## THE UNGAVA BAY PROBLEM

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In A civilized and increasingly complex world, native and primitive peoples become farther and farther removed from the apex of civilization, unless they are assisted and educated to keep pace with, or to approach, that civilization. This disparity in tradition and outlook becomes the more striking and the more serious where the two cultures touch one another, as when civilized man encroaches upon the economy of the native to such an extent that the original native economy has been totally disrupted and the native has become more and more dependent on the civilized man.

In these circumstances the native can be easily and completely corrupted by the acceptance of unfamiliar moral standards which do not apply to his own historic experience, and he can become so dependent on the white man's trade that he loses his original arts of hunting and travelling, and is then unable to look after himself if the economy of the white man deteriorates, or even fluctuates.

These ill effects have been demonstrated in many instances all over the world. It follows that there is an obligation on the white man to protect the native, or so to manage the affairs of the native that he survives—and this obligation rests on government rather than on the trading companies as such. In some parts, as in Greenland, the two have been the same; there was until recently, a government trading monopoly in Greenland. If they are not the same, as in northern Canada, it is still the concern and obligation of government to manage the affairs of the native peoples within the national boundaries, because the private trading company, which is commercially interested, may not be able or willing to undertake the cost of the recuperation of the native economy, especially when the deterioration of that economy has gone as far as in the Ungava Bay region of Canada. Government then reaps the reward of having at some earlier time taken the risk of entrusting the affairs of the native to private interests.

There are two possible points of departure in a process of rebuilding the native economy and morale: (1) to attempt to assimilate the native population immediately into the activities of civilized man in the area; and (2) to attempt to put the native economy back on a footing as near as is reasonable to the original—at least to base it once more firmly on the real wealth of the native region—and to graft in, gradually, the patterns of civilization in the process. Both these policies carry the assumption that the ultimate civilization of the native population is inevitable, if not desirable.

The first alternative, although it seems to be popular at present, may be unworkable. A lengthy period of unearned support and of education is necessary before the native people are ready to take part in civilized activities,

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such as radio communication, air traffic, and mining. They can, of course, be used simply as cheap labour, in which case they are being frankly exploited and have no hope of ever being anything else. Assuming that the objective is better than that, what is to happen in the period of education and apprenticeship, which may last for a whole generation? If they are allowed to continue to lose their original economy and means of livelihood, they become a direct charity load on the public exchequer, to the detriment of both the native and the exchequer.

The wiser course is the second, in fact it is probably the only course that is likely to succeed. In Greenland, where the process of introducing the native fully into civilized life is in mid-swing, the amalgamation of native



Calanus in Calanus Harbour, Button Islands, August 1949.

traditional life and introduced civilized economy is the explicit policy of the Danish Administration. The principle has always been that the economy of Greenland should be based on the real wealth—the seals, the fish, and the fur —of the country, with assistance from mineral wealth when and where found. There was no deterioration of the native life comparable with what is happening now in Canada, although such a condition was threatened in the eighteenth century, leading to the formation of the Royal Greenland Trading Company in 1774, and the management of all trade in Greenland as a government monopoly.

In Canada, at least in some parts of the Eastern Arctic, including Ungava Bay, there is a certain amount of back-tracking to be done before a sound condition is reached from which the process of civilized advancement can begin. It should be emphasized—for this is a point which, it seems, is not digested on first presentation—that the time-scale in this matter may be large. Significant changes in the economic habits of a human group cannot be made in a few years, perhaps not in less time than a few generations. It has taken two hundred years to achieve the present stage of results in Greenland, and though the pace there has been deliberately kept down, those two centuries of time must serve as a warning and a lesson to us in Canada who have begun, so recently, what the Danes began in Greenland so long ago.

