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ORIGIN OF THE COPPER ESKIMOS AND THEIR COPPER CULTURE *

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There is a peculiar attraction about a people which is in the transition stage between the stone and the iron ages.¹ In such a people we seem to be studying not so much the development of an outward civilization as the mental processes of man before the dawn of history. For this reason, as well as for the intrinsic beauty of its relics, the bronze age of Europe has always attracted a host of enthusiastic investigators. America, too, has had its transitional period, in some places a true metal age marked by the smelting of copper and of tin, in others only a pseudo-metal period, copper being treated simply as a malleable stone. The Eskimos inhabiting the regions around Coronation Gulf were in this pseudo-metal stage. Pure native copper is found there in three places; at the head of Prince Albert Sound on Victoria Island, in the Copper Mountains west of the Coppermine River near its mouth, and on the islands in Bathurst Inlet. Copper obtained from all these sources was hammered into tools and weapons by the Eskimos, but most of their supply seems to have come from the Copper Mountains. Among the Eskimos of northern Greenland there was also a pseudo-metal period marked by the use of meteoric (and possibly telluric) iron instead of copper; but this use of iron never extended outside of Greenland and so does not come within the scope of this paper, which is concerned only with the Central Eskimos and their copper.

THE ANCIENT POPULATION IN CORONATION GULF

The earliest evidence of inhabitants in the present home of the Copper Eskimos, the region around Coronation Gulf, comes from archeological sources. At various places along the coast there have been found graves in the shape of stone cairns and ruins of houses built of wood and covered over with sod. The Copper Eskimos of the present day, like their kinsmen in Hudson Bay, do not cover their dead, but merely leave them on the surface of the ground to the mercy of the elements and beasts of prey; but stone cairns of a similar character to those of Coronation Gulf were discovered by Mr. Stefansson on the fringe of the Mackenzie region around Cape Parry and Langton Bay. Houses of wood covered over with sod are also unknown to

* Published by permission of the director, Victoria Memorial Museum, Ottawa.

¹ By stone, copper, bronze, or iron age throughout this paper I mean the period during which stone, copper, bronze, or iron predominated in all implements that require an edge, as knives, harpoon points, arrowheads, etc.

the present inhabitants of Coronation Gulf, although in the Mackenzie delta and in Alaska they constituted the normal type of dwelling. Excavation of the ruins revealed the presence of pottery, likewise a western, not an eastern Eskimo product, together with harpoon points and fishhooks that were foreign to the Copper Eskimo culture but quite usual in the Mackenzie delta and in Alaska. We can have no hesitation therefore in ascribing these ancient ruins in the Copper Eskimo country to a tribe or tribes affiliated with the Eskimos dwelling today in the Mackenzie delta.

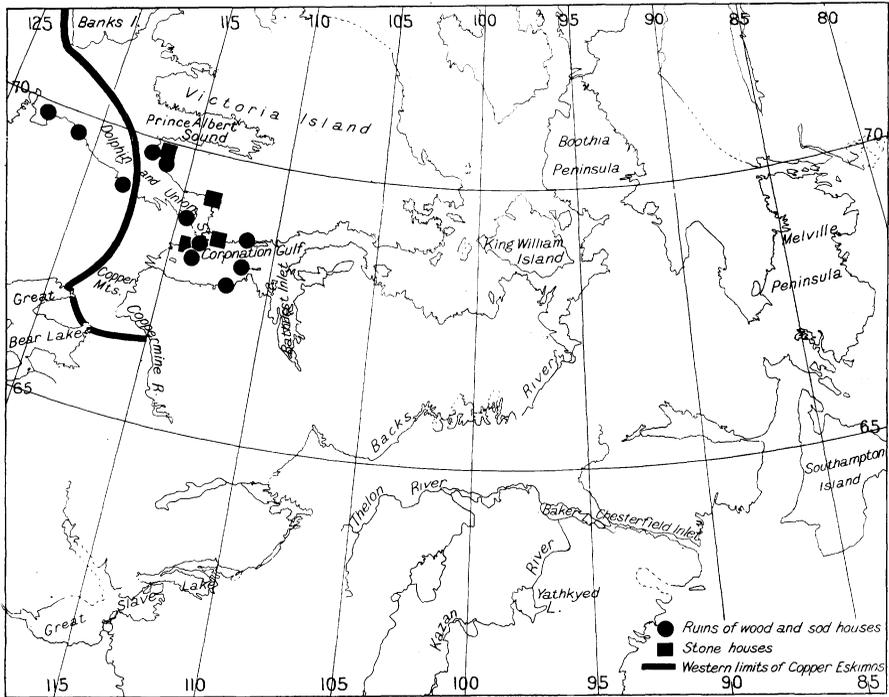


FIG. 1—Map showing the western limits of the Copper Eskimos and the distribution of Eskimo house types in the vicinity of Coronation Gulf.

