

MEDDELELSER OM GRØNLAND
UDGIVNE AF
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Bd. 202 · Nr. 1

ARCHAEOLOGICAL AND
ANTHROPOLOGICAL INVESTIGATIONS
OF LATE HEATHEN GRAVES IN
UPERNAVIK DISTRICT

BY

JAN HJARNØ, J. BALSLEV JØRGENSEN
AND M. VESELY

WITH 22 FIGURES, 6 PLATES AND 28 TABLES

KØBENHAVN
C. A. REITZELS FORLAG
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PREFACE

Numerous investigations, especially Danish investigations, of the Eskimos' physical constitution have seen the light of day over the years. These concern analyses of alive Eskimos' physical type, as well as that of earlier people based on the few remains which have been preserved for a long period after death. Such remains are almost exclusively skeletal materials, which have a considerable amount of inorganic components.

There are many reasons why the Greenlanders' physical anthropology is so interesting:

- 1) Eskimo research is a part of the general studies of man's natural history, whose purpose is to explain his origin and development and the distribution of the various types of human beings now existing.

- 2) The biological description of different arctic peoples can contribute to the history of the Eskimos: their origin, their migrations, and their contacts with other peoples.

- 3) Eskimo research is particularly significant to studies of human adaptation in general to various environments. One reason why Eskimo research occupies a central place in this connection is this people's very scattered localization and the consequent ease in registering contacts; another is that the environmental conditions in the arctic regions are extremely difficult and adjustment therefore has a decisive bearing on survival. Since the Eskimos live on the borderline of existence, natural selection has had a stronger effect among them than among most of the other human populations to whom adaptation has not been a matter of life and death to the same degree.

- 4) Eskimo research has been pointed out as especially significant and particularly urgent in connection with the considerable international cooperative research now being carried out on the subject of man's adaptability, the International Biological Program's Human Adaptability Section. This is because the rapid advance of modern technique requires far greater mobility and communication, along with quick and considerable moving in and out of the previously scattered and isolated populations and speedy assimilation of foreigners.

- 5) The intense admixture of Eskimos and other ethnic groups provides a special opportunity to observe how a blending of two very differ-

ent types of man develops; this makes Eskimo research particularly important.

Originally, the Eskimos were a mongoloid people who migrated at a fairly recent period from Asia to the northernmost coasts of America, where they managed to survive and develop through the last few millenia. In the course of this development they spread out along the Polar Sea as far east as Greenland and all the way around this island.

During the past 300 years an increasing admixture took place between the Eskimos in Greenland and Europeans, primarily Danes, which resulted in the contemporary Greenlanders. Thus, given a possibility of comparing the Greenlanders of today with their Eskimo forefathers, one can arrive at the result of this admixture of Eskimos and white men.

Because of a decisive environmental change the comparison clearly becomes complicated; if one is alert to this situation, however, such analyses should also give an idea of the significance of the environment as far as the physical type is concerned.

As a link in the chain of investigations whose purpose is to illuminate the Eskimos' physical development, we have endeavoured to find skeletal material from the last centuries preceding the Danish colonization in the 18th century. As a result of the National Museum's investigations in 1967 it was possible to locate a number of graves of this kind; the present paper describes the graves from an archaeological point of view and also describes a physical-anthropological analysis of the skeletal materials.

Accordingly, the paper is divided into two parts; JAN HJARNØ wrote the first part, which deals with the archaeological material, and J. BALSLEV JØRGENSEN and MORTEN VESELY are the authors of the second part, which concerns the physical-anthropological investigations.

The paper is translated by Mrs. KARIN FENNOW.

I.
ESKIMO GRAVES FROM UPERNAVIK DISTRICT

By JAN HJARNØ

With 11 figures and 6 plates

Introduction

In connection with the National Museum's archaeological investigations in Upernavik District in the summer of 1967 (HJARNØ, J., 1968) a large number of Eskimo burials were uncovered for the purpose of collecting usable skeletal materials for anthropological investigations. A total of 52 graves was investigated; as indicated below, these graves were distributed numerically on the following islands: 32 Angmaussa^{*} 5 Upernaviarssuk, 8 Sâtoq, 2 Tapeq, 1 Nunâ and 4 Nordø. (For the situation of the localities see fig. 1).

Graves are an extremely common occurrence in the area. Most frequently they consist of a chamber built of stone containing the remains of the corpse or corpses. A domed heap of stones covers the chamber's exterior. The graves are usually situated on dry, rocky slopes, ledges, and the like, but in a few cases the graves lie in swampy terrain. The graves near the Nûgârssuk settlement on Angmaussa^q can be mentioned as an example of the latter (HJARNØ, J., 1968).