Ungava Bay is a body of salt water, along the shores of which live less than one thousand Eskimo, who tend to concentrate at the trading posts of Payne Bay, Fort Chimo, and George River. From Port Burwell to Cape Hopes Advance is about 150 sea miles, and it is somewhat less than that from Akpatok Island to the mouth of the Koksoak River in the south. Trapping



Port Burwell, July 1949.

at Payne Bay is still good enough to warrant keeping the trading post open there, and Chimo serves as a trading post not only for the Eskimo, but for the small Indian population which formerly traded at Fort Mackenzie before that post was closed in 1948. It is understood that George River is to be closed in 1952, and the post at Leaf River was closed some years ago. There is no post now at Diana Bay, which lies just outside Ungava Bay, and the post at Port Burwell was closed in 1941.

Clearly the fur trade on the shores of Ungava Bay is not booming. The condition of the trade is of course reflected in the Eskimo, who are poor, and rely heavily upon family allowances and Government relief. They tend more and more to collect at the posts themselves, especially Chimo, and their diet contains too high a proportion of store-food—white flour, hard tack, lard, and tea. Their state of health is poor; on this point the writer has no details to publish, nor are any apparently available. The general initiative is correspondingly low.

The low state of enterprise and energy results, as would be expected, in reduced hunting and fishing activity. This, combined with the growing strength of the feeling that "the Government owes us a living", forms a depressing picture. One group of natives was willing, when it was suggested, to go up the Payne River after white whales which were known to be there, but expected as a matter of course that the necessary gasoline for fuel should be given them free. The gasoline was not forthcoming, and the whale hunt did not take place. Examples of this sort are fairly common. The reduced activity in hunting in turn reflects upon the nutrition of the natives, and so the process is circular, and spiralling downwards. Fur is not the only resource that is in short supply. It must be said, in defence of the reluctance of the Eskimo to go hunting, that the rewards are not overwhelming. Caribou are becoming increasingly scarce, by all accounts, and according to report suffered a major, and unexplained, setback about 1918, when the migrating herd which usually crossed the Koksoak River



Peterhead boats at Chimo, July 1947.

each year, failed to appear. It has not appeared since. The sea mammals, although present, are not abundant in Ungava Bay, and moreover the season of good hunting is very short—about three weeks in June and July between the break-up of the ice and its disappearance from the bay. Almost all the ice has gone, in an average year at this point in the climatic cycle, by the middle of July. The seal, especially the ringed seal (*Phoca hispida*), leave with the ice; only a few bearded seal (squareflippers, *Erignathus barbatus*), and fewer harp seal (*Phoca groenlandica*) and ringed seal, remain in the open water for the rest of the summer. Even so, the number of seal sighted during four summer seasons' field work in Ungava Bay is not so small as the low hunting activity would lead one to suppose, and the families still energetic enough to go sealing can make considerable kills. One record, admittedly very exceptional, is that of a camp in the southwest part of the bay in 1947, consisting of two families in five tents, with two Peterhead boats and three

kayaks, which landed 79 ringed seals and 42 squareflippers in a period of about three weeks, in late June and July. Coming in to the mouth of the Koksoak River on 2 September 1950, the *Calanus* sighted about 12 harp seal, some 6 bearded seal, and a number of ringed seal, and groups of bearded seal were recorded in all four seasons both before and after the disappearance of the ice.

The winter hunting conditions on the ice are apparently very unsafe owing to the extremely large tidal range and the strong tidal currents; consequently there is little seal hunting in the winter.

It is not clear whether there has actually been a decline in the sea mammal population of Ungava Bay, or whether these waters have always, or for a long time, been comparatively poor in them. One native at Fort Chimo told the writer that "about 40 years ago" walrus were common at the Gyrfalcon Islands, in the southwest part of the bay, but it is doubtful whether great credence should be given this report without corroboration from other sources. Walrus now are common only at Akpatok Island, at certain times of year, where they are occasionally hunted by the natives of Payne Bay and the Cape Hopes Advance region, until the ice leaves the island in July. For most of the natives of Ungava Bay, walrus scarcely figure at all in the annual cycle.

