possible.

Many other illustrations might be given. Greenland has today a voice that has a possibility of being heard. But it is surely also evident from my commentaries that we have far to go.

The words "The Greenland Department" figures in much of this article. This work of development, which goes on in Greenland and which has been going on since World War II, calls for large annual investments from Denmark. For the greater part these are provided for in the yearly budget, today about 600 million kroner for works and operations. They are managed by the Greenland Department and the included directorates. The decisive influence must belong to the financing partner - that cannot well be otherwise. Consequently, a part of the population's voice and share in the responsibility is only on paper.

And so, the following words are heard in Greenland as in Alaska, "Let us have a voice in the management — You forgot to hear our views."

Just as it is true that influence follows money then it is also true that it is reassuring in difficult times to know that the difficulties are not yours alone. And the difficulties are different looking at them from an office in Copenhagen than feeling them on your own body.
Greenlanders are justified in drawing attention to the fact that the advanced aim of a greater share in the responsibility must not be forgotten, and may well reproach the mighty state-organizations if they are forgotten or if their share in the responsibility is reduced to a formal act of acceding to a full-fledged scheme on which there is no going back.
Part 3

The Economic Situation

George W. Rogers
Cross-Cultural Education and the Economic Situation: The Greenland and Alaska Cases

One of the most recent and comprehensive official overviews of Alaska Natives today opened with these generalized observations:

A great contrast exists today between the high income, moderate standard of living, and existence of reasonable opportunity of most Alaskans and the appallingly low income and standard of living and the virtual absence of opportunity for most Eskimos, Indians, and Aleut of Alaska. About four-fifths of the more than one-quarter million people of Alaska are not Alaska Natives. Most of them, living in or near urban places, lead lives very much like those of other Americans. They are, by and large, regularly employed. Most families earn more than $10,000 per year. The median educational level is more than 12 years.

The other one-fifth, who live in widely scattered settlements, are unemployed or only seasonally employed, live in poverty, in small, dilapidated or substandard houses under unsanitary conditions, are more ten victims of disease, and their life span is much shorter than that of
The Economic Situation

other Alaskans. They are not only undereducated for the modern world, but they are living where adequate education or training cannot be obtained, where there are few jobs, where little or no economic growth is taking place, and where little growth is forecast.

With a change of names and some minor adjustment of statistics, this statement could be used to generalize the economic situation and living standards of any of the other northern polar indigenous peoples. In the same sense a case study of any one of the political divisions of the North could serve as a means of understanding the others for all have certain basic elements in common and have had similar histories of outside contact, penetration and dominance. Basic differences arise in connection with public policy as it attempts to deal with the problems of conflict between economic development and cultural change.

For this discussion, only two case studies have been included, the Greenland and the Alaska situations. There are important parallels and important differences in each. For example, they both have recently achieved the highest form of regional political status within their respective nations: Greenland advancing from a colony to a provincial status in 1953 and Alaska from a territory to a State of the Union in 1959. From the standpoint of dealing with cultural differences, however, they present almost opposite policy poles and something might be learned in studying these extremes which would be lost in dealing with intermediate cases.

The analytical approach of this discussion will be that used by the Danish economist Mogens Boserup in his review and evaluation of Greenland's economic future. In both Greenland and the dominantly Native parts of Alaska, the basic economic problem is one of severe regional imbalance compared with the rest of the nation or the state. The intent of government policy in both cases has been that levels of income and consumption of the residents be raised at least to something comparable to the levels in the balance of the nation. The specific programs and policies have varied over time and place, but have represented attempts at improvement through combinations of three underlying processes: population transfers (first into larger more economically viable concentrations within the region, but ultimately the transfer of economically surplus population out of the region into more developed regions), raising levels of regional productivity (through economic development, reorganization of economic activity and upgrading skills of resident workers), and continual heavy


A fuller discussion of the theoretical basis and analytical tools for regional development planning is given in J.R. Boudeville, Problems of Regional Economic Planning (Edinburgh, the University Press, 1966).
subsidization by the balance of the nation of investment, public consumption and the levels of private consumption in the less developed region.

Analyzed in these terms the subject cases represent two almost opposite sets of approaches to economic development and social objectives. In both, the common economic objective is increased per capita resident income, and the common social objective the increased health, education and general well-being of residents in the region. In Greenland since 1953 the emphasis has been heavily upon promoting regional economic development primarily to serve social development objectives, i.e., increased well-being of Greenlanders. In Alaska the emphasis has been upon changing people through education and vocational training to serve economic development needs. To promote the well-being of the residents of these regions both have used direct and indirect subsidies—the construction of housing, community facilities, development loans, etc. But again there has been a difference in emphasis. In Greenland a higher proportion of subsidies has been through the economic development process in the form of trade advantages, heavy investment and expenditure in productive plants, etc., which provide increased employment and income which would not have been possible if the process were determined by the market. In the Native areas of Alaska, there has been greater subsidy emphasis in direct consumption payments in the form of welfare and social programs.

Finally, in Greenland population transfer has been limited as a policy matter to movements from smaller to larger community units and in spite of Greenland’s political reforms has not extended to movement of population out of the province. In fact, the attempt has been made to tie the rate of economic development to the rate of increase in the Greenlandic labor force in order to avoid emigration. In Alaska from the earliest organization of education and other programs for the Native people, the major objective has been to move these people into and integrate them with the mainstream of American society. Education has been strongly oriented to breaking down the hold of traditional ways, in particular the use of Native languages, and providing vocational education to train the Native labor force to fit into the modern economy. Attempts to induce migration by education and training have more recently been augmented by programs of actual relocation of individuals and families.

Although the approaches used in each case have differed, it is ironic that the results have been comparable. In both cases some progress has been made toward the general raising of living conditions (the Greenland record is significantly better than the Alaska on this score). The subject populations are both still significantly segregated geographically, socially and economically. But the final twist is that recent education and development reforms in each are switching their emphasis. In Greenland, economic development appears to have reached its natural limit. More than in the past, vocational education is being emphasized as a means toward economic betterment of the Greenlander’s lot. The schools have departed from exclusive use of Greenlandic and include instruction both in the Native language and Danish. There is a growing movement, in fact, to eliminate the use of Greenlandic and teach only in Danish. On a pilot basis Alaska is now experimenting with the use of the Eskimo in the primary grades of school. Within the past five years, Alaska’s
rural areas have been the subject of a number of experiments in the promotion of economic development through use of fisheries co-operatives, community development projects and other means. The Bureau of Indian Affairs has departed from its past almost exclusive concern with education and welfare to create new programs to foster industrial development in Native areas and revitalized its dormant loan programs. These new policy and program trends in Alaska would appear to be an adaptation of the older Greenland policies and programs which aimed at improvement of the lot of people where they are. Greenland would appear to be adapting the older Alaskan policies and programs which aimed at increasing the mobility of people in economically depressed areas and attempting to integrate them into the dominant society.

If there is a general lesson to be learned from these two case studies—their inability to achieve the stated economic and social objectives, and their changing emphasis in the methods and goals of education—it is to be found in the area of cultural differences. In both cases, the subject regions and people are characterized by low productive capability and standards of living and by marked cultural differences in relation to the more productive and higher living standard parts of the State of Alaska or the Danish nation. The failures of education would seem not to be with the content of these programs or their attempts either to accommodate traditional languages or to obliterate them in the interest of promoting ultimate integration. Instead, failure results from the forms of the educational systems, the classroom, the academic or school year, all of which evolved with Western civilization and are adapted to the cultural ways of the modern society. They are not compatible with the traditional hunting and fishing semi-nomadic societies of the indigenous peoples. Education in the form now presented can reach these people only after they have made or actively started a cultural transition.

Part I. The Greenland Case

> Until the middle of this century, the economic history of Greenland was one of the struggle of a primitive people to survive in the face of a harsh climate and topography, isolated and remote location, narrowly limited resource base, and only minimal outside assistance in the form of public services and economic subsidy. After remaining almost constant at near or slightly above 10,000 persons during the nineteenth century, the number of Greenlanders rose to 15,634 by 1927 (204 Europeans were also in residence) and with increased health services to about 25,000 at mid-century. Sealing and the export of seal oil and sealskins were the principal economic activity of the Greenlanders until cod fish appeared in great quantities along the west coast in the mid-1920's. In the decades following, the base of the economy shifted from sealing to fisheries. Fishing was limited to small boats within fiord and coastal waters and production to simple salting and drying processes with export primarily to the Mediterranean countries. Some sheep raising was practiced in South Greenland, but this never became of major economic importance. From the mid-nineteenth

century until deposits were recently worked out, the mining of cryolite was of economic significance and there had been limited and sporadic mining of coal and quarrying of marble. Although cryolite was successfully mined at Ivigtut, the economic benefits to Greenland were limited to the application of the resulting net profits to the cost of providing social services. As Mogens Boserup summed it up, “Ivigtut was all the time an economic enclave in the fullest sense of the word, having no kind of economic exchange with the Greenland society.” Machinery, construction, supplies and skilled labor were all imported and incomes earned were spent outside Greenland.

The official economic policy for almost 200 years was summed up by Boserup as being:

- guided by the principle that Greenland must be neither a financial liability, nor a source of profit for the Danish State. Consequently, the prices paid to primary producers and the prices to be paid for consumer goods in the Government shops were fixed at such levels that the Government’s economic activities would result in a surplus large enough to cover (together with the Government’s profit from the mining of Kryolit) the expenditure on education, health, church, and general administration. Direct taxes were not levied.

As sole employer and with a complete monopoly control of all segments of the economy, the State fixed the level of wages and prices paid for fish and other raw materials low enough to ensure the required profits on exports. Boserup characterized the pre-1950 Greenland as the classic colony with the added “status as a kind of economic and social native reserve.” A United States analogy to such a situation would be to imagine a remote and isolated Indian reservation from which all outsiders were excluded except under strict government supervision and in which the level of public services and income provided the residents was determined by the income which could be generated from internal natural resources and manpower without any outside assistance or subsidy.

Political, Economic and Social Reform

Immediately after World War II criticism of the results of this policy led to the appointment in 1948 of a Royal Commission on Greenland. They found the economic situation to be characterized by:

- low income and production, high mortality, one-sided and primitive production, low educational level, lack of the proper plant

5 Mogens Boserup, op. cit., p. 15.
and equipment, almost no contact with the outside world, and in most places a subsistence economy. One thing that in particular was criticized was the health situation, the average expected lifetime being 30 years. As far as the economic life was concerned, the criticism especially centered on the monopoly held by the state on all trade and industry, a situation which for one thing was claimed to be responsible for the failure to utilize the existing possibilities for development of the fisheries.7

The reform program introduced by the Commission was based upon analogies with the reconstruction efforts in post-war Europe and the belief that "through investment of a few hundred million kroner it should be possible to change Greenland into a modern community which thanks to its industrialization would be able to pay its own way—except for certain subsidized public services." The main elements of the program were:

(1) Industrialization of the fisheries based on Danish initiative and financed by private interests, supported by a number of state loan facilities . . . (2) Transfer of capital from Denmark to ensure a rapid and essential improvement of the standard of living . . . and (3) that Greenland become an integrated province of Denmark by a constitutional change in 1953 . . . All public expenditures should be paid out of the Danish exchequer rather than being financed by taxes imposed in Greenland, while wages and salaries should be adjusted according to the earnings of the export trade. In addition to capital, Denmark should also make manpower available for implementation of the improvement in the standard of living in Greenland.8

Denmark began to pour men and money into Greenland. During the initial period 1950-53, the annual average investment in capital improvements was 24 million kroner and rose to 58 million kroner in 1960. In addition the Danish government increased expenditures for current operating expenses (administration, wages, supplies, etc.) from 28 million kroner to 76 million kroner (Tables 1 and 2). For a number of reasons, the most important being the niggardliness of nature, explosive population growth, and unanticipated cultural obstacles, the relatively quick results hoped for in 1948 did not come about, although there were impressive advances. Accordingly, the new ten year plan of the Greenland Commission of 1960 called for even heavier investments and expenditures. Net investments in 1965 were 139 million kroner and in 1969 budgeted at 260 million kroner, and net current expenses rose from 180 million kroner to 297 million kroner.

8Ibid., p. 298.
Increased Economic Productivity

The accomplishments of the first ten year program (1953-64) in terms of gross economic output and industrial reorganization were briefly evaluated by Jenness as follows:

With the investment of this capital, the fish harvest on which West Greenland's prosperity rested .. it rose from a yearly average of 21,000 tons between 1950 and 1953 to 31,000 tons in 1961; and she increased her exports of fish products from a yearly average of 5,564 tons between 1953 and 1955 to 11,955 tons in 1962, besides multiplying five-fold her exports of preserved shrimp, a relatively high-priced commodity. . . . Furthermore, she financed the enlargement and renovation of the canneries and freezing plants of the Royal Greenland Trade Department, and the construction of harbour facilities, roads, water supplies, and other works that would help to swell the island's production. . . . The abolition of the trade monopoly—in 1950, and the opening up of Greenland to Danish commercial enterprises, failed to produce the influx of Danish entrepreneurs which the Royal Commission had anticipated. . . . The Royal Greenland Trade Department continues to handle 85 percent of the trade, and will probably remain a powerful factor in the province for many years to come.9

The steady rise in Greenland's economic productivity under the reform program was accomplished primarily through expansion and diversification of the fisheries or fish processing. Cod fish continued to represent the major species of the total fisheries, but its relative importance fell from 94 percent in 1950-53 to 72 percent in 1967 (Table 3). Other and higher value species were harvested as a result of the investment made in vessels, gear and harbors. With their new capability to go beyond the coastal and fiord waters, the Greenland fishing fleets began to take a higher proportion of the total catch in the international waters off the West Greenland coast. From the 8 percent of the total catch during the first five year period of the ten year program (1954-58), the share of Greenland fishermen rose to ten percent in the middle and late 1960's (Table 4). Within the total economy, fisheries continued to account for 90-95 of the value of total international sale of Greenland products (Table 5).

In spite of the scepticism concerning survival of sealing, this traditional pursuit has shown a dogged vitality. The annual average sale of sealskins has continued to rise and has held the population in the sealing districts in this marginal occupation in spite of inducements and subsidies to move them into the higher income and amenity fishing districts.10

9D. Jenness, op. cit., pp. 144, 149.

10C. Bornemann, "Economic Development and the Specific Aspects of the Society in Greenland", Fourth International Congress, Arctic Development and the Future of the Eskimo Societies, Le Havre, 1969, pp. 1. The average sale of sealskins has run as follows, according to this source:

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Skins</th>
</tr>
</thead>
<tbody>
<tr>
<td>1953-56</td>
<td>27,778 skins</td>
</tr>
<tr>
<td>1957-60</td>
<td>33,368 skins</td>
</tr>
<tr>
<td>1961-65</td>
<td>35,771 skins</td>
</tr>
<tr>
<td>1964-66</td>
<td>44,573 skins</td>
</tr>
</tbody>
</table>
TABLE I - DANISH GOVERNMENT EXPENDITURES IN GREENLAND
1950 - 1969

<table>
<thead>
<tr>
<th>Year</th>
<th>Public Health</th>
<th>Education</th>
<th>Other Public Services</th>
<th>Social Welfare and Institutions</th>
<th>Transportation &amp; Communications</th>
<th>Sub-Total</th>
<th>Royal Greenland Trade Dept., Utilities, etc.</th>
<th>Other</th>
<th>Total</th>
<th>Less: Dividends on Cryolite operation &amp; other revenue</th>
<th>Total Net Current Expenses</th>
<th>Budget figures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950-53</td>
<td>12.2</td>
<td>5.6</td>
<td>5.3</td>
<td>1.0</td>
<td>4.2</td>
<td>24.0</td>
<td>9.0</td>
<td>2.2</td>
<td>33.0</td>
<td>(5.0)</td>
<td>28.0</td>
<td>24.0</td>
</tr>
<tr>
<td>1955</td>
<td>19.4</td>
<td>9.1</td>
<td>9.9</td>
<td>1.0</td>
<td>13.7</td>
<td>27.3</td>
<td>12.4</td>
<td>3.2</td>
<td>41.9</td>
<td>(4.5)</td>
<td>37.4</td>
<td>30.3</td>
</tr>
<tr>
<td>1960</td>
<td>36.2</td>
<td>27.9</td>
<td>40.4</td>
<td>8.3</td>
<td>30.5</td>
<td>53.1</td>
<td>24.5</td>
<td>5.5</td>
<td>80.8</td>
<td>(4.5)</td>
<td>76.3</td>
<td>58.1</td>
</tr>
<tr>
<td>1965</td>
<td>52.2</td>
<td>62.6</td>
<td>61.5</td>
<td>22.1</td>
<td>66.0</td>
<td>143.3</td>
<td>31.3</td>
<td>11.6</td>
<td>180.1</td>
<td>(7.1)</td>
<td>74.2</td>
<td>139.1</td>
</tr>
<tr>
<td>1969†</td>
<td>52.2</td>
<td>62.6</td>
<td>61.5</td>
<td>22.1</td>
<td>66.0</td>
<td>164.4</td>
<td>31.3</td>
<td>11.6</td>
<td>298.6</td>
<td>(7.1)</td>
<td>289.5</td>
<td>259.7</td>
</tr>
</tbody>
</table>

1950-53: (Annual average) 1955-1969: (Millims Kroner)

### TABLE 2 - RELATIVE COMPOSITION OF DANISH GOVERNMENT INVESTMENT IN GREENLAND, BY PURPOSE 1951-1972

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(percentage)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Fishing Industry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- sedge</td>
<td>0.1</td>
<td>1.1</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>- plant</td>
<td>4.1</td>
<td>6.2</td>
<td>0.5</td>
<td>5.6</td>
</tr>
<tr>
<td>- harbors</td>
<td>0.7</td>
<td>0.8</td>
<td>0.8</td>
<td>2.1</td>
</tr>
<tr>
<td>Sub total</td>
<td>1.9</td>
<td>7.0</td>
<td>8.4</td>
<td>11.6</td>
</tr>
<tr>
<td>2. Industrial &amp; Trade subsidies</td>
<td>1.5</td>
<td>3.0</td>
<td>9.2</td>
<td>2.7</td>
</tr>
<tr>
<td>3. Hotels</td>
<td>0.2</td>
<td>4.8</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>4. Supply Service (shops, warehouses) tanks</td>
<td>8.2</td>
<td>3.6</td>
<td>6.7</td>
<td>5.4</td>
</tr>
<tr>
<td>Sub total</td>
<td>14.8</td>
<td>18.4</td>
<td>24.4</td>
<td>19.7</td>
</tr>
</tbody>
</table>

### Socio-Economic Overhead

| 1. Utilities (elec., heat, coal mine, etc.)      | 4.0     | 7.1     | 4.8     | 4.4     |
| 2. Roads, water, sewage                         | 8.3     | 4.1     | 6.3     | 7.2     |
| 3. Buildings & Shipyard services                | 4.6     | 3.9     | 1.7     | 4.1     |
| 4. Fire protection, etc.                        | 0.7     | 1.1     | 0.2     | 0.8     |
| 5. Communication                                | 1.7     | 2.1     | 5.2     | 4.9     |
| 6. Air, water transport                         | 6.0     | 9.3     | 10.0    | 4.4     |
| 7. Misc. Works                                  | 13.0    | 12.7    | 9.8     | 0.2     |
| Sub total                                       | 38.3    | 40.6    | 38.0    | 28.0    |

### Public Institutions

| 1. Education                                    | 4.6     | 7.2     | 4.9     | 10.0    |
| 2. Health                                       | 12.7    | 5.9     | 1.2     | 2.2     |
| 3. Other (includes sports, etc.)                | 1.7     | 0.7     | 1.5     | 8.3     |
| Sub total                                       | 19.0    | 13.8    | 7.6     | 20.5    |

### Housing

| Housing                                         | 27.9    | 27.2    | 30.0    | 33.8    |

| Total                                           | 100.0   | 100.0   | 100.0   | 100.0   |

1 Includes GTID yard at Copenhagen

### TABLE 3 - GREENLAND FISHERIES, ANNUAL CATCH BY SPECIES 1950 - 1967

**Annual Average For:**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Shrimp</td>
<td>210</td>
<td>538</td>
<td>1.500</td>
<td>3.930</td>
<td>5.378</td>
<td>5.644</td>
</tr>
<tr>
<td>Wolf-fish</td>
<td>.857</td>
<td>3.228</td>
<td>2.950</td>
<td>2.385</td>
<td>2.379</td>
<td>2.699</td>
</tr>
<tr>
<td>Greenland halibut</td>
<td>.271</td>
<td>.844</td>
<td>1.440</td>
<td>2.283</td>
<td>2.449</td>
<td>1.749</td>
</tr>
<tr>
<td>Salmon</td>
<td></td>
<td>.090</td>
<td>.108</td>
<td>1.126</td>
<td>1.153</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>20.988</td>
<td>26.146</td>
<td>35.655</td>
<td>35.178</td>
<td>41.302</td>
<td>39.521</td>
</tr>
</tbody>
</table>

Codfish as % of Total: 93.6, 82.4, 93.3, 73.5, 72.4, 71.6

* Round weight. All others dressed weight as sold to GTD and private firms.


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### TABLE 4 - TOTAL CATCH OF FISH IN WEST GREENLAND WATERS BY NATIONALITY 1954 - 1958

<table>
<thead>
<tr>
<th>Nationality of Vessels</th>
<th>(annual average)</th>
<th>1965 (1,000 tons, round fish)</th>
<th>1966</th>
<th>1967</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenland</td>
<td>26</td>
<td>40</td>
<td>43</td>
<td>44</td>
</tr>
<tr>
<td>Faroes</td>
<td>35</td>
<td>66</td>
<td>65</td>
<td>64</td>
</tr>
<tr>
<td>Portugal</td>
<td>114</td>
<td>61</td>
<td>75</td>
<td>63</td>
</tr>
<tr>
<td>Germany</td>
<td>27</td>
<td>126</td>
<td>101</td>
<td>156</td>
</tr>
<tr>
<td>Norway</td>
<td>39</td>
<td>32</td>
<td>39</td>
<td>47</td>
</tr>
<tr>
<td>France</td>
<td>36</td>
<td>40</td>
<td>41</td>
<td>43</td>
</tr>
<tr>
<td>Spain</td>
<td>18</td>
<td>1</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Other</td>
<td>29</td>
<td>38</td>
<td>36</td>
<td>13</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>324</strong></td>
<td><strong>404</strong></td>
<td><strong>404</strong></td>
<td><strong>441</strong></td>
</tr>
</tbody>
</table>

Greenland's share of total catch: 8.0%, 9.9%, 10.6%, 9.8%

*Preliminary

TABLE 5: INTERNATIONAL SALE OF GREENLAND PRODUCTS (EXCLUSIVE OF MINERALS)

<table>
<thead>
<tr>
<th></th>
<th>1965</th>
<th>1966</th>
<th>1967</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Millims Kroner)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>salted dried</td>
<td>11.4</td>
<td>12.4</td>
<td>12.6</td>
</tr>
<tr>
<td>shrimp: canned</td>
<td>10.5</td>
<td>12.4</td>
<td>10.8</td>
</tr>
<tr>
<td>frozen</td>
<td>9.7</td>
<td>12.3</td>
<td>13.7</td>
</tr>
<tr>
<td>other frozen</td>
<td>43.9</td>
<td>49.5</td>
<td>44.9</td>
</tr>
<tr>
<td>fish meat</td>
<td>2.3</td>
<td>2.3</td>
<td>1.8</td>
</tr>
<tr>
<td>Sub total</td>
<td>78.1</td>
<td>88.0</td>
<td>83.8</td>
</tr>
<tr>
<td>Seal skins, other skins</td>
<td>7.5</td>
<td>6.5</td>
<td>3.4</td>
</tr>
<tr>
<td>Lamb, mutton</td>
<td>1.1</td>
<td>1.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Other</td>
<td>1.3</td>
<td>0.8</td>
<td>0.7</td>
</tr>
<tr>
<td>Total</td>
<td>68.0</td>
<td>97.2</td>
<td>88.1</td>
</tr>
<tr>
<td>Percent fish product</td>
<td>88.8%</td>
<td>91.2%</td>
<td>95.1%</td>
</tr>
</tbody>
</table>

1 Includes sales by Royal Greenland Trading Department and private firms.

The sale of lamb and mutton has added a modest amount to the total sales of all products, but further expansion is limited by natural and economic factors. Mineral production continued to be limited primarily to cryolite (which was applied to defray a proportion of the operating costs of the programs), but was recently discontinued due to exhaustion of reserves.

**Increased Economic Subsidy**

Although the general level of economic output has been increased, the overall picture of the economy is not particularly healthy. Table 5 indicates the heavy degree to which the economy is based upon the west Greenland fisheries and fish processing. The balance of payments or external trade balances furthermore indicate the high degree to which the maintenance of even this precariously narrow and specialized economy is dependent upon outside subsidy (Table 6). The total value of all exports from Greenland (including sales within the Greenland economy and exports to the rest of Denmark) has been running at about forty percent of the value of all imports into Greenland. The rise of this trade imbalance has been largely a result of the new reform programs, and rather than decreasing in the future it is assumed that it will continue to increase in both relative and absolute terms. The investment of capital in Greenland has only been in part, and that a lesser part, in industrial modernization. Although the trade subsidies and industrial capital improvements have been substantial as compared with those in Alaska and elsewhere, they have comprised only about fifteen percent of operating expenses of the total programs and fifteen to twenty-four percent of their capital investments (Tables 1 and 2). The achievement of the social objectives of the reform program have called for continuing heavier expenditures for health, education and other public services and investments in the necessary appurtenances of a modern Danish community and they have been without any significant offsetting economic return.

It was originally expected that at least the capital investment in new vessels, equipment, dock facilities and plant would not be a total subsidy, but would ultimately pay off over a longer-run future in terms of increased economic output which would significantly redress this imbalance. But there are severe natural, economic and social limitations to such expectations. Commercially exploitable natural resources are limited primarily to fisheries and the limits to which these might be safely exploited may have already been reached. As in Alaska, Boserup notes that, "When Greenland's present problems are discussed, two splendid future possibilities are invariably mentioned as a kind of reassurance: the development of tourism on a large scale, and the discovery of rich and exploitable mineral resources." He dismisses both as rather dangerous and cruel "economic mirages."  

The elements of the reform programs which directly subsidize the improvement of standards of living have also brought about a growing imbalance between rates of population and unsubsidized economic growth. From pre-1950...
<table>
<thead>
<tr>
<th>Countries of Origin</th>
<th>1963</th>
<th>1964</th>
<th>1965</th>
<th>1966</th>
</tr>
</thead>
<tbody>
<tr>
<td>Or Consumption</td>
<td>Imports</td>
<td>Exports</td>
<td>Imports</td>
<td>Exports</td>
</tr>
<tr>
<td>Rest of Denmark</td>
<td>158.1</td>
<td>45.3</td>
<td>181.5</td>
<td>47.0</td>
</tr>
<tr>
<td>Greenland</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>4.7</td>
</tr>
<tr>
<td>Spain</td>
<td>0.6</td>
<td>2.4</td>
<td>0.2</td>
<td>3.4</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2.5</td>
<td>0.2</td>
<td>1.6</td>
<td>2.8</td>
</tr>
<tr>
<td>West Germany</td>
<td>0.0</td>
<td>0.6</td>
<td>0.0</td>
<td>0.5</td>
</tr>
<tr>
<td>U.S.A.</td>
<td>0.0</td>
<td>19.6</td>
<td>0.0</td>
<td>14.1</td>
</tr>
<tr>
<td>Venezuela</td>
<td>2.0</td>
<td>0.0</td>
<td>5.5</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>163.2</td>
<td>73.9</td>
<td>189.8</td>
<td>72.5</td>
</tr>
</tbody>
</table>

1Imports from “rest of Denmark” include goods of Danish as foreign origin.

Exports to “rest of Denmark” include goods consumed there or re-exported.

The Economic Situation

Annual rates of about two percent, rates of net natural increase of population rose to four percent and more under the impact of health programs. Further, the objectives of the industrial development program were not purely economic or the promotion of industrialization as an end in itself, but were primarily social. Economic efficiency, maximization of economic return of investment, etc., were not the criteria followed in the design of these programs. As the director of the Royal Greenland Trading Department recently stated, the objectives of the industrial development programs were the creation of new employment sufficient to accommodate the anticipated annual growth in the Greenland labor force, and a rate of personal income growth which would result in steadily rising standards of living.

The essence of the industrial program is the scaling of the size of the processing plants to the expected flow of labor, the basing of production on deep-freezing to enable all kinds of fish to be utilized and so make possible production all year round, and finally the planning of a fairly rapid transition from fiord and coastal fishery in small fair-weather boats to sea-going fishery in long-line boats and trawlers -- which likewise should make year-round fishing possible and mean less dependence on changing weather conditions.\(^2\)

Finally, true economic viability is limited by the high costs of living and doing business in Greenland as compared with the rest of Denmark and the nations with which they are competing in world trade. It is clear, therefore, that the economy will always be a heavily subsidized one if it is not to fall back to its pre-1950's levels when the basic policy was one of making it pay its own way. Rather than being judged in terms of expansion of gross regional product and external trade, the economic elements of the reform program must be evaluated in terms of income and employment.

Income, Employment and Standards of Living

The improvement of employment, income and standards of living of Greenlanders has been accomplished by both direct and indirect means. As it is impossible to separate them for purposes of analysis, Jenness reports that, as had been done in the case of the basic industrial enterprises, the Danish government invested directly by subsidy and loans in building up the living and working capital of the individual Greenlanders.

During the same ten-year period (1953-64) she maintained a steady home-building program (an annual average of 245 new family units for the period), concentrated mainly in the fishing towns of the southwest coast to accommodate the increasing local population and to draw in families from the outposts. Not only did she furnish all

the funds for the erection of these new dwellings, many of them large apartment buildings, but she offered such liberal loans that even a penniless Greenlander could acquire an individual home and, at the same time, perhaps, the new boat and equipment he needed for fishing.¹³

Christiansen summarized the results, in terms of marked increases in monetary returns to Greenlanders engaged in primary economic activities.

The total sales value of Greenland production was in 1935 a mere 2.5 million kroner, by 1950 it had risen to 10.0 million kroner, in 1962 to 47.8 million kroner, and in 1967 to 62.7 million kroner. In 1951 the Greenland producers (i.e., fishermen, hunters and sheepfarmers) received 3.2 million kroner for the primary produce they sold to the processing plants, in 1962 this had risen to 17.5 million kroner and in 1967 to 23.9 million kroner. In addition to this, 9.6 million was paid out in 1962 in all production plants as direct and indirect wages and 16.3 million kroner in 1967.¹⁴

The rise in earned personal income was significantly assisted by other means, as pointed out by Jenniss.

Economically, all Greenland was expanding fast; at a faster rate, even, than its population. The private income of the average Greenlander in 1962 shows this clearly, for it had almost doubled since 1947, after making full allowance for the rise in prices and the growth of the population. About half the increase occurred between 1947 and 1953, when Denmark, after a preliminary assessment of the changes that had taken place during the war, began to flood the west coast with inboard and outboard motors for the fishing fleets, and to pour large sums of money into Greenland's public services, health, education, and housing, actions which gave an impetus to economic production and multiplied the amount of wage-employment. ...After 1953, when Greenland became part of the Danish realm, the subsidies from the mother country grew heavier still, until by 1962 they averaged yearly about $5,000 U.S. per Greenland family. Yet in spite of these subsidies says Boserup, the West Greenlander's personal income still equalled not more than 40 percent of that enjoyed by the average man in Denmark. (Emphasis added)¹⁵

¹³Jenniss, op.cit., p. 144.

¹⁴Hans. C. Christiansen, op.cit., p. 273. The sale values quoted appear to be understated in comparison with data from other sources quoted in this report. They do, however, provide an index of relative growth and indicate the general allocation of income to Greenlanders.

¹⁵Jenniss, op.cit., p. 148.
Boserup attempted to put the matter another way by a comparison of total resources used to support Greenlanders and Danes (rather than income received) on a per household, per capita and per consuming unit basis and concluded that:

...the money value of per capita resources used for consumption and investment is almost identical in Greenland and in Denmark proper. Thus, in a certain sense 'equality' can be said to have been achieved, but of the resource value used in Greenland less than one-fifth represents value produced by the Greenlanders themselves. Furthermore, the real value obtained by spending a krone in Greenland is far lower than that of spending a krone in Denmark. Thus, despite conspicuous improvement since the inauguration of the new era (1950), the level of living of the Greenland population continues to be quite modest compared to that of Denmark proper.\(^{16}\)

This is perhaps a more valid index of economic well being for purposes of comparison than the more familiar per capita income received. As noted by Jenness in his attempt to calculate per capita personal income received as a measurement of improved economic conditions in Greenland, the heavy public consumption factor limits the significance of personal income comparisons.

I had hoped to compare this table with similar income figures computed for the Eskimos of arctic Canada and perhaps also of Alaska; but after observing the superior living conditions in West Greenland and the much higher cultural level of its population, I decided that such a comparison would tell the reader little more than he could glean himself from pictures of Greenlanders and American Eskimos, from photographs of the interior of their homes, and from the records of their educational attainments.\(^{17}\)

The program of economic development through industrialization of the Greenland fisheries also required the importation of technicians, managers and skilled workers as well as large blocks of capital investment. Since 1950 the number of Danes in residence has grown at a more rapid rate than the expanding Greenland population. From 1860 through the 1930's Danes or Europeans accounted for only slightly more than two percent of the total population, approaching but not exceeding three percent during the 1940's. From 4.6 percent of total population in 1950, Danes in Greenland rose to 8.3 percent by 1960, 10.2 percent by 1965 and 14.7 percent by 1967.\(^{18}\) The jobs taken by these European migrants were dominantly in the top paying employments. Jenness found the composition of the employed workforce in January, 1963, to be made up of 24.7 percent Danes and 75.3 percent Greenlanders. However, the

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\(^{16}\)Boserup, op.cit., pp. 3-4

\(^{17}\)Jenness, op. cit., p. 148

\(^{18}\)Bornemaan, op. cit., pp. 2-3
highest paying occupations (management, foremen, and skilled craftsmen) were 65.8 percent Danes and only 34.2 percent Greenlanders, the intermediate paying service and clerical occupations 39.8 percent Danes and 60.2 percent Greenlanders, the low paying labor 11.8 percent Danes and 88.2 percent Greenlanders and the traditional maritime, fishing, and seal hunting occupations only 0.7 percent Danes and 99.3 percent Greenlanders.  

It was anticipated that in the light of the drastic nature of the economic and industrial reforms being undertaken, it would be necessary to import initially most of the higher skilled workers from Denmark, but it was also believed that this would be only a brief transition situation. One of the major disappointments, therefore, was that at the end of the first ten-year program there would still be a heavy and apparently growing reliance on Danish employees in the top positions with Greenlanders remaining in the low paying unskilled or traditional occupations. An analysis by Bornemann of the total labor force in Greenland in 1966 by educational or training requirements and by nationality presents a quantification of both the economic position of the Greenlanders in relation to the Danish workers and the importance of differences in levels of education and training attainment in causing and maintaining this imbalance (Table 7). In occupations requiring university or other higher education and technical training (including school teachers, professionals, etc.) only 21.6 percent were Greenlanders. Greenlanders accounted for 27.3 percent of workers in occupations requiring training in a craft or skilled trade (such as carpenters, etc.), 80.6 percent in office and business (mostly clerical) and 71.2 percent in service occupations requiring a modest amount of training. Significantly 94.1 percent of occupations requiring little or no training were taken by Greenlanders and the traditional Greenlandic occupations which required traditional training and experience rather than formal education or modern vocational training were 98.3 percent Greenlanders. The recognition of this situation and its causes resulted in a greater emphasis upon education and vocational training in the second ten-year program.

Since the beginning of the 60's the vocational training has undergone an explosive development. The number of pupils in the process of vocational training has increased tenfold since 1963 when there were about 130; the number being 1,400 in 1969. The capacity will be further increased when the new central vocational school is finished in 1970 with a capacity of about 200 pupils. From 1972, the number of Greenlandic pupils receiving vocational training will be more than 2,000 per year.

Population Growth and Mobility

The reform programs in Greenland since 1953 have stressed bringing the social amenities and the health and happiness of Greenlanders as nearly as possible, op. cit., p. 146. It is also significant to note that whereas Danes accounted for a quarter of the employed labor force in January of 1963 they counted for nine percent of the total population.

C. Bornemann, op. cit., p. 9.
### TABLE 7

**TOTAL LABOR FORCE IN GREENLAND, 1966**  
(excluding part-time workers)  
BY EDUCATION OR TRAINING AND NATIONALITY

<table>
<thead>
<tr>
<th>Education or Training</th>
<th>Greenlanders (Number of workers)</th>
<th>Danes</th>
<th>Total</th>
<th>Greenlanders as percent. of Total</th>
<th>Relative Labor Greenlanders (percentage)</th>
<th>Composite Force</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>University and other higher education</td>
<td>10</td>
<td>120</td>
<td>130</td>
<td>7.7</td>
<td>0.1</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>College of education and other teacher training</td>
<td>165</td>
<td>345</td>
<td>510</td>
<td>32.4</td>
<td>1.6</td>
<td>12.9</td>
<td></td>
</tr>
<tr>
<td>Technical</td>
<td>5</td>
<td>190</td>
<td>195</td>
<td>25.6</td>
<td>7.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-total</td>
<td>180</td>
<td>655</td>
<td>835</td>
<td>21.6</td>
<td>1.7</td>
<td>24.5</td>
<td></td>
</tr>
<tr>
<td>Skilled craftsmen</td>
<td>650</td>
<td>725</td>
<td>1.375</td>
<td>47.3</td>
<td>6.3</td>
<td>22.3</td>
<td></td>
</tr>
<tr>
<td>Office and business</td>
<td>925</td>
<td>605</td>
<td>1.530</td>
<td>60.5</td>
<td>9.0</td>
<td>22.8</td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>335</td>
<td>130</td>
<td>465</td>
<td>72.0</td>
<td>3.2</td>
<td>4.9</td>
<td></td>
</tr>
<tr>
<td>Hospital (incl. midwives)</td>
<td>180</td>
<td>105</td>
<td>285</td>
<td>63.2</td>
<td>1.7</td>
<td>3.9</td>
<td></td>
</tr>
<tr>
<td>Kitchen</td>
<td>315</td>
<td>100</td>
<td>415</td>
<td>75.9</td>
<td>3.0</td>
<td>3.7</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>830</td>
<td>335</td>
<td>1.165</td>
<td>71.2</td>
<td>7.9</td>
<td>12.5</td>
<td></td>
</tr>
<tr>
<td>Unskilled (little or no training)</td>
<td>4,655</td>
<td>290</td>
<td>4,945</td>
<td>94.1</td>
<td>44.9</td>
<td>11.9</td>
<td></td>
</tr>
</tbody>
</table>
possible to a level comparable to that enjoyed by other citizens of Denmark. It is
beyond the scope of this discussion to review and evaluate these important
factors in the development of modern Greenland and the interested reader is
referred to the excellent and comprehensive treatment given by Diamond
Jennings in the Greenland part of his last great work on Eskimo administration
and programs in the northern polar lands. Any discussion of the economic
situation and prospects cannot be complete, however, without consideration of
the results of these programs as reflected in the demographic data and
projections. In a closed economic and social system such as Greenland has been
they are of critical economic importance.

As noted in the Introduction to this part, the population of the Island
during the nineteenth century was stagnant, fluctuating slightly above or below
the 10,000 level. During the first half of this century it experienced continuous
growth at a modest rate, and since mid-century it has grown at an explosively
greater rate. From annual average net natural increases of about one percent in
the first decade of this century the rate rose to about two percent during the
1940's as a direct result of the expansion of the economic base by cod fishing in
the 1920's and then in response to increasing expenditures by the Danish
government for health and other public services during the 1930's and 1940's. In
1927 total population was reported at 15,838, and in 1945 at 21,412. The
proportion of Europeans or Danes in the total population maintained an almost
constant ratio to total population. In 1860 Europeans accounted for 2.3 percent
of total population, 2.3 percent in 1901, falling to 2.1 percent in 1938 and rising
to 2.7 percent in 1945. These were the teachers, clergy, medical personnel and
administrators. The relative regional population distribution within Greenland
remained remarkably constant. In 1921 East Greenland (the sealing districts)
accounted for 8 percent of total population and West Greenland (the fishing
districts) 92 percent. In 1945 the relative distribution was exactly the same.
There was a significant and accelerating movement within Greenland, however,
from smaller to larger concentrations of population. In 1901 towns accounted for
19 percent of total population, settlements 36 percent and tiny isolated outposts
45 percent. By 1930 towns accounted for 29 percent, settlements 38 percent,
and outposts 33 percent and by 1950 the continuing shift resulted in 47 percent
of total population in towns, 31 percent in settlements and 22 percent in
outposts.21

The reform programs have changed some of these data and accelerated
some trends. The annual average rate of population increase rose from two
percent during the 1950's to four percent and more during the 1960's. From
21,412 in 1946, total population rose to 33,140 by 1960, then 43,792 by 1967
and projections for 1975 are 53,600 and 1980 about 60,000.22 The

21 A.W. Bentsen, T. Agersnap, "Urbanization, Industrialization and
Changes in Family Life in Greenland During the Reform Period Since 1950," Fourth
International Congress, Arctic Development and the Future of Eskimo Society,
Le Havre, 1969. Also data collected from Jenness and Bornemaaen cited above.

Bornemaaen, op.cit., pp. 2-3.
concentration of population was a deliberate element of both the economic development and standard of living improvement aspects of the reforms, and these have combined to continue and accelerate the long-term trend of population into urban and larger population concentrations. By 1960 towns accounted for 59 percent of total population, settlements 29 percent and outposts 12 percent, and by 1967 towns had risen in importance to 87 percent and settlements had fallen to 25 percent and outposts to 8 percent. One of the objectives of the second ten year program is to have 81 percent of the total population in towns, 19 percent in settlements by 1975. Outposts would be used only on a limited seasonal basis with their former resident population in the towns or settlements of the district. In spite of all efforts to induce regional movement within Greenland, through housing and other subsidies, East Greenland rose slightly in relative importance accounting for 9 percent of the total population in 1965. As noted in the previous section, the reform programs have also brought in a higher ratio of Danes to Greenlanders in the total population. From 5.3 percent of total population in 1950, Danes accounted for 8.3 percent in 1960, 10.3 percent in 1965 and 14.7 percent in 1967. The distribution of the Greenlanders and Danes in the province by place is summarised in Table 8.

Other demographic impacts of the reform programs have been equally profound. Increased expenditures for health services resulted in rapid and dramatic reduction in deaths from infectious diseases. For example, a 1953 medical survey revealed six to seven percent of the total population of Greenland suffered from infectious tuberculosis, that from 1,500 to 2,000 needed immediate attention and that the disease was carrying off 150-200 victims annually. An intensive campaign was waged by the Health Service with dramatic results. From the rate of 8.0 per 1,000 population in the early 1950's the rate of deaths from tuberculosis had fallen to 0.9 per 1,000 population by 1958. By the mid 1960's it had fallen from first place as a cause of death to twelfth place and 1967 was the first year without any deaths from tuberculosis. Accidents are Greenland's highest present cause of death given the nature of its coasts and basic occupation of its people, but infant mortality (death of infants under the age of twelve months) continues as Greenland's most serious health problem. As Jenness notes, "The rate has fallen, to be sure, from 134.2 per 1,000 in 1948 to 65.9 per 1,000 in 1965, but it still remains more than three times the corresponding rate in Denmark." This suggests that even greater improvement in reducing death rates should be a reasonable expectation. Although highly desirable from a humanitarian standpoint, however, such health improvement will result in further adverse economic effects.

In 1965, of a total population of 35,027 persons, 19,900 were of an age to be considered part of the labor force. The resulting ratio of dependents to potential workers of 3.1 to 1.0 is high, but as Jenness observed in 1967, this will...

24 Jenness, op. cit., p. 155 and Bornemann, op.cit., p. 3.
25 Jenness, op. cit., p. 156.
<table>
<thead>
<tr>
<th>Place</th>
<th>Total Population</th>
<th>Danish No. Persons</th>
<th>Greenlanders No. Persons</th>
<th>As % Total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fishing Districts</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southern</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nanortalik</td>
<td>1,074</td>
<td>129</td>
<td>945</td>
<td></td>
</tr>
<tr>
<td>Aasiaat</td>
<td>2,198</td>
<td>389</td>
<td>1,809</td>
<td></td>
</tr>
<tr>
<td>Narsaaq</td>
<td>1,441</td>
<td>196</td>
<td>1,265</td>
<td></td>
</tr>
<tr>
<td><strong>Sub-Total</strong></td>
<td>4,713</td>
<td>714</td>
<td>4,015</td>
<td>14.4</td>
</tr>
<tr>
<td><strong>Open Water</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frejlevik</td>
<td>1,267</td>
<td>235</td>
<td>1,112</td>
<td></td>
</tr>
<tr>
<td>Godthul</td>
<td>4,681</td>
<td>1,283</td>
<td>3,568</td>
<td></td>
</tr>
<tr>
<td>Suhkertopper</td>
<td>2,138</td>
<td>250</td>
<td>1,888</td>
<td></td>
</tr>
<tr>
<td>Holmen, Godthul</td>
<td>2,198</td>
<td>299</td>
<td>2,199</td>
<td></td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td>10,070</td>
<td>2,067</td>
<td>8,003</td>
<td>81.4</td>
</tr>
<tr>
<td><strong>Disko Bay</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eqi-Gletscher</td>
<td>2,407</td>
<td>307</td>
<td>2,190</td>
<td></td>
</tr>
<tr>
<td>Christianhav</td>
<td>1,151</td>
<td>140</td>
<td>1,011</td>
<td></td>
</tr>
<tr>
<td>Alkefjellet</td>
<td>1,207</td>
<td>178</td>
<td>1,029</td>
<td></td>
</tr>
<tr>
<td>Assaqtag</td>
<td>1,407</td>
<td>113</td>
<td>1,294</td>
<td></td>
</tr>
<tr>
<td>Godhavn</td>
<td>744</td>
<td>89</td>
<td>655</td>
<td></td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td>7,660</td>
<td>827</td>
<td>6,923</td>
<td>89.3</td>
</tr>
<tr>
<td><strong>Total Towns</strong></td>
<td>23,353</td>
<td>3,608</td>
<td>19,845</td>
<td>84.5</td>
</tr>
<tr>
<td><strong>Settlements</strong></td>
<td>8,338</td>
<td></td>
<td>8,338</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total Fishing</strong></td>
<td>31,691</td>
<td>3,608</td>
<td>28,183</td>
<td>88.8</td>
</tr>
<tr>
<td><strong>Sealing Districts</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upernavik</td>
<td>361</td>
<td>16</td>
<td>335</td>
<td></td>
</tr>
<tr>
<td>Upernavik</td>
<td>207</td>
<td></td>
<td>207</td>
<td></td>
</tr>
<tr>
<td>Assaqtag</td>
<td>244</td>
<td></td>
<td>244</td>
<td></td>
</tr>
<tr>
<td>Scoresby Sound</td>
<td>291</td>
<td>35</td>
<td>256</td>
<td></td>
</tr>
<tr>
<td><strong>Total Towns</strong></td>
<td>2,960</td>
<td>349</td>
<td>2,611</td>
<td>88.2</td>
</tr>
<tr>
<td><strong>Settlements</strong></td>
<td>4,441</td>
<td></td>
<td>4,441</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total Sealing</strong></td>
<td>7,401</td>
<td>349</td>
<td>7,041</td>
<td>96.3</td>
</tr>
<tr>
<td><strong>Districts</strong></td>
<td>30,964</td>
<td>3,967</td>
<td>30,027</td>
<td>98.8</td>
</tr>
</tbody>
</table>

Source: C. Børnemann, op. cit. p. 30.
Increase as health standards improve, and Denmark is determined that health will improve.

Very few of the islanders, hardly more than six percent, survive their 5th year; but replacing them are the multitudes of children who swarm in every settlement. One-fourth of the entire population is below school age, and over 40 percent has not yet reached the age of 14. Their number imposes a heavy economic strain on the parents, unless the wife as well as the husband earns a steady wage; and it imposes an equally heavy strain on the government, which must provide adequate housing, schools, medical care and, as far as possible, full employment. At its present rate of increase, over 4 percent, Greenland's population will double within 25 years, unless emigration drains away a considerable proportion; and if the birth rate remains as high as now it will continue to be a population of predominantly young people who will never cease to demand more and more homes, more and more schools, more and more employment opportunities and at the same time, perhaps, more of those things which we dwellers in temperate climes have come to consider necessities, but which the present-day Greenlanders still regard as pure luxuries.26

The simple Malthusian formulation of the future Greenland situation as one of a relatively fixed and limited natural resource base and a population increase at the rate of four percent per year is an alarming prospect. As concluded by Bornemaan in his review of the economic situation under the reform:

The objective has been to build up a viable community in Greenland with an acceptable standard of living, which, however, must be commensurate with the economic conditions in Greenland. But today many people are in doubt whether there is an economic base in Greenland for a society which has not only a rapidly increasing population, but which is, at the same time, on its way towards a European standard of living.

The projections of the labor force are an increase from 10,360 persons in 1966 to 13,800 by 1975 and 16,000 by 1980, which necessitates the creation of a total of 5,640 new jobs over the 14 year period! After reviewing the rather limited economic prospects ahead, Bornemaan concludes:

The difficulties facing trade and industry have weakened the faith in the possibility of securing employment for the constantly increasing population in Greenland proper. Many people find that attempts should be made to stabilize the population figure at the estimated 1985 level (about 86,000 inhabitants) by an intensive campaign for family planning and by a limited emigration.27

Some margin for a few more years will be provided by a program of eventual replacement of all Danes now employed in Greenland by Greenlanders, but this does not begin to face the issue squarely. The Danish economy is capable of supporting the present heavy subsidy of Greenland and apparently there is a general willingness to do so if no other alternative presents itself. But the true cost to Denmark is the bypassing of other investments that might have greater economic and social payoffs than maintaining a separated Greenland economy and society and the cost to Greenland will be measured in paternalism and a continuing and increasing sense of inferiority.

Writing on the eve of the launching of the second ten year plan, Diamond Jenness characterized the continued reliance only upon internal population relocation and economic development with no emigration as a great lottery.

If the shoals of cod rapidly and consistently diminish during the ten years, whether through excessive exploitation on the fishing banks, an imperceptible or barely perceptible reduction in the strength of the Irminger branch of the Gulf Stream, or any other cause, the plan will fail, or at least fall short of complete success, and much of the sacrifice of the Danish people will have been fruitless. If the cod, though decreasing perhaps in actual numbers, diminish so slowly that for ten or fifteen years their decline hardly affects the catch, then by the end of that period the Greenlanders should have progressed so far educationally that a sufficient number of them will be able to emigrate to Denmark and painlessly diffuse among its European inhabitants, and this emigration, combined with a decline in the birth-rate, may more nearly balance the population with Greenland's natural resources.

Continued rejection by both Greenlanders and Danes of emigration he fears to be a rejection of the “only alternative to pauperism and starvation.”

Cultural Separatism vs. Economic Equality

Mogens Børærup in his analysis of Greenland’s economic future which has been drawn upon in this discussion, concluded that true equality with the modern world, the stated goal of the reforms since 1953, can only be accomplished by the full integration of Greenlanders into the modern world. The paths of subsidized or autonomous economic development and subsidized standards of living can only achieve an intermediate position which could collapse immediately upon a policy reversal. This path has had the principal permanent effect of raising the expectations of the Greenlanders above those offered by their traditional economy and society. These expectations can only be met on a continuing basis by full participation in the modern Danish society. Vocational education, training and experience are important elements in achieving the necessary integration, but ultimately the economic and social future of Greenland depends upon the people’s ability to discover and accept the necessity of cultural change.

Behind everything that has been said in this paper lies the conviction that modernism has come to stay in Greenland, and that the alternative of retreat to the traditional hunting society simply does not exist. The Greenland society is in an uneasy, often ugly, situation of transition where the harmony of the old society has gone and no new balance has been found. Since there is no way back, it seems logical to shorten this period of painful transition by unfaltering pursuance of the modernization policy, including the concentration policy, increased influence for the Greenlanders in matters of public spending, and, last but not least, a policy of linguistic reorientation as a means of raising the Greenlanders to true equality, with the Danes.

The nature of the painful transition is inherent in much of the statistical data reviewed above. Progress toward achievement of the goals set up in 1948 has been made, but not at the rate hoped for. Aside from the physical limitations of climate, resources, and location, there has been resistance to modernization implied in the failure to relocate population significantly from the economically and amenity depressed sealing districts to the economically growing fishing districts. There has been vocational resistance to change apparent in the continued heavy reliance upon an imported Danish labor force to fill the professional and skilled occupations essential to modernization and the continued following of traditional hunting and fishing pursuits by a large majority of the Greenland labor force. These reflect cultural factors. As one Danish commentator quoted above has noted:

In Greenland there is no old tradition to support the education, training and readjustment of the labour force with a view to modern production. This is a process which requires a great deal of time, a fact which is often forgotten when evaluating the policy pursued in Greenland since 1950.

The process is one of substituting a new tradition for the old tradition before education and training can be effective, but which requires education to produce the changed cultural traditions.

Jenness saw the continued teaching in the Greenlandic language as imposing a serious limitation upon the educational and economic attainment of the people both in terms of limiting the scope of their education and tying future generations to a dead culture.

The requirement since 1950 that Greenland children should study two languages from their ninth year onward restricts the hours they can spend on other subjects, and weights their curricula rather heavily. The burden persists for those who aim at a professional career and pass on to the Godthab high school, for there they must

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29 M. Boserup, op. cit., p. 19.
30 R. N. Rasmussen, op. cit., p. 299.
maintain their studies both of Danish and Greenlandic, and also add one, and perhaps two other languages, German and English, if they hope to continue their education in Denmark, since the last two languages are compulsory in all Danish gymnasia. German and Danish are kindred languages, and an individual who has acquired one as his native tongue easily learns to speak the other, but the Eskimo language differs entirely from any European tongue in both thought-pattern and structure. If the Greenlandic language could be readily developed to meet the needs of modern commerce, science and technology — which it cannot — there might be strong grounds for easing the load on the children by delaying the teaching of Danish until high school. But the clock of change never runs backward; and the Greenlanders cannot return to their ancient isolation. Unless they are prepared to see their children and grandchildren become the coolies of outsiders, they must encourage the present generation to endure the burden of mastering some internationally known language that will give them a role in world affairs, small though that role might be.31

Many Greenlanders and some Danes do not hold this view of the key role of the teaching of language in the process of achieving economic equality. These persons would put the preservation of cultural identity above economic and amenity goals, even if this meant the continuation of Greenland as a gold-plated Native reserve. But Boserup, although recognizing and respecting these aspirations, considers them to be totally unrealistic and insists that language reform must be immediate.