The opening of the graves took place according to a rather standard pattern: as soon as a grave was observed it was photographed, and its location and height a.s.l. were recorded on a sketch map. The area around the stone heap was next examined for the purpose of finding possible grave goods. The burial chamber was then uncovered, photographed, and measured. Suitable crania and thigh bones, as well as possible grave goods, were removed, marked, and packed in plastic bags. Data and a description of the entire operation were recorded in a notebook; finally the grave was restored and marked with a painted number. Upon return to Copenhagen the archaeological specimens were deposited in the National Museum and the skeletal remains in the University's Anthropological Laboratory.

^{*}) (The name is unauthorized, according to files).

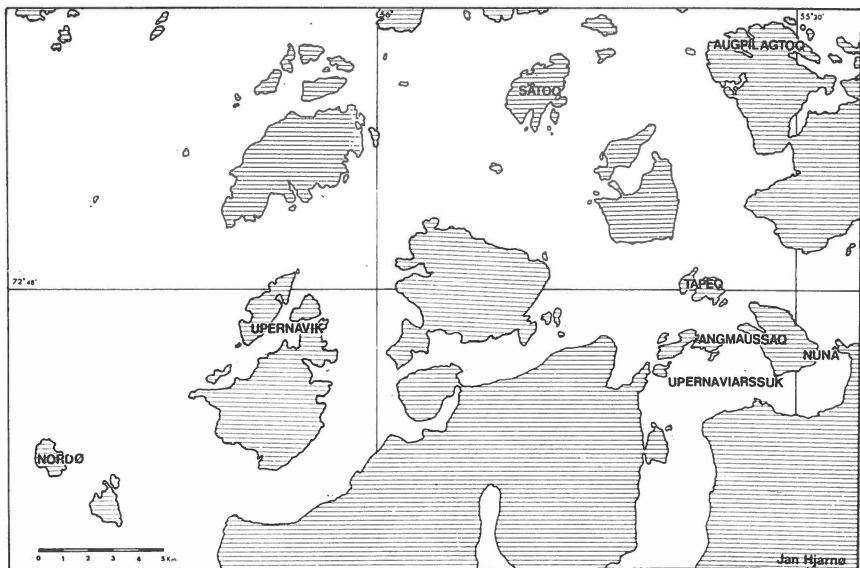


Fig. 1. Sketch of the central part of Upernavik District, Greenland.

Location of the Graves

Angmaussaq

Angmaussaq has been described in detail elsewhere. (HJARNØ, J., 1968). Here it shall simply be mentioned that two localities with ruins of sod houses were found; some of these undoubtedly were inhabited in the 19th Century and possibly even in the beginning of the 20th Century (HJARNØ, J., 1968). The island is an important fishing ground at present, and hunting parties often visit it. There are many graves on the island; far from all of them have been investigated (fig. 2).

Grave 1

This grave, which was situated alongside a rock wall, contained an oblong chamber in which there was the skeleton of one individual. The skeleton lay untouched in a flexed position, with the cranium towards the west. There were grave goods among the stones surrounding the chamber.

Finds:

- 1 oval piece of wood (12×7×1 cm) (not preserved)
- 1 whalebone snow knife (plate 6, no. 5)
- 1 unidentified, considerably disintegrated bone object.

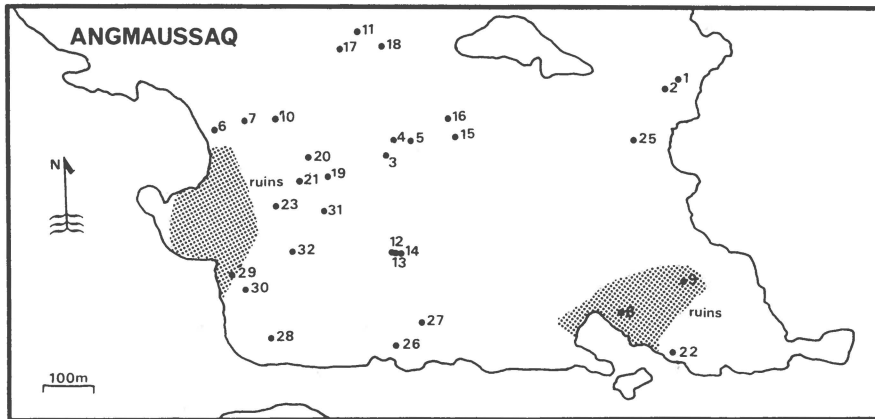


Fig. 2. Sketch map showing location of the graves on Angmausaq.

Grave 2

This extremely collapsed grave was situated beside a large boulder. The burial chamber contained a considerably disintegrated skeleton lying in a flexed position, but the cranium was well-preserved. Grave goods and a much disintegrated cranium lay among the stones covering the exterior of the chamber.

