ESKIMO PREHISTORY IN THE VICINITY OF POINT BARROW, ALASKA

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WITH AN APPENDIX, "SKELETAL REMAINS FROM THE VICINITY OF POINT BARROW, ALASKA," BY T. D. STEWART

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INTRODUCTION

During the summer of 1930 I had the privilege of assisting Henry B. Collins, Jr., of the Bureau of American Ethnology, Smithsonian Institution, in the excavation of a remarkable sequence of prehistoric Eskimo sites near the village of Gambell, on St. Lawrence Island in Alaska. This work revealed in unusual detail some 2000 years of Eskimo prehistory, providing a standard by which the accumulated scattered bits of information bearing on Western Eskimo history could be ordered.¹

When the archeological collections that had been made by Vilhjalmur Stefánsson, Knud Rasmussen, W. B. Van Valin, and Fred Hopson in the vicinity of Point Barrow were interpreted on the basis of information provided by the St. Lawrence Island excavations, it appeared very probable that the old sites along the north coast of Alaska held the key to the development of the Thule Culture of the Central Canadian Arctic and Greenland. This early maritime Eskimo culture had been investigated and reported by Therkel Mathiassen and other workers on the Fifth Thule Expedition of the Danish National Museum headed by Knud Rasmussen during the preceding decade. Mathiassen had concluded that the bearers of this culture probably came from northern Alaska and cited considerable evidence in support of this theory.²

It was obvious that the next step in an archeological program in the western part of the Eskimo Area should be systematic excavation at the old sites in the vicinity of Point Barrow. Unfortunately, Collins was faced with several years’ study of the collections and the preparation of a report on the very productive work on St. Lawrence Island in the field seasons of 1928–1930. Consequently, he very generously arranged that the United States National Museum send me to Point Barrow to undertake the needed investigation.

In the summer of 1931 I traveled from Seattle to Nome aboard the Coast Guard Cutter “Northland,” and from Nome to Barrow aboard the “M. S. Patterson,” a trading vessel then en route to Herschel Island. On the latter leg of the trip I was the guest of Captain Theodore Pedersen. That summer, unfortunately, unusually bad ice conditions prevailed in the Arctic Ocean. We did not arrive at Barrow until the middle of August, two weeks before the end of the brief summer season during which the ground thaws. However, while the “Patterson” lay south of the ice pack as it moved slowly northward, there was an opportunity to examine much of the coast, and excavations were started in several old sites. Work was begun at the Birnirk Site near Barrow, but could be continued for only 10 days owing to the onset of the freeze-up.

After the United States National Museum gave me permission to pass the winter at Barrow, I took the opportunity during the month of September to go east to Barter Island aboard the small schooner “Trader.” The weather was bad and the ice difficult. Although we called at every native settlement along the north coast and questioned the Eskimo about old sites, little new information was gathered.

The winter of 1931–1932 was far from dull. Most of the cold months when I was in Barrow Village, I lived with the medical missionary, Dr. Henry B. Griest; in the spring I used facilities offered me by Mr. Charles D. Brower, the well-known trader. In the fall I joined a boat crew, and we killed a bowhead whale east of Point Barrow and hauled it to the new land-fast ice at the Point. As my portion of the kill, the Eskimo detached the skull and hauled it up onto the beach where it could be protected from the dogs by a covering of ice blocks. In the summer of 1932 this skull was shipped to Seattle on the sailing schooner “Holmes” and is now on display at the United States National Museum.

In October the annual reindeer round-up was held at Walakpa, 20 miles southwest of Barrow. By working in three shifts, we passed 12,000 deer through the corrals, killing, castrating, and marking chutes in seven days. A supply of skins for winter clothing and meat for the archeological camp for the following summer were my compensation for helping in this work.

Early in the fall, Sergeant Stanley Morgan of the United States Army Signal Corps, stationed at Barrow to operate the wireless telegraph station, Mr. John Trendle, the school teacher, and I completed the transformation of

¹ Collins, 1937.
² Mathiassen, 1927b.
Fig. 1. Map of the north coast of Alaska in the vicinity of Point Barrow. The names of old Eskimo villages and burial sites referred to in the text are underlined. Nuwak, Uulkvik (Barrow Village), and Wainwright, 85 miles down the coast, were occupied in 1930.
a Model T Ford chassis into a rather primitive snowmobile. With occasional difficulties this machine operated fairly well on the smooth sea-ice just off the beach. We made trips to the deer corral, to Wainwright, 100 miles to the southwest, and to the camp of the crew of the steamer "Baychimo," frozen in near the Sea Horse Islands, covering a total of 1300 miles by this means. In the early spring I made an interesting trip with Alfred Hopson, with dogs and sleds, to the oil seeps at Cape Simpson, 100 miles east of Barrow. The purpose was to bring back two sled loads of asphalt to be used as fuel.

In 1932 spring whaling began May 2, when I joined Dave and Bobby Brower's boat crew. We spent six weeks camping at various places along the shifting leads 5 to 10 miles from shore. Although we saw many whales, we did not kill one. Only two whales were taken at Barrow that spring.