To be more precise, I believe it would be a good thing in all those schools where Danish can be taught, to discontinue the teaching of the Greenland language to the new generations of children entering school from now on. Furthermore, I believe that the Greenland language should be gradually abolished also as the teaching medium. This assumes willingness among the Greenland population to accept the postulate, shocking as it may seem at first, that the Greenlanders must become Danish-speaking even at the risk that their own Eskimo language will gradually fall into disuse. This may be regarded as a tough and even brutal standpoint, and most, though not all, Greenlanders find it unacceptable today. I am fairly optimistic, however, with regard to the possibility of convincing leading Greenlanders, and through them the Greenland population at large, that this policy, though painful, is the essential condition for eliminating the Greenlander's status of inferiority and thus to achieve real equality.32

31 Jenness, op. cit., p. 160.
The discussion of the Greenland economic situation has focused upon post
World War II efforts to change the island into an approximation of a modern
Danish community capable of supporting its indigenous residents at a suitable
standard of living with an economy and political system capable of "paying its
own way." The analysis has dealt with public investment and the changes in
structure and functioning of the economy, the levels of income and population
shifts. The attempts to "better" the lot of the indigenous peoples of Alaska have
generally been through educational programs which until very recently have
stuck to the guidelines initially set down in 1890:

...the education to be provided for the Natives of Alaska should fit
them for the social and industrial life of the white population of the
United States and promote their not-too-distant assimilation.... The
children shall be taught in the English language, reading, writing,
arithmetic, geography, oral history, physiology, and temperance
hygiene. No text-books printed in a foreign language shall be
allowed. Special efforts shall be put forth to train the pupils in the
use of the English language.33

Thus the emphasis of programs aimed at improving the economic situation of
Alaska's Natives was placed on an educational process that would facilitate
"population transfers" and promote "upgrading skills of resident workers." In
short, they were to cease being Natives in the shortest time possible.

The Greenland case emphasized changing the economic context, while the
Alaska case emphasized changing the people to fit into a different economic
context. The discussion of the Alaska case, accordingly, will not follow the
format of that of the Greenland case, but will focus on demographic analysis. It
will be carried out on a longer historical scale and will attempt to relate
population and economic development as a means of measuring the degree to
which the official policy of assimilation has advanced. The appropriateness of
these objectives will not be treated here.

Alaska's Native population is composed of several ethnic groups having
distinctive cultural and physical characteristics, but all sharing the common
ones of aboriginal ancestry and residence in Alaska. At the time of the first
European contacts, the southeast region had an estimated 10,000 Tlingit and
1,800 Haida Indians who were part of the high primitive culture of the
northwest coast of North America. The mild climate and abundance of readily
harvestable marine resources provided the wealth and leisure for elaboration of a

33Quoted in Diamond Jenness, Eskimo Administration: I Alaska, Arctic
remarkably rich culture and sophisticated social system. Several subdivisions of the Western Eskimo and Aleut inhabited the Arctic, Bering Sea, Aleutian, and Gulf of Alaska coastal regions and at places penetrated inland as hunters of caribou. The estimates of the Western Eskimo at the time of first "historical" contacts put about 6,300 along the Arctic coast, 300 Siberian Eskimos on St. Lawrence and the Bering Strait, 11,000 along the Bering Sea coast and the Yukon and Kuskokwim delta lands, and 8,700 on Kodiak Island and along the Gulf coast as far east as the Copper River delta. An estimated 16,000 Aleuts followed a maritime existence along the chain of the Aleutian Islands and on to the Peninsula. Some 6,900 representatives of the Northern Athapaskan were scattered in small tribal groups throughout the vast woodlands of interior Alaska and had penetrated through the Alaska Range southward into the Cook Inlet and Copper River regions.

Following the first contacts with western civilization, most of the Native Alaskans were simply by-passed by the course of economic development. There were important exceptions. The Aleuts were forced to become involved during the Russian period because they lived in the regions rich in fur seal and sea otter. In the process their aboriginal society and culture were destroyed and their numbers drastically cut down. During the American period the coastal Eskimos suffered death from starvation and diseases brought by the whalers who virtually extinguished the walrus and whale resources upon which the Natives depended for survival. The southeast Indians managed to keep the white invaders at arm's length because of their savage and warlike reputations, but their downfall came near the end of the nineteenth century when commercial fishermen and cannerymen from California and the northwest coast invaded and took over their fisheries. The turn of the arctic and interior Eskimo and interior Indians came when Alaska shifted from its colonial to its military period. Finally, all were embraced by the coming of the welfare state to Alaska in the 1930's when national programs designed to meet the needs of a twentieth century urban-industrial society were uniformly applied to a people still far from that condition.

The results of these contacts between Native Alaska and the now mainstream of Alaska's economic development did bring some benefits and opportunities for participation; marginal at best. Whether they participated or not, their very survival required adaptation of their traditional ways to the new conditions imposed by the altered environment.

A review of the official Alaska Native position as stated in documents from the Russian period to the 1968 publication by the Federal Field Committee for Development Planning in Alaska of its contribution "to a fair and intelligent resolution of the Alaska Native problem," however, gives the impression of a clear policy of increasing the fullest participation of the Alaska Native in the development process and in the sharing of its benefits, an assimilation policy which has remained steadfast for more than a century and a half. But the record reveals that there has been no progress, and the 1968 report still finds the Alaska for the most part living in "places where the population is largely of
Native origin” and which are characterized by an “appallingly low income and standard of living, and the virtual absence of opportunity.”

Economic Development and Population

European explorations of the Pacific Northwest during the eighteenth century prepared the way for the extension of the Russian and the British fur trades into what is now Alaska and launched the colonial development of Alaska. For varying periods of destructive exploitation, whaling (1847-53) and the harvesting of fur seal and sea otter pelts (1768-1911), together with a variety of land furs, set the pattern; but within ten to twenty years after the transfer to the United States, the primary base had begun to shift to other resources. The beginnings of the canned salmon industry (1878 in southeastern and 1882-84 in central and western Alaska), the discovery of gold lode deposits in southeastern Alaska (1880), and the gold placers of Nome and in the Interior (1898-1906) provided the base for an expanded colonial economy. Between 1911 and 1938 copper ore production from the Kennecott mines made a further major contribution (from 1915 through 1928 value of copper production exceeded that of gold), and a few other natural resources made very minor contributions. During the 1931-40 decade, the most recent decade for a predominantly peacetime civilian economy, average annual value of out-shipments totaled $58,758,000, of which the two leading items were canned salmon ($32,582,000, or 55.1 percent of total shipments), and gold ($15,764,000, or 26.6 percent). Defense was an insignificant element in the total economy: the average annual expenditures were $1.5 million for the five fiscal years 1933 through 1937.

Colonial Alaska was eclipsed between 1940 and 1942 by the coming of World War II to Alaska. For the next two decades defense, government, and supporting economic activities were Alaska’s basic economy. Employment income generated by all of Alaska’s fisheries, canneries, and other processing plants, and pulp mills, mines, farms, traplines, etc., combined was exceeded by the military payrolls, and military personnel alone was equalled by that in tertiary industries other than government and was just barely above that arising from the single industrial classification “contract construction.” By the advent of the sixties, the defense economy had leveled off and its employment and income-producing capacity began to decline. The economy was


beginning to shift to another base reflecting the state’s increasing international importance as a strategic link in intercontinental air travel and transportation, and as a source of a broad range of natural resources for domestic and foreign markets. From the peaks of expenditures for construction, procurement, and R&D during the mid-1940’s and early 1950’s, the annual expenditures of the United States Department of Defense have shown a steady decline. An indication of the nature and magnitude of this shift in the basic economy can be measured by comparing a few key statistics for the year 1953, the last of the clearly defense dominated years, with the year 1970. Department of Defense spending declined from $512.9 million in 1953 to $33.4 million in 1970 (all values in unadjusted current dollars). The value of wood products had been negligible prior to the construction of the first pulp mill in 1954, after which it rose from $6.6 million in 1953 to $108.0 million in 1970. There had been no significant production of petroleum or natural gas until the discoveries at Swanson River on the Kenai Peninsula in July 1957 ushered in the Kenai and Cook Inlet oil and gas booms. The value of petroleum and natural gas production from these fields during 1970 was $256.7 million. The discoveries in July 1968 at Prudhoe Bay on Alaska’s Arctic slope, with estimates of reserves ranging from 5 to 10 billion barrels, caused a rush of exploration and development activities. Fisheries production rose in value from $69.6 million in 1953 to $213.9 million in 1970, reflecting improvements in salmon catch for that year (a good year in most areas) but also expansion of new fisheries in king crab and other shellfish. The immediate prospect for greater natural resource development looks excitingly promising.

Population trends are the end product of economic and social factors and can serve as convenient means for approximating the direction, levels, and the timing of the important turning points in development trends which are difficult to identify and measure. The last two hundred years of Alaska’s past can be restated with population data summarized from estimates of the number of Alaskans at the time of the first European contacts through a selection from the several Russian and United States census reports (Table 9). The expansion of commercial fisheries and gold mining is reflected in the rise in non-Native population from the few hundred during the Russian and Initial United States periods to 34,056 and 39,025 in the 1900 and 1909 census counts. The period of stabilization and stagnation of the basic economy of gold, fish, copper, and furs is reflected in the decline between 1909 and 1929 in non-Native population, and the effects of the Great Depression outside Alaska in stimulating increased gold production and a “return to the land” by the regaining of the 1909 population level by 1939.

The dramatic expansion in population by 1950 can be traced directly to the movement of large numbers of military or defense personnel into Alaska, jumping from 524 in 1939 to 20,643 in 1950. Counting the increase in military personnel alone does not indicate the full magnitude of this new source of population. Accompanying those in uniform were an equal number of dependents, several thousand civilian employees of the Department of Defense (and their dependents), and a fluctuating labor force of construction, services, and supporting workers directly related to the construction and
### TABLE 9

**GENERAL POPULATION TRENDS IN ALASKA, 1740-1960**

<table>
<thead>
<tr>
<th>Year of Date</th>
<th>Total No. of Persons</th>
<th>Trend (^a)</th>
<th>Total No. of Persons</th>
<th>Trend (^a)</th>
<th>Total No. of Persons</th>
<th>Trend (^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circa 1740-80</td>
<td>74,000</td>
<td>24.5</td>
<td>74,000</td>
<td>100.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1839</td>
<td>39,813</td>
<td>13.2</td>
<td>39,107</td>
<td>52.9</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1840</td>
<td>33,426</td>
<td>11.1</td>
<td>32,996</td>
<td>44.6</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1850</td>
<td>32,052</td>
<td>10.6</td>
<td>25,354</td>
<td>34.3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>June 1900</td>
<td>63,592</td>
<td>21.0</td>
<td>29,536</td>
<td>39.9</td>
<td>34,056</td>
<td>13.6</td>
</tr>
<tr>
<td>Dec. 31, 1909</td>
<td>64,356</td>
<td>21.3</td>
<td>25,331</td>
<td>34.2</td>
<td>39,625</td>
<td>15.6</td>
</tr>
<tr>
<td>Jan. 1, 1920</td>
<td>55,036</td>
<td>18.2</td>
<td>26,558</td>
<td>36.0</td>
<td>28,478</td>
<td>11.4</td>
</tr>
<tr>
<td>Oct. 1, 1929</td>
<td>59,278</td>
<td>19.6</td>
<td>29,983</td>
<td>40.5</td>
<td>29,295</td>
<td>11.7</td>
</tr>
<tr>
<td>Oct. 1, 1939</td>
<td>72,524</td>
<td>24.0</td>
<td>32,358</td>
<td>43.8</td>
<td>40,066</td>
<td>16.0</td>
</tr>
<tr>
<td>Apr. 1, 1950</td>
<td>128,643</td>
<td>42.6</td>
<td>33,863</td>
<td>45.8</td>
<td>94,780</td>
<td>37.8</td>
</tr>
<tr>
<td>Apr. 1, 1960</td>
<td>226,167</td>
<td>74.8</td>
<td>43,081</td>
<td>58.2</td>
<td>183,086</td>
<td>73.1</td>
</tr>
<tr>
<td>Apr. 1, 1970</td>
<td>302,173</td>
<td>100.0</td>
<td>51,712 (^b)</td>
<td>69.9</td>
<td>250,461</td>
<td>100.0</td>
</tr>
</tbody>
</table>

\(^a\) Number of persons expressed as percentage of maximum for each series.

\(^b\) Partly estimated; Eskimo and Aleut included with “other races” in 1970 census reports.

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maintenance of the new Alaska military establishment. In view of the decline of the pre-World War II based economy, virtually all of the increased population between 1939 and 1950 might be attributed to the shift in the basic economy from the limited base of the first half of the twentieth century to a military economy.

The level of military personnel continued to rise and remained at about 50,000 for the period from 1952-1957. There was a sharp drop to about 35,000 in 1958 (due to technological changes), to 33,000 in 1960 and 30,000 in 1970.

The stabilization of military personnel during the 1950's and subsequent decline during the 1960's would be expected to be reflected in similar behavior in the military-related civilian economy, but the total population has continued to rise since 1960. New natural resource developments (particularly petroleum and forest products) and the expansion of civilian government services following statehood created more jobs and a new in-migration of workers and their families.

Segregation of these data by Native and non-Native persons, and more recently military and their dependents, reveals quite distinctive trends among these major components of Alaska's total population which are obscured or lost in their combination (Table 9). These components each have quite different characteristics and their trends represent response to different forces. The least complicated is the combination of military personnel, Defense Department civilian employees, and the dependents of both these employed groups. Together these persons are a pool of population increasing or decreasing in size in response to forces external to Alaska but retaining a relatively stable range of age, sex, and occupation patterns administratively determined by the forms of employment required by the defense establishment practices of rotation of personnel and dependents on a relatively short tour-of-duty basis.

The Native population dynamics have been primarily the result of natural forces of fertility and mortality, there being, until recently, very little migration out of Alaska and relatively little within the region of Alaska. These biological forces were modified by the nature of contacts with non-Native people. Reviewing past trends, the general decline from an estimated 74,000 persons circa 1740-1780 to about one-third that number during the first two decades of the present century follows the classic pattern of the disruptive contact between a self-sufficient subsistence culture of an aboriginal people and specialized and exploitative colonial forces bringing depredations of unfamiliar diseases. The accelerating increase in Native population starting in the late 1920's and assuming explosive proportions in the 1950's, reflects generally successful programs of public health and welfare in keeping people alive, and an absence of official birth control programs.

The remainder of the population, the non-Native and non-defense-related population, is the most erratic in its trends over time, in or out-migration in response to economic factors being its primary determining force. These data reflect an almost purely economic development population response. Outside workers have come in when jobs were available and have left when they reached retirement age or their employment ended.
A study of data gathered in terms of local statistical units (census divisions, election districts, administrative areas, etc.) indicates that there have been and are several contrasting sub-economies within the state, each with different structure and often opposing trends. For this analysis a five unit division of the state will be used which has been widely used in other studies since first proposed to the State Division of Planning in 1962 as a representation of natural regional combinations of elements with economic development focus.

1. Southeast Region (land area 37,566 square miles), set off from the rest of the State by the Malaspina Glacier and the St. Elias Range, comprises the many islands of the Alexander Archipelago and a strip of mainland extending along the northwest corner of British Columbia. Gold mining disappeared from the regional economy with World War II, but fisheries have continued and forest products (primarily wood pulp) have been the source of recent growth.

2. Southcentral Region (land area approximately 80,000 square miles) comprises the southcentral coastal area of Alaska south and east of the arc of the Alaska Range. It includes the Susitna River basin, Cook Inlet and its tributaries, the Copper River basin, and Kodiak Island and other islands in the Gulf of Alaska. Its economy includes the main military, finance, trade, and transportation center of the state, important fisheries and the developed and producing petroleum areas.

3. Southwest Region (land area approximately 150,000 square miles) includes the Alaska Peninsula, Aleutian Islands, Bering Sea islands south of latitude 62 degrees north, the Bristol Bay drainage, Kuskokwim River basin, and the lower Yukon River basin (south of 64 degrees north). Bristol Bay contains the most important red salmon resource in Alaska, and the Aleutian Islands major defense facilities, but for the most part the economy is a combination of subsistence and welfare.

4. Interior Region (land area approximately 180,000 square miles) includes the remainder of the Yukon River basin, the Tanana and Koyukuk River basin. Until the recent closing down of dredging operations, this was the “Golden Heart of Alaska.” It is the second most important military region and is one transportation gateway to the North Slope petroleum provinces.

5. North Slope and Northwest Region (land area approximately 125,000 square miles) is the remainder of the state, its extreme northwestern corner and the arctic (or North) slope. Mining and furs have provided the basic economy, but petroleum development activities presently overshadow all else.

These five regions are not only different in terms of physical geographic characteristics and natural resource endowment, but exhibit clearly different economic and social characteristics and trends. The distribution of the census enumerations by major population components among these regions reveals over time further aspects of their behavior. Within each of the regions the Native population exhibits a similar U-shaped curve. The non-Native population for each region exhibits considerably more erratic behavior than for the total Alaska as counterbalancing effects of opposing regional trends are now eliminated (Table 10).
<table>
<thead>
<tr>
<th>Year or Date</th>
<th>Southeast</th>
<th>Southcentral</th>
<th>Southwest</th>
<th>Interior</th>
<th>Northwest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circa 1740-80</td>
<td>11,800</td>
<td>—</td>
<td>3,700</td>
<td>—</td>
<td>26,000</td>
</tr>
<tr>
<td>1880</td>
<td>7,455</td>
<td>293</td>
<td>4,318</td>
<td>34</td>
<td>13,825</td>
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<tr>
<td>1890</td>
<td>5,967</td>
<td>2,071</td>
<td>3,566</td>
<td>2,546</td>
<td>10,660</td>
</tr>
<tr>
<td>June 1, 1900</td>
<td>5,800</td>
<td>8,550</td>
<td>4,000</td>
<td>6,000</td>
<td>9,600</td>
</tr>
<tr>
<td>Dec. 31, 1909</td>
<td>5,866</td>
<td>9,350</td>
<td>3,205</td>
<td>9,695</td>
<td>7,326</td>
</tr>
<tr>
<td>Jan. 1, 1920</td>
<td>5,357</td>
<td>12,045</td>
<td>3,000</td>
<td>8,173</td>
<td>10,151</td>
</tr>
<tr>
<td>Oct. 1, 1929</td>
<td>5,990</td>
<td>13,314</td>
<td>3,559</td>
<td>8,321</td>
<td>10,735</td>
</tr>
<tr>
<td>Oct. 1, 1939</td>
<td>6,502</td>
<td>18,739</td>
<td>3,974</td>
<td>10,907</td>
<td>10,858</td>
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<tr>
<td>Apr. 1, 1950</td>
<td>7,929</td>
<td>20,274</td>
<td>3,783</td>
<td>46,395</td>
<td>10,838</td>
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<tr>
<td>Apr. 1, 1960</td>
<td>9,242</td>
<td>26,161</td>
<td>5,514</td>
<td>103,337</td>
<td>14,314</td>
</tr>
<tr>
<td>Apr. 1, 1970</td>
<td>8,354</td>
<td>34,211</td>
<td>9,723</td>
<td>154,069</td>
<td>17,364</td>
</tr>
</tbody>
</table>

## TABLE 11

ANNUAL ESTIMATES OF ALASKA'S RESIDENT NON-NATIVE AND NATIVE POPULATIONS, BY REGION, 1940 - 1968

<table>
<thead>
<tr>
<th>July 1</th>
<th>Southeast</th>
<th>South Central</th>
<th>Southwest</th>
<th>Interior</th>
<th>Northwest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Native</td>
<td>Non-Native</td>
<td>Native</td>
<td>Non-Native</td>
<td>Native</td>
</tr>
<tr>
<td>1940</td>
<td>6.5</td>
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<td>4.0</td>
<td>11.0</td>
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</tr>
<tr>
<td>1945</td>
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<td>3.9</td>
<td>59.1</td>
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<td>22.1</td>
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<td>10.8</td>
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<td>24.0</td>
<td>4.4</td>
<td>106.1</td>
<td>12.1</td>
</tr>
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<td>9.2</td>
<td>26.8</td>
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<td>103.5</td>
<td>14.3</td>
</tr>
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<td>28.1</td>
<td>5.8</td>
<td>110.2</td>
<td>14.9</td>
</tr>
<tr>
<td>1962</td>
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<td>28.6</td>
<td>6.2</td>
<td>117.7</td>
<td>15.4</td>
</tr>
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<td>1963</td>
<td>9.3</td>
<td>29.4</td>
<td>6.5</td>
<td>115.9</td>
<td>15.9</td>
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<td>31.8</td>
<td>7.0</td>
<td>116.8</td>
<td>16.2</td>
</tr>
<tr>
<td>1965</td>
<td>9.0</td>
<td>33.3</td>
<td>7.4</td>
<td>125.2</td>
<td>16.6</td>
</tr>
<tr>
<td>1966</td>
<td>8.8</td>
<td>34.0</td>
<td>7.9</td>
<td>126.8</td>
<td>16.7</td>
</tr>
<tr>
<td>1967</td>
<td>8.5</td>
<td>35.5</td>
<td>8.4</td>
<td>129.1</td>
<td>16.9</td>
</tr>
<tr>
<td>1968</td>
<td>8.4</td>
<td>36.1</td>
<td>8.9</td>
<td>133.6</td>
<td>17.0</td>
</tr>
<tr>
<td>1969</td>
<td>8.5</td>
<td>37.3</td>
<td>9.4</td>
<td>142.5</td>
<td>17.2</td>
</tr>
<tr>
<td>1970</td>
<td>8.4</td>
<td>34.2</td>
<td>9.7</td>
<td>154.1</td>
<td>17.4</td>
</tr>
</tbody>
</table>

(12-month average, thousands of persons)


Native population for 1961 through 1968 estimated from vital statistics with adjustment for other factors (e.g., migration) projected from 1950-1960 and 1960-1970 experience.
A more detailed examination and analysis of the period of transition from 1940 to 1970 is provided by shifting the analysis from decennial census data (which have the dual disadvantage for Alaska of being too infrequent and coming at the wrong time of the year) to annual population estimates for the state made by the United States Bureau of the Census and by the Alaska Department of Labor. Table 11 summarizes these annual population estimates for Alaska and its five major regions. The annual changes in non-Native population are even more erratic than the behavior revealed in the decennial census reports, reflecting population response to the shifting role of Alaska in national defense strategies since 1940. Reviewing the trends from 1940 by five-year periods, 1940-45 experienced average annual rates of increase of approximately twenty percent, 1946-50 average rates of decrease of approximately one-half of one percent, 1955-1960 a period of almost complete stability (rates of increase averaged only two-tenths of one percent), 1960-1970 an average rate of two and two-tenths percent.

The turning points in these trends can be matched by development turning points: the frantic defense build up between 1940-1943, the shift of strategic importance from Alaska to elsewhere following the successful Aleutian campaign and the Pacific battles of 1943 and 1944, the virtual shut down of the Alaska defense establishment in the all too brief period of peace at the end of World War II, and, with only a minor diversion during the Korean War, the construction activities and defense staffing which established Alaska in a permanent and key position in the northern hemisphere defense system. It was not until the 1960’s that the population trend assumed a relatively steady and moderate continuing growth, but even this was disrupted by the effects of the 1964 earthquake and the reconstruction period following. The regional population trends reflect the concentration of the main defense activities in the south central and interior regions and to a lesser degree in the southwest region, and the virtual absence of these forces of population change in the remaining two regions.

In contrast, Native population experienced continuously increasing average annual rates of growth for the same five-year periods: 0.3%, 0.5%, 2.1%, 2.7%, and 2.6%. The Native population trends have all exhibited some decline in annual rates of net natural increase during the last five years, but the general level of rates of growth have differed regionally.

Native Population Response to Economic Development — the Geographic Dimension.

The different patterns and trends of Native and non-Native population, suggest a means of making a rough measurement of the degree of Native population "under-response" to economic development. The discussion of non-Native population trends in the past suggested that their volatile nature reflecting in-and out-migration and migration within Alaska in response to...
fluctuating employment is the dominant determinant of the level of distribution of this population. The non-Native, non-defense population prior to 1970, therefore, represents what might be called the "economic development effect" translated into population and geographic terms.

In Table 12 the 1940-1970 Native population for total Alaska was reallocated among the five major regions in the same proportion as the reported regional distribution of the non-Native, non-defense population for the same period. This regional redistribution would be approximated only if Native population had been as responsive to geographic shifts in economic development as the non-Native. A comparison of these hypothetical distributions with the actual distributions gives one partial measure of the degree to which Native people have not been responsive to economic development forces in the past. Being at or getting to "where the action is" represents the first obvious step toward participation.

One conclusion to be drawn from these comparisons is that the southeast region is the only region in which major population movements would not have been necessary in the past for the greater involvement of Native people in Alaska's economic development. Social and economic data presented below will indicate some degree of correlation between this measure of economic development response and well-being of the people. The other four regions would require major movements of Native populations to achieve an indicated population-development balance comparable to the southeast region.

The southeast and northwest regions obviously have major economically surplus Native population, but the interior and southcentral regions would appear to have substantial Native population deficits in relation to level of economic development activity as indicated by non-Native population distribution. This might lead to the expectation that the economic and social conditions of the Native population in the interior and southcentral regions would be greatly above the conditions of those in the remaining two regions. On the contrary, however, the relative well-being of the Native people in all of these regions does not vary significantly. Part of the explanation is that the interior and southcentral regional units used are not entirely appropriate to the analysis being attempted (i.e., measurement of the amount of movement of Native population required for greater development involvement), although they were appropriate for the purposes for which they were originally defined (i.e., planning for general economic and social development of the State).

In these two regions 89 percent of the 1970 non-Native population was concentrated in the two near-metropolitan regions of Anchorage and Fairbanks and related major defense centers as compared with only 26 percent of the Native population of the two regions (Table 13). Furthermore, within the urban centers they constituted a small minority group easy to overlook. In other words, another leg of the journey to achieve communication and contact with the mainstream remained, that of the movement from rural to urban places within the region. In the southeast Alaska case the urban-rural distribution was not as important in relation to contact between the two racial groups, given the nature of the economic development (the harvesting and processing of natural resources) as compared with the nature of the 1970 economic development of
TABLE 12

ALASKA NATIVE GEOGRAPHIC RESPONSE TO ECONOMIC DEVELOPMENT
1940-1970

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Alaska</th>
<th>South East</th>
<th>South Central</th>
<th>South West</th>
<th>Interior</th>
<th>North Slope &amp; Interior</th>
<th>Northwest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Thousands of persons)</td>
<td>Actual or Estimated Geographic Distribution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1940</td>
<td>32.6</td>
<td>6.5</td>
<td>4.0</td>
<td>10.8</td>
<td>3.5</td>
<td>7.7</td>
<td></td>
</tr>
<tr>
<td>1945</td>
<td>33.0</td>
<td>7.1</td>
<td>3.8</td>
<td>10.8</td>
<td>3.6</td>
<td>7.7</td>
<td></td>
</tr>
<tr>
<td>1950</td>
<td>33.9</td>
<td>7.9</td>
<td>3.8</td>
<td>10.8</td>
<td>3.7</td>
<td>7.7</td>
<td></td>
</tr>
<tr>
<td>1955</td>
<td>37.6</td>
<td>8.5</td>
<td>4.4</td>
<td>12.1</td>
<td>4.1</td>
<td>8.4</td>
<td></td>
</tr>
<tr>
<td>1960</td>
<td>43.1</td>
<td>9.2</td>
<td>5.5</td>
<td>14.3</td>
<td>4.6</td>
<td>9.4</td>
<td></td>
</tr>
<tr>
<td>1965</td>
<td>48.2</td>
<td>9.0</td>
<td>7.4</td>
<td>16.6</td>
<td>5.1</td>
<td>10.1</td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>51.7</td>
<td>8.4</td>
<td>9.7</td>
<td>17.4</td>
<td>6.6</td>
<td>10.7</td>
<td></td>
</tr>
</tbody>
</table>

Total Alaska Native Population Allocated Regional on Basis of Non-Native, Non-Defense Regional Allocations

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Alaska</th>
<th>South East</th>
<th>South Central</th>
<th>South West</th>
<th>Interior</th>
<th>North Slope &amp; Interior</th>
<th>Northwest</th>
</tr>
</thead>
<tbody>
<tr>
<td>1940</td>
<td>32.6</td>
<td>15.0</td>
<td>8.0</td>
<td>1.5</td>
<td>6.0</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>1945</td>
<td>33.0</td>
<td>14.5</td>
<td>9.0</td>
<td>1.5</td>
<td>6.0</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>1950</td>
<td>33.9</td>
<td>10.9</td>
<td>14.0</td>
<td>1.5</td>
<td>6.5</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>1955</td>
<td>37.6</td>
<td>10.1</td>
<td>18.0</td>
<td>1.0</td>
<td>8.0</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>1960</td>
<td>43.1</td>
<td>10.3</td>
<td>23.6</td>
<td>0.8</td>
<td>7.8</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>1965</td>
<td>48.2</td>
<td>8.5</td>
<td>28.1</td>
<td>1.7</td>
<td>9.2</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>51.7</td>
<td>7.9</td>
<td>32.5</td>
<td>1.6</td>
<td>9.4</td>
<td>0.3</td>
<td></td>
</tr>
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</table>

Native Population Economically Surplus or (Deficient)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Alaska</th>
<th>South East</th>
<th>South Central</th>
<th>South West</th>
<th>Interior</th>
<th>North Slope &amp; Interior</th>
<th>Northwest</th>
</tr>
</thead>
<tbody>
<tr>
<td>1940</td>
<td>- (8.5)</td>
<td>(4.0)</td>
<td>9.3</td>
<td>(2.5)</td>
<td>5.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1945</td>
<td>- (7.4)</td>
<td>(5.2)</td>
<td>9.3</td>
<td>(2.4)</td>
<td>5.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1950</td>
<td>- (3.0)</td>
<td>(10.2)</td>
<td>9.3</td>
<td>(2.8)</td>
<td>6.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1955</td>
<td>- (1.5)</td>
<td>(13.6)</td>
<td>11.1</td>
<td>(3.9)</td>
<td>7.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1960</td>
<td>- (0.5)</td>
<td>(18.1)</td>
<td>13.5</td>
<td>(3.2)</td>
<td>8.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1965</td>
<td>- 0.5</td>
<td>(20.7)</td>
<td>14.9</td>
<td>(4.1)</td>
<td>9.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>- 0.5</td>
<td>(22.8)</td>
<td>16.8</td>
<td>(3.8)</td>
<td>10.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: Calculated from Table 11, less members of armed forces.
The Economic Situation

TABLE 13

NATIVE AND NON-NATIVE POPULATION DISTRIBUTION WITHIN MAJOR ALASKA REGIONS - 1970

<table>
<thead>
<tr>
<th>Region and Place</th>
<th>Native Population</th>
<th></th>
<th>Native Population</th>
<th></th>
<th>Natives as % Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Persons</td>
<td>% Dist.</td>
<td>No. of Persons</td>
<td>% Dist.</td>
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<tr>
<td>SOUTHEAST</td>
<td>34,211</td>
<td>100.0</td>
<td>8,354</td>
<td>100.0</td>
<td>19.6</td>
</tr>
<tr>
<td>Sitka, Ketchikan</td>
<td>25,448</td>
<td>74.4</td>
<td>4,258</td>
<td>51.0</td>
<td>14.3</td>
</tr>
<tr>
<td>Juneau Div.</td>
<td>8,763</td>
<td>25.6</td>
<td>4,096</td>
<td>49.0</td>
<td>31.9</td>
</tr>
<tr>
<td>SOUTH CENTRAL</td>
<td>164,069</td>
<td>100.0</td>
<td>9,723</td>
<td>100.0</td>
<td>5.9</td>
</tr>
<tr>
<td>Anchorage Div.</td>
<td>102,413</td>
<td>66.4</td>
<td>5,286</td>
<td>54.4</td>
<td>4.9</td>
</tr>
<tr>
<td>(excluding defense bases)</td>
<td>22,436</td>
<td>14.6</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Major defense</td>
<td>29,220</td>
<td>19.0</td>
<td>4,437</td>
<td>45.6</td>
<td>13.2</td>
</tr>
<tr>
<td>Other</td>
<td>9,315</td>
<td>100.0</td>
<td>17,364</td>
<td>100.0</td>
<td>65.1</td>
</tr>
<tr>
<td>Major defense</td>
<td>6,096</td>
<td>65.4</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>34,211</td>
<td>100.0</td>
<td>8,354</td>
<td>100.0</td>
<td>19.6</td>
</tr>
<tr>
<td></td>
<td>25,448</td>
<td>74.4</td>
<td>4,258</td>
<td>51.0</td>
<td>14.3</td>
</tr>
<tr>
<td></td>
<td>8,763</td>
<td>25.6</td>
<td>4,096</td>
<td>49.0</td>
<td>31.9</td>
</tr>
<tr>
<td></td>
<td>164,069</td>
<td>100.0</td>
<td>9,723</td>
<td>100.0</td>
<td>5.9</td>
</tr>
<tr>
<td></td>
<td>102,413</td>
<td>66.4</td>
<td>5,286</td>
<td>54.4</td>
<td>4.9</td>
</tr>
<tr>
<td></td>
<td>22,436</td>
<td>14.6</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>29,220</td>
<td>19.0</td>
<td>4,437</td>
<td>45.6</td>
<td>13.2</td>
</tr>
<tr>
<td></td>
<td>9,315</td>
<td>100.0</td>
<td>17,364</td>
<td>100.0</td>
<td>65.1</td>
</tr>
<tr>
<td></td>
<td>6,096</td>
<td>65.4</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>


The Interior and Southcentral regions (maintaining garrisons). A comparison of the movement of Native population within the regions from 1950 to 1970 in most cases reflects a slowing down of the rate of movement in the last decade (Table 14).

Native Population Participation in Economic Development - Employment and Income Dimensions

So far this discussion has dealt with only one dimension, the space or geographic dimension, of the total change required for fuller participation of the Native people in the mainstream of Alaska development. Geographic mobility is an important aspect of necessary change and adaptation of Native population to
<table>
<thead>
<tr>
<th>Region</th>
<th>April 1, 1950</th>
<th>April 1, 1960</th>
<th>April 1, 1970</th>
<th>April 1, 1950-60</th>
<th>April 1, 1960-70</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(number of persons)</td>
<td></td>
<td></td>
<td>(average annual rate of change)</td>
<td></td>
</tr>
<tr>
<td>Southeast Region</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sitka District&lt;sup&gt;a&lt;/sup&gt;</td>
<td>7,929</td>
<td>9,242</td>
<td>8,354</td>
<td>1.0</td>
<td>(0.9)</td>
</tr>
<tr>
<td>Balance</td>
<td>5,874</td>
<td>6,405</td>
<td>6,991</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Southcentral Region</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anchorage District&lt;sup&gt;b&lt;/sup&gt;</td>
<td>3,788</td>
<td>5,514</td>
<td>9,723</td>
<td>3.8</td>
<td>5.8</td>
</tr>
<tr>
<td>Balance</td>
<td>3,129</td>
<td>3,407</td>
<td>4,437</td>
<td>0.8</td>
<td>2.6</td>
</tr>
<tr>
<td>Southwest Region</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bethel City</td>
<td>10,838</td>
<td>14,314</td>
<td>17,364</td>
<td>2.8</td>
<td>1.9</td>
</tr>
<tr>
<td>Balance</td>
<td>10,371</td>
<td>13,337</td>
<td>15,494</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>Interior Region</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fairbanks District</td>
<td>3,666</td>
<td>4,638</td>
<td>5,615</td>
<td>2.3</td>
<td>1.8</td>
</tr>
<tr>
<td>Balance</td>
<td>2,367</td>
<td>3,185</td>
<td>3,797</td>
<td>2.9</td>
<td>2.7</td>
</tr>
<tr>
<td>Northwest Region</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nome City</td>
<td>7,663</td>
<td>9,373</td>
<td>10,656</td>
<td>2.0</td>
<td>1.3</td>
</tr>
<tr>
<td>Barrow City</td>
<td>929</td>
<td>1,608</td>
<td>1,522</td>
<td>5.6</td>
<td>(0.5)</td>
</tr>
<tr>
<td>Balance</td>
<td>5,810</td>
<td>6,550</td>
<td>7,230</td>
<td>1.2</td>
<td>1.0</td>
</tr>
</tbody>
</table>

<sup>a</sup>Mt. Edgecombe native population: 1950, 718; 1960, 1,432; and 1970, 464.

<sup>b</sup>1970 preliminary racial classification of correction in 1970 count not available.

**SOURCE:** U. S. Bureau of the Census and Alaska State Department of Health and Welfare.
development, and the experience of the 1960's has seen the Native people themselves working toward this end in their political actions and in voluntary movement into the state's major growth centers. But formidable barriers still remain to be overcome. In addition to being geographically mobile, the Native population must also have vocational mobility, and this in turn requires being qualified to take on the jobs offered and being accepted by the non-Native community. The journey is more than one from one place on the map to another. It is a journey through time and between cultures with all of the uncertainties, complexities, and hardships this implies.

No simple measures of this complex of factors can be readily devised, but the population characteristics data in the census provide general indicators. In Table 16 and the related discussion, the following census data have been taken as representative of the total Native population characteristics: non-white population for 1939, non-white civilian population less Anchorage-Spenard and Fairbanks in 1950 and 1960. (The 1939 "non-white" population was 97.3 percent Native and only 2.7 percent non-Native and the 1950 and 1960 "non-white" less Anchorage and Fairbanks was 97.4 percent and 93 percent Native, respectively). Sufficient detail is not yet available from the 1970 census.

Employment data for these years can only be presented regionally for southeast Alaska and the remainder of Alaska. For this discussion this will be satisfactory, as the southeast Native population differs significantly in many respects from the remainder of the Native population.

Indices of the Native population participation in the Alaska economy are given by the non-worker to worker ratios. (Table 16). "Non-workers" are here taken as all persons under 14 years of age, persons 14 years and over who are classified by the census as not being in the labor force (persons doing only incidental unpaid family work, students, housewives, retired workers, seasonal workers in the off-season who are not seeking employment, inmates of institutions, or persons who cannot work because of physical or mental disability) and persons 65 years or over. The labor force includes all persons classified as employed or unemployed under the Bureau of the Census definitions of these terms, as well as members of the armed forces. The increase in the ratios among southeast Natives from 2.26 in 1939 to 2.68 in 1960 reflects the population boom between 1950 and 1960, coupled with a relatively small increase in jobs available to Natives. Whereas the population increased by 41 percent between October 1, 1939 and April 1, 1960, the labor force (including unemployed) increased by only 24 percent.

The compounding effects of public health programs in decreasing the death rates and a sharp drop in the industrial sector of the economy in which most Natives participate (fishing and fish processing) is dramatically demonstrated by the data for the Native population in the remainder of Alaska. Native population remained constant over the first decade (25,956 in 1939 and 25,955 in 1950) and increased 30.4 percent between 1950 and 1960 to 33,839. Between 1939 and 1960, on the other hand, there was a decline in the labor force from 7,612 to 5,707. Together these developments resulted in a rise in the non-worker to worker ratio from 2.44 to 4.89.

Since the 1960 census there has been continuing migration of Natives from traditional village areas to the growth centers of the state. The Bureau of
Table 15

NON-WORKER-WORKER RATIOS, BY RACE, 1939, 1950, 1960

<table>
<thead>
<tr>
<th>Non-Workers 1/</th>
<th>Workers</th>
<th>Non-Worker to Worker Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 14 yrs.</td>
<td>Others not in Labor Force</td>
<td>Total</td>
</tr>
<tr>
<td>&amp; Over 65 yrs.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Non-White Civilian (Excluding Anchorage and Fairbanks in 1950 and 1960)

Southeast Region
- Oct. 1, 1939: 3,196 & 1,774 = 4,970
- April 1, 1950: 3,308 & 2,729 = 6,037
- April 1, 1960: 4,518 & 2,799 = 7,308

Remainder of Alaska
- Oct. 1, 1939: 11,535 & 7,034 = 18,569
- April 1, 1950: 11,781 & 6,773 = 18,554
- April 1, 1960: 16,670 & 11,269 = 27,939

Total White Population
- Oct. 1, 1939: 8,660 & 7,474 = 16,134
- April 1, 1950: 21,606 & 14,674 = 36,280
- April 1, 1960: 59,509 & 28,809 = 88,318

1/ All persons under 14 years of age and persons 14 years and over not classified as members of the labor force (unpaid family workers, students, housewives, retired workers, inmates of institutions, disabled persons unable to work, etc.).

2/ All persons classified as employed or unemployed by Bureau Census.

Indian Affairs and the various federal and state manpower training and area economic development programs have focused upon educating, training, and preparing Native workers to take a greater part in meeting Alaska's labor needs. All of this leads to the expectation that the employment situation has been improved, but a 1968 overview states the contrary.

Among Alaska Natives generally, more persons are unemployed or are seasonally employed than have permanent jobs. More than half of the work force is jobless most of the year; for them, food gathering activities provide basic subsistence. Only one-fourth of the work force has continuing employment. The Alaska Native work force, urban and rural, is estimated to be composed of 16,000 to 17,000 persons. . . 60 to 60 percent are jobless in March and September, according to recent semi-annual reports compiled by the Bureau of Indian Affairs. At these times, only half of those employed have permanent jobs. In the summers, when no estimates are compiled, joblessness among Natives across the state may drop to 20 or 25 percent. . . In urban areas, Native unemployment appears to be higher than among non-Natives. Lacking education and marketable skills, the villager is not usually equipped to compete in the job market. . . Year-round jobs in most villages are few. Typically, the opportunities are limited to positions such as school maintenance man, postmaster, airline station agent, village store manager, and possibly school cook or teacher aide. In these places, other adults gain income through the sale of furs, fish, or arts and crafts; find seasonal employment away from the village as fire-fighters, cannery workers, or construction laborers; depend upon welfare payments, make their National Guard income stretch mightily; or, as is usually the case, (1) provide for the bulk of their food supply by fishing, hunting, trapping, and other activities of food gathering; and (2) rely upon a combination of means to obtain cash needed for fuel, some food staples, and for tools and other supplies necessary to the harvest of fish and wildlife. 36

Another general measure of relative participation is a comparison of income received by different population groups. Annual estimates of personal income received by resident Alaskans are available back to 1950. In originally establishing the series for Alaska the Office of Business Economics also was interested in determining the causes of Alaska's high income level. The most obvious factor was the relative cost of living. Taking note that 1957-1958 consumer prices in Anchorage and Fairbanks were 35 percent to 45 percent above Seattle, the report concluded "that if prices are taken into account, per capita real income in Alaska is no higher than that in the country as a whole, at most, and possibly somewhat less." Another important factor was discovered when data

collected for the benchmark year 1957 was organized to present the components of per capita income in four major economic groups:

- **Military** $1,806
- **Native Economy** 1,231
- **Natural Resource Economy** 2,052
- **Defense-oriented Economy** 3,591

**TOTAL ALASKA** $2,408

Alaska's high 1957 income level (117 percent of the national average) was thus seen to stem largely from the state's defense-oriented economy located primarily in the southeastern part of the State (175 percent of national average). It was also clearly revealed that Alaska had an area of poverty which could be identified as the "Native economy" and measured 60 percent of the national average.

A more recent study of personal income within Alaska found support for the conclusion that since 1960 the poor have been getting poorer and the rich have been getting richer. More recent study of personal income within Alaska found support for the conclusion that since 1960 the poor have been getting poorer and the rich have been getting richer. Per capita income was calculated for all census districts on the basis of wages and salaries, unemployment benefits and welfare payments reported by government agencies and annual population estimates for each district. An urban-rural comparison was made by comparing a combination of the four census districts containing the largest urban centers in the state with an entire rural region, consisting of four contiguous census districts in western Alaska. Other rural census districts were not included because of estimating inaccuracies associated with their small numbers or because they were islands of intense economic activity, such as electronic defense installations or construction, which caused district wage totals to be very misleading as to the actual economic condition of the permanent residents. In 1960 the Native population in the urban census districts was only 4.7 percent of the total population of these districts, but in the selected western rural districts it was 88.7 percent of the districts' population. Therefore, the comparisons can be taken as a reasonable index of the income position of Native Alaskans relative to other Alaskans.

The comparisons of income made in this study are summarized in Table 16. The supporting tables of the study indicate that between 1961 and 1967 per capita income rose 29% in Anchorage, 38% in Fairbanks, 24% in Ketchikan, and 8% in Juneau. These data did not reflect changes in price levels which also moved upward in all districts since 1961 (Anchorage 7.8%, Fairbanks 9.3%,

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Ketchikan 11.6%, and Juneau 14.5%). In contrast, the western rural area experienced a per capita income decline over the same period. The ratio of urban to western Alaska per capita income rose from 3.8 in calendar year 1961 to 5.1 in fiscal year 1967. The report ends with a statement of the only conclusion possible.

In conclusion, actual buying power per person and living standards are definitely not improving in rural areas of the state, although living standards steadily increase in large urban centers. Consequently, disparities in living standards are continuing to increase. In Alaska almost all victims of poverty, in both urban and rural areas, are non-white... chiefly Eskimo, Indian, or Aleut.

This difference in income received by these two geographic groups of Alaska is further confirmed in the 1970 census data on "poverty status." This is based upon an analysis of income received by families in the 1969 calendar year in terms of a poverty level threshold income. The poverty line varies in accordance with the size of family and sex of the head of each individual family and is based upon national data, unadjusted for variations in state and regional cost of living. For all families the line is drawn at $3,388. Combining the data for the Anchorage, Fairbanks, Juneau and Ketchikan census divisions as "urban Alaska" and the Kobuk, Wade Hampton, Bethel and Kuskokwim census divisions as "western Alaska" results in the following comparison in distribution of incomes of all families in relation to poverty status.

<table>
<thead>
<tr>
<th>URBAN ALASKA</th>
<th>WESTERN ALASKA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Families with income less than poverty level</td>
<td>5.0</td>
</tr>
<tr>
<td>Families with income less than 75 percent of poverty level</td>
<td>3.3</td>
</tr>
<tr>
<td>Families with income less than 125 percent of poverty level</td>
<td>7.8</td>
</tr>
<tr>
<td>Families with income more than 125 percent poverty level</td>
<td>92.2</td>
</tr>
</tbody>
</table>

A comparison of income received may be a measure of degree of participation in the dominant cash economy (the stated objective of most of the past and present education programs), but it is not an entirely accurate index of

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39 Computed from data in U.S. Bureau of the Census, P6 (1)-B3, Alaska, Table 124.
### TABLE 16

**COMPARISON OF URBAN VERSUS WESTERN ALASKA CIVILIAN PER CAPITA INCOME, BASED ON WAGE INCOME, UNEMPLOYMENT BENEFITS, AND WELFARE PAYMENTS**

<table>
<thead>
<tr>
<th>Year</th>
<th>Calendar Year</th>
<th>Calendar Year</th>
<th>Calendar Year</th>
<th>Calendar Year</th>
<th>Calendar Year</th>
<th>Fiscal Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>$2,410</td>
<td>$2,467</td>
<td>$2,562</td>
<td>$2,878</td>
<td>$2,953</td>
<td>$3,026</td>
</tr>
<tr>
<td>1962</td>
<td>$2,467</td>
<td>$2,562</td>
<td>$2,878</td>
<td>$2,953</td>
<td>$3,026</td>
<td>$3,118</td>
</tr>
<tr>
<td>1963</td>
<td>$2,562</td>
<td>$2,878</td>
<td>$2,953</td>
<td>$3,026</td>
<td>$3,118</td>
<td></td>
</tr>
<tr>
<td>1964</td>
<td>$2,878</td>
<td>$2,953</td>
<td>$3,026</td>
<td>$3,118</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1965</td>
<td>$2,953</td>
<td>$3,026</td>
<td>$3,118</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1966</td>
<td>$3,026</td>
<td>$3,118</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1967</td>
<td>$3,118</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**URBAN ALASKA**, consisting of:
- Anchorage, Fairbanks, Juneau, and Ketchikan Census Districts

<table>
<thead>
<tr>
<th>Year</th>
<th>Calendar Year</th>
<th>Calendar Year</th>
<th>Calendar Year</th>
<th>Calendar Year</th>
<th>Calendar Year</th>
<th>Fiscal Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
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<td>$602</td>
<td>$607</td>
<td>$609</td>
<td>$556</td>
<td>$575</td>
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<td>$607</td>
<td>$609</td>
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</tr>
<tr>
<td>1963</td>
<td>$607</td>
<td>$609</td>
<td>$556</td>
<td>$575</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1964</td>
<td>$609</td>
<td>$556</td>
<td>$575</td>
<td></td>
<td></td>
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<tr>
<td>1965</td>
<td>$556</td>
<td>$575</td>
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<td></td>
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<tr>
<td>1966</td>
<td>$575</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1967</td>
<td>$614</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**WESTERN ALASKA**, consisting of:
- Kobuk, Wade-Hampton, Bethel, and Kuskokwim Census Districts

<table>
<thead>
<tr>
<th>Year</th>
<th>Calendar Year</th>
<th>Calendar Year</th>
<th>Calendar Year</th>
<th>Calendar Year</th>
<th>Calendar Year</th>
<th>Fiscal Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>$3,8</td>
<td>$4.1</td>
<td>$4.2</td>
<td>$4.7</td>
<td>$5.3</td>
<td>$5.3</td>
</tr>
<tr>
<td>1962</td>
<td>$4.1</td>
<td>$4.2</td>
<td>$4.7</td>
<td>$5.3</td>
<td>$5.3</td>
<td>$5.1</td>
</tr>
<tr>
<td>1963</td>
<td>$4.2</td>
<td>$4.7</td>
<td>$5.3</td>
<td>$5.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1964</td>
<td>$4.7</td>
<td>$5.3</td>
<td>$5.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1965</td>
<td>$5.3</td>
<td>$5.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1966</td>
<td>$5.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1967</td>
<td>$5.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**RATIO:**
- Urban Per Capita Income
- Western Alaska Per Capita Income

Although proprietor's income and several other income categories are not reflected in the per capita income figures above, 80 per cent of all civilian income in Alaska is accounted for by the sources used. Therefore, it is unlikely that inclusion of all cash income would substantially alter the ratios of urban per capita income to that of Western Alaska. However, the ratios would be decreased by the inclusion of estimates for non-cash income from subsistence hunting and fishing. No such estimates are available, but it is known that subsistence activities are an important aspect of the economy in Western Alaska.

relative well-being. As Jennets pointed out in his attempts to compare Greenland and Danish income levels, an important element of public consumption is present in the form of free health and social services available only to Native people. Furthermore, subsistence hunting and fishing also contributes an unmeasured component of value (although the Office of Business Economics has attempted to include something for this). There have been those who have attempted to minimize the adverse impression given by income comparisons on just this basis, but a look at the comparative standards of living enjoyed by the Native and non-Native Alaskan soon puts the picture back in focus. Here a few health statistics will be used to suggest the quality or the end product of life in each group. In the year 1960 the crude death rate was 9.4 per 1,000 total population for Native Alaskans as compared with 4.7 for non-Native. This was a dramatic drop from the Native rate of 16.9 for the year 1950, but still double the rate for the rest of Alaskans. The infant mortality rate for Alaska's Natives (the number of deaths of children under one year of age per 1,000 live births occurring in the same year) dropped from 95.9 in 1950 to 74.8 in 1960. Although a heartening improvement, this is still far above the non-Native rate of 27.8 for 1960. Among the five major regions of the state, there were marked differences in the infant mortality rate (southeast 55.1, southcentral 43.7, southwest 121.9, interior 62.8, and northwest 82.4).40

A review of the 1966 Native health situation reports little improvement since 1960.

The crude death rate of Alaska Natives is more than twice the rate of white Alaskans. There were 478 Native deaths in 1966, or 9.6 deaths per thousand estimated population; in the white population there were 810 deaths or 3.8 deaths per thousand. While the Native death rate is high, and a fraction higher than four of the past seventeen years, it is almost half what it was in 1951... There has been no significant change in the Native death rate since 1958. The three principal causes of death in the Native population in 1966 were accidents, influenza and pneumonia, and diseases of early infancy. The death rate of Natives as a result of influenza and pneumonia was ten times the rate of Alaska whites; as a result of accidents, three times; and suicides, double the rate. Since 1950 the number of people who died from tuberculosis has declined from 222 in that year to 6 in 1966... The Infant mortality rate of Alaska Natives, a significant factor in the overall death rate, is also more than twice the rate for white Alaskans. More than one-fifth of the total Native deaths in 1966 occurred in persons under one year old; these 102 deaths resulted in an infant death rate of 52 per thousand live births. Among the white Alaskans the rate was 22. Except for 1963, the present high rate of infant mortality of Natives is lower than at any time during the past 17 years.41

Mortality statistics can only begin to suggest the effects of poverty upon the physical well-being of Alaska's Natives. Work days and income lost through prolonged sickness and hospitalization, to say nothing of physical suffering and resulting damaged and handicapped humanity, are only hinted at in the hospitalization statistics of the U.S. Public Health Service. The extent and intensity of all this was broadly recognized and generous and effective health programs mounted two decades ago. These have been continued and augmented since. Although they had a dramatic impact upon mortality and the incidence of sickness during the first years, over the last decade they appear to be making little further progress. The continuing poor physical health of the Alaska Native is obviously due to environmental conditions and malnutrition, according to the 1968 health report.

While medical efforts -- preventing disease where possible, treating diseases and injuries, teaching good health practices -- have resulted in substantial gains, for many of the remaining problems there are no preventive medical measures to be taken; there is no means of immunization, for instance, against respiratory diseases or otitis media. Significant reduction in the incidence of many of Alaska's remaining health problems must be sought in improvement of the socio-economic conditions under which Alaska Natives live.

The prospect that future economic development in Alaska will automatically solve the "Native problem" provides even less cause for complacency than the prospect of solving poverty problems elsewhere. In addition to adverse factors of lack of education and skills, racial discrimination, etc., the present geographic distribution of Native population is heaviest in areas of the state which are away from the centers of recent economic development and anticipated future growth. Although there has been evidence of increasing geographic mobility among Alaska's Natives, they have traditionally remained within the major regions in which their ancestors lived.

