

# VANKAREM ANTIQUITIES

Nikolai N. Dikov<sup>1</sup>

Translated by Richard Bland

Edited by Owen K. Mason and Erica Hill

## ABSTRACT

Cape Vankarem and the adjacent barrier islands contain evidence of several Old Bering Sea and Thule settlements. In 1957 and 1963 Soviet archaeologists conducted several excavations in the vicinity of Cape Vankarem, examining several house depressions and two burials. Five discrete sites were clustered around the cape, each with a distinctive house type and artifact assemblage. The excavations produced diagnostic Old Bering Sea, Birnirk, and Thule harpoon heads and arrow points, pottery paddles, polar bear pendants, bola weights, and fishing equipment. The wood house floors included baleen, skin, and the bones of walrus and seal. Subsequent to the original report, three <sup>14</sup>C ages were obtained, establishing, minimally, three periods of occupation over the last 2000 years. The oldest assay, circa 1840 <sup>14</sup>C yrs BP, must be adjusted for marine carbon reservoir effects and places the earliest occupation of Cape Vankarem around AD 500. Two younger assays on charcoal place subsequent occupations around AD 1100 and AD 1650–1800.—*Eds.*

**KEYWORDS:** Old Bering Sea, Thule, Eskimo archaeology, coastal geomorphology

In the late fall of 1957 [and in 1963],<sup>2</sup> our team conducted the first professional archaeological excavations on Cape Vankarem. As a result, four groups of ancient house depressions, in addition to two graves, were identified on the crest of the cape and the barrier island adjoining it, where the modern Vankarem village is situated (Map 1).<sup>3</sup>

## EXCAVATIONS IN TYPE I HOUSES

Reconnaissance excavations were undertaken in the southwestern dwelling of Locus 4 within one of two large (30-meter diameter) Type I pithouses (Fig. 1). The huge

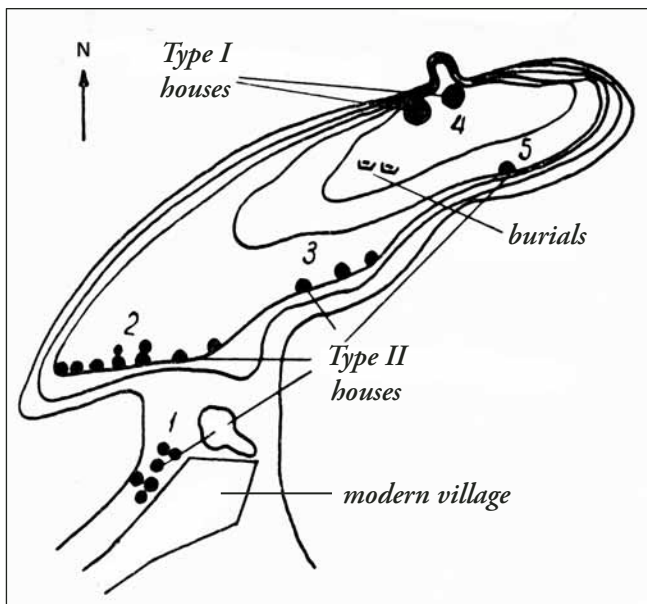
mound of the ruins of this house is located on the edge of the bedrock bluff about eighteen meters above sea level. The recent slump of the cultural layer extends in one place to the base of the cliff. In this slump we found various stone and walrus tusk artifacts (Fig. 2), including a fragment of a winged object (Fig. 3:8).

We obtained most of the diagnostic artifacts of the OBS and Punuk/Thule cultures by excavating within the sod of the upper part of the slumping deposits on the north edge of the knoll. An area of more than 100 square meters was uncovered to the limit of permafrost, a depth of 40 cm. The disturbed sediments do not provide a reliable basis

1 [Nikolai Nikolaevich Dikov (1925–1996) was director of the Laboratory of Archaeology, History, and Ethnography of the Northeastern Interdisciplinary Scientific Research Institute of the Far East Division of the Russian Academy of Sciences (RAN), Magadan, for thirty-five years. He worked throughout Chukotka and Kamchatka during his long career (e.g., Dikov 1965, 1968) and is perhaps best known to English-speaking audiences for his excavations at the Ushki sites (Dikov 1996).]

2 [All annotations by the editors are indicated by brackets.]

3 [Only selected figures have been reproduced here; therefore, figure order differs from that of the 1968 original, published as *Vankaremskie drevnosti. Oblastnoi Kraevedcheskie Muzei Zapiski* (Magadan) 5:60–71.]



Map 1: Sketch map of Cape Vankarem loci.

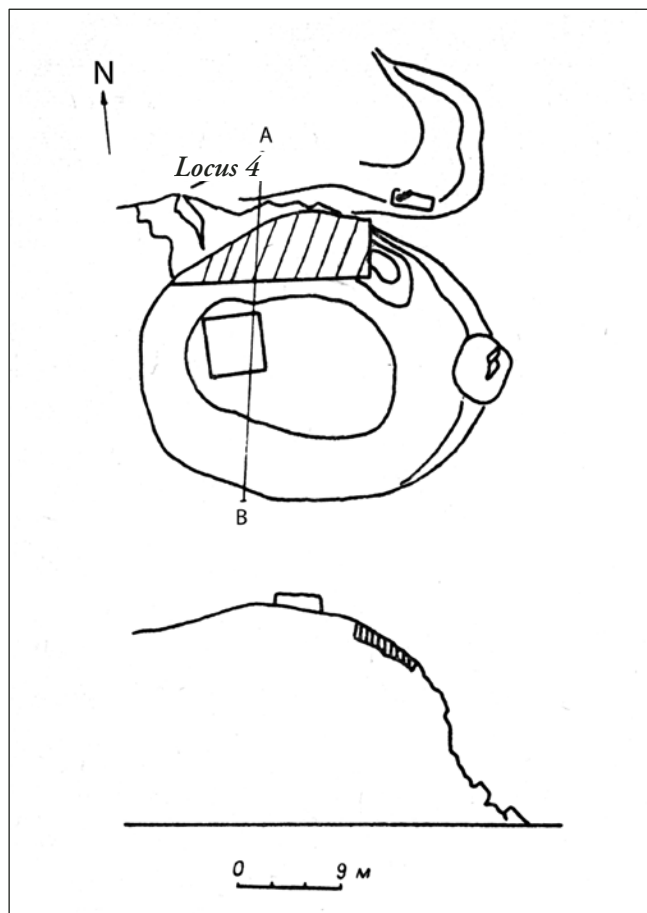


Figure 1: Plan and cross-section of the excavation of a large house depression in Locus 4. Line A-B indicates location of cross-section.

to evaluate the construction of the pithouse. However, [it is known that] sizable Type I pithouses were built of whale bones (ribs, mandibles, and crania) [as described by Nelson 1899:265]. A variety of artifacts were recovered from the slump area (Figs. 2–8). Stone artifacts collected from the slump included a slate knife, scrapers, and arrowheads; walrus tusk artifacts included one whole and two broken toggling harpoon heads of the Thule 2 type (Figs. 8:1, 8:2), as well as a blank for a large whaling harpoon head (Fig. 8:4). [Additional artifacts included] a stemmed arrowhead, an ivory pick (Fig. 5:11), bone leister prongs, [a marlin spike (Fig. 5:9)],<sup>4</sup> pendants, net sinkers, bone punches, needles,

