

# Ancient Ivory Tools Testify To Existence Of Alaskan Culture

*Archæology*

**J**UST below the Arctic Circle, on the bleak tundras of northwestern Alaska, flourished one of the New World's oldest and greatest cultures.

Buried under the frozen earth and heaps of accumulations are the remains of an "Ivory Age". Perhaps before or while the Mayas built their cities and temples in Central American jungles, expert craftsmen in these desolate wastes were fashioning tools, weapons and trinkets of exquisite beauty out of walrus tusks.

A leading discoverer of this unique ivory culture is Dr. Ales Hrdlicka, curator of physical anthropology at the National Museum in Washington. He returned recently from Alaska, bringing a large additional collection of the artifacts of this ancient people whose delicate workmanship arouses the enthusiasm of professional anthropologists.

There is nothing else like it in the world, Dr. Hrdlicka says. The first substantial hint of the existence of this culture came in 1926 when the Smithsonian anthropologist visited Alaska in an effort to trace the paths of the ancestors of the Indians and the Eskimos from northern Siberia into North America. Here and there he found finely carved specimens of ivory incised with conventionalized figures and curvilinear designs which had been excavated from the old heaps by the Eskimos.

Where did they come from? They were recognized to represent a culture far superior to that of the present day Eskimos and Indians of Alaska, the craftsmanship of men with artistic ideals and a delicacy of technique far beyond merely utilitarian demands. Dr. Hrdlicka's excavations, matched by those of Diamond Jenness, a Canadian anthropologist of note, led him to conclude that this culture is of considerable age and the work of a highly intellectual people.

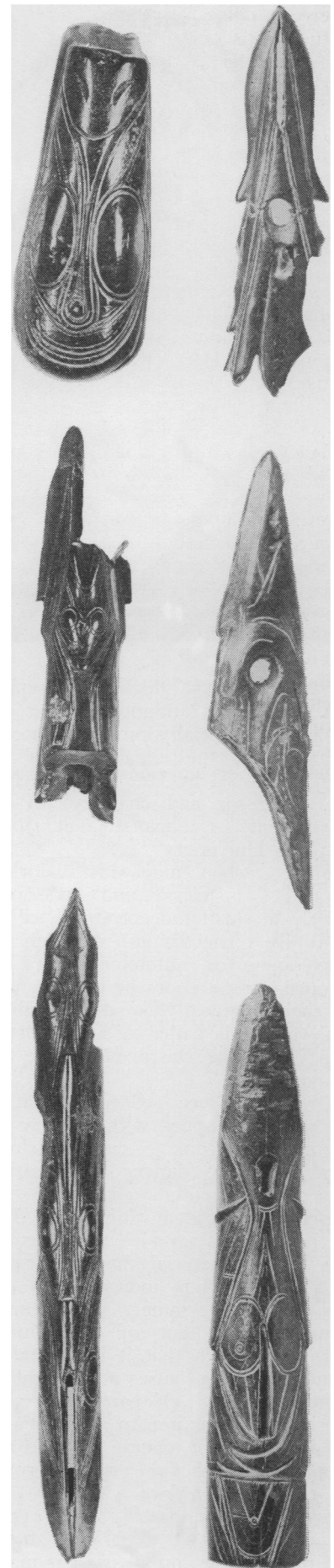
Another member of the National Museum staff, Henry B. Collins, Jr., entered the Alaskan field in 1928 and followed Dr. Hrdlicka's route to the Bering Sea. Working at St. Lawrence Island that summer and again in 1929, Collins excavated frozen refuse heaps where prehistoric men had lived and dug out of the earth many specimens of the ancient carved ivory.

Returning last summer Dr. Hrdlicka was able to secure hundreds of new specimens of the fossil ivory culture, all in a good state of preservation, which represent almost fully the mechanical arts of these people. For years it was learned, objects of this kind had been unearthed by the natives and sold to dealers as old ivory, to be used in the jewelry trade, with no suspicion of their scientific value.

As now arranged at the National Museum the objects suggest the array of polished steel instruments in a surgeon's office. There are numerous styles of very beautiful axes, picks, awls, drills, needles, daggers, gouges, scrapers, with which the ancient workmen plied their trades. There are also many adzes, wedges and objects the use of which is uncertain. All are most dexterously designed as tools.

The axes and similar instruments are balanced and "hefted" correctly, in itself evidence of a high culture level. Some of the adzes were fashioned from ivory sledge runners. Evidently ivory was valued material, to be used over and over again.