Furthermore, we may be reasonably sure that they actually migrated from the west, for otherwise they would not have used driftwood for their dwellings, driftwood being very scarce in Coronation Gulf.

The date of the ruins can only be conjectured. In one settlement the floors of the houses are said to have been three or four feet below the general level of the terrain, but the turf that covered the walls and roofs would probably account for about two feet of this depth. No precise estimate can be made of the time required for an extra foot or two of soil to accumulate above this, since that would depend on the nature of the vegetation, the position of the ruins, and the watershed of the surrounding country. Judging, however, from similar remains on the north coast of Alaska we should



FIG. 2

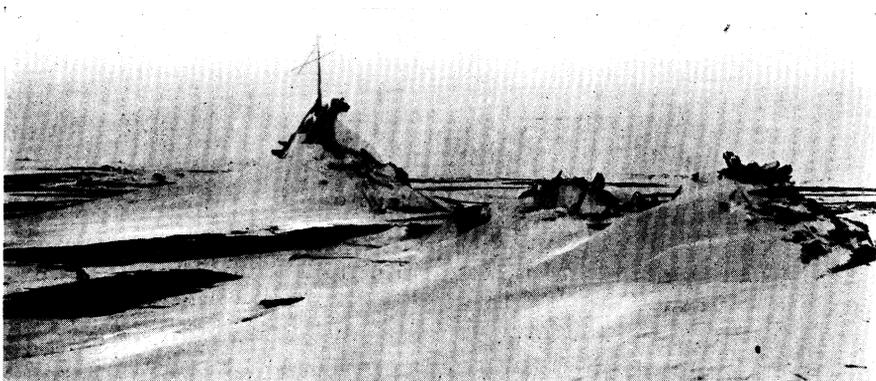


FIG. 3

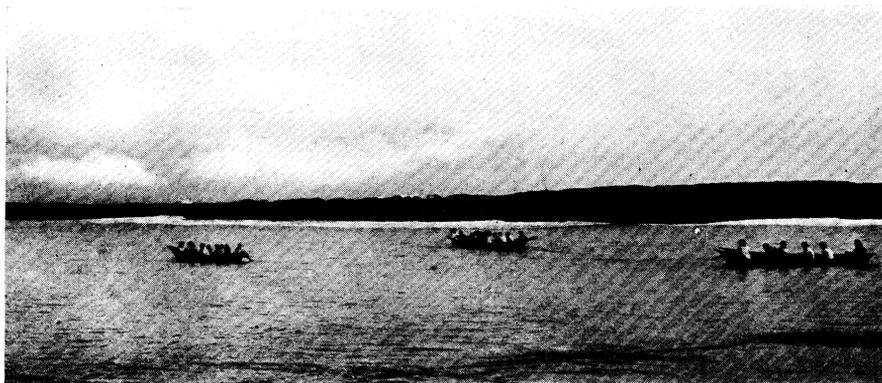


FIG. 4

FIGS. 2-4—Cultural features of the western Eskimos.

FIG. 2—Grave of a western Eskimo, covered with logs in the usual manner. Barter Island, northern Alaska. (Photograph by D. Jenness.)

FIG. 3—Ruins of wood and sod houses at Demarcation Point, on the Alaska-Canada boundary, once inhabited by Mackenzie River Eskimos. (Photograph by D. Jenness.)

FIG. 4—The umiak, or large skin boat, of the western Eskimos. (Photograph by D. Jenness.)