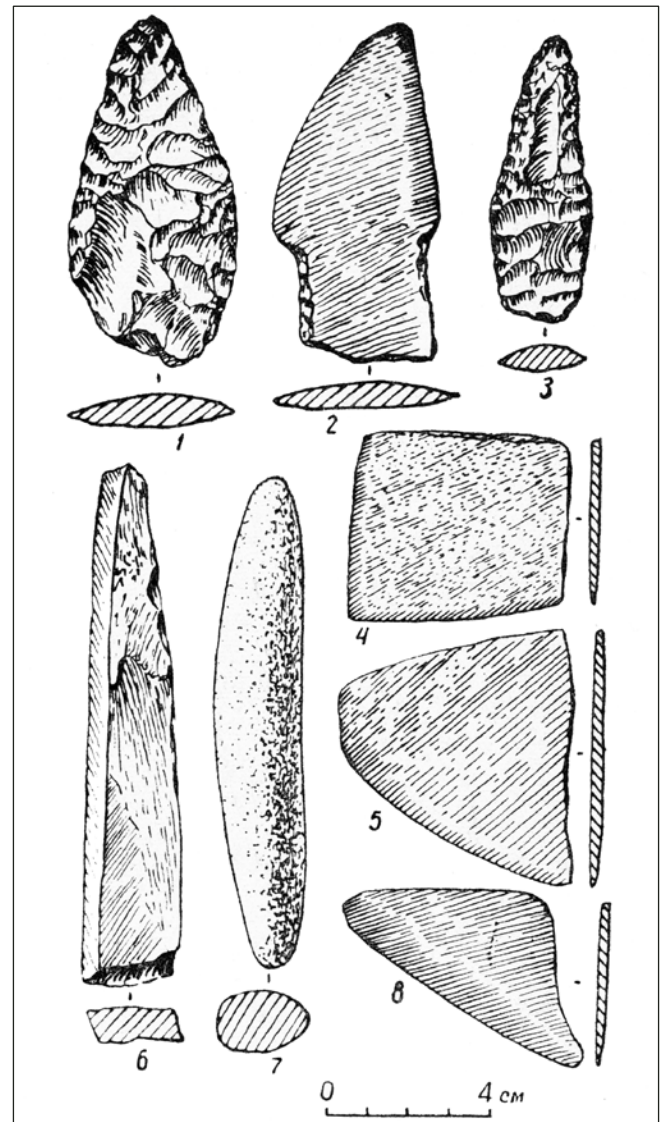


Figure 2: Artifacts of stone and walrus tusk from the large house depression at Locus 4: flaked stone bifaces (items 1, 3) and fragments of slate knives or scrapers (items 4, 5, 8).

<sup>4</sup> [Not identified as such by Dikov; the spike resembles a piece illustrated in Ford 1959:120.]

knife and graver handles, as well as a fish-shaped lure (Fig. 5:10). Caribou antler artifacts included handles, punches, a spoon (Fig. 4:1), an arrow point with a tapered tang, and a [possible] anthropomorphic figurine (Fig. 4:4). Wood artifacts included a bow fragment, a paddle and a toy oar, an arrow shaft, handles, as well as fragments of a vessel. Several thick-walled vessels were obtained from the slump, as well as the tooth of a polar bear with a hole for suspension (Fig. 7:5). Two objects provide evidence of a late occupation of the Old Bering Sea culture: a winged object (Fig. 3:8) and the two Thule 2 harpoon heads (Fig. 8:1, 8:2).<sup>5</sup> [Dikov 1977 (2003:188) characterizes the winged object as “degenerative,” adding that its cultural context was “mixed.” Associated charcoal provided a <sup>14</sup>C assay of 220 ± 50 BP (MAG-202), calibrated at 1σ to AD 1643–1683, 1736–1805, using IntCal09.]

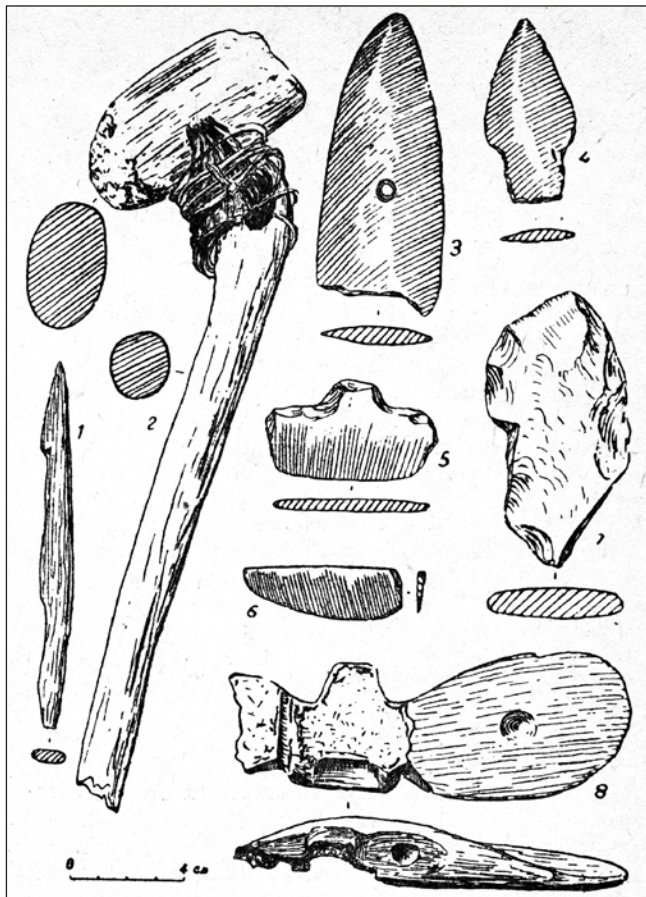


Figure 3: Artifacts from Locus 3 (items 1–7), including a hammer with a wooden handle attached with baleen (item 2) and a winged object (item 8) from Locus 4.

## EXCAVATIONS IN TYPE II HOUSES

All in all, twenty small house depressions were classified as Type II, and were distributed within several discrete loci (labeled 1, 2, 3 on Map 1). [Locus 1 lies on the adjoining barrier island; Locus 2, with nine house depressions 15 to 20 meters in diameter, is on the southwest slope. Locus 3 includes four houses on the southeast margin of the massif; only three are shown on Map 1.] Excavations were undertaken in 1957 and in 1963 in Loci 1 and 3, but not in Locus 2. Within the group of seven small Type II house depressions [Locus 1] on the west side of the spit near a warehouse (Map 1; Fig. 9); our crew stripped off the eroded area that was first uncovered in 1957. Among the finds were a harpoon head of Old Bering Sea or early Punuk

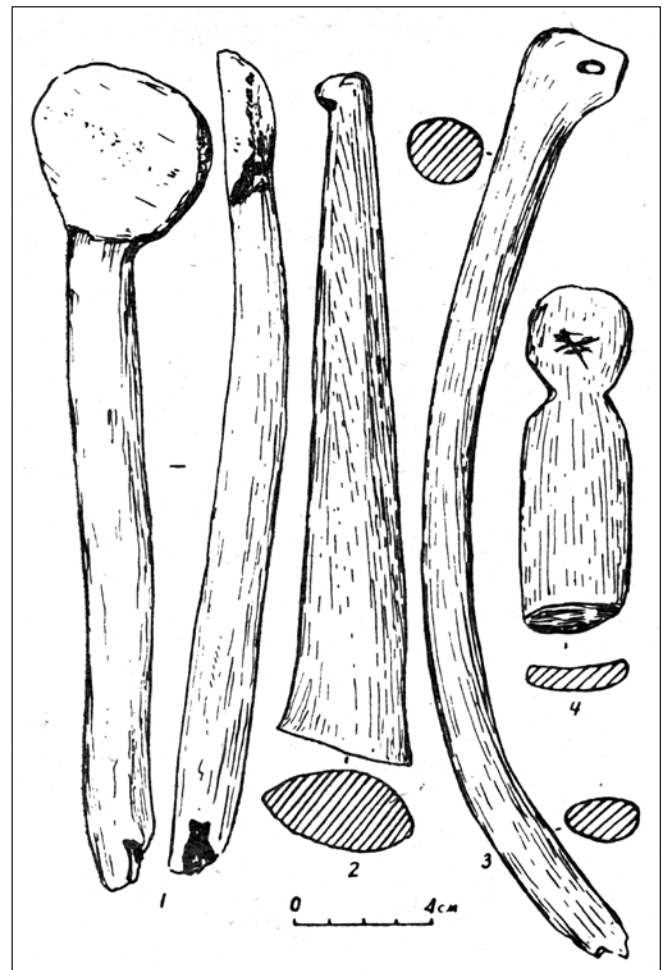


Figure 4: Artifacts of caribou antler from Locus 4, including a spoon (item 1) and what may be an anthropomorphic figurine (item 4).