Coupled with the relatively high labor immobility of Alaska's Natives, their recent rates of natural increase further work against the probability that general economic development will automatically take care of their condition of poverty. During most of the period from 1950 to date, rates of natural increases have been close to 4 percent per year for the state as a whole, and approached 5 percent in the southwest and interior regions. If we define economic progress in terms of per capita income growth, these rates of population increase far outstrip even the most optimistic projections of rates of economic output for the state. Even with programs to reduce the rates of Native population increase, Alaska is faced with a grim race between Native population growth and increasing the rate of participation in the state's general economic development. The process of economic development will not adjust its pace to accommodate the Native's development. If he is not ready, the new employment needs will be met
Native Population Response to Economic Development — the Political Dimensions

In October 1966 eight separate associations (four Eskimo, one Aleut, and three Indian) joined together in the united front of the Alaska Federation of Natives. By mid-1966 these new Native groups by right of aboriginal use and occupancy had submitted title claims to public lands covering approximately 290 million acres of Alaska’s 375 million acres (this rose to 370 million acres by April 1967). Faced with these massive filings, the Secretary of the Interior in December 1966 halted all disposal of public land in the state to which Natives claimed aboriginal possession until the United States Congress passed an act defining the rights of these claimants and established machinery for settlement. In one united action the Native minority had temporarily thwarted the intent of the Alaska Statehood Act to provide the new state with income from land resources during its initial development (the freeze applied to transfer of lands from the public domain in the state as well as to individuals) and threatened planned economic developments including oil and gas. But more important, the non-Native community had been put on notice that Alaska’s Eskimo, Indian, and Aleut peoples were a political force to be reckoned with. They had graduated from their long and little noticed apprenticeship in politics. They had found new aggressive leaders, their political voice, and an economic weapon which could prove more effective in advancing their causes than the economic boycott and violence used by the minority groups elsewhere. The political payoffs started coming in even before the land freeze. During the 1966 political campaign the Native voters were courted as they had never been before. Major candidates visited isolated and remote villages previously never or rarely receiving such calls. The land claims had a galvanizing effect upon government at all levels. Native matters, small and large, that had languished in bureaucratic pigeonholes began to receive priority treatment.

In December 1971 the United States Congress passed the “Alaska Native Claims Settlement Act” (Public Law 92-203, 92nd Congress), but this in no way has diminished the importance of the continuing political movement with which it was identified. Whether the Native people continue on their ancestral lands or migrate into the new development centers of the state, what has been described above as the gulf between non-Native and Native Alaska will remain unless the basic conditions of poverty and wardship are changed. This is the political movement’s underlying meaning, land merely being a convenient and tangible short-hand symbol for deliverance from the Native problem. The real objectives were given in the following report of the participation of one of the more effective of the new young Eskimo leaders in a 1967 land problems forum.

“Hensley said the Native associations which have filed land claims have several objectives, among them securing the claims, acting as political organizations and educating the people. We in Western
Alaska," he said, 'have given our votes for years, putting big
men into office and getting little in return. For all too long we have
not had the benefit of our numbers.' He said Natives were not trying
to hold up the development of Alaska with their claims. 'Our
contention is,' Hensley said, 'that if we do have a legal claim to the
land, we want to be part of that development. In other countries,
the benefits of development have not filtered down to the people.
We are not trying to develop a racist state. Land claims have to be
put on the basis of race because this is how the law has developed.'
He decried 'Western standards being applied to villages just coming
into the 20th Century.' It is in helping the villages in making the
adjustment, Hensley said, that the Native associations are performing
their educational functions. 'In my view,' he said, 'life will be very
hard in the next 20 to 30 years, until a cash economy is developed.
We want to encourage this development, but at the same time, we
want to be able to say, 'Hunt and fish if you want to! If there are no
hunting lands, it will make the coming years more difficult.'

The 1960's was also a decade of bureaucratic revolution. When the national
administration embarked on its War on Poverty in 1964, the Alaska Native was
overwhelmed by a Babel of voices, government workers and federally-funded
private consultants following banners with strange devices. There were some
benefits mixed in with the confusion. VISTA workers appeared and for the first
time Native villages had a white man or woman, or both, in residence who
devoted full-time to learning rather than teaching. These young people have
provided a new breed of bush school teachers.

Institutes and programs for training Native teacher aids and orienting
non-Native teachers for bush schools were sponsored at the University of Alaska
and Alaska Methodist University; a rural school project at the University of
Alaska grew into a continuing Center for Northern Education. English began to
be considered as a second language by the educating programmers and teaching
in Native languages was considered as a worthwhile pilot experiment. Federal
programs provided the seed money and initial leadership training for the Native
regional corporations which now face the task of managing a money settlement
of $965.2 million and 40 million acres of land. Faced with these new
competitors, the Bureau of Indian Affairs overhauled what had been fringe
programs dealing with economic and industrial development and even began to
encourage Native participation in administering its educational programs; in an
advisory capacity, in 1967. Preference was given to the hire of Native applicants
for jobs with the Bureau and in 1969 it could report that more than half its
permanent employees were Natives.

In this flux of emerging and consolidating Native political power and basic
reform in government programs, there has been a need for a complete reform of
the cross-cultural education system in Alaska. Education was not the principal
vehicle by which the Native gained significant participation in Alaska's economic

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development but, from the admittedly short-range vantage of the present, it would appear that this participation is being gained by other means -- the participation in the political process and the consolidation of Native political power. Through the political and land ownership route Alaska's Natives are accomplishing a do-it-yourself cultural transition which will finally accommodate the new forms of education programs emerging in the non-Native society.
The following article was read by Dr. Rogers at the Conference. Since the preceding article comparing the Greenland and Alaska cases draws heavily on the work presented at Montreal there is some repetition. Nevertheless, because of the value of the paper as a separate work and a more complete source of information in the sole context of the Alaskan situation the repetition has been allowed to stand.
The new economic developments anticipated by the report would provide Natives with future employment opportunities "to make the transition from their present subsistence existence to a more self-supporting one with adequate income and employment." No attempt is made to reflect the past differences in the Native and Non-Native population characteristics and behavior in the population estimates beyond 1970. The report's implication is, therefore, that from 1970 on, the increased Native population of working age will be absorbed into the new employment opportunities on the same basis and rates as the Non-Native.

In comparing these projections of the future population with the past population trends in Alaska, it must be recognized that important assumptions have been made or must be implied. Population prior to 1970 was a product of a number of factors reflecting the differing rates of fertility, mortality, and migration among the three major population components being discussed in this section—the defense-related population, the Native population, and the remaining population. These three major population components not only demonstrated differing patterns of behavior, but within each there were pattern changes over time and between regional divisions. The population estimates beyond 1970 presented in Table 6 reflect changes attributable only to economic developments, the creation of new basic employment and the additional population this would support on the basis of the same relations between basic and total employment, and employment and total population as exist for the nation as a whole. These estimates, in other words, are a projection of the development effect translated into population rather than a projection of Alaskan population on the basis of its present characteristics. There would have to be complete and automatic adjustment of population to development changes. All population, whether Native or non-Native, would have to participate in the development changes at the national rates and move freely to and from Alaska and within Alaska in response to changes in employment patterns.

If we are to be realistic in speculating on Alaska's future population, however, special consideration must be given to the Native sector. The defense-related population will continue as it has in the past to reflect administrative decisions and policies. The non-Native, non-defense population will retain its past characteristic of fluctuating primarily in response to economic development factors, with some increase in stability reflecting the evidence of the last decade that net natural increase has begun to play a growing role. The analysis of past Native population trends has indicated that this sector responds primarily to changes in birth and death rates with relatively little movement until very recently within Alaska or out of Alaska. Unlike the other two major components of total population, however, it would not be realistic to assume that this will continue to be the pattern of future behavior.

II. ALASKA DEVELOPMENT AND NATIVE ALASKA

Following the first contacts with western civilization, most of the Native Alaskans were simply by-passed by the course of economic development. There were important exceptions. The Aleuts were forced to become involved during the Russian period because they lived in the regions rich in fur seal and sea otter. In the process their aboriginal society and culture were destroyed and their
### TABLE 6


<table>
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<th></th>
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<td>491</td>
<td>562</td>
<td>649</td>
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</table>

1. Population generated by introduction of aluminum industry (based upon imported bauxite and Rampart project power availability) has been eliminated from the high case in accordance with June 15, 1967, report conclusions.

years or were barely met by births, but all experienced explosive rates of average annual increase following 1950 (the direct result of intensive and effective public health programs), with southcentral rates for 1960-1965 averaging 4.8%, southwest 3.8%, and the interior and northwest approximately 2%.


Many estimates have been made of the growth, nature, and distribution of Alaska's future population, but only two sets will be discussed here. The U.S. Bureau of the Census regularly makes several sets of projections for each state and the total United States on the basis of assumptions concerning the three factors which account for rates of population change: fertility, mortality, and net migration. Trends of each factor are determined from an examination of the experience of recent years. The future economic view presented by these population estimates is not a promising one, with continuous out-migration in all cases. Such a future is within the realm of possible as it is, after all, a projection of trends which have been part of the recent past. But the view is not in accord with the more recent developments and prospects discussed in the last chapter. Alaska has clearly entered a totally new phase of development which should make past trends a poor guide to the future.

The second set of population estimates to be referred to is that of the lowest and highest cases in the U.S. Department of the Interior's market study for the Rampart power project (Table 6). Underlying these estimates is the assumption of a continuing significant annual net in-migration varying in absolute amount from period to period in response to anticipated economic developments. Estimates were computed from a major review and evaluation of all available and projected information on Alaska natural resources, national and world markets, industrial and transportation technology, economics, the anticipated effects of major federal and state programs and agencies devoted to development ends, etc., which resulted in estimates of major new large industries by type, location, quantities, etc.

Once the new industrial developments had been determined, measured, mapped and scheduled, estimates of new employment based on size and output of specific industries were computed. Estimates based on national ratios were also made of supporting employment and additional population generated by total new employment. The future population of Alaska, in effect, was projected as that of 1960 plus additional population generated by new industrial developments. One implication of this is that the 1960 basic economy will continue as one of the "given" in the future. This was made explicit in the defense-oriented sector of the population. The Department of the Interior study assumed virtually no change in the numbers of distribution of military personnel in Alaska and the number of dependents of defense personnel.

Within the non-defense-related population sector, the report makes the following observations concerning the future of the Native:

"Alaska's native people have long had a high natural rate of increase. With increase in public health programs, rates of survival have been improved, with corresponding acceleration in rates of natural increase. This indicates that in the future, Alaska's natives will be of increasing importance."
<table>
<thead>
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<th>Southeast</th>
<th>Southcentral</th>
<th>Southwest</th>
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<td>Non-Native</td>
<td>Native</td>
<td>Non-Native</td>
<td>Native</td>
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<td></td>
</tr>
<tr>
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<td>11.0</td>
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</tr>
<tr>
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<td></td>
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<td>3.9</td>
<td>59.1</td>
<td>10.8</td>
</tr>
<tr>
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<td>7.2</td>
<td>20.8</td>
<td>3.6</td>
<td>8.2</td>
<td>7.6</td>
</tr>
<tr>
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<td>3.8</td>
<td>51.2</td>
<td>7.2</td>
</tr>
<tr>
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<td>24.0</td>
<td>4.4</td>
<td>106.1</td>
<td>7.9</td>
</tr>
<tr>
<td>1960</td>
<td>9.2</td>
<td>26.8</td>
<td>5.5</td>
<td>103.5</td>
<td>6.7</td>
</tr>
<tr>
<td>1965</td>
<td>9.4</td>
<td>28.0</td>
<td>5.8</td>
<td>110.2</td>
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<td>34.4</td>
<td>8.3</td>
<td>134.2</td>
<td>11.0</td>
</tr>
</tbody>
</table>

(12-month average, thousands of persons)


Native population for 1961 through 1968 estimated from vital statistics with adjustment for other factors (e.g., migration) projected from 1960-1960 experience.
### TABLE 4

Annual Estimates of Total Alaska Resident Population and Components of Non-Native Population Change, 1940—1968

| July 1 | Total Native | Total Non-Native | Military | Non-Native Civilian | Non-Native Net-Change | Natural Increase | Military Change | Civilian Migration
|--------|--------------|------------------|---------|---------------------|-----------------------|------------------|----------------|-----------------|
| 1960   | 43.1         | 184.0            | 33.0    | 151.9               | 6.8                   | 4.6              | (1.0)          | 3.2
| 61     | 44.3         | 190.7            | 33.0    | 157.7               | 5.8                   | 4.6              | (1.0)          | 2.0
| 62     | 45.6         | 197.4            | 33.0    | 164.4               | 6.7                   | 4.7              | 1.0            | 0.9
| 63     | 46.9         | 204.1            | 34.0    | 170.1               | 6.7                   | 4.8              | 1.0            | (2.2)
| 64     | 48.2         | 207.8            | 35.0    | 172.8               | 3.7                   | 4.9              | 1.0            | (2.0)
| 1965   | 49.5         | 217.5            | 33.0    | 184.5               | 9.7                   | 5.0              | (2.0)          | 6.7
| 66     | 50.7         | 221.3            | 31.0    | 190.3               | 3.8                   | 5.2              | (2.0)          | 0.6
| 67     | 52.0         | 219.0            | 34.0    | 185.0               | (2.3)                 | 5.4              | 3.0            | (10.7)
| 68     | 53.0         | 224.0            | 34.0    | 190.0               | 5.0                   | 5.5              |                | (0.5)

1/ Parenthesis indicates out-migration.


Sources: Estimate of native population (based on census data and annual vital statistics) deducted from total resident population estimates in the following to calculate non-native population and components of change:

<table>
<thead>
<tr>
<th>July 1</th>
<th>Total Native</th>
<th>Total Non-Native</th>
<th>Military</th>
<th>Non-Native Civilian</th>
<th>Non-Native Net-Change</th>
<th>Natural Increase</th>
<th>Military Change</th>
<th>Civilian Migration</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>(12-month average, thousands of persons)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1940</td>
<td>32.5</td>
<td>42.5</td>
<td>1.0</td>
<td>41.5</td>
<td>12.9</td>
<td>0.9</td>
<td>7.0</td>
<td>5.0</td>
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<tr>
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<td>8.0</td>
<td>47.4</td>
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<td>1.0</td>
<td>52.0</td>
<td>(0.1)</td>
</tr>
<tr>
<td>42</td>
<td>32.7</td>
<td>108.3</td>
<td>60.0</td>
<td>48.3</td>
<td>91.9</td>
<td>1.0</td>
<td>92.0</td>
<td>(1.1)</td>
</tr>
<tr>
<td>43</td>
<td>32.8</td>
<td>200.2</td>
<td>152.0</td>
<td>48.2</td>
<td>(48.1)</td>
<td>1.0</td>
<td>(48.0)</td>
<td>(1.1)</td>
</tr>
<tr>
<td>44</td>
<td>32.9</td>
<td>152.1</td>
<td>104.0</td>
<td>48.1</td>
<td>(46.1)</td>
<td>1.3</td>
<td>(44.0)</td>
<td>(3.4)</td>
</tr>
<tr>
<td>1945</td>
<td>33.0</td>
<td>106.0</td>
<td>60.0</td>
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<td>(40.1)</td>
<td>1.5</td>
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<td>35.0</td>
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<td>5.1</td>
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<td>144.1</td>
<td>(16.0)</td>
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</table>

Continued
The Economic Situation

estimates of components of change. For Alaska these estimates are available from July 1, 1940. Although the estimates are given as of a mid-year date, they do not represent an estimate of the total population, but the resident population. No adequate definition of "resident" Alaskan exists, but in this case the figure is the twelve month moving average computed from monthly vital statistics and migration estimated by use of school enrollment data. Following the 1960 census, the Alaska Department of Labor published annual estimates of current resident population by election districts (the 1960 census districts) using the same methodology and basic data as the Bureau of Census. These two sources are drawn upon to present an analysis of annual population changes for Alaska from 1940 to 1968 and for its major regions. In addition, estimates have been made of Native population by relating annual statistics on Native births or deaths to the 1950 and 1960 census benchmarks.

Tables 4 and 5 summarize these annual population estimates for Alaska and its five major regions. The annual changes in Non-Native population are even more erratic than the behavior revealed in the decennial census reports. In part this reflects the relatively small population base; where only a few hundred persons constitute a significant change, but in larger part it reflects population response to the shifting role of Alaska in national defense strategies since 1940. Reviewing the trends from 1940 by five-year periods: 1940-1945 experienced average annual rates of increase of approximately twenty percent, 1945-1950 average annual rates of decrease of approximately one-half of one percent, 1950-1955 average annual rates of increase of twelve percent, 1955-1960 a period of almost complete stability (rates of increase averaged only two-tenths of one percent), and 1960-65 average annual rates of increase of three and a third percent. The turning points in these trends can be matched by development turning points: the frantic defense buildup between 1940-1943, the shift of strategic importance from Alaska following the successful Aleutian campaign and the Pacific battles of 1943 and 1944, the virtual shut down of the Alaska defense establishment in the all too brief period of peace at the end of World War II, and, with only a minor diversion during the Korean War, the construction activities and defense staffing which established Alaska in a permanent and key position in the northern hemisphere defense system. It was not until the 1960's that the population trend assumed a relatively steady and moderate continuing growth, but even this was disrupted by the effects of the 1964 earthquake and the reconstruction period following. The regional population trends reflect the concentration of the main defense activities in the south-central and interior regions and to a lesser degree in the southwest region, and the virtual absence of these forces of population change in the remaining two regions.

In contrast, Native population experienced continuously increasing average annual rates of growth for the same five-year periods: 0.3%, 0.5%, 2.1%, 2.7% and 2.8%. The Native population trends have all exhibited some decline in the annual rates of net natural increase during the last five years, but the general level of rates of growth have differed regionally. By five-year periods from 1940 through 1965, the average annual rates of increase for the southeast region fell from 2% during 1940-1945 to 1.2% for 1960-1965, while for the remaining regions during the ten years 1940-1950 Native deaths exceeded births for most
# TABLE 3
Alaska’s Native and Non-Native Populations, by Regions, 1740-1960

<table>
<thead>
<tr>
<th>Year or Date</th>
<th>Southeast Native Non-Native</th>
<th>Southcentral Native Non-Native</th>
<th>Southwest Native Non-Native</th>
<th>Interior Native Non-Native</th>
<th>Northwest Native Non-Native</th>
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<td>Circa 1740-80</td>
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<td>3,700</td>
<td>2,600</td>
<td>5,200</td>
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<td>2,546</td>
<td>4,837</td>
</tr>
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<td>4,000</td>
<td>6,000</td>
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<tr>
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<td>3,205</td>
<td>9,695</td>
<td>7,142</td>
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<td>3,000</td>
<td>8,173</td>
<td>13,500</td>
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<tr>
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<td>5,990</td>
<td>13,314</td>
<td>3,559</td>
<td>8,321</td>
<td>10,860</td>
</tr>
<tr>
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<td>18,739</td>
<td>3,974</td>
<td>10,907</td>
<td>10,838</td>
</tr>
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<td>3,788</td>
<td>48,395</td>
<td>10,838</td>
</tr>
<tr>
<td>April 1, 1960</td>
<td>9,242</td>
<td>26,161</td>
<td>5,514</td>
<td>103,337</td>
<td>14,314</td>
</tr>
</tbody>
</table>
### TABLE 2

**Social and Economic Characteristics of Alaska Population by Major Sub-Regions, 1960**

<table>
<thead>
<tr>
<th>Employment Census Week 1960</th>
<th>Total</th>
<th>Northwest</th>
<th>South-central</th>
<th>South-west</th>
<th>Interior</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>90,923</td>
<td>2,859</td>
<td>46,209</td>
<td>5,998</td>
<td>22,179</td>
<td>2,859</td>
</tr>
<tr>
<td>Government</td>
<td>51,941</td>
<td></td>
<td>26,948</td>
<td>4,422</td>
<td>14,733</td>
<td>1,339</td>
</tr>
<tr>
<td>Private</td>
<td>38,982</td>
<td></td>
<td>19,261</td>
<td>1,576</td>
<td>7,446</td>
<td>1,520</td>
</tr>
<tr>
<td>% Government</td>
<td>57.1</td>
<td></td>
<td>58.3</td>
<td>73.7</td>
<td>66.4</td>
<td>46.8</td>
</tr>
<tr>
<td>Non-Worker to Worker Ratio</td>
<td>1.27</td>
<td>1.38</td>
<td>1.15</td>
<td>2.22</td>
<td>1.06</td>
<td>2.35</td>
</tr>
<tr>
<td>% of Employable Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not working or working less than 13 weeks during 1959</td>
<td>35.2</td>
<td>36.8</td>
<td>32.3</td>
<td>51.8</td>
<td>29.9</td>
<td>54.5</td>
</tr>
</tbody>
</table>

**Education Levels Persons 25 yrs. old and over, 1960**

<table>
<thead>
<tr>
<th>% No Education</th>
<th>% with 1-8 yrs. school</th>
<th>% with more than grade school</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>2.0</td>
<td>2.5</td>
</tr>
<tr>
<td>22.8</td>
<td>27.1</td>
<td>19.4</td>
</tr>
<tr>
<td>73.6</td>
<td>70.9</td>
<td>58.7</td>
</tr>
</tbody>
</table>

**Infant Mortality Rates, 1963**

<table>
<thead>
<tr>
<th>Deaths under 1 year of age</th>
<th>Native</th>
<th>Non-Native</th>
</tr>
</thead>
<tbody>
<tr>
<td>per 1,000 live births</td>
<td>74.8</td>
<td>27.8</td>
</tr>
<tr>
<td></td>
<td>55.1</td>
<td>24.5</td>
</tr>
<tr>
<td></td>
<td>48.7</td>
<td>30.8</td>
</tr>
<tr>
<td></td>
<td>121.9</td>
<td>99.0</td>
</tr>
<tr>
<td></td>
<td>62.8</td>
<td>22.8</td>
</tr>
<tr>
<td></td>
<td>82.4</td>
<td>55.5</td>
</tr>
</tbody>
</table>

Source: Data from U.S. Bureau of the Census reports as presented in R. Cooley and G. Rogers, *Alaska's Population and Economic Situation, Volume II.*
(3) The Southwest Region with a land area of approximately 150,000 square miles includes the Alaska Peninsula, Aleutian Islands, Bering Sea Islands south of latitude 62 degrees north, the Bristol Bay drainage, Kuskokwim River basin, and the lower Yukon River basin, south of 64 degrees north.

(4) The Interior Region with a land area of approximately 180,000 square miles includes the remainder of the Yukon River basin, the Tanana and Koyukuk River basins, and the eastern part of the Arctic Slope within the Fairbanks election district. Until the recent closing down of dredging operations, this was the "Golden Heart of Alaska". It is the second most important military region that is now taking on the new role of transportation gateway to the North Slope petroleum provinces.

(5) The Northwest Region with a land area of approximately 125,000 square miles is the remainder of the State, its extreme northwestern corner. Mining and furs have provided the basic economy and there are prospects of petroleum in the future.

These five regions not only differ in terms of physical geographic characteristics and natural resource endowment, but exhibit clearly different economic and social characteristics and trends. Looking at only a few of the population characteristics reported in the 1960 census (Table 2), in the southwest and northwest regions, the Native population, or persons of aboriginal ancestry, are in the majority and in the other three regions they are minority groups. These two regions also exhibit the lowest per capita incomes including estimated value of subsistence hunting and fishing and the highest ratio of non-workers to workers. The southcentral and Interior regions have had the greatest absolute and relative population growth in recent years, the highest proportion of military and government workers to total population, the highest per capita incomes, and the lowest non-worker to worker ratios. The southeast region has the lowest proportion of military in its population and lowest government employment in its total employed labor force. The distribution of the census enumerations by major population components among these regions reveals further aspects of their behavior. Within each of the regions the Native population exhibits a similar U-shaped curve. The Non-Native population for each region exhibits considerably more erratic behavior than for the total Alaskan population, as counter-balancing effects of opposing regional trends are now eliminated (Table 3).

Estimates of Annual Population and Components of Change, 1940-1968

As valuable as the census data are in establishing population and development benchmarks, a ten-year period is too long to pinpoint the critical turning points. The gold stampedes at the turn of the century reached their climax of activity and population influx in the years between the taking of the official census. Nome had begun to decline in population when the census was taken on June 1, 1900, and the 1904 rush into the Tanana Valley, which resulted in the founding of Fairbanks, was history when the December 31, 1909, census was taken. Similarly, the turning point in World War II and the Cold War which followed all fell within periods between October 1, 1939, April 1, 1950, and April 1, 1960. Because of this, the Bureau of the Census has attempted to provide annual estimates of current/resident population for each state with
successful programs of public health and welfare in keeping people alive, in combination with an absence of official birth control programs.

The remainder of the population, the non-Native and non-defense-related population, is the most erratic in its trends, in- or out-migration in response to economic factors being its primary determining force. With certain lags and recent shifts toward a more balanced sex ratio and more normal age distributions over all ranges, these data reflect an almost purely economic development population response. Outside workers have come in when jobs were available and have tended to leave Alaska when they reach retirement age or their employment ends. The practice of retiring outside Alaska when the normal employment age limits are reached is indicated in the abnormally low proportion of non-Native people 65 years or over. The highly seasonal employment patterns and the heavy reliance upon seasonally imported workers in many industries, and the relatively high proportion of Alaska unemployment checks mailed to outside addresses are evidences of the mobility of this population component.

Alaska is not a single homogeneous entity and its study has always been based upon some form of regional sub-division in terms of physical, climatological, or natural resource features. The earliest surveys and reports divided Alaska into geographical provinces. Administrative units, from the earliest recording districts and judicial divisions to the present, election districts and administrative divisions of the State of Alaska, represent attempts to define meaningful and manageable entities. A study of statistical data and other information gathered in terms of these smaller local units indicates that there have been and are several contrasting sub-economies within the State, each with different structure and often opposing trends. Recently there have been attempts to find some general agreement on a basic division of the State which would be useful for both administrative and research purposes. The following five-unit division used here was proposed by the State Division of Planning in 1962 as an attempt to combine natural regional elements with economic development focus and has found general acceptance (Figure 1). This division, for example, has been used in the U.S. Department of the Interior 1967 Rampart power project studies, the Bureau of Public Roads 1965 highway study, and a number of important works done for federal and state agencies by private consultants.

(1) The Southeast Region with a land area of 37,566 square miles, set off from the rest of the State by the Malaspina Glacier and the St. Elias Range, comprises the many islands of the Alexander Archipelago and a strip of mainland extending along the northwest corner of British Columbia. Gold mining disappeared from the regional economy with World War II, but fisheries have continued and forest products (primarily wood pulp) have been the source of recent growth.

(2) The Southcentral Region with a land area of approximately 80,000 square miles comprises the southcentral coastal area of Alaska south and east of the arc of the Alaska Range. It includes the Susitna River basin, Cook Inlet and its tributaries, the Copper River basin, and Kodiak Island and other islands in the Gulf of Alaska. Its economy includes the main military, finance, trade, and transportation centers of the State, important fisheries, and the producing oleum areas.
Stabilization of the number of military personnel during the 1950’s and subsequent decline to a lower plateau during the 1960’s would be expected to be reflected in similar behavior of the military-related civilian economy, but the total population has continued to rise since 1960. New natural resource developments following the end of World War II, particularly the major petroleum and forest products developments, and the expansion of civilian government services in response to the needs of the larger and more settled population of today created more jobs than could be filled from local sources, and a new in-migration of workers and their families from Outside offset any decline in military-related population and continued to swell the total population. Looking into the future, the complex of anticipated development projects can be translated via employment calculations into the common denominator of population and afford a means of tracing the probable course of the future in terms of permitting direct comparisons with the present and the past.

The shape of Alaska’s past economic development, as noted above, can be traced, using the decennial census enumerations as a general indicator of the trend and its major turning points. Beyond this, segregation of these data by Native and non-Native persons, and more recently of the military and their dependents, reveals distinctive trends among these major components of Alaska’s total population which are obscured or lost in their combination (Table 1). These components have quite different characteristics and their trends represent response to different forces. The least complicated is the combination of military personnel, Defense Department civilian employees, and the dependents of both these employed groups. Together these persons are a pool of population increasing or decreasing in size in response to forces external to Alaska (national political considerations, changes in the international situation, changes in defense technology, etc.) but retaining a relatively constant internal composition. Within this sector the population comparison reflects a selective and stable range of age, sex, and occupation patterns, administratively determined by the forms of employment required by the defense establishment practices of rotation of personnel and dependents on a relatively short tour-of-duty basis.

The Native population dynamics have been primarily the results of natural forces of fertility and mortality. Until recently it was assumed that there was very little migration out of Alaska and relatively little within the regions of Alaska. During the 1950’s and 1960’s there has begun to be evidence of growing geographic mobility, but only in the last five years has this seemed significant.

Reviewing past historical trends, the general decline from an estimated 74,700 persons circa 1740-1780 to about one-third that number during the first two decades of the present century follows the classic pattern of the disruptive contact between a self-sufficient subsistence culture of an aboriginal people and specialized and exploitive colonial forces. The destruction of aboriginal self-sufficiency through specialization of activities and depletion of the former natural resource base, the depredations of unfamiliar diseases and customs took their toll. The accelerating increase in Native population starting in the late 1920’s and assuming explosive proportions in the 1950’s, with the total regaining about two-thirds of the 1740-1780 population by 1960, reflects improvement in general economic conditions in some regions, but more generally
# TABLE 1

**General Population Trends in Alaska, 1740-1960**

<table>
<thead>
<tr>
<th>Year or Date</th>
<th>Total</th>
<th>Native</th>
<th>Non-Native</th>
<th>Military Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Persons</td>
<td>Trend</td>
<td>No. of Persons</td>
<td>Trend</td>
</tr>
<tr>
<td>Circa 1740-80</td>
<td>74,000</td>
<td>32.7</td>
<td>74,000</td>
<td>100.0</td>
</tr>
<tr>
<td>1839</td>
<td>39,813</td>
<td>17.6</td>
<td>39,107</td>
<td>52.8</td>
</tr>
<tr>
<td>1860</td>
<td>33,426</td>
<td>14.8</td>
<td>32,996</td>
<td>44.6</td>
</tr>
<tr>
<td>1890</td>
<td>32,052</td>
<td>14.2</td>
<td>25,354</td>
<td>34.3</td>
</tr>
<tr>
<td>June 1, 1900</td>
<td>63,592</td>
<td>28.1</td>
<td>29,536</td>
<td>39.9</td>
</tr>
<tr>
<td>Dec. 31, 1909</td>
<td>64,356</td>
<td>28.5</td>
<td>25,331</td>
<td>34.2</td>
</tr>
<tr>
<td>Jan 1, 1920</td>
<td>55,036</td>
<td>24.3</td>
<td>26,558</td>
<td>36.0</td>
</tr>
<tr>
<td>Oct. 1, 1929</td>
<td>59,278</td>
<td>26.2</td>
<td>29,983</td>
<td>40.5</td>
</tr>
<tr>
<td>Oct. 1, 1939</td>
<td>72,524</td>
<td>32.1</td>
<td>32,458</td>
<td>43.8</td>
</tr>
<tr>
<td>Apr. 1, 1950</td>
<td>128,643</td>
<td>56.9</td>
<td>33,863</td>
<td>45.8</td>
</tr>
<tr>
<td>Apr. 1, 1960</td>
<td>226,167</td>
<td>100.0</td>
<td>43,081</td>
<td>58.2</td>
</tr>
</tbody>
</table>

1/ Number of persons expressed as percentage of maximum for each series.

estimates will provide the basis for analysis of the trends from 1740 to 1960. Treatment of the “past” will stop with the 1960 census. The level of military personnel stationed in Alaska appeared to have achieved a plateau, and military constructions, and, as noted above, related economic activities, declined during the decade of the fifties with no reversals during the sixties. Major natural resources developments initiated during the late 1950’s had not advanced by the date of the 1960 census to the stage of registering subsequent impacts upon population. Closer examination of the period of transition from 1940 to 1968 is provided by shifting the analysis from decennial data (which has the dual disadvantage for Alaska of being too infrequent and occurring at the wrong time of the year) to annual population estimates made by the U.S. Bureau of Census and the Alaska Department of Labor. This also will provide a more appropriate and detailed introduction to consideration of anticipated future trends to the end of the century which concludes this part.

Population Trends and Composition, 1740-1960

Population trends are the end product of economic and social factors and can serve as convenient means for approximating the direction, levels, and the timing of the important turning points in the more difficult to identify and measure development trends. The last two hundred years of Alaska’s past can be restated with population data summarized from estimates of the number of Alaskans at the time of the first European contacts through a selection from the several Russian and United States census reports (Table 1). The expansion of commercial fisheries and gold mining is reflected in the rise of non-Native population from the few hundred during the Russian and Initial United States periods to 34,056 and 39,025 in the 1900 and 1909 census counts. The period of stabilization and stagnation of the basic economy of gold, fish, copper, and furs is reflected in the decline between 1909 and 1929 in non-Native population, and the effects of the Great Depression outside Alaska in stimulating increased gold production and a “return to the land,” by regaining of the 1909 population level by 1939.

The dramatic expansion in population by 1950 can be traced directly to the movement of large numbers of military or defense personnel into Alaska, jumping from 524 in 1939 to 20,643 in 1950. Counting the increase in military personnel alone does not indicate the full magnitude of this new source of population. Accompanying those in uniform were an equal number of dependents, several thousand civilian employees of the Department of Defense and their dependents, and a fluctuating labor force of construction, services, and other supporting workers directly related to the construction and maintenance of the new Alaska military establishment. In view of the decline of the pre-World War II basic economy, virtually all of the increased population between 1939 and 1950 might be attributed to the shift in the basic economy from the limited base of the first half of the twentieth century to a military economy. The level of military personnel continued to rise and remained at about 50,000 for the period from 1952-1957. There was a sharp drop to about 35,000 in 1958 due to technological changes, and the level reported in 1960 has continued with minor fluctuations to the present.
Colonial Alaska was eclipsed between 1940 and 1942 by the coming of World War II to Alaska. But even without this new element, Colonial Alaska was already declining, its props of canned salmon, gold, and fur having been seriously eroded by over-exploitation or changed economic conditions. For the next two decades, defense, government, and supporting economic activities were Alaska's basic economy. Employment income generated by all of Alaska's fisheries, canneries, pulp mills, mines, farms, traplines, and minor industries was exceeded by the military payrolls. Personnel alone was equalled by that in tertiary industries other than government and was barely above that arising from the single industrial classification of "contract construction." This eclipsing of natural resources as the major element in Alaska's basic economy is not surprising. Alaska's military importance lay in its strategic location and the availability of relatively unlimited space for military installations, not in its natural resources. Consideration of economic factors was likewise not a matter of primary military concern, and defense construction had the effect of greatly increasing labor costs in an already high-cost area, thus creating barriers to resource development which might have come with the normal passage of time.

By the advent of the sixties, the defense economy had leveled off and its employment and income-producing capacity began to decline. The granting of statehood to Alaska in 1959 represented the highest political development possible for a territory within the United States. Future economic development was significantly conditioned by this political fact. At the same time, the economy began to shift to another and entirely different basis resulting from that State's increasing international importance as a strategic link in intercontinental air travel and transportation, and as a source of a broad range of natural resources for domestic and foreign markets. From the peaks of expenditures for construction, procurement, and personnel during the mid-1940's and early 1950's, the annual expenditures of the U.S. Department of Defense have shown a steady decline, from $416.9 million in 1954 to $315.3 million in 1966, including the value of some 1964 earthquake reconstruction. The value of wood products had been negligible prior to the construction of the first pulp mill in 1964, after which it rose from $14.6 million in 1954 to $57.8 million in 1966. There had been no significant production of petroleum or natural gas until the discoveries at Swanson River on the Kenai Peninsula in July, 1957, ushered in the Kenai and Cook Inlet oil and gas booms. The value of petroleum and natural gas production from these fields during 1966 was $56.3 million. Other discoveries were made in this region, but the most spectacular was the discovery in July, 1968, at Prudhoe Bay on Alaska's Arctic slope. Initial estimates of reserves in this new field ranged from 6 to 10-billion barrels, and a rush of exploration and development activities spread over most of the North Slope, with good prospects of further major discoveries. Fisheries' production rose in value, reflecting some improvement in the salmon fisheries by the mid-1960's, but to a greater extent reflecting the expansion of new fisheries such as king crab. As the decade of the 1960's approach their close, the immediate prospect for great natural resource development looks excitingly promising.

This first part will be concerned with reviewing population trends as indices of economic and social trends. The decennial census data and earlier
My analysis will be limited to statistical data which is readily available and understandable, the census data on population and its social and economic characteristics, and employment and income series. The subjects treated will be Alaska’s total economic development as translated into population trends, and measures of the degree to which Native population has been identified or involved in these developments. The objective of the whole exercise is not to penetrate deeply into the subject but, possibly for the first time, attempt to suggest its magnitude. The methodology can be applied to other political divisions of the North by those who have the necessary background to interpret and use the available statistics.

I. ALASKA DEVELOPMENT AND POPULATION CHANGE

European explorations of the Pacific Northwest during the eighteenth century prepared the way for the extension of the Russian and British fur trades into what is now Alaska, and launched the colonial development of Alaska. For varying periods of destructive exploitation, whaling during the mid-1800’s and the harvesting of fur seal and sea otter pelts from 1768 to 1911, along with a variety of land furs, set the pattern; but within ten to twenty years after the transfer to the United States, the primary base had begun to shift to other resources. The beginnings of the canned salmon industry, 1878 in southeastern and 1882-84 in central and western Alaska, the discovery of gold lode deposits in southeastern Alaska in 1880, and the gold placers at Nome and in the Interior between 1898 and 1906 provided the base for an expanded colonial economy. In the period between 1911 and 1938 copper ore production from the Kennecott mines made a further major contribution, exceeding gold production from 1915 to 1928. A few other natural resources made very minor contributions. But during the decade before its eclipse by World War II and its aftermath, the economic base of Colonial Alaska rested primarily upon the production of only two highly specialized products — gold and canned salmon.

The extent of this colonial specialization is highlighted in statistics of Alaska’s external trade. During the 1931-40 decade, the most recent decade for a predominantly peacetime civilian economy, average annual value of total shipments totalled $58,768,000, of which the two leading items were canned salmon ($32,582,000, or 55.1 percent of total shipments), and gold ($15,764,000, or 26.6 percent). All other shipments accounted for only 18.3 percent of the total. Defense was an insignificant element in the total economy. The average annual expenditures in Alaska of the Department of War, Corps of Engineers, and Department of the Navy was $1,546,046 for the five fiscal years 1933 through 1937. Most of this was for essentially civilian programs of river and harbor projects of the Corps of Engineers, communications system construction and operation by the Army Signal Corps, and the maritime safety and navigational aids of the Coast Guard. Despite the preaching of the early prophets of the new air age, it was not until the onset of World War II and the actual invasion and occupation of United States soil that Alaska’s strategic location came to be recognized, not as a defense liability, but as a natural bulwark for the North American continent. The October 1, 1939, census reported only 524 mill.
The Native people (the term "Native" having recently lost its slightly derogatory colonial connotation, will be used in place of the more cumbersome "indigenous people") have had experiences since the first European contacts which repeat those of all circum-polar peoples. But in keeping with Alaska's total political development, they also have made recent advances and have found political voices and means of implementing their objectives through the exercise of land claims. In the interest of simplicity and avoidance of duplication of other contributors, I have purposely avoided any comment on these critically important developments, although everything I will have to say can be taken as illumination of these political events and developments. I am here concerned only with attempting to measure crudely the degree to which Alaska Natives have participated in Alaska's economic development and its future prospects.

Several definitions should be given here in order to avoid future confusion. "Native population" represents the people who are indigenous to Alaska. There are several groups within this general classification having distinct cultural and physical characteristics, but they all share the common ones of aboriginal ancestry and permanent residence within Alaska. The common denominator among the "non-Native" peoples is that they are all recent migrants or descendants of recent migrants, of which the majority is transient. The gulf between Alaska's Natives and non-Natives when measured in terms of economic and physical well-being is so wide that most writers have come to talk of there being two separate and distinct Alaskas rather than one.

Native Alaska is quite diverse in terms of cultural differences and physical environments. The present-day Native Alaskans are descended from a variety of aboriginal economic and social systems, each reflecting the geographical and natural resource differences of the regions in which they developed and the ethnic inheritance of the original settlers from Asia. At the time of the first European contacts, the southeast region supported an estimated 10,000 Tlingit and 1,800 Haida Indians who were part of the high primitive culture of the northwest coast of North America. The mild climate and abundance of readily harvestable resources (particularly marine resources) provided the wealth and leisure for elaboration of a remarkably rich culture and sophisticated social system. Several subdivisions of the Western Eskimo and Aleut inhabited the Arctic, Bering Sea, Aleutian, and Gulf of Alaska coastal regions and all places penetrated inland as hunters of caribou. Estimates of the population at the time of the first "historical" contacts put about 6,300 along the Arctic coast, 600 Siberian Eskimos on St. Lawrence and the Bering Strait, 11,000 along the Bering Sea coast and the Yukon and Kuskokwim delta lands, and 8,700 on Kodiak Island and along the Gulf coast as far east as the Copper River delta. An estimated 16,000 Aleuts followed a maritime existence along the chain of the Aleutian Islands and on the Peninsula. Some 6,900 representatives of the Northern Athapaskan were scattered in small tribal groups throughout the vast woodlands of interior Alaska and had penetrated through the Alaska Range southward into the Cook Inlet and Copper River regions. Traces of the linguistic and cultural characteristics of each of these main divisions of the Native people survive to this day, being strongest among those living in the villages and weakest among the second generation which has attempted to move physically and culturally into the dominant non-native society and economy.
The Impact of Economic Conditions on Cross-Cultural Education in Alaska

This Conference is concerned with the gulf that separates the indigenous from the non-indigenous peoples of the North. My contribution is to focus upon the changing economic situation in the North and the involvement of the indigenous population in this development. Rather than attempt a general overview of the entire circum-polar North, I will deal only with the section in which I live and work. Although a choice made for personal convenience, my observations, analysis, and conclusions will have broader application. Alaska is large enough to embrace almost every type of physical, environmental, and natural resource situation to be found elsewhere. Its history of Western contact, penetration and domination is slightly shorter than its immediate western and eastern neighbors, the eastern sections of Siberia and the northern territories of Canada, but Alaska has moved further up the scale of political development, having the status of a "sovereign" state of the United States with relatively broad powers of local self-determination. In common with the rest of the North, the Alaskan past has been characterized by fluctuations in economic activity marked off in well-defined and highly specialized periods. The present, as well as the past, is characterized by a mixture of high hopes for the future which erase the lost in the past.
numbers drastically cut down. During the American period the coastal Eskimos suffered death from starvation and strange diseases brought in by the whalers who virtually extinguished the walrus and whale resources upon which the Eskimos depended for survival. The southeast Indians managed to keep the white invaders at arm's length because of their savage and warlike reputation, but their downfall came near the end of the nineteenth century when commercial fishermen and cannery men from California and the northwest coast invaded and took over their fisheries. The turn of the arctic and interior Eskimo and interior Indians came when Alaska shifted from its colonial to its military period. Finally, all were embraced by the coming of the welfare state to Alaska in the 1930's when national programs designed to meet the needs of a twentieth-century urban-industrial society were uniformly applied to a people still far from that condition.

The results of these contacts between Native Alaska and the mainstream of Alaska's economic development did bring some benefits and opportunities for participation, but on the whole the story was a contradictory one of unconscious or conscious cruelty and unavoidable or needless human misery. During the colonial period the Natives were treated as part of the environment in which the exploitation was undertaken. If they could be turned to a use in serving the purpose of getting the resource out as easily and cheaply as possible, they might be enslaved as with the Aleuts, or recruited, as were the southeast Indian fishermen and their women as a local work force in the harvest and processing of marine resources. If not, they were ruthlessly pushed aside while their traditional resources were exploited to the point of extinction by seasonally Imported work forces as was the case with the coastal Eskimo. The impact was, on the whole, destructive to traditional ways and to the Native people themselves, and their economic participation was marginal at best. Whether they participated or not, their very survival required adaptation of their traditional ways to the new conditions imposed by the altered environment.

A review of the official Alaska Native position as stated in documents from the Russian period to the 1968 publication by the Federal Field Committee for Development Planning in Alaska of its contribution "to a fair and intelligent resolution of the Alaska Native problem," however, gives the impression of a clear policy of increasing the fullest participation of the Alaska Native in the development process and in the sharing of its benefits, an assimilation policy which has remained steadfast for more than a century and a half. But the record reveals that progress has been as static, and the 1968 report still finds the Alaska Native for the most part living in "places where the population is largely of Native origin" and which are characterized by an "appallingly low income and standard of living, and the virtual absence of opportunity."

This section will take an overall view of the response of all of Alaska's Natives to economic development since 1939 only in terms of degrees of participation for which some indices can be computed and will make only some preliminary projections. The selection of the time period was partly a matter of convenience and availability of statistical evidence, but it also coincides with the period in which Alaska emerged from its pre-World War II colonial phase of
economic development and special Native health, welfare, and development programs were expanded or initiated. Economic participation requires as a first step that there be communication and contact between the two Alaskas, the Native and the non-Native. The population-development discussion of Part I will be resumed with the application of this type of analysis to the subject of the first step, that of achieving geographic proximity.

Native Population Response to Economic Development — the Geographic Dimension

The total population projections discussed in the last part combined with observations on the different patterns and trends of Native and Non-Native population, suggest a means of making a rough measurement of the degree of Native population under-response to economic development in the past and a measure of the increased response needed in the future if population-economic development imbalances are to be avoided and Native Alaskans are to be brought into contact with and eventual participation in the mainstream of development. The U.S. Bureau of the Census estimates were projections of past trends with certain assumptions concerning changes in fertility and natural increase. Migration was merely assumed to reflect recent past trends. The U.S. Department of the Interior estimates were based on a combination of predictions of major economic changes that would alter past population trends by providing a broader job base for the support of future populations and the awareness that public policy can effect the determining conditions. Applied to Native population, the first method can be a means of predicting or projecting how many Native people there will be in the state and where they will be located if they do not migrate from the region of their birth or present residence. These projections would assume, then, no Native response to shifts in economic development. The second method would provide a means of predicting where Native population probably would be located if it were as completely mobile and responsive to economic change as the non-Native. Applied to the past total Alaskan Native population, these would be used to compute hypothetical regional distributions. A comparison with the actual past distribution could provide a crude measure of the degree of past lack of responsiveness to economic development. The relative distribution of projected additional total population in these estimates applied to projected Native population increases will provide an indication of the population movements required as a first step in social development.

Two sets of Native population estimates are compared in Table 7. The first set of projections for the state and its regions assumed that in the future the Native population will not respond to economic development to any greater degree than it has prior to 1960 and that the projected level of population will reflect a progressively declining rate of net natural increase. Recent evidence suggests, however, an opposite assumption of rising rates of net natural increase as being more likely.

The population projections on the basis of natural increase alone assume that through the effects of public health and family planning programs there will be a progressive decline in the rates of natural increase from those of the 1960's to approximately 2.0 percent per year by 1990 or 2000. The actual total Alaska
<table>
<thead>
<tr>
<th>Year</th>
<th>Total Alaska</th>
<th>South Central</th>
<th>South Central</th>
<th>Southwest</th>
<th>Interior</th>
<th>Northwest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Alaska 1. 2. 3. 4. 5. 6. (thousands of persons)</td>
<td>1. 2. 3. 4. 5. 6. (thousands of persons)</td>
<td>1. 2. 3. 4. 5. 6. (thousands of persons)</td>
<td>1. 2. 3. 4. 5. 6. (thousands of persons)</td>
<td>1. 2. 3. 4. 5. 6. (thousands of persons)</td>
<td></td>
</tr>
<tr>
<td>1940</td>
<td>32.5</td>
<td>6.5</td>
<td>15.0</td>
<td>(7.5)</td>
<td>4.0</td>
<td>8.0</td>
</tr>
<tr>
<td>1945</td>
<td>33.0</td>
<td>7.1</td>
<td>14.5</td>
<td>(7.4)</td>
<td>3.8</td>
<td>9.6</td>
</tr>
<tr>
<td>1950</td>
<td>32.5</td>
<td>7.9</td>
<td>10.9</td>
<td>(3.6)</td>
<td>3.8</td>
<td>14.0</td>
</tr>
<tr>
<td>1955</td>
<td>37.5</td>
<td>8.5</td>
<td>10.1</td>
<td>(1.5)</td>
<td>4.4</td>
<td>18.0</td>
</tr>
<tr>
<td>1960</td>
<td>42.1</td>
<td>9.2</td>
<td>10.3</td>
<td>(0.9)</td>
<td>5.5</td>
<td>23.8</td>
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<tr>
<td>1965</td>
<td>49.7</td>
<td>10.2</td>
<td>11.3</td>
<td>(1.1)</td>
<td>7.0</td>
<td>29.1</td>
</tr>
<tr>
<td>1970</td>
<td>57.5</td>
<td>14.0</td>
<td>10.0</td>
<td>1.0</td>
<td>9.0</td>
<td>31.0</td>
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<tr>
<td>1975</td>
<td>69.0</td>
<td>13.5</td>
<td>15.0</td>
<td>(1.5)</td>
<td>11.0</td>
<td>33.0</td>
</tr>
<tr>
<td>1980</td>
<td>80.0</td>
<td>15.0</td>
<td>19.0</td>
<td>(4.0)</td>
<td>13.5</td>
<td>34.5</td>
</tr>
<tr>
<td>1985</td>
<td>94.5</td>
<td>17.5</td>
<td>23.0</td>
<td>(5.5)</td>
<td>16.0</td>
<td>41.0</td>
</tr>
<tr>
<td>1990</td>
<td>106.5</td>
<td>20.0</td>
<td>27.0</td>
<td>(7.0)</td>
<td>18.5</td>
<td>44.5</td>
</tr>
<tr>
<td>1995</td>
<td>122.5</td>
<td>23.0</td>
<td>32.5</td>
<td>(8.5)</td>
<td>21.0</td>
<td>47.0</td>
</tr>
<tr>
<td>2000</td>
<td>136.0</td>
<td>25.5</td>
<td>36.0</td>
<td>(10.5)</td>
<td>23.0</td>
<td>49.0</td>
</tr>
</tbody>
</table>


Regions:

Col. 1 - Same assumptions as Total Alaska with no migration between regions 1970-2000.

Col. 2 - Total Alaska projections re-allocated to regions in same proportion as non-native, non-defensive population regional distributions.

Col. 3 - Native population surplus or deficit.
and regional population levels reported by the census and estimates from vital statistics from 1940 to 1968 and the projections to the year 2000 on the basis of these assumptions will be taken as the base line from which to measure the degree of development response, made or required.

The second set of Native population estimates is calculated from the U.S. Department of the Interior estimates of population from 1970 to 2000. The underlying assumptions of these estimates were that jobs created by new economic developments would support additional population above the 1960 levels in the same proportions as national ratios of employment to total population and that defense personnel and their dependents would remain constant at about the 1960 levels. The discussion in Part I of non-Native population trends in the past also suggested their volatile nature, reflecting in-and out-migration and migration within Alaska in response to fluctuating employment as the dominant determinant of the level of distribution of non-Native population. The non-Native, non-defense population prior to 1970 and the estimated increased non-defense population together represent what might be called the "economic development effect" translated into population and geographic terms.

The 1940-1960 Native population for total Alaska was allocated among the five major regions in the same proportion as the reported regional distribution of the non-Native, non-defense population for the same period. This regional redistribution would be approximate if the Native population had been and is as responsive to geographic shifts in economic development as the non-Native. A comparison of these hypothetical distributions with the actual and projected distributions, assuming no migration gives a partial measure of the degree to which Native people have not been responsive to economic development forces in the past and the degree of geographic mobility they must achieve to be responsive to future developments. Being at or getting to "where the action is" represents the first obvious step.

One conclusion to be drawn from these comparisons is that the southeast region is the only region in which major population movements would not have been necessary in the past nor in the future for the greater involvement of Native people in Alaska's economic development. Social and economic data in the 1960 census, presented below, indicate some degree of correlation between this measure of economic development, response, and well-being of the people. The other four regions would require major movements of Native populations to achieve an indicated population-development balance comparable to the southeast region.

The southwest and northwest regions obviously have a large economically surplus population, but the interior and southcentral regions appear to have substantial Native population deficits in relation to the level of economic development activity as indicated by non-Native population trends and distribution. This might lead to the expectation that the economic and social-conditions of the Native population in the interior and southcentral regions would be greatly above the conditions of those in the remaining two regions. The comparisons of the indicators used above, on the contrary, suggest that the well-being of the Native people in all of these regions does not vary.
significantly. Part of the explanation is that the interior and southcentral regional units used are not entirely appropriate to the analysis being attempted, i.e., measurement of the amount of movement of Native population required for greater development involvement, although they were appropriate for the purposes for which they were originally defined, i.e., planning for general economics and social development of the State.

In these two regions 89 percent of the 1960 non-Native population was concentrated in the two near-metropolitan regions of Anchorage and Fairbanks, the town of Kodiak, and related major defense centers as compared with only 26 percent of the Native population of the two regions (Table 8). Furthermore, within the urban centers they constituted a small minority group easy to overlook. In other words, another leg of the journey to achieve communication with the mainstream remained, that of the movement from rural to urban places within the region. In the southeast Alaska case the urban-rural distribution was not so important in relation to contact between the two racial groups, as the non-Native population was, almost equally divided between rural and urban places given the nature of the economic development (the harvesting and processing of natural resources) as compared with the nature of the 1960 economic development of the Interior and southcentral regions (maintaining garrisons). Since 1960 there have been changes both in the behavior of Native population and in the economic development of these two regions.

Native Population Participation in Economic Development

The last section dealt with only one dimension, the space or geographic dimension, of the total change required for fuller participation of the Native people in the mainstream of Alaska development. Geographic mobility is an important aspect of necessary change and adaptation of Native population to development, and the experience of the 1960's has seen the Native people themselves working toward this end in their political actions and in voluntary movement into the state's major growth centers. But formidable barriers still remain to be overcome. In addition to being geographically mobile, the Native population must also have vocational mobility, and this in turn requires being qualified to take on the jobs offered and being accepted by the non-Native community. The journey is more than one from one place on the map to another. It is a journey through time and between cultures with all of the uncertainties, complexities, and hardships it implies.