Beyond this nothing is known for certain about the vanished people. Their bones and the remains of their habitations, if anything remains, are buried far under the frozen sands and have not yet been discovered. The physical geography of the region has changed and obliterated all traces of the ancient habitations as well as burials. Consequently nobody knows



where to dig for them and some fortunate discovery must be made before it will be practicable to excavate. Northwestern Alaska is not a field where scientists can dig at random in the mere hope of finding something.

But the carved ivory pieces themselves, Dr. Hrdlicka says, furnish clues for reconstructing a startling picture of ancient days in the Far North when the human race was establishing its footholds on the American continent. The climate probably has not changed materially. It is now cold and stormy with short summers and long, cruel winters. The landscape is dreary and unstimulating. This is the sort of environment in which one would not expect to find a high culture level. Ordinarily under such conditions men have all they can do to keep body and soul together. The most they develop is a purely utilitarian culture evolved to meet the demands of life. Art is the product of kindlier climates where man has leisure, security and plenty.

The very existence of art means that man has mastered his environment. This gives the first clue to the nature of this early people. They must have had both time and conditions for the development of their artistic culture. There must have been an old high stone age civilization somewhere in the Far North. Furthermore, ivory carving is not likely to have been an isolated phenomenon, for artistic cultures do not develop that way. Art is an expression of higher mental activities. It does not exist independently of such social institutions as religion and law, and it affords a fair measure of the development of these.

Consequently it is fair to assume, Dr. Hrdlicka believes, that anthropology stands on the brink of a major discovery and that in the years to come the frozen tundras of the northernmost lands surrounding the Bering Sea with its islands will yield more and more wonders. These artifacts are merely the beginning of the story of this strange, seemingly vanished people.

It is really, Dr. Hrdlicka says, a high polished stone age culture, but

instead of stone the workmen used ivory; and because of the very nature of the material their artistry improved. The ivory, imperishable, relatively easy to work, and taking a beautiful polish, was just what was needed for their growing ideals of beauty.

Who were these prehistoric artisans? This question must remain unanswered for the present, although there are some indications which point to their probable origin. First, nothing has been found which shows an evolution of the remarkable culture in that environment. The most exquisitely carved objects are the oldest. But cultures do not drop out of the sky or spring from the earth fully formed. They come only with slow, painful evolution. In this case it is evident that the artistry must have been evolved elsewhere and brought to the Bering Sea region bodily. The one place from which it could have come was northern Asia, just where in the vast territories of northern Asia remains to be determined. It was a coastal as well as land culture. Its presence in the northernmost parts of the Bering Sea is a further strong evidence that this was the path of immigrants into North America, a position Dr. Hrdlicka long has maintained.

The theory has been that native groups in Siberia, pushed farther and farther eastward and northeastward by the pressure of populations and the retreating game, finally came to the ocean and followed this to the end of the land. But on a clear day they might see the outlines of new land over the water. So they came, a comparatively few at a time but over the course of many centuries, if not thousands of years. And they carried their dialects, cultures and institutions with them. The new discoveries indicate that they were far from the crude savages they have been pictured. Quite to the contrary, they probably had achieved one of the richest and finest stone age cultures yet discovered in the world. They established their villages and adapted themselves to the new environment. Then, the artifacts indicate, the culture began to degenerate. The trib-

ulations of the climate were proving too strong, or a less cultured group supervened, until matters became stabilized in the later Eskimo culture of those regions, still fairly rich and able, but paling before the older.

The cold, bleak, barren environment of the northern Bering Sea is not such as to sustain broad and high culture. It declined, and perhaps the people wandered farther away to the southward, gradually peopling the coasts of Alaska and beyond, and carrying with them only a lingering tradition of the culture of their ancestors. From time to time it broke out in new forms as Indian tribes became sheltered and prosperous.

The Eskimos of today have an ivory culture which bears strong evidence of having been inherited from this first great artistic era, but it shows considerable devolution. Life has been too hard for the Eskimos to reach again the level of their predecessors or ancestors. The Eskimo ornamentation, for instance, is distinguished by straight lines, simple geometric designs, and natural (instead of conventionalized) representation of animals, scenes, etc. There are no curved lines. And the difference between an artistic curved line and a plain straight line graven on ivory or stone is a great difference in the eyes of the anthropologist.

The National Museum collection contains also many tools for use in making nets, ornately decorated fish spears, spoons, knives, and kitchen utensils, and purely ceremonial objects ornamented with human or animal figures which show delicate carving and polishing. There are figures of fish and mammals with many conventionalized details.