Archaeological work began the second week in June, and with a crew of three to four Eskimo I excavated principally at the Birnirk Site (Fig. 1). Brief periods were also spent at Nuwuk (Point Barrow), Nuvuwarruk (near Brower's Trading Post), and in Utqiavik Village (Barrow), working on Birnirk Period burials at Kugok near Utqiavik, at Nunavak (6 miles south of Barrow Village), and at Walakpa. The season of thaw terminated at the end of August, and I left Barrow in the Bureau of Education supply ship "North Star."

In 1936 Collins planned to excavate the series of old sites near Cape Prince of Wales and invited me to assist him again. After the Wales dig was started and running smoothly, it was decided that I should return to the vicinity of Point Barrow and continue the work started there. Accordingly I caught the mail boat to Kotzebue where, after a slight delay, passage was secured in a small launch with an Eskimo en route to Point Hope to trade for muktuk (black skin of the whale) and seal oil. At Kivilina, a village midway between these points, two Eskimo were hired for the summer, and at Point Hope we rented an 18-foot skin boat. I had brought along a 10-horsepower outboard motor which, mounted on the umiak, made an excellent craft capable of about 10 miles per hour when fully loaded. We left Point Hope on July 22, passed Cape Lisburne with its great murre rookeries, and after several days' delay, due to heavy seas, reached the village of Wainwright. Inquiries were made of the Eskimo at Point Lay and Icy Cape, and most of the probable localities that might have provided sites for old villages were examined, but no very old ruins were found. The middens of Mitliktavik and Klimatavik, 12 miles southwest of Wainwright, were examined. These villages, each of about a dozen house pits, were abandoned within the memory of living Eskimo and could not have been inhabited for more than a hundred years, judging from the artifacts we gathered there.

Northeast of Wainwright the ice was tight on the beach, and after some difficulty we reached the abandoned site Nunagiak, where I had worked briefly in 1931. Here we stayed for two weeks, continuing the cuts started in 1931 and opening new cuts in promising parts of the ruin. The recently abandoned village of Atanik and the slightly older ruin of Pingusugaruk were examined, but nothing was found at either that extended as far back as the Thule Period. On the trip to Barrow, we examined the mouth of each small stream, but with no new results. The last two weeks in August and the first part of September were spent at the Birnirk Site. The return trip to Nome was made aboard the small schooner "Trader."

The collections resulting from this work were returned to the United States National Museum, but unfortunately funds were not available to permit me to work on them. The material was stored until 1952, when it was brought to the American Museum of Natural History for cataloguing and study.

The third opportunity to visit the archeological sites in the vicinity of Point Barrow was offered me in the summer of 1953. Under the auspices and support of the Arctic Research Laboratory, established at Barrow by the Office of Naval Research, a group of Harvard University graduate students, headed by Wilbert Carter, was completing a three-season program of archeological work in the old sites near Point Barrow. Through the courtesy of Mr. Carter and Dr. John Otis Brew, Director of the Peabody Museum at Harvard University, I was invited to join this field party. Scheduled flights from Fairbanks to Barrow solved the problem of transportation, and more than adequate housing was provided by the facilities the Navy had established there. My principal contribution was a 1-foot-interval
contour map of the Birnirk Site and a similar map of the Nunagiak Site. To obtain the latter, Carter and I, accompanied by a young native of Wainwright, traveled down the coast in an umiak with an outboard motor. It is indicative of the changes in transportation that, although this 18-year old boy was raised at Wainwright and had been working for the Navy at Barrow for several summers, he had never made the trip along the coast by boat or dog team; he had traveled by air.

In 1952 the United States National Museum lent me the still uncatalogued collection. It was brought to the American Museum, and the task of plowing through the material and the rather cold field-notes was begun, only to be frequently interrupted by other projects. A number of people have assisted in the detailed compilations so necessary when reporting on the prehistory of a gadget-burdened culture like that of the Eskimo. Mr. Charles Ward, Miss Frances Brownstein, and Miss Miriam Mulqueen did the cataloguing. Mr. Ernest A. Neilson assisted with the tabulations. Mrs. Marilyn Weber made approximately the first half of the illustrations; the remainder were drawn by Mr. Nicholas Amorosi. In the later stages of assembling and correcting, I have been assisted by Miss Joyce Firstenberg. Miss Bella Weitzner has revised the manuscript in her usual capable fashion.

To the University Museum of the University of Pennsylvania I am grateful for the loan of specimens and notes from the Van Valin Collection.

Had it been possible to study and report upon these collections soon after the completion of the field-work, I would have been able to present this study as a substantial contribution to the unraveling of Eskimo prehistory. However, since the early 1930's, excellent studies of the archeology of the Arctic Coast of Alaska have been made by Larsen and Rainey and by Giddings. Comparative studies have been published by De Laguna, and summaries by Collins. The sequence in the vicinity of Point Barrow has been neatly bracketed by this work, and for two decades specialists in Eskimo prehistory have had a rather clear idea as to the cultural content of each period to be found there. This, then, is in the nature of a mopping-up job.
LANDSCAPE, SITES, AND ARCHEOLOGICAL FIELD-WORK
PRIOR TO 1930

The Brooks Range, extending eastward from Point Hope and Cape Lisburne and trending northward to approach the sea near Barter Island and Demarcation Point, divides the drainage of the Yukon, the Kobuk, and the Noatak rivers from the streams flowing northward into the Beaufort Sea. The Colville, the largest of these streams, flows from west to east along the foothills of the range for 200 miles before it bends northward to empty into Harrison Bay, 150 miles east of Point Barrow. Foothills rising to 2500 feet above sea level lie north of the Colville, but beyond these hills a coastal plain, beginning at an elevation of about 50 feet above sea level, slopes gently northward to the coast, a distance of 80 to 100 miles. This has been described by Leffingwell.1 The country is gently rolling where the poorly developed drainage patterns of the Kuk, Kugrua, Inaru, Meade, Topagoruk, and Chipp rivers have been incised. For the most part, however, this plain, level as far as the eye can see, is covered with reindeer moss and other low-growing arctic plants, and intricately interlaced with patterns of frost cracks that have raised low ridges that hold shallow ponds of water all summer, superficially like artificial rice paddies.