It is conceivable that the recent warming of the marine (and atmospheric) climate of the Atlantic Subarctic, which has so strongly affected the west Greenland coast, has caused a reduction in the sea mammals of Ungava Bay, but it can scarcely be considered probable. It is true that the waters of Ungava Bay, at least the overlying layers, are subarctic—influenced, that is to say, by Atlantic water—and that such subarctic indicators as the Atlantic cod (*Gadus callarias*) and the Atlantic salmon (*Salmo salar*) are present in certain parts, but there is good evidence for the presence of both these forms at least as far back as the 1880's, so that recent hydrographic changes can hardly be postulated. Unfortunately, the first observations of salinity and temperature in Ungava Bay were made in 1947, and we have therefore nothing from which to construct the hydrographic history of the bay.

If any reduction in the sea mammal population has taken place, it is most probably the result of the use of the rifle by the Eskimo, and of the coarsening of the native hunting skill. From observation of Eskimo hunting in Ungava Bay during four seasons, the *Calanus* expeditions came to the conclusion that for every seal landed during the summer, three are lost owing to sinking, the seals having been killed by rifle fire from a distance, far out of harpoon range. Such a waste of a natural resource would never be tolerated among the fish and game circles in civilized communities, but it has been going on for years in the north, every summer. It has led to the natural conclusion that the seal population must be declining. It may be, but we have no proof of it.

Whatever the present status of the seal and walrus populations, it is certain that even were a return to the hunting manners of their forefathers possible, it would not solve the present economic problems of the Eskimo of Ungava Bay.

The establishment of an air base near Fort Chimo might have had as little effect upon the Eskimo as the Greenland bases have had upon the Greenlanders.

In the early years of the war the air bases in Greenland were declared out of bounds to the native population, and similarly the native settlements were off limits to military personnel, in fact to all personnel from the military establishments, with the result that the price structure carefully maintained by the administration over several generations did not suffer, and there was no deflection of the constructive efforts of the Greenlanders into the labour requirements of the airfields and weather stations, which for the native is a blind alley. At Chimo, however, and also at other northern airfields in Canada, there was no effort made to keep the natives off the base limits. They were welcomed, settled down in villages, and proceeded to forget a little more of the habits of independence. Employed as help in the mess, as unskilled labour, and a few as truck drivers, they gained a false sense of big-time importance, and the scorn or secret envy of their less evolved compatriots, according to the points of view of the latter. They became a little farther removed from an economy based on the real resources of their country, and the future holds nothing for them but the continuation of their present lot for as long as the work exists for them-or for as long as they wish it-and after that a return to the failing economy of the Ungava Bay Eskimo as a group, with still less mental equipment to deal with that problem than they had before.

It is of course a great saving to the white man engaged in building or maintaining a northern airfield to be able to employ local native labour at two dollars a day, rather than to be forced to import expensive white labour; and the glib official good intentions of those who wish immediately to "integrate the Eskimo with the march of civilization in the north" fit all too well into this saving of expense; but it is possible that such published intentions reflect a complete ignorance of the highly complex problems involved, or else an equally dangerous unwillingness to face them. The history of Indian affairs in the United States, with the object lessons of the dangers of walking into the slough of the easy way out, is before us; and the extraordinary complexity of the labyrinths through which it is now necessary to feel one's way back are well shown up by such studies as Dr. Laura Thompson's book 'Culture in Crisis' on the Hopi Indians, or Mr. John Collier's 'Indians of the Americas' on the American Indians in general. It is very important to realize that the feeding and clothing and shelter of the Eskimo is not by any means the whole of the question, and that the consequences to the native mentality of what amounts to a brutal dislocation of their traditional ways of life, and ways of thought, can cause irreparable damage. It appears that in all human affairs the mental damage wrought is the hardest to repair. To put the Eskimo problem in Ungava Bay in the picturesque terms used by the Brazilian natives employed in one of the Fawcett searches-their souls may never catch up with their bodies.