Finds:

- 1 whalebone snow knife (plate 6, no. 6)
- 1 oval piece of wood (very disintegrated)
- 1 sucking tube, narwhal tusk, disintegrated at one end (plate 6, no. 2)
- 1 unidentified, extremely disintegrated object of ivory
- 1 grindstone
- 1 soapstone vessel
- 1 circular, pierced, whalebone plate (oar blade for an umiak?).

Grave 3

Isolated, very well-preserved grave. The chamber contained the skeletal remains of two individuals. One lay in a flexed position with the cranium towards the west, whereas the skeletal remains of the other had been pushed under one of the corner stones of the chamber. There were no grave goods.

Grave 4

Isolated grave, with an almost rectangular chamber containing the skeletal remains of two individuals. One skeleton lay in a flexed position, whereas the other, which was badly preserved, did not lie in a primary

position. Both crania lay in the western end of the chamber. There were no grave goods.

Grave 5

Badly collapsed grave situated along a low rock ledge. It was impossible to identify the original form of the chamber. Skeletal remains of at least four individuals were found. No grave goods.

Grave 6

This grave was situated beside a large, isolated boulder; it contained two chambers. In one chamber there was a sharply flexed skeleton, whereas the other, and somewhat larger chamber, contained the skeletal remains of at least six individuals. Grave goods were found among the stones surrounding the two chambers.

Finds:

- 1 unidentified, wooden stick
- 1 whalebone plate (bottom of a bowl?)
- 1 wooden dish (plate 5, no. 3)
- 2 sled shoe fragments
- 3 soapstone fragments.

Grave 7

Badly collapsed grave situated beside a large rock. The chamber, which was destroyed, contained some skeletal remains of at least four individuals. A small chamber near the periphery of the grave contained grave goods.

Finds:

- 1 kayak scraper of antler
- 1 asbestos lamp wick trimmer (plate 6, no. 3).

Grave 8

Isolated grave in the swamp in front of house ruin III at Nûgârssuk. The grave was badly collapsed, and overgrown by moss. Some extremely decomposed skeletal remains of an individual lying in a flexed position were determined. Grave goods were found around the burial chamber.

Finds:

- 1 snow probe, bone (plate 2, no. 5)
- 2 arrowheads, bone (plate 3, no. 1)
- 1 unidentified object, bone
- 1 two-handed scraper, bone (plate 6, no. 4)
- 1 bodkin (plate 1, no. 4)

- 1 bone socket piece with a socket at one end (plate 4, no. 9)
- 1 whalebone foreshaft (plate 2, no. 2).

Grave 9

Isolated grave situated in the swamp in front of house ruin V, Nûgârssuk. The grave was badly collapsed, overgrown, and partly cover-



Fig. 3. Grave 9, Angmaussaq.

ed by midden remains, presumably from house V. A badly decomposed skeleton in a flexed position lay in the chamber. A number of objects, possibly grave goods, possibly deriving from the midden, were found among the stones (fig. 3).

Finds:

- 1 kayak scraper of antler (plate 6, no. 7)
- 2 sled shoe fragments
- 1 ajagaq (plate 1, no. 11)
- 1 soapstone lamp, with wick ledge (plate 5, no. 1).

Grave 10

Collapsed grave. Skeletal remains of at least three individuals lay in the chamber. There were no grave goods.

Grave 11

Well-preserved grave, with a well-built rectangular chamber in which there was an extremely well-preserved skeleton lying on its back, with sharply flexed legs and the hands folded on the breast. Remains of skin and textiles lay on the skeleton. Grave goods were found inside the chamber.

Finds:

- 1 snuff box, antler (plate 1, no. 6)
- 1 bone-handled European clasp knife. The name James was incised on one side of the handle (plate 3, no. 7)
- 1 round button, horn.

Grave 12

Three graves (12-13-14) lay beside a cliff wall. Grave 12 contained some disintegrated skeletal remains of at least five individuals. The remains of a sealskin lay across a cranium. There were grave goods on a ledge behind the burial chamber.

Finds:

- 1 unidentified object, narwhal tusk
- 1 fragment of a small wooden doll
- 1 knife of European origin, with an iron blade and a wooden handle (plate 3, no. 8).

Grave 13

The burial chamber contained 2 crania and some other, badly disintegrated skeletal remains. There was a grave gift inside the chamber.

Find:

- 1 ice pick, antler.

Grave 14

The burial chamber contained skeletal remains of two individuals. There were no grave goods.

Grave 15

Well-preserved isolated grave with three chambers. In one chamber there were skeletal remains of three individuals, one of them a child. Another chamber also contained skeletal remains of at least three individuals. Grave goods were found in the third chamber.