5 An additional house was excavated in the upper part of the large pithouse, close to the west side; Oleg Alekseevich Petrov removed many bone and stone objects from a depth of more than one meter.



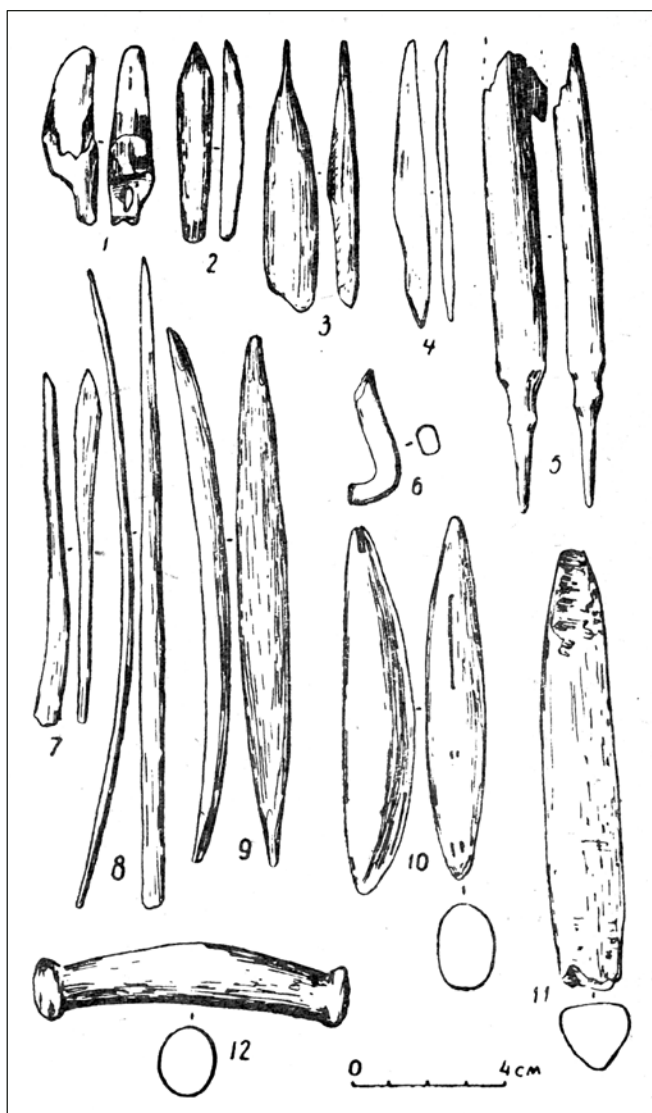


Figure 5: Bone artifacts from Locus 4, including a marlin spike (item 9), a fish-shaped lure (item 10), and an ivory pick (item 11).

[II-y form]<sup>6</sup> (Fig. 10:1) [cf. Collins 1937:fig. 24], as well as several sherds of thick-walled clay vessels (Fig. 10:5), a perforator of caribou antler, a fragment of a slate knife (Fig. 10:3), a rock crystal, a bone pick, and a cobble spall. From deep in one house depression we obtained baleen for a radiocarbon determination. [The date of this sample was reported in Shilo et al. (1977:95); it yielded a <sup>14</sup>C age of 1840 ± 100 BP (MAG-352). When corrected for marine carbon, following Dyke et al. (1996), the date calibrates to AD 622–910 at 1σ or between AD 460 and 1042 at 2σ.]

In the eastern [part of] Locus 3 with its four house depressions located along the edge of the bluff, the inves-

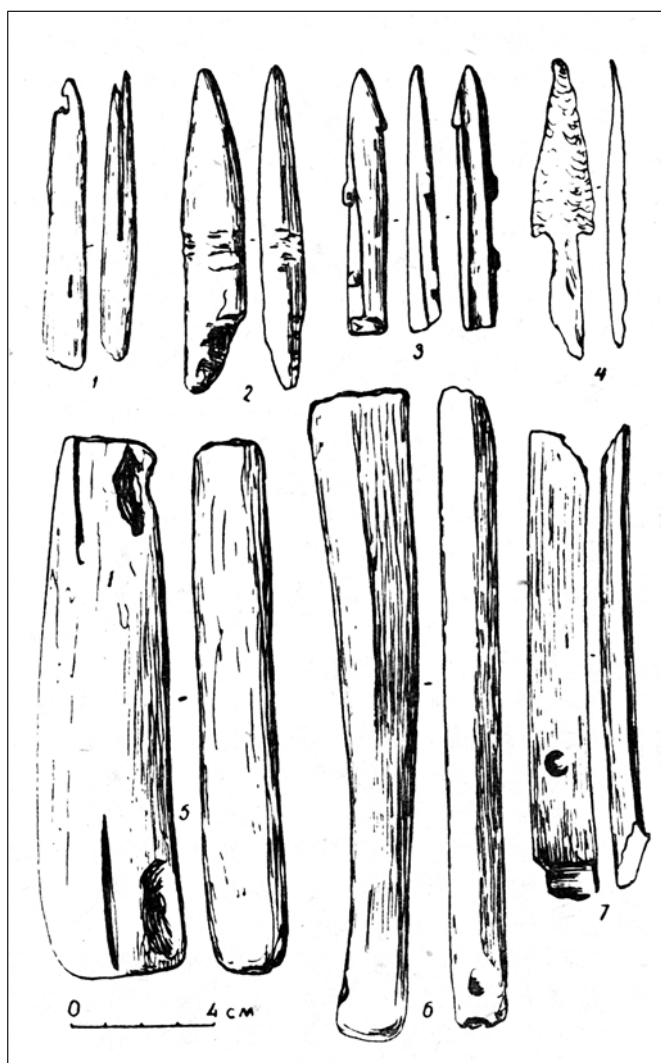


Figure 6: Artifacts of bone and walrus tusk from Locus 4.

tigation, started in 1957 and continued in 1963, involved stripping an unvegetated area within the most heavily eroded house depression, then extending the excavation to the limit of permafrost. Sod-stripping exposed a twelve-meter cross-section through the dwelling, to a depth of about 1.5 meters (Fig. 11). This dwelling was built predominantly of logs, supplemented by whale bone supports. A wood floor constructed of five timbers was encountered in the central area of the excavation through the eroded area, at a depth of one meter. Interestingly, a [polar] bear skin was found, originally placed in the spaces between the logs. The entrance to the former dwelling

6 [In the original text, the harpoon head was identified as either OBS or Punuk; as compared with Geist and Rainey (1936:176), it is a Type H Birnirk harpoon head.]

was a passage to the north that followed a frost crack. In the lower, western part of the exposure, a considerable amount of charcoal and burnt logs were revealed [providing a radiocarbon age of  $870 \pm 50$  BP (MAG-201) in Dikov 1977 (2003:188), calibrated to AD 1040–1112, 1115–1257]. In the low central part [associated with the floor], two toggling harpoon heads were found; these are Old Bering Sea or early Punuk types [identifiable as Birnirk Tuquok (Fig. 12:1) or Naulock types (Fig. 13:1) following Ford (1959:79ff)].

Numerous artifacts were discovered in the midden fill of the house pit during the process of opening up the eroded area (Figs. 3, 12–15), including slate knives, scrapers, [a single barbed bone arrow point with a ta-

pered tang] (Fig. 12:2), spear heads (Figs. 12:3, 12:4), an adze fragment, bola weight (Fig. 12:8), net sinkers, and a hammer attached to a wooden handle by baleen fiber (Fig. 3:2). Walrus tusk objects included picks, leister points (Fig. 3:1), blubber hooks, perforators, net sinkers, and a miniature labret shaped like a cuff-link (Fig. 8:9). Wood artifacts include bow fragments, a cutting board (Fig. 7:8), miscellaneous vessel fragments, and a net float. Objects of caribou antler included a leister point, knife handles, and punches. The most prominent baleen object was an image of a whale. Of the bone objects, a polar bear tooth had holes for suspension [as a pendant] (Fig. 12:5). Finally, the midden contained numerous sherds of thick-walled clay vessels.