In addition, this treeless plain, particularly the lower-lying north portion, is rather evenly dotted with hundreds of rather peculiar shallow lakes. These lakes tend to be elongated, with straight parallel sides and rounded ends, and to have similar proportions of width to length regardless of size. Roughly three times as long as wide, they vary in length from 100 yards to as much as 5 miles. Their most peculiar aspect is their orientation: the longer axes are parallel, and all trend slightly west of north and east of south. In arrangement they apparently have no connection with the present drainage pattern; indeed, most of them are not connected to one another or to nearby drainage streams. The west coast appears to be retreating, as is discussed below (p. 34). In 1953, at one point near the base of the sand spit that forms the northeastern enclosure for Pead Bay, I observed several of these lakes that had been cut into and drained by the encroaching sea. The basins were only 5 to 6 feet deep, and the bottoms of these extinct lakes were flat.

The coastal plain is underlain by hard rock of earlier geological ages, but nearly everywhere there is a thin capping of sand and silt, apparently of Pleistocene age, for elephant bones are found in it. The elongated lakes appear to be formed in these late soils. Black and Barksdale have published detailed descriptions of these interesting features but have reached no conclusion as to their origin. Apparently they are in some way related to the permafrost phenomena.

The Arctic Coast in the vicinity of Barrow (Fig. 1) has been well described by Ray, Murdoch, Leffingwell, and others. Along the coast, east of Barrow, the coastal plain slopes gently to the sea. The coast line is indented with numerous bays and inlets, and there are many bars and small sand islands in the shallow waters off the coast. Elson Lagoon, protected on the north by a chain of islands, the Plover Islands, extends 35 miles east from the Point Barrow sand spit. In contrast, the coast southwest from Utqiagvik is almost straight, slightly curving for a distance of 60 miles to the head of Peard Bay. The coastal plain here terminates in a low bluff that is nowhere over 50 feet high. Southwestward from Point Franklin offshore sand beaches have built up and enclose protected lagoons almost continuously to Cape Beaufort, south of Point Lay. Low bluffs at Wainwright mark the only point where the coastal plain approaches the present beach.

The climate, precipitation, and ocean currents along the coast have also been well described in the references cited above.

In the discussion that follows there is an excellent chance of confusion in the way in which the names "Barrow" and "Point Barrow" are used. The name "Point Barrow" is generally used when the region is referred to. Specifically, however, it is the end of the sand spit that forms the northernmost point of the North American mainland (Fig. 1). The recently aban-

1 Leffingwell, 1919, 52-54.
2 Black and Barksdale, 1949.
3 Ray, 1885.
4 Murdoch, 1892.
5 Leffingwell, 1919.
doned Eskimo village of Nuwuk is situated here.
The confusion arises from the fact that the Post Office located at the Eskimo village of Utkiavik, 10 miles southwest of Nuwuk, is officially named Barrow, Alaska. Barrow Village, then, is a term that is used interchangeably with Utkiavik.

**ARCHEOLOGICAL SITES IN THE VICINITY OF POINT BARROW**

Eastward from Point Barrow I did not succeed in locating any new archeological sites, although I visited the Thule Period site on Barter Island excavated by Diamond Jenness. Stefánsson mentions ruins on the Jones Islands east of the mouth of the Colville River. The geological surveying parties that have been working so intensively in the region in recent years have found house ruins on the banks of the streams that flow north into Beaufort Sea, but I have no information to contribute about these sites.

The old sites that I have examined lie along the west coast. They are shown on the map (Fig. 1) and briefly described below.

**Nuwuk (Point Barrow):** An occupied village in 1936, but now abandoned. North of the occupied houses along the beach are a number of old house pits. Nothing preceding the Recent Period was found.

**Nixeruk (Small Hook):** A small, hook-shaped, sand spit that projects into Elson Lagoon about midway on the narrow sand spit that connects Point Barrow (Nuwuk) with the mainland. Skeletons from surface burials were collected here. There were no accompanying artifacts, and the skeletons are probably not very old.

**Birnirk:** A group of mounds formed by superimposed houses (Fig. 11). This is the locality where the major part of Stefánsson’s collection was made, where I worked principally, and where a group of Harvard University students, directed by Wilbert Carter, excavated in the seasons of 1951, 1952, and 1953.

**Nuvuvuaruk:** This site is referred to by Ray, as follows: “On the point where the station was established were mounds marking the site of three huts dating back to the time when they had no iron and men ‘talked like dogs.’”

Brower’s trading post was placed on the site of Ray’s station, and dwelling houses rather completely covered this area. By 1953 recent grading with bulldozers had removed these deposits. Two cuts were made here, and the artifacts recovered are Birnirk in age (Fig. 6).