No simple measures of this complex of factors can be readily devised, but the population characteristics data in the census provide general indicators. Racial breakdown of population economic characteristics is not available in the census reports beyond the color classification of white and non-white, but prior to World War II the non-white data could be treated as representing Native for purposes of general analysis. For the 1939 census the non-white population composition was 97.3 percent Native and only 2.7 percent other non-white. The last category was primarily Filipino and some oriental races engaged in fishing, fish processing, and services and, in any case, treated by the dominant white population as though they were really part of the Native population. The "other non-white" category increased in size and relative importance as a result of an
### TABLE 8

**Regional Distribution of Non-Native and Native Population by Type of Place — 1980**

<table>
<thead>
<tr>
<th>Type of Place</th>
<th>Non-Native Population</th>
<th>Native Population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Persons</td>
<td>%</td>
</tr>
<tr>
<td>Southeast</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban Places</td>
<td>13,555</td>
<td>51.8</td>
</tr>
<tr>
<td>Rural</td>
<td>12,601</td>
<td>48.2</td>
</tr>
<tr>
<td>Southcentral</td>
<td>103,337</td>
<td>100.0</td>
</tr>
<tr>
<td>Anchorage-Spenard</td>
<td>51,630</td>
<td>50.0</td>
</tr>
<tr>
<td>Anchorage Suburbs</td>
<td>12,825</td>
<td>12.4</td>
</tr>
<tr>
<td>Kodiak City</td>
<td>2,318</td>
<td>2.2</td>
</tr>
<tr>
<td>Defense</td>
<td>21,420</td>
<td>20.7</td>
</tr>
<tr>
<td>Rural</td>
<td>15,144</td>
<td>14.7</td>
</tr>
<tr>
<td>Southwest</td>
<td>6,687</td>
<td>100.0</td>
</tr>
<tr>
<td>Defense</td>
<td>4,520</td>
<td>67.8</td>
</tr>
<tr>
<td>Rural</td>
<td>2,167</td>
<td>32.2</td>
</tr>
<tr>
<td>Interior</td>
<td>44,190</td>
<td>100.0</td>
</tr>
<tr>
<td>Fairbanks City</td>
<td>12,877</td>
<td>28.9</td>
</tr>
<tr>
<td>Fairbanks Suburbs</td>
<td>12,840</td>
<td>28.9</td>
</tr>
<tr>
<td>Defense</td>
<td>17,138</td>
<td>35.5</td>
</tr>
<tr>
<td>Rural</td>
<td>1,635</td>
<td>3.7</td>
</tr>
<tr>
<td>Northwest</td>
<td>2,411</td>
<td>100.0</td>
</tr>
<tr>
<td>Nome</td>
<td>708</td>
<td>29.4</td>
</tr>
<tr>
<td>Defense</td>
<td>1,056</td>
<td>43.8</td>
</tr>
<tr>
<td>Rural</td>
<td>647</td>
<td>26.8</td>
</tr>
</tbody>
</table>

*Urban includes only places of 2,500 persons or more (except Nome) as listed in census reports.*

*Defense includes separate self-contained military base and reservation of 100 or more persons listed on census worksheets. Population includes both civilian and military persons enumerated at such defense places as deemed to be negligible.*

*Source: U.S. Bureau of the Census unpublished worksheets.*
In-migration of Negroes with the armed forces, construction work, etc. The 1950 non-white category consisted of 91.5 percent Native and 5.5 percent other non-white races, and in 1960 the composition had changed to 83.6 percent Native and 16.4 percent other non-white. Fortunately for our present purposes, most of the new non-white population other than Native was affiliated with military Alaska and its heaviest concentration in the Anchorage and Fairbanks areas. These two centers did not experience any significant in-movement of Native population until the mid-1960's. By deducting from the total Alaska non-white data the non-white military and Anchorage-Spenard and Fairbanks non-white civilian population, therefore, the balance of this category would still cover 98.6 percent of total Alaska Native population in 1950 and 95.1 percent in 1960. With this relatively minor "loss" of Native there would be a major deduction of other non-white population. The racial composition of the remainder would be changed to 97.4 percent Native and 2.6 percent other non-white in 1950 and 9.3 percent Native and 6.8 percent other non-white in 1960.

In Table 9 and the related discussion, the following census data have been taken as representative of the total Native population characteristics: non-white population for 1939, non-white civilian population less Anchorage-Spenard and Fairbanks in 1950 and 1960. Although a five regional breakdown of most population data is possible for 1960 and for a limited number of characteristics for 1950 and 1939, employment data for these three years can only be presented regionally as southeast Alaska and the remainder of Alaska. For this discussion this will be satisfactory, as the southeast Native population differs significantly in many respects from the remainder of the Native population as discussed in the previous section. Indices of the Native population participation in the Alaska economy are given by the non-worker to worker ratios calculated from census reports. "Non-workers" are taken as all persons under 14 years of age and persons 14 years and over who are classified by the census as not being in the labor force such as persons doing only incidental unpaid family work, students, housewives, retired workers, seasonal workers in the off-season, who are not seeking employment, inmates of institutions, or persons who cannot work because of physical or mental disability. The labor force includes all persons classified as employed or unemployed under the Bureau of Census definitions of these terms, as well as members of the armed forces. In Table 9 the non-worker category has been separated into the age brackets not normally found in the labor force, children and persons of retirement age, in order to indicate the role played by population increase in determining ratio.

The non-worker-worker ratios for white population presented in Table 9 reflects the age-sex imbalances in this component of Alaska's total population. The increase over the twenty-year period from less than one non-worker per worker to slightly more than one in 1960 reflects the increase in military dependents and families connected with recent economic developments. The increase in the ratios among southeast Alaska Natives from 2.28 in 1939 to 2.68 in 1960 reflects the population boom between 1950 and 1960, coupled with a relative small increase, in jobs available to Natives. Whereas the population increased by 41 percent between October 1, 1939, and April 1, 1960, the labor
<table>
<thead>
<tr>
<th></th>
<th>Under 14 yrs.</th>
<th>Others not in Labor Force</th>
<th>Total</th>
<th>Labor Force</th>
<th>Non-Worker to Worker Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-White Civilian (Excluding Anchorage and Fairbanks in 1950 and 1960)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Southeast Region</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct. 1, 1939</td>
<td>3,196</td>
<td>1,774</td>
<td>4,970</td>
<td>2,203</td>
<td>2.26</td>
</tr>
<tr>
<td>April 1, 1950</td>
<td>3,308</td>
<td>2,729</td>
<td>6,037</td>
<td>2,485</td>
<td>2.43</td>
</tr>
<tr>
<td>April 1, 1960</td>
<td>4,518</td>
<td>2,790</td>
<td>7,308</td>
<td>2,725</td>
<td>2.68</td>
</tr>
<tr>
<td><strong>Remainder of Alaska</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct. 1, 1939</td>
<td>11,553</td>
<td>7,034</td>
<td>18,587</td>
<td>7,612</td>
<td>2.44</td>
</tr>
<tr>
<td>April 1, 1950</td>
<td>11,781</td>
<td>6,773</td>
<td>18,554</td>
<td>7,213</td>
<td>2.51</td>
</tr>
<tr>
<td>April 1, 1960</td>
<td>16,670</td>
<td>11,269</td>
<td>27,939</td>
<td>5,707</td>
<td>4.89</td>
</tr>
<tr>
<td><strong>Total White Population</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct. 1, 1939</td>
<td>8,660</td>
<td>7,474</td>
<td>16,134</td>
<td>23,036</td>
<td>1.70</td>
</tr>
<tr>
<td>April 1, 1950</td>
<td>21,606</td>
<td>13,674</td>
<td>35,280</td>
<td>56,463</td>
<td>0.64</td>
</tr>
<tr>
<td>April 1, 1960</td>
<td>59,509</td>
<td>22,809</td>
<td>82,318</td>
<td>86,331</td>
<td>1.02</td>
</tr>
</tbody>
</table>

1/ All persons under 14 years of age and persons 14 years and over not classified as members of the labor force (unpaid family workers, students, housewives, retired workers, inmates of institutions, disabled persons unable to work, etc.).

2/ All persons classified as employed or unemployed by bureau Census.

force, including unemployed, increased by only 24 percent. The compounding effects of public health programs in decreasing the death rates and a sharp drop in the industrial sector of the economy in which most Natives participate is dramatically demonstrated by the data for the Native population in the remainder of Alaska. Native population remained constant over the first decade (25,955 in 1939 and 25,955 in 1950) and increased 30.4 percent between 1950 and 1960 to 33,839. Between 1939 and 1960, on the other hand, there was a decline in the labor force from 7,612 to 5,707. Together these developments resulted in a rise in the non-worker to worker ratio from 2.44 to 4.89.

The population increase due to the new public health drives of the 1960's coincided with the crash of the salmon-fisheries and canneries in which most of the Native population found their regular employment. The number of persons of all races engaged in fishery, including beach seine, and in transporting fish to processing plants fell from 28,609 and 27,544 during the 1949 and 1950 seasons to 11,992 and 15,101 during the 1959 and 1960 seasons. The mid-season employment in food processing fell from 11,600 and 11,900 in 1949 and 1950 to 5,200 and 7,100 in 1959 and 1960.

Unemployment data reported in the census are distorted by the high seasonality in much of Alaska's basic economy, but the comparison of the unemployment rates of Natives with white population at the dates of the census reports indicates the relative position of the Native worker to the Non-Native. Of the Native labor force in the southeast region, 16.6 percent were unemployed during the census reference week in April, 1960, as compared with 29.6 percent unemployed in the remainder of Alaska. The white labor force reported an unemployment rate of 11.1 percent.

Since the 1960 census there has been increased migration of Natives from their traditional village areas to the growth centers of the state. The Bureau of Indian Affairs and the various federal and State manpower training and area economic development programs have focused upon educating, training, and preparing Native workers to take a greater part in meeting Alaska's labor needs. All of this leads to the expectation that the employment situation has been improved, but a 1968 over-view states the contrary.

"Among Alaska Natives generally, more persons are unemployed or are seasonally employed than have permanent jobs. More than half of the work force is jobless most of the year; for them, food gathering activities provide basic subsistence. Only one-fourth of the work force has continuing employment. The Alaska Native work force, urban and rural, is estimated to be composed of 16,000 to 17,000 persons...50 to 60 percent are jobless in March and September, according to recent semi-annual reports compiled by the Bureau of Indian Affairs. At these times, only half of those employed have permanent jobs. In the summers, when no estimates are compiled, joblessness among Natives across the state may drop to 20 or 25 percent... In urban areas, Native unemployment appears to be higher than among non-Natives. Lacking education and marketable skills, the villager is not usually equipped to compete in the job market... Year-round jobs in most villages are few. Typically, the
opportunities are limited to positions such as school maintenance man, postmaster, airline station agent, village store manager, and possibly school cook or teacher aide. In these places, other adults gain income through the sale of furs, fish, or arts and crafts; find seasonal employment away from the village as fire-fighters, cannery workers, or construction laborers; depend upon welfare payments, make their National Guard income stretch mightily; or, as is usually the case, (1) provide for the bulk of their food supply by fishing, hunting, trapping, and other activities of food gathering; and (2) rely upon a combination of means to obtain cash needed for fuel, some food staples, and for tools and other supplies necessary to the harvest of fish and wildlife.\(^6\)

Another general measure of relative participation is a comparison of income received by different population groups. Annual estimates of personal income received by resident Alaskans are available back to 1950. These are updated and published along with the materials for all other states in the August issues of the Survey of Current Business and afford a means of measuring the relative economic progress in Alaska as a whole. In originally establishing the series for Alaska, however, the Office of Business Economics also was interested in determining the causes of Alaska's high income level. The most obvious factor was relative cost of living. Taking note that 1957-1958 consumer prices in Anchorage and Fairbanks were 35 percent to 45 percent above Seattle, the report concluded "that if prices are taken into account, per capita real income in Alaska is no higher than that in the country as a whole, at most, and possibly somewhat less." Another important factor was discovered when data collected for the benchmark year 1957 was organized to present the components of per capita income in four major economic groups:

<table>
<thead>
<tr>
<th>Economic Group</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military</td>
<td>$1,606</td>
</tr>
<tr>
<td>Native economy</td>
<td>1,231</td>
</tr>
<tr>
<td>Natural resource economy</td>
<td>2,052</td>
</tr>
<tr>
<td>Defense-oriented economy</td>
<td>3,691</td>
</tr>
<tr>
<td><strong>Total Alaska</strong></td>
<td><strong>$2,408</strong></td>
</tr>
</tbody>
</table>

Alaska's high 1957 income level (117 percent of the national average) was thus seen to stem largely from the state's defense-oriented economy located primarily in the southcentral part of the state (176 percent of national average). It was also clearly revealed that Alaska had an area of poverty which could be identified as the "Native economy" and measured 60 percent of the national average.

These conclusions were further confirmed by another investigation which organized the annual personal income estimates for the period 1957 through 1960 into the five major geographical regions used here and arrived at a series of total and per capita figures which divide the total state economy into regional rather than economic components. A comparison of 1960 regional levels of income with regional distribution of Native population reported by the U.S. Census indicated a marked correlation between the incidence of low income and population concentration.\(^8\)
A more recent study of personal income within Alaska found support for the conclusion that since 1960 the poor have been getting poorer and the rich have been getting richer. Per capita income was calculated for all census districts by the Bureau of the Census on the basis of wages and salaries, unemployment benefits and welfare payments reported by government agencies, and annual population estimates for each district. An urban-rural comparison was made by comparing a combination of the four census districts containing the largest urban centers in the state with an entire rural region consisting of four contiguous census districts in western Alaska. Other rural census districts were not included because of estimating inaccuracies associated with their small numbers or because they were islands of intense economic activity, such as electronic defense installation or construction, which caused district wage totals to be very misleading as to the actual economic condition of the permanent residents. In 1960 the Native population in the urban census districts was only 4.7 percent of the total population; but in the selected western rural districts it was 88.7 percent. Therefore, the comparisons can be taken as a reasonable index of the income position of Native Alaskans relative to other Alaskans.

The final comparisons of income made in this study are summarized in Table 10. The supporting tables of the study indicate that between 1961 and 1967 per capita income rose 29 percent in Anchorage, 38 percent in Fairbanks, 34 percent in Ketchikan, and 8 percent in Juneau where the 1967 per capita income, however, was still higher than any of the other urban districts. These data did not reflect changes in price levels which also move upward in all districts since 1961 (Anchorage 7.8 percent, Fairbanks 9.3 percent, Ketchikan 11.6 percent, and Juneau 14.5 percent). In contrast, the western rural area experienced a per capita income decline over the same period. The ratio of urban to western Alaska per capita income rose from 3.8 in the calendar year 1961 to 6.1 in the fiscal year 1967. The report ends with a statement of the only conclusion possible.

In conclusion, actual buying power per person and living standards are definitely not improving in rural areas of the state, although living standards steadily increase in large urban centers. Consequently, disparities in living standards are continuing to increase. In Alaska almost all victims of poverty, in both urban and rural areas, are "non-white"—chiefly Eskimo, Indian, or Aleut."
<table>
<thead>
<tr>
<th>TABLE 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparison of Urban Versus Western Alaska Civilian Per Capita Incomes, Based on</td>
</tr>
<tr>
<td>Wage Income, Unemployment Benefits, and Welfare Payments¹</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Calendar Year 1961</th>
<th>Calendar Year 1962</th>
<th>Calendar Year 1963</th>
<th>Calendar Year 1964</th>
<th>Calendar Year 1965</th>
<th>Calendar Year 1966</th>
<th>Fiscal Year 1967</th>
</tr>
</thead>
<tbody>
<tr>
<td>URBAN ALASKA, consisting of: Anchorage, Fairbanks, Juneau, and Ketchikan Census Districts</td>
<td>$2,410</td>
<td>$2,467</td>
<td>$2,562</td>
<td>$2,878</td>
<td>$2,953</td>
<td>$3,026</td>
<td>$3,118</td>
</tr>
<tr>
<td>WESTERN ALASKA, consisting of: Kobuk, Wade-Hampton, Bethel, and Kuskokwim Census Districts</td>
<td>$630</td>
<td>$602</td>
<td>$607</td>
<td>$609</td>
<td>$556</td>
<td>$575</td>
<td>$614</td>
</tr>
</tbody>
</table>

**RATIO:**

- Urban Per Capita Income¹ to Western Alaska Per Capita Income¹ (Excluding Nome)
  - 1961: 3.8
  - 1962: 4.1
  - 1963: 4.2
  - 1964: 4.7
  - 1965: 5.3
  - 1966: 5.3
  - 1967: 6.1

¹ Although proprietor's income and several other income categories are not reflected in the per capita income figures above, 80 per cent of all civilian income in Alaska is accounted for by the sources used. Therefore, it is unlikely that inclusion of all cash income would substantially alter the ratios of urban per capita income to that of Western Alaska. However, the ratios would be decreased by the inclusion of estimates for non-cash income from subsistence hunting and fishing. No such estimates are available, but it is known that subsistence activities are an important aspect of the economy of Western Alaska.

The Economic Situation

Educational Prerequisites for Native Involvement in Economic Development

This part opened with an analysis of the dimensions of the geographic prerequisites for increased Native participation in Alaska's economic development — moving from the village setting to "where the action is." A regional comparison of Native population projections solely on the basis of net natural increase with population based upon employment projections indicated that the two regions with the largest present Native populations and prospects for greatest future growth (Southwest and Northwest) are also the two regions with the lowest employment growth potential. The total number of new jobs anticipated at all levels in these regions, and which would be open to all persons without regard to previous residence or race, might even be exceeded by the additions to Native population in these regions. There will be an urgent need of a large but highly intelligent relocation of population from these areas if a natural out-migration does not take place. A 1967-68 BIA study of "employment non-availability" of village Natives suggests that reluctance to move to employment opportunities is a compound of factors arising from ignorance and fears. One job to be performed by education for greater Native economic participation is knowledge of what lies beyond the village horizons and what is required of the Native who would move on.

The measures of economic participation gave other dimensions of the problem of increasing Native participation. The non-worker to worker ratios by race (one for white and three for non-white Alaskans) and per capita income comparisons indicated the tremendous gap between Natives and other Alaskans which must be overcome in order to bring all population groups up to the same levels of economic participation. A racial comparison of employment patterns leads to the further general conclusion to be drawn that throughout the state as a whole the occupational or industrial sectors in which the greatest employment expansion will take place are those in which few Native people are today to be found. As a further minimum in considering education goals and programs, therefore, there is an urgent need for vocational education and retraining programs which are keyed to the most perspective study of general economic trends. But this is not enough. Since the launching of Native education programs under Sheldon Jackson and the Office of Education in 1884 to the present Federal and state vocational training and special education programs, Alaska's Native peoples have received the benefits of such preparation for increased economic participation. The results have been less than impressive. Because of the remoteness and isolation of many Native Alaskans, these benefits have not been evenly distributed, but even where the locational conditions were most ideal (the southeast region) education and vocational training have yielded disappointing results.

At the Fifty-Sixth Annual Convention of the Alaska Native Brotherhood held in November, 1968, I was asked to give a keynote address dealing with the dilemma.10 I used as the basis of the address a review of the experience of the region and the Tlingit, Haida, and Tsimshian people during the decade of the 1950's when fishing suffered its deepest depression and forest products were launched as a major economic development with the construction of two large
pulp mills at Ketchikan and Sitka. Although the region’s income and employment levels were impressively expanded between 1950 and 1960, an analysis of the economic and social data presented in the two censuses revealed that there had been virtually no shift of Native workers from the declining fisheries to the rapidly expanding forest products industries. All measures of total economic participation, in fact, indicated declining rates for Natives between 1950 and 1960 as compared with sharply increasing rates for Non-Whites. Population data adjusted for factors related to Bureau of Indian Affairs programs at Mount Edgecumbe near Sitka indicated a migration of Natives from these two centers of development as compared with a 31.3 percent increase of non-Native population in the Ketchikan area and a 99.7 percent increase in the Sitka area. The conclusion drawn was that the new jobs and the new income created by this development were taken up by more intensive utilization of the non-Native labor force and a significant immigration of additional workers from Outside.

But an even more striking conclusion was drawn from an examination of these data for the 1950’s. The vital statistics for the decade reported a total net natural increase (excess of births over deaths) for the Natives resident in the southeast region which was more than twice the Native population increase computed by deducting the 1950 from the 1960 census date. The “loss” was 20 percent of the 1950 population. Living through this period of hardship among fishermen and worker shortages in the new forest products industries, I was aware of the difficulties of changing fishermen into mill operatives and loggers from my involvement in a program in 1953-54 which attempted this on a crash basis with predictable results of total failure. Accepting welfare which at that time was in the form of distribution of surplus agricultural products was less degrading to a fisherman than surrendering himself to the tyranny of the clock and the meaninglessness of factory labor. I was also sadly aware that migration in a growing number of cases was preferable to either, if it held out the hope of remaining what one had always been or even a shadow of what one had been.

Everything that we are able to anticipate concerning Alaska’s future, and of the North in general, is that it will move even further than the present from forms of employment and ways of living which are compatible with the traditional ways of Alaska’s Natives. Given time, possibly a generation of time, the needed adjustments might be made, but the process would be costly in terms of human well-being and loss. Greater involvement of the Native peoples of the North in these new economic futures of the North and eventually beyond the geographic boundaries with a minimum of suffering requires more from education than knowledge and training alone. This greater challenge is difficult to grasp or to formulate into words. Speaking to representatives of Alaska’s Natives in November 1968, my concluding remarks were such an attempt.

“Now I am ready to discuss what you as members of the Alaska Native Brotherhood and Alaska Native Sisterhood can or should do about Alaska development. In light of what has already been said, we cannot or should not simply sit back and let things happen. You might argue that major development, such as the establishment of pulp mills, is something beyond our control. We do not have the
George Rogers

Financial or technical means to do this ourselves and therefore, must rely upon outside sources and decisions in which we play no part. This is true. But, this organization and its members should keep as fully informed on planned developments as possible. You should be constantly concerned with anticipating the future in order to prepare for it... For years you have made education of your youth one of your primary concerns. This is one means of helping your young people prepare themselves to take a greater role in the emerging future. But there is also a need for continuing education and training for all age groups, for the future will be a constantly changing one. You can assist your people in planning for participation through helping them to anticipate the changes and changing requirements. As in the past, your political influence and power must continue to be applied effectively to promote objectives which you have carefully chosen as being desirable. In addition to support of education and training programs, you should inaugurate programs of study of forms of economic organization, such as marketing or producers' cooperatives, which realize additional developments made possible by the larger developments. Participation requires anticipation, planning, education, training, and organization. But we also have a role to play in shaping the future as well as participating in it. An urban sociologist, Edmund Bacon, in his book Design of Cities has said, 'We are in danger of losing one of the most important concepts of mankind, that the future is what we make it'.

REFERENCES


2. For a full discussion of the basis on which the five regions were defined refer to Rogers and Cooley, op.cit. pp. 1-12. A revision in the Southcentral and Southwest boundaries has been suggested in one recent basic planning report to reflect the impact of emerging and anticipated petroleum and transportation developments. The Federal Field Committee for Development Planning in Alaska, A Subregional Economic Analysis of Alaska, Anchorage, August 1968:


The Economic Situation

Claus Bornemann

Claus Bornemann has worked in the office of the Greenland Department as one of the chief policy makers for many years. His economic analyses of Greenland are among the most perceptive available. Mr. Bornemann prepared the following paper while serving as Chief of the Greenland Secretariat, Copenhagen.
Economic Development in Greenland and Its Relationship to Education

Dr. Rogers' paper on Alaska is of considerable interest to anybody occupying himself with the problems of Greenland. Although people in Greenland will give a nod of recognition to several of the problems dealt with by Rogers, it should be noted that a number of conditions, geographic, climatic and not least historical, are different in Alaska and Greenland. Large parts of Alaska are climatically in a better situation than Greenland where the conditions of life are greatly influenced by five-sixths of the vast territory of Greenland being covered by the ice cap. And as to resources, Alaska seems to be in a considerably better position than Greenland.

The Colonial Period

Until 1953 Greenland was a Danish colony, a closed country to which strangers were admitted only with permission from the Danish Government. The purpose was to protect the population against undesirable influence from the outside world so as to preserve the Greenland culture and secure a harmonic development.
A report published by my friend Mr. Mads Lidegaard, and I, in 1960 after a visit to Alaska contained the following passage:

"From the beginning of the Danish Colonization starting in the eighteenth century (1721) — the Greenlanders have been protected against outer influences by the state, a protection, which in periods has brought with it a certain stagnation. At the same time the Alaskan Eskimos have for generations been exposed to a very marked influence from the white man, firstly by the Russian traders and adventurers, and since then by American pioneers and gold diggers. The Eskimo culture in Alaska has not received much attention, and not until a rather late date has the government brought into effect the protective measures for Alaska's native population, namely by the establishment of a special school and health department.

"While in Greenland is found a clear consciousness of Greenlandic people who are members of the Danish state as equal citizens, we found in Alaska no belief, that the Eskimos will continue to be able to live as a marked cultural group with their own language. All efforts are focused on bringing about the education of the Eskimos, so they can join the American community as citizens with equal rights and able to compete."

The desire for a quiet development of the Greenlandic community was also decisive for the economic policy in colonial Greenland. In his book "Economic Policy in Greenland" the Danish economist Mogens Boserup describes that period as follows:

"Up to the second World War, the economic administration of Greenland had been guided by the principle that Greenland must be neither a financial liability, nor a source of profit for the Danish State. Consequently, the prices paid to primary producers and the prices to be paid for consumer goods in the Government shops were fixed at such levels that the Government's economic activities would result in a surplus large enough to cover (together with the Government's profit from the mining of Kryolit) the expenditure on education, health, church and general administration. Direct taxes were not levied."

The Period After World War II

World War II roused Greenland from her magic sleep, and after the war it was no longer possible to keep the country isolated. It is true that the isolation protected the population against undesired influence from outside, but at the same time it meant stagnation with all the unfortunate consequences involved. When the Danish Prime Minister, Hans Hedtoft, visited Greenland in 1948, the social distress and the widespread tuberculosis made a deep impression on him, and shortly after his return the government set up a commission to deal with the problems in Greenland.

In its report the Greenland Commission of 1948 recommended far-reaching reforms in all sectors of society. The results of these recommendations
were first felt within the Health Service as, in the fifties, a public campaign was started against tuberculosis, the scourge of Greenland. Thanks to systematic efforts the rate of mortality declined greatly, and from being the commonest cause of death, tuberculosis was, in the mid-sixties, as far down as the twelfth place in the death rate statistics. The disease was under control, and 1967 was the first year without any deaths from tuberculosis in Greenland.

Development of the Population

The efficient work made by the Health Service, the improved hygiene, and the higher standard of living for the population has halved the mortality, and as, at the same time, the birth rate has increased enormously, the increase of the population in Greenland has shown an explosive development, the increase being almost four percent annually. Since 1921 the population in Greenland has increased as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1921</td>
<td>14,855</td>
</tr>
<tr>
<td>1938</td>
<td>18,708</td>
</tr>
<tr>
<td>1945</td>
<td>21,412</td>
</tr>
<tr>
<td>1962</td>
<td>35,499</td>
</tr>
<tr>
<td>1965</td>
<td>39,600</td>
</tr>
<tr>
<td>1967</td>
<td>43,782</td>
</tr>
</tbody>
</table>

The figures also comprise the persons born outside Greenland, whose percentage of the total population has increased considerably during recent years. The percentage of the non-Native population has, since 1860, developed as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1880</td>
<td>2.3%</td>
</tr>
<tr>
<td>1901</td>
<td>2.3%</td>
</tr>
<tr>
<td>1921</td>
<td>1.9%</td>
</tr>
<tr>
<td>1930</td>
<td>2.5%</td>
</tr>
<tr>
<td>1938</td>
<td>2.1%</td>
</tr>
<tr>
<td>1945</td>
<td>2.7%</td>
</tr>
<tr>
<td>1950</td>
<td>4.5%</td>
</tr>
<tr>
<td>1960</td>
<td>8.3%</td>
</tr>
<tr>
<td>1967</td>
<td>14.7%</td>
</tr>
</tbody>
</table>

From the middle of the last century up to World War II there were, as will be seen, only small fluctuations in the percentage of the population coming from Denmark; as late as in 1945 the percentage was under three. Since then, a regular increase is seen in the number of Danes, first and foremost necessitated by the current development, which calls for persons with education and qualifications not yet acquired by a sufficient number of Greenlanders.

While, up to the 1950's, State-Employed personnel were to Greenland, a regularly increasing number of Danes are now independent or employed in private undertakings within commerce, transport and the artisan trades. As will be seen, close to 15 percent of the population in 1967 were born outside Greenland.

Boserup examined in his book whether this demographic situation is a threat to economic progress, as some observers are inclined to think. Boserup,
The Economic Situation

was of the opinion, that "... these apprehensions are shown to be unfounded because Greenland's economic situation is different in several important respects from the situation usually found in underdeveloped countries with a high rate of population growth."

Boserup discussed the effect of population growth with regard to each of the three barriers which might conceivably prevent a steady increase in income per year, namely nature, capital and market outlets.

"Provided that climatic conditions do not worsen, the fisheries can be expected in the foreseeable future to give constant returns to additional inputs of capital and labour. In other words, 'nature' would not appear to be a limiting factor for an expansion of the basic industry."

With regard to the capital barrier Boserup pointed out that:

"Greenland's position is quite exceptional in that it is numerous as Greenland's own. In these conditions, the provision of the capital necessary to cope with the population increase in Greenland can not be a serious problem of financing for the Danish economy."

As to the market outlet Boserup remarked that:

"... prospects in world markets for fish processed by modern freezing methods are not bad, and Greenland's share in the total volume of world trade in these products is small, so that not even a large relative increase in its exports would be expected to produce a glut."

Boserup concluded:

"Greenland thus appears to be favoured in all three respects, and the high rate of population increase therefore need not be deplored on economic grounds. As regards to political results of rapid population increase, they may be regarded as wholly beneficial. This is so because under the conditions of modern civilization a population of only 30,000 people — especially when scattered over a very large area — will find it difficult to balance, without undue exclusion or excessive domination by immigrants. With a population of 60-80,000 — and with greatly improved education facilities — these problems should be easier to solve."

Plans for Development

Schedule 6 shows how investments were appointed in the period from 1951 to 1965. During these years the state invested totally more than 1,000 million kroner, but the rate was further increased after the Greenland Council of 1960 (G 60) had concluded its work. Under the impression of the enormous population increase, the Commission made an investigation of the need for investments in Greenland, and, on the basis of the investigation, the Commission worked out a ten-year plan for the development, which at the price level of that time (1963) presupposed a transfer of capital from Denmark of 4,200 million kroner in the period of 1966-75, about half for investments and the other half for operational expenditure.
On the basis of the report given by the Council, the Ministry for Greenland worked out an investment scheme with an investment framework of not less than 1,245 million kroner.

The main idea behind this planning has been the theories forming the basis for the work that has been done by the Greenland Council of 1960 (G 60), viz.:

A significant improvement of the standard of living in Greenland will depend on a continued concentration of the population whereby a larger proportion of the inhabitants will settle in urban districts. Only in this way will it be possible to provide the necessary sources of income and to make school facilities, social services, etc., available to a reasonable extent.

The mainstay of Greenland trade must be the all-seasonal marine fisheries. In consequence hereof future developments will primarily pivot on the openwater towns: Godthab, Frederikshab, Sukkertoppen and Holsteinborg. These centers provide the best opportunities for fishing on a large scale — and at all seasons of the year. Second in importance from an economic point of view will be the shrimp centers at Disko Bay.

When considering this as the main line, the four tasks set out below must be given priority when distributing the total amount available for investment:

1. The Export Trade — i.e. the fisheries and the fishing industry — as they will form the economic basis for Greenland's future development.

2. Housing Developments — necessary for concentration of the population (apart from that, also for other reasons).

3. School for Children and Adults — well educated manpower being one of the prerequisites for reorganization of Greenland's trade and industry with a view to improved economy.

4. Social Services — to cover the growing need for day nurseries, kindergartens, recreation centers and other facilities for young people, etc., caused by the growth of the towns; the industrial development; and the increasing employment of women.

A summary of the current five-year plan from 1968 to 1972 is given in schedule 6.

Population Prognoses

An essential basis for the investment planning is, of course, the expected increase of the population and its future distribution. With a growth rate of almost four percent the Greenlandic population would double in 20 years, but there is reason to believe that the intensified programme for family planning, including the increasing use of the loop and other contraceptive devices will bring about a reduction of the birthrate, and a somewhat slower population increase is expected in the 1970's. On this assumption and taking into account the number of people expected to come into, and leave the country, the authorities now work on the basis of the following population prognosis for Greenland (including persons born in Denmark):
The Economic Situation

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>46,700</td>
</tr>
<tr>
<td>1975</td>
<td>53,600</td>
</tr>
<tr>
<td>1980</td>
<td>60,000</td>
</tr>
<tr>
<td>1985</td>
<td>66,000</td>
</tr>
</tbody>
</table>

Distribution of the Population

As already mentioned, an increasing concentration of the population in the bigger towns is expected, although this is not the case in the sealing districts where the population must be scattered with a view to the sealing possibilities. In this respect the Greenland Council of 1960 has made the following forecast:

"By 1975, 80 percent of the population will be living in the towns against 60 percent today. In the fishing districts nearly 90 percent will at that time be living in towns."

The migration in Greenland is not a new phenomenon. Since World War II frequent migrations have taken place, and the booklet issued by the Ministry of Greenland "From Outpost to Town" says on this subject:

"A few years ago the Committee for Social Research in Greenland examined the census figures for 1950-60, which showed that within each single year of this latter period about 10 percent of the population moved from one settlement to another. In some years the rate was even higher, viz., about 12 1/2 percent. Already in 1960, it could be ascertained that more than 50 percent of the adult population in West Greenland were settled at a different place from that where they had been born."

These many removals may definitely be seen to follow a main trend. According to the Committee they practically all go in one direction, viz., from outpost to settlement, and from settlement to town, i.e., always toward large places. The census figures show that in most towns in Greenland the new arrivals are in a majority.

The past years have been an influx to the towns here as everywhere else in the world. In the period from 1950 to 1955, 42 inhabited places in Greenland have been depopulated, and the migration from the settlements shows a regularly increasing trend. The extensive migration necessarily gives adaptation difficulties and social problems to the people coming from the small static settlement communities to the different way of life in the towns, and the fear that the social harm will be too great has given rise to an animated public debate about the justification of the concentration policy. The criticism is, in particular, levelled against the development of the four openwater towns.

The tendency in Greenland is the same as in corresponding territories and countries, for instance Iceland, the Faroe Islands, and the northern parts of Norway, and even if the investment policy should be reversed in whole or in part in favor of the smaller places, there is reason to believe that the bigger towns would still exercise an attractive influence, especially on the young people.

Schedule 1 elucidates the expected migration to the town in Greenland up to 1975.
The Employment Situation

As stated by Mr. Loiz in his commentary to Dr. Rogers' paper, it must be admitted "... that Alaska has some good statistics." That Greenland, on the other hand, is in rather a weak position as regards employment will be seen in a few years, as at the moment, a system of "labour market offices" is being set up, and among the tasks to be performed by these offices is that of collecting material for the working out of employment statistics.

In view of the fact that sealing and marine fisheries are the dominating trades it is understandable that seasonable unemployment must occur in Greenland. Furthermore, there is reason to draw attention to the special form of unemployment which Boserup describes in his book as "voluntary unemployment" in the sense that the supply of labor for wage employment as well as for fishing appears to be lower than what is usually regarded as "normal" in European countries.

Especially in the winter period seasonal unemployment will occur, whereas in the summer period there is a pronounced shortage of labor in the towns. To judge from the reports available and, in particular, from the records of the amounts paid as public assistance, it is, however, justifiable to maintain that, so far, unemployment has constituted no serious problem to the community of Greenland.

It is characteristic of the labour market in Greenland that the development rate and not least the hectic investment rate has necessitated the presence of a considerable number of Danish experts and workers. Out of a labour force of 13,025 persons in 1966, 2,665 were Danes sent up from Denmark, and as will be seen from schedule 4, these persons preferably had the jobs requiring good training and skill and consequently were better paid. First of all, the reason is, of course the introduction of a new technique and new trade conditions, which have, so far, been unknown to the Greenlanders. Through an intensified development programme, the Danish Government tries to make the Greenlanders capable of taking over the jobs held by the personnel sent from "Greenlandization" of the labour market, but at the present level of investment there are hardly any prospects of a radical change towards the end of the 1970's. As will be known, education and training are time-consuming processes.

In 1965, the labour force available on the Greenlandic labour market in the age groups of working was 10,900. This figure is expected to rise as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>12,000</td>
</tr>
<tr>
<td>1975</td>
<td>13,800</td>
</tr>
<tr>
<td>1980</td>
<td>16,000</td>
</tr>
</tbody>
</table>

If the fisheries do not fail in the next few years and provided that the planned investments are made, it is supposed that this labour force can be absorbed. However, in order to avoid unemployment it is necessary for the Native labour force to get such good training in the years to come that they will be able to take over the jobs now held by personnel from Denmark. Therefore, the development will make heavy demands on the educational sector.

On the longer view, it is a serious question whether the fisheries will be able to give work to the growing population, and in particular, occupational
problems may arise if the investments are reduced. These problems are receiving some attention in the Ministry of Greenland where a development plan up to 1985 is now being worked out.

**Fisheries**

As will be seen from the above, the fisheries are considered to be the principal trade in future. This view has been criticized from various quarters, but on the grounds that the Greenlanders are being tied to a trade of a rough and difficult nature at a time when the world market for fishery produce does not seem to offer very favourable conditions. The various Greenland committees have, however, found it reasonable to build up a Greenlandic trade and industry on the basis of the natural resources; codfish, shrimp, and salmon, because the population outside the sealing districts proper has grown accustomed to fishing in a generation.

At the turn of the century, sealing was exclusively the principal industry in Greenland, but in the twenties codfish was observed in considerable quantities along the west coast of Greenland, and during the following decades coastal fishing developed, small boats being used to deliver the fish to the plants ashore where it was salted or dried with a view to exporting to southern countries, in particular the Catholic Mediterranean countries. Since the mid-fifties the state has created a number of industrial plants up the west coast of Greenland for the processing of codfish, shrimp, and salmon, and especially shrimping has developed greatly.

Towards the end of the fifties the Greenlanders fished from dinghies and quite small motor boats, usually 20-22 foot boats, but the shrimping brought about a considerable growth of the Greenlandic cutter fleet, and today there are more than 100 privately owned cutters of 35 feet or more. The Greenlandic fishermen relatively soon became accustomed to the bigger types of craft, the purchase of which was rendered possible by favourable Government loans and grants. During the latter half of the sixties the size of the boats has increased considerably: The state has led the way by acquiring two line-fishing craft of 80 tons and two of 150 tons, but also private Greenlandic fishermen have made investments in big line-fishing craft for codfishing.

Since 1950 the Greenlandic fisheries have developed as follows:

In the spring of 1969 the first Greenlandic stern trawlers of 500 tons belonging to the State were launched, and in the period up to 1973 four more state-owned trawlers are expected to be added to the Greenland fleet of fishing vessels. The purpose is to secure for the Greenland fishermen a share in the large stock of fish at the banks in Davis Strait and thus to secure the Greenlandic industry regular supplies of raw materials all the year round. Thereby the employment in the fishing industry in central Greenland might be more constant than is the case at the moment when it is prone to seasonal fluctuations.

Although shrimping has developed satisfactorily, the important cod fishing is stagnating in spite of the use of increasing tonnage. According to the biologists, this mainly is caused by the over-fishing taking place in Greenland waters in consequence of the intensive international fishing activities. The large stocks of codfish are now caught much faster than before. Also climatic
<table>
<thead>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Codfish (whole fish)</td>
<td>19,650</td>
<td>21,536</td>
<td>29,765</td>
<td>36,300</td>
<td>24,800</td>
<td>17,178</td>
<td>25,210</td>
<td>29,970</td>
<td>28,276</td>
</tr>
<tr>
<td>Shrimps</td>
<td>210</td>
<td>538</td>
<td>1,500</td>
<td>3,460</td>
<td>3,340</td>
<td>3,770</td>
<td>5,151</td>
<td>5,378</td>
<td>5,644</td>
</tr>
<tr>
<td>Wolffish (whole fish)</td>
<td>857</td>
<td>3,228</td>
<td>2,950</td>
<td>1,700</td>
<td>2,520</td>
<td>2,064</td>
<td>3,257</td>
<td>2,379</td>
<td>2,699</td>
</tr>
<tr>
<td>Halibut (Greenland)</td>
<td>271</td>
<td>844</td>
<td>1,440</td>
<td>1,300</td>
<td>2,360</td>
<td>2,575</td>
<td>2,898</td>
<td>2,449</td>
<td>1,749</td>
</tr>
<tr>
<td>Salmon</td>
<td>90</td>
<td>300</td>
<td>400</td>
<td>1,387</td>
<td>743</td>
<td>1,126</td>
<td>1,153</td>
<td></td>
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<tr>
<td><strong>Total</strong></td>
<td>20,988</td>
<td>26,146</td>
<td>35,745</td>
<td>43,060</td>
<td>33,420</td>
<td>26,924</td>
<td>37,159</td>
<td>37,159</td>
<td>41,402</td>
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Other Trades

So far, the Greenland trade and industry have, to an overwhelming degree, been based on sealing and fisheries. It is true that sheep-breeding has, with some success, been developed in South Greenland, but the possibilities in this trade are rather limited. On an estimate, a maximum of 70 farms with 700-800 sheep each may be able to subsist. Consequently, sheep-breeding is of no great importance as regards the employment of the greatly increasing population.

Mining

Mining in Greenland is mainly known in the form of coal mining at Qutdligrassat and the mining of cryolite at Ilulissat. But the state-owned coal mine at Qutdligrassat is to be closed down in 1972 in consequence of the high increasing deficit, which, among other things, is due to marketing difficulties on account of consumers shifting to liquid fuel. The cryolite quarry is worked out and in about ten years all the existing cryolite will have been shipped from Greenland.

An act of May 12, 1965, prepared the way for private initiative to explore and exploit mineral deposits in Greenland, which has resulted in rather brisk activities, the outcome being a number of interesting mineral finds. The finds that have so far aroused the greatest interest are the occurrence of lead and zinc in the Umanak district, chrome at "Fiskerisq"; uranium, niobium and beryllium at Narsag and molybdenum at Mestersvig. But so far no mining has been commenced anywhere, and at most places mining would involve extremely large investments.

Future Prospects and Problems

The reform policy pursued since 1950 has brought about considerable progress for the Greenlander population. Tuberculosis is under control, the average duration of life has increased greatly, the standard of accommodation has been raised, the education system is developing with explosive force, and the effective income has been trebled.

Also in the political field a positive development has taken place. Anyone who has followed the work performed by the local councils in this period has no doubt that the members' faculty of dealing with the increasingly complicated social problems has improved considerably. The Provincial Council of Greenland, dealing with all proposals in connection with the development in Greenland, saw its political position strengthened in 1967 when the Governor, who had, so far, presided over the Council's meetings, had to yield his seat to a chairman elected by the Council. At the same time, the Provincial Council set up its own secretariat, and now the Council is able to deal with the business submitted without assistance from the state authorities in Greenland.

Just as in other countries where development is moving at a high rate, however, social adjustment difficulties are seen in Greenland, especially in the rapidly growing townships, where one finds increased criminality and a rising consumption of alcohol, although it must be admitted that outstanding progress has, first and foremost, been made possible by increasing state grants, which, in exceed 500 million kroner, and by the presence of a considerable number
The Economic Situation

of Danish experts and workers. That the state grants are being constantly increased, can be seen from the latest budget for the Ministry of Greenland published in June 1969.

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<tr>
<td>Mill. Kr. Net Operational ex penditure</td>
<td>246.1</td>
<td>268.0</td>
<td>278.5</td>
<td>295.4</td>
<td>306.0</td>
</tr>
<tr>
<td>Investment and capital expenditure gross</td>
<td>307.2</td>
<td>340.0</td>
<td>350.5</td>
<td>371.4</td>
<td>360.9</td>
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TABLE 3

As the most pressing problems in Greenland are about to be solved and the worst social evils have been combated, the question is raised from several quarters whether the Danish policy in Greenland is too ambitious. Reports and plans worked out since World War II have all been aimed at the development of a Greenlandic community with a satisfactory standard of living, which at the same time should be in harmony with the trade potential of the country. But since Greenland acquired a status of equality as part of Denmark in 1953 demands have been put for continued improvement of the standard of living without regard to economic background, based on the wish to secure full social and economic equality for all parts of the Danish realm. Now the question presents itself with increasing force whether the trade potential of Greenland is sufficient to bear the burden of a growing community on its way towards a European standard of living. Will it be possible to develop an economy in Greenland that will be able to bring about a reduction of the increasing state grants or, at any rate, to stabilize them on the present level?

The prospects for the traditional Greenlandic trades and fisheries do not look too cheerful. It is true that the sealing districts have shown a certain vitality, and the authorities have adopted a positive attitude to the development of the sealing trade. But the question is whether, on the long view, it will be possible at all to make a population stick to the tough sealing trade in areas that, through modern means of communications, will get into increasing contact with the outer world.

The guarded optimism characteristic of Bostrup's view of the fisheries in connection with the highly accelerating growth of the population is on the wane. Confidence in the fisheries as the 'natural basis' has faded on account of the increasing overfishing and the climatic difficulties experienced during recent years. The climatologists' views on the climatic development in Greenland during the coming decades are unfavorable, and although nobody dare predict the complete disappearance of the cod from the Greenland waters, the fishing trade must be prepared to face difficulties. International markets for the fishery produce seem to have but limited possibilities of expansion, and the prices of fish from Greenland have been declining. Although the trade may overcome
the present crisis, it is highly doubtful that this trade alone will be able to create
the economic basis for a modern community in Greenland.

It is not to be wondered that the Greenlanders are eagerly looking for
other potential sources of income, and at present they pin their faith on mining
and tourism. The numerous mineral finds have raised their hopes in connection
with the Greenland subsoil, but a commercial exploitation will require consider-
able investments of a magnitude exceeding the means available in the Greenland
— and probably also in the Danish — community. If mines are to be opened up
in Greenland, international capital must be involved with all the problems this
may create in the small Greenland community. Furthermore, the possibility of
direct employment of the growing Greenland population in the mines is prob-
ably limited, as the mines will undoubtedly be automated to a great extent.
Therefore, the expectations are to a higher degree centered on the potential
income from the service trades derived from the mining activities.

The tourist trade takes an increasing interest in Greenland, but the
authorities are rather cautious in their evaluation of the importance of tourism
to the Greenland population in respect to employment as well as income. There
are some misgivings about the socio-psychological consequences of a develop-
ment of the tourist trade. It is generally agreed, however, that the present
economic crisis makes it desirable to investigate all possibilities, including
tourism.

Other industrial undertakings based on local production (meat, skins,
handicraft) will probably come into existence in the years to come, presumably
on the co-operative system. Difficulties in connection with the establishment of
industrial undertakings in Greenland, however, arise from the initial costs, which
are twice as high as in Denmark, and the long distances to the markets.

The difficulties facing trade and industry have weakened the faith in the
possibility of securing employment for the constantly increasing population in
Greenland proper. Many people find that attempts should be made to stabilize
the population figure at the estimated 1985 level (about 66,000 inhabitants), by
an intensive campaign for family planning, and by a limited emigration unless
new industrial and commercial possibilities should appear in the coming years.

It is not only the large capital transfers, but also the presence of the great
number of persons sent up from Denmark that create social problems. The
considerable elements of Danes in the population contributes to the develop-
ment being forced in a West-European direction, the original social structure in
Greenland being thereby swept away. In the private sector, which has gradually
come to cover 30 percent of the economy (especially trade, craft and transport)
the Natives find it difficult to compete with the immigrated Danes.

The natural tension between Danish and Greenlandic has, so far, given rise
to no great friction or difficulties. The Provincial Council of Greenland and the
population in general still go in for the integration policy, but an increasing
number of Greenlanders are discussing whether it will be possible to preserve
their national character in the face of the development now taking place. For
instance, this manifests itself in the debate on the placing of the Greenlandic
language in the school system, but also the problem turns up in many other
aspects. In particular the discussion turns on the problem of the participation of
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It is maintained that the demand for economic and social equality with the other parts of the Danish realm contributes to speeding up the rate of the development, thereby creating difficulties for Greenlandic participation.

A Greenlandic student expressed this opinion in a newspaper article recently published in part of the Danish press. He wrote:

"The Greenlanders must leave off demanding equality with the Danes at any price. The objective of our policy must be that as many Greenlanders as possible are made to feel that the community is a concern of theirs, that as many Greenlanders as possible become contented citizens in the community and feel to be part of it. The demand of equality must, in view of the said objective, be of secondary importance."

During certain periods the problems around Greenland have been the subject of animated debates among the general public in Denmark, and in the coming six months such debates will undoubtedly be intensified. The Danish TV has prepared a series of telecasts about Greenland to be put on the air in the autumn of 1969, and in political circles a general debate about Greenland is expected to take place in the Danish Parliament early in 1970. The present employment crises will certainly give rise to a renewed evaluation of Greenland policy.

In her policy in Greenland, Denmark has always been prompted by her desire to support the population in Greenland and to improve its possibilities of development. This policy, which has to a higher degree been induced by social motives than by prospects of economic gains, has — as will be seen from the above — lately met with serious problems of economic and cultural character. Therefore, it is understandable that, also in Danish quarters, we are with great interest looking forward to an international exchange of views on the future prospects of the arctic peoples.

REFERENCES

The Economic Situation

James R. Lotz

At the time this paper was prepared, Jim Lotz was Professor and Assistant Director at the Canadian Research Centre for Anthropology, University of Ottawa. Professor Lotz has written extensively on the North from the point of view that economic development must be considered first and foremost out of consideration for the people of the North rather than the material resources. His paper clearly states this case.
Any discussion of development in the North from a Canadian perspective is bound to be, to some extent, a footnote to the work of Dr. George Rogers. There are significant differences between Alaska and northern Canada, but there are also remarkable similarities in the recent economic and social development in the two regions. These include patterns of boom and bust, the reliance on defense expenditures, the heavy seasonality of employment, the transient "outside" labour force, the production of primary products for overseas markets, the reliance on "outside" sources of money and power, the dominance of government spending in the economy, the focus on the material aims of development, and the emergence of a dual economy of affluent, transient whites and poor, resident Natives.

Alaska at least has some adequate statistics. Anyone surveying the statistical picture in northern Canada soon comes across the problems of unreliable figures, unsuitable categories, unavailable data, and other difficulties. While the federal government is doing a great deal to ensure that accurate figures will be available in the future for planning northern development, it is still possible to find "progress" in mineral development being equated with the number of claims staked in various parts of the North. We do not know the
The exact population of the North is determined through censuses taken at peak periods, and for intercensus years, in the Yukon Territory, 1,000 is added each year as a handy way of arriving at a population estimate. Between 1961 and 1966, in the Yukon Territory, however, there was a decline in population of about 900. Between these years, the natural increase in the Territory had been over 2,000.

In northern Canada, a land that is still emerging from the mists of myth, it is necessary to approach matters from a subjective and intuitive aspect, in the absence of reliable data. My aim in this paper is not to make dogmatic, deterministic statements about what should happen in the North, but rather to raise some questions about the economic, political, social and human future of the North, and leave those in charge of running the North to work out the necessary policies, programmes and approaches at the various levels.

For the past fourteen years, I have been involved in Canada’s northern development as a participant and as an observer. I have travelled widely in the Canadian North but never stayed very long in one place. I have tried without success to grow vegetables and grasses in Labrador-Ungava, attempted to measure the micro-climate above high arctic glaciers (and wondered exactly what I was measuring with my expensive and complicated instruments), served in an administrative section of the northern development bureaucracy in Ottawa (and seen the stresses that come with trying to run the edges from the center, with inadequate knowledge and information), worked in research in government (and seen the limits that operational and financial requirements set on free enquiry), and talked with a wide variety of people at every level, from prospectors to professors, about the development of the North.

Unlike Dr. Rogers, I am not a resident of the North. I live in Ottawa, and have seen the way in which Canadians have begun to realize that their nation is not an imitation United States or a misplaced Britain, but a northern land with all the problems of adaptation that this implies. Transportation is being touted as the key to northern and national development. Yet within the last year, two events have occurred that demonstrated the lack of awareness that Canadians have about the northern nature of their land. A western airline bought two Japanese planes that would not operate in the cold of northern Manitoba. And Canada’s National Railway put a turboprop tested in the Northern United States into service in eastern Canada, only to withdraw it when problems associated with operating in the cold weather were encountered.

There is still the blithe belief in Canada that the North is somewhere “up there”, rather than a constant presence that presses on the country. I have not spent any considerable time in the North since the summer of 1965, and have to fight hard to avoid the arctic expert syndrome, which involves claiming to know more and more about the North in inverse proportion to the amount of time spent there. Ottawa, however, has about four months of sub-arctic weather each year and, as elsewhere in Canada, we struggle along dissipating large amounts of energy, trying to use temperate artifacts (notably cars and houses) in a cold climate.
I must admit to a great deal of confusion in my own mind about northern development in Canada—a luxury in which official spokesmen on the North cannot afford to indulge for fear of wrecking confidence in the future of the area. Canada's federal North has been my main focus of interest. Here, beyond 60°N, at the present time, the federal government is the dominant force in development. Officials set the rules. The Yukon and the Northwest Territories cover about 40% of the land area of Canada, but contain a population of under 60,000 at the present time. The federal government "owns" the land and its resources, and is an inescapable presence. The Territorial governments are becoming more and more aware of the people problems, and, as with most western style development programmes, a strain is emerging between economically-oriented people and socially-oriented people. Another stress area is between those who equate development with mineral exploitation, and those to whom conservation of resources and the ecology of the land are paramount.

In northern development in Canada, we seem to have trouble determining the size, shape and color of the Emperor's clothes. Over the past few years, there has been an unbounded spirit of optimism about the Canadian North. It is hard to determine why this booster approach has not been challenged. It has overtones of the American approach to the "Great West" in the nineteenth century. Concepts appropriate to the American West in the nineteenth century have been transferred to the Canadian North in the twentieth. The great rich Canadian North may be largely myth—careful scientific work on the ground is replacing fond dreams and illusions with concrete realities. Of course, there are rich bits in the Canadian federal North. But in between there are miles and miles of miles and miles—all this land must be surveyed, looked after, conserved. Even the rich lead-zinc deposit at Pine Point in the Northwest Territories needed a massive federal investment in a railway, to bring it into production. Government support and subsidy seems to be a sine qua non for any northern development role. But the federal government does not have unlimited funds, and it has other priorities for regional and urban development throughout Canada. Why spend federal funds in the North when they might create employment for larger numbers of people elsewhere in Canada? The recent establishment of the Department of Regional Economic Expansion indicates that the federal government will be seeking to bolster the economies of other "lagging" parts of the nation. There is a rich iron ore deposit on northern Baffin Island, and the federal government has been talking about a $25,000,000 subsidy to bring this mine into production. Why public funds should be used in a venture of this sort is never explained. Is there a shortage of iron ore? Can the ore be got out and to the markets on a regular schedule? What will the delivered price be compared to the cost of getting the ore out of the ground? These questions do not only puzzle simple bystanders like me. They are also beginning to be asked by those people in the federal government whose responsibility it is to see that available funds are allocated in a rational way to provide employment for as many people as possible. The North is only one of many "disadvantaged areas" in Canada into which federal funds have to be put. And the experience of development north of sixty to date could give many useful pointers on how the federal funds could be invested, instead of merely being spent for showpieces or to bolster inefficient,
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sagging sectors of the economy that are not competitive at the national or the international level.