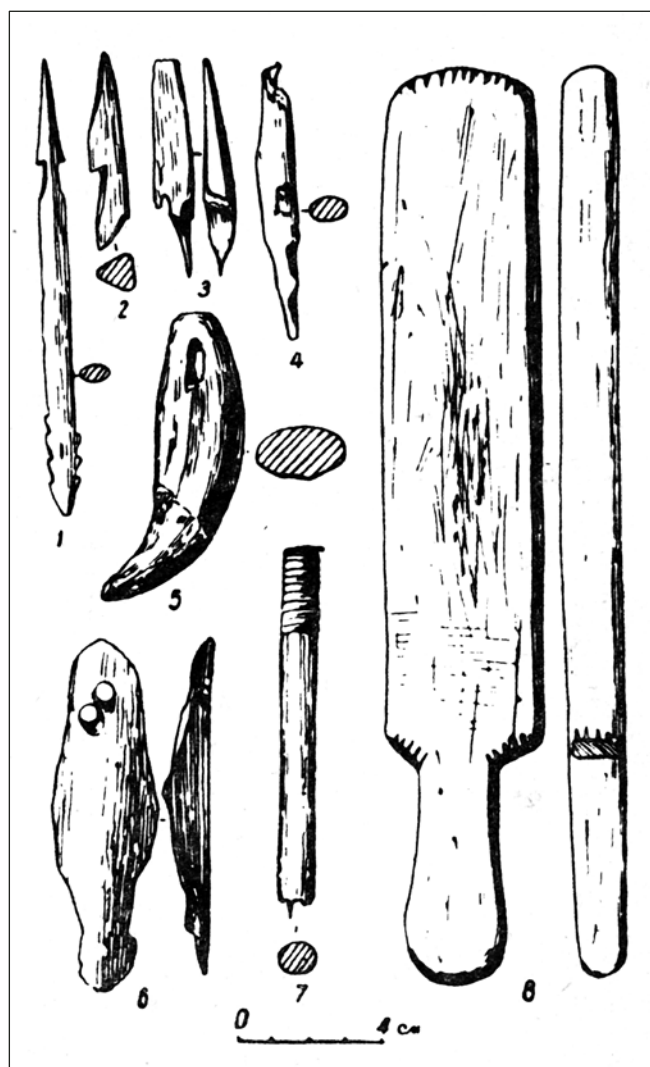


Figure 7: Artifacts of bone and wood from Locus 4. Item 5 is a polar bear tooth pierced for suspension.

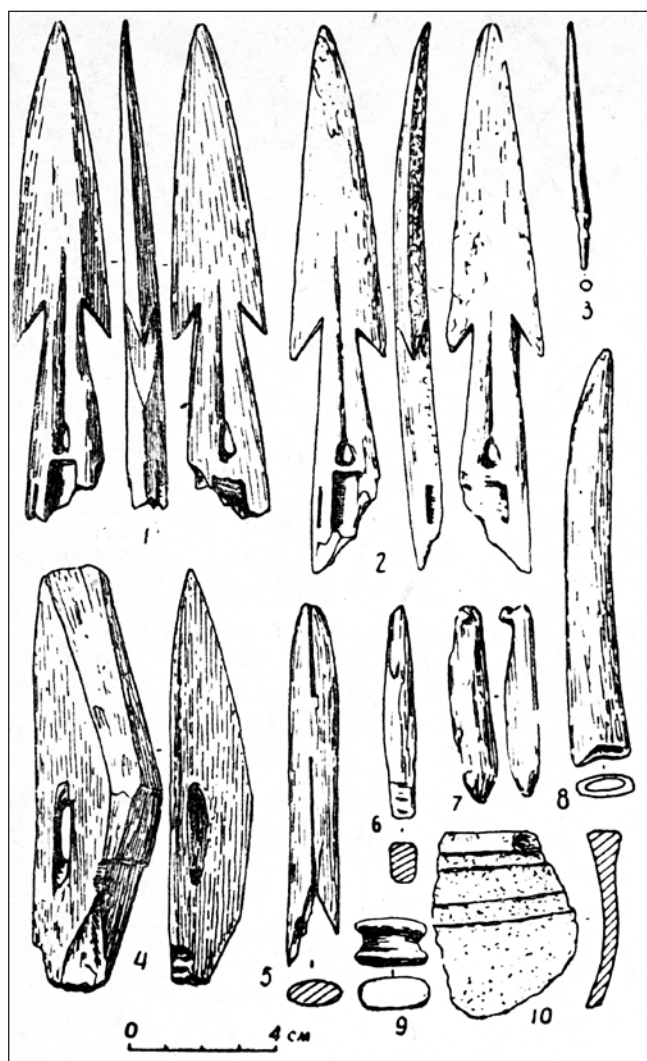


Figure 8: Bone and ivory artifacts from Locus 4 (items 1–7), including two toggling harpoon heads (items 1 and 2). The labret (item 9) and ceramic sherd (item 10) are from Locus 3.

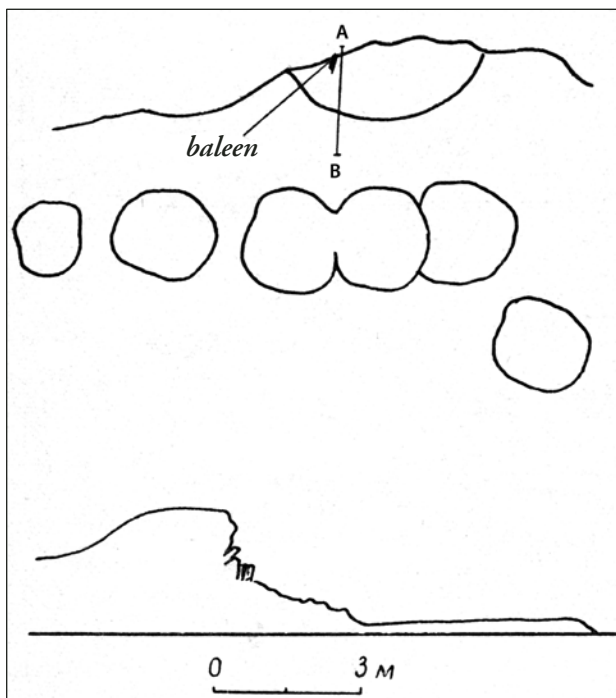


Figure 9: Plan view and cross-section of Locus 1. Line A-B indicates location of cross-section.

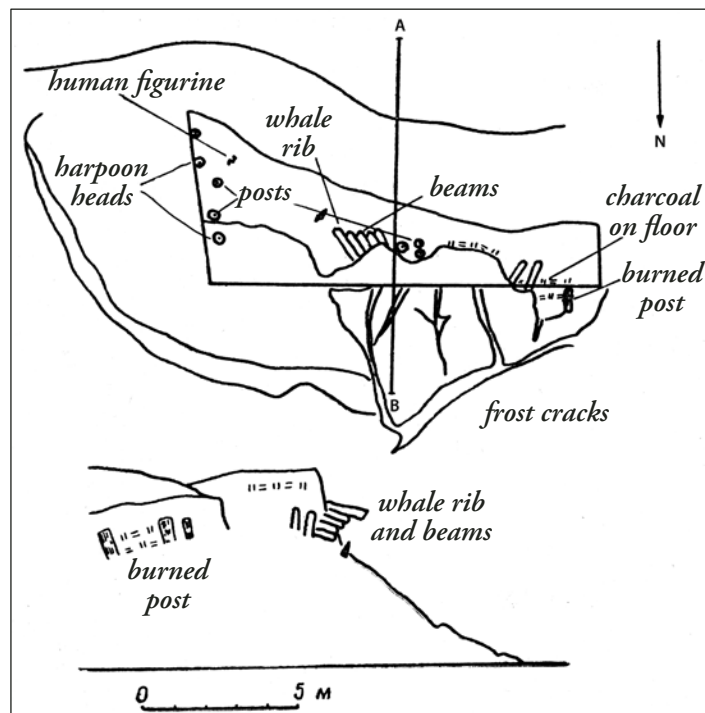


Figure 11: Plan view and cross-section of Locus 3. Line A-B indicates location of cross-section.