In 1947 the Fisheries Research Board undertook the study of the physical and biological oceanography of Ungava Bay, with a view not only to putting our knowledge of those waters (and of other Eastern Arctic seas) on the approximate level reached by other countries in other parts of the north, but also to discovering, if possible, hitherto unused marine resources which could be developed by or for the Eskimo. Ungava Bay was found to be unsuitable for trawling or for normal commercial exploitation, but certain possibilities were brought to light at Port Burwell, and Burwell became fixed, in the mind of the present writer, as a possible key to the problem of Ungava Bay. Before dealing with this in any detail, it will be necessary to describe briefly the history of fishing activities of all kinds in this region. It is not a long history.

The Atlantic salmon reaches its northerly limit in Canada in the rivers of Ungava Bay, from the Koksoak eastward. The salmon start to run between late July and the third week in August. The run is variable in extent, and therefore unreliable as a source of food for man or dogs. Nevertheless the salmon is of some importance economically to the Eskimo of Ungava Bay, and the unreliability of the upstream run is therefore a matter of considerable concern to them. The fish are taken in gill nets. The present annual catch on the Koksoak River probably varies between about 10 and 40 300-lb. barrels. The catch in 1947 was estimated at about 35 barrels, in 1948 less than 12 barrels. The George River catch was approximately the same in 1947 as on the Koksoak, but in 1948 less than 5 barrels were obtained.

It is possible that the salmon fishery was damaged by commercial fishing which began in 1881 (on the Koksoak; 1884 on the George and Whale rivers), and continued until the early 1930's. Both the total catch and the average weight began to decline as soon as the fishery opened. About 40 tons of fish were frozen for shipment in 1881, average weight 19 lbs.; 24 tons in 1882, average weight 16 lbs.; 38 tons in 1883, average weight 14.5 lbs., and less than 40 tons in 1884, average weight 14.7 lbs. In 1899 A. P. Low reported that the salmon fishery had steadily declined and that in 1897 it had been an almost complete failure. The present status of the salmon population is uncertain.

The arctic char (*Salvelinus alpinus*) occurs in all suitable rivers in the area; in the southern part it is replaced in some of the smaller streams by the speckled trout. During the upstream migration it is caught in gill nets and with long-poled gaffs, and in much smaller numbers it is taken also in the winter, in lakes. It does not appear to support so important a fishery as does the salmon, no doubt because the latter is the larger and therefore the more valuable fish to the Eskimo. As is usually the case with the arctic char, it could be subjected to considerably greater fishing by the native population, if the activity were spread over the many streams which are now hardly touched at all. Intensive fishing on one river, however, would probably do serious harm.

There is a certain amount of winter fishing on the lakes, with gill nets set beneath the ice, for lake trout and whitefish.

It will be observed that there is no salt water fishing in the above account. Apart from the netting of salmon and char in tidal stretches of rivers, the jigging of a few sculpin, and the catching of the occasional codfish (at Burwell), there is no sea fishing activity in the bay. While it is possible that both salmon and char fishing, particularly the latter, could be developed by the Eskimo, these two resources could not provide the volume of native or "country" food necessary to restore the economy to health. Salt water fishing at Burwell, however, might save the situation.

It is significant that Burwell, the least attractive of the Ungava Bay settlements from the point of view of the fur trader, should appear as the richest of them all from the point of view of the old-style Eskimo. There is no doubt that it is. Burwell is on the route of one of the groups of harp seal on their fall migration to Newfoundland, in October and November, and this alone assures the few Eskimo left there of enough seal for almost the whole year. Burwell also lies close to the Button Islands, which can usually be relied upon to provide good seal hunting throughout the open season (the islands cannot normally be reached in the winter). Ringed seal, harbour seal (*Phoca vitulina*), harp seal, and squareflippers are all taken in summer at the Button Islands by the Burwell natives, although the shortage of good boats makes the visits somewhat rare. Polar bear are occasionally shot there. The waters in the immediate vicinity of Burwell itself also appear to be richer in seals, especially bearded seals, than the remainder of Ungava Bay.

It is not surprising that the few Eskimo who did not leave Burwell in 1941 when the post was abandoned (there are now about twenty of them) should be the best situated in the bay. The surprising and depressing thing is that so few stayed, that the majority preferred to follow the trade-store to George River or Chimo.