As far as Arctic oil exploration is concerned, a useful rationale for the expenditure of federal funds in such ventures is that they do help Canada to secure title to its North. Canada's attitude towards the question of Arctic sovereignty of late has smacked somewhat of an old lady looking under the bed for burglars. She sometimes hopes she will find them there so that she can scream for help. There was tremendous alarm in Canada this year when someone stated that he had seen maps put out by American oil companies showing that parts of the Arctic did not belong to Canada. Somehow these maps were never found, and anyone familiar with the operation of large oil companies realizes that they have had enough experience in other parts of the world to render them sensitive to the problems of national sovereignty. It is a pathetic comment on Canada's attitude towards the North that the area only slides into prominence when (a) there seems to be something of economic value there and (b) some other power or group appears to be intent on stealing it.

In Canada, imagination about the North has not been lacking, and pop art versions of northern development have appeared with increasing frequency. There has been endless talk of domed cities, under-ice pipelines, and ice-breakers keeping the Northwest Passage open. It seems as if this sort of talk acts as a magic potion to offset the fears of people about this strange, vast, demanding land that is at the heart of the Canadian identity. But wishful thinking and futuristic designs cannot serve as a substitute for examining the limits of the possible and deciding where scarce resources can be applied to initiate a scientific and rational approach to northern development. The first step in science is to demythologize, to separate the real from the illusory, to determine the limits of the possible, to ask the right questions. The North is a frontier, a place of grand dreams, and a place where illusions do not persist when scientific precision replaces vague guesses.

Canada's North has been seen as a place from which something can be taken. The federal government's reasoning seems to run as follows. We have invested large sums of money north of sixty (the total would be nearly a billion dollars since 1954). This is public money for which the taxpayers of Canada should get a return. We have invested this money to create an infrastructure to develop the rich North. The North must be rich - look at the Klondike Gold Rush, look at Pine Point, look at Anvil! And so the self-fulfilling prophecy appears. More public money is spent to encourage investors to open new mines which are then presented as evidence of the richness of the North. Once again the chance of rational development in northern Canada disappears under a welter of wild statements and attempts to rationalize past expenditures. Another element has crept into the discussion of late - the belief that these new mines will provide employment for unemployed Indians and Eskimos.

There is a tendency to see some sort of an Ottawa plot in all this. But reference to the literature on development in the rest of the world soon shows that the sort of unbridled exploitive pattern that has passed for northern development in the past is not unique to Canada. In Canada, this drive to exploit North seems to be petering out for a number of reasons. Concern is being
expressed about ecological damage in the North. While there have always seemed to be adequate funds for subsidizing mining ventures in the Yukon and Northwest Territories, and $10,000,000 a year for roads, little attention has been paid to conservation. This year, fires swept through the Yukon Territory, burning out the newly established mining town of Faro. The direct costs of these fires will be over a million dollars, and the ecological damage will not be known for some time.

The northern land, a delicately balanced ecology, is obviously being damaged. How badly remains to be seen. The other end result of the exploitation of northern resources is seen among the Native peoples. As Dr. Rogers has pointed out, economic development in Alaska is something that leaves the Native people in the cold. There seem to be two ends of the development spectrum—the "one big mine" syndrome for which government subsidy is sought, and on which outsiders pin their hopes for a quick profit, and the small-scale attempts at economic improvement. There have been some bizarre examples in Canada of outside "experts" foisting on Eskimos and Indians a wide range of endeavours that have had little or no pay-off. The most successful attempts at small-scale economic development in Canada have been based on co-operatives. These have usually been started by "outsiders" who have been sensitive to local needs and aspirations and have withdrawn gradually as local people have shown a capacity and a willingness to take over responsibility for the co-operative.

The northern peoples are seen in western terms—either as potential mine workers or as quaint Natives, hunting, fishing, trapping, making prints, carving soapstone, stitching sealskin oōkipiks. Both approaches tend to limit the possibilities for a realistic approach to socio-economic development in northern Canada carried out in a humane and democratic fashion.

There is a high degree of ambivalence in Canada about the North and its future. Are the Eskimos noble savages or unemployable welfare cases? Is the North a great rich land, or a barren wilderness? Will the North repay the capital invested in its development—or end up taking the entire Gross National Product to run it? Will northern development benefit the people there, or merely enrich a few greedy outsiders? Between boomer talk and a sort of blank, fearful despair that one encounters in government offices, a whole land and a whole people seem to be slipping into limbo, into a sort of frozen transition. After the Baleen Rush in the Arctic, after the Gold Rush in the Yukon, after the Defense Rush in the whole North, the land was abandoned and forgotten by the nation. But this cannot happen again—the North is becoming visible to all Canadians, and integrated into the nation. There seems to be hardly a national project these days—up to and including the proposed Canadian satellite—that is not rationalized on the grounds that it will "help northern development." The national ethos, struggling to find expression, discovers in the North the concrete embodiment of the uniqueness of the country and a focus for aspirations. The Canadian North was one of the last parts of the earth's surface to be reached and effectively occupied by man. This strange land is no longer forgotten. We know a great deal about its dimensions. It is odd that a nation like Canada, with the image of a timorous people, clinging to the safety of the
United States border and hanging on like grim death to their British heritage, should suddenly awake to find themselves charged with the responsibility for developing, in the modern world, one of the harshest, largest, and most demanding places on the face of the earth. For here, in the inescapable North, western man finds himself looking at himself, as in a mirror. The Canadian North is remote from the temperate regions of the world, and lacks warmth and light, those two great bases of human life. In this remote land, from the total environment, from people and the places, a process of instant feedback seems to be operating. The linear thrust of western man, that restless urge to escape, to conquer, to overcome, to search for quick riches (the Eldorado theme) or for a quiet and rational place (the Utopian dream), here finds itself blunted and turned back on itself. In the Yukon and the Northwest Territories, processes that took three hundred years in western Europe have been crammed into fifteen years. These processes—the Industrial, Democratic, Welfare, and Electronic Revolution—have been compressed in time, but expanded in space. In Canada's North, sophisticated electronic equipment can be seen side by side with ancient tools.

It is time, in the Canadian North, to turn the economic development process upside down. Instead of starting from resources, statistics, or theoretical frameworks derived from western experience, it is from man that development must begin. In the western model, man is seen as an abstract "Economic Man" (the consumer) or an equally abstract "Factor of Production" (the producer). Indeed, in the talk of automation, man often seems to be considered as a sort of residual. In the North, man is an inescapable fact. He is not a statistical abstract or a handy input into a model. He is a complex, delicate, difficult individual with potential and limitations that change all the time. Man swims into perspective in the North. It is impossible to flee to isolation in the North these days. The North forces men to look at themselves and at each other. The human bond becomes inescapable, as people find they have to accept the necessity of living with themselves and with others. In the North there is need to do "more with less" in Buckminster Fuller's phrase. People become scarce goods. It costs a great deal merely to stay alive in the North, let alone engage in productive labour.

The North forces new ideas, new approaches, new technologies on people. Merely imitating southern ways is not enough. One significant feature of Canada's official attitude towards northern development has been the cultural lag involved. The development process to date has been compounded of a number of ingredients that have a quaint nineteenth century air about them:—the booster ethic, the unbridled individualism, the ethnocentric bias, the belief in progress. Despite this nineteenth century atmosphere, the North has also recently acquired some aspects of the total welfare state. Attempts at development based on the use of public funds have been labelled "Keynesian". The laissez-faire ethic has been accompanied by massive federal spending, and rules and regulations lie thick on the ground, deterring rather than luring investors. The fallacy persists that the North can be understood and developed by the use
of techniques that have arisen from the experience in technologically advanced, machine-based industrial societies in Europe and the United States, remote in time and space from the raw edge of the northern frontier.

Too often the problems of the Canadian North have been seen simply as northern problems. While reference is made to Keynesian techniques of using government money to prime the pump of development (what happens if there is no water in the well?), and regional planning is proposed for the federal North, there seems to be little understanding of what working on a frontier implies. On the frontier, attitudes, values, ideas and actions are displaced and dislocated as the known and the unknown run together. There is always an element of uncertainty; and the mechanical determinism of the nineteenth century is out of place. The material from the developing nations indicates that western methods of development have dubious applicability in such areas. Western society is machine based; traditional society is human based. What the West calls nepotism, traditional peoples call using the extended kinship system to obtain benefits. There is a tendency to see western society heading towards alienation, and to wax enthusiastic over the virtues of unspoiled, primitive peoples, untouched by the ways of the West. Neither view stands up on examination. Machine-based societies do not necessarily debase and alienate the individual — they can make life easier if technology serves man.

But a kind of stalemate seems to have been reached in the Canadian North. Certainly the Gross Territorial Products of the Yukon and the Northwest Territories would indicate that these areas have achieved "take-off". But where are they heading now, and who is benefiting from the new wealth from the North? The human misery of Eskimos, Indians and Metis comes into prominence daily. Take-off may have been achieved, but there may be a crash landing ahead.

The North's economy is perilously balanced. Planning an area's future on non-renewable resources, tourism and small cottage-type industries is not a realistic way to solve the "people problems" of the North. Sales of minerals to Japan gladden the booster's heart. But this also means that development in the North must run at the pace of a huge, highly integrated, industrialized nation. Stresses appear in the system as it tries to meet new demands for performance in outsiders' terms. For those involved in mineral development, new standards of performance are needed. On the mechanical side of things, this presents problems, but problems that can be readily identified and solved with a high degree of technological sophistication. On the human side, there are now serious "people problems", that do not lend themselves to manipulation in a mechanical manner. The characteristic of the North is that it needs a highly skilled, scientific approach to any aspect of development — mechanical and human.

The credential society is much in evidence in recruitment of the North. There are a limited number of ecological niches in the employment structure, and since "outsiders" set the rules, local people seem always to end up last in line. The North is rapidly moving into post-industrial society as knowledge becomes the key resource in development. But the majority of northern Native
peoples are getting left behind in this process. They are identified as "lagging behind", and the feeling is that they have to go through the whole process of industrial society to find their place in the world. The northern Native peoples in Canada have reached the age of leisure before the white man has, but they have not achieved the Nirvana that is promised in the future age of leisure. They are being cut off, more and more, from meaningful participation in the economy and in the northern society. The technique of animation sociale would obviously be one method of assisting the Native peoples to identify where they stand.

Elsewhere ("The Future of the Eskimo", Futures 1 (1)), I have suggested that Eskimos, instead of being "backward", may be able to move into new areas of opportunity more readily than many whites. They have "less to unlearn." It may be that the attitude of the white authorities in the "Regulatory Society" of the North is the biggest bar to the human development of northern Native peoples, and to their movement into positions of power and responsibility. For one thing, the Eskimo is stereotyped as backward when he is merely different. For another, a large number of good jobs have been created in establishing systems that run the lives of Native peoples. The Eskimo especially seems to be a scarce good, to be looked after and surrounded by white advisers who tell him how to behave. And, of course, since there are few jobs in the northern economy, the Eskimo, instead of being a romantic savage, may suddenly become a rival in the employment field for jobs created by whites. In post-industrial society, people will not train for a skill or a job that will ensure a lifetime's employment. They will need to retain flexibility and openness to experience, to learn from a wide variety of experiences, to blend theoretical and practical knowledge. Not only Eskimos, but anyone wanting to learn about the dimensions of external reality and of the internal self finds, in the North, a wonderful testing ground for ideas and experiences. Contacts with other cultures and other individuals create a mirror for man, immersion in the environment provides a sort of laboratory for technology.

The North can be seen as a place of limited opportunities, but where all aspects of the modern world and traditional societies can be seen, analyzed, understood, and perhaps changed. The greatest barriers are in the minds of men, and in their perception of the North, and what technology involves. Man makes the tools, and then his technology helps him to reshape his ideas. The Canadian approach to northern development to date has been grossly materialistic, extremely simplistic, very mechanical; it has revealed the dilemmas of dealing with an ancient land which, paradoxically, needs the most modern approaches to its development and conservation.

Fortunately, one aspect that is coming to the fore in Canada is the amount of serious research that is being done by a new and younger generation of social scientists. The old days of the quick and dirty study, of the rapid tour and the hasty impressions are over. Work, such as that being done by Peter Usher on the ecology of Banks Island, by Bill Kemp on the energy systems in camps in southern Baffin Island, by Miss Hillary White on isolation in the Yukon, by Derek Smith on the aspirations of northerners and by other young scholars is providing hard data on the human dimension of the North, and revealing its complexity.
The time has come to focus on people as the real basis for development. In the Canadian North, a new generation of technologists is moving in to open and operate mines, construct roads and run the wide variety of government programs. These people are young, highly skilled with young families. They are highly mobile — they see the North as an episode in their lives, not as the place where they will spend the rest of their days. These new technologists must be handled carefully — they cannot be treated like pick and shovel workers. They will simply quit or go on strike — this pattern is already emerging in the Yukon Territory — if they are treated as less than human. Their children go to northern schools, and their school mates are the offspring of traditional people. These people are becoming outsiders in their own country, living on the fringes of society, ill-clothed, ill-housed, unemployed, scorned or ignored by the white outsiders. The experience in Alaska has shown that Native peoples can organize and obtain political power so that they can press their demands. Training programs for Native peoples in the North have too often been short-term crash approaches that attempt to ram Native peoples into semi-skilled jobs. In many northern communities, there are no openings for the “trained” people, nor can they go elsewhere to work. As usual, the problems of Native employment have been compounded by outside experts who come up to do surveys and come up with the right solutions, but the wrong problems. The attitudes revealed by the operation of employment programs in Canada reveals an even greater cultural lag than in economic development. It seems to date back to the English Poor Law system of the sixteenth century, as it tries to turn “sturdy beggars" into “honest workers".

It is no use denying Native peoples the right to a place in society by claiming that they are “not ready" for advancement or lack the educational qualifications. Ethically, humanistically and practically, the evidence of what happens when people are treated as backward and inferior instead of merely different culturally and individually is overwhelming. To Native peoples, the political option becomes more attractive every day as a means of change. And in practical terms, the costs of running a welfare bureaucracy become larger each year. In social and health terms, the costs of the “two nations" in the North is very high. In some northern settlements, the health level may be that of the sickest person in an isolated interacting environment. The North is a harsh land, and bacteria and viruses harmful to man will find plump white children better hosts than thin Native children. And no technologist or professional person will stay long in a land where his children’s health is in daily hazard.

What does education mean in this context? It means treating whites and Native peoples as people capable of learning. It means dumping the myth of white ethnocentricity and concentrating on mutual learning. It means the end of top down education in the Platonic tradition. It means that both white and Native children must not merely learn by reading and by rote, but by total sensory immersion. It means also that people must be educated so that they perceive, understand and take advantage of new opportunities as they occur. It means breaking the value systems and time-binding of industrial society for the individuals of a freer, more flexible, more human, more relaxed, more individual
The Economic Situation

world than the one that persists at present. It means teaching social science and technology to match mechanical science and technology. It means a chance for a new start on a frontier where all the categories keep changing and the world is seen as a complex, wondrous place. It means that the most modern methods of teaching and education must be introduced in culturally accordant ways in a short space of time. Approaches such as those developed by Father Andre Renaud in Saskatchewan, by Frank Darnell in the Alaska Rural School Project at the University of Alaska and by Lee Salisbury in the College Orientation Programme for Alaska Natives have to be encouraged and expanded.

Canada's North is a last frontier, a place where a person gets some sense of his own power, his own humanity and his own powerlessness. If knowledge is seen as the real resource and the basis of development, if an accurate understanding of the limits of the North replaces the wild stuff of dreams that persists in Canada at the present time, if the focus of attention in the North begins to swing towards the real problems of real peoples and not those that obsess and upset outsiders, if northern peoples get a chance to participate in a meaningful way in decisions that affect their future, we need not worry about spoiling the promise of this last frontier on the earth's surface.

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Bent Gunther is Educational Advisory Officer for the Greenland Department, Copenhagen. In his paper Mr. Gunther has indeed taken the inventory of the educational system defined as a purpose of the Conference. His historical approach followed by an analysis of current programs clearly demonstrates the complexity of educational problems in the North.
The Pedagogical Situation in Greenland

A Retrospective View

The population of Greenland is scattered over long coastal stretches, with the greater part on the west coast, whereas only a few places in East Greenland are inhabited.

Today instruction is being given at about 100 educational centers. The number of pupils at the individual places varies from five to more than 1,000. Furthermore, there are out-of-the-way settlements with only one or a few schoolchildren; at such places private instruction is often resorted to. In Godthaab, the biggest town in Greenland, there were, in the school year of 1968-69, about 1,400 pupils in two schools.

The country is divided into seventeen educational districts, each of them under the leadership of a principal or an educational district leader. Each educational district has a central school in the principal town of the district and a number of smaller schools. The number of such small schools is changing rapidly - from about 180 in 1950 to about 100 in 1969 - due to the migration of the population from the smaller places to the towns.
The modern Greenland school system is based on the Education Act of 1967, which, on many points, is similar to the ordinary Danish legislation on education. However, the educational tradition goes far back to the time of the arrival in Greenland of the first missionaries in the first part of the eighteenth century.

In the beginning, educational activities were closely connected with missionary work. The European influence on the Greenlanders began in 1721 when Hans Egede, the missionary, came to the country. Hans Egede and the missionaries who continued his work were, as a matter of course, interested in teaching as many people as possible to read and write, so as to spread the knowledge of the Bible. However, a literary language had to be created first, and for this reason alone it was rather a long time before it was at all possible to start the educational work proper.

The question of teachers was a very considerable obstacle to the endeavors to establish regular schooling. The missionaries themselves had a few private pupils whom they tried to train to become their assistants; but in order to get still more assistants for the mission work they had some young men from an orphanage in Denmark sent to Greenland. Quite a number of these stayed on in Greenland for the rest of their lives, marrying Greenland women and thus becoming integrated in the Greenland community.

However, the efforts to get Greenland tutors proper were not given up, and it has always been quite clear that a real Greenland school must be based on Greenland tutors, including the catechist among others.

It was only as late as 1847 that higher education was introduced in Greenland. In that year two teachers' training colleges were established: one at Godthaab and one at Jakobshavn. The establishment of the two training colleges was highly beneficial to the school teaching in general. However, there are indications that the basic work had already been done earlier as, in 1856, the first principal was able to declare that virtually the whole population was able to read and write. The teachers' training college at Jakobshavn had to be closed down in 1875. It reopened in 1901, but was finally given up in 1905. On the other hand, the training college at Godthaab is still in existence.

The first legislation on education proper came into existence in 1905 when the Church and Education in Greenland Act was passed by the Danish Parliament. This act became a milestone in the history of the school. As a direct consequence it was possible to intensify the teaching at the training college at Godthaab, because, in 1907, a college building was erected, which by the standards of those days was highly modern, making it possible to introduce new subjects, including physical training.

The 1925 Act superseding the Act of 1905 created the possibility for gifted pupils to receive further education after the seven-year primary school, i.e. partly at a two-year continuation school and, in direct continuation thereof, at a so-called High School for another two years. The high school has two sides—a lower secondary education for those aiming at an apprenticeship with an artisan or at an office, and a preparatory education for the group wanting to go on for the two-year course at a teachers' training school. The training college curriculum covers the requirements of the school as well as those of the church, for teachers were to serve in church as Preachers and spiritual advisers as well.
Danish was now introduced as a compulsory subject in the primary school. For many years this subject could only be taught in the town schools mainly by the Danish ministers and by the relatively few Greenland ministers who had received supplementary education in Denmark and, for this reason, had acquired special language qualifications, which the Native teachers, trained at the training college at Godthaab, had no possibility of acquiring to the extent necessary for this subject.

The direction of the whole educational system was still vested in the church, a relic from the time of the missionaries. The Rural Dean of Greenland was director of education and the ministers were in charge of the local educational areas. The first step towards admitting educationalists to the pedagogic leadership was, however; taken by the Act of 1925, establishing two permanent posts of school inspectors who were to travel up and down the coast, giving pedagogic and professional guidance to the tutors.

According to political resolutions in Greenland as well as in Denmark, a reform was introduced in Greenland in 1930 in all spheres— including, of course, the educational system. The aim of such re-organization was to make Greenland part of Denmark on an equal footing with the other parts of the realm. As far as the school system was concerned, this meant great changes, structurally as well as pedagogically. The school and the church administrations were severed. The direction of the school was assigned to a Board of Education presided over by the Governor, the Rural Dean of Greenland being an ordinary member and the new Director of Education being responsible for the day-to-day direction. Furthermore teachers will gradually take over the responsibility for the individual educational areas and the individual schools.

After the seven-year Primary School only specially gifted pupils were yet permitted to continue their studies at the two-year Continuation School. At the same time, the Continuation School was turned into a preparatory school for the new four-year Lower Secondary School ('realskole'), in quality and value equal to the Danish 'realskole'. However, for the time being the pupils in Greenland take their Lower Secondary School examination four years later than their opposite numbers in Denmark, who are able to pass their examination in their tenth school year.

The teaching of Danish was centrally placed by the introduction of the so-called A-B arrangement aiming at the streaming of the children from the third grade into Greenlandic-speaking and Danish-speaking classes. In the A-classes the instructions were given in Greenlandic with Danish as a special subject. In the B-classes Danish was gradually introduced as the language of instruction—except in the subjects of Greenlandic and Religious Knowledge.

II. Current Greenland Problems Influencing Education

In the period since the re-organization in 1930 the Greenland community has experienced violent upheavals—social, occupational, economic, and cultural. In fact, the community of Greenland of today is organized on European lines. In point of time, however, it has not been possible for the school fully to satisfy the requirements facing the rising generation as to the discharge of their differ-
The Pedagogical Situation

The School Structure

CONTINUATION SCHOOL

10th grade

9th grade

8th grade

2nd SIDE

7th A

6th A

5th grade

4th grade

3rd grade

2nd grade

1st grade

Nursery school class

Higher Secondary in Denmark

3rd class Lower Sec.

2nd class Lower Sec.

1st class Lower Sec.

2nd Prep. class

1st Prep. class

1st SIDE
rent functions in society. Rapidly developing modern undertakings and institutions have been established, requiring fully qualified labor. A very considerable part of the new functions in society must today be performed by the workers sent out from Denmark.

After overcoming tuberculosis, which was formerly the scourge of the community, and concurrently with the improvements taking place during these years in the social services and in the housing situation, the population has increased considerably in number. As nearly half the population of Greenland is today below the age of fourteen, this increase in the population is especially felt in the educational sector.

On the basis of the available forecasts of population and its distribution, the Ministry for Greenland has worked out the following prognosis of the number of children and young people in towns and settlements in Greenland in the years of 1975, 1980, and 1985. When the prognosis of the number of children and young people in the various age groups was worked out, it was necessary to disregard any geographic variations in the distribution on age brackets, and as only a prognosis of the distribution on age groups for persons born in Greenland has been made, it has been presupposed that the grouping of persons born outside Greenland will remain unchanged in relation to the census taken in 1965.

As will be seen from the table, the number of children and young people of school age is expected to rise by 7,600, or more than seventy percent, in the period from 1965 to 1985. During the said twenty years the total population is expected to be increased by sixty-seven percent, and thus the number of children and young people in the six to seventeen year age group will, according to the prognosis, retain the same proportion to the total population in 1985 as in 1965 with the difference, however, that there are relatively fewer children in the six to thirteen year age group, and more in the fourteen to seventeen year age group in 1985 than at the census of 1965.

Whereas the number of persons outside the school age is expected to rise by the same percentage in the ten-year periods of 1965-75 and 1975-85, the percental increase of the number of persons in the six to seventeen year age group is, however, five times higher in the first than in the second decade. According to the prognosis, the number of persons in the six to thirteen year age group will be increased by more than 4,000 in the 1965-75 period, but only by 700 from 1975 to 1985. From 1980 to 1985 the increase amounts to 200 only. Also as regards the number of persons between fourteen and seventeen, the rate of increase will decline in the period up to 1985, but to a lesser degree than for the younger age groups.

To the education authorities the outlined increase in the population figures means that the demands for school-rooms and teachers, etc., will increase considerably during the coming few years, culminating around 1975. Concurrently with the increase in the population, a shift of the population from smaller to bigger places will be seen.

The expected continued redistribution of the population means that the increase in the number of children will be concentrated in very few towns whereas in a number of other towns and in the settlements, stagnant or de-
In some towns the number of school children is five times the number of school children fifteen years ago.

In spite of the impressive building activities, the increase and the changes in the composition of the population have made it difficult to set up the ideal framework for the school.

In spite of the great diversity, the training of the Greenland teachers has been designated as fully trained teachers on the basis of the following criteria: They have all received the highest education possible in Greenland at the times in question.

One of the greatest problems of the school in Greenland is the lack of Greenlandic-speaking teachers. This is primarily due to the fact that the training of Native teachers has not kept pace with the enormous increase in the number of children.

For many years the Greenland teachers, or catechists, trained at the more than 100-year old training college at Godthaab, have been the mainstay of the Greenland teaching staff. In order to cover the demand for teachers, catechists have, however, up to 1950, been trained at one- or two-year catechist schools headed by successive ministers of religion. The education given was unsatisfactory and insufficient in the long run.

At the same time, however, the education proper of the Native teachers was gradually improved. From 1957 the conditions were changed in such a way that the Lower Secondary examination (O-level) was required for the candidates to start upon a three-year teachers' training course, the last year being spent in Denmark. In 1964 Greenland got a new Teachers' Training Act. It provides training of over four years, one in Denmark, and qualitatively the training is equal to that given in Denmark. Naturally, the curriculum for the Greenlanders shows some deviations, Greenlandic being included as a subject, and the special Greenland topics have found a natural place in subjects like history and natural science. The training gives the same chances of promotion as in Denmark, and having passed a special test in Danish this group of teachers can apply to the Danish school authorities for employment in Denmark; but in the training of teachers it is difficult to keep abreast of the constantly increasing demands for training there. A new Teachers' Training Act will come into force in Denmark in 1969, occasioning the consideration of change in the training of teachers in Greenland.

The intake of students at the Teachers Training College at Godthaab is not large as the number of young people having passed the Lower Secondary examination is small and as there are so many other possibilities of education for this particular group. In order to cover the demand for teachers at all it has, in recent years, been necessary to engage an increasing number of Danish-speaking teachers. Thus, in the school year of 1968-69 the number of Greenlandic speaking teachers was less than one-third of the total number of teachers. This means that a great number of subjects must necessarily be taught in Danish — also subjects that, under normal circumstances, would have been taught by a Greenlandic-speaking teacher.

As will be seen from the foregoing, the demand for teachers has been met to a constantly increasing extent by the employment of Danish teachers.
In order to make the prognosis as clear as possible, the pupils have been divided into 3 age groups only, namely: six-year-old pupils (nursery school classes), pupils of 7 to 13 (1st to 7th grades), and pupils of 14 to 16 plus 25 per cent of 17-year-old pupils (further education in 8th to 10th grades and the Lower Secondary School according to the objectives for 1985).

As will be seen from the below table, considerable shifts in the age groups are expected in the period up to 1985:

<table>
<thead>
<tr>
<th>Age groups</th>
<th>1965 Number %</th>
<th>1975 Number %</th>
<th>Index 1975 1965 - 100</th>
<th>1980 Number %</th>
<th>1985 Number %</th>
<th>Index 1985 1975 - 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>1330 3.4</td>
<td>1800 3.4</td>
<td>135</td>
<td>1850 3.1</td>
<td>1950 3.0</td>
<td>108</td>
</tr>
<tr>
<td>7-13</td>
<td>7190 18.2</td>
<td>10750 20.0</td>
<td>149</td>
<td>11200 18.7</td>
<td>11300 17.1</td>
<td>105</td>
</tr>
<tr>
<td>14-16+</td>
<td>2130 5.4</td>
<td>3950 7.4</td>
<td>185</td>
<td>4700 7.8</td>
<td>5000 7.6</td>
<td>127</td>
</tr>
<tr>
<td>1/4 of pupils of 17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totally</td>
<td>10650 27.0</td>
<td>16500 30.8</td>
<td>155</td>
<td>17750 29.6</td>
<td>18250 27.7</td>
<td>111</td>
</tr>
<tr>
<td>Not in the school age</td>
<td>28860 73.0</td>
<td>37100 69.2</td>
<td>129</td>
<td>42250 70.4</td>
<td>47750 72.3</td>
<td>129</td>
</tr>
<tr>
<td>Total population</td>
<td>89510 100</td>
<td>53600 100</td>
<td>136</td>
<td>60000 100</td>
<td>66000 100</td>
<td>123</td>
</tr>
</tbody>
</table>
preferably at the major schools — whereas the very small schools still engage untrained tutors. Furthermore, a very great number of lessons are given as overtime work.

The percental proportion of schoolchildren to the total population is so high that the demand for teachers in Greenland is twice as great per 1,000 inhabitants as in Denmark where, for many years, there has been a serious shortage of teachers.

In 1965, 470 teachers were in charge of 7,300 children, which gives an average of eighteen children per teacher. This proportion cannot be expected to remain unchanged in the future considering the very considerable overtime work and the expected reduction of the teachers' working hours. Furthermore, in the years to come it is foreseen that there will be a rapid increase in the number of pupils in the eighth, ninth and tenth grades, so far voluntary, and in the Lower Secondary department, which means further demands for teachers.

As it is hardly possible immediately to increase the number of Greenlandic-speaking teachers through the ordinary training colleges and, furthermore, as mentioned in the following section on the language problem, it is considered absolutely necessary to secure for the pupils contact with Greenlandic-speaking teachers from their first day at school, it has been discussed whether it might be possible to arrange for training of Greenlandic-speaking tutors as a supplement to the teachers' training proper. Such training would plainly differ from the ordinary teachers' training by being less exacting and less extensive.

Various decisive factors may justify the employment of such tutors, with only a few mentioned here:

1. The increased demand during the years to come for Greenlandic-speaking teachers.
2. The necessity for a reduction of the pupils' difficulties — maximal when they start school, at which time many pupils have a very limited Greenlandic vocabulary and a narrow outlook.
3. The desire to facilitate the cooperation between school and home, which will only be possible if a greater number of Greenlandic-speaking teachers are engaged.
4. A regular training of tutors in order to avoid increasing employment of unqualified persons.

The Danish Teachers' Training Act of 1966 maintains a standard training for all primary school teachers in Denmark, but in other countries many primary schools employ teachers at varying standards of training.

Although it is, in many ways, an advantage that all the teachers in the primary school have received the same training, still, with the background of the difficulties already mentioned, it must be considered fully justifiable to use bilingual assistance in the school in Greenland. It is, however, important to establish the fact that these assistants are not real teachers but only tutors who are qualified to undertake a number of limited tasks in the school.

The proposal for arranging a training course for tutors was dealt with by the Provincial Council for Greenland in the month of May, 1969. The Council
accepted the idea, and the further planning of a new training system, if any, will probably be left to the Minister for Greenland, who, besides considering the salary and promotion problems of the tutors, will also try to arrange for training on the basis of a number of fundamental principles already discussed.

The training of tutors shall comprise theory as well as teaching practice, and it is estimated that the training can be finished in the course of one to two years. Instruction will be given at the Teachers' Training College of Greenland where there will be teachers qualified for this task.

If such tutor arrangement is to be successful, a clear and reasonable salary system must be established. Furthermore, the possibilities of further training and promotion must be elucidated, but at the same time it should be emphasized that a tutor can never be appointed teacher without going through a teachers' training college. The idea is that each tutor shall be attached to one or more fully trained teachers whereby a number of pedagogic teams will be formed which, under the leadership of a fully trained teacher, will be able to undertake educational tasks.

It may be difficult to arrange for a training system for tutors as it is an innovation which is unknown in the Danish school system; however, it is generally held that such a training system may provide the school in Greenland with valuable staff members. The result may be that the few fully trained, bilingual teachers may be put to better use than they are now, and that the children will, to a greater extent, benefit from the instruction given by the Danish-speaking teachers and, on the long view, fewer teachers will have to be sent from Denmark.

As regards the placing of the subject Greenlandic a good deal of discussion went on prior to the passing of the 1967 Act which provides as follows:

After a parents' meeting has been held, the local School Board shall, with due regard to the necessary teaching staff able to teach the subject Greenlandic being available at the school in question, submit to the Board of Education to what extent Greenlandic shall be taught at the school in question in the first and second school years, or whether the teaching of this subject should be postponed till the beginning of the third school year.

By this formulation it is, among other things, acknowledged that the number of Greenlandic-speaking teachers is insufficient to cover the demand. In view of this situation the school in Greenland must, to rather a great extent, be expected to be based on teaching in Danish in the future. Greenlandic as well as Danish is included in the timetable, and both languages are, at the same time, languages of instruction, but the Education Act does not fix in what proportion the two languages are to be used.

The reason the language of instruction was not laid down in the Act itself is that, at the drafting of the Bill, it was realized that the Greenlandic school system would be short of Greenlandic-speaking teachers and that consequently, every teacher must necessarily use in practice the language he masters. Only less than ten percent of the teaching staff master Greenlandic/Danish so well that able to teach in either language without difficulty.
The Education Act of 1967 has not yet been followed up by a curriculum fixing the number of lessons to be given to the pupils in the individual subjects. However, at the present time a Syllabus Commission, arranged by the Minister for Greenland is working on a new syllabus.

Since 1961 the educational work has been performed according to a provisional timetable adapted to the so-called 'Experimental Education', according to which it is possible to postpone the teaching of Greenlandic until the third school year—an arrangement which, by and large, was legalized by the Education Act of 1967.

According to the timetable about eleven percent of the lessons must necessarily be in Greenlandic, which demands a Native teacher as, considering the present conditions—including the lack of instruction courses for the teachers—we cannot expect any Danish teacher to acquire so great a knowledge of Greenlandic that he is able to teach this subject.

The Ministry for Greenland has made estimates of the distribution of teachers in the town schools in 1970, with 86 Natives, 558 non-Natives making a total of 644 teachers, thirteen percent of whom are Natives.

When this percentage is related to the eleven percent lessons in Greenlandic, the situation is serious. In the long run, nobody can be interested in a development relegating the fully trained Native teachers to teach the subject of Greenlandic only, not least because, apart from the subject of Greenlandic, there is a great need for Greenlandic-speaking teachers for lessons in religious knowledge and orientation in the lower grades as it is now clear that the benefits derived by the pupils from the teaching of these subjects is very small because they have insufficient knowledge of Danish. Thus, the subject cannot be taught, even according to the timetable mentioned, which gives the Greenlandic language the weakest placing, so far as is known, within the educational system.

As will be seen from the figures in the prognosis as well as from the timetable mentioned, the school is today in the situation that the greater part of the teaching must be in the hands of Danish-speaking teachers. As, however, only very few pupils of any year have the proper qualifications for understanding even a little Danish, the situation is very serious. Not only is a considerable part of the instructions hampered by communication difficulties between pupils and teachers, but furthermore the Danish teachers will have a professional background based on experiences and ideas alien to the Native pupils.

The newly engaged Danish teachers take a three-week course before they leave for Greenland. This brief course is quite insufficient for the teachers to acquire even a moderate knowledge of Greenlandic. Teachers may get instructions in Greenlandic during their employment in Greenland provided that capable instructors are available. Teachers working at small schools with no other Danish-speaking persons than the Native teacher may be lucky enough to pick up the language at an early time, whereas teachers in towns with many Danish-speaking people will hardly manage to learn the language. It is evident that the teaching is extremely difficult for the Danish teacher placed in situations in which his own mother tongue is a foreign language and in which his job is to teach the pupils such foreign language—without really having the possibility of using the pupils' own language as his tool.
The distribution of teachers during the past will be seen from the below table:

Teachers per January 1, 1968.

TEACHER FORCE
pr. 1/1 1968

I: Danish Teacher College Education
II: Greenlandic Teacher College Education
III: Other Education
IV: Without Education
As already mentioned, the Education Act provides the possibility for all
gifted pupils wanting to do so to finish their schooling by going in for the Lower
Secondary examination (O-level) or the Government-controlled ninth or tenth
grade tests, which are identical with the corresponding Danish examinations. In a
statement made during the sitting in the summer of 1965 The Provincial Council
of Greenland furthermore expressed as its opinion that the population support
the placement of the Danish language in school curriculums as the following state-
m ent made:

The target in the endeavours to procure a new Education Act was to
find the ways and means to give to the young people in Greenland an overall schooling that will give the best possible basis for further education whether such further education will be given in conti-

The teaching of Danish has got so prominent a place in the proposal on the
assumption that almost any kind of education must essentially be based on Danish teaching, Danish technical literature, and Danish Institutes of education. The aim is to enable the rising generations in Greenland to choose a training commensurate with their gifts and interests without being hampered in their choice by language con-

It is now left to the responsible educationists to arrange instructions cor-
responding to the pupils' gifts and aptitudes, and the same time aiming at the
stated objective.

Any curriculum intended to cover so comprehensive an obligation must
necessarily be a compromise. When the language qualifications of the pupils are
taken into consideration together with the fact that the Native pupils must,
during the whole of their schooling, be taught one subject more than the Danish
pupils of the same age, it is evident that a line has been laid demanding greater
efforts on the part of the pupils than they may reasonably be expected to
manage. Especially their first period of schooling will present serious problems.
The fact that there are two official languages in Greenland, in which every
citizen in the country may, according to inclination, necessity or capability,
express himself, give to the day-to-day educational work in Greenland a problem
that may often overshadow the administrative as well as the educational pro-
blems at hand.

This searching for new ways first led to the 'A-B School System'. However,
after a few years it was found that, at a very early time, pupils were sorted into
two groups. But the 'A-B' arrangement brought one more fact home to the
educationists, namely that it is impossible for the pupils concurrently to learn
two languages so widely different as Greenlandic and Danish from the beginning
of their schooling. Furthermore, it is generally agreed that, according to ex-
perience, it is easier for the pupils to learn to read Danish than Greenlandic.

When it was taken into consideration that the greater part of the teachers
in the school in Greenland work best when using Danish, it was natural to
change the basis of the educational work. In the period from 1958 to 1963 it
was attempted, in most town schools, to intensify the teaching of Danish from
the very beginning, the teaching of Greenlandic proper being, at the same time,
postponed until the third school year. The experience gained from these so-
called educational experiments contributed to the formulation of the completely

It goes without saying that the enormous increase in the number of school
children and the very considerable shift of the population from the settlements
to the towns create problems in connection with procuring the necessary frame-
work for the school. Endeavours to improve the educational standard are inevi-
tably hampered by the insufficient number of classrooms and rooms for special
subjects. In order to cover this demand as soon as possible it has, at many places,
been necessary to make shift with temporary buildings which could be erected
quickly. Unfortunately, the provision of rooms for special subjects has, for
several years, yielded to the provision of ordinary classrooms. The failure to
extend the schools must be seen in the background of the great demand for
investments in many other fields — especially in the housing sector. So far, the
framework of the school has not been able to accommodate the rather sudden
and very great accession to the voluntary eighth and ninth grades. In 1968–69
about sixty-five percent of young people of fourteen to fifteen years of age
attended the eighth grade and a great number the ninth grade.

In order to avoid turning away young people wanting schooling after the
compulsory school age has, therefore, been necessary to send a great number
of this group to Danish continuation schools. The pupils are partly placed in
large groups at special schools run by the Ministry for Greenland, partly in
groups of twenty to forty together with Danish pupils, and partly singly or in
pairs among Danish pupils. The placing depends on the knowledge of Danish of
the individual pupils. Furthermore, about pupils at the age of twelve are sent to
Denmark every year for one year's schooling with a view to entering the Lower
Secondary School in Greenland. Private lodgings with Danish families are pro-
vided for these pupils.

School building activities in Greenland go on. About forty classrooms are
erected every year, and the building activities planned for the period up to 1972
are so extensive that we are justified in hoping that it will then be possible to
arrange for instruction in Greenland for the greater part of the pupils in the
eighth and ninth grades. In the major towns, the construction of schools is
gradually attaining a standard meeting the requirements for effective teaching.
At the small educational centers the classroom problem is solved by the erection
of the so-called school-chapels — buildings used for educational activities as well
as for divine services.

III. Levels of Attainment — Education Material

In spite of the improved educational standard, especially in the towns, the
results obtained in general are still below the results obtained by pupils on the
same age level in Denmark. Incidentally, the standard differs greatly from place
to place and from subject to subject. Results obtained will also vary from year to
year. The reasons for these rather considerable variations may be found in the
nature of the educational material, the standard of the classrooms, the frequent
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changing of teachers, the uneven distribution of Greenlandic-speaking and
Danish-speaking teachers, and, in some towns, the great number of new arrivals
from the settlements with highly varying qualifications. Furthermore, the nature
of the educational background in the smaller or bigger towns affects the results
obtained. Persistent efforts are being made to raise the educational standard to
such a level that the road will be paved toward further education. It must be
realized, however, that the children we are working with have special cultural
and environmental backgrounds.

An investigation of the current syllabus carried through in the autumn of,
1968 shows — without indicating thereby that a comparison with the levels of
attainment of the Danish school children is reasonable or desirable — that, for
linguistic reasons and due to teaching staff problems, pupils in Greenland are
somewhat retarded.

It appears from the investigation that the fourth and fifth grade pupils
must, in general, be said to be one year behind in Danish compared with Danish
pupils of the same age, whereas the difference at the end of the seventh grade is
given as one-and-a-half to two years. In this instance, it is only a question of
ordinary attainments, such as reading and spelling techniques, whereas the in-
vestigation says nothing about the pupils' ability to understand the foreign lan-
guage, Danish, and to use it themselves orally and in writing. As to the last-men-
tioned point, it is generally agreed by teachers that the difference in the levels of
attainment is considerable.

In respect to the subject of arithmetic the syllabus commission has, on the
background of the investigation, stated as follows:

When a comparison is made of how far the individual classes have got
in the textbook systems (Danish systems) used, it is seen that already
in the first grade the pupils are somewhat retarded, but presumably
no more than it may be assumed that a great number of the classes
tested have got through the syllabus.

The said retardation is transferred to the second grade, presumably
because of the assumption that the book must be read carefully be-
fore the next one is introduced, whereby the retardation is increased.

Furthermore, it plainly appears that there are great problems in connection
with 'text' problems. It is, however, impossible to decide summarily whether the
problems are of a purely arithmetical nature or whether, also in this case, the
language element is a contributory cause of the poor results, although an
investigation made in 1963 seems to indicate that the norm is lower within the
area of arithmetical problems where the language plays no important part. These
observations apply to an increasing extent from the third grade upwards. The
greater part of the sixth grades get no further than into the fifth grade arithmetic
book.

Several of the problems of the lower levels (compared with that of the
corresponding classes in Denmark) have been dealt with in this paper, for
instance the teaching staff situation, the language, and the classrooms, and
therefore it will suffice to add a few comments on the situation concerning the
rational material used in the schools.
It must be pointed out that, due to the above-mentioned difficulties, the book must be considered, and actually placed, as the backbone of the educational work in Greenland. Textbooks written especially for the school in Greenland must, as far as the method is concerned, be much more firmly worked out than it is usually found necessary, and the contents must, in particular, take into consideration the pupils' conceptions and qualifications on the whole. As a result, it has been found necessary to establish a special publishing undertaking.

Since 1963 the Ministry for Greenland has intensified the publishing of textbooks written especially for the schools in Greenland by teachers experienced in the day-to-day educational work. In the period from 1963 to 1968 about 100 textbooks have been published.

Part of the material is, pedagogically and technically, of a high value, which may be proved by the fact that several of the textbooks have been introduced into the primary school in Denmark. Another part of the material must be characterized as usable, from the point of view that no better textbooks are available and that the use of ordinary publications from the Danish publishers cannot be used verbatim for linguistic, conceptional, and environmental reasons.

The curriculum investigation carried through in the autumn of 1968 resulted, among other things, in information about educational activities, working methods, and textbooks. From the results of the investigation it will be seen that there is still a great, unsatisfied need for suitable material. Thus, it is established that the ordinary education lacks:

A. A modern Greenlandic reader system.
B. A modern Greenlandic writing system.
C. Material in Greenlandic for object lessons and the initial teaching of 'orientation'.
D. An arithmetic book system for the primary school.
E. Books for all 'orientation' subjects.
F. Advanced Danish readers.

But in spite of this unfortunate shortage of material it must, however, be said that this is a field of rapid development. Several energetic, bilingual, and Danish-speaking teachers are deeply engaged in the working out of educational material.

The Ministry has been in a position to furnish all the schools in Greenland with AV material, such as film projectors, slide projectors, and tape recorders, and, furthermore, electric aggregates have been bought so it is now possible for the schools in the settlements to introduce AV material into the instruction. In the three towns of Egedesminde, Godthab, and Julianehaab, AAC language laboratories have been established. This situation regarding AV material may be characterized as favorable. Until now, however, no AV material has been produced that is especially adapted to the school in Greenland, apart from a few series of slides for the teaching of 'orientation'.

* Orientation subjects are: history, geography, biology, and, in the upper grades.
Today, the total number of school-children is about 9,000 which is more than double the number in 1952.

In an attempt at adapting the school to the enormous development in society in the course of the first fifteen years after the reform, the Ministry for Greenland, together with the educational authorities in Greenland, drew up a new Education Act, which came into effect in May, 1967. The Education Act valid in Denmark formed the basis thereof, but at the same time the Act was adapted to the special conditions in Greenland. Keeping in view the aggregate complex of problems in Greenland the legislators have, through the Act, tried to create the possibility of developing the whole educational sector in the most expedient manner.

This brought about the framework act on the basis of which we are working today. The problems surrounding the school in Greenland were not solved by the passing of the 1967 Act, but it should be borne in mind that this framework will not prevent any experiments by the trial and error method.

It should be mentioned that we are about to build up a school psychology institution in Greenland, including, among other things, arranging for special education. Two years ago, the Minister for Greenland set up a committee in Copenhagen to deal with special education, and a report is expected to be published in the beginning of 1970. Furthermore, the engaging of advisory officers for individual subjects is contemplated.

These endeavors, together with those described previously, such as the working out of new educational plans including curricula and educational instructions, publishing activities, the introduction of AV aids, a more extensive schooling of Danish-speaking teachers, and an intensified training of Greenlandic-speaking teachers, show in broad outline an educational policy deliberately directed towards the future.

Education in Greenland remains in the hands of the Board of Education, whose members are the Governor of Greenland (chairman), the Rural Dean of Greenland, and the Director of Education, who is responsible for the direction of the educational system. Furthermore, there are two members elected by the Provincial Council and one representative elected by the Joint Teachers' Council who attend the Board meetings—the latter, however, with no right of voting.

For each education center two representatives of the parents are elected. In each educational district there is an Education Committee consisting of the school inspector, the minister, the district member of the Provincial Council, the chairman of the local council and three other members elected by the local council from among the local population—two of these being parents' representatives. The Committee elects its own chairman.

The following comments supplement the diagram of the school structure:

1. The Act offers the possibility of establishing Nursery School Classes at schools with the necessary staff of teachers and classrooms.
2. After the fifth grade the classes may continue, divided or undivided.
3. Pupils in the eighth, ninth and tenth grades have, besides the obligatory curriculum, the option of subjects in which the instruction may, among other things, aim at training in special Greenland trades.
School Structure according to the Act of 1925.

TRAINING COLLEGE

1st Tr. Coll.
2nd Tr. Coll.

Training Coll. Side

11th school year
10th school year

Lower Sec. Side

11th school year
10th school year

FOLK HIGH SCHOOL

CONTINUATION SCHOOL

9th school year
2nd Cont. School

8th school year
1st Cont. School

7th school year

6th school year

5th school year

4th school year

3rd school year

2nd school year

1st school year

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4. The Lower Secondary examination (O-level) is identical with the Danish examination, having the same standards and requirements.

5. The First Side aims at trade and industry whereas the Second Side aims at continued studies.

6. In the various sectors of the school, the same subjects are taught as in Denmark, plus, of course, Greenlandic.

One of the very difficult pedagogical fields in the day-to-day work in the schools in Greenland is the teaching of the foreign language, Danish, where a Danish teacher must give instruction to a class of children with whom he cannot talk in his own language.

The first thing observed by most Danish teachers in Greenland is that, in fact, their mother tongue consists of two independent languages, namely, the whole complex of the spoken language with everything belonging to it, vocabulary, set phrases, idioms, linguistic patterns, accepted irregularities, and special pronunciations. Secondly comes the written language, which, of course, moves mainly along the same lines as the spoken language but is governed by other and narrower rules. Whereas the former language induces people to take an active part in various situations, the latter is, as a rule, only used to describe such situations, in a manner that is more cautious and reserved than the rather hasty spoken language.

When, for the first time, a teacher experiences his own language "from outside," it may be rather overwhelming to perceive the distance between the spoken language and the literary, written language the pupils are required to learn — even though the teacher himself may not use it consistently when giving his instructions verbally.

And in this very field, the teaching of Danish, the school has been guilty of a number of mistakes in Greenland. When feeling uncertain about the procedure, most teachers will, as a rule, cling to the methodical firmness supposed to be found in the textbooks available, in this case the Danish readers in particular. But in Greenland it appears that it is the normal Danish readers that have contributed towards creating a "closed" Danish language, which, to many children, was something they concerned themselves with only during the lessons in Danish and only in the form of questions and answers directly referring to the textbook — but which, apart from the work in the classroom, was of no relevance during the breaks, outside the school, or at home.

The book language has put its stamp upon the teaching methods to such a degree that, at most places, conversation and subjects like biology, history, and geography are rare occurrences. Therefore, it has been necessary, at least at the elementary stage, to drop Danish textbooks which are otherwise excellent books in many respects, and then the teachers must, locally and to the best of their ability, try to create something usable.

At the present time the Ministry for Greenland publishes new-oriented Danish educational material under the title, My Danish Reader. The basic point of this system is, first and foremost, deliberately to emphasize the spoken language, whereas the reading language comes second, and the written language third.
number of typical social situations, all of them taking place in Greenland surroundings. These selected situations are enlarged upon and, repeated in different ways several times in the course of the first two school years, both in spoken language and in the form of texts for reading. For it is not only a question of learning the words and sentences; they should become automatic before the pupils can use them with any degree of certainty.

The first material is a set of pictures for object lessons, consisting of eighty-six big, richly coloured figures, all of them representing quite unambiguous concepts. There is a family: father and mother and three children, their house, car, boat, domestic animals. The figures are seen in many different situations. They are standing, walking, running, sitting, and lying down, and it is thus rather a simple job to combine the figures with several other figures to form simplified situations.

When the boy Ole is ready to attend school, the teacher just takes the walking Ole-figure, puts a satchel into his hand, places him on the road, and places the school building at the end of the winding road. The figures are fastened by means of small 'burr's' on to a big flannelgraph, a regular piece of equipment in the classroom, and by using these few figures the teacher has a good starting point for a conversation which — at this simple stage — will be both engaging and exciting. Thus, the initial teaching is kept far away from textbooks and reading exercises.

The pupils' material consists of variations of the teacher's flannelgraph figures. Some of the material consists of big reproductions, which the pupils themselves are to colour, cut out, and stick into an exercise book, and with a view to checking the understanding there is a set of punched-out figures for each pupil.

"Can you show me the shop?" asks the teacher, and all the children immediately hold high the figure of the red shop. Any uncertainty is easily discovered: the children may look sideways at the neighbours, or they may simply show the seal, the razor-bill or some other wrong figure.

While at the beginning, as already mentioned, the teachers work with simple words and concepts, which are then combined to whole sentences, the next step will be to provide the pupils with a pointer book containing pictures showing more complicated situations. Here the purpose is the exact opposite, namely, to find the details in the big picture — and then tell about them.

This "talking picture book" likewise contains the first material for reading exercises, which is arranged in such a way that the pupils are working all the time with well-known things. The spoken-language background is now in order and the pupils can start reading; but still, only one thing is learned at a time.

The subsequent reading material is naturally rather like the ordinary, well-known readers. But everywhere the interplay between the talking and reading functions is plainly emphasized. And it is an absolute condition that the pupils will only read material which the teacher and the pupil have been able to talk about in advance. As, at the same time, there are far-reaching considerations for reading technique in the arrangement of the text; a great part of the spoken language does not appear at all, simply because the words are too difficult to read. Consequently, the pupils at the elementary stage are able to say a good
deal more than they can read, and this is the proper path to normal teaching as it is known in Denmark.

My Danish Reader covers, so far, the first three school years only, but the material for the following textbooks is being worked out, with further motivation for speaking Danish. Again the idea is deliberately to disengage oneself from the somewhat artificial working method which the material might induce the teacher to use in this special relation. It will instead be necessary to use to a great extent the range of possibilities offered by the modern AV aids. So far, economic considerations have held back the education authorities, but to a certain extent the new Education Act has made it possible to use other and more modern methods in the work towards the objective: a Lower Secondary examination (O-level) or a ninth or tenth grade test with the same contents and on the same level as in Denmark.

Considering the fact that the pupils in Greenland have, throughout their schooling, one subject more than the pupils in Denmark, it is quite obvious that the school is bound to assist them and to take short cuts wherever possible.

Ahead of us lies an experimental period of absorbing interest, in which the possibilities of the various aids are to be tested and adapted for special use in the schools in Greenland. Above all, pictorial material in large quantities will be produced, from pictures for object lessons to slides, videotapes, endless films, and sound films. Furthermore, sound programmes on many levels will be used in the school radio, on tape recorders in the classroom, or in the language laboratory.

The demand for a school TV with special programmes broadcast in the individual schools in closed circuits becomes increasingly urgent. Only when TV is introduced in Greenland will the school authorities be able to open up the window in earnest to the modern world, giving the impulses and the background information that are so necessary if there is any hope of the level of the leaving classes corresponding in all ways to the level of the graduating classes in Denmark.

In a transition period, the instruction in practical subjects is being given to the extent made possible by the number of rooms available. In the special sealing districts instruction is given in 'sealing practice'. For the boys this comprises the construction of the ordinary sealing tackle and kayak paddling, while the girls are taught skin dressing and sewing. Instruction in the subjects attached to the sealing trade is, first and foremost, given to create an interest in the trade; it is still considered highly important that the family undertake to train the young people in sealing and skin dressing in the proper way.