FIG. 5



FIG. 6

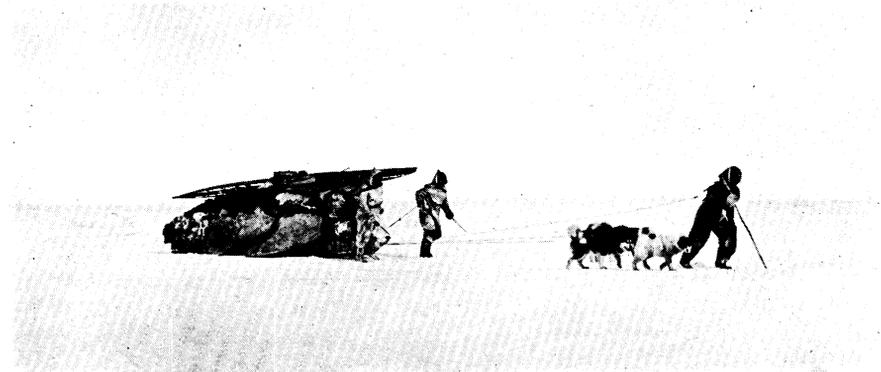


FIG. 7

FIGS. 5-7—Eskimo cultural features of eastern origin.

FIG. 5—Grave of a Copper Eskimo. The body lies unprotected on the surface of the ground. (Photograph by G. H. Wilkins.)

FIG. 6—Ancient stone hut at Cape Krusenstern, Coronation Gulf, indicating presence of eastern Eskimos. (Photograph by D. Jenness.)

FIG. 7—Migration of a Copper Eskimo family, with a long river kayak on the sled. (Photograph by R. M. Anderson.)

hardly be justified in assigning an age of more than five or six hundred years to the ruins in the Coronation Gulf area.

Besides the undoubtedly western character of these ruins one very significant point must also be noticed. As far as my information goes at present no copper was found within them. Very little copper, if any, has been discovered in similar ruins in the Mackenzie delta and in Alaska. Hence we may reasonably conclude that the use of copper was practically unknown to the Eskimos at this period, at least from Coronation Gulf westwards. The Eskimos of Hudson Bay may have been acquainted with copper through contact with Indian tribes, but there also its absence in archeological remains proves that any such acquaintance must have been very slight and almost negligible.

At Cape Kellett, on Banks Island, there was an ancient settlement where whalebones were used instead of wood for the framework of the houses.² It was evidently an important center for whale hunting, like Cape Bathurst on the mainland opposite. Many whalebones were found also around some of the old wood and sod houses in the Coronation Gulf area, and their inhabitants must have been familiar with the methods of hunting whales. Probably, therefore, they possessed the large open skin boats called umiaks which were usually employed for whaling. The present inhabitants of Coronation Gulf and for some distance east along the coast did not use these boats in historical times, nor is there any evidence to show that they had used them at an earlier period. It is true that they knew of them traditionally, but such traditions may easily have filtered in through trade with either the eastern or the western natives.

The first questions that arise in connection with these ancient settlements are, why did they fall into decay, and what became of their inhabitants? The Eskimos as a race have short memories, and their traditions never carry us very far back into the mists of the past. Consequently the actual historical reasons can never be discovered, although we may conjecture some of the causes. In the first place the whaling pursuit could never have been very successful in Dolphin and Union Strait and Coronation Gulf, since whales rarely enter these restricted waters. Then, again, wood for the building of houses and of large skin boats is very scarce along the coast. Consequently the old population would soon be forced either to change its western culture or to move elsewhere. A few lean years may have reduced its number, never very great, and forced the survivors either to return west to their earlier home or to push farther eastward, there to be swallowed up in other tribes where the mode of life was different. The few who remained behind in the region around Coronation Gulf must later have merged with the immigrant people who form its present population.

Theoretically one other possibility is open with regard to the fate of these ancient inhabitants. It may be conceived that they slowly altered their mode of life and became the ancestors of the Copper Eskimos of the present

² See "The Life of the Copper Eskimos," *Rept. of the Canadian Arctic Expedition 1913-18*, Vol. 12. p. 46.

day. If this were the case we should expect the modern culture in this region to retain its western character with only such changes as were forced upon it by the environment and by the more or less sporadic intercourse with eastern Eskimos. In this way we might explain perhaps the cessation of whale hunting and the loss of the umiak, together with the change from wood and sod houses to snow huts. Copper, if altogether unknown, may have supplanted stone through some brilliant discovery or through a knowledge gained from the Yellow-knife Indians to the southward. But will this theory explain in detail the culture of the Copper Eskimos as it is known today? And can we reasonably interpret this culture as developing out of the stage represented by the old whale-hunting people and their kinsmen to the westward?