Finds:

- 1 wooden harpoon foreshaft (plate 2, no. 6)
- 1 unidentified, badly disintegrated wooden object
- 1 soapstone vessel
- 2 unidentified fragmentary bone objects
- 1 unidentified object, ivory.

Grave 16

Well-preserved grave, built alongside a cliff. The rectangular chamber contained two badly disintegrated skeletons. No grave goods.

Grave 17

Well-preserved isolated grave with a central chamber in which there were two skeletons lying in a flexed position. Near the periphery of the stone heap there was a smaller chamber which contained the skeletal remains of one individual that apparently was put here after its flesh was gone. Presumably this is a secondary burial. An oblong wooden object was found in the stone heap on the grave.

Find:

- 1 unidentified object, wood (plate 2, no. 7).

Grave 18

This grave was situated alongside a large boulder. The burial chamber was partly filled with fallen capstones; it contained a well-preserved skeleton lying in a flexed position. Some grave goods were found in a crevice in the boulder.

Finds:

- 2 horn buttons of European origin (plate 1, no. 3)
- 1 knife of European origin with an iron blade and a horn handle (plate 3, no. 11).

Grave 19

This grave, which was placed beside a large boulder, had a large oblong chamber and a small side chamber. There were two crania and some other skeletal remains in the large chamber. The small side chamber contained the skeletal remains of one individual in a secondary position. Some grave goods were found at one end of the large burial chamber.

Finds:

- 1 winged needle case, ivory (plate 1, no. 10)
- 1 knife handle, antler (plate 3, no. 12)
- 1 flint chip

- 1 unidentified object, bone
- 1 carved figure, ivory (polar bear?) (plate 1, no. 12).

Grave 20

Small grave with an irregularly-shaped chamber containing some badly disintegrated remains of one individual. Grave goods were found among the outer stones.

Finds:

- 1 ulo handle, bone (plate 1, no. 5)
- 1 comb, ivory (plate 1, no. 7)
- 1 grindstone (plate 1, no. 1)
- 2 pieces of iron pyrite (plate 1, no. 13)
- 1 flint chip (plate 1, no. 14).

Grave 21

Small grave with a quadrangular chamber containing some very disintegrated skeletal remains of at least one, possibly of two individuals. No grave goods.

Grave 22

Badly collapsed isolated grave. The chamber could not be identified, but skeletal remains of at least two individuals lay among the stones. There were also some grave goods.

Finds:

- 1 ornamented bodkin, ivory
- 1 "winged" needle case, ivory
- 2 miniature lamps, soapstone
- 1 flint chip
- 1 oval plate, wood (bottom of a vessel?).

Grave 23

The central chamber of this grave, which was located beside a large boulder, contained the skeletal remains of at least five individuals; a cranium also lay in the periphery of the grave. There were no grave goods.

Grave 24

This number was not used.

Grave 25

Large grave, beside a boulder. Numerous skeletal remains of at least nine individuals were found in the burial chamber, and grave goods were found in its periphery.

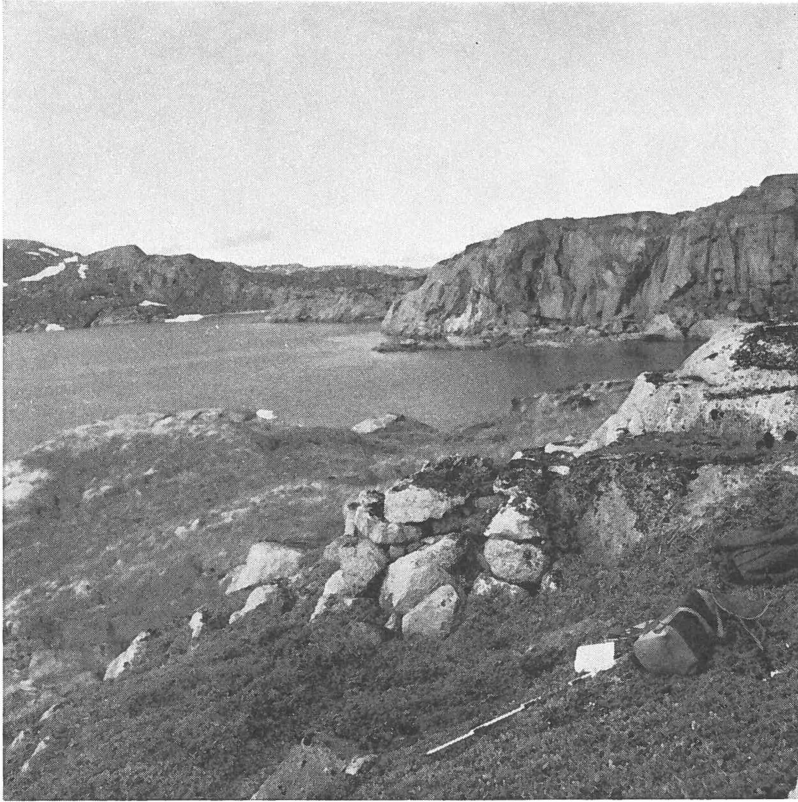


Fig. 4. Grave 29, Angmaussaq, before uncovering (photo: MORTEN VESELY).