Burwell stands out from the other points in the Ungava Bay coast in one other respect—it is the only place where a marine fishery could be developed. Atlantic cod (*Gadus callarias*) spend some ten weeks at least in the Burwell area, from the latter part of July to the end of September approximately, and can be caught by hand-line at the rate of about 20 fish per man-hour, or a little higher. The fish are fairly small, up to about 75 centimetres, but they are good eating. The Greenland shark (*Somniosus microcephalus*) is common, and could also be used, once the Eskimo gets over his aversion to the shark. Sharks are a nuisance to the seal hunters, who seem somewhat scared of them, and they have never learnt, as the Greenlanders have, the value of the liver, or to use the dried flesh for dog-food; and they are quite unaware that there exists anywhere a market for the skin.

Marine fisheries, and the possibility of marine fisheries, are rare in the Arctic. They belong to the Subarctic and to zones farther south, and it is worth observing that the Eskimo, who have arrived in Greenland and the Labrador by arctic routes, have not developed marine fisheries to any significant degree by themselves, but only with the initiative and help of white men. Where marine fisheries have been developed they have proved of vital importance to the native, especially in west Greenland, where the cod fishery is now by far the biggest single industry. The Burwell area of Ungava Bay, it should be emphasized again, is subarctic, so far as the sea is concerned.

In Ungava Bay, it is clear that the one group of Eskimo who do not need help, by the development of fisheries or anything else, is the little Burwell group, and yet it is there that a possible solution of the Ungava Bay problem as a whole is to be found, in cod fishing and shark fishing. The general objective of a "Royal Commission on Ungava Bay" might be the turning of the Eskimo's attention to Port Burwell, and the stimulation of a native fishery there which would provide salted, frozen, or possibly dried fish for distribution to other points along the coast, for human and canine consumption. (The Burwell climate is not well-suited to drying fish.) This development would involve the summer migration of some of the natives from



Greenland shark (12-foot) on deck of Calanus, August 1949.

Chimo, Payne Bay, and George River, to Burwell; it would at the same time bring them to better sealing waters, and they might be able to remain, after the fishing, for part or all of the period of migration of the harp seal.

The bare bones of this scheme are easy to draw. There are practical problems involved, none of them, I believe, insoluble. For the proper operation of such a fishery, there will be a need for: (1) a small processing station at Burwell; (2) more boats; (3) the education of the Eskimo, and (4) a system of internal trade in Ungava Bay which will both distribute the fish economically and fit it into the established summer activities, such as salmon fishing and sealing. It will require, at first, a capital outlay on a small scale and the system will probably not pay for itself in the first few years. Almost certainly it must be administered by government, but it would be wise to do it rather more economically than many Government enterprises in the north.

An experimental fishery station was in fact set up in 1950, by the Northern Administration of the Department of Resources and Development, and the few Eskimo at Burwell were induced to catch codfish with hand-lines, for their own use. Some 6,000 fish were salted away. The enterprise was strictly experimental, intended to demonstrate the scale upon which such a fishery could be maintained. The fact that the salt fish were not immediately con-



Peterhead boats at Payne Bay, July 1947.

sumed by the Eskimo is immaterial—it has already been pointed out that the Burwell natives themselves do not need the fishery.

Apart from one Peterhead boat which the Hudson's Bay Company moved from Lake Harbour to Port Burwell in 1951, in connection with a possible fishery there, there has been no new boat brought into Ungava Bay for many years; and the present state of the fur trade does not suggest that the purchasing power of the native will be able to bring them, in the foreseeable future. It is understood that arrangements are being made at present for the building of whaleboats at certain northern trading posts, including the Ungava Bay region, and this may considerably ease the present shortage. For the distribution of Burwell fish to other parts of the bay, however, at least one larger vessel will be required, perhaps a 50-foot boat with good cargo space, which could be beached at Fort Chimo each winter. Such a vessel could also transport some of the Eskimo engaged in the Burwell fishing. Small dories are best for the actual fishing, which would be largely by hand-line—long-line does not appear to be a useful method at Burwell—but native-owned whaleboats and Peterhead boats could also be used. These latter boats at present have gasoline engines. With gasoline at a dollar a gallon, it would probably be better to change over at some time to diesel engines, and to induce the Eskimo to re-learn some of their old sea-going habits and use sail alone whenever possible. There is seldom any prolonged absence of wind in Ungava Bay.