PRESENT DAY COPPER ESKIMOS IMMIGRANTS FROM EAST

An examination of the culture of the Copper Eskimos of today reveals one fact very clearly: their nearest affiliations are not with the Eskimos of the west but with those of the east and southeast. In material culture they so closely resemble the Netchilik Eskimos of King William Land and Boothia Peninsula that both must have the same historical background. Both groups, for example, use the same types of weapons for sealing, fishing, and caribou hunting; their household utensils have the same forms; and their dwellings, both snow huts and skin tents, are of the same shape and internal arrangement. Such differences as appear in the sled gear and in costume are of a minor character only, while the art patterns and the tattooing are the same in both places.

Customs, traditions, and religious beliefs also link the Copper Eskimos with eastern tribes rather than with western. The natives of the Coronation Gulf area frequently visited the Netchilik Eskimos and the Eskimos on the Thelon River; they knew of tribes as far east as Admiralty Inlet on Baffin Island and as far south as the Kazan River that runs north towards Chesterfield Inlet. Their geographical knowledge of the country to the west, on the other hand, was much more limited. Their travels in that direction rarely extended beyond Wise Point, which is barely outside the limits of their normal range; and only one name, Uwallinirmiut, was known for the western natives and for whatever subdivisions there might be among them. The mythology of the Copper Eskimos most closely resembles the mythology recorded from Hudson Bay. Both places have the well-known Sedna myth,³ which has not been found in the Mackenzie delta or in Alaska; moreover, the personal taboos so common in the two latter places are unknown in Coronation Gulf and eastward, where much more emphasis is laid on the distinction between sea products and land products. We may cite also the evidence of burial customs. In Coronation Gulf, as in

³ See Franz Boas: *The Eskimo of Baffin Land and Hudson Bay*, *Bull. Amer. Museum of Nat. Hist.*, Vol. 15, 1907, pp. 1-570; reference on pp. 163-165.

the east, the dead are simply laid out on the surface of the ground, unprotected, but with replicas of their clothing and miniature implements placed beside them; in the west no such miniature articles have been found in the graves, which were always covered with stones or logs of wood.

Finally the linguistic evidence definitely links the Coronation Gulf area with a central group that includes northeastern Hudson Bay from the Kazan River in the south to the Netchilik Eskimos of Boothia Peninsula. Some of the specific marks of the dialects in this region, as distinguished from the dialect of the Mackenzie delta area, are:

1. The use of *n* and *ng* instead of *t* in many terminations.
2. A preference for the *poq* and *voq* conjugation endings, whereas these are generally replaced in the Mackenzie area by *toq* and *yoq*.
3. The spirantizing of *s* to *ch* (of German *ich*), with a tendency for it to become a pure breathing in initial positions.
4. The appearance of voiceless *l* (this is less certain).
5. Frequent substitution of conjunctive mood for indicative.

Language, traditions, and customs, then, all point to the Copper Eskimos being merely a subgroup of the Eskimos of Hudson Bay. They must therefore be comparatively recent immigrants into the Coronation Gulf region, not descendants of the old whale-hunting population that has left its remains along the coast; for it would be highly unreasonable to suppose that this old population in the course of three or four centuries cast off all the most distinctive features of its culture and took on those of the eastern natives; for example that it not only dropped whale hunting in umiaks and seal hunting in kayaks, abandoned the building of wood and sod huts, and lost the art of making pottery, but also changed its style of tent and altered the kayak from the short, rather broad, sea-going type such as persists today in the Mackenzie region to the long, narrow river type that is characteristic of the Netchilik Eskimos and the tribes inland from Hudson Bay. It is not improbable that some of the old inhabitants survived and blended with the immigrants, but the predominantly eastern character of the modern culture in this area shows conclusively that their influence must have been very slight.

Archeology also provides clear evidence of a movement from the eastward into Coronation Gulf. Houses built of stone have never been found among the western Eskimos, although they are numerous throughout the whole of the eastern region from Labrador north to the Parry Archipelago and are still used as dwellings by the Eskimos of Smith Sound in Greenland. Three such houses have already been reported from the Copper Eskimo country, all in the southwestern portion of Victoria Island. Near Cape Krusenstern on the mainland opposite, I myself examined a stone structure which was a little too small indeed for a dwelling but may have been either a meat cache, like the stone piles on Southampton Island in Hudson Bay, or more probably still a fox trap, for which purpose similar structures are erected

even today five hundred miles to the eastward on Adelaide Peninsula. This ruin near Cape Krusenstern showed no signs of great antiquity and was certainly much more recent than the wood and sod houses that were discovered later in its vicinity. With the three stone huts on Victoria Island it definitely indicates the settlement of eastern Eskimos in the Coronation Gulf region at a period that cannot date back more than four or five centuries.