**Utkiavik:** These are the recently abandoned houses of Utkiavik Village. Many of these structures, which were occupied until the Eskimo moved into above-ground wooden houses, contain abundant iron and glass. Several excavations were made here to obtain a sample of recent artifacts (Fig. 6).

**Kugok:** A group of Birnirk Period burials in the tops of small knolls on both sides of Kugok ravine (Fig. 6). These burials seem to be Early Birnirk.

**Nunavak:** A group of mounds with burials in the top excavated by A. H. Hopson in 1929 for the University Museum, Philadelphia; Birnirk in age (Fig. 5).

**Kuguk:** The group of six burial mounds excavated for the University Museum by Van Valin in 1918–1919.

**Walakpa:** Several burial mounds were excavated here by Hopson in 1929. Results unknown.

**Kukulik:** Several recent houses. No excavation.

**Pingasugaruk:** Several recent house mounds. I made a surface collection but did not excavate.

**Atanik:** Recent house ruins. Surface collection; no excavation.

**Nunagiaik:** House mounds ranging in age from Late Birnirk to recent. I excavated here (see Fig. 19). This is the only site along this coast that seems to have been extensively occupied in the Thule Period.

**Kilimatavik:** Recent house ruins. Surface collection; no excavation.

**Mitliktavik:** Recent house ruins. Surface collection; no excavation.

**STEFÁNSSON’S WORK AT BIRNIRK**

On August 1, 1912, Stefánsson dug into one of the mounds at Birnirk which is described as being 12 feet high and 126 paces in circumference. This description seems to fit Mound H better than any other. He managed to excavate to a depth of 3 feet over what appeared to be a

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1 Stefánsson, 1914, 9.
2 Wissler, 1916.
3 Ray, 1885, 37.
4 Mason, 1930.
5 Stefánsson, 1914, 393.
house entrance. Stefánsson’s journal suggests that he actually excavated at Birnirk just one day, and that conforms to what Charles Brower told me in 1931. The balance of the collection which Stefánsson obtained from Birnirk was excavated by the Eskimo and purchased from them by Brower, acting for Stefánsson. This collection is now in the American Museum of Natural History. Harpoon heads and arrowheads have been described by Wissler.¹

**VAN VALIN’S WORK AT KUGUSUGARUK**

At the Twenty-third Congress of Americanists held at New York in 1928, J. Alden Mason of the University Museum, University of Pennsylvania, reported on work which had been conducted for the museum in the vicinity of Barrow from 1917 to 1919 by a school teacher, W. B. Van Valin. He had discovered and explored the remains of what he called six houses, located in tundra knolls southward from the village of Utqiavik.

According to Mr. Van Valin’s notes, the sizes and shapes of the “houses” varied greatly, ranging between 45 by 18, 15 by 10, 15 by 15 ft.; apparently all were rectangular. These structures were all built of driftwood. The walls were made of wood placed vertically and apparently were originally of two to three feet in height. The roofs were formed of parallel logs which reached from the tops of the side walls to the ridge poles. A thick covering of sods was then placed over the roofs and the walls, consisting of two layers of rectangular pieces of tundra, decomposed moss and grass, about two feet long, eighteen inches wide, and six inches thick. In each roof a frame was built for a skylight which was covered with seal or walrus entrails. The bottoms of the largest buildings were from four and a half to five feet below the tops of the mounds (presumably after the roofs had fallen in). No ice-cellars for storing food were discovered, in spite of search.²

Mason continues to the effect that in these houses, Van Valin found the remains of 83 persons, dressed in parkas made of bird and animal skins, and lying in rows on beds of brown bear, polar bear, and musk-ox hides.

Specialists on Eskimo archeology have never been quite satisfied with this description of charnel houses. This appeared to be a unique example, entirely at variance with burial customs elsewhere. Moreover, the description fits perfectly the recent Point Barrow dwelling house, even to the detail of gut skylight window, a feature that could hardly be determined from a collapsed building.

At Mason’s invitation I examined the file of notes and letters pertaining to the Van Valin Collection at the University Museum and then borrowed the entire file to study in New York. Van Valin’s manuscript “final report” was faithfully quoted by Mason. However, now also in the file are photographic prints of drawings that Van Valin evidently made while excavating the site. A note on the envelope containing these prints states that they were received in the University Museum in 1942, more than a decade too late to have been utilized by Mason in preparing his 1928 paper. These drawings have been recopied to make them more legible and are reproduced here as Figs. 2 and 3. The longhand notes on the drawings are not always intelligible. The sketches show that the skeletons were laid out on wooden platforms, and there are numerous stumps of posts.

It is not possible from Van Valin’s notes to locate the “Old Igloo” Site exactly. However, in 1928, when Mason became interested in working up Van Valin’s collection, arrangements were made to have Alfred H. Hopson, a long-time resident of Barrow, continue collecting for the University Museum. Hopson had been present when Van Valin worked in 1918–1919 and was still living at Barrow when I worked there in 1931–1932. From Hopson’s letters it is possible to deduce that Van Valin worked at a locality called Kugusugaruk, about 10 miles southwest of Barrow Village (Fig. 1). Translated, this name seems to mean “similar to a small river,” a very apt name for the ravine beside which the mounds were located.