Finds:

- 1 oval bowl with a wooden bottom and sides
- 1 flint chip
- 1 sled shoe (plate 4, no. 16).

Grave 26

Isolated grave, with an irregularly-shaped chamber containing a rather poorly-preserved skeleton. There were no grave goods.

Grave 27

A grave in a dry rock cave which had a considerable overhang. In the chamber there was a child's skeleton covered by remains of skin and textiles. Some caribou bones lay under the skin, and caribou bones and the lower jaw of a dog were found in a small chamber. There were no grave goods.



Fig. 5. Grave 29, Angmaussaq, after uncovering (photo: MORTEN VESELY).

Grave 28

Isolated grave, with one small chamber containing a sharply flexed skeleton. There were no grave goods.

Grave 29

The skeletal remains of at least ten individuals were found in this grave, which was situated beside a cliff. Grave goods were found among the outer stones (figs 4 and 5).

Finds:

- 1 fragment of a sled shoe
- 1 knife blade, iron
- 1 flint chip.

Grave 30

Badly destroyed grave, not excavated.

Grave 31

There were two chambers in this grave, which was situated beside a large, isolated boulder. One chamber contained the skeletal remains of at least three individuals; the skeletal remains of two individuals could be determined in the other chamber. Grave goods were found among the outer stones.

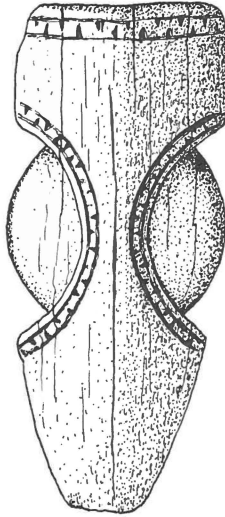


Fig. 6. "Winged" needle case, grave 31, Angmaussaq.

Finds:

- 2 unidentified objects, antler
- 1 ornamented "winged" needle case (fig. 6).

Grave 32

Isolated grave, with an oblong chamber in which there were skeletal remains of at least two individuals. There were no grave goods.

Sātoq (fig. 7)

On the south side of Sātoq island along a wedge-shaped fjord which cuts into the island there were some almost washed-out ruins of sod houses and eight graves. Several objects, some of European origin, were found in the eroded slope near the ruins of the dwellings; in addition, a spoon made of antler and a small wooden doll which presumably represented a Norseman wearing a hood were found (fig. 8). Both objects probably stem from the Inugsuk period. (MATHIASSEN, TH., 1930: 288-290). According to the census taken from Upernavik, Sātoq apparently was

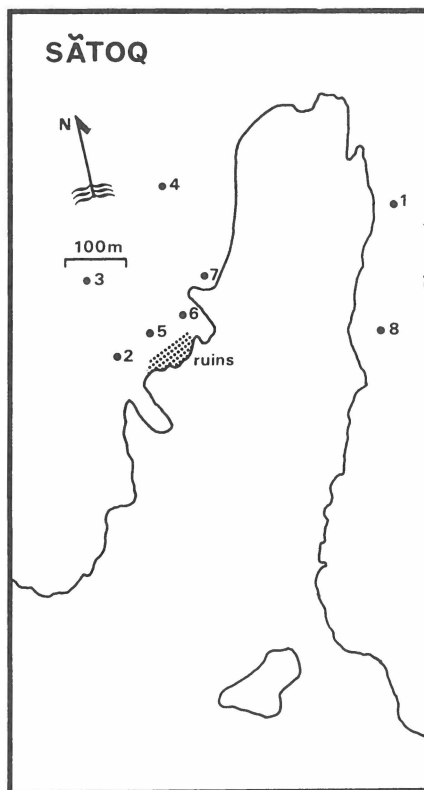


Fig. 7. Sketch map of the location of the graves on Sãtoq.

inhabited as long as until 1908 (Statistic-Economic Section, Ministry of Greenland).

Grave 1

Grave situated in a rock cave, with rocks blocking its entrance. Skeletal remains of one individual and one grave gift were found among the stones.

Find:

- 1 wooden plate, possibly the bottom of a vessel.

Grave 2

Isolated grave, with one chamber in which two skeletons were found. In a small chamber there were some skeletal remains of at least one individual.