Occupationally, the country may be divided into three regions, namely, the Sealing District comprising the most northerly part of Greenland and East Greenland; the Fishing District comprising the central part of West Greenland, and the Sheep-breeding District in the southern part of the country. This occupational division into three regions makes itself felt to a certain degree in the school work. The largest settlements are found in the fishing district and here it has been possible to enlarge the schools, while this has been impossible at the small places in the sealing district. In the sheep-breeding district regular instruction can hardly be arranged in the very small, out-of-the-way settlements.
The educational requirements in the fishing district differ little from those known in Denmark. The educational requirements for the group that will live as primitive sealers may, of course, be met locally, but the part of the population in the sealing as well as the sheep-breeding districts that will later migrate to the bigger towns, has a natural claim for book-learning. It is difficult to find qualified Greenland-speaking teachers for the small places. Therefore, it is often necessary to use local tutors with no training, apart from what they learned in the primary school. Some of the places are so small that they do not have even a building where teaching can take place. In the sheep-breeding district the children live in boarding-schools, some in a few settlements, and some in the nearest larger town.

Through many years it has been a tradition in Greenland to place the pupils for further education in boarding schools. The boarding schools, housing totally about 550 children, have been concentrated in the towns of Julliachab, Godthaab, and Egedesminde. Besides, smaller homes for pupils have been built in the other towns for children from the district. The Education Act provides that in each educational district it must be possible for the pupils to continue their schooling not later than from the end of the fifth grade at one or more central schools, to which homes for pupils are attached. This means that more homes for pupils must be built at the highest rate permitted by the appropriations and the technical apparatus.

V. Vocational Education after the Compulsory School Age

A good basic education is necessary for the young people if they are to succeed in carrying through their vocational training. As already mentioned, the demand for well-trained people is being felt in the developing community. Such demand exists in the free trades, in the fishing industry, among the artisans, in offices and business, and in undertakings requiring higher education.

The Danish apprenticeship system was put into force in Greenland in 1963. The training of apprentices takes place first and foremost in the wood and metal trades and in the office and business lines. Incidentally, the differentiation of the training in the various trades mainly depends on the extent to which qualified and recognized employers can be found for the apprentices. Trades of a more special nature must be learned in Denmark.

Considering the investment activities in Greenland during these years with the extensive use of labor from Denmark, the need for the traditional artisan's training will still be pronounced. Since 1962 there has been a provisional vocational school for artisans at Godthaab. Immediately before the introduction of the apprenticeship system, courses were arranged for semi-skilled artisans and office clerks, the participants passing the "journeyman's test" for the artisans and the "shop and office assistants' examination" for the clerks, whereby the status of this group of skilled workers was secured.

Apprentices in the wood and metal trades are gathered in Godthaab from the whole of Greenland to attend the basic preparatory school and twice during their apprenticeship for theoretical instruction rounded off with a "journeyman's test". Training of a more advanced nature — for instance that of
an electrician — is started in Greenland and finished in Denmark. The same holds true for shipwrights.

In 1969 a central vocational school was finished at Godthaab for the training of apprentices and for other vocational courses. The block of buildings comprises a number of classrooms and workshops, and a hostel housing about 130 students will be attached to the school. About 1,000 apprentices and students are expected to attend the school per year.

Business apprentices get their practical training in Greenland and finish their theoretical education in Denmark.

Since 1959 there has been a nautical school at Godthaab where coastal and home-trade masters are trained, whereas no mate’s examination is held as yet in Greenland. The fishing industry is the most important one in Greenland. Therefore, it is of very great importance that as many people as possible are trained in seamanship. A regular fishermen’s school has not yet been established in Greenland, but local courses in elementary practical and theoretical subjects are held for fishermen. Increased efforts are to be foreseen in this field during the next few years.

These years a great activity is, upon a whole, displayed in connection with courses for unskilled workers. Courses are arranged in Greenland as well as in Denmark. We may mention courses for machine drivers, courses in the use of contractors’ machines, courses for crane drivers, for workers in the building trade, for storage and warehouse workers and for foremen — just to give a few examples.

There are several training possibilities for the young girls in Greenland. Women are, to a great extent, represented on the shop and office staffs. Among the special training courses for women may be mentioned the training as assistant nurse and as children’s nurse assistant. At Julianeaab is found a school for housewives, at the moment accommodating fifteen pupils, and courses are arranged for catering officer’s assistants.

Under the Act, possibilities have been opened up for the establishment of evening schools, evening high schools, courses of lectures, and continuation schools, recreation arrangements, and various kinds of general education, including course activities. The Minister for Greenland has been authorized to lay down provisional regulations for such activities.

Knud Rasmussen’s High School at Holstebro is an independent institution and the only school of this kind in Greenland. It is run in the same way as the Danish folk high schools. Instruction is given in ordinary school subjects, the main stress being laid on history, civics, and what falls within the concept of Greenland traditions and Greenland culture.

After the new Education Act came into force with its provisions for evening classes and out-of-school education for young people, this kind of spare-time education has progressed considerably. The evening classes comprise subjects like Danish, Greenlandic, arithmetic, foreign languages, social subjects, and practical subjects. Evening classes may be arranged in cooperation with the local associations. Offering an excellent opportunity for further education, evening classes cater to people of more than eighteen years. The youth school has pupils in the age group of fourteen to eighteen. With "orientation" for
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young people as starting point, the problems of the young people themselves are dealt with. Many pupils at the youth school come from the group of young people already in training, supplementing at the youth school the education they are already receiving. The greater part of the pupils, however, are recruited from the group that has had seven years of schooling only. Through the youth schools this group of young people gets an opportunity to go in for tests in a single subject corresponding to the tests arranged after nine years' schooling. This is a new opportunity which probably will be made use of by a considerable number of young people.

As will be seen from the foregoing, the differentiation in the education given in Greenland must necessarily be limited. Apart from the training of teachers, no further theoretical studies have been arranged. To gifted young people, however, the road to all forms of higher education is open. It is possible to be educated in Denmark in the subjects not taught in Greenland. The economic problems have been solved by the establishment of an advantageous students' loan fund. After having concluded their apprenticeship in Greenland, the young people may apply for further education at technical institutes of education and at advanced school of commerce. Trained nurses, kindergarten teachers and the like are trained in Denmark. The pupils qualified for Higher Secondary Schools or schools on a similar level must go to Denmark, too. The universities and other institutes of higher education are open to sufficiently gifted and mature students. According to the latest statistics, about twenty young people are preparing for matriculation examination and about ten are studying at the universities.

It is a general experience that the drop-out rate of the young people receiving a higher education in Denmark is rather high. So far, few Greenlanders have taken a university degree. It is in itself very exacting for a Greenland student with a purely Greenland background to complete an education in a foreign language, and to take the change of environment and the social transplantation from Greenland to Denmark demands much force of character. These factors undoubtedly contribute to the relatively high drop-out rate.

It can be said in general that the educational system in Greenland is quite new and that heavy demands are made on the young people who are being trained to attend expensive and complicated technical plants. The reform of the community has been so rapid that the educational sector has not been able to keep pace. On this background it is encouraging to note that the authorities empowered to make grants as well as people in general clearly realize the importance of education in modern Greenland. By the choice of their career the young people have often proved that their goal is a full and complete education although they may sometimes find it difficult to evaluate their own capabilities and qualifications. Here the school and other agencies must help them. Already demands are made for most forms of education to be on an equal footing with the education in the rest of Denmark. We have reason to feel happy because so many young people have been able to go through rather complicated training schemes. On the other hand, we must not be blind to the fact that quite considerable demands are made upon the young people, considering their social and linguistic qualifications. Therefore, we also see some failures. On the long
view, the objective must be as it is, but opinions may vary on the road to be followed and on the methods and means to be used. The debate must go on for the elucidation of this very important question.
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Inez Boon Ulfsby

Inez Boon Ulfsby acquired her insight in the educational needs of Lapps as a teacher in the Finnmark District of Norway. In this capacity she initiated development of instructional materials in the Lapp language, including the first readers written in Lappish. It is with this background that Mrs. Ulfsby prepared the following material.
The pedagogical situation in the Lapp-speaking districts of Norway gives the Lapps two main problems, namely, what should the school teach and how will the school achieve the most desirable results?

In earlier times people did not bother so much about what children learned in school. They mostly were content when the children were taught religion, and eventually got some practice in reading, writing and arithmetic. What really mattered for the children's later practical life, was taught them by their parents during the daily work like farming, fishing, hunting, reindeer-breeding.

But, although the parents did not claim too much from the schools, it still was very difficult to carry out satisfactorily the simple educational goals for the school. The school's language of instruction was Norwegian, a language which neither parents nor pupils understood.

The language problem is old, and for a long time this problem has called forth struggle. A historic review shows that between 1710 and 1870 there were short periods with cultural humaneness and good will on the side of the fies. However, from 1870 until the last World War, the authorities tried
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to "Norwegianize" the Lapps in a very harsh way, and the Lappish language was absolutely forbidden in the school.

Lapp parents considered the school as an unnecessary evil. According to their opinion, the children learned next to nothing there. On the other hand the children did not get the opportunity to learn the far more important and useful things which their parents could have taught them in the same time at home.

After the last World War, the central authorities started to show more interest in the education of Lapp speaking children. The Northern part of Norway (Finnmark) was completely burnt down by the German army when withdrawing in 1944 in front of the Red Army. Nothing was left behind, nor any school. At the same time when the rebuilding of schools started, the authorities made arrangements for improving and extending the education of Lapp speaking children. It is typical of the bad experience the Lapps hitherto had experienced with the Norwegian school that many of them strongly opposed the extension of the period their children were to stay in school. They were convinced that it was a waste of time. Especially among those Lapps who worked with the traditional reindeer husbandry, the opposition was very strong and lasted until recent times. They knew the children did not learn anything which could be used in reindeer husbandry. They knew too that their children at school were under-achievers, much retarded compared with Norwegian speaking children, so that they would not have any chance to compete on other fields than that of reindeer-breeding. The school program was generally still presented in Norwegian only, and based on the needs and values of the Norwegian cultural and social urban society.

However, from the year 1963 a great change of thought took place, at first with the authorities, later with the Lapp population. The most important feature of the attitude of the authorities was that they recognized that it was impossible for harmonious development and effective learning to take place without being connected to Lapp language and culture. Of the same importance was the fact that they were willing to take the practical consequence of this point of view. It was stated by law that the Lapp language could be introduced at the primary school, both as a teaching language and as a subject. Also Lapp history and culture was given a place in the curriculum. Financial disposition to realize all this were made. From 1969 there will also be established a "gymnasium" within the Lapp speaking district with provision for Lapp language, history and culture. The certificate from this "gymnasium" will give the same competence as those from other "gymnasium" in Norway do. Moreover, a special bilingual course is being planned at the teacher training seminar in Tromso, which is to prepare teachers for their work in bilingual districts.

How do Lapps react to this new school policy? The important conversion of the authorities was not greeted with joy alone. As the same authorities have been doing their best through a hundred years, to convince the Lapps that their language and culture was worthless, that their Lapp identity was an undesirable one, it was not quite so simple for the Lapps to understand that it now suddenly was all right to be a Lapp. Through many generations they had experienced that being a Lapp, speaking Lapp, was identical with defeat, poverty, contempt. Is this new policy an honest one, they ask? Do they not want us to underline our
The Lapp identity. Just to keep us at the bottom of the table? The Lapps know that the Lapp language does not pay in the national society.

Slowly, however, mistrust and misunderstanding seem to be disappearing. Among others the teachers have contributed to this by developing an intensive informative activity - e.g. about the advantages the use of the mother tongue during the first school year is supposed to give for more efficient teaching during the whole school period. In 1967 the first experiment with teaching reading, writing and arithmetic through the mother tongue alone was started. The Norwegian language was used only half an hour every day, and only for elementary oral exercises. Very few of the parents dared to oppose the popular opinion, most of them letting their children participate in the experiment. After one year the experiment proved to be successful. Today many parents send their children to classes where the mother tongue method is used. (In some districts there is an 11 percent support). They found not only that their children performed better than children did before them, but they also found out that the children like to be at school and were really interested and engaged in what was going on in the classroom.

It is not only the question of language which brings a change in the minds of the people as to their relation to the school. Especially important is the economic situation in the local societies. The increase of the Lapp population is large. The average age is low, with 30 percent under 15 years, 75 percent working within the primary occupations of agriculture, lumbering, fishing, reindeer-breeding. Their income is the lowest in Norway. While the population increases, the resources within the already mentioned primary occupations are exploited to the maximum. Leaving the local society seems to be the only way out. Until now few have left the local society, although shortage of working places exists. This should indicate that the social press outside the local society is too strong for most of the Lapps. Therefore, people and authorities are looking at the school as the main means of solving the economic problems. The school's program should primarily prepare the pupils for a living outside the local society and should procure an education as general as possible.

A quite opposite view is represented by the Lapps living by reindeer-breeding. Traditionally this group of Lapps has been quite independent from the press of the national society, because of their special way of living and working, which forces them to stand on their own feet. It was also this group which for a long time did not expect any benefit from school education. Meanwhile they acknowledge that reindeer-breeding today cannot give a family a reasonable living as long as it is done only in the traditional way. So far only a little research on reindeer-breeding has been done in Norway, but no modern vocational training for reindeer-keepers has been established. So, also for the group of reindeer-breeders the school should bring a solution, not by giving the children a general education, but, on the contrary, by giving them a vocational training as early as possible, and through this, primarily preparing them for a living inside the local society.

It is obvious that the general technical and economical development of modern society has made the Lapps more aware of the importance and the necessity of school education than they ever were or had to be before. Still one
can say that the attitude of the Lapps opposite the school is ambivalent. Some research on this subject was made by a Norwegian scholar, magister Anton Hoem:

The most general pre-condition for any education is that the school and the children belong to the same culture. In the nationwide society of Norway, home and school in general share common goals for the children's education. One will find that in the home and in the school much the same methods are used to educate the children, and motivation is sought in accordance with the same values and norms. Thus education at home and in school might be said to reinforce each other.

Hoem argues that the reason one still finds, in spite of the special arrangements the school authorities have made, that Lapp pupils as a group are under-achievers, seriously retarded, compared with the standards of the curriculum is due to the fact that the school in Lappish districts belongs to the culture and social system of the nationwide society, while the home constitutes local Lapp communities with a varying, but generally low degree of connection to the nationwide society.

The investments in special training for teachers, printing of text-books and literature in Lappish, introduction of Lappish language and culture as subjects are efforts to raise the efficiency of teaching within the established system. They are not efforts to adapt the school to the particular needs and values of the Lappish society. Therefore one will find different norms and values in the school and the home, and different behavioral standards. In fact, the more efficient teaching, the greater discrepancy between goals of education at home and in the school. This makes the formal education an unnecessarily difficult process. The main results are a cultural and social gap between the most successful pupils and the local Lapp society, and a barrier between losers and the nationwide society.

For both parents and pupils school education will often mean making a choice between the local and the national society. In most cases choosing the national society will mean cutting the ties with the local society. In the opposite case, will identification with the local society exclude from the national society? The conclusion might be that although parents and pupils know they cannot manage without the school, and therefore show more interest in it than ever before, they at the same time feel that the school, as it is at the moment, gives them new problems, not economically but socio-psychologically.

REFERENCE
The Pedagogical Situation

Ghislaine Girard

Ghislaine Girard has worked in northern education through the General Branch of New Quebec, Government of Quebec. It is significant that educational problems identified at the Provincial level in Canada are so similar to national or federal problems found elsewhere in the North. The scope and dimension of teacher training described by Ms. Girard have obvious application for the entire North.
Until the sixties, the only governmental presence in Northern Quebec was that of the Federal Government. In 1962, following a survey of the situation, the Government of Quebec decided to commit itself deeply and globally in its Northern territory, with special respect to Eskimo and Indian Affairs in this region. This sudden attention of the Quebec Government to the northernmost parts of its territory was no doubt connected with the recent discoveries of valuable natural resources in that area. To this selfish interest was joined a sincere desire to help the inhabitants of this territory to enjoy the same organization of life as citizens in the southern part of the province.

The plans were not so much to give the Natives material assistance since in fact their subsistence was already taken care of by welfare programs of the two levels of government, Federal and Provincial. Rather, it was necessary to orientate this new government effort to the preparation of these people already physiologically and psychologically adapted to the territory so that they could eventually play a personal role in its development. This training was essentially related to education and was to be offered to the whole of the population, young and adult. In other words, a special intellectual and technical development
The Pedagogical Situation

which would facilitate their adaptation to a new way of life and would permit them eventually to have access to a larger preparation.

Previous studies as well as the observation of the first "southern" teachers sent by the Quebec Government and seconded in their Kindergartens by Eskimo assistants, resulted in the following findings:

1. Eskimo children at the age of five are capable of work denoting a sensorimotor and intellectual development largely similar to that of southern children in the same age bracket; at eight years of age, however, they were significantly behind southern children with respect to acquired knowledge.

2. Eskimo assistants are very patient, even-tempered, and attentive with children.

3. Eskimo adults who could be oriented towards positions of responsibility must accede to these levels before reaching the age of eighteen or nineteen, otherwise the great majority of them will not terminate their studies.

4. To motivate learning in Eskimo society, the education system must respect the values of that society, incorporating some of them into the actual courses of study. The school, in other words, must seek the support and, ideally, the active participation in the educational process of both family and community.

The Use of the Mother Tongue

The school is essentially the continuation of the family circle in so far as education is concerned. Its role is to make the child aware of his environment and give free course to his expression.

For the child, language develops at the same time as the frames of his conceptual thought and his first structures of logical thinking; even if language is not a sine qua non condition of thought, it is its precious auxiliary at different steps of its evolution. The sooner the child can acquire an easy manipulation of verbal expression; the sooner he will be free to benefit from the use of this precious tool in all the fields of its social and intellectual adaptation.

To ask the child to learn a second language at this moment in his development, would be to limit him in the discovery of his personality and his milieu. It would also retard, if not prevent him from reaching mastery of verbal expression in his own language.

It is only by mastering his own language that he will be able to acceed surely and rapidly to new concepts and forms of expression, even those with which his milieu is not familiar. There is great danger of upsetting the mental development of children whose patterns of thought have been influenced since their-earliest years by a linguistic system fundamentally different from those of the Indo-European languages.

It is similarly unrealistic to expect adult Eskimos of a certain age, the majority of whom have no formal schooling in the southern Canadian tradition, to understand or make themselves understood properly in a second language. Time spent in teaching either French or English to those adults would be time
wasted, especially in view of the extent of unfamiliar cultural content reflected in both of those foreign languages.

History and Methods of Training Eskimo Teachers in New Quebec

For the above reasons, it was decided that all subjects in the first cycle—kindergarten, first and second years—would be taught in Eskimo. The language of instruction in the second cycle—grade three to six—would be either French or English, with Eskimo retained in the curriculum as a subject of study. Upon completion of their elementary course in grade six, students may register for the third and final cycle of the regular northern school system at the Regional School of Poste-de-la-Baie, where studies include academic subjects as well as accelerated vocational options. The courses in this cycle are so designed as to meet entrance requirements of southern school systems for students who wish to continue their education in other parts of the province.

In the beginning, however, before the present system was established, the need for Native teacher assistants had to be met locally on an ad-hoc basis by hiring young people who had at least some formal schooling in the Federal Government system. In most villages of New Quebec, federal day schools did not exist before the fifties, so that very few of the prospective teacher assistants had even the equivalent of a regular southern grade seven. Nevertheless, the principle of teaching in Eskimo could brook no compromise, and Native assistants were consequently chosen locally for the beginning classes at Fort Chimo (population of 600 Eskimos), Wakeham (180), and Ivujivik (110).

The criteria used for selecting assistants were as follows:
1. Aptitude for, and interest in, teaching
2. Personal presence and attentiveness to the child
3. Ability to communicate with children
4. Knowledge of the candidate’s own milieu and culture
5. Possession of the academic knowledge necessary for teaching in the lower grades.

Obviously, the candidates met those criteria in varying degrees. Those selected then served a kind of apprenticeship in the actual classroom with the southern teachers whom they assisted. At the end of each day’s teaching, assistant and teacher reviewed together the day’s problems and tried to find ways to solve them in preparing the work for the following day. In the measure of their aptitudes, the teacher assistants could come to assume almost full responsibility of their class and, after three years of service, were given the opportunity of going elsewhere to improve their personal education. This opportunity has become a reality for one young man still in his teens who, after working three years as a teacher assistant in the remote village of Ivujivik, has been studying for the past year in a Quebec city high school.

The second phase in the preparation of Native teachers took place in the early part of 1967 at Wakeham, on Hudson Strait, where the existence of classes in all three years of the first cycle made possible a teacher training course based on observation and practical classwork. The course was necessarily short because of the urgent need for teacher assistants, and also because of the students’ difficulties in doing intensive work in the same field over a long period of time.
As proof of the positive results of this course, let us mention that five of the six students are presently engaged as teacher assistants in various posts of New Quebec.

The training session in Wakeham was followed during the summer with courses designed to permit the students to acquire new general and pedagogical knowledge through an exchange of experiences with those who were teaching already. This summer session is now an annual institution for all the teacher assistants.

Difficulties Inherent in the Training of Native Teachers at Present Time

As previously mentioned, we are still in the first stage of developing educational programs and methods for Eskimo schools. In this phase, answers must be found to a whole host of basic questions arising from the confrontation of two ethnic groups whose languages, mentalities, frames of reference, socio-economic traditions, and concepts of education are radically different. Even if Eskimo is used as the language of instruction, the form and content of our educational program belong to a culture which is alien to the daily experience of traditions of the pupil's own community. What in effect has happened is that an educational system has been established in the North which in essence differs from southern systems only in so far as the language of instruction and teacher assistants are concerned. It is therefore not surprising that the Eskimo adults of New Quebec, including the teacher assistants, do not yet feel that the school is an integral part of their own community. This attitude is translated by a lack of real interest in the educational process, on behalf of most adults, and a lack of initiative, of dynamic involvement, on behalf of many teacher assistants. There is an urgent need for young Eskimos willing to help set the guidelines for educational programs that would be valid in terms of both traditional values and the needs of a community in rapid socio-economic evolution.

We are presently attempting to find the best approach to many of the above problems in the framework of a new teacher-training course which has been in operation at Poste-de-la-Baleine since last January. To be admitted, candidates must have the equivalent of at least a good grade six education. Some of the present students have a little more. Training is provided in all the normal academic subjects and pedagogical skills the future teachers will need. All the present student teachers are in their teens. The idea of beginning specialization at such an early age is not so much to train them for a well-paid profession later on as to help them develop an intellectual maturity towards the values of the two cultures in the North in order that they may participate creatively and responsibly in the development of their own community. We must therefore disregard any odious and meaningless comparisons with teacher training of non-Eskimos in the south.

The Eskimo Language and Standard Orthography

To our knowledge, no study has been made to determine at what moment of his development an Eskimo may be said to master his own language, or to what degree of perfection and precision he can aspire. We have nevertheless noted that young people who have done their studies for a relatively long time in
a foreign language have a limited and imprecise vocabulary in their own. Moreover, they are more or less shy of communicating in their mother tongue.

We must therefore inculcate in our students an awareness of lexical and syntactical precision in their own language. As future teachers, they must be brought to see the role of language in the development of the child's intelligence and conceptual patterns. They must understand its importance as an instrument of group cohesion, as a means of expressing and conserving group values, as an indicator of cultural change in the community, and of sensorimotor or psychological disturbances in the individual. The obvious prerequisite to such understanding is a high degree of competence in, and sensitivity to, the teacher's own language. The present generation of New Quebec teenagers do not possess their language to the necessary degree. The children presently studying in the primary classes of the Quebec government day schools will have a much greater mastery of the Eskimo language upon completion of their elementary course, but until then, the most reliable guides as to the correctness of spoken and, if in syllabics, written Eskimo, are the more elderly adults in each community.

All language exercises in the training course are done in Standard Orthography, a phonemic system for writing Eskimo in Roman characters which was developed for use by Eskimos in all parts of Canada by Mr. Raymond Gagne, linguist with the federal Department of Northern Affairs and National Resources. While avoiding the ambiguities of the syllabic form of writing, Standard Orthography makes it possible to write in Eskimo on an ordinary typewriter keyboard, thus giving Eskimo students access to regular commercial courses. Since very little literature or pedagogical material exists at present time in the new orthography, students are encouraged to use it rather than syllables in writing formal compositions and personal letters. A considerable number of stories written originally in syllabics by Miiyarjuk, a woman from Wakeham, on Hudson Strait, have been transcribed into Standard Orthography, and it may be expected that reading material of all kinds will be available in the new orthography within a few years.

General Knowledge

As mentioned earlier, our immediate goal is to form teachers for the first years of the primary course. Their training is naturally carried out in a second language, since obviously no texts pertaining to their specialization exist in Eskimo. While the study of the second language must necessarily aim at correct vocabulary and grammar, it must be eminently practical and avoid all literary and stylistic pretensions.

We have observed that the students have many difficulties in mathematics. One of the main goals of their training must be to get them to reason the underlying principles of mathematical situations, rather than insisting on developing skill in complex operations — a skill, moreover, which they normally have had the opportunity to acquire before entering teacher training. In effect, it is necessary to go through the whole introduction to mathematics with them from the kindergarten onwards, doing exercises on the notions of space, size and measurement.

It has been underlined that it was necessary for the child to be instructed in his own language because this language is for him the only way of
learning to understand and express his environment. From the time he enters school until the age of nine; the child lives in a relatively uniform period characterized by an exclusive interest in the exploration of the outdoor world and during which he accumulates observations, facts and experiences. If we want the school to make a real contribution to his development, it is of first importance to help him in the discovery of his surroundings. The three "r's" are only the means of attaining that objective.

We have discovered another difficulty resulting from a lack of curiosity whose origin is hard to explain. It is certain that in order to keep alive the desire for knowledge, the latter must be expressed, listened to, stimulated, and, most of all, answered. We know that the Eskimo child is relatively excluded from the world of the adults and consequently he cannot obtain the answers he is trying to find. It seems also that the adults themselves do not greatly question their milieu; they are simply aware of its existence. The simplest questions about their universe, about life, do not seem to preoccupy the children in the slightest, either because they have not yet arrived at that phase of their development or because they can foresee they will not be able to obtain any answers.

Along these lines, it is felt necessary to induce our candidates to base their knowledge of the milieu on a scientific knowledge free from taboos and legends. It is their own physical environment, the animals, the seasons, vegetation, the evolution of their people as well as their own biology that they need to know in order to arouse the children's interest.

This approach must nevertheless be somehow simplified in order that the teachers not be encumbered with complex theories that they cannot relate to their immediate context, and which could make it difficult for them to convey their knowledge to the children in terms of the latter's interests and ability to comprehend.

Pedagogical training

We have mentioned that the young teachers to be are not yet capable of a personal say in what the school should be for their people. What they have known of it until now comes of listening instead of participating; consequently they are not tempted to go beyond the limitations of reading, arithmetic, and formal teaching. To palliate that difficulty, we try to give them a great deal of freedom in their professional training. Instead of standard lessons or precise pedagogical notions, we prefer periods of observation or participation in the classroom which can permit the students to perceive the child's development and intellectual processes. The Eskimo is by nature inclined towards the child, but he seems little conscious of the contribution of games or teaching to the latter's development. Here again it is unthinkable at the present time to give our student teachers systematic courses in child psychology; it is nevertheless possible to draw their attention to the children's attitudes and reactions, and to suggest means of a greater effectiveness in communication with their pupils which experience will help them to assimilate and refine.

At present, there exist very few teaching materials adapted to the Eskimo environment. We must therefore urge our student teachers to conceive and produce texts, educational games, and other teaching aids which they can use in their own milieu.
The preparation of Native teachers is of capital importance for teaching at all levels in the Eskimo community. Because of their privileged situation and the responsibilities they will be called upon to assume in their own society, Eskimo teachers will be able to participate decisively in the elaboration of educational policy. With them, formal schooling as we know it will have a better chance of becoming an integral part of the Eskimo community, rather than, as at present, a foreign imposition.

REFERENCE
The Pedagogical Situation

L. V. Belikov

L. V. Belikov is Professor and Director of the Northern Section of the Pedagogical Institute of Leningrad. Professor Belikov was an early pioneer in Soviet efforts to provide bilingual education in the northern regions of Siberia. Early in his career Professor Belikov taught in the Siberian North, prepared various textbooks including material in the Native languages, and most recently has been in charge of teacher training programs for the Soviet
Training of Teachers for the Far North of the U.S.S.R.

Training of Far Northern National Minorities Organized in the Twenties and Thirties

The training of specialists belonging to the national minorities of the Soviet Far North was organized in the mid-twenties in Leningrad. In 1925 a group of 19 northern people arrived in Leningrad, representing eleven northern nationalities (Nenetz, Saamis, Khants, Mansis, Evenks, Kets, Nanays, Nivkhs, Itelémens, Chukchas, Yukagirs). These first messengers of the Far North, almost illiterate, were sent by the local authorities to Leningrad University to be trained at a preparatory workers' faculty (the traditional abbreviation was "Rabfak"). Thus the North Group of Leningrad University was created — the first institution to train northern national intellectuals. A year later, in 1926, the training of northern people was transferred to the Leningrad Oriental Institute, where a special Northern Faculty was organized and in the 1926-27 academic year 74 northern aboriginal people of different ages were being trained.

The most experienced professors, teachers and well-known Leningrad scholars were invited to give general and special training to the first students from the North and they undertook with great enthusiasm to teach young
people who arrived in the city from the far corners of taiga and tundra. The well-known ethnographers and linguists, V.G. Bogoraz and L.J. Shternberg, who dedicated their lives to the study of northern people, took a most active part in organizing the training of the northern national youth in Leningrad.

Eventually some of the Leningrad northern students of the twenties became well-known public men in the vanguard ranks of cultural and economic construction in their national districts and regions. Among them were the Chukcha, Tevianto, a formerly illiterate herdman, who became chairman of the Chukcha national district executive committee and deputy of the U.S.S.R. Supreme Soviet, the Aftenian, Haborov, the Even, Salatkin, Diidorov and Voronin, the Khant, Alarov, and others.

But by the late twenties the need for teachers and other specialists had greatly increased in the Far North, for general development of economics and culture required an ever-growing number of specialists in the national regions who were well acquainted with local conditions. Therefore in the early thirties a necessity arose for augmenting the training of national intellectuals and concentrating it in one special educational institution. This first special educational institution was the Northern Peoples Institute, organized in Leningrad in 1929-30 on the basis of the Oriental Institute’s Northern Faculty.

The Northern Peoples Institute was established as an educational institution of a complex type. It consisted of elementary, secondary, and higher stages of education to ensure the training of Northerners in different specialties necessary for the successful development of a socialist economy and culture in the Far North in the thirties.

An extensive Department for Elementary Schools became necessary for the further development of education of the Northerners entering the Institute because in those years there were mainly primary schools in the North.

The secondary specialized education was the most important department of the Institute; it facilitated the training of specialists so badly needed in the North, including teachers, within a comparatively short period of time.

All the students of the Institute were wholly supported by the State. They were provided with meals, clothes, footwear, everyday medical and cultural services, text-books, copy-books, etc., all free of charge.

Besides secondary specialized education there was a higher level, where the most successful students, who wished to get a higher education for work as teachers at seven-year schools in the Far North, were trained.

In 1930 a Research Branch was organized at the Institute. In the thirties it was the first scientific establishment and an important research center dealing with the study of languages, history, ethnography and other problems of the northern nationalities. A large group of Leningrad experts on the People of the North worked there. At the Institute under the guidance of V.O. Bogoraz, Y.P. Koshkin, S.N. Stebnitzky and other scholars, writing was devised for those languages that had been only oral before. ABC textbooks for northern schools were compiled, languages and the ethnography of northern peoples were studied. To train the first scholars for the Far North postgraduate courses were organized. Those graduates from the Institute who showed abilities for research were admitted there.
Students of the Institute such as the Nanalan, Akim Samar, the Chukcha men Vukvol and Tinetegin, the Nenets, N. Vilka and P. Khatangeev, the Khant, N. Tereshkin, the Evenk, N. Salatkin, the Eskimo, Kasiga and many other Northerners took an active part in working out writing for their peoples.

By the mid-thirties about 300 students, representing 24 nationalities had been trained at the Institute, which thus played an important part in educating the first groups of national northern intellectuals.

Training of Teachers for the Far North
at the Hertzen Institute, Leningrad

In the thirties a wide network of primary and seven-year schools was growing in the Far North and organization of national pedagogical and ten-year schools began. The number of Native teachers who were trained at the Northern Peoples Institute proved to be insufficient and to increase the numbers of teachers, graduates of an institution of higher learning, a special Northern Department was opened at the Hertzen Pedagogical Institute, Leningrad.

Enthusiastic Russian young people were admitted to the Northern Department, helping to bring culture and education within reach of national minorities. They were teachers of the first schools in the North and they had some practical knowledge of national languages and experience in work among the Native population so that they could aid in literary translation and in compiling textbooks for the peoples of the North.

In the thirties at the Northern Department, special groups were opened at the faculties of Russian Language and Literature, History and Geography. The basic five-year training was carried out at the Faculty of Literature according to the generally accepted curriculum. In addition to the main philological subjects, the curriculum of the Northern Department provided for the study of Native languages, ethnography, and physical and economic geography of the North. National languages were taught under the guidance of a special department organized by Professor V.G. Bogoraz and Professor Y.P. Koshkin at the Northern Department of the Hertzen Institute in 1930. These two professors got the cooperation of a group of experts in northern languages and ethnography from the Northern Peoples Institute.

Graduates of the Northern Department and of the Northern Peoples Institute worked as teachers and headmasters of seven-year and ten-year schools, pedagogical schools and as administrative staff of the local educational bodies. Together with Native personnel they were the first organizers of seven-year and ten-year schools in the Far North, the heralds of writing, culture and education among the Natives in the thirties and forties. Eventually many of them became specialists in the languages, folk-lore and ethnography of the North, authors of school books and scientific literature. The author of this report graduated from the Northern Department in the thirties and worked at schools at Chukotka for about ten years. Thus as far back as the thirties the Northern Department at the Hertzen Institute did much to provide the Far North with teachers having a higher education, specialists in northern languages.

The training of teachers for the North was temporarily interrupted by the patriotic War, but after the war the Soviet Government took the most
drastic measures to resume the training of Northerners as teachers. During the early post-war years teachers for the North were first trained at Leningrad University, where most northern specialists then worked. Professor V.I. Tzintzius held the Chair of Northern Languages, for example. To overcome the acute shortage of teachers for the North they were also trained in several regional centres of the Far East such as Khabarovsk, Petropavlovsk-on-Kamchatka and Magadan, and for several years a small quota of Northerners was trained at the Pedagogical Institutes of those cities.

In 1949 the Soviet Government decided to establish a special Department for the Peoples of the Far North at the Hertzen Pedagogical Institute, Leningrad. After some time Northerners studying at Leningrad University were transferred to the Hertzen Institute, which had good traditions of training teachers for the northern regions since the thirties.

Annual admittance to the Department for the Peoples of the Far North was determined in accordance with a pre-planned allotment for every national district or region to provide the training of a sufficient number of teachers for all the Far North territory of the Russian Federation. Total enrollment was distributed among the nationalities according to specialities to satisfy the needs of each national region and the demands of local educational bodies.

In the past years the structure of the Department underwent changes to meet the needs of the Far North for teachers of different particular qualifications. For example, in the post-war years the Department for Northerners trained teachers for seven-year schools mainly, the number of ten-year schools in the North being small. Many northerners were sent to study in Leningrad at the age of 15-18 after finishing seven-year national schools. So they had first to be given complete secondary education and then to be trained as teachers. For this reason the Department consisted of two stages — preparatory and basic. Admittance to the three year preparatory courses (corresponding to the eighth, ninth and tenth forms of secondary school) was open to people of minor northern nationalities only.

At the basic stage at the Institute itself teachers for seven-year schools were trained for three years. Northerners who finished secondary and pedagogical schools were admitted there (Nenetz, Saami, Mansi, Khant, Dolgan, Nganasan, Selkup, Tofalar, Evenk, Nanalan, Udegel, Ulch, Nivkh, Itelmen, Altai, Eskimo, Chukchi, Korjok, Yukagir and others).

But together with Northerners constituting the overwhelming majority of the students, people of other nationalities, including Russians, are also admitted to the Institute, if they are permanent residents of the Far North national regions who know the conditions of life in the North and wish to work there after graduation. All the students of minor nationalities who study at the Department are wholly supported by the State with free fare and also free board and lodging, clothes, footwear and everyday medical and cultural services. Scholarships are granted them depending on progress.

Later the educational pattern of the Department was changed because of the development of secondary education in the North. Thus in 1953 a four-year training period was introduced during which students got narrow specialization in different subjects taught at secondary schools and pedagogical schools.
Since 1956 duration of studies for Northerners has increased to five years because of the expansion of training and broader training in interrelated subjects such as "Russian, Literature and History", "Mathematics and Physics", "Biology and Chemistry", "Geography and Biology", "Art, Draftsmanship and Handwork," etc.

As the system of secondary schools developed in the Far North there was no more need for preparatory courses and since 1957 no new students have been admitted to the preparatory courses.

The entrance examinations to the Northern Department are held at the Regional-Pedagogical Institute and Pedagogical Schools. People who have passed their examinations are sent to Leningrad and admitted to the Hertzen Institute.

For the past twenty years students of the Northern Department have been trained in all pedagogical specialities to meet the needs of secondary education in the Far North, in History and Literature, Physics and Mathematics, Natural Sciences and Arts and other subjects.

For some time specialists in elementary education were trained at the Institute to provide the North with inspectors for elementary schools and teachers for pedagogical schools.

Many pedagogical specialities at the Northern Department changed periodically. This depended on the needs and demands of the national regions, however, for two main specialities — philology, physics and mathematics — entrance examinations are held every year. The total number of those admitted to the Northern Department is planned by the Institute according to applications of the national regions and is confirmed by the Board of Education.

At present, for instance, Northerners are trained in five specialities; most students are trained in philology, physics and mathematics, natural sciences; others in fine arts and physical training. We must also mention the peculiarities of the educational training of northern students at the Institute. These peculiarities mainly refer to training in philology (Russian language and literature, northern peoples' languages and literature).

Northern students receive many-sided training in all pedagogical specialities according to the general standard of our educational system. Besides they have lessons in their mother tongue (phonetics, morphology, syntax, lexicology, dialectology) and also folk-lore and literature of the northern peoples, their economy and culture. In addition to their main speciality — Russian language and literature — northern philologists are trained in northern languages and literature as a second speciality. This helps them to use more effective methods of teaching the national contingent of northern pupils and carry on political and cultural work among the aborigines.

Many graduates are not only teachers of their mother tongue in schools and pedagogical schools; they also take part in translation work at national regional publishing houses and newspapers. Students of other specialities also study their mother tongue, the economy and culture of the peoples of the Far North (abridged curriculum), and students of the natural science department study the physical and economic geography of the North.

All kinds of laboratory and practical studies occupy a significant part in the training. These studies are aimed at helping the students to work efficiently at various kinds of reports and theses.
Most northern students are very diligent and persistent in their studies and they are eager to get knowledge not only at the Institute, but also make use of their five-year stay in Leningrad to enjoy the cultural values of the city. Many of them take an active part in the students’ Scientific Society, mainly working on problems of the philology and economy of their native land. Thus, Andrei Krivoshapkin, a fourth-year philologist, an Evenk, gives all his time to studying northern national literature; he has made many reports not only at the Institute, but also at the All-Union Students Scientific Conference. His very interesting report was mentioned as among the best ones. Furthermore, the report of Nina Vaa, a fourth-year philologist, Chukcha girl, on the economy of the Chukcha national region was awarded a diploma at the Leningrad contest of students’ scientific works.

Many teachers are engaged in teaching the northern students. They are highly skilled professors, assistant professors and lecturers from various departments of the Institute who have been teaching these students for many years and are able to use the most effective methods and ways of teaching the multi-national body of Northerners. Among them are such prominent scholars as Professors J.S. Lyapin (higher algebra), Z.Z. Vulikh (mathematical analysis), A.M. Arkhangelsky (physical geography), A.L. Grigor’ev (foreign literature), A.M. Dokusov (Russian literature), Assistant Professor K.J. Saharov (Russian language), V.J. L’uizhkovsky (general physics), M.O. Afonskaya (economy of the North) and many others.

The training of students in northern subjects is carried out by the Department of Languages, Folklore and Literature of the North. The Department was founded in 1930 and it is the only one of its kind in our country. Professor M.G. Voskoboynikov holds the chair. Teachers of this Department teach national languages, folklore and literature of northern peoples, the Evenk language and folklore, the literature of the northern peoples (Professor M.G. Voskoboynikov), the Nenets language and folklore (Professor Z.N. Kupriyanova), the Chukcha language and folklore (Assistant Professor L.V. Belikov) and other languages. Representatives of the northern national intelligentsia, M.P. Balandina, a Mans’, and M.I. Barminch, a Nenets, by nationality, both M.A.’s work at the Department and teach their native languages.

Work at the elaboration of the academic courses in various languages is systematically carried out as well as research work on the languages and folklore of the people of the North. The results are regularly published in special volumes of the Institute’s Transactions. Teachers of this Department are also authors of textbooks and translators of fiction for the North schools, and authors of manuals on languages and folklore of some nationalities for national pedagogical schools. They also compile anthologies of folklore texts.

Besides the basic teacher training in their speciality, many northern students get optional training in national amateur activities (dancing, singing, reciting) which makes them able to put into practice the artistic education of pupils in national schools of the North. This kind of training is carried out by T.F. Petrova-Bytnova, of the Northern Department. The performances of the Nth are a great success not only at the Institute but also in schools of Leningrad and elsewhere.
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geographic region, political subdivision, or cultural heritage, is simply to make certain that the good is there to contemplate. Individuals, by attainment of such an end, regardless of where they find themselves in the maze of any cross-cultural mix, may then be free to make whatever choices they must to acquire the means to meet their own objective. The educational programs certain to emerge in the North may well contain lessons for all groups struggling to establish their own identification.
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unto itself. While educational programs in the past as imports from elsewhere have been patently inappropriate and inapplicable to Northern people, no guarantee exists that programs to follow will necessarily improve solely because of the transfer or sharing of control. Change in control does, however, open the opportunity for change in programs — but only that. Once a new structure emerges the real work of perfecting new educational processes will begin. A new base for influence can indeed be the instrument by which alternative systems of education emerge, but the new base should not be considered the alternative itself. Certain basic problems will generate disagreement among Native groups themselves as they acquire more control. Research designed to resolve disagreements remains a pressing need. Native groups ought to be in a position to make use of findings from the behavioral sciences to learn as well what methods will work best for them. Just as any large, complex enterprise retains a research division to resolve new problems. For example, how far does cultural conditioning of Northern people affect the rejection or acceptance of educational innovations? With the culture changing rapidly, what subject fields will assist Northerners in adjusting to continuous accelerating change which is inevitable? How can Northern cultures be retained in light of the increasingly specialized knowledge and skills that the more complex cultures will require? And most importantly, how will new educational systems allow pupils to adapt to events that are unforeseen but bound to happen?

The predicament in the North, therefore, is one of inconsistency. On the one hand, the establishment with legal and financial means to influence the educational system and a growing bank of academic and research skills now recognizes that new programs which will enhance the position of the cultural minority must be developed and implemented. Conversely, that very segment of society for whom such educational programs are desperately sought holds the key to meaningful program development but does not have the background necessary to cope with all the problems. Obviously, ways ought to be found to bring the two elements together. Each has much to offer the other. Such a merger has the potential to eliminate the chaos evident within the majority on the one hand and the frustrations of the minority on the other. The ensuing degree to which positive concepts of cross-culturalism are applied to educational program development will determine the success or the amalgamation.

The tone of the conference clearly indicated that increased participation by the Northern people themselves is the essential ingredient to a more realistic Northern social environment although a great deal can still be offered by scientists and educationists. Whether the present school system or whether a new system of education has to evolve to permit this cooperative involvement may become the ultimate issue. The degree to which a group of people is ready to make changes or move into different spheres of influence whether the dominant or non-dominant group, is a nebulous condition to assess. Northerners may or may not be more ready than the world as a whole to create a new educational system and social realm, but clearly in the North today, a departure from the status quo is essential and imminent.

It has been frequently said in one way or another by many spokesmen that a recurring universal notion of the ultimate end of education, regardless of
responsiveness to local community needs but in practice programs reflect the antithesis of these principles, and if concepts of cross-cultural equality are still found wanting, the means to alter these conditions need to be developed. Realignment of control of education is generally the first means suggested. By examining this suggestion we note that authority is ideally exercised by an individual or an institution in possession of three common forms of influence: 1) legal authority to act, 2) adequate financial resources, and 3) a thorough understanding of the problem in need of solving. Unfortunately, all three elements are seldom brought to bear simultaneously on any given program in the North. If reality only exists insofar as culture has made it accessible, it follows that the majority of people currently holding legal authority and fiscal control cannot possibly perceive the problems as they really are. These officials are not of the grass roots culture (with a few notable exceptions) and no matter how well-meaning their intentions, a necessary ingredient is typically lacking. When the existing educational establishment set about to develop educational programs and designed administrative flow charts “cutting up” the lines of authority for Northern schools, they were well authorized by law, and in recent years have been usually well funded. But no matter how well defined their authority and how well financed, the third ingredient, thorough understanding of the problem, often has been found wanting. Throughout the North, it is the Native population who has the exclusive cultural perception and basic factual information inherently denied, through no fault of their own, to those presently in control of the education process. It might be added that this holds true for administrators of many minority groups elsewhere in the world. However, in the North the relationship of the Native population to the total society still represents a position which distinguishes it from some minority populations elsewhere. For the most part the Native population is not alienated from the majority and is still to be found within the circle encompassing the total Northern society. This situation enhances the opportunity for improved conditions, but how long such a large segment of the society can be denied substantive influence, and still stay within the circle, is in itself one of the critical questions which needs consideration.

The universal concerns expressed by the Native people of the North may be looked upon as essential elements necessary for substantive change; ways for their perception to influence programs must be brought to bear on new programs. But like the statements of educational theorists and behavioral scientists, they may not, by themselves, resolve the issue. Although there is not apt to be a single voice representative of all Northern people, nor should this be considered necessarily desirable, the papers taken collectively do point to a certain sameness of need. The means to cope with all the political-social elements in the North, country by country, must come from all segments of the Northern community.

And this fact gives rise to one last universal point which seems to have emerged from the conference: Although realignment of groups contributing to the influence of educational programs and of the amalgamation of the existing system with the Native populations is an urgent need, it is still necessary to keep that need in proper perspective, less the issue of control, per se, become an end
and, most importantly, goals of education. Clearly, existing programs have too often ignored this premise. Where educational systems have been designed, either deliberately or unknowingly, with barriers to multi-directional cultural transmission, failure can be observed. Educational goals, curricula, teaching strategies and administrative structure of schools must be analyzed in light of this concept in order to foster educational systems that meet the needs of the people they serve.

The most direct approach to educational improvement, when considered in light of these concepts, may call for simply abandoning existing practices and allowing conditions which would encourage alternative educational processes to develop on their own without outside interference. (This process generally describes how the existing school system came into being, but, of course, in a different place, at a different time, for members of a different society.) But now in the North, because of involved economic factors, disconnected administrative arrangements, well entrenched pedagogical practices imported from elsewhere and ever increasing diverse cultural relationships all bearing hard on the people, the simple solution in reality has the least likelihood of happening. As the situation continues to grow more complex those presently responsible for educational systems invent more complicated ways out of the maze. Regardless of whether new processes are going to emerge in simple or involved fashion if they are to be developed successfully at all, they will in all likelihood be conceived in the light of multi-cultural equality.

Each nation has its own peculiar problems and the extent of inadequate programs varies from place to place. A few papers stressed positive situations now observable in the North, particularly in the U.S.S.R. Elsewhere the developing social conscience by some members of the non-Native society who are responsible for school systems has given rise to a much higher degree of attention to educational programs based on local conditions than in the past. It remains, however, that too much attention has been in the form of overly specific categorical programs, usually funded for periods too short to determine their value, and not necessarily directed toward the basic issues. Even the description of favorable situations in the Soviet Union as reported by Belikov and Danilov may be less than promised when examined in light of conflicting information, meager as it is, that has been reported from other Soviet sources. Lamentably, one may conclude, changes in basic educational processes even though sometimes proposed, are infrequently carried out and when carried out are done so inadequately or incompletely.

It must be stressed that the conference participants were essentially taking inventory and not solving problems. The inventory did, however, give rise to certain questions and suggested tentative answers which may lead to more meaningful education. How may the concerns for cross-cultural inequality be perused the articles be brought to bear on the existing educational system? How may the real principles of democracy and community involvement be put into practice and guaranteed as the controlling philosophy in the educational system? The general tone being set in the North, much of it since the conference, tends to suggest these questions are being raised with increasing frequency. The schools have been conceived on the principles of democracy and
education in the past and remains so to a discouraging degree today in the North. This condition is no longer being tolerated by many of the Northern Native peoples. School programs contributing to assimilation, arouse increasingly negative emotions on the part of many, especially those persons sensitive to the identity they have been denied through submersion of inherited culture. Many indigenous groups throughout the North are now seeking ways to reject imposed cultural, economic and administrative dominance from outside influences.

Another situation in the North which may be perceived from the papers and closely associated with the cultural diffusion phenomenon should be considered when educational, economic and administrative processes are examined. It has been found that single societies in the North are usually coterminous with single cultures, i.e., the society and the culture are common. This fact may be attributed to the condition that in the North many societies have been and in some cases are still small, isolated and relatively stable. This situation is in contrast to the heavily populated sections to the South where it may be observed that most large societies are multi-cultural or pluralistic. Now, however, with the northward movement of pluralistic societies and their complex economic systems, we are faced not only with the problems of change brought about by the introduction of alien cultural elements, but with a situation wherein the basic nature of the social structure itself is undergoing change from simple to complex. Individuals in more complex social structures may require more elegant means to cope with their more involved relationships and subsequent frustrations than occurs in a simple society. Existing school systems were not designed to provide these means.

The problem of providing for balance and equality in multi-directional cultural transmission has become a critical factor in determining the success or failure of future educational programs and their consequential effects on economic and administrative situations. Positive self-image and pride of inheritance by Northern Natives in complex social and economic settings are dependent on the extent to which strengths and weaknesses of cultures are allowed to flow naturally and become part of a balanced cultural add-mixture. The tragedy of educational programs with so few of the elements necessary to assure multi-directional flow of cultural components and of learning situations that so seldom reflect respect for the less-dominant culture in the diffusion process may be observed in the frustrations of Native populations throughout the circumpolar North.

The premise of George F. Kneller that reality exists only Insofar as culture has made it possible and that culture ultimately controls how we think about the world and defines how we perceive it might well become the prevailing argument for new educational development in the North. We cannot understand individual behavior of others without taking into account their language, economy and cultural setting. Therefore, in order for cross-cultural settings to bear positively on education, it is necessary to know to what extent Native cultural factors influence the acceptance or rejection of educational programs.

The extensive variety of topics examined in the foregoing material and the broad geographic areas they embrace preclude the development of detailed conclusions on the subject of Northern education as a whole. Also, with specific conclusions drawn in many of the papers it is probably an unnecessary exercise to enlarge upon them here. There are, however, certain elements of a general nature which may be identified from the foregoing articles that seem to prevail almost universally in the North.

It is clear that unrestricted, two-way cultural transmission has not been encouraged by the education systems in the North with the possible exception of certain situations in the Soviet Union. Elements of the various Northern cultures have often been repressed and certainly have not flowed unrestricted in the educational systems. Acculturation, when considered in its best sense as the process of multi-directional cultural diffusion and the equitable transfer of cultural elements from one group to another for the overall betterment of each has been discouraged. Instead, the process of cultural dominance, or assimilation, can be observed. Assimilation, as a negative force, regardless of planned or unintentional, has often been the end result of public
Conclusion

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The Conclusion for this series of papers was prepared at Cambridge University while Dr. Darnell was a visiting scholar at the Scott Polar Research Institute. The Conclusion is based in large part on the information contained in the papers, but also as a result of field studies in the U.S.S.R., Finland, Sweden, Norway and Denmark where observations of classroom practices were made and discussions with officials responsible for education were held.
UNESCO on Cross-Cultural Education

MASS MEDIA


The New Media: Memo to Educational Planners. UNESCO/International Institute for Educational Planning, 1967.


Radio Broadcasting Serves Rural Development. (La radiodiffusion au service du développement rural.) (Reports and papers on mass communication, 48) UNESCO, 1967.

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LITERACY


27. Much of this experience, and some of the ideas discussed here, are treated in detail in Schramm, Coombs, Kahnert, and Lyle, *The New Media: Memo to Educational Planners*. Paris, Unesco/International Institute for Educational Planning, 1969, and the associated three volumes of *Case-Studies for Planners*.


29. This experience is described in *New Educational Media in Action, Case Studies for Planners*, Volumes I and II respectively.


32. Three large Unesco-aided programs of teacher-training improvement follow various elements of this pattern: the Associated Teacher Training Schools in Latin America; the Thailand-Unesco Rural Teacher Education Project; and the Ecoles Normales Rurales d'Instituteurs (ENI) in Africa.


34. Somaliland Republic Ministry of Education, Regional Department of Education, Unesco/Unicef project. *Refresher Course of Training In-Service Teachers of Nomadic Schools in Eastern and Western Regions*, p. 2.

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Unless a title in French is given, the publication is available in English only.

**CONTENT OF EDUCATION**


10. Ibid, p. 3.

11. Final Report, Meeting of Experts on Curriculum ... p. 3.


13. Plan of Operations ... p. 3.

14. The Qualitative and Quantitative Improvement of Rural Education p. 3.

15. Final Report, Meeting of Experts on Curriculum ... p. 6.

16. Final Report, Meeting of Experts on Curriculum ... p. 16.


18. Final Report, Meeting of Experts on Curriculum ... p. 10.


26. "New media" can also refer to mechanical teaching devices with which the student communicates actively, such as teaching machines and tape recorder devices used in language laboratories. The latter differ from films, radio and television in having a specialized and individual use only, while the three media can be used for entertainment or formal education (or something between the two), and usually address themselves to groups of people.

UNESCO on Cross Cultural Education

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1. Children in different societies may even learn differently. "... Little is known about the extent to which research findings made in one society are applicable to others. For example, while it is probably true that fundamental principles of human learning are universal, it is very doubtful that the applications of these principles will be equally so under very different patterns of child rearing and social expectations. This is a crucial area of research."