Unfortunately, I did not visit the Kugusugaruk Site. Until the file of notes at the University Museum was examined, I was under the mistaken impression that Van Valin had excavated at Nunavak. Hopson, as his letters show, certainly knew where Van Valin had worked, but, as he was convinced that nothing more was to be found at Van Valin’s site, probably did not think it necessary to mention it to me.

Van Valin’s collection from Kugusugaruk has been described and illustrated by Mason,

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¹ Wissler, 1916.
Fig. 2. Copies of Van Valin's sketches of Burial Areas 1 to 4 at the Kugusugaruk Site. The accompanying notes, written in script, have been transcribed as accurately as possible, but are not always clear.
Fig. 3. Copies of Van Valin’s sketches of Burial Areas 5 and 6 at the Kugusugaruk Site.

and there seems to be no point in repeating this description. The sketches of the burials (Figs. 2 and 3) list the artifacts found with each, but as the items were not given field numbers they cannot be identified. Three wooden bows that Mason did not illustrate are shown in Fig. 4. These excellently preserved bows seem to have had sinew cable backing, for there are faint marks of the lashings on the wood.

The harpoon heads which Van Valin obtained from Kugusugaruk have been classified and are listed in Fig. 4. These clearly date the burials as having been deposited early within the Birnirk Period. The other artifacts conform to the styles of this period, and almost exact duplicates of each were obtained at the Birnirk Site.

HOPSON’S WORK AT NUNAVAK

Hopson began working at Kugusugaruk, but, finding that Van Valin had cleaned up all the burial knolls, he soon moved to Nunavak (Fig. 5) where he opened five graves atop small knolls: one contained two bodies; the remainder, one each. In a letter dated July 25, 1929, Hopson describes his finds at Nunavak as follows:

These that I have excavated have the bodies laying with the heads all pointing S.E. and each one is wrapped in either Polar Bear skins or muskox skins, and each man or person had implements of hunting or household buried with them. In no case had anything been buried with the bodies that had not been broken. Each body had placed near the head a small whalebone container [baleen bucket] and a drinking tube made from wood. Each body had also near the head a platter made from clay, in taking them out and exposing them to the air they crumbled away so that it was almost impossible to save them. I did manage to save several pieces large enough to show what they were made of [several sherds with concentric circle paddle impressions]. . . . The best preserved specimen was wrapped first in a deer skin, then outside of that a polar bear. On the outside of this was a bearded seal skin with the hair on the skin. . . . The bodies were all lying on drift wood planks that had been chopped down on the upper side. A few were laid on driftwood logs that had never been worked. In some cases small willow brush had been placed under the bodies on top of the planks. . . . Each body was by itself with a small upright post each side of it at the head and foot, leaving a space of about four feet, and in between these posts each person and his implements were placed.

The same thing was done in the large mound opened by Van Valin only he had not gone to the bottom of the grave and the wood that the bodies he found rested upon is still in place.

Hopson’s description is corroborated by Van Valin’s drawings (Figs. 2 and 3) which show
skeletons laid out on wooden platforms. There seems, then, to be a basic similarity in the method of burial in the Kugusugaruk Site excavated by Van Valin, the Nunavak Site where Hopson principally worked, and the Kugok Site which is described below.

Only a few specimens accompanied the six skeletons recovered by Hopson, mainly baleen buckets, slate ulus, and other items that serve to date the burials as on the general Birnirk time level, but do not permit precise dating such as is provided by harpoon heads. With Burial 6 was an ivory pottery paddle with concentric ridges on the face, almost identical to the paddle from the Kugok Site described below (Fig. 9q).¹

¹ This paddle was illustrated in the University Museum Bulletin, University of Pennsylvania (1930, Vol. 1, No. 3, Pl. 6). The mistaken identification as a "blubber pounder" was made originally by Hopson.
EXCAVATIONS FOR THE UNITED STATES
NATIONAL MUSEUM
KUGOK SITE

In 1932 Fred Hopson pointed out to me the location of a third group of burial mounds on the banks of a small gulley called Kugok that runs inland from the beach through the village of Utkiaqivik. About 500 feet in from the beach are five small knolls on the level tundra to the north of the drainage way, and on the opposite side there are two (Fig. 6). These rounded rises are only 2 to 3 feet high and perhaps 60 feet in diameter and are identical with hundreds of others that flank the drainage ways in the tundra. There seems to be little doubt that they are of natural origin. My excavations produced no suggestion that they were artificial constructions.

Test pits were made in all these low rises. The upper levels of all of them, except Mounds A and B, had been disturbed to a depth of 18 inches or 2 feet. Fragments of decayed wood and bone were found, but no artifacts. Mounds A and B contained burials, some of which apparently had been only partially disturbed.

**Burial Mound A**

A heavy sod of grass and moss covered the small rise designated as Mound A. Immediately below this sod, not more than 6 inches beneath the surface, burials and fragments of wooden platforms were uncovered. Both skeletons and the wood upon which they lay were principally within the zone of summer thaw. Consequently, the bones were extremely fragile, and the wood had been reduced to the consistency of wet paper and was crushed flat. It was impossible to tell whether the timbers had been hewn planks or were driftwood logs in the round. Grass roots had thoroughly penetrated the bones, wood, and artifacts and added considerably to the difficulty of clearing the site.

The arrangement of the burials in Mound A is shown in Fig. 7 and in Pl. 6a.