Finds:

- 1 sled shoe fragment
- 1 miniature lamp, soapstone
- 1 small doll, wood (plate 1, no. 8).

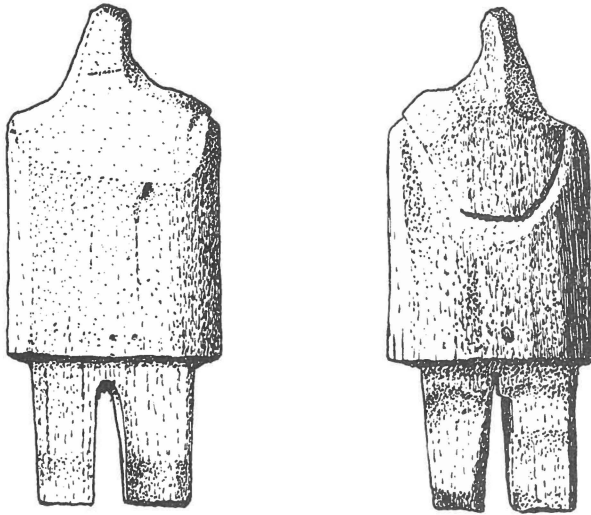


Fig. 8. Wooden figure. Possibly represents Norseman wearing hood.

Grave 3

Isolated grave with a well-built chamber containing skeletal remains of at least four individuals. Grave goods were found in a small side chamber.

Finds:

- 2 oval plates, wood (possibly bottoms of bowls)
- 1 small doll, wood
- 1 miniature lamp, soapstone (plate 1, no. 15)
- 1 miniature bowl, soapstone (plate 1, no. 17).

Grave 4

This grave, which was situated under a precipice, was badly collapsed; there were no determinable traces of skeletal remains, but a few grave goods were found.

Finds:

- 1 knife handle, with an iron blade (plate 3, no. 9)
- 1 edge mounting, bone
- 1 miniature harpoon, bone and wood (plate 2, no. 3).

Grave 5

Badly decayed grave which has been used as a meat cache. A human lower jaw and a number of animal bones were found among the stones. There were no grave goods.

Grave 6

Small grave alongside a solid cliff. The chamber contained the skeletal remains of one individual. There were no grave goods.

Grave 7

Collapsed grave, with no skeletal remains or grave goods.

Grave 8

Isolated grave, with a well-built chamber, inside of which there were one skeleton lying in a flexed position and the remains of another skeleton heaped at the other end of the grave. Some objects were found on a small mound of stones on a slope behind the grave.

Finds:

- 1 unidentified object, wood
- 5 extremely disintegrated objects, bone
- 2 side prongs of a bird dart, ivory (plate 4, no. 14)
- 1 harpoon head with open shaft socket (plate 4, no. 8)
- 1 disintegrated bone bodkin with a round head.

Nordø

The ruins of two well-preserved communal houses and eight graves were found on the east side of Nordø. Some of the graves had been thoroughly searched and plundered.

Grave 1

A badly collapsed small heap of stones contained a long narrow chamber in which there were some gravegoods and the skeletal remains of two individuals. But since the chamber was too small to contain a body, the skeletal remains presumably were placed there secondarily.

Finds:

- 2 bowls with baleen sides. Only one bowl's bottom was sufficiently well-preserved to permit its removal
- 1 fragment of a wooden shaft
- 1 fragment of a throwing stick (plate 2, no. 4)
- 2 fragments of a composite bow (plate 2, no. 1)
- 1 fragment of an ice pick, antler
- 1 unidentified plug, stone
- 4 arrow heads, tang with screw (plate 3, nos 2-4 and 6)
- 1 iron-tipped arrow head, antler (plate 2, no. 5).

Grave 2

Collapsed, isolated grave which contained the remains of a badly disintegrated skeleton, as well as some grave goods.

Find:

- 1 wooden plate, possibly the bottom of a bowl.

Grave 3

Well-preserved grave, covered by a large stone. The skeletal remains of two individuals could be determined. There were no grave goods.

Grave 4

Collapsed grave containing the skeletal remains of at least three individuals. Grave goods were found among the stones.

Finds:

- 1 miniature soapstone lamp
- 1 knife, European (plate 3, no. 10)
- 1 winged needle case
- 1 fragment of a wooden doll.

Nunâ

Nunâ is a more or less inaccessible island, where bluffs go down to the sea. With the exception of the southeastern corner, where there were five burials and a telt ring there were no traces of other archaeological occurrences. But a single grave was investigated.

Grave 1

The grave was situated under a promontory beside a large boulder. As far as we were able to determine, the skeletal remains, which had fallen down into a crevice, represented only one individual; they were so inaccessible that we had to abandon efforts to reach them. Some grave goods lay on a ledge in the promontory.