ORIGIN OF THE COPPER CULTURE

Now that we have reached the conclusion that the present Copper Eskimos represent, for the most part at least, an immigrant people from the eastward, a second problem comes up for our consideration. Copper was extensively used in this northern area both by Indians and Eskimos. Did each group acquire its knowledge independently; or did one of them, and which one, learn the use of copper from the other?

Let us examine first the evidence from Eskimo sources. A full copper culture—a culture, that is, where copper replaces stone in all the cutting implements—appears only in the region around Coronation Gulf, where there are large deposits of free native copper. The metal was well known to the Eskimos on the shores of Hudson Bay during the last two to three centuries, but from their own statements it is clear that they obtained their supply from Coronation Gulf. Copper has not been found to my knowledge in the older ruins of northern Alaska and the Mackenzie delta. A little drifted in at a later date; but this, like the soapstone lamps and pots, was derived from trade with the Copper Eskimos. At first sight, therefore, it would appear that the only knowledge of copper the Eskimos possessed came from the deposits in the Coronation Gulf area. Now the old wood and sod houses in this region, which are probably not more than five or six hundred years old, reveal a stone-age culture; copper either does not appear at all or is found in very sparing quantities. Consequently the copper culture among the Eskimos must be of comparatively recent growth, so recent indeed that it did not have time to spread far from its home before Europeans appeared on the scene.

We can glean a little more information on the subject from the journal of Samuel Hearne, who made a journey to the mouth of the Coppermine River with a band of Chipewyan Indians in 1771. At Bloody Fall, near the mouth of the Coppermine, his Indians murdered five Eskimo families. Hearne's description of the tools and weapons these Eskimos possessed shows that, with one exception, they did not differ from those in use up to the beginning of the present century. This one exception, however, is all-important. He says: "Their arrows are either shod with a triangular piece of black stone, like slate, or a piece of copper; but most commonly the former."⁴ Now a century later the use of slate for arrowheads, or for any tools or wea-

⁴ Samuel Hearne: *A Journey from Prince of Wales's Fort in Hudson's Bay to the Northern Ocean in the Years 1769, 1770, 1771, and 1772*, new edit., edited by J. B. Tyrrell, The Champlain Society, Toronto, 1911, p. 189.

pons, had virtually ceased. No mention is made of it by the explorers of the nineteenth century, although they frequently mention copper arrowheads. One arrowhead tipped with stone (slate?) was obtained by Mr. Stefansson in 1911—the only one, I believe, that has been reported since the days of Hearne. Slate points are still found occasionally on the surface of the ground, but the use of them in 1914 was traditional only, and the method of manufacture was not clearly remembered. It would seem therefore that the Copper Eskimos had passed out of the stone age not so very long before Hearne's day, since they still retained the use of slate in at least one of their weapons, and that a very important one.

The linguistic evidence might seem to run counter to this conclusion. The Eskimos have almost exactly the same word for copper from Greenland to northern Alaska, and even in northeastern Asia. In Greenland it is *kangnusak*, *kangusak*, or *kannussaq* (according to dialect); from Labrador to northern Alaska it is *kannuyaq*; and in northeastern Asia it is given as *kaniuyak*. There are some obscure features about this word which I do not understand, but the changes that it has undergone in Greenland would indicate that it was present in the eastern dialects before the great Eskimo migrations to Greenland between the eleventh and the fourteenth centuries. But the fact of the Eskimos having a word for copper before 1000 A. D. would not signify a copper culture or that they knew of copper deposits and the art of hammering out the metal. It cannot therefore vitiate the argument that a real knowledge of copper was acquired by the Eskimos only four or five hundred years ago, when it arose in the region around Coronation Gulf.