The problem of the education of the Eskimo is far wider than the present matter of the development of a fishery at Burwell, but the fishery is one of the kind of things for which they have to be educated. Only two points need be made here; first, that we are disgracefully late in introducing adequate schools in the north, and second, that much of the ordinary grade school curriculum is not appropriate to Eskimo purposes. The Eskimo needs to know precisely what his position is in the modern world, and what the real foundations of his present economy are. For this he needs to learn English, a little mathematics, some practical mechanical and electrical engineering, and some biology-not the kind that demonstrates that under certain circumstances a bean will germinate, which he knows already, but the kind that deals with the balance of natural populations, including his own. Whether he becomes a little Protestant or a little Catholic is a secondary consideration. If the curriculum is specially designed for the Eskimo, and if the teachers themselves know what the present issues are in the north, the schools will be a great success. If our own educational system is simply moved north, and if the teachers imagine that teaching the Eskimo is in no way different from teaching anyone else, the schools might as well not be built.

The system of internal trade best suited to the fitting of a marine fishery into the Ungava Bay economy is essentially an ad hoc problem; it can be adapted to the immediate situation. Certain things can be foreseen, however. Those who leave Chimo or George River to fish for cod will miss the salmon fishing. This should not reduce the salmon take significantly, if at all, since the number of nets operated can be held constant, but the salmon fishers may produce a surplus over and above their own needs. The cod fishermen certainly will produce a surplus, especially the native Burwell population who may have no need for the fish at all. Some system of barter, therefore, will be necessary. The seal take at Burwell will be increased, much of which will be taken back to Chimo or George River; some could be traded for spruce logs from Chimo, just as sealskins from Payne Bay are at present sometimes traded for firewood from Chimo. Depending on the extent to which the Government or trading company are involved, it may be best to buy some of the cod with cash, and to open a trade-store at Burwell. The cod so purchased would then be taken to other coastal points in the fall. Certain of the products of such a fishery might be saleable in outside markets, such as shark- and cod-liver oil, and shark leather. Possibly a cooperative system could be developed.

Many old hands in the north may not like these ideas. Eskimo, they may say, will not fish for cod; they will not eat salt fish; they will not touch shark, and so on; to all of which one obvious counter is that the native population of Greenland is engaged in shark and cod fisheries, and the salt can be leached out of the fish. It could also be pointed out that there must have been a time when the trapping of foxes seemed just as foolish a novelty to the Eskimo hunters as cod fishing may seem today, and that their employment at air bases must come less naturally to them than going to Burwell to fish. Moreover, there are other new things on the way. Mining, for instance, may open up on Ungava Bay any year, on a large scale. If Eskimo can be employed in mining operations, they can also go fishing for cod, and moreover the mining companies (and the personnel at air bases or weather stations) would provide an immediate market for some of the fish.

The argument has also been raised that there is not time for such a development as has been suggested here, that the problem of bringing the Eskimo into the march of civilization is immediate. The Eskimo, it could be maintained, is highly adaptable, and would come to no harm by such a rapid transition from hunter and trapper to miner or radio technician, and he could learn the necessary techniques very quickly.

A third, and not very admirable point of view might be that it is not worth all this trouble; less than 1,000 people are involved in Ungava Bay, and besides they have little political importance. Such an attitude does exist. It can be firmly rejected, but it cannot be ignored.

There is, in fact, plenty of time to follow the general policy advocated in the early part of this article. If at the same time it is possible to train Eskimo quickly to become skilled as well as unskilled labour, well and good; at least we must have the proper schools. And in general, the two cardinal rules of policy in handling the Eskimo problem should surely be: (1) no charity (beyond the usual matters of the aged and the disabled), and (2) use the local resources to the utmost, consistent with their conservation.