Burial 1 was an isolated skullcap unaccompanied by other bones. It lay in the soil, just off the edge of a wooden platform. Nearby was a small mattock made of whale rib (Find 1) which may or may not have been intended as part of the grave goods.

Burial 2, again, was merely a fragment of a skull. It lay near the center of a platform formed of five parallel logs. Nearby were a few fragments of plain pottery (Find 2). To the east of the platform was a large fragment of musk-ox hide.

Burial 3 was also a fragmentary skull. It lay on a platform of parallel logs, almost at right angles to the logs, under Burial 2. At the edge of the platform near the skull were a dozen sherds stamped with curvilinear designs (Find 3).

Burial 4, another single skull, lay on the ground to the east of Burial 2. Nearby was an oval baleen bucket with wood bottom and a cache of six large thin flint flakes that showed no sign of use. With these was an ivory mouth-piece for a sealskin float (Find 5; Fig. 9p). Find 6 lay 2 feet to the east, a slate ulu blade with shoulders like blades described below from Birnirk, and an elongated beach pebble with a groove knocked into one end.

Burial 5 was an adult skeleton that lay on its back, with the legs partially flexed, towards the northwestern side of the excavation. Timbers lay nearby, and several large whale ribs were over and above the head of the skeleton. Beneath the burial were fragments of musk-ox hide, and beneath these fragments of sealskin.

Find 14 was beneath the knees of Burial 5. It was an ivory pottery paddle with incised concentric circles on the flat sides (Fig. 9q). The design corresponds to the stamped pottery found with Burial 3 in this mound and at the Birnirk Site. This paddle is very similar to that found by Hopson at Nunavak which is mentioned above (p. 24). Associated with this was a rather well-preserved harpoon head made of antler of the Gaulock Type (Fig. 9f).

Burial 6 was extended on the back on a platform of parallel logs. Underneath these, two logs lay crosswise. One humerus could be traced; the other probably had been lost through decay. Although in very poor condition, the other bones of the skeleton were in anatomical arrangement. Find 9, between the knees of Burial 6, consisted of two ivory hooks, unfortunately in rather advanced stages of de-
Fig. 6. Sketch map of Barrow Village as it was arranged in 1932. Brower's trading post was on the site of Ray's fort; nearby were the Nuvuk waruk ruins. Both occupied and abandoned houses were scattered through the Utkiavik Village. Black rectangles locate the cuts made there. The Kugok burial site and areas excavated are also shown.
Fig. 7. Map of burials and finds in Kugok Mound A. Logs are shaded by lines; whale bones are stippled.
(See Pl. 6a.)

cay, but on the small remaining portion of the cortex of each there were fragments of a fine-line incised decoration, plainly of Old Bering Sea style (Fig. 10a–b). This decoration is of the curvilinear variety that marks the latter phases of this style.

Find 10, at the right shoulder of the skeleton, consisted of two curious wedge-shaped pieces of ivory with sockets in the flattened end that contained fragments of decayed wood (Fig. 10c). The use of these items remained a mystery until I examined the collection from Birnirk made by Wilbert Carter and his associates for the Peabody Museum, Harvard. In this collection there is a complete wooden umiak paddle that has an identical ivory wedge fitted to the end of the blade. The utility of such a tip when working a canoe through floating ice is obvious, and it is strange that the Eskimo later abandoned this practical device. Find 11, an oval baleen bucket, lay just above the head of Burial 6, off the edge of the platform. Find 13, an ivory foreshaft for the harpoon, lay on the platform to the east of the feet of the skeleton (Fig. 9r). Two harpoon heads, very poorly preserved, also lay on this platform. One was of Naulock Type and the other conformed to the Tuquok category (Fig. 9a, e).

Burial 7 lay on a bed of parallel logs near the western end of the excavation. The lower jaw, clavicles, one humerus, and a few ribs were the only remaining bones, but they suggest that at least the upper part of the body had been extended on the back. Off the platform, above where the skull of the burial should have been, were fragments of plain pottery. On the logs to the right of the pelvis the remains of an oval baleen bucket were found (Find 12).
Burial Mound B

This small rise was situated across the ravine, southwestward from Mound A. Burials resting on platforms were found in it, very similar to those in Mound A (Fig. 8; Pl. 6b). A roughly rectangular area, approximately 35 by 22 feet, was uncovered to a depth of not over 1 foot, for none of the remains lay more than 6 to 9 inches beneath the present surface.

Burial 1, in the southeastern corner of the cut, was not on a wooden platform but lay on an uguruk skin and fragments of other unidentifiable skins. It was on its back, with legs slightly flexed. At the sternum there was a nicely chipped blade of translucent chalcedony, 11.5 cm. long, and a small, chipped, triangular point of the same material, 3.5 cm. long (Fig. 9i, k).

Burial 2 lay on a platform of parallel logs and was covered by other logs. It was partially destroyed by a hole that had been dug through the abdomen and pelvic region, cutting through both skeleton and log platform. The remaining upper part of the skeleton suggested that the burial had been extended on the back. Above the skull, on the edge of the platform, were fragments of a baleen bucket.

Burial 3 consisted of a single skull lying among some fragments of timber. Scattered about were two fragments of chalcedony, also chipped blades, of the same material and similar in shape to the large one found with Burial 2. There was also a rim fragment of a bowl-shaped pottery lamp. Immediately to the west, a shallow hole had been dug and a fire built in it. It could not be determined whether this was associated with the burial.