Finds:

- 1 oblong, oval bowl carved out of one piece of wood (plate 5, no. 4)
- 1 oval bowl with baleen sides and a flat wooden bottom (plate 5, no. 2)
- 7 unidentified pieces of wood
- 1 winged needle case (plate 1, no. 9)
- 1 fragment of a thimble holder.

Upernaviarssuk

There were many traces of human activity on Upernaviarssuk. The southeast corner of this small island opens into a bay where ruins of sod houses were found. Many graves lay behind the ruins of these dwellings; there was a decayed cross on some of these graves, the majority of which contained a simple wooden coffin surrounded by packed stones. None of these graves was touched. But on the easternmost point of the island there was a small group of graves, five in all. These graves, which were



Fig. 9. Sketch map of the location of the graves on Upernaviarssuk.

covered by a growth of lichens and did not contain coffins, were excavated (fig. 9). According to the annual census taken since 1888, Upernaviarssuk apparently was uninhabited (Statistic-Economic Section, Ministry of Greenland). The reason for this is that when the census was taken it registered the distribution of the population as of 31 December, a period when most of the inhabitants of Upernaviarssuk lived elsewhere. Thus, BRYDER (BRYDER, H., 1921: 480–481) relates that in about 1920 some Greenlanders lived in Kingigtoq settlement on the south side of the island Qaersorsuaq from December to the end of May. In May some of the inhabitants of Kingigtoq moved into Upernaviarssuk, where the waters were quieter and the hunting and fishing better than at stormy Kingigtoq at this time of the year. At the end of June the people moved to various places inside the fjord area around J. P. Kochs Land to fish for salmon and hunt caribou. In September most of them again live on Upernaviarssuk until the ice once more is firm at Kingigtoq. Accordingly, Upernaviarssuk must be considered a spring and autumn settlement. It cannot be accurately determined when the settlement was abandoned, but this scarcely could have happened many years ago.

Grave 1

Isolated grave, with one chamber containing the skeletal remains of two individuals. No grave goods were found.

Grave 2

Isolated, badly collapsed grave. Skeletal remains of one individual and fairly scattered grave goods were found among the stones.

Finds:

- 1 vessel, soapstone
- 1 trace buckle, showing traces of wear
- 2 fragments of two different plates, wood
- 1 barrel stave, wood.

Grave 3

Badly collapsed, isolated grave, which contained skeletal remains of two individuals. Some grave goods lay in a heap among the outer stones.

Finds:

- 6 harpoon heads (plate 4, nos 1-6)
- 1 harpoon head made into a toggle (plate 4, no. 7)
- 1 toggle, of antler, part of towing gear (plate 4, no. 12)
- 1 mouthpiece for a bladder (plate 4, no. 11)
- 1 mouthpiece for a bow drill (plate 4, no. 13)
- 1 drag line handle, narwhal tusk (plate 4, no. 10).

Grave 4

Badly collapsed and almost washed-out grave containing some extremely disintegrated remains of bones. No grave goods were found.

Grave 5

Badly collapsed grave in which there was the skeleton of one individual. No grave goods were found.

Tapeq

A hunting party from Augpilagtoq which visited our excavations on Angmaussaq told us about a grave in which a kayak had been placed as a grave gift. The hunters said that this grave was located on Tapeq island and that according to belief the individual buried in it was the last heathen to live in Augpilagtoq.

That same evening, without telling anyone, our Greenland helper, KNUD LØVSTRØM from Augpilagtoq, went off on his own to find this kayak grave. When he returned to Angmaussaq at four o'clock in the morning, he had found the grave, and brought back two pieces of wood from the kayak. The following evening Tapeq was investigated in detail. Apart from two graves and a meat cache of fairly recent date, no other traces of human activity could be found.

Grave 1

Isolated grave with a rectangular chamber containing a fairly well-preserved skeleton, lying in a flexed position. There were no grave goods (fig. 10).



Fig. 10. Grave 1, Tapeq.

Grave 2

This grave was situated in a niche in a rocky slope ca 12 meters away from grave 1. The corpse, which was partly mummified, lay in a flexed position. Its kamiks and other parts of its skin clothing were still intact. A small miniature soapstone lamp lay beside the cranium. On a bare rock surface next to the grave there were some bits of wood that could be identified as the remains of a kayak. Some wooden fragments had been blown down into crevices and fissures in surrounding rocks.

Finds:

- 1 miniature lamp, soapstone
- 1 sled shoe, bone
- 2 toggles, wood, as well as various wooden fragments of a kayak frame.



Fig. 11. Empty grave, Nunâ (photo: JEPPE MØHL).