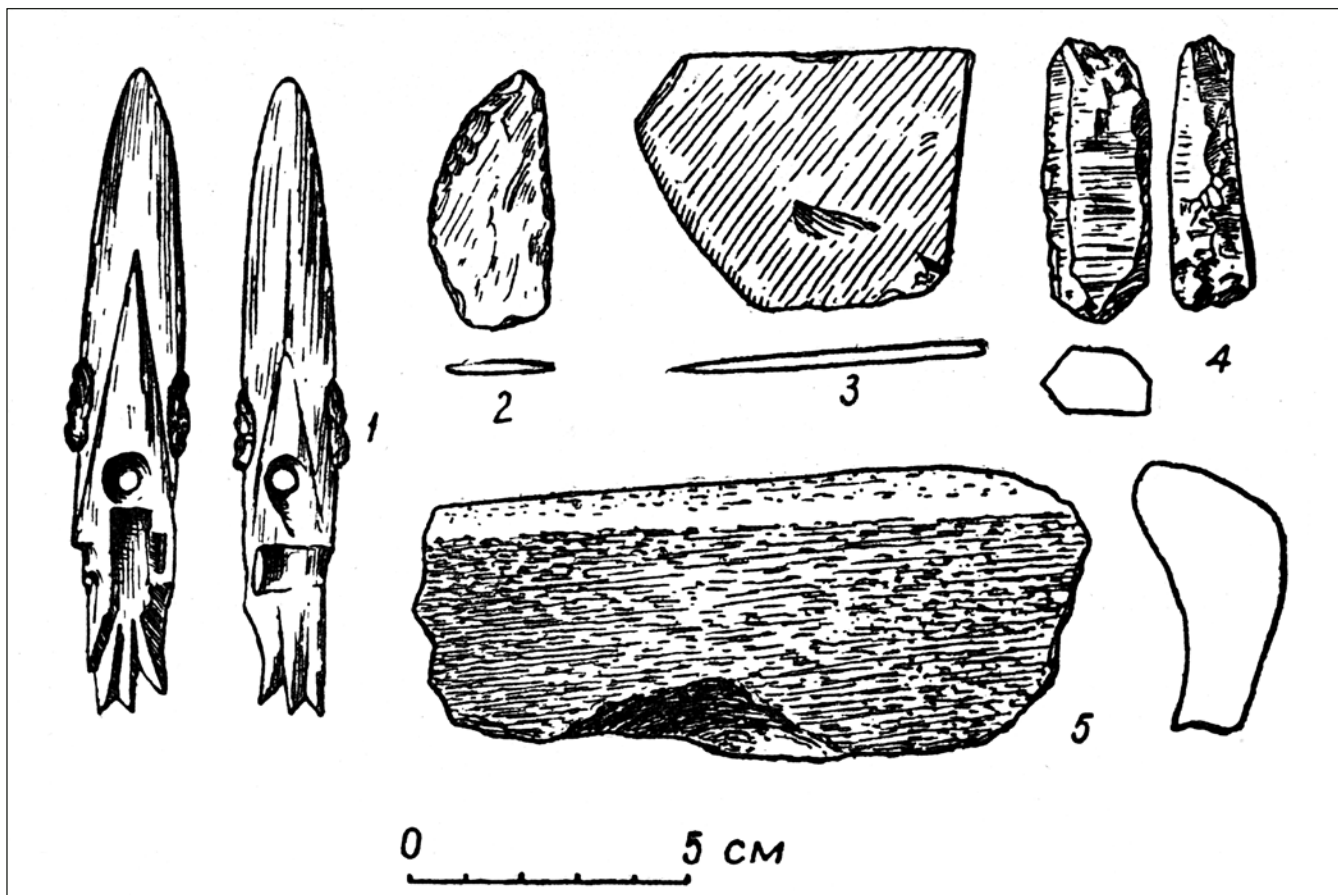


Figure 10: Artifacts from profiling the unvegetated area at Locus 1, including a harpoon head (item 1), a perforator (item 2), fragment of a slate knife (item 3), and a thick-walled ceramic sherd (item 5).



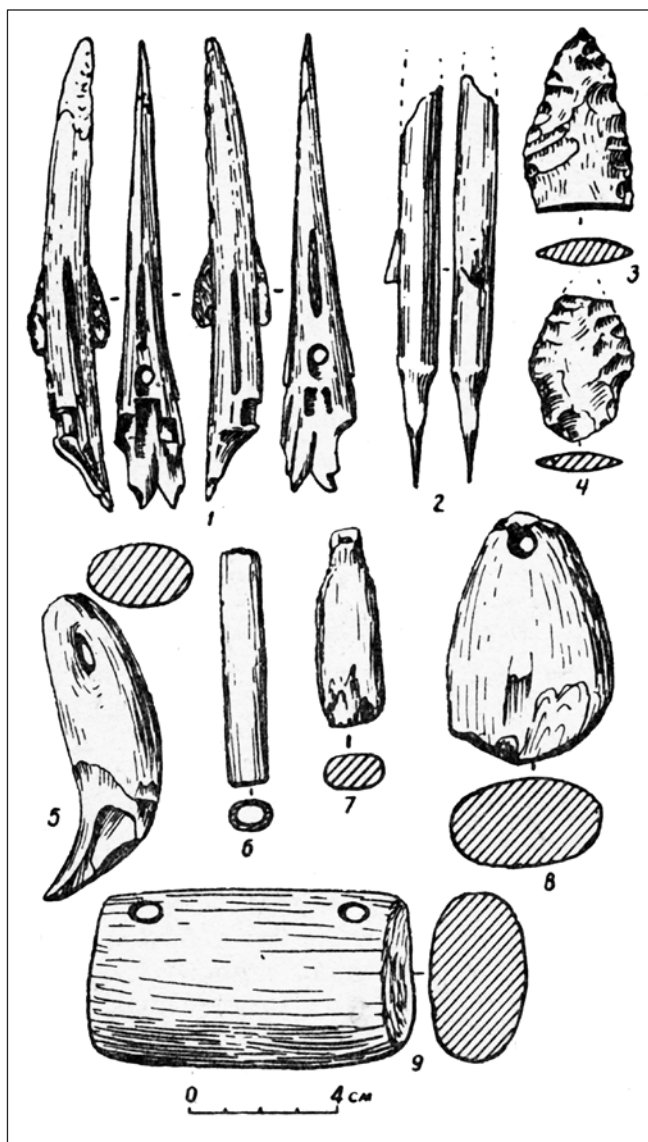


Figure 12: Stone and bone artifacts from Locus 3, including a bone arrow point with a tapered tang (item 2), spear heads (items 3, 4), a perforated polar bear tooth (item 5), a bone tube (item 6), and a bola weight (item 8), [which appears to be made from a walrus tooth].

Several important discoveries by the Vankarem teacher P.S. Mogila must also be considered. Mogila collected a variety of artifacts at the base of the eastern part of the Locus 3 profile in 1961 that were subsequently presented to our expedition (Figs. 14, 15, 16). The objects include: an antler leister prong with four barbs and three grooves on its opposite edge for insets (Fig. 14:1); [a possible engraving tool (Fig. 13:2)]; a distinctive fastener (possibly for a harness) of walrus tusk (Fig. 14:2); and a walrus tusk pottery paddle decorated with curvilinear motifs (Fig. 15). One of