Burial 4 lay on its back, with legs flexed, on a
pallet of parallel logs. At one side of the skull were about a dozen potsherds, fragments of a shallow rounded bowl too deep to have been a lamp and too shallow to be called a pot. The pieces could not be fitted together, so the exact shape of the bottom must remain uncertain. Apparently it was slightly pointed. Near this, at the edge of the platform, lay a whetstone of fine-grained sandstone. This had been used until it was square in cross-section, about 3 cm. on a side, and it was 11 cm. long (Fig. 9n).

Burials 5, 6, and 7 were found side by side in the south-western corner of the excavation. Burial 5 lay on the back, with the knees slightly drawn up; Burial 6 was extended full length on the back; and Burial 7 lay on the right side, with legs flexed. A large wooden food dish, the only accompanying artifact, lay over the chests of Burials 5 and 6.

Five feet to the north of Burial 7 was a bundle of 11 arrows (Find 6). The heads and fragments of the shafts are illustrated in Fig. 61a–f. The shafts, about 40 cm. long, were round in section, except towards the nock where they were flattened. The diameter of the shafts increased slightly towards the point end. These arrows may have been in a quiver, but, if so, no evidence of it was found. Nearby lay the wooden bottom for a baleen bucket.

On the east side of the excavated area, opposite Find 6, were two arrangements of logs side by side. However, no burials or artifacts rested on them (Fig. 8). These, with the absence of any burial near Find 6, the occasional holes in platforms and burials, and the partially disturbed condition of some of the burials, add to the suspicion that both Mounds A and B had been partially excavated in a rather unsystematic fashion. The shallowness of the burials and the consistent color of the soil have probably caused other previous pits in these mounds to remain undetected.

Burial 8 lay on a rather extensive wooden platform at the northern end of the cut. For the first time it was possible to determine the form of the wood that underlay the interments. These were planks hewn to a thickness of about 2 inches. The skull and the ribs were disposed in such a fashion as to suggest that the burial was extended on the back, but the other bones were missing. Red ocher was scattered around the chest. A recent hole had been dug through the platform, just to the north of where the pelvis should have been. On the platform, just south of the skeleton, three rather poorly preserved harpoon heads were found. Two were of the Birnirk Type, and one was of the Naulock Type (Fig. 9c–d). Nearby were two arrowheads. A simple, ivory harpoon foreshaft (Fig. 9a) lay above the skull, and an ivory finger rest for the harpoon shaft (Fig. 9a) was found on the edge of the recent excavation mentioned above. Under the shoulders were three small triangular blades, neatly chipped, of the same translucent chalcedony mentioned above (Fig. 9g–h, j). Near the eastern edge of the platform was a composite knife handle, also of ivory (Fig. 9m).

Its condition suggested that it belonged with this burial rather than with the recent material that was recovered in the overlying soil.

Tests in Burial Mounds C to F

As said above, Mounds C to F (Fig. 6) were examined by test trenches, but found to have been completely excavated to a depth of not over 18 inches, usually only 10 to 12 inches. A single artifact was recovered from Mound F, a badly eroded piece of ivory (Fig. 10d).

Comparison of Mounds A and B

The similarities of the constructions in Mounds A and B are readily apparent. Both contained wooden platforms, only 6 to 9 inches below the surface, on which skeletons were generally extended, with heads to the east. This recalls Hopson's statement that at Nunavak the burials had their heads to the southeast. They were accompanied by a small quantity of burial goods. Previous excavators may have removed part of the contents of these two mounds. The layer of sod and soil overlying the burials was light brownish and contrasted somewhat with the black soil immediately underlying the wooden platforms upon which the burials rested. In addition, this brownish layer was literally filled with chips of bone, an occasional bone sled shoe, and a few artifacts of types identical to those found in the recently abandoned houses of Utkiavik, some of which are not more than 100 feet away. This recent layer not only covered the tops of these low mounds but also the ground nearby. It extended down into the gulley that separates these low mounds but also the ground nearby. It extended down into the gulley that separates these low mounds.
terial from the artifacts accompanying the burials. As were artifacts recovered from all parts of Utqiagvik, these chips and artifacts in the brownish soil were well preserved.

The fact that the few inches of soil covering these burials is of recent date suggests the possibility that when the burials were first placed on these two hillocks they were not covered. Possibly by the time of the occupation of the Utqiagvik Site, they were sufficiently overgrown by moss, grass, and the wind-blown soil trapped by this vegetation to conceal the skeletons, so that the people of Utqiagvik who used this area as an outdoor workshop were unaware that they were working over the graves of their ancestors.