THE USE OF COPPER AMONG THE NORTHERN INDIANS

Let us turn now to the evidence on the Indian side. We know that a knowledge of copper was widespread among the Indians in very early times. The deposits around Lake Superior, for example, were worked before the Europeans settled in America. In the north the Yellow-knife Indians of Great Bear and Great Slave Lakes received their name from the extensive use they made of this metal, and from Hearne's testimony we gather that it was not a recent acquisition among them. I may quote his words *in extenso*:

"Before Churchill River was settled by the Hudson's Bay Company, which was not more than fifty years previous to this journey being undertaken [i. e. after 1721] the Northern Indians [Chipewyans] had no other metal but copper among them, except a small quantity of iron-work, which a party of them who visited York Fort about the year one thousand seven hundred and thirteen, or one thousand seven hundred and fourteen, purchased; and a few pieces of old iron found at Churchill River, which had undoubtedly been left there by Captain Monk. This being the case, numbers of them from all quarters used every Summer to resort to these hills [the Copper Mountains near the Coppermine River] in search of copper; of which

they made hatchets, ice-chisels, bayonets, knives, awls, arrowheads, &c. The many paths that had been beaten by the Indians on these occasions, and which are yet, in many places, very perfect, especially on the dry ridges and hills, is surprising; in the vallies and marshy grounds, however, they are most'y grown over with herbage, so as not to be discerned.

"The Copper Indians [Yellow-knives] set a great value on their native metal even to this day; and prefer it to iron, for almost every use except that of a hatchet, a knife, and an awl: for these three necessary implements, copper makes but a very poor substitute. When they exchange copper for iron-work with our trading Northern Indians, which is but seldom, the standard is an ice-chissel of copper for an ice-chissel of iron. . . ."⁵

We should not take too seriously Hearne's remarks about the tracks worn by the Indians on their visits to the Copper Mountains. Probably they were nothing but the trails of caribou or musk oxen, which often travel along well-defined paths. But his statement does prove that the northern Indians, including the Yellow-knives, Dog-ribs, and Chipewyans, had a full-fledged copper culture in the seventeenth century, when the Eskimos to the north of them seem not to have fully emerged from the stone age. Moreover, from numerous passages in his journal it is clear that the two races frequently came into contact with each other at this period, and even though such contact may always have meant hostilities, this would not prevent a knowledge of copper from passing from one to the other. We learn also that, although the lower reaches of the Coppermine River were very remote from the usual hunting grounds of the Chipewyan Indians who visited Fort Churchill, so well known was the route that these Indians did not hesitate to make the long and arduous journey of nearly a thousand miles in order to obtain their own supply of copper from the "mines," rather than to rely on their trade with the Yellow-knives. Hearne gives the Chipewyan legend concerning the discovery of these mines, and a slightly different version of the same legend was obtained fifty years later by Sir John Franklin. Although too long to quote here in full, it has an important bearing on our inquiry inasmuch as it ascribes the discovery of these copper deposits near the Coppermine River not to an outside people but to the Chipewyans themselves and implies that they were acquainted with the metal even before this discovery. We cannot tell how long it would take for such a myth to arise, but it certainly does not favor any recent introduction of copper from an outside source.

ESKIMO COPPER CULTURE DERIVED FROM INDIANS

Our investigation has now brought to light two facts. First, the limited distribution of copper among the Eskimos, its absence or scarcity in the older settlements, and the use of stone for arrowheads in Coronation Gulf, the center of the Eskimo copper culture, down to the end of the eighteenth century, all indicate that the extensive use of copper among the Eskimos

⁵ Hearne, *op. cit.*, pp. 197-198.

does not date back more than four or five centuries. Secondly, the widespread copper culture of the northern Indians in the seventeenth century was many generations old even at that period; moreover, the Indians throughout a great part of North America were making extensive use of copper long before the arrival of Europeans. In the light of all these facts only one conclusion seems possible: the Indians were the first to learn the use of copper, and the Eskimos borrowed it from the Indians.

MIGRATION OF THE COPPER ESKIMOS PART OF A GREATER MIGRATION FROM INLAND

I have tried to prove that the Copper Eskimos came about five centuries ago from the east to Coronation Gulf and in that region, through contact with the Indians, acquired the copper culture which marks them off from other Eskimos. Can we gather any clues as to their earlier history?