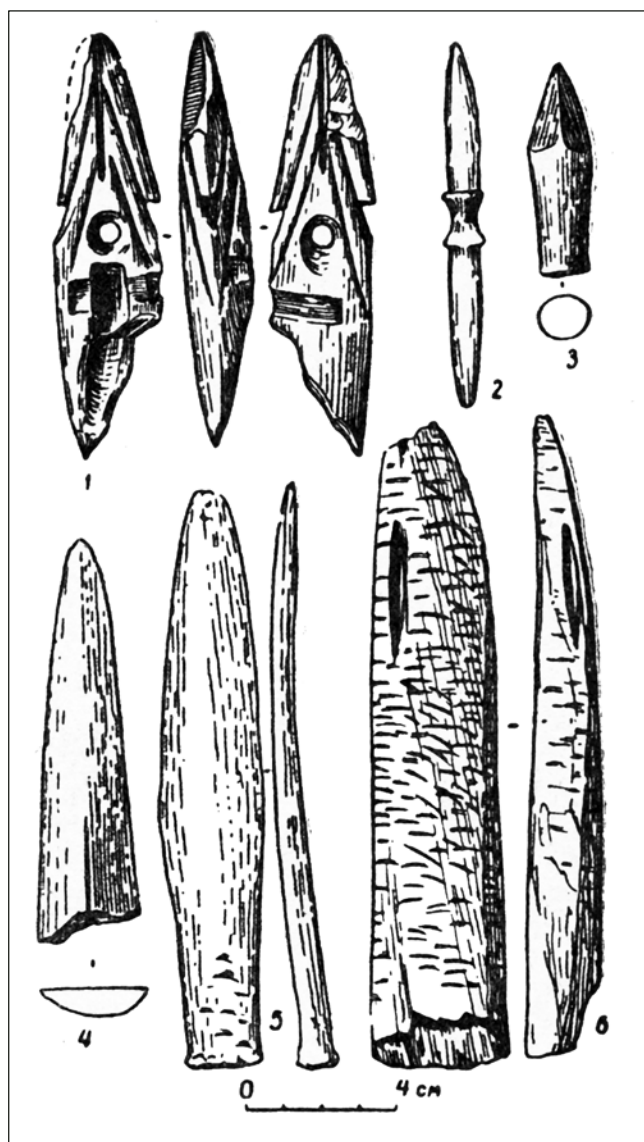


Figure 13: Bone and ivory artifacts from Locus 3.

Mogila's most notable finds is a figurine of a seated person sculpted of walrus tusk (Fig. 16).

## MORTUARY INVESTIGATIONS

The two burials investigated in 1957 and 1963 on Cape Vankarem appear to date to a later period. The graves are located between Loci 3 and 4, on the driest and high part of the cape massif (Map 1). Prior to excavation in 1957 the graves were shallow (50 cm deep) irregular oval pits (3 x 4 m), with large rocks projecting from along their margins. Grave 1 was oriented from northwest to southeast (Fig. 17, left). The 1957 excavations focused on its southwestern corner, reaching 60 cm below the surface, and

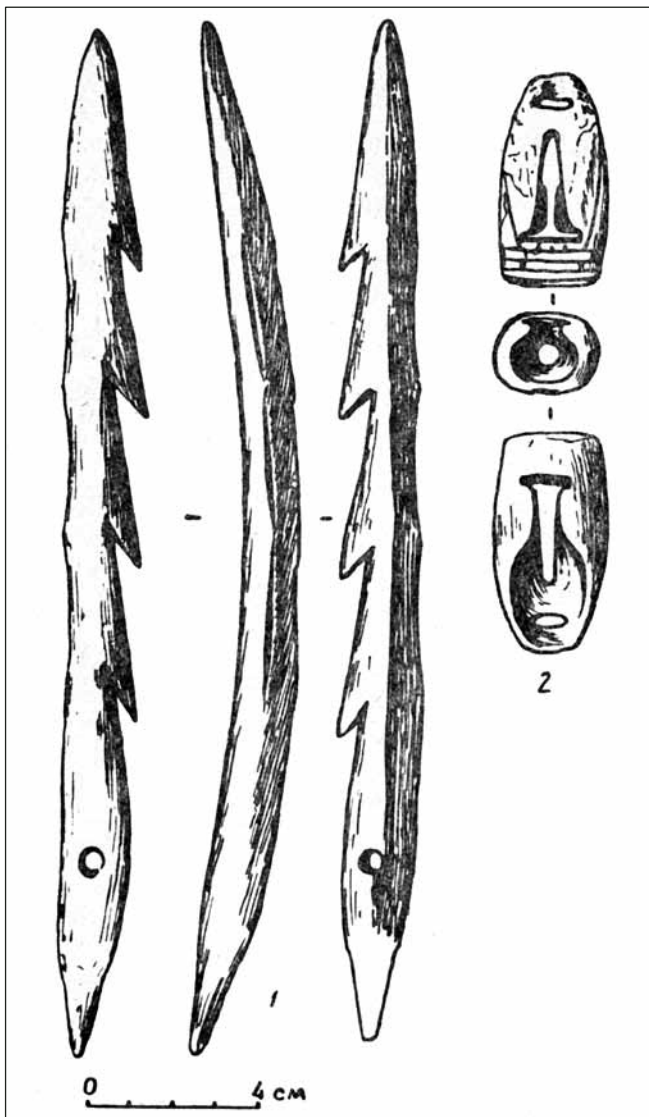


Figure 14: Bone artifacts collected by P.S. Mogila from the devegetated area at Locus 3: a leister prong of antler (item 1) and a fastener (item 2).

recovered a bone awl, a crude clay piece [?], a knife, and a fragment of a slate spear point, as well as polar bear, seal, and caribou bones. Excavations in 1957 were suspended at 60 cm below surface, because frozen ground did not permit digging deeper. By 1963 the permafrost had thawed; the excavation of the burial could be completed and the outline of its stone enclosure was clarified. Three additional stone slabs were noted under the sod on the northeast, establishing that the stone enclosure had the shape of a boat [Russ. *baidar*], 4.5 meters in length by 2.5 meters in width. On its southwestern aspect, between 60–70 cm, a variety of other artifacts were uncovered in addition to the 1957 finds. These include [several] wooden arrow shafts, a stone arrowhead, and [several] bone punches. Under these

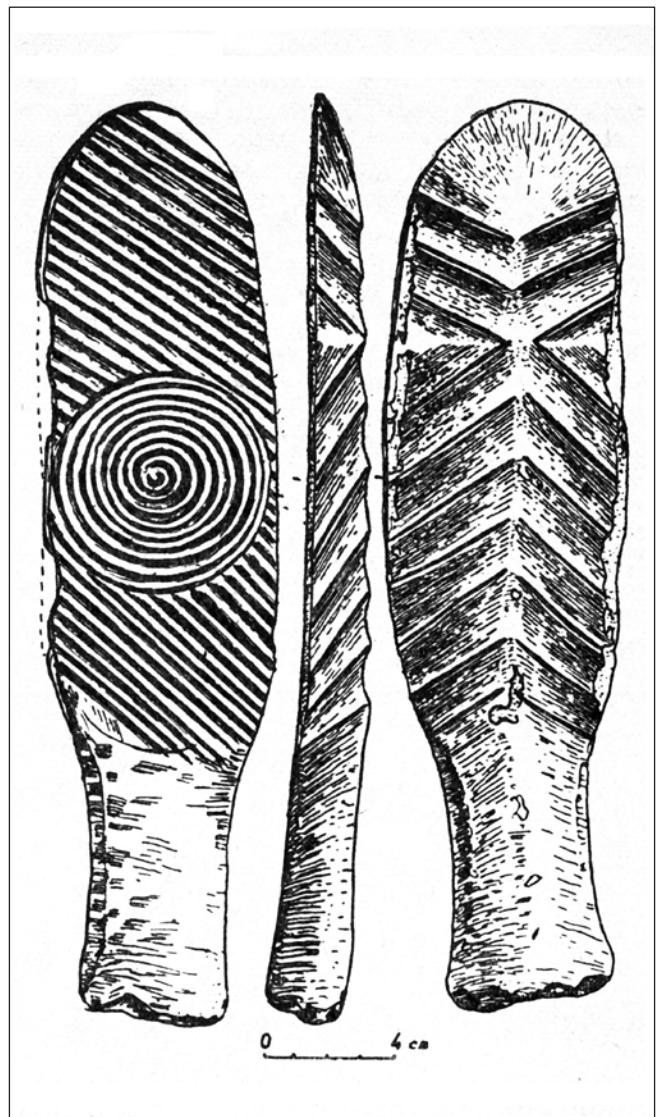


Figure 15: Walrus-tusk paddle for stamping ceramics from Locus 3; collected by P.S. Mogila.