Ibid., p. 3.

4. Ibid., p. 16.


6. Ibid.

7. The others deal with development of mineral resources, industry, agriculture, water resources, transportation and communication, and environment planning.

8. "In a nutshell, the new Unesco approach is intensive rather than extensive, selective rather than diffusive, work-oriented rather than culturally oriented. It emphasizes functional rather than rudimentary literacy, intensive adult education fusing into genuine vocational instruction rather than the once-and-for-all teaching of the three R's. It favors the use of diversified primers rather than single primers, in conjunction with follow-up materials embodying specific knowledge of nutrition, sanitation, industrial arts, and agricultural science. It does not hesitate to assist the teacher with new educational media and to draw into the teaching process vocational instructors from the Ministry of Labor and extension officers from the Ministry of Agriculture. It regards literacy programs as a first step in the creation of qualified manpower, as investment rather than consumption. It is, to say the least, more than a literacy program; in short, it is adult education in the fullest sense of the word."

A comprehensive educational program that illustrates a creative approach to education for a cultural minority is the "necleo" or nuclear system, developed in Bolivia for rural areas. We describe it here because, although it also stresses community development and schooling, the system centers around teacher education and in-service training.

The impetus for the nuclear system comes from the Bolivian Indians' strong sense of community organization and cooperation; for this reason, personnel working in the system continually survey and take into account the Indian population's attitudes toward the education they are receiving. The elements of the system are: (1) a central school with six grades and sometimes a kindergarten, staffed by a director and three or more specialists in teaching methodology, agricultural education, home-life and health education, audio-visual aids, and development of small industries; (2) a residential normal school attached to the central school that prepares local young people as teachers; (3) an average of twenty-five "sectional schools," some as far as 200 kilometers away from the central school, most with only one teacher. The central school serves as a demonstration school for student teachers; it also comes teachers from the sectional schools for periodic training programs. From the central school specialists travel extensively to aid teachers in the sectional schools. Teachers in the nuclear system use no textbooks; each is trained to prepare his own teaching materials. Instruction is in Spanish, in accordance with the Indians' strong desire for children to learn that language, but curriculum includes many poems, songs, chants, etc., in the local language. Both central and sectional schools also serve the community, and the specialists who help the teachers also aid community projects. These are planned in cooperation with the community's natural leaders, who look to specialists and teachers for technical advice and also organize the community's resources in making improvements. In 1954 Bolivia had twenty-two nuclear school systems; it now has about one hundred and twenty.

Summary

In conclusion, we would summarize the main educational principles suggested in this paper for the education of cultural minorities: (1) minority groups need educational programs that prepare them for development and progress in two societies, their own and the dominant one; (2) such programs should be inextricably linked to a total social and economic development program; (3) the content of education should be suited to the two goals mentioned above, to the context of everyday life, and to real needs; (4) language of instruction should, at least in the early years, be the one the student thinks in and speaks; (5) up-to-date educational techniques (such as the new media) should be used, but always with specific requirements of the cultural minority in view; (6) teachers should come from within the minority group itself, and if possible receive pre-service and in-service training in a regional institution which is also a center of curricula, methods, and materials development.

Limitations in resources and political considerations may affect positive development, but the long-term goals of providing a potentially richer life to cultural minorities through education should not be lost.
them more important centers of significant research on education of cultural minorities.

In-service training, important for all teachers everywhere, is especially valuable for teachers in cultural minorities. These teachers often work alone in isolated regions where it is difficult to keep in touch with developments in their profession. Further, their job is usually much more complex than that of the average teacher—especially if they are called upon to serve out of the classroom as well as in it. Thus, they need all of the professional, technical, and moral support they can get. However, their isolation and their importance within the community make it difficult to provide this training without excessively disrupting their work. To show how ingenious in-service training programs must sometimes be to suit teachers in cultural minorities we describe here two programs operating under circumstances with some relevance to the situation of the Arctic peoples.

The UNRWA/Unesco Institute of Education in Lebanon was established in 1963 to raise the professional level of the largely unqualified teaching personnel in the United Nations Relief and Works Agency school system for Palestinian refugee children. Most of the refugee families live in isolated camps in the Gaza Strip, Jordan, Syria, and Lebanon; except in Jordan they are not citizens of the host countries, and have little access to jobs. For their children education is a major means of escaping a difficult existence. The Institute program includes self-administered correspondence lessons (carried back and forth by the UNWRA courier service), supplemented by field representatives who visit the classrooms and teach weekly seminars and intensive summer courses. It is flexible to account for the trainees' different levels of education and experience and the differing programs they teach, which all stress Palestinian history and customs but prepare each student to enter the school system of his host country. The program is so efficiently run, and the trainees so well motivated, that they manage to receive the same certificate as graduates of the UNWRA pre-service teacher-training schools while teaching full time.

A two-year program for teachers of the nomadic pastoral people of northern Somali in 1965 and 1966 took advantage of the fact that the teacher, or "wedad", who travels with them, is widely considered by the members of the nomadic community as their religious leader and guide to advise them on everyday life affairs. His words are respected and his guidance is usually carried out without much hesitation.

In 1965 the Somali government, with Unesco and Unicef aid, brought thirty of these teachers from a widespread area to Hargeisa for a four-week training course to upgrade their teaching. Evaluation of the trainees' teaching after the course showed the need for further training, especially in community development techniques, and the following year the same teachers were provided a refresher course stressing practical improvements in the life of the nomadic community.
will clearly have some unmatchable advantages: familiarity with the group's ways; understanding of its social structure (who the real leaders are, for example); fluency in the language. However, candidates from the cultural minority may lack the basic education required to meet the difficult responsibilities of teaching within their community, or their education may have created attitudes of "superiority" toward the cultural minority. Also, they may quickly be called upon to fill other, higher positions in the society and thus leave teaching. Finally, it should be noted that an "outsider", if sensitive and dedicated enough, can sometimes—and for a limited period of time—play a significant role in awakening a group to its own potential through his enthusiasm, respect, and commitment to progress; in certain cases U.S. Peace Corps volunteers were clearly able to contribute in this manner. In any case, as with language of instruction, so with teachers—an all determining factor is what the minority group itself wants; if it feels better served by a member of the community as teacher the choice is clear.

Most important, teaching in a cultural minority should be rewarding enough as a profession to attract and hold well-qualified candidates. Especially if the schools are isolated, a great effort must be made to ensure that the teacher, has frequent contact with centers of professional training, that he is often visited by specialists and advisors who can aid with materials and techniques and make him feel less distant and forgotten, and that his role, while not setting him off from the community, makes him an important, productive member of it.

A crucial step toward developing an education suitable for cultural minorities is developing an education suitable for their teachers. A teacher will not relate education to environment, prepare for continued education, or educate for change unless his own education has included these elements—as well as shown him how to provide them for students. Thus, the problem of the schools, revising the content of education to suit real needs, is also the problem of the teacher-training institutions.

One means of attacking this problem is to place primary-school teacher-training institutions near where teachers will serve; these institutions can draw on the region for candidates, root their education in the environment in which they will teach, and give this environment added status in their eyes through the importance it assumes in their education. Further, a regional school can provide in-service training and continual aid to teachers in the region, as well as design and produce appropriate materials and curricula. The long-term goal of such a rural, or regional, institution must be to offer an education equivalent in all respects to that given elsewhere in the country. However, since these institutions are usually established to meet critical situations, their short-term goal must be to use the resources at hand creatively and flexibly in achieving practical solutions. Thus, their main purpose should not be to meet qualifications devised for a different setting, but to shape their own standards on the spot consistent with effective results.

As for secondary-school teacher-training institutions, they will usually be institutions of higher education, often associated with universities, and they need be less intimately connected with the particular communities served. On the hand, the more advanced training of their staff and students makes
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implemented in India, Ghana and elsewhere; each new user is helped by
documentation and evaluation of previous programs.

An excellent example of a program following all of these guidelines is the
educational television scheme for the Ivory Coast designed with help from the
French Government, Unesco, and the Ford Foundation, and based largely on
previous experience in American Samoa and Niger. This program, which is
planned in detail through 1980, was devised to help meet the nation's social,
cultural, and economic needs within a very limited budget. It calls for estab-
lishing television receiving centers (20,000 by 1980) around which will function
primary schools, educational programs for out-of-school youth, and cultural,
continuing education, and informational activities for the entire community; it
also envisages extending educational television to secondary schools and higher
education after 1980. Detailed plans are provided for training teachers and
various other professional personnel needed; for producing teaching
programs and materials; and for curricula.

Providing educational programs for cultural minorities through the new
media will require even more careful planning and specialized training for per-
sone than for the dominant society. Specialists producing films and radio and
television broadcasts will need both competence in subject matter and pedagogy
and a detailed knowledge and understanding of the cultural minority (for ex-
ample, its receptivity to new ideas, its relative ability to deal with abstractions).
Similarly, those in charge at the point of reception will need the skills suggested
above and the ability to exercise these skills within particular groups. Language
will always present problems—whether instruction is in the local language
(requiring special production of films or broadcasts and teacher-monitors fluent
in this language) or in a second language (requiring special efforts to promote
acquisition of this language and to ensure comprehension of materials pre-

Teachers — the Vital Link

A final element of education for cultural minorities—one calling for special
emphasis—is the teacher. Carefully thought-out goals, well-designed curricula,
effective teaching aids are all important, but they cannot replace good teaching.
Nowhere more than in cultural minorities is it true that: “The failure of a child
(in school) is essentially a failure of teaching.” At the same time, nowhere
does the teacher have a more difficult job. He (or she) must: a) work to achieve
the two major goals of preparing students for life in the community and for life
in the dominant society; b) provide elements of education that elsewhere are
often the responsibility of the home—for example, acquisition of the language of
instruction, positive attitudes toward school; c) strive to explain the school’s role
to the community and integrate its activities into the community’s life; d) in-
form, guide, and sometimes instruct out-of-school members of the community,
and act as liaison between it and sources of aid and development outside. These
multiple responsibilities set certain requirements for the recruitment, education,
and in-service training of teachers for future minorities.

Describing the ideal teacher candidate for a cultural minority is not easy;
most we can state a few general propositions. A member of the group itself
geographical or economic reasons; e) provide literacy training and other educational programs for adults; and f) aid in local community development. In all cases they can provide a uniform standard of instruction — ideally, the best teacher available — to all recipients. Thus, they can help attain the democratic ideal of equal as well as universal education.

Recent experience in many countries and under differing conditions indicates some general guidelines for educational programs using the new media: 27

The new media are most effective doing something new.

They should be used at “change points” in the educational system — that is, at “places where educators agree that change and improvement are strongly needed, but most difficult to achieve by normal means.”

Even in developed countries, large-scale innovative projects, rather than tentative “enrichment” programs, seem to produce the best results. *The human element is still important.*

Use of these media promotes learning but cannot guarantee it. Careful supervision at the point of reception, and continued efforts to engage the listener’s or viewer’s active participation are essential. If the learner views or listens independently he must have contact with the teacher through correspondence or periodic meetings. Radio and television instruction must allow for feedback to production facilities.*Personnel involved need special training.*

This calls for training specialists to design educational programs using the new media, and teacher-lecturers to present them. The teacher monitor in the classroom no longer need organize the lesson, but he must develop new skills — leading discussion, helping students assimilate lessons according to individual aptitudes, evaluating the success of the teaching program. Inspectors, supervisors, and specialists giving in-service aid will need training in developing and evaluating such skills.*Detailed planning is essential.*

Production and transmitting facilities and receiving equipment for the new media constitute a major investment in funds and educational strategy that must be carefully planned. For example, it would be foolish for a nation to construct school buildings with thirty-pupil classrooms now if it envisions use of television instruction requiring auditoriums for viewing and small rooms for study and discussion in the near future.*Experience can be shared internationally.*

Documentation and evaluation are essential both for the quality of the programs concerned and because they facilitate international sharing of experience. That experience in one setting can serve, with appropriate modifications, in others is shown by the farm radio forum, a program begun for Canadian farmers in the 1950’s. The basic pattern is a radio broadcast to isolated rural areas on problems of farm and village life followed by discussion by listening groups, or “forums”, which often leads to action on the problems discussed. The forums also suggest other topics for discussion or raise questions which are relayed to the radio station and considered in future programming. This program has been successfully
one or the other is the child's mother tongue, nor as they are in countries where they are completely foreign languages.

This approach must face the need for sacrificing the history of the language to a better knowledge of it in its modern form; for reducing the study of theoretical grammar to the essential minimum and placing more emphasis on good contemporary usage.

What is in fact required is scientific methods of second language teaching:

1. adapted, to particular contexts, e.g. through research into the local and second languages concerned to analyze similarities and contrasts;
2. using up-to-date materials and techniques, such as language teaching laboratories; and
3. administered by specially trained teachers fluent in both languages.

The New Media and Education

The "new" media — film, radio, and television — are called "new" by educators to distinguish them from the "old" media — books, newspapers, posters, in short all means of communication employing print and/or a fixed image and because their use as a specific aid to educational systems is quite recent.

Film, radio, and television constitute a major, and sometimes the most effective, bridge between cultural minorities and dominant societies. Communications technology is developing so fast that most members of isolated groups not now reachable by these media soon will be. At the same time, education is moving beyond its traditional preoccupation with the written word and exploring more intensive use of the spoken word and the image; these new directions show affinities with ancient oral and visual traditions preserved by certain groups, among them some tribes in Africa and the Arctic peoples.

The new media play a general educational role in several ways: a) they bring news, cultural programs, and entertainment from around the world to isolated and illiterate peoples; b) they inform these peoples about the customs, goals, and values of the dominant society, and in this way help bridge the gap between the schools, which are introducing the new generation to these elements of the dominant society, and the rest of the community, who often have no other way of becoming familiar with the "second" society; c) they help to instill a sense of national community and pride in belonging to the nation, for example, by allowing the most isolated citizens to be present at events of national importance; d) radio and television can create a strong sense of local community by broadcasting local news and other programs, often in local language (all India Radio broadcasts in 51 languages, and 82 tribal dialects).

In addition, the new media have specific and more formalized educational uses. They can: a) provide all or part of classroom instruction at all levels from primary through university; b) enrich classroom teaching; c) provide pre-service in-service training for teachers; d) educate youth unable to attend school for
J. C. Cairns

or four years of schooling educational content has a second responsibility—
gradually, to make the child aware of the existence of other societies and of their
practices and values, to show him the role of groups within the nation as a
whole, and to prepare him for successful entry into the dominant society if
desired. At this time materials and methods used can more closely approach
those of the dominant society, until the student becomes fully at ease in both
societies.

Language(s) of Instruction

If a cultural minority speaks its own language, should instruction be in its
language, in that of the dominant society, or in both? No question highlights
more the tensions involved in designing a dual-purpose education for these
groups. Language, culture, and personality are inextricably linked; if the commu-
nity feels that education entails a debasement or loss of its language this can
create profound problems for the group’s identity and its role vis-a-vis the dom-
inant society; it will also, of course, create serious barriers between it and the
educational system. On the other hand, members of the group may need fluency
in the dominant language to achieve a healthy relationship with the dominant
society.

A child entering school will undoubtedly progress much faster—and feel
much less culturally estranged—if he learns in the language he thinks in and
speaks. The same rule applies to adults learning to read. In an ideal system, both
groups will learn to read and write their own language and then acquire speaking,
reading and writing fluency in the second language. (All kinds of oral instruction
—through lectures and discussion groups, films, radio and television—can of
course use the mother tongue.)

Unfortunately, bilingual instruction often proves impossible, and a choice
is required. In each case, the particular situation of the group must be con-
sidered, and such questions as the following asked: Which language will give the
learner more chances for a full life and more opportunity to continue his educa-
tion later? What do members of the group want—to preserve their language or to
learn the dominant language? These questions cannot be answered without care-
ful—and continual—reference to the people in question. The answers may
differ between school education and adult education.

A decision to instruct in the local language may raise another set of diffi-
culties; transcribing the language and modernizing it to cope with scientific and
technical terms, recruiting and training qualified teachers, providing sufficient
reading material for the newly literate. Where the will exists, these problems can
be met. Ghana offers literacy courses in ten languages, Kenya in six.21 A few
years ago Niger had two official newspapers, both in French (a language only 6
percent of the population can read). Now there are literacy programs in five
languages and nine departmental newspapers in these five dealing with topics of
interest to the bulk of the population.22

Teaching the language of the dominant society as a second language is a
distinct discipline. As experts at one Unesco meeting put it:

new and original teaching approach (is) required since these
languages could be taught neither as they are in the countries where
of general education... The importance of this aim lies in the constant appraisal of tradition and the possibilities it offers for imparting a readiness for, indeed an expectation of, continuous change arising from the process of unfolding discovery.

Textbooks, workbooks, readers, charts, maps, etc., appropriate for the dominant society may be - and almost certainly will be - educationally unsuitable for a cultural minority. The problem is how to design successful materials. These will be based on specific cultural, environmental, and other needs of the pupils concerned, but they will also take into account the needs of teachers. A well-qualified, sensitive, experienced teacher intimately familiar with the environment from which the students come can modify and supplement partly unsuitable teaching materials so as to use only what is relevant and productive. Unfortunately, many teachers, especially in isolated areas, lack these qualities, and they need teaching materials intimately designed for use with the minority group. Teacher training institutions involved with the education of cultural minorities are, of course, ideal centers of curriculum and materials design and testing.

The functional literacy pilot projects mentioned above experiment with developing individualized teaching materials for each project. In a literacy micro-project in Brazil, for example, teaching materials specifically related to the linguistic environment of the learners were developed from a computer analysis of local workers' speech which revealed a basic vocabulary of 2,300 words comprising 540 different syllables. Nine percent of these syllables form sixty percent of the words used; twenty percent (about 100 syllables) meet eighty percent of speech needs. A teaching program based on these data is expected to have time needed to teach literacy.

In discussing the content of education for cultural minorities we have stressed the special needs of these groups as distinct communities, because these special needs are so often forgotten. But education for life in the minority community is only one of the two broad educational goals we set out at the beginning of this paper. The second, education for life within the dominant society, must not be ignored in any drive to adapt educational programs and materials to students' needs.

In considering the relation of these goals to content we can distinguish between the first three or four years of schooling and what follows. The first years are, as the Moscow report states it:

the school situation where the child must leave the home and adjust to school learning conditions. However, the relation between home and the school and their inter-dependence is greater in this period than is likely to be true at any other level of education.

This is the time to make every effort to show the child - and his parents - that school is not an alien institution but one that serves the community by helping it to define and meet its needs. Here, curricula, textbooks, activities, and language should disrupt the child's world as little as possible. After the first three
Institutions, on the job, through mass media. The member of a cultural minority especially will require the extra help these opportunities provide, and therefore his formal schooling must make it possible for him to benefit from them. As the experts meeting at Moscow in 1968 to discuss curriculum reform expressed it:

"Children come to school with very different preparations for school learning as a result of their very different home environments. The evidence is clear that (these variations) account for the major differences in early school learning aptitudes and general abilities... The major aim of learning to learn is to give each child the conditions necessary to ensure that he has as good an opportunity for further learning as is available to the best prepared child in the school." 

Preparation for continued learning has two aspects, distinct but closely related. First, the student must acquire the basic tools he will need for all further education—these include language ability, familiarity with sources of information, elementary mathematics, a notion of scientific principles. As he masters these tools he must understand that success lies not in their acquisition but in their continued use. Second, the student must acquire certain attitudes. He should view education as both unending and endlessly rewarding, learning as his own responsibility, and the teacher as someone to help, but not dictate, his efforts. Clearly the teacher must share and help instill these attitudes.

In order to enable the individual to continue to self-educate himself after completion of his formal education, it will be necessary to emphasize the objective of developing educability as a part of formal education itself.

Cultural minorities often place a high value on preservation and continuity, and children in these groups are usually not conditioned to expect and welcome change. Thus, a major role of education in a cultural minority, one which is closely linked to preparing for continued learning, consists in developing a positive attitude to change in the entire community. This process need not turn people away from their own society.

The first aim of education stated experts meeting at Nairobi in 1968 to discuss the relationship between education and development:

...should be to help the child to appreciate the intrinsic importance of his physical, social and cultural environment. It is that appreciation which carries within itself the seeds of advancement, change, and progress.

In this connection, science training is particularly useful. As the report of the Moscow meeting notes,

...training in scientific methods, involving speculation followed by confirmation or disproof, should be one of the more important aims.
By "revision" these experts did not mean adaptation. Most felt that it is not suitable to take the European curricula and try to adapt them to the African environment, but rather to single out the essential principles and scientific methods, and then to make a study of the African environment before initiating the actual process of reform.10

Unfortunately, this suggestion is rarely followed; usually curricula designed for the dominant society are adapted for cultural minorities by inserting references to local customs, changing illustrations, etc., whereas what is really required is a thorough commitment to the preliminary research and the long-term creative effort involved in first examining the minority group's characteristics and needs and then devising appropriate educational content.

Education suited to the environment does not mean only technical or agricultural education. Nor does it mean giving one group an education essentially different from that given any other. Instead, it implies "education ... specifically designed for each context."11 Wherever possible, examples of general principles used are those familiar to the student. As skills are taught their immediate practical applications to everyday life are made clear. Hours and days of instruction are fitted to the community's calendar. Educational resources of the society are drawn on whenever possible: for example, in some societies older children naturally supervise and instruct younger children; in school this practice can be used to help an overburdened teacher and reinforce the other child's understanding of what he has learned.

Education suited to the environment also means, "the adaptation of curricula to real needs," that is, "the intellectual and practical preparation of the pupil for the part he will have to play in social life."12 "Real" is stressed here because needs are so often seen in terms of examination results leading to occupational positions or further education rather than preparation for all aspects of life. In awareness of this danger, the U.A.R. program described above calls for introducing six hours of practical studies a week for the fifth and sixth grades of primary school - because "the primary school curriculum is too much oriented to the needs of the minority who continue in school, and even they would benefit if some practical subjects were taught."13

While it is an excellent thing, in accordance with the precepts of all direct teaching methods, that primary education in rural areas should take its references from the locality, inculcate a taste and respect for manual work and introduce the child to manual activities, it must nevertheless keep in the forefront its two functions: to communicate knowledge, regarded as a tool, and to train the mind, thus making possible the acquisition of further knowledge.14

No aspect of educational content has more importance for cultural minorities than this one. All commentators agree that in a rapidly changing world life-long renewal of knowledge is becoming more and more imperative. In recent years, educational opportunities will be increasingly available in educational
mary teenagers; and opening a community center in the city of Aswan for women, girls, and children which also serves as a training center for family and child welfare workers.

The Experimental World Literacy Program, begun in 1964, provides a model of specific education linked to development. Recognizing that piecemeal attempts to teach illiterates to read have not been very successful, it encourages "selective-intensive" pilot projects in "functional literacy". These integrate teaching with vocational and technical training and general education for workers in high-priority sectors of the economy. The pilot projects (1) teach skills where possession of these will produce maximum returns, and (2) develop effective and experimental methods of literacy teaching and explore the relationship between functional literacy and development. Thus, farmers newly organized into cooperatives in Tunisia learn how to read, how to carry out the basic computations consistent with true self-management, and something of the social and economic problems affecting them. Spinners in a woolen mill in Iran learn to read color names and the factory color- and yarn-mixture codes; from these they progress to more general reading skills, technical instruction, hygiene, arithmetic, etc.; results show that the course reduces errors, accidents, and absenteeism. In Ibadan, Nigeria, illiterate tobacco growers are learning how to read intricate rules, difficult to transmit orally, for growing and curing tobacco; the tobacco purchasing company believes that farmers who can refer to written guides will produce a better grade of product. It is too early to evaluate fully the "selective-intensive" approach to literacy but preliminary assessments seem to show positive results for both education and economic development.

The Content of Education

From an overall look at where education for cultural minorities is being integrated into total development efforts, we now turn to what this education consists of. Everywhere the content of education (aims, organization, curriculum, methods, examinations) is being questioned. Here we suggest several broad areas of inquiry and experimentation relevant to cultural minorities.

In many societies educators are struggling to redesign content imposed from outside and having little relation to the society. Experts meeting in Madagascar in 1962 to discuss general secondary curricula for Africa found both psychological and pedagogical reasons for reform that can be generalized from the African context:

Where there is a contradiction between the child's everyday life and what he learns at school, conflicts are set up in the personality of the child and complexes are developed ... In the African child who learns a great deal that is foreign to his environment and reflects on values, ideas and sentiments that are not part of his own intellectual, spiritual and emotional way of life, there is a tendency for particular reliance to be placed on the memorization of facts. But with a revision of the curriculum that will allow him to study things related to his own experience, his intelligence, sensibility, will, and creative imagination will be given greater play.
The program was to "raise the living standards of these people, to integrate them into the life of their nations, to bring them hope for the future, and to give their countries the full strength of their hitherto untapped human resources." Under it schools, constructed mostly by adult Indian volunteers, serve children during the day and adults at night. "The thirst for education among the Andean Indians," notes a report on the program, "seems to be almost insatiable. Schools put up as part of the Program are packed with pupils from the day they open." In addition, experts show the Indians how to increase agricultural production and raise health and nutritional standards, and vocational centers provide training in skills with immediate vocational use in the community.

In the sixties the countries involved have gradually taken over responsibility for the program and incorporated its activities into their plans for economic and education development. As for results, the report says:

Many changes already are perceptible in the communities reached for the Program. Improved agricultural techniques are beginning to increase the yield of land under cultivation; cooperative activity is emerging; new skills are being put into use in trades and homes as well as on the land. Above all, perhaps whole communities have learned that they are able through their own efforts to do things not previously regarded as possible.

A second integrated program, this time in a rapidly developing region, is the comprehensive child and youth-welfare project for the Aswan Dam area, implemented by the United Arab Republic with aid from several United Nations agencies.

In recent years construction of the Aswan Dam has brought this area rapid change and development and problems. Among the latter are: "weakening of traditional family ties, the transformation of the role and status of women, the growing number of maladjusted individuals, the growth of an unskilled labor reserve, bad housing and slum areas, malnutrition and undernourishment causing increased susceptibility to various diseases, the multiplicity of social problems brought about by industrial and technological development." These problems it was felt, required "an intelligent and bold policy of social planning that gives due consideration to the human resources on which such development depends and in whose interest it should operate. The changes now taking place and likely to occur cannot be left to chance."
tion for minority culture children has often been patterned after that developed by and for a society totally different from theirs; it is quite proper to stress that such children require an education suited to their environment, grounded in familiar terms. But education that only suits them for their restricted environment constitutes a form of educational apartheid.

The ideal is an education balanced enough so the student can choose between (1) remaining a functioning member of his own group, and (2) fitting satisfactorily into the dominant society if he so wishes. Thus, he needs an expanded, not a restricted, education, covering the heritage and values of his group plus the knowledge required for living in the dominant society. Clearly, the same criteria apply to all forms of education — whether in school or out, whether for children, young persons, or adults.

This ideal of education has drastic implications. Those developing educational programs to prepare people for life in two societies must thoroughly understand present and future characteristics and needs of both societies; this calls for research and coordinated planning. In the schools, they will need to redesign radically curricula and textbooks; look again at content and methods of language instruction; investigate use of the newest media, including radio, television, and film; transform teacher recruitment and training practices; give added importance to relations between the school, parents, and the community as a whole. Education must also move beyond the school system as we traditionally see it and provide imaginative programs for special groups within the community — out-of-school, youth, adults in general, women, workers, illiterates, community leaders.

Integral Planning for Development

Educational programs for cultural minorities, no matter how well designed, cannot alone provide a fuller life for these people. Such programs must be part of a total effort to improve life for the whole community, and must be planned carefully with the other components of this effort. Economic and technical aid, improved health services, expanded transportation and communications facilities — these, along with education, will help change the community's prospects for the future. In the absence of a full, well-integrated development plan those educated to welcome and effect change will meet only frustrations; further, they will join the exodus of youth and talent from deprived areas that constitutes one of the world's major resources problems. For this reason Unesco aid to education is often part of an inter-agency and sometimes inter-governmental program designed to change radically a community's or region's life. We describe here three such programs to illustrate how they fit into comprehensive development schemes.

The Andean Indian Program is a cooperative rural development project involving six Latin American governments and the International Labor Organization, the World Health Organization, the Food and Agricultural Organization, and Unesco. It started in 1953 in Bolivia, Equador, and Peru, later extending to Colombia, Chile, and Argentina. When it began the Andean Indians were cut off geographically and psychologically from the economic and social developments taking place in their countries (although they constitute
New Roles for Education

Whereas once educational institutions existed to preserve knowledge and pass it on to a carefully chosen elite, now education is being asked to fulfill a radically different role—helping people develop themselves so they can meet goals of economic and social change. At the same time the modern world defines education as a means of increasing each individual’s potential for spiritual, intellectual, and physical development; accordingly the Universal Declaration of Human Rights proclaims that education is a human right. Thus, governments now look to education both as an investment providing an excellent return in terms of economic and social development and as a benefit potentially, at least, due all citizens.

A view of education as (1) a force for change and (2) available to all entails radical innovations, the extent of which is poorly understood; as shown by the dangerous gap so frequent between current educational expectations and the means now in use—and even planned for the future—of meeting them.

As access to education extends to more and more people, education also becomes a prime concern of political strategy. Such emotion-laden terms as “integration,” “assimilation,” “promotion of minority cultures” are linked to political goals; in nations striving to achieve political unity or, conversely, regional autonomy, political goals can supercede economic-development targets. At the same time, governments must consider the rising educational aspirations and demands of their citizens. Especially for cultural minorities, political policies are a major determinant of educational opportunities.

Special Needs of Cultural Minorities

Cultural minorities, often the worst victims of an elitist approach to education and usually in need of radical economic and social development, are becoming a prime object of educational programs based on the new educational expectations. But results are not always as planned. Widespread illiteracy, school repetition and drop-out, high unemployment rates, cynical or apathetic attitudes, or a general “inability to adjust to modern society” are often found among such groups—even where educational facilities and enrollments have been impressive. In extreme cases, cultural minorities may reject the dominant society—its values, its methods, its goals—sometimes with violence.

The prime fact about a member of a cultural minority today is that, educationally speaking, he is a member not of one society, but of two.

The society to which he belongs by parentage has its own history, cultural heritage, values and ways of explaining the world. Nobody can “bring” education to it, since it already possesses a system of educating the young in these elements of society, as well as in certain necessary skills; otherwise it would never have persisted as a cultural entity. An educational system completely divorced from the society’s ways—for instance, a system based on competition between pupils in a society that values group, not individual, achievement—will permanently harm the student’s sense of identity.

But the member of a cultural minority also belongs to the dominant society by citizenship, and because it largely determines the conditions of his life. (To take an elementary example, he is subject to its laws.) Because education...
UNESCO Experiences in Cross-Cultural Education

Introduction

Living in the world's harshest climate, in a part of the earth visited by few travellers, the peoples of the Arctic regions exemplify the distinct and self-contained human grouping. For human beings, however, remoteness is not a matter of geography alone. The world contains many other groups as removed in various ways from the societies surrounding them as are the Arctic peoples. Their remoteness may be less geographical than social, psychological, cultural, and economic, but it is just as strong a factor in their existence. For convenience sake we will call these groups "cultural minorities" and the more influential groups surrounding them the "dominant society". (*Minority" here denotes influence, not relative numerical strength; a "cultural minority" may constitute a majority of a given country's population.) Nomads of the desert, migrant workers in America and barge families in Europe, political refugees living in camps, isolated and deprived rural groups all stand out from the dominant societies in their countries. If as cultural entities these groups do not closely resemble the Arctic peoples, they do present many of the same educational opportunities and problems. In this paper we attempt to define these opportunities and problems and describe certain practical attempts being made with UNESCO to meet them.
John Cairns currently holds the position of Director, Division of Literacy, UNESCO. As a former education officer of the Canadian Department of Indian Affairs and Northern Development he was the logical choice to draw together the concepts behind UNESCO programs in cross-cultural education and apply them to a discussion on cross-cultural education in the circumpolar nations. This paper was prepared by Dr. Cairns who was assisted in its preparation by staff members of UNESCO in Paris. The paper is reproduced with the permission of UNESCO.
Finally, one or two familiar concepts, seemingly jotted down at random: economic laws; labor market, individuals, well-being; culture. These concepts embrace the problems which are very relevant to the Lapps. A worthwhile remark by one of the leading Icelanders should be quoted in this context. The conversation had turned to the Icelander's culture and everyday problems. He said, "Being an Icelander is expensive".

No doubt it is even more expensive to a Lapp. The Lapps cannot afford to lose their roots in the culture of their ancestors and face the risk of extinction. But they cannot either afford to work for its development. This is particularly true of young intellectuals who receive modern schooling and modern training. There are not enough openings and positions where they can use their knowledge and talents for the good of their own group. This is a regrettable feature of the labor market (particularly where intellectuals are concerned) into which the Lapps are incorporated.

Meanwhile, the inexorable economic laws in the hands of the technocrats and manifested in state capitalism decide what is to happen on the lands and waters of the Lapps. And many of the Lapps, especially the older ones, cannot follow the course of events.

Wounded Race

It has deep wounds in the root, forces try to wither it.
The root feels chopped.

He who lives in the soil
cannot defend himself against painful blows.
He merely feels that something is changed in his wind-driven life.

But in the spring,
when the snow still extends
across frozen ground in the north,
then the new shoots
with the motive power of the sun's warmth
right through all resistance
begin to force the tips of the branches
towards the light.

The root's wounds
do not heal quickly.
But he rejoices
when the wind tries the shoots.
Self-confidence and faith
rise up, that their creative power
will carry on the heritage.

Pálaus Utsi
I have gone into detail in order to substantiate an assertion which deals with pedagogical situation. It is obvious that the child who speaks Lappish and who has his roots in the Lappish life and milieu must have, in respect of compulsory education, some contact with his mother tongue. In absence of this, the child will experience great difficulties in the understanding of concepts. The resulting timidity and insecurity will seriously limit his ability to realize his potential.

The teachers selected for instruction purposes must be chosen according to their knowledge so that relevant material will be represented. A common denominator for modern and naturally developed cognitive systems is brought about through data collection and analysis. This has to be the basis for the arrangement of methodical development and its practical application. Therefore the results of trans-cultural studies ought to constitute an important phase in teacher education and teacher continuation courses.

Teacher candidates who are born into the respective ethnic language and the western teacher candidates naturally have different qualifications in order to reach these common cognitive elements. Most often the western world's attitude is not conducive to the attainment of common conceptions and thus the flexibility of contact is impaired. The consequence is that the members of the ethnic minority become westernized and gradually lose their ethnic identity, thus becoming poor copies of the members of the "macro" society. Knowledge of the structure of one's own language and culture is so necessary that it should be given on all educational levels, from elementary school on up through the university years. In this way, the status of one's own language is maintained.

And now we have come to appraisal. If the members of the "macro" society appreciate the language and culture of the arctic peoples, the members of the ethnic minority will come to value their cultural heritage. Values are partially based on emotions. It is my opinion that the human being's ultimate intellectual resources are best released if he has an emotional basis of support, where the feelings for one's own culture are self evident.

I would now like to say a few words about "yolking", the Lappish form of singing. In Pite Lappmark, my home area, each individual had a musical name, a personal "yolk". This name was naturally a means of placing and identifying the individual in a social system. "Yolking" is an important part of the Lappish culture. Herein lies the cognitive and emotional elements where artistic elements are delegated to emotions.

It is in general these facts and conditions which must be brought forth to become a living reality in terms of the present and especially significant in teacher education.

The theme of this conference has included the economic outlook of the Nordic peoples. I, too, wish to stress the importance of economy, and the point that I would like to emphasize is that destruction of capital means an economic loss. In a wider sense of the word, the human being himself is a form of capital and it is a loss to society when an individual is unable to realize his potential because of a limited or non-existent education. As you can see, I feel that one should not only stress the physical aspects of economy, but that one must also pay special attention to the human aspects.
other, is largely due to the want of a common system of reference, or its deficiencies if one does exist. In this system I include both value norms and cognitive elements. The cognitive elements are often reflected in a taxonomy.

In the United States during the last decade, a great deal of interest has been shown in trans-cultural studies. These studies analyze the terminology and classification systems of so-called primitive peoples. This type of research is of great importance and especially relevant to work of a pedagogical nature, since these studies clearly show that the theory that cognition among primitive peoples is prelogical is utter nonsense.

An American researcher in Uppsala, David Kvisler, has recently written a paper with the title, The Paradigmatic Structure of the Lappish Reindeer Classification System: A Study in Ethnozoology. The methodological basis is taken mainly from Goodenough (1957), Struvevant (1964), Pike (1954), and Corcklin (1962). His data is partially drawn from a terminological study which I have published concerning my native dialect in the southern division of Noorbotten.

Reindeer terminology is made up of four main categories: sex, age, color, and antler or horn form. This classification system of four categories makes it possible to identify each separate reindeer in herds ranging from a hundred to a thousand animals.

It should be mentioned that reindeer and reindeer herding terminology comprises approximately one fourth of the entire Lappish vocabulary. This fact is based on Neilson's Lappish dictionary which contains approximately 25,000 words.

The color terminology in Arjeplog, my home district, is comprised of seven basic colors, namely:

I. **suortahk** - black
II. **keipak** - dark with white (light) hoof brush and light belly pelage
III. **ruskuhk** - reddish brown
IV. **tjuuuhk** - yellow grey
V. **muovas** - light grey
VI. **Ituorak** - throat and belly pelage almost white
VII. **velkuhk** - white

Even though one can make a detailed classification and a positive identification of reindeer from the color category alone, we can combine it with age terminology and antler or horn description to form an extremely complicated and refined classification system.

Other areas in which Lappish has a rich terminology are snow and the lack of snow, weather, wind, terrain forms, and kinship.

Another way in which Lappish shows its refinement, is the grammar of the language itself. The verb, for example, describes the categories of activity and occurrence as durative, continuous, momentive (for the moment only), and frequentive acts of action for the base word and the forms derived from it.

- **cuoggot** - to stab repeatedly
- **cugget** - to stab once
- **cuggudit** - to continue stabbing
Education and the upbringing of children should be seen as an integrated part of cultural, social, and economic life. With the term "life", I refer to the activities which fall within the framework of society. These activities have more or less specified structures. Professor Torgny Segerstedt, Uppsala, (in "Tekniskt bistånd och social struktur"), shows three functions of the social system, namely, reproduction (recruitment), socialization (education and the upbringing of children), and the production of utilities. The social system is then divided into three general groups: particular (patriarchal), industrial, and educational sub-societies. The older forms, such as rural and nomadic societies, are members of the particular sub-society. In these older forms, the three functions were furnished by the extended family group.

From a historical point of view, the beginning industrial societies were characterized by the fact that the production of utilities was brought forth by an uneducated labor force. This labor force was drawn from the extended family groups. Nowadays a component of the western culture is an educational sub-society in which education, and to a certain degree the upbringing of children, constitutes the task of the "macro" society or as a final resort, the state. In principle, education should be nondiscriminating and available to everyone.

The arctic peoples living in the rural areas in the northern districts far from the distant industrial centers, fall outside of the type of development which is determined by the particular, industrial, and educational sub-societies. It is also natural that the educational sub-society finds itself in a problematic situation, when it tries to export to the members of an arctic society the qualities of being active, contributing and productive individuals in the modern meaning, especially if this is to be done in a natural and constructive manner.

The Lapps, as well as the rest of the arctic peoples, have quite special and different demands to make of the modern educational system. When satisfying these demands, the costs for special teacher education and the production of supplementary materials, especially educational television and radio, should not be a hindrance, but perhaps the most important point is teacher education, or rather continuation courses which pay attention to the specialized needs of these teachers.

In connection with teacher education and continuation courses the question of recruiting candidates is also of importance. From my point of view one should consciously strive for the selection of future teachers from the ethnic group which is to receive educational instruction. The future teachers should be Lapps, Eskimos, Indians, Samoyeds, Chucks, etc. But we cannot exclude members of the "macro" society, i.e., individuals who are not members of the particular ethnic minority.

This is an extremely important point. The experience which I have had from the nomad schools in Sweden, and lately from the school in the Lappish populated area in northern Norway, speaks for itself. It is my opinion that the type of teacher which has been previously referred to, can be a base unit for a deeper understanding between different cultures. This is the manner in which an educational program can be carried out in a meaningful fashion.

For a long time, it has been clear to me that the lack of understanding between the State and regional authorities, on one side, and the Lapps on the
nomad studies which contains instruction relating to the Lappe's specific way of life. The "social orientational" subjects also contain certain material relating to their own culture and community life. Instruction given in handicrafts in these schools concentrates on the Lapps' characteristic products.

For grades 7-9 there has been set up a special Senior level for Lapp children, coordinated with the Senior level school in the commune of Gallivare, in the northernmost part of Sweden. This arrangement has made it possible to offer Lapp pupils the same range of choice in the Senior level as other students. At the same time, it is possible to give a specialized form of teaching, in that the Lapp pupils can, in the majority of subjects, be kept in the same classes. Special instruction in Lappish can be given also at the Senior level. The knowledge of Lapp culture and community life imparted at the Junior and Middle levels can be expanded at the Senior level.

In grade 9, there is given also preparatory vocational instruction in reindeer-breeding on a special alternative line that covers two thirds of the teaching time assigned to this year. These arrangements have been made to allow Lapp pupils, so far as it accords with their own interests and wishes, to adapt their studies to their own form of livelihood. The practical training included in this line is arranged by having the pupils accompany the Lapps for a certain period on their travels, taking part in the different phases of work included in reindeer-breeding. Under skilled guidance they make nature observations, get to know camp life, and experience the changing conditions of work involved in reindeer-breeding.

Interest in this line is great, and pupils from the nomad schools take this alternative almost to one hundred percent, in spite of their complete freedom to transfer to an ordinary Senior level at another school in their home district.

At the Gallivare school there has been built for the Lapps a separate hostel, which provides adequate care.

By the provision of these arrangements in a nine year compulsory school, opportunities have been created for those who desire to continue their education at the gymnasium level schools.

The schooling of Lapps is regulated by a special Nomad Schooling Act (SFS 1967:216), by the terms of which Lapp parents themselves, without clearance by any authority, can decide whether they will send their children to the nearest nomad school or to the nine year compulsory school in the commune where they are registered for census purposes. No inquiry or test whatsoever is made as to whethere, or not the child is in fact of Lapp origin. The complete freedom of the parents in choosing a school for their child is reflected in the wording of the Nomad Schooling Bill (1962:51) "A Lapp is a person who states that he is a Lapp."

The total number of pupils in nomad schools in the academic year 1967-68 is about 220, plus 114 pupils attending the Senior level in Gallivare.
Lulea’s Bishop Olof Bergqvist, who examined the educational system of the Lapps, was of the opinion that “the Lapps lacked the physical attributes necessary for regular, heavy manual labor and therefore fell into deep poverty and misery when they adopted a settled way of life. On the other hand if they continued with reindeer herding they could count upon a secure source of livelihood . . .” According to him it was also “of national economic interest that the Lapps retain their inherited source of livelihood”, because the immense fields could only be used as pasturage for reindeer herds. Reindeer herding demanded that the Lapp lead a nomadic existence. “This free life,” which was “his proper element, his delight and joy, and if he were to make a lengthy visit, especially during his younger years, among those who led a settled life, he would become unsuitable for the nomadic wanderings in the mountain wilderness of cold and snowstorms.”

The limited viewpoint of the investigator reflected in the above quotation was predominant among the authorities in Sweden at that time. Bergqvist’s paternalistic, romantic cliches and prejudices formed the basis for the 1913 reform. This type of occurrence is not unique to Sweden, but can be said to be the general situation whenever there is contact between members of the western world and the so-called primitive peoples. Thus a great deal of the education was still given in the Lappish huts throughout the 1940’s. The reason behind this practice was to keep the Lapp children from withdrawing from their nomadic way of life.

In spite of this attitude, the nomadic way of life has been weakened. Nowadays, none of the nomadic Lapps live in Lappish huts during the cold season, but rather reside in regular houses. Most often there are two houses for each family engaged in the migratory movements of the reindeer herds. It is only during high summer and in the mountains that they utilize the more primitive means of residence, the Lappish huts.

That this old romantic concept is no longer predominant is shown by the following section, taken from Jonas Orling’s book, School in Sweden:

The reaction to the ambulatory schools and their relatively low standard (above all in respect of premises and equipment) has led to a return to permanent schools, situated in the largest Lapp villages. The state has in about ten places set up for the children of Lapps special schools, to which hostels are attached. These schools are called nomad schools.

The instruction given there has been increasingly adapted to the particular requirements of the Lapps, and raised to the same standard as the teaching given in the seven year primary school, and now in the nine year compulsory school. At present grades 1-6 are taught at the nomad schools. In view of the relatively small number of children attending these schools, each teacher teaches, as a rule, two grades. The Junior level comprises grades 1-2, and the Middle level grades 3-6, usually divided into two groups. For the most part, the nine year compulsory school curriculum is followed also in these schools. Certain modifications have been made, however, to permit instruction in the Lappish language. There is a special subject called
That there exists and has existed special education for the Swedish Lapps for hundreds of years is perhaps a surprising fact. As early as 1632 the so-called Skyttean School was founded. This school was the only educational institution available in the Lappish territory (hereafter to be referred to as Lappmark) for more than one hundred years.

To illustrate the importance of this school we need only to refer to the following fact: fourteen Lapp students were enrolled at the University of Uppsala between 1633 and 1722 due to the activities of the Skytteanian school. It can probably be said that this school was unique during its period of existence. In no other place has such a serious attempt been made to import school education to a primitive group living on the outskirts of settled areas.

During the 1700's Lappmark schools were founded in the parish villages (in this case "parish" refers to a political division of land area which can be compared to a "township"). In these schools the Lapp children followed a course of study based on a two year plan. The maximum pupil quota for each grade was six. Neither the Skytteanian nor the parochial schools were intended to offer a direct public education. But indirectly they did intend to reach this end. Those who had completed the two year course were expected to spread their knowledge of Christianity and the ability to read in their home villages. As the Lapps are a nomadic people, the term "home village" (in Swedish, "viste") refers to a specific group of individuals rather than a specific place of residence. The main purpose of the schools was primarily a type of teacher's training, even though very primitive. But mark well that the teachers themselves were of Lapp origin.

The pedagogical activity in the "vistes" was encouraged through monetary rewards and therefore became widely spread during a short period of time. This type of education by monetary reward was replaced after several decades by a more stable system. The post of Catechets was founded. A catechet was a travelling or ambulatory teacher who was proficient in the catechism. This form of ambulatory education was characteristic far into the 1900's.

From the second half of the 1700's and on, there existed both permanent and ambulatory schools in the parish villages. Both the advantages and disadvantages of these two systems were intensively discussed up until the 1930's. At certain times emphasis was placed on the permanent form of school system and at other times the ambulatory system was selected as being best.

The permanent form was naturally more effective, but unfortunately did not reach so many; the ambulatory form was extremely primitive because of the low quality of the education of the teachers, but it did reach a great number of the Lapp children. Between two and four weeks a year was the usual length of study that each child was able to receive. Incidentally, I myself received my first schooling in a Catechet or ambulatory type of school.

Those who defended the ambulatory system felt that the permanent school form drew the Lappish youth away from the nomadic life. Here we catch a glimpse of an important point, namely that the Lapps should retain that legacy which has passed down through many generations, a legacy of an ancient traditional means of livelihood. It was this conservationist ideology which formed the basis for the development of the Lapp schools, and the nomad school reform of 1913 was based on this ideology.
The paper I have prepared is a description of the Lapp schools in Sweden and some of the current problems involved therein. Comparisons with situations in other northern regions of the world may readily be made from other articles accompanying this paper.

The Lapps are an arctic and sub-arctic people, just as many peoples in the Soviet Union, e.g. Samoyeds, Chjucts, Koryacs, plus Eskimos and certain Indian populations in Canada.

In discussing teacher training and related educational situations in the North I would like first to present a brief historical account of education of the Lapps in Sweden. I will then comment on the ideologies that have been the basis for this education during different epochs. Secondly, I will give a short survey of the existing educational system, taken mainly from Jonas Orring's book, *School in Sweden*, Stockholm, 1867. Lastly, I will discuss some principles which, in my opinion, ought to be the basis of a meaningful education for the Lapp minority and perhaps for the other Nordic peoples.

A governmental report (*Education of the Lapps, Samernas skolgäng,* based on the 1957 analysis of the nomad schools. SOU 1960: 1941) was released in 1960. I was a member of that 1957 examining committee.
The Pedagogical Situation

Iseral Ruong

Israel Ruong is one of Scandinavia's most distinguished scholars. Dr. Ruong has spent his life working to improve conditions of Lapps through his scholarly work as a professor at the University of Uppsala and author of several books on Lapp conditions. As a Lapp leader in the Nordic-Lapp Council and as a member of various study commissions for the government of Sweden, Dr. Ruong is well known throughout Scandinavia.


27. Files of the Bureau of Indian Affairs, Juneau Area Office, Juneau, Alaska.


tests during the last three years, although when examined by individual school units, it is obvious that by the sixth grade, pupils in the remote villages are two to three years behind in grade-level achievement.

The Bureau of Indian Affairs has a testing program throughout Alaska, but results are broken down according to requirements of regional agencies and are not reported on a statewide basis. Each agency controls selection of the items to be reported by the testing company; so data from one agency to the next is not necessarily compatible for comparative purposes and partially prevents analysis of the system as a whole.

The most striking characteristic of the BIA system revealed by the BIA tests are the generally low achievement levels for the populations as a whole. The tests reveal that by the time pupils in the BIA schools have reached eighth grade, the average pupil is approximately three grade levels behind pupils of the nation as a whole.

Thus, data as indicators of attainment and achievement by Alaskan Native pupils in the rural system as a whole or as a means of comparison is tenuous at best. The most obvious observation from the data is the lack of a coordinated effort to utilize what little is known through testing, and the lack of cooperative plans by the BIA and state for mutual testing programs. Not even the same tests are used in common by the two agencies. Both the BIA and state in their most recent annual progress reports are silent on the subject of testing.

It is interesting and important to speculate on the degree to which each of the variables of pupil cultural background, English language proficiency, economic conditions, isolation, and nature of school programs actually influence level of attainment, age grade placement, grade point averages, achievement test scores, and eventually “success”. Knowledge of the relative importance of these, and the degree to which they are inter-related, all have important implications for future school programs.

Significant detailed data in attainment and achievement by students from the unorganized rural districts simply does not exist. Where achievement has been observed, the observations are based on small samples, tests of questionable value, or incomplete data. Conclusions reached from such studies do indicate inadequate programs but different studies tend to contradict rather than complement specific conclusions. What is indicated is the need for extensive coordinated improvement in educational programs and research. The educational success characteristics of Alaskans with a large segment of the population (non-Native) better educated than the United States population generally on the one hand, and the Alaskan Natives with considerably less education on the other, poses special problems for improved Northern education.

REFERENCES

While Native dropouts showed no significant relationships between I.Q. scores and grade point averages, the Native graduates did. This supported the suggestion that many of those who dropped out of school had I.Q.'s strong enough to complete high school. The continuance in school by the Native students was dependent upon factors other than academic success and achievement alone.31.

The most sophisticated Alaskan study to date that permits an analysis of Native success in school is the study done by Dr. Ashley Foster of the Alaska Native Hospital. The study sought to find areas for profitable research on predispositional factors related to the achievement of success by Alaska Native people. It was assumed that a person who had finished high school and enrolled in college fulfilled Foster’s criterion for success. Thus, for the study, thirty-seven Alaskan Native students in attendance at the University of Alaska were interviewed in 1967. The students were asked why people should go to the University and what education was doing for them.

By grouping the students interviewed, Foster identified ten from the BIA high school, sixteen from various city and state schools and eleven from mission schools. High school grade point averages indicated that BIA and mission pupils did better than students from state and city schools in high school. In college, however, the opposite was observed by examining grade point averages; students from BIA and mission schools performed the poorest in college.

Findings of Foster’s study indicate that high school grades could not be used to predict academic success, nor is performance in the secondary school an index of motivation for an education. The most significant element leading to academic success appeared to be the quality of seeking knowledge from a sense of curiosity. Thus, according to Foster, an understanding of education as the means to comprehend the environment seemed the most significant factor of academic success by Alaskan Native students.32

Achievement testing of pupils as a means to recognize problem areas has largely been a failure in rural Alaska because of five apparent variables: several distinctly different minority cultures, varying degrees of acculturation by members of the minority cultures, varying degrees of command of English as a second language, lower economic status, and extensive geographic isolation.

With the foregoing variables in mind, a brief description of the achievement testing program in state and BIA schools may be made. First, the state's testing program may be critically questioned. Tests have been given to all pupils in Alaska’s State-Operated Schools, including children in the 10,178 pupil military base school system, with little attempt to distinguish test results given in isolated areas from test results given children in larger towns and military bases. It may be said that the current testing program in State-Operated Schools serves mainly the purposes to which individual teachers may utilize the tests for studying individual pupils. This may be an important use of the tests, but there are no rural school test data available for purposes of examining the system as a whole. The presently being used by the state are the Thorndike Intelligence tests and the Iowa Test of Basic Skills. There was no analysis made on data from these
**TABLE 9**

**COMPARISON BETWEEN BIA AND STATE SCHOOLS**

BY PERCENTAGE OF OVERAGE PUPILS

1967-1968

<table>
<thead>
<tr>
<th>Grade</th>
<th>BIA</th>
<th>State</th>
<th>BIA</th>
<th>State</th>
<th>Percent Overage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beg.</td>
<td>671</td>
<td>236</td>
<td>141</td>
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<td>21.0</td>
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<tr>
<td>First</td>
<td>725</td>
<td>844</td>
<td>188</td>
<td>212</td>
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<tr>
<td>Second</td>
<td>722</td>
<td>659</td>
<td>239</td>
<td>270</td>
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<tr>
<td>Third</td>
<td>660</td>
<td>608</td>
<td>292</td>
<td>250</td>
<td>44.2</td>
</tr>
<tr>
<td>Fourth</td>
<td>593</td>
<td>576</td>
<td>293</td>
<td>242</td>
<td>49.4</td>
</tr>
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<td>621</td>
<td>568</td>
<td>325</td>
<td>270</td>
<td>52.3</td>
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<tr>
<td>Sixth</td>
<td>569</td>
<td>463</td>
<td>341</td>
<td>175</td>
<td>59.9</td>
</tr>
<tr>
<td>Seventh</td>
<td>507</td>
<td>503</td>
<td>270</td>
<td>257</td>
<td>63.3</td>
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<tr>
<td>Eighth</td>
<td>453</td>
<td>546</td>
<td>259</td>
<td>279</td>
<td>57.2</td>
</tr>
</tbody>
</table>

**Totals**

5,521  5,003  2,348  1,963  42.5  39.2

**Ungraded Grades 1-8**

367

**Total**

5,888

Source: Pupil enrollment files of the BIA (Juneau) and State Department of Education (Anchorage).

school before graduation was two and one-half times as great as the non-Native.