The precise age of this ivory culture, says Dr. Hrdlicka, cannot be determined from present evidence.

"All we can say," he says, "is that it is very old." It is older than any other human remains found so far in those parts of the New World.

The migrations of the Asiatic people into America must have been very slow, requiring hundreds of generations, to reach the distribution found when white men first came to America. The (*Turn to page 44*)



**Tools ornamented with curved lines found in Alaska. The modern Eskimo uses only straight lines. The use of many of these tools is unknown.**

## Ivory Tools Indicate Alaskan Culture—Continued

main routes they followed were doubtless those along the coasts.

Some of the aboriginal immigrants invaded also the interior of the continent by way of the Yukon and other rivers. In an effort to retrace these paths, Dr. Hrdlicka, accompanied by Dr. George Maly of the Charles University of Prague, Czechoslovakia, last summer made an additional journey to Alaska. A part of this was rather adventurous. For over 1500 miles the travel was in an open 18-foot craft. It was a journey

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in almost continuous daylight but through fog and frequent rains and storms. The results were many hundreds of measurements, photographs, casts and specimens.

One of the main facts ascertained definitely on this journey by Dr. Hrdlicka is that there is no line of demarkation, either physical or cultural, between the Indian and the Eskimo along the Yukon. Both shade into each other. The true Yukon Indian, he says, seems like an Indian evolving into an Eskimo, and the Yukon Eskimo like an Eskimo evolving into an Indian.

The skeletal remains collected tell an interesting story of the migrations and perhaps evolution of the later people of the Far North but shed no light on the very ancient culture or on the earlier migrations. The possibility of finding really ancient remains is very remote, Dr. Hrdlicka says, because of the changing coasts and banks of the rivers along which the people traveled. Only a rare accident would reveal graveyards thousands, or even hundreds of years old, in the rocky foothills or the jungle flats of the present stream.

Along the lower Yukon the scientists found a culture that was marked by a profusion of stone implements and artifacts of bone and antler, but essentially Eskimo. In the middle area the variety of imple-

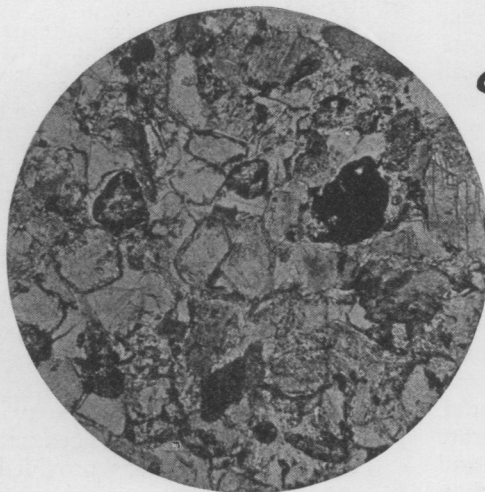
ments decreases but two new types make their appearance, showing the shading off into Indian culture. These are bilateral stone axes and tomahawks. Pottery was of the same poor quality along the whole river, with little difference in form.

Dr. Hrdlicka was able to get on friendly relations with the natives by giving medical treatment, explaining frankly his purposes, dealing with them as he would with his own people, and by paying for all the specimens brought in. In this way he has left behind him not a few interested amateur archaeologists with some understanding of his objects.

Making casts of the heads of the living, essential for museum purposes as well as for comparative study, was a little more difficult. Some demanded pay for submitting to the process of "making stone faces." Others were pleased at the prospect of "having their faces in Washington." The greatest difficulty of all, Dr. Hrdlicka said, was to get normal, full-blooded natives. These are becoming scarce along the river, especially in the middle regions where the transition is most marked, and in a few years will have disappeared altogether leaving only a mixed blood population.

The earliest skeletal material recovered, Dr. Hrdlicka said, extends well back before the coming of the Russians, but not from as far back, probably, as the fossil ivory culture. The skeletal material recovered from the Indian areas indicates that the people were true Indians, but with some strongly marked Asiatic affinities. They belong for the most part to one physical type, although there may have been a small group which departed from this.

The living natives along the great waterway afford few clues to the ancient dead, their pioneer ancestors in this far northern land. These are likely to remain for years an inspiration to the imagination of the archaeologists. The existence of the high and rich fossil ivory culture, says Dr. Hrdlicka, is one more conclusive blow at the contentions of the still sometimes encountered opinions that men originated in America, or came from some mythical "lost Atlantis," or crossed the southern Pacific in their frail canoes. Here, he says, is an obvious proof of migrations into the New World of Asiatic peoples.



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