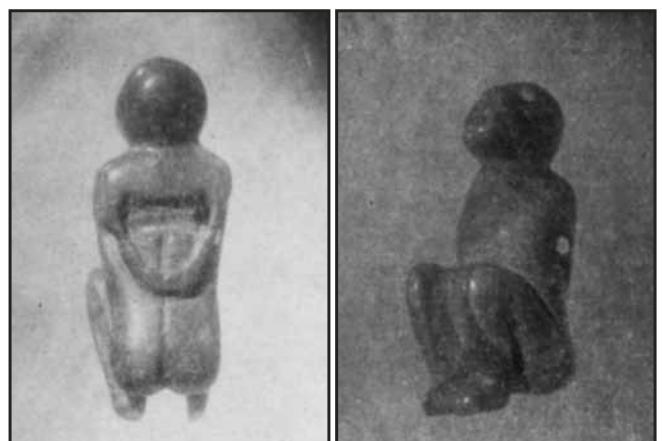


Figure 16: Seated human figure carved of walrus tusk; collected by P.S. Mogila at Locus 3. [May represent a bound captive.]



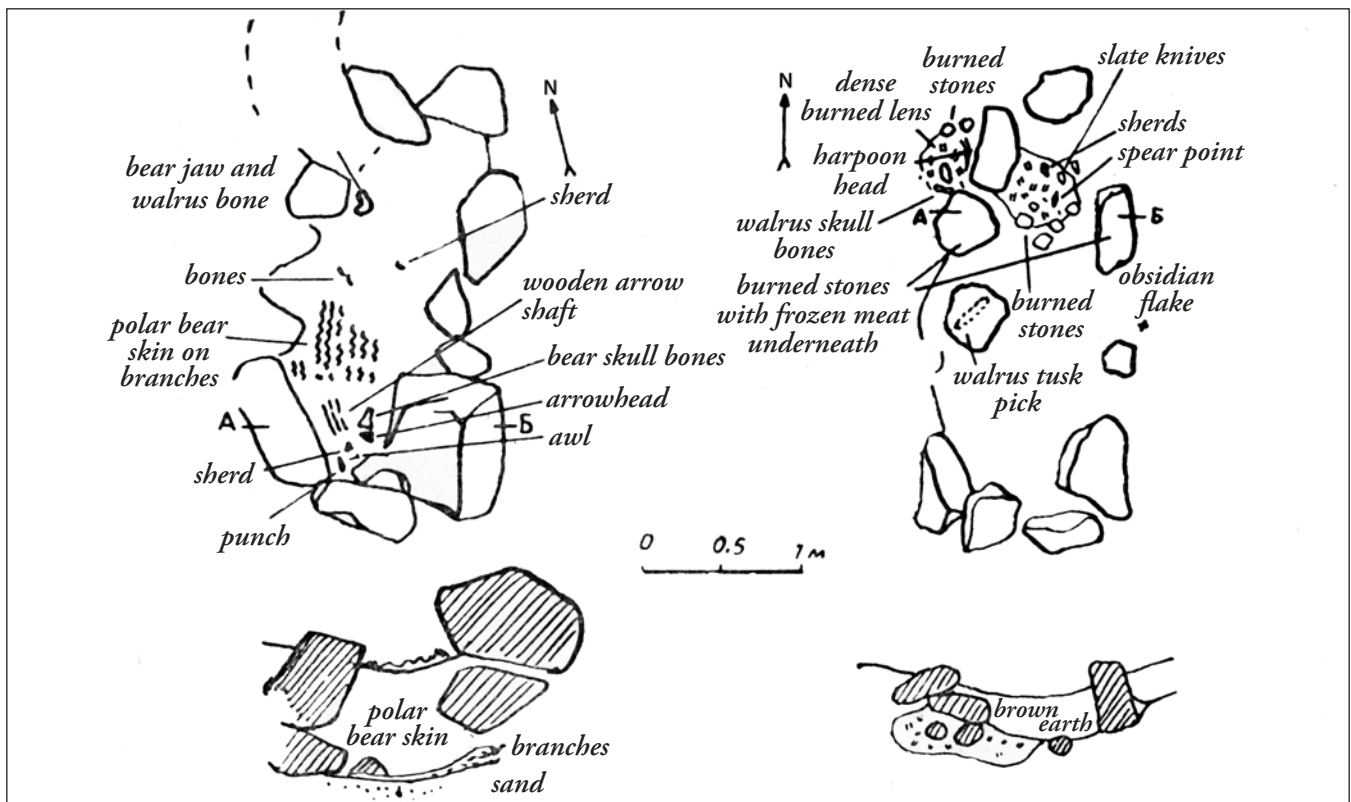


Figure 17: Plan view of the two Vankarem graves, no. 1 (left) and no. 2 (right). Line A–B indicates location of cross-section.

objects, at a depth of 70 cm, the remains of the skin of a polar bear lay on branches. Under the skin and brush was pure sand, saturated with water (the consequence of the thawing of the permafrost). In the northeastern half of the grave were a bear's jaw, split walrus bones, and the sherd of a ceramic vessel. Several fragments of baleen and a caribou scapula were preserved near the rocks forming the south margin of the burial enclosure.

In the northern part of the second grave (Fig. 17, right), oriented from north to south, traces of a hearth were found during the excavations of 1957 [comprised of] a charcoal stain surrounded by small burned stones and containing clay sherds and a scraper. Walrus and bear bones lay on both sides of this small hearth near one large burnt stone; decayed meat was underneath. The completion of excavation within this grave was possible only in 1963 after [additional] thawing. This grave enclosure (3.5 meters long)—following the removal of all

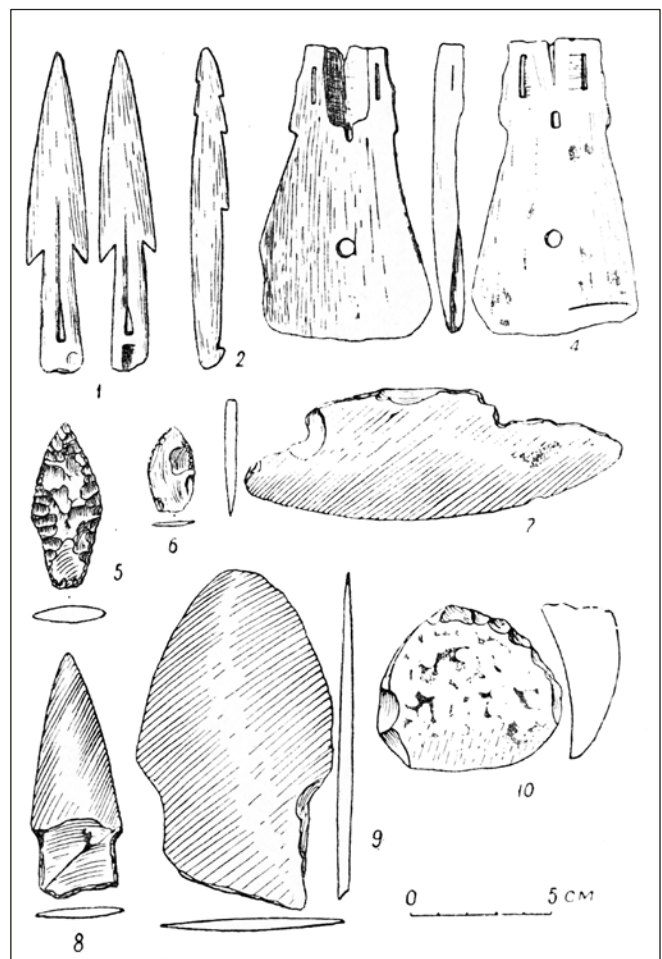


Figure 18: Isolated finds from Cape Vankarem.

of its superimposed stones—resembled a baidar with its bow oriented north. The hearth stain uncovered in 1957, surrounded by burned stones, was traceable under the stones and continued to the northwest. The hearth was a dense burned lens, possibly of burned fat. Grave 2 contained walrus skull bones as well as a Thule 3 toggling harpoon head. On the east side of the hearth were three slate knives, a spear point, the rim of a clay vessel, and additional walrus bones. In the central part of the grave was another clay sherd, and by its eastern slab—a whale vertebra and fragments of a wood post. In addition, a walrus tusk pick was found near a fragment of the walrus skull.