The subject requires more investigation than I have yet been able to bestow on it. But I have already pointed out a few of the many features that tend to unify all the Eskimo tribes from the Kazan River northward to Boothia Peninsula and Coronation Gulf. The southern tribes, those on the Kazan, Thelon, and Backs Rivers, are inland dwellers, living on fish and caribou and musk oxen. They seldom visit the coast except for trade and, if they know any methods of sealing at all, know only the *maupok* and *utok* methods, i.e. the watching over the seal hole in the ice and the stealthy creeping upon a seal that lies on the surface of the ice outside its hole. Even the Eskimo tribes along the north coast from Dolphin and Union Strait to Boothia Peninsula, who spend more than half the year either on the seashore or on the ice near by, hunting the seals at their breathing holes, are not really a littoral people in the sense that the Eskimos east and west of them are littoral. For the sea is useful to them only when it is frozen solid like the land. Open water, a blessing to the littoral Eskimos, is a hindrance to these northern tribes, since they possess no large skin boats and sealing from the kayak is an unknown art. Their summer life is the same as that of the inland Eskimos, and their winter life differs from it only in that they hunt seals through holes in the sea ice and use seal blubber for fuel, instead of fishing through the lake ice in the same manner, hunting caribou and musk oxen, and using caribou tallow in the stone lamps. Both groups use the long narrow type of kayak suitable only for lakes and rivers, wear clothing cut after the same general pattern, and have practically the same dialect. For these and other reasons I am inclined to believe that the Copper and Netchilik Eskimos migrated to the coast from inland only a few centuries before the appearance of the Copper Eskimos in Coronation Gulf. This would imply a general movement from inland about seven or eight centuries ago, both to the northern coast line and to the western shores of Hudson Bay; and it is noticeable that in both these regions the same extreme emphasis is laid on the distinction between

sea and land products, a distinction that is much less pronounced in other Eskimo tribes. The natives on the shores of Hudson Bay, who have a more strictly littoral culture, may have been influenced by older littoral tribes in Baffin Island, who have hardly affected the Netchilik and Copper Eskimos owing to the greater difficulties of communication.

The primary cause for this migration, if my theory holds good, was pressure from expanding Indian tribes. Not all the inland Eskimos, however, were driven out to the coast. A considerable number were congregated in the barren lands north of the Thelon River, whence many of them returned south as soon as the pressure was removed. Thus we learn from Hearne's narrative that the basin of the Kazan River was Chipewyan territory in his day; but shortly after his journey a rapid decline set in among the northern Indians, their hunting grounds became more restricted, and the Eskimos gained (regained?) control of the Kazan basin. Tyrrell,⁶ in 1893 and 1894, discovered between five and six hundred Eskimos along this river, all inland natives who only visited the coast for trade. Almost certainly they had not abandoned the coast for an inland life but had migrated south from the barren lands between Backs River and Boothia Peninsula.

If later investigations confirm this theory of a migration of inland Eskimos to the coast some time after 1000 A. D., it will pave the way for still larger issues. The Eskimos of Southampton Island in Hudson Bay, for example, whose primitiveness has remained an unexplained enigma, may perhaps be interpreted as a small first wave that moved out farther than the rest and became isolated, thereby escaping the cultural influences that affected the rest of Hudson Bay. The theory will involve also the perhaps synchronous migrations from Baffin Island into Greenland and raise the problem as to whether the same causes may not have operated in this movement also, although here it mainly or exclusively affected coastal tribes. Finally there would remain the question of the connection between the western and the eastern coastal Eskimos and of both of these with the inland tribes.

In regard to the often-discussed problem of the ultimate origin of the Eskimos and their peculiar civilization I have no opinion to offer. The theories outlined above deal only with the history of a small portion of the race during the last thousand years. If they concern an area which, in the opinion of some of the ablest ethnologists, saw the transformation of an original inland, proto-Eskimo population into the littoral Eskimos that we know today, my theories need not be considered as running counter to that opinion, because such a transformation, if it ever did take place, must have occurred many hundreds of years before the Christian era. But a permanent solution of the entire Eskimo problem can hardly be satisfactorily attempted until more excavation has been done among the ancient ruins of Canada and Alaska and additional studies have been made of the living Eskimos in parts of both these countries.

⁶ J. B. Tyrrell: Report on the Doobaunt, Kazan and Ferguson Rivers, *Ann. Rept. Geol. Survey of Canada*, Vol. 9 (N. S.), 1896, pp. 1 F-218 F; reference on p. 167 F.