Native students who came from small towns and villages had more difficulty with high school subjects than the Native students who had lived in the larger towns and were more closely associated with the dominant culture for the major portion of their lives. Not considering the cultural bias of standardized tests, 75 percent of the Native dropouts who were tested revealed intelligence enough to complete high school.
### TABLE 3

**AGE-GRADE DISTRIBUTION OF PUPILS ENROLLED IN BUREAU OF INDIAN AFFAIRS SCHOOLS 1967-1968**

<table>
<thead>
<tr>
<th>AGE</th>
<th>Beginning</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>5th</th>
<th>6th</th>
<th>7th</th>
<th>8th</th>
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<td>6</td>
<td>630</td>
<td>75</td>
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<td>8</td>
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<td>298</td>
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<td>9</td>
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<td>1</td>
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</tr>
<tr>
<td>21 and over</td>
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<td>1</td>
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<td></td>
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</tr>
<tr>
<td>Totals</td>
<td>671</td>
<td>725</td>
<td>722</td>
<td>680</td>
<td>593</td>
<td>621</td>
<td>569</td>
<td>507</td>
<td>463</td>
<td>5,688</td>
</tr>
</tbody>
</table>

*Source: Bureau of Indian Affairs Juneau Area Office*
### TABLE 7

**AGE-GRADE DISTRIBUTION OF PUPILS**

**STATE-OPERATED SCHOOLS, 1967-1968**

<table>
<thead>
<tr>
<th>Age in yrs. Sept. 1, 1968</th>
<th>Kindergarten</th>
<th>Grade 1</th>
<th>Grade 2</th>
<th>Grade 3</th>
<th>Grade 4</th>
<th>Grade 5</th>
<th>Grade 6</th>
<th>Grade 7</th>
<th>Grade 8</th>
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<tbody>
<tr>
<td>4</td>
<td>35</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>193</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>6</td>
<td>8</td>
<td>56</td>
<td>26</td>
<td>2</td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>7</td>
<td>1</td>
<td>187</td>
<td>363</td>
<td>50</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>8</td>
<td>21</td>
<td>204</td>
<td>206</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>9</td>
<td>4</td>
<td>54</td>
<td>178</td>
<td>300</td>
<td>48</td>
<td>1</td>
<td></td>
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<tr>
<td>10</td>
<td>1</td>
<td>7</td>
<td>51</td>
<td>167</td>
<td>250</td>
<td>-44</td>
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<td></td>
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<tr>
<td>11</td>
<td>2</td>
<td>19</td>
<td>56</td>
<td>171</td>
<td>244</td>
<td>16</td>
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<td></td>
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<tr>
<td>12</td>
<td>1</td>
<td>11</td>
<td>64</td>
<td>112</td>
<td>209</td>
<td>35</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>13</td>
<td>2</td>
<td>8</td>
<td>24</td>
<td>42</td>
<td>135</td>
<td>232</td>
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</tr>
<tr>
<td>14</td>
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<td>5</td>
<td>18</td>
<td>71</td>
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<td>18</td>
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<td></td>
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<tr>
<td>21</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Alaska State Department of Education Statistical Services.
### TABLE 6

**EDUCATIONAL LEVEL ATTAINED BY PERSONS 25 YEARS OLD AND OVER IN ALASKA AS PERCENT OF TOTAL, BY REGION 1960**

<table>
<thead>
<tr>
<th>Category</th>
<th>United States</th>
<th>Statewide Total</th>
<th>South-east</th>
<th>South Central</th>
<th>Interior</th>
<th>South-west</th>
<th>North-west</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent with no education</td>
<td>2.2</td>
<td>3.5</td>
<td>2.0</td>
<td>0.9</td>
<td>2.5</td>
<td>22.2</td>
<td>11.2</td>
</tr>
<tr>
<td>Percent with 1-8 years of school</td>
<td>35.1</td>
<td>22.8</td>
<td>27.1</td>
<td>16.9</td>
<td>19.4</td>
<td>39.9</td>
<td>58.7</td>
</tr>
<tr>
<td>Percent with 1-4 years of high school</td>
<td>44.9</td>
<td>51.2</td>
<td>48.7</td>
<td>57.8</td>
<td>54.4</td>
<td>26.2</td>
<td>17.7</td>
</tr>
<tr>
<td>Percent with 1-3 years of college</td>
<td>8.6</td>
<td>12.9</td>
<td>11.7</td>
<td>14.4</td>
<td>14.1</td>
<td>6.4</td>
<td>6.4</td>
</tr>
<tr>
<td>Percent with 4 or more years of college</td>
<td>7.9</td>
<td>9.5</td>
<td>10.5</td>
<td>10.0</td>
<td>9.6</td>
<td>5.3</td>
<td>6.0</td>
</tr>
<tr>
<td>Percent with more than a grade school education</td>
<td>61.4</td>
<td>73.6</td>
<td>70.9</td>
<td>82.2</td>
<td>78.1</td>
<td>37.9</td>
<td>30.1</td>
</tr>
</tbody>
</table>

their thirties and forties (909 villagers) have a median education level of almost the fifth grade and three percent (thirty-seven) have completed high school. A median of grade nine was reported for the group from sixteen to thirty years. Of the 975 villagers in this group almost 25 percent (223 persons) have completed high school.

Data describing pupil age-grade composition is the most current information available that may be used to describe levels of rural school pupil attainment. Table 7 lists age-grade placement in state schools, and Table 8 lists age-grade placement in Bureau of Indian Affairs schools, both for the school year 1967-68.

The large number of over-age pupils in each system has been made immediately apparent by distinguishing the number of normal age-grade pupils by placing their enrollment totals in boxes. These two tables also introduce the means to make a comparison between BIA and State schools especially when enrollments are summarized and put side by side as seen in Table 9.

Reasons for the generally high percentages of over-age pupils of both systems, regardless of relative program quality, may be attributed to: (1) nonpromotion of students by teachers until certain academic standards are reached; (2) school closure when the number of children enrolled falls below the minimum enrollment required to maintain a school, or the teachers leave before the school year is over and a replacement cannot be found; (3) late entrance, irregular attendance or early departure from school because the children are taken from school by their parents during the school year, usually for hunting and fishing; and (4) a high incidence of childhood illness, especially illness affecting hearing and sight resulting in irregular attendance or inability to accommodate school programs.

Performance of pupils from BIA and State-Operated Schools in one large Alaskan city high school have been compared with interesting results. In a study of Lathrop High School in Fairbanks by Herbert K. Small et al., the following conclusions were drawn: A Native student entering Lathrop High School had a better survival rate if he received the majority of his elementary education in a Bureau of Indian Affairs school or an independent public school than if he came from any other type of school. In the years studied (1964-1966) a student transferring from a State-Operated School had the least chance of graduating.

Findings of the study of importance to Native educational programs in general included the following:

The success or failure of the Native student was not as predictable as the non-Native. The testing program and grading system were more meaningful predictors for non-Native than for the Native as to the student's success in school.

Over 70 percent of the Native dropouts left school during their freshman and sophomore years, while the non-Native students left at a steady rate of about 25 percent each of the four years of high school. A definite dropout problem existed among the Native students. The percentage of Natives dropping out of
The Pedagogical Situation

<table>
<thead>
<tr>
<th>Year</th>
<th>United States</th>
<th>White</th>
<th>Alaska</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1939</td>
<td>8.6</td>
<td>9.7</td>
<td>1.8</td>
<td>6.2</td>
</tr>
<tr>
<td>1950</td>
<td>9.3</td>
<td>12.2</td>
<td>4.0</td>
<td>11.3</td>
</tr>
<tr>
<td>1960</td>
<td>11.0</td>
<td>12.4</td>
<td>6.6</td>
<td>12.1</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Census

completed their work. Two percent had gone to college, but a fraction of only one percent had completed four years or more. Also, in 1960, it should be noted; only, 1,832 of 5,365 Native children between the ages of fourteen and nineteen were enrolled in high school.29

It is obvious from the preceding examination of the 1960 Census data that Natives of Alaska per se have a lower level of educational attainment than the people of the nation as a whole. Data from 1960, while important, may be too old, however, for purposes of long-range educational planning, and the 1970 Census data will contain much from which inferences may be drawn. Data from 1960 important as a means to detect trends, however, more than for drawing specific conclusions. It is to be expected that improvements in rural education have been made since the 1960 Census, and the limited data available since then indicates that such is the case. It needs to be stressed, however, that only casual data since 1960 have been analyzed. Data available since 1960 also introduce elements that may permit a limited degree of comparison between BIA and State schools.

The number of village children attending BIA boarding schools is increasing faster than the population. In 1962-63, there were 894 pupils attending secondary schools; in 1966-67, there were 1,595. The number of Natives pursuing post high school education has increased substantially. Between 1955 and 1967 the number of students continuing education beyond the high school rose from fifty-four to more than 1,000.30

Indicative of trends tending to show an improved picture of Native educational attainment are data that emerged from a recent regional study. A BIA study in 1968 of thirty-four interior Alaska and Arctic Coast villages in the Fairbanks agency revealed that about half of the pupils sixteen years and over completed the sixth grade. This represents an increase of two to three grades above the median found in these districts of persons twenty-five years and over in 1960. Broken down by age groups, the villagers' fifty-one years and older have the least education, about half have a second grade education or less and nine out of a total of 401 in this age group are high school graduates. The group in
TABLE 4
TOTAL ENROLLMENTS OF
ALASKA SCHOOL CHILDREN, BY RACE
(Including Native 1 Children in Out-of-State Schools)

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Native 1</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1962-63</td>
<td>35,185</td>
<td>13,184</td>
<td>1,503</td>
<td>49,874</td>
</tr>
<tr>
<td></td>
<td>(70.6%)</td>
<td>(26.4%)</td>
<td>(3.1%)</td>
<td>(100.0%)</td>
</tr>
<tr>
<td>1963-64</td>
<td>34,479</td>
<td>14,300</td>
<td>1,611</td>
<td>50,390</td>
</tr>
<tr>
<td></td>
<td>(68.4%)</td>
<td>(28.4%)</td>
<td>(3.2%)</td>
<td>(100.0%)</td>
</tr>
<tr>
<td>1964-65</td>
<td>31,298</td>
<td>13,894</td>
<td>1,980</td>
<td>47,172</td>
</tr>
<tr>
<td></td>
<td>(66.3%)</td>
<td>(29.5%)</td>
<td>(4.2%)</td>
<td>(100.0%)</td>
</tr>
<tr>
<td>1965-66</td>
<td>33,014</td>
<td>14,289</td>
<td>1,875</td>
<td>49,177</td>
</tr>
<tr>
<td></td>
<td>(67.1%)</td>
<td>(29.1%)</td>
<td>(3.8%)</td>
<td>(100.0%)</td>
</tr>
<tr>
<td>1966-67</td>
<td>37,931</td>
<td>14,979</td>
<td>1,815</td>
<td>53,825</td>
</tr>
<tr>
<td></td>
<td>(68.8%)</td>
<td>(27.8%)</td>
<td>(3.4%)</td>
<td>(100.0%)</td>
</tr>
<tr>
<td>1967-68</td>
<td>37,841</td>
<td>15,482</td>
<td>9,666</td>
<td>55,289</td>
</tr>
<tr>
<td></td>
<td>(68.4%)</td>
<td>(28.0%)</td>
<td>(3.6%)</td>
<td>(100.0%)</td>
</tr>
</tbody>
</table>

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH SCHOOL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1962-63</td>
<td>8,688</td>
<td>2,676</td>
<td>210</td>
<td>11,574</td>
</tr>
<tr>
<td></td>
<td>(75.0%)</td>
<td>(23.2%)</td>
<td>(1.8%)</td>
<td>(100.0%)</td>
</tr>
<tr>
<td>1963-64</td>
<td>8,968</td>
<td>3,213</td>
<td>275</td>
<td>12,456</td>
</tr>
<tr>
<td></td>
<td>(72.0%)</td>
<td>(29.8%)</td>
<td>(2.2%)</td>
<td>(100.0%)</td>
</tr>
<tr>
<td>1964-65</td>
<td>14,437</td>
<td>3,668</td>
<td>402</td>
<td>18,507</td>
</tr>
<tr>
<td></td>
<td>(78.0%)</td>
<td>(19.8%)</td>
<td>(2.2%)</td>
<td>(100.0%)</td>
</tr>
<tr>
<td>1965-66</td>
<td>14,885</td>
<td>3,866</td>
<td>402</td>
<td>19,153</td>
</tr>
<tr>
<td></td>
<td>(77.7%)</td>
<td>(20.2%)</td>
<td>(2.1%)</td>
<td>(100.0%)</td>
</tr>
<tr>
<td>1966-67</td>
<td>14,565</td>
<td>3,939</td>
<td>493</td>
<td>19,997</td>
</tr>
<tr>
<td></td>
<td>(76.3%)</td>
<td>(20.6%)</td>
<td>(3.1%)</td>
<td>(100.0%)</td>
</tr>
<tr>
<td>1967-68</td>
<td>18,596</td>
<td>4,512</td>
<td>703</td>
<td>21,811</td>
</tr>
<tr>
<td></td>
<td>(76.1%)</td>
<td>(20.7%)</td>
<td>(3.2%)</td>
<td>(100.0%)</td>
</tr>
</tbody>
</table>

1 The term "Native" refers to Eskimo, Indian, and Aleut persons indigenous to Alaska. The Bureau of Indian Affairs sends some Alaska Native children to out-of-state secondary schools.

Source: Alaska Department of Education and the U. S. Bureau of Indian Affairs. Compiled by University of Alaska Institute of Social, Economic and Government Research.
borough and city schools and Natives attending school outside Alaska, from the total of 19,991 Native pupils, it is seen that approximately 11,000 Native pupils are in either a BIA or State-Operated School. The BIA does not bar non-Natives from their schools, but there were no such students in 1967-68. Of this total, 6,354 (78.8 percent) were full blood, 847 (12.5 percent) three-fourths blood, 447 (5.6 percent) one-half blood and 146 (2.1 percent) less than one-half blood (BIA terminology).3

The rural state schools enrolled a total of 5,333 pupils in 1967-68, of whom 4,401 were of Native heritage. Obviously, more than 900 non-Native children attending State-Operated Schools, but it is also obvious that the rural schools operated by the state are essentially provided as a service to a distinct ethnic group, if Alaskan Natives may be so grouped collectively. Also, serving to sustain this observation is the fact that there were sixty-five state schools in villages with exclusive Native enrollment.

Before describing the educational attainment and achievement of the schools primarily with Native student bodies, it is desirable to report on the educational level of the population as a whole. An appreciable difference of educational attainment exists among ethnic segments of the population and among regions of Alaska. They bear directly on factors to be considered in pupil educational attainment and on future administrative decisions relative to development of Alaskan rural education.

Data from the United States Bureau of the Census provide some measure of the general educational level of the median school years completed by Alaskan adults. Educational attainment of persons twenty-five years and over may be tabulated to make comparisons of Alaskans and the rest of the United States and between Natives and whites within Alaska. Table 5 depicts the trends in median school years completed since 1939 for the white-Native, and total population of Alaska compared with the rest of the United States. From Table 5 it may be seen that Alaskans attained a median of twelve and one tenth years of education; the national population attained a median of eleven years. Considering Alaskans by white, Native categories, however, it is obvious that the median school years completed by Alaskan Natives is much lower than the national and Alaskan averages, although an appreciable increase from one and eight-tenths years to six and six-tenths years occurred between 1939 and 1960.

Educational level attained by inhabitants per region of Alaska is also significant in an analysis of educational success. Certain regions of Alaska, as pointed out above, are populated predominantly by Native people and thus a concentration of people with lower than average educational attainment is found in these regions. The educational attainment levels by region are reported in Table 6.29

Another dimension of information pertaining to attainment is provided by examining data available from the 1960 Census after breaking it down to percentages of the total population completing various grade levels. Of the nearly 26,000 Natives fourteen years or older, 50 percent had completed no more than the sixth grade; 21 percent had completed the seventh or eighth grades; another 14 percent had gone to high school, but only 8 percent had
TABLE 3

ENROLLMENT PER SINGLE CLASSROOM UNIT GROUPED BY SIZE AND AGENCY IN SCHOOLS WITH FOUR TEACHERS OR FEWER 1967-1968

<table>
<thead>
<tr>
<th>Enrollment per Classroom</th>
<th>BIA No.</th>
<th>%</th>
<th>State No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 35</td>
<td>8</td>
<td>12.90</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>30-34</td>
<td>7</td>
<td>11.27</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>24-29</td>
<td>25</td>
<td>40.32</td>
<td>5</td>
<td>6.02</td>
</tr>
<tr>
<td>20-24</td>
<td>14</td>
<td>22.58</td>
<td>14</td>
<td>16.87</td>
</tr>
<tr>
<td>15-19</td>
<td>6</td>
<td>9.68</td>
<td>33</td>
<td>39.76</td>
</tr>
<tr>
<td>10-14</td>
<td>2</td>
<td>3.23</td>
<td>22</td>
<td>26.51</td>
</tr>
<tr>
<td>Under 10</td>
<td>0</td>
<td>0.00</td>
<td>9</td>
<td>10.84</td>
</tr>
<tr>
<td>Totals</td>
<td>62</td>
<td>100.00</td>
<td>83</td>
<td>100.00</td>
</tr>
</tbody>
</table>

There have been no recent studies in Alaska seeking answers to the question why teachers leave Alaskan rural schools, but informal reasons given by personnel officers in both the state schools and BIA included isolation of school sites, return to school for graduate study, dissatisfaction with financial rewards, inadequate housing, limited opportunity, for advancement, and community problems as the most important reasons.

Pupil Composition

Total enrollments of all Alaskan school children for a six-year period (1962-1968) by race is reported in Table 4. By combining total elementary and high school enrollments reported in Table 4 for 1967-68, it may be seen there were 77,100 Alaskan pupils enrolled in school in grades one through twelve including pupils in state schools, BIA schools, city and borough schools, and schools outside Alaska. Of this number, 19,994 are considered to be Alaskan Natives (15,482 elementary pupils and 4,512 high school pupils). During the school year 1967-68, it is reported by officials of the Alaska State Department of Education there were about 8,800 Native students attending borough schools and about 1,000 outside Alaska. By subtracting the number of Natives attending
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>State Operated Schools</td>
<td>251</td>
<td>4,527</td>
<td>18.03</td>
<td>75</td>
<td>806</td>
<td>10.75</td>
<td>326</td>
<td>5,333</td>
<td>16.36</td>
</tr>
<tr>
<td>Bureau of Indian Affairs</td>
<td>251</td>
<td>5,999</td>
<td>23.90</td>
<td>60</td>
<td>794</td>
<td>13.23</td>
<td>311</td>
<td>6,793</td>
<td>21.84</td>
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<tr>
<td>Alaska District Schools</td>
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<td></td>
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<tr>
<td>USA</td>
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<td></td>
<td></td>
<td>2,229</td>
<td>52,166</td>
<td>23.90</td>
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</table>

Source: State Department of Education Statistical Services, Bureau of Indian Affairs Statistical Services, and National Education Association-Research Division.
<table>
<thead>
<tr>
<th>Elementary Schools</th>
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<th>BIA</th>
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<tr>
<td>Teachers covered by report</td>
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<td>91</td>
</tr>
<tr>
<td>Degrees from accredited schools</td>
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</tr>
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<td>Degrees from non-accredited Schools</td>
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<td>No degrees</td>
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<tr>
<td>Elementary teachers with no elementary education courses</td>
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<td>38.20</td>
</tr>
<tr>
<td>Average Hours in Education</td>
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<td>Average Hours in Elementary School Education for Elementary Teachers</td>
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<td>Median Hours in Education</td>
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<td>Median Hours in Elementary School Education for Elementary Teachers</td>
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<tr>
<td>Average Years Teaching Experience</td>
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<td>4.09</td>
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</table>

Source: Files of the Department of Education, University of Alaska
The Pedagogical Situation

but it must be stressed that the population is not a scientifically developed random sample. The attributes of individual teachers which motivated them to seek summer study may or may not make the sample group atypical for Alaskan village teachers as a whole. Table 1 summarizes qualification characteristics compiled from University application forms and transcripts.

Analysis of pupil-teacher ratio data for schools providing rural education reveals the extent to which each agency is committed to provide professional staff members for operation of their respective systems. Taken as a whole, the pupil-teacher ratio for the two rural agencies appears favorable when compared with district schools and the United States as a whole. When the two rural components are compared, it is obvious that an appreciably greater number of pupils per teacher is found in Bureau of Indian Affairs schools (21.84) than in state schools (16.36). Data in Table 2 summarizes pupil-teacher ratios in Alaska.

Table 2 also provides a means to compare the pupil-teacher ratio of the two rural systems with city and borough schools and schools in the United States as a whole.

Examination in Table 3 of pupil-teacher ratios by individual schools, especially the incidence of extremes, in another way to examine enrollment data to obtain insight into effectiveness of the rural systems. Extremes may be observed by examining school enrollments and number of teachers per school in the small schools of one to four classrooms each.

The largest pupil-teacher ratio (53.5) is in the BIA system at the two-teacher school of Alakanuk where 107 elementary pupils are taught by two teachers. The smallest pupil-teacher ratio (8) is found in state rural schools at Stony River and Thorne Bay. The pupil-teacher ratios of the Bureau of Indian Affairs and state-operated schools are clearly unequal.

Teacher mobility or attrition rate may be used as an important factor to examine the nature of the faculties of northern schools. Holding power of the rural schools per se has increased substantially over the last ten years, but attrition is still much higher than the 18.9 percent of the nation as a whole.

The rate of turnover for the nation was 17.0 percent in 1958, while that of Alaska was more than twice as great with 34.2 percent. The BIA schools in 1958 had an attrition rate of 42.8 percent and the rural State-Operated Schools had the highest rate of all at 47.5 percent. The attrition rate in 1967 shows a substantial decline from the earlier high turnover rate with the most marked improvement observed in BIA holding power. Bureau of Indian Affairs schools employed 305 teachers in 1966-67 and accepted sixty-nine resignations for a turnover rate of 22.8 percent. In 1967-68 the BIA employed 311 teachers and had seventy-six resignations for a turnover rate of 24.4 percent, a rate which was higher than the previous year but much less than 1958. No data were available to indicate how many BIA teachers who resigned stayed in the state and may have moved to city, borough or State-Operated Schools.27

Statistics for State-Operated Schools are available in slightly different form, but comparison is still possible. Data for State-Operated Schools shows a decline in the turnover rate since 1958, but not as great as in BIA schools. The rural teaching staff of the state in 1967-68 consisted of 64.6 percent of the faculty loyed in 1966-67. Another 9.9 percent was still in Alaska but had moved to
political-social elements apparent in the North must come from all segments of the Northern community. Robert Havighurst has pointed out in his summary report, *The Education of Indian Children and Youth*, that there is still no clear voice from the Indian community setting forth a single position, that there "will be some uncertainty in the Indian voice on educational matters" and declares:

As time goes on, certain basic educational issues will become more controversial among Indians. For example, there will be disagreement on the question of maintaining small local all-Indian schools on the one hand, or consolidating these with non-Indian school systems to create larger, integrated schools. There may also be controversy over the way English is taught in communities where the home language is Indian. In this case, it is to be hoped that research will show what methods work best, so that Indian communities can make knowledgeable decisions. In general, we must predict that Indian leaders will be more and more involved in the problem of transcultural education and styles of life. This is a complex problem that can never be met by a single unchanging solution.

Although Havighurst's conclusions are general and for the nation as a whole, similar conditions may be said to prevail in Alaska. A level of increased participation forecast by Havighurst is valid.

Faculty Composition

In 1968, 326 teachers were employed to instruct 5,333 pupils in the State-Operated Schools and 311 teachers were employed to instruct 6,793 pupils in BIA schools. An additional 75 teachers were employed in small remote incorporated school districts with programs for another 900 pupils.

Basic demographic data reveals that of the total BIA faculty, there were 162 males and 149 females employed in 1968. There were eighty-five married couples employed as teaching teams in Bureau of Indian Affairs schools in 1968. In the State-Operated Schools, there was the same number of males as females, 163 of each sex. Sixty married couples were employed as teaching teams in State-Operated Schools.

Analysis of professional qualifications may be utilized to describe the nature of the rural faculties. Because of security restrictions imposed by governmental agencies to protect the privacy of their employees, unlimited personnel data is not part of the public domain. Data describing professional qualifications was compiled from transcripts and application forms from a sample population consisting of 180 state and BIA teachers who attended summer sessions at the University of Alaska during 1966, 1967, and 1968. This data was collected with the expectation that a reasonably representative cross section of rural faculties was present at the University during summer sessions,
The Conference this morning passed a resolution asking the Alaska Federation of Natives to file suit against the United States and the State of Alaska for "an integrated quality education for all Alaska Natives in Alaska."***

At a meeting in Sitka in December, 1968, Native spokesmen continued to make known their dissatisfaction with the current status:

Natives from across Alaska served notice Thursday night that in their drive for improved rural education, they will be satisfied with nothing less than a system of regional high schools, close to the villages they serve and under direction of Native school boards.

Indian, Eskimo and Aleut spokesmen gave their view at a conference on rural education presided over by U.S. Representative Howard W. Pollock, R-Alaska, and U.S. Senator elect Mike Gravel, D-Alaska.***

In an appearance before the Special Indian Subcommittee of the United States Senate in 1969, Mr. Willie Hensley, Alaskan Eskimo legislator from Kotzebue, stated:

I think that once we give a lot of these students from the villages the dignity they need, and let them know that they are not inferior because they are Native, that they have as much opportunity to grow in the world as anyone else, then I think we'll have licked a great portion of the problem.***

Also appearing before the Senate Committee, Mr. Phil Kelly, a representative of the Native Student Committee on Education at the University of Alaska, stated that Native students enrolling at the University are "psychologically and socially almost totally unprepared to meet and cope with the westernized university situation" and that if "these students are to find and fit themselves into today's great American social structure, they must be exposed to it at an early age and not be made to feel as though they are ethnic freaks".

Emil Notti, at the time President of the Alaska Federation of Natives, told the Subcommittee that villagers should be members of school boards and should have a member on the State School Board and called for giving responsibility for schools to local people.***

The concerns and demands thus expressed by the Native people themselves may be looked upon as essential elements, previously lacking, necessary for substantive change; although, like the statements of researchers, by themselves not convincingly argue the needs. The means necessary to cope with all the
In order to carry out its programs, the BIA has established several priorities including: construction of new classrooms, quarters and support facilities to allow twenty-five pupils per teacher, plus one teacher aide for each classroom, in order to "maintain quality of education with standards equal or better than those of state schools"; maintenance of present facilities for 250 elementary and junior high students at Wrangell Institute for those pupils from villages that have no grade school; continued Johnson-O'Malley contracts with the state; increased scholarship programs, and provisions for kindergarten programs in all Bureau of Indian Affairs elementary schools.

The state continues to attempt to meet its goals through approved uniform courses of study for all grades in all schools regardless of their location or administrative structure. A state curriculum committee representing the local school districts, the University of Alaska, the Bureau of Indian Affairs and the State Operated Schools exists to advise the Commissioner of Education on curriculum issues and recommend courses of study for adoption. The state course of study manual, Scope and Sequence, and several single-topic curriculum guides initiated by this body for all state schools, including autonomous districts, covers, for all practical purposes, the same material as Basic Goals for Elementary Children, published by the Bureau of Indian Affairs for all BIA schools.20, 21

Established goals of education and prescribed programs of education in all three components of the Alaskan system of education are not different from the goals and programs of the country as a whole. From the very beginning of educational programs in the North through current times programs and goals have been the programs and goals of the dominant "western" culture. It is because of this situation that emerging Native voices are being heard in increasing numbers and with growing intensity. The following examples are representative of recent statements by Native spokesmen:

Kimmlis Hendrick, writing a series for the Christian Science Monitor on national Indian education wrote:

"During a recent Bureau of Indian Affairs conference, an Alaskan Indian rose and spoke: "I've been reading Kierkegaard. (You could hear a pin drop.) He says there are three basic fears that confront a man - marriage, God, and death. I want to add a fourth fear - change." To BIA personnel, no word could strike more deeply.22"

A meeting of Alaska Natives in October, 1968, resulted in this report.

 Improved and more educational opportunities for Native youth has been a principal concern of the Tanana Chief's Conference since the conference was revived in 1962.

Meeting in Fairbanks for the second time this year (1968) the representatives to the Chief's Conference again tackled education with more vigor than before...
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The difference between the philosophy and procedures of territorial school education and those of federal schools for natives of Alaska are fewer than is generally believed to be the case. The differences that do exist are differences in degree, not kind.19

CLARK C. RAY, in 1958, recognized "that both agencies in Alaska have expressed the need for a common body of knowledge and common skills be learned by all children."12

It would be necessary to initiate an extensive research study in individual classrooms across Alaska to determine precisely how similar the programs truly are, but considering current statements made by each agency, very little difference appears to exist today. The state, the BIA, and local districts use the same textbook adoptions and teacher pool, thereby assuring a high degree of potential for similarity of programs. Individual differences in programs under this situation are probably as likely among schools in the same system as among intra-agency schools.

Programs developed by officials of the Bureau of Indian Affairs may be summarized by the following outline prepared as a statement of programs for the BIA's manual for teachers new to Alaska:

1. Provide a local school program for villages now without such services.
   a. Extend all village school programs through eight grades, in order to raise the educational level. This will do the following:
      (1) Implement the policy of keeping education as near the home community as is feasible, especially during the formative years of the child’s life.
      (2) Raise the level of education so that many more of the Native people can compete for available jobs within, and outside of, their villages.

2. Operate regional high schools in villages where the school population can justify the provisions of an adequate secondary school program.

   The high school programs aim to provide the necessary education and training to enable the student:
   a. To complete academic high school as a foundation for college training, or,
   b. To complete high school as a foundation for advanced vocational and technical training, or
   c. To complete high school and gain prevocational and practical arts experience useful to those who desire semi-skilled work.

5. Carry on a program of adult education in basic education and community improvement where a demonstrated need exists.4
In stating the responsibility of the school, one must not overlook the function of the home where manners, standards of morality, and loyalties are first taught, and basic attitudes are largely molded. The role of the church and other educative agencies within the community in the development of moral, spiritual, and ethical values must be recognized.

Goals

In the practical application of this philosophy, the following opportunities shall be provided each student to the maximum of his capacity:

- to learn to think critically and act effectively through the mastery of the basic skills and knowledge embodied within the major achievements of civilization;
- to gain knowledge of and to develop and cherish a commitment to his own national and spiritual heritage and culture, as well as that of other people;
- to develop intellectually, emotionally, morally, and socially so that problems of everyday living can be successfully attacked and solved;
- to develop a purpose for living with standards and values which embody honesty, integrity, self-reliance, self-determination, pride, and ambition;
- to develop a healthy body;
- to develop intellectual curiosity and creativity; and
- to acquire the basic preparation culminating in saleable skills for various vocations, professions, or careers in society.18

Current goals of the BIA are more difficult to identify than the goals of the state, as they have been declared at more than one level and currently are once more undergoing radical change.

Because goals have sometimes been stated in inconsistent forms, a comparison of programs between the two agencies may be a more valid factor for consideration to determine the degree of similarity between the two systems, especially since programs should be manifestations of actual goals, stated or not. Evidence of similarity of programs goes back many years. In a national study of BIA programs in the 1940's, Homer H. Howard found few differences.

He wrote:
Commission on Cross-Cultural Education, the Northwest Regional Educational Laboratory, the University of Alaska and other interested groups, agencies and individuals, has in recent years begun to develop programs to meet the special educational needs of Native Alaskans; and

Whereas these programs must be expanded, the pace at which they are being developed intensified, their utilization for all pupils throughout the state encouraged, and their existence and importance publicized, in order to provide the best elementary and secondary education for all the youth of the state;

Be It Resolved that the Governor is requested to direct the Department of Education to intensify its programs to develop culturally relevant programs for the Native pupils in the state, to encourage the teaching of Native studies to all pupils regardless of cultural or ethnic background, and to stimulate and encourage the utilization of these programs in the city and borough schools throughout the state.

Regardless of the intentions of legislative bodies, today goals of education for Alaska are no less nebulous and difficult to derive than in the past and may be more difficult because of the growing complexity of the cross-cultural nature of the population. Goals for Alaskan schools, as elsewhere, should be considered the objectives toward which educational efforts are directed: Unfortunately, goals have been elusive and sometimes have been confused with their means and policies. The history of Alaskan education reveals a lack of consistency in educational goals and thus policies and means have fluctuated over the years. Fluctuating goals were the result of a combination of changing social and political factors. Also, it appears that at times there was a hiatus between goals stated in Washington and policies carried out in Alaska.

There were no specific educational goals declared by the State Board of Education for the State as a whole in 1970 but the Board had previously prepared a statement of philosophy and goals for State-Operated Schools:

Statement of Philosophy for State-Operated Schools

Our democratic way of life is founded upon the ability of people to govern themselves through representative government, a recognition of the dignity and integrity of the individual, and a great spiritual heritage.

The Constitution of the State of Alaska, Article VII, states: "The legislature shall by general law establish and maintain a system of public schools open to all children of the state. . . ." To meet this requirement in a sparsely populated state the size of Alaska, a variety of public schools must be established to meet the needs of students living in villages, small towns, and large urban communities.
the economic life of American society is much greater than the student from a middle class Caucasian family. The resources including buildings, specially designed instructional materials, and teachers to narrow this gap, are limited in rural Alaska, and in some cases they are non-existent . . .

It is a well accepted fact that it is not the student who has failed in the school setting, but the fact that the program provided has been inadequate . . .

In 1968, President Lyndon Johnson, speaking on the subject of the total national Indian situation, declared:

I am asking the Secretary of Interior, in cooperation with the Secretary of Health, Education and Welfare, to establish a model community school system for Indians.

These schools will:

have the finest teachers familiar with Indian history, culture, and language; feature an enriched curriculum, special guidance and counseling programs, modern instruction materials, and a sound program to teach English as a second language . . .

Following President Johnson’s lead, the United States Senate passed the following resolution:

The complete solution of Indian problems will require new and innovative services for the full development of Indian and Alaskan Native people and their communities . . . Necessary technical guidance and assistance will be given to insure future economic independence; that continued efforts will be directed to maximum development of natural resources; that inadequate and substandard housing and sanitation will be corrected; that a comprehensive health program incorporating and insuring curative and preventative physical and mental health will be further developed by Indian and Alaskan Natives; and that a long-term general, vocational, technical and professional education program will be encouraged and developed for both old and young American Indians and Alaskan Natives so that they may share fully in our society.

The Alaska State Legislature, in 1970, passed three resolutions, all addressed to the subject of improved education for the Alaskan Native population. The resolutions, house concurrent Resolutions 3, 4 and 5, contain the following:

It is universally recognized among Alaskans that improvements in the field of education are of the highest priority in fulfilling the needs of our state . . .

Whereas the Alaska Department of Education, in cooperation with the Alaska Rural Schools Project, the Governor’s
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general economic development, and education. On the topic of education the Task Force report made a special point to stress educational needs of Northerners and concluded that:

Above all they (federal and state education agencies) should recognize and make provisions for meeting the peculiar educational needs (language training for example) of these youngsters.

Contemporary studies on the national level, such as the Strinber Report (a study on Indian education commissioned by the Congressional Subcommittee on Economic Progress of the Joint Economic Committee) urged that federal schools for Indians be made models of excellence for the education of disadvantaged pupils, declared it to be essential to involve Indian parents in the education of their children, and indicated the inadequacy of the present curriculum especially as related to Indian culture, history and current life.

In 1966, in the publication Education and Northwest Alaska, Bureau of Indian Affairs officials stated the educational needs for Northern Natives as they perceived by their agency:

The principles and objectives of education evidenced in Native programs have too often failed in their application on the local school level and the curriculum has frequently remained a result of current educational practices as found throughout the public school system throughout the United States. Any innovations of educational planning have had to overcome distance, administrative problems in supervision, and traditional procedures before being utilized.

Even more recently, in 1969, the Alaska Governor's Commission on Cross-Cultural Education in their publication Time for Change in the Education of Alaska Natives, declared that:

In Alaska today, we have a unique opportunity to provide new meaning to the concept of crosscultural education. Our society is a composite of elements drawn from many facets of our multicultural society, in order to provide each individual, regardless of background, maximum educational opportunity.

Statements by Political Figures and Resolutions by Governmental Agencies

In a letter to the Honorable Harold Howe, then Commissioner of Education for the U.S. Office of Education, dated December 28, 1967, Dr. Clifford R. Hartman, Commissioner of Education for the State of Alaska, pointing out needs for educational support by the federal government, made the following comment:

The public schools must provide the vital link to progress and indeed the very existence of our democratic society. The gap separating a Native student in Alaska from full participation in
1928, with the publication of the report of a study by Dr. Lewis Meriam entitled *The Problems of Indian Administration*, some Alaskans have been aware of the shortcomings of educational programs for many segments of Alaska’s population. Meriam brought national attention to the need for Native-controlled and culturally inspired educational programs.

John Collier, President Roosevelt’s Commissioner of Indian Affairs, stressed the need to respect Indian culture which ultimately led to the passage of the Johnson-O’Malley Act in 1934 as one means of improving education for America’s indigenous population.

H. Dewey Anderson and Walter C. Bells of Stanford University reported in 1934 on their two-year study of Alaska for the U.S. Office of Education in an extensive volume entitled *Alaska Natives*. The research of Anderson and Bells, financed by the Carnegie Corporation, was the first comprehensive study of the sociological and educational needs of Native Alaskans. In their conclusions they lamented the dearth of Alaskan-based education research, and stressed the recommendation that:

The present subject-centered, formal curriculum copied too much from that of public schools in the States (they called the curriculum an “inert, patchwork of various American textbooks quite unsuited to an Eskimo environment”) should be abandoned in favor of an indigenous one to be worked out (in Alaska) and made up of desirable activities fundamental to the economic and social life and well-being of the people.

In 1941, the writings of Charles F. Reed of Teachers College, Columbia University, on the topic of Alaskan education, included the belief that:

...this type of curriculum is especially unsuited to the needs of Native children, who constitute a large majority of rural schools.

The former President of the University of Alaska, Dr. Terris Moore, chaired a special University committee in 1949-50 to study the needs of northern education and concluded that:

It is difficult to determine which (governmental) agency is responsible for (education). Native and white populations are mobile, but there is no coordination between the school systems, programs of studies, textbooks, or methods of instruction.

Just prior to the time Alaska became a state, Dr. Charles K. Ray, of the University of Alaska, made an extensive study of Alaska’s educational needs. Ray stressed in his report the need for new curriculums, especially those based on materials appropriate to the cultural environment, and the need for teachers specially trained with an understanding of cultural factors of the people of the North.

The advent of statehood brought about a federal-state “Task Force” in 1962 to study the educational-social needs of the indigenous population of Alaska. Initiated by the Secretary of the Interior, and joined in by the Governor of Alaska, the Task Force investigated the entire continuum of Native problems such as health, welfare, hunting and fishing, the land problem, village problems,
System of State-operated Schools. It may be said that only the state has clear constitutional and statutory authority to operate public schools in Alaska (or delegate this responsibility to local authorities). Also, it may be said that the authority of the federal government to operate public schools in Alaska has been acquired because of the unique historical relationship of the federal government to a particular segment of the population and through traditionally assumed roles. There is no reason to expect the authority of the BIA to operate schools to be challenged by the state as long as both the State and BIA hold to the conditions agreed to in Washington, D.C., in 1962:

It is agreed that closer coordination will be established between programs of the Federal Government which provide the State with financial aid for education. The Bureau of Indian Affairs intends to operate, its schools' otherwise fulfill its commitments to the education of Alaskan Natives in a fashion consistent with educational policy as it is developed by the State of Alaska. However, it is agreed that State policy should be formulated with full consideration of the limitations of law which govern federal activities and financial contributions.

It is important to note that at this time, "the plan that the state formulates" has not been developed. The state, by consenting to the final point of the agreement, has given license of a sort to the BIA:

Nothing in this statement is to be interpreted as a commitment by either the State of Alaska or the Bureau of Indian Affairs to a particular approach in meeting the educational problems in Alaska which are of mutual concern. At the time the State of Alaska provides policy guidelines for discussion with the Bureau of Indian Affairs, it is hoped that a commitment to particular actions may be made at both the State and federal levels.

Agreements and legal bases either real or traditional notwithstanding, the state cannot continue indefinitely to avoid full responsibility for all public education. With two large agencies, one at the federal and one at the state level, both assuming the same responsibility and with no visible unifying structure, a change seems essential. Compounding this situation is an internal administrative structure in the state requiring a disproportionate amount of decision making at the "top" and an internal administrative structure in the BIA with an excessive number of lateral levels. Because of the structure in each system ideas at the lower level have usually been prevented from becoming part of the total process. At present lines of authority for overall educational development clearly are uncertain. Uncertainty has discouraged ideas, hindered leadership and defied the principle of self-determination for segments of Alaska's population in the past and may continue to do so in the future unless substantial reforms are brought about.

Educational Goals and Programs

Studies attempting to define and assess educational needs unique to Alaska have been made over a longer period of time than is generally realized. Since
suggested by Chief Justice Marshall in an attempt to find consensus among conflicting ideas about the status of Indian tribes. It was believed by Marshall that the relationship of Indians to the government should “resemble that of a ward to his guardian,” but retain a form of independent sovereignty. The status of Indians, however, became much more exclusively that of ward rather than sovereign with the enforced settlements of Indians on reservations.

Early in the history of federal-Indian relationships treaties were often used, but since 1871 statutes have been the exclusive mode of dealing with Indian affairs. Legislation, such as the Indian Reorganization Act of 1934, which facilitated development of tribal governmental structures is an example of Indian legislation extended to Alaska that gives regulatory authority to the Bureau of Indian Affairs. Although Alaskan Natives were never in a situation requiring enforced settlement on reservations, BIA practices established outside Alaska apply to Alaska simply because BIA regulations are applicable to all of the United States. Thus, from this concept, Indians and Eskimos of Alaska may be considered to be the responsibility of federal officials. Adding force to this view, it may be that by the simple fact that Natives live on unpatented federal lands of the public domain, the federal government is obligated to assume a legal responsibility toward them. In the absence of litigation by Alaskans contesting BIA jurisdictional rights, and in light of a state school merger policy of “mutual readiness,” it appears that clear legal authority for BIA school operations is not needed and authority is based more on tradition and moral responsibility than on law. This position is expressed by the Bureau of Indian Affairs in their publication We Teach In Alaska:

The policy of the Juneau Area (i.e. Alaska) is based upon the point of view that Indians, Eskimos and Aleuts, as citizens of the state, are entitled to the same educational services and advantages as other citizens of Alaska. Therefore, the final responsibility for the education of all Native people rests with the state to the extent that they are situated as other citizens; and with the Federal Government to the extent that they differ from other citizens due to their origin and historical relations to the Federal Government. It is the policy of the Juneau Area to discharge the responsibility of the Federal Government, as stated above, whenever and wherever possible...

Due to the inadequate educational level of many Indians, Eskimos and Aleuts, and the inability of the state to carry the burden financially and to meet the educational needs of these people within the limitations of the state policy, and prescribed courses of study, it is the policy of the Juneau Area to operate schools directly... until such time as these limitations have been removed.

For the time being, vague “legal” responsibility appears to satisfy most officials concerned with Native education.

The legal basis for State-Operated schools is clear and simple; the legislature, taking its mandate from the Constitution to “establish and maintain of public schools open to all children” has provided by statute for a
1. A minimum enrollment in grades one through eight of ten or more pupils in state schools and an anticipated minimum average daily attendance of twelve pupils in the BIA schools is required.

2. Evidence of future population growth of the community should exist.

3. Other factors to be considered are availability of funds and feasibility of transporting pupils to existing schools.

In those situations where an insufficient number of pupils exists to meet the minimum for an elementary school, the state will provide elementary level correspondence courses.

Teacher responsibilities in the rural schools vary according to the policies of each agency. BIA teachers, employed on a twelve-month basis, in addition to the regular school program, are often directly involved in adult education, summer programs, school lunch program, and community activities. Teachers in state schools, generally employed for nine months, are either not directly responsible for, or not necessarily available to perform or administer these services.

Legal Basis for Alaskan Native Education

With the advent of statehood the responsibility for education of Alaskan Natives became the legal responsibility of the State of Alaska. Indians and Eskimos, as full citizens of the state, free of treaty encumbrances or reservation status, clearly came under the full influence of the Constitution of Alaska. Thus, a state constitutional section providing that “the legislature shall by general law establish and maintain a system of public schools open to all children” refers as surely to Alaskan Indians and Eskimos as to other citizens of Alaska. Former federal and territorial school laws reserving responsibility for Native education to the federal government had been designed for a territory without sovereignty. State constitutional provisions notwithstanding, the federal government continues to retain responsibility for the education of many Natives in Alaska. The legal basis, if any, by which the Bureau of Indian Affairs continues to justify supporting and operating educational programs in Alaska is vague.

In states other than Alaska where Indian reservations are found, the BIA possesses final authority over most tribal actions as well as over many decisions made by Indians as individuals. For example, BIA approval is required when a tribe enters into a contract, expends money or amends its constitution. The normal expectation on the reservation is that the Indians may not do anything unless it is specifically permitted by the government. In Alaska, nevertheless, where there are no reservations in the formal sense, nor treaties with defeated Indian nations, the BIA continues to maintain a position in the “protection” of off-reservation Indians and Eskimos.

Detailed analysis of the historical legal relationship between the federal government and the Indian tribes in the United States per se is beyond the scope of this paper; but because BIA authority in Alaska is based in part on precedent in other parts of the nation, brief mention of the relationship is appropriate. A cept that Indians as members of “domestic dependent nations” was
vocational, and social skills necessary for equal participation as productive citizens of Alaska.

The Alaska State Department of Education in its public information publication *North to the Future* acknowledges state responsibility for education of people in the rural areas:

The State itself may be the logical unit for operation of certain kinds of educational institutions or programs (in the rural areas), and it is necessary in Alaska to have the State as a single attendance area for rural schools.

Thus each agency provides essentially the same service for the same population; viz., education in rural Alaska populated for the most part by the state's autochthonous inhabitants.

The State-Operated rural schools are located throughout the state, but mostly in Central and Western Alaska. Average school enrollments range from twelve to sixty pupils for grades one through eight, and average schools employ one to four teachers.

Secondary education provided by the state in rural areas is especially limited. Most small communities with elementary schools are unable to support a high school program. In those small communities where high school programs have been established, curricular offerings are of necessity extremely limited and the education obtained by students attending them is meager. Although small elementary schools may be operated with only one teacher, much more difficulty arises in successfully operating small high schools. Of the 116 rural communities in which the state operates schools, nine offer secondary programs with only four of these high schools enrolling more than fifty students.

Of the fifty-eight day schools in rural Alaska operated by the Bureau of Indian Affairs, about two-thirds are of one and two classrooms located in remote, isolated villages. The four largest schools in Barrow, Kotzebue, Hooper Bay, and Unalakleet provide junior high school programs in addition to the elementary programs.

Most BIA schools are located in Western and Northern Alaska. At the present time the BIA operates a boarding high school at Mount Edgecumbe near Sitka which enrolls children from all parts of the state. A few schools operated by the BIA offer directed correspondence study courses in high school work. Chemawa School in Oregon, which has been attended by Alaskans since 1961 and Chilocco School in Oklahoma, which has been attended by Alaskans since 1968, offer a full high school curriculum for Alaskan pupils. These schools absorb overflow BIA enrollment which cannot be accommodated in Alaskan facilities.

Under present policies, both the BIA and State Department of Education establish rural elementary schools wherever a minimum number of children of school age reside. It is the basic premise of both agencies that an elementary educational program should be offered at the community or village level in preference to sending young children to a larger elementary school on a boarding basis.

The following criteria are considered in the initial establishment of rural elementary schools:
The Pedagogical Situation.

Education.* The State legislature allocates the major share of financial resources for the support of each of these two systems. Local districts augment state support with local taxes, but there is no local support, and no local control, in State-Operated Schools, as there are no organized local units. The third element of the tripartite is the federal system of rural schools for Alaska Natives operated directly by the U.S. Department of the Interior's Bureau of Indian Affairs.

There are twenty-seven local school districts in Alaska, each with their own elected board of directors and superintendent of schools operating under laws of the State legislature and regulations of the State Board of Education. These districts collectively enrolled 52,166 pupils and utilized the services of 2,614 professional workers in 1967-68. In administrative structure and control they are unrelated to the State-Operated Schools and Bureau of Indian Affairs schools. Because the local school districts are more often located in the populated regions and towns of Alaska than elsewhere and because their operational procedures are not unlike those of typical school districts across the country, they are not usually considered in the same realm or operational scheme as the State-Operated Schools and Bureau of Indian Affairs schools. A much closer relationship in geography and purpose exists between Bureau and State-Operated Schools.

There are 173 villages in Alaska that do not have local districts but do have schools, primarily for Eskimo, Indian, and Aleut pupils. Of this number of schools, 100 were administered in 1970 by the Alaska State Department of Education, enrolling about 5,200 pupils and employing 314 teachers. Also in 1970 the state operated two boarding high schools with about 300 pupils and twenty-five teachers. The remaining seventy-three schools, with 5,888 pupils and 260 teachers, were under the direction of the Bureau of Indian Affairs (BIA). In addition to the village schools, the Bureau of Indian Affairs operates two boarding schools in Alaska, one a high school of 673 pupils and thirty-six teachers and the other an elementary school enrolling 232 pupils and employing fifteen teachers.

Each component of the federal-state rural system defines its role along similar patterns and purposes in providing educational programs in the rural areas. According to the opening statement in a booklet prepared by the Bureau of Indian Affairs for public information:

All of the education programs conducted by the Bureau of Indian Affairs in Alaska are for the purpose of providing opportunities for Native people to achieve academic.

* On July 1, 1971, State-Operated Schools came under control of a semi-autonomous Governor-appointed board of education established by the Alaskan legislature specifically for the purpose of creating a special body to be responsible for rural schools and subsequently separate the State Board of Education and the State Department of Education from direct school operations. The exact relationship of the new board to the State-Operated School System is still vague but the schools clearly remain State controlled, with legal local influence provided.
Systems of Education for the Alaskan Native Population

Systems of Public Education

Over the past hundred years throughout the United States many administrative arrangements have evolved as local populations, state governments, and the nation as a whole have designed systems to control and support public education. It might be said that nowhere has a more unusual structure of education been developed than in Alaska. A history clearly unlike any other region of the United States, an indigenous population with cultural patterns distinct from any other American group, and a physical environment described only with superlatives which are both positive and negative, have all combined to influence the making of an anomalous system of education for a large portion of the people of Alaska.

There is in Alaska what may be considered a complex tripartite system of education. Two parts of the system are organized so that their functioning is the responsibility of the state, i.e., a group of local districts with local boards with delegated by the state legislature and the State-Operated Schools directly by legislative act and regulations of the State Board of
All northern senior students do obligatory school practice. Practical work is done in the best secondary schools of Leningrad under the guidance of experienced teachers of the Institute and school teachers. As long-term experience shows, northern students cope with their pedagogical practice in Leningrad schools quite well.

All students of the Northern Peoples Department live in a special hostel, a boarding house, where they have their own self-government — the Student Council of the boarding house. They issue a wall newspaper, see to the routine in the hostel and organize amateur parties, students' meetings with scientists, writers, actors and foremen of industry.

During the twenty years of its existence the Northern Department of the Hertzen Pedagogical Institute provided all national districts and regions with teachers of different specialties, who were Natives of the Far North — they are the children, grandsons and granddaughters of hunters, and the reindeer-breeders. Their fathers began to learn reading and writing in the twenties and thirties while their grandfathers were illiterate and led a semi-primitive life.

All graduates work in the national regions they came from. Now all over the large territory of the Soviet Far North our graduates work in national schools. There are many schools where several northern teachers — our graduates — work together and many who were graduated from our Institute are now headmasters.

Most of our graduate Northerners are at the head of local educational bodies, for instance: Mikolai Sharin is Minister of Education of the Yakut ASSR, Michael Istomin is Head of the District Committee of Education of the Nenets national district; Boris Plavkin is Manager of the Regional Department of Education in Chukotka, and others. Some of them have become scientists — a Chukcha man, Peter Inenlikey, Manalan (Mikhail Kile), and a Nenet woman, Mary Barmich, are now philologists and do research work in the field of their mother tongues. The Evenk, Alexandr Shublin, a historian, does research work in the field of ethnography, and the Nanalan, Vladimir Bely, a specialist on physical culture and sports, became a scholar in the field of education.

The Nanalan, Grigori Hodzer, the Mansi Ivan Shetsholov, the Nivkh, Vladimir Sangi, the Nenets, Vasili Lodkov, and the Evenk, Vasili Lebedev, graduates of the Northern Department, have become well-known writers and poets.

All these facts go to prove that for many years the Northern Department has been not only the main link for providing teachers with a higher education and leaders of local educational bodies for the regions of the Far North, but it has been the foundation for the growth of talented intellectuals of the national minorities who do successful work in different spheres of culture and science.

Since 1957, Advanced Refresher Courses lasting a year for teachers of primary schools of the Far North have functioned.

National teachers having a secondary pedagogical education are sent for courses to improve their knowledge of Russian, mathematics, the languages of the northern peoples, fine arts and other subjects and also of the methods of teaching these subjects in elementary schools. The students of the Advanced Refresher Courses study the methods of the best teachers in Leningrad schools and do practical work under the guidance of their teachers.
The Pedagogical Situation

Such are the results of the higher pedagogical education of the northern peoples in the Soviet Union, which illustrate the practical results of the Communist Party's Leninist national policy.
The Pedagogical Situation

Frank Darnell

Frank Darnell is Professor of Education and Director, Center for Northern Education of the University of Alaska. Dr. Darnell served as a rural teacher and public school administrator throughout Alaska prior to moving to the University. The following paper was not presented at the Conference although it was written about the same time. It was prepared with several purposes in mind, one of which was the general inventory function of the Conference and thereby fits the theme of this book. The Alaskan situation described in this paper, while still essentially current, has undergone some change since 1970 and is not to undergo substantial revision in the near future as the current mood for change prevails.