Notably, in the graves described, no human bones were recovered by the expedition. However, human bones were encountered in the adjacent back dirt of other pits excavated by local residents. For example, in the back dirt beside Grave 1 we obtained a mandible and a femur. The general dearth or absence of human bones in the graves we excavated reflects either poor preservation or the complete decay of the bone or, secondarily, as in some graves (e.g., Grave 2), the practice of cremation.

## CONCLUSIONS

The data [from the investigations] of the early sites at Cape Vankarem allow several archaeological conclusions. First, the very large dimensions of the dwellings (from 15 to 30 meters in diameter) suggest that large family units occupied [each] house. [House size, hence, household composition, was larger at the dwelling at Locus 4], which shows the influence of the [intrusive] Thule culture.

The presence in all the dwellings of [materials with] clear Old Bering Sea affinities, especially the harpoon heads and the discovery of the winged object (Fig. 3:8), confirms the assumption of Belyaeva (1965) that the Old Bering Sea culture developed only in the western Eskimo region—in western Alaska and on the Chukchi Peninsula—and did not spread to the east [to Canada]. For this reason, Old Bering Sea cannot be viewed, contrary to many long-standing opinions, as the initial center of development of a unique culture of sea mammal hunters that spread to the east. It did not extend farther east than Alaska. Recently, an entirely different Neoeskimo culture has been discovered in Canada and Greenland,

with roots as deep as those of OBS. The sources of that culture are apparent in sites of the newly defined Arctic Small Tool tradition [e.g., Irving 1957, 1962].

Another archaeological concern involves the expansion of the Neoeskimo culture, Old Bering Sea, to the northwest, along the shore of the Chukchi and East Siberian seas. Cape Vankarem provides evidence that the Old Bering Sea culture extended from Bering Strait to this distant western point: (a) the winged object of late type from the large house at Locus 4 as well as (b) the harpoon heads from the houses at Loci 1 and 3. Thus, the presence in the north Chukotkan coast of other OBS sites [i.e., Cape Baranov], continuing to the mouth of the Kolyma [Okladnikov and Beregovaya 1971] indicates that Old Bering Sea at Cape Vankarem was not an accidental occurrence. This confirms the hypothesis that the migration of the OBS founding population was not to the east, but was predominantly to the northwest.

The Birnirk culture spread in the same [northwesterly] direction as well. The center of this “archaic” Eskimo culture is along the northern shore of Alaska, in the region of Point Barrow (Ford 1959). The Birnirk culture developed after Ipiutak and focused on the hunting of small seals and caribou, in contrast to Old Bering Sea and Punuk, which were reliant on the hunting of larger sea mammals—whales and walruses.<sup>7</sup> Large dwellings are characteristic of Birnirk and occur frequently on spits and beach ridges, typically at lower elevations than Old Bering Sea sites. In Birnirk graves, flexed burials are often encountered along with extended burials (Dikov 1967:76–78, figs. 30–32). The ceramic vessels, based on the curvilinear stamps in the Vankarem house depressions, were decorated with complex designs of concentric circles and spirals [that are similar to Birnirk motifs]. This [Birnirk] culture coexisted in Chukotka and Alaska with the Old Bering Sea and Punuk and corresponds, apparently, to another [distinct] ethnic group of Eskimos. Finally, the last influence on the pre-Russian Cape Vankarem population was exerted by the Greenland–Canadian Neoeskimo Thule culture.<sup>8</sup> This influence was very strong and, judging by the Vankarem finds, especially in its harpoon heads, represents an admixture of a Thule-Punuk material complex that prevailed in the region.

7 [This view may be questioned, given recent data and reinterpretation (cf. McCartney 1995).]

8 [The use of the term “Greenland-Canadian” is retained, although Dikov’s precise meaning is unclear. Presumably, he is referring to what Collins (1964:99) termed a Thule “return flow” westward once Thule people reached the eastern Arctic.]

## REFERENCES

- Belyaeva, A. V.  
1965 Forum uchenykh mira [Forum of the Scholarly World]. *Kraevedcheskie zapiski* V. Magadan.
- Collins, Henry B., Jr.  
1937 *Archaeology of St. Lawrence Island, Alaska*. Smithsonian Miscellaneous Collections 96(1).
- 1964 The Arctic and Subarctic. In *Prehistoric Man in the New World*, edited by Jesse D. Jennings and Edward Norbeck, pp. 85–114. Published for William Marsh Rice University by the University of Chicago Press, Chicago.
- Dikov, N. N.  
1965 The Stone Age of Kamchatka and the Chukchi Peninsula in the Light of New Archaeological Data. *Arctic Anthropology* 3(1):10–25.
- 1967 Uelenskii mogil'nik, po dannym raskopok v 1956, 1958 i 1963 gg. [The Uelen Burial Ground, Based on Excavations in 1956, 1958, and 1963]. *Istoriya i kul'tura narodov Severa Dal'nego Vostoka* [The History and Culture of Peoples of the Northern Far East]. Works of the Northeast Interdisciplinary Scientific Research Institute, Siberian Division, Academy of Sciences, USSR. 17:76–78, figs. 30–32. Moscow.
- 1968 The Discovery of the Palaeolithic in Kamchatka and the Problem of the Initial Occupation of America. *Arctic Anthropology* 5(1):191–203.
- 1996 The Ushki Sites, Kamchatka Peninsula. In *American Beginnings: The Prehistory and Paleoecology of Beringia*, edited by Frederick H. West, pp. 244–250. University of Chicago Press, Chicago.
- 1977 [2003] *Archaeological Sites of Kamchatka, Chukotka and the Upper Kolyma*. Shared Beringian Heritage Project, National Park Service, Anchorage. [Translation by Richard L. Bland of *Arkheologicheskie pamiatniki Kamchatki, Chukotki, i Verkhnei Kolymy*, Nauka, Moscow].
- Dyke, Arthur S., Roger N. McNeely, and James Hooper  
1996 Marine Reservoir Corrections for Bowhead Whale Radiocarbon Age Determinations. *Canadian Journal of Earth Sciences* 33:1628–1637.
- Ford, James A.  
1959 *Eskimo Prehistory in the Vicinity of Point Barrow, Alaska*. Anthropological Papers of the Museum of Natural History 47(1).
- Geist, Otto and Froelich Rainey  
1936 *Archaeological Excavations at Kukulik, St. Lawrence Island, Alaska*. Government Printing Office, Washington, D.C.
- Irving, William N.  
1957 An Archaeological Survey of the Susitna Valley. *Anthropological Papers of the University of Alaska* 6(1):37–52.
- 1962 A Provisional Comparison of Some Alaskan and Asian Stone Industries. In *Prehistoric Cultural Relations between the Arctic and Temperate Zones of North America*, edited by J. M. Campbell. Arctic Institute of North America Technical Paper 11:55–68.
- McCartney, Allen P.  
1995 Whale Size Selection by Precontact Hunters of the North American Western Arctic and Subarctic. In *Hunting the Largest Animals: Native Whaling in the Western Arctic and Subarctic*, edited by Allen P. McCartney, pp. 83–108. Canadian Circumpolar Institute, University of Alberta, Edmonton, AB.
- Nelson, Edward W.  
1899 *The Eskimo about Bering Strait*. Government Printing Office, Washington, D.C.
- Okladnikov, A. P. and N. A. Beregovaia  
1971 [2008] *Early Sites of Cape Baranov*. Shared Beringian Heritage Program, National Park Service, Anchorage. [Translation by Richard Bland of *Drevnie poseleniia Baranova Izdatel'stvo*. Nauka, Sibirskoe Ordelenie, Novosibirsk.]
- Shilo, N. A., N. N. Dikov, A. V. Loshkin, and A. V. Starikov  
1977 New Radiocarbon Dates of Archaeological Objects from Upper Quaternary Deposits in the Soviet Northeast. *Doklady Akademii Nauk ASSR* [Proceedings of the USSR Academy of Sciences] 237:94–95.