Burials on log platforms, usually covered with logs in different ways, are not an uncommon Eskimo practice, even in recent times. In 1930 Henry Collins and I removed several skeletons from recent burials near Unalakleet. These had been laid out on platforms formed of parallel logs and covered by other logs placed over them tipi-fashion. At the Ipiutak Site at Point Hope, Larsen and Rainey found numerous Ipiutak and Near Ipiutak culture burials placed in rectangular log tombs, outlined by log frames, or on indistinguishable masses of rotted wood. So shallow were many of these burials that the excavators were uncertain that they had been intentionally covered with soil.¹

### Cultural Content of the Kugok Burial Mounds

The inventory of items from my excavations of the two burial mounds at the Kugok Site is by no means so extensive as the collections made by Van Valin and Hopson. Basically, this collection appears to be closely related to the cultural content of the Birnirk Site, described below. However, there are a few suggestions, based principally on decoration, that these burials may be slightly earlier than most of the material from Birnirk. Among these are the two ivory hooks (Fig. 10a–b) that bear the remnants of curvilinear Old Bering Sea style decoration. The badly eroded ivory object shown in Fig. 10d appears to represent an animal with mouth open and teeth prominently featured. This is another motif of the Old Bering Sea style,² but the present example is too poorly preserved to show whether there was fine incised decoration on the modeled figure or not.

At the Kugusukaruk Site, Van Valin appears to have found a closed socket harpoon head with a simplified Old Bering Sea decoration of Style III.³ This is the latest of the Old Bering Sea styles and is the one that can be expected as an occasional find in sites that date early in the Birnirk Period. Neither my work at Birnirk nor the recent, more extensive excavations of Wilbert Carter for Harvard University have uncovered any clearly recognizable Old Bering Sea style decorated artifacts from the Birnirk Site. In the Stefánsson Collection, reported by Wissler, there is a harpoon head of rather crude Old Bering Sea style of decoration, listed from

¹ Larsen and Rainey, 1948, 57–63.
² Collins, 1937, Pl. 27 B.
³ Mason, 1930, Pl. 5, Fig. 1; cf. Collins, 1937, Pl. 26, Fig. 16.
Birnirk. There is also an excellent example of an early Old Bering Sea Period harpoon, both in shape and decoration, shown as Wissler's Fig. 9. It conforms to Collins' Type Ix. This is listed as from Utkiavik. Stefansson purchased the specimens in his collection from the Eskimo, and the report was probably correct. This harpoon head probably came from the Kugok mounds on the edge of Utkiavik Village.

The sites excavated by Van Valin, Hopson, and my own appear to give a very clear picture of the burial customs of the early part of the Birnirk Period. The bodies were wrapped in skins and placed upon wooden platforms more or less carefully prepared. Baleen buckets may have contained food and drink; weapons and tools were placed beside the bodies. Probably there was usually a covering of logs which, because it was subject to thawing in the summer, has almost completely decayed.

**Physiography Related to the Burial Sites**

Figure 5 is a sketch map of the Nunavak vicinity, the lagoon of that name, and another lagoon about half a mile down the coast to the southwest which, for the sake of convenience, is herein referred to as "South" Nunavak Lagoon. As can be seen there are five small mounds to the south of the mouth of this southern lagoon. These were also excavated by Hopson, and he stated that they contained burials, but I obtained no clear account as to exactly what was found in them.

It appears that the knolls at Kugok, Nunavak, South Nunavak, and Kugusugaruk are all of natural origin. The method of formation is clearest in the case of the low mounds beside the two Nunavak lakes; they are obviously frost features, a result of the ground ice wedges so ably described by Leffingwell. In the vicinity a number of young knolls, unused by the Eskimo for burial purposes, could be seen in the process of formation. As can be observed, many of the Nunavak mounds lie at the intersection of ground ice cracks, particularly where cracks intersect in the form of a T. At these intersections there is often a small pond. The mounds are found just above the stem of the T, adjacent to what may be considered the crossbar. The sides of what appear to be fresh mounds are steeper towards the ice crack and slope more gently on the other sides. The turf on these young mounds is broken into blocks, more or less evenly spaced over the hillocks, and the subsoil can be seen through the wide cracks between the turf blocks. This suggests that these hillocks were raised by pressure from below the surface. Apparently older mounds are evenly covered with sod, but this coverage seems to be by a slow process. The force that has raised these mounds is probably provided by the longitudinal expansion of the ice wedges that occupy the stem portions of these T-like intersections. The ancient Eskimo merely took advantage of these knolls as resting places for their dead.

As far as I could discover, the rather extensive excavations of the Eskimo, who have been mining the abandoned portions of Utkiavik for specimens for a number of years, have not located any area with dwelling refuse of an age comparable with the burials at the Kugok mounds. A similar situation appears to exist at Nunavak and at South Nunavak; we found no dwelling site refuse, although we searched the vicinity with great care, digging a number of holes in the tundra at likely places.

Usually Eskimo burials are placed back on the tundra away from the shore, only a short distance from the dwellings. The lack of any evidence of dwellings in the vicinity of these sites is somewhat strange and requires some attempt at explanation. The 25-foot cliff at the village of Utkiavik is still retreating, as is demonstrated yearly by fresh slumping of the bank. It has been argued that this results from a sinking of the coast line so that possibly the dwellings of a date comparable with the burials described have already eroded into the ocean. The conditions at Nunavak lagoons are slightly different in that the banks are low, and probably the coast is not retreating as fast as at Utkiavik. There is a possibility that village remains have been lowered by regional subsidence beneath the water of the drowned river mouths or the sand beach formation that separates these lakes from the ocean. It would be interesting to do some test drilling in the areas in an attempt to find refuse deposits.

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1 Wissler, 1916, Fig. 6a.
2 Collins, 1937, 100-101, Pl. 23, Fig. 1.
3 Leffingwell, 1919, 205-242.