Dating of the Grave Goods

29 of the 50 investigated graves contained objects which are classified above as grave goods. The classification seems reasonable, for it is difficult to explain the presence of these objects in and around the graves in any other way; furthermore, historical evidence shows that in the earliest period of colonization the Eskimos gave the dead gifts which were put into the grave with them (EGEDE, H., 1741: 83-84; LYNGE, H., 1955: 34).

Accordingly, it can be expected that a dating of the grave goods also can determine the date of burial; this solely applies to single graves, however, since the common graves apparently represent burials which took place at different times. A description of the grave goods follows.

Hunting Gear

Foreshafts: A whalebone foreshaft was found in Grave 8, Angmaussaq. Its base is tapered and somewhat disintegrated. A perforation can be seen slightly above this tapered piece; there also are two small perforations in the tip. For a harpoon foreshaft, the piece is extremely flimsy, and the perforation of the base seems too small. It is possible, therefore, that the piece more likely is a foreshaft of a bladder dart (plate 2, no. 2).

A wooden foreshaft (plate 2, no. 6) with its base formed into a tenon upon which there is a small perforation turned up in grave 15, Angmaussaq.

The first foreshaft is not typical of any specific period in the West Greenlandic Neo-cultural tradition, whereas the other one (plate 2, no. 6) is typical of a late phase of the West Greenlandic Neo-Eskimo cultural tradition (Post-Inugsuk).

Socket Pieces: A single whalebone socket piece (plate 4, no. 9) was found in grave 8, Angmaussaq. It has an oval cross section; at one end there is an oval socket, while the other end has a roughly carved top. The form is typical of a late phase of the West Greenlandic cultural tradition (Post-Inugsuk).

Harpoon Heads: 7 harpoon heads, all made of antler (plate 4, nos 1–7) were found in grave 3 on Upernaviarssuk. One had been made into a toggle, and had perforations for lashing through the eye of the socket. Another (plate 4, no. 5) belongs to MATHIASSEN's Inugsuk type (MATHIASSEN, TH., 1930: 182–183). The rest of the harpoon heads were flatter, and one was equipped with a pair of symmetrically placed barbs. In MATHIASSEN's terminology (MATHIASSEN, TH., 1927: I:24; II:11) all of these would be designated flat types. On five of the examples the blade groove was fairly wide, and apparently the blade was made of walrus ivory or bone. The bone blade was preserved on one example. On the basis of the finds from the Nûgârssuk dwellings (HJARNØ, J., 1968) it seems that the collection of harpoon heads can be dated 17th Century, or possibly early 18th Century.

A single harpoon head made of ivory, with an open shaft socket (plate 4, no. 8) turned up in grave 8 on Sâtoq. Harpoon heads of this type occurred on Angmaussaq in 17th Century dwelling sites, and are also known from the earliest layer on Inugsuk island (MATHIASSEN, TH., 1930: 184–185).

Towing Gear: In grave 3 on Upernaviarssuk, in addition to a harpoon head re-made into a toggle (plate 4, no. 7), two other toggles (plate 4, nos 10 and 12) were found.

One of the pieces (plate 4, no. 12) is a straight piece of bone, tapered at both ends and having two perforations. The other piece presumably is a drag line handle. It is made of ivory is M-shaped, and has a central perforation. The type has been found before on Baffin Island and King William Island in Canada (MATHIASSEN, TH., 1927: pl. 41, 7 and pl. 82, 16), Kap Kent in Thule (HOLTVED, E., 1944: pl. 9, 2), and in a Norse ruin (VEBÆK, C. L., 1943: 89–90). It is a rarely occurring form which is thought to belong to a quite early phase of the Canadian and West Greenlandic Neo-Eskimo cultural tradition.

Floats: A mouthpiece for a float appeared in grave 3 on Upernaviarssuk (plate 4, no. 11). Mouthpieces of this type are known from all phases of the Neo-Eskimo cultural tradition in West Greenland, and are made and used this very day.

Bows and Arrows: Testimony of bows and arrows appeared in grave 1 on Nordø. In grave 8 on Angmaussaq eight antler arrowheads were uncovered. The original form could still be identified on six of them (plate 3, no. 1), and all of these arrowheads were equipped with a lanceolate tip, a round shaft and a tapered base equipped with two knobs.

Grave 1 on Nordø contained fragments of a composite bow, as well as five arrowheads. One of the arrowheads was badly disintegrated

(plate 3, no. 4), but like the other examples the tang was furnished with a screw thread. Two examples had a flat point with a pair of symmetrically-placed barbs; one was barbed, and one consisted of a shaft made of antler with an iron tip attached to it (plate 3, nos 5).

As far as the shape of the arrowheads is concerned, it can be mentioned that the general assumption (MATHIASSEN, TH., 1936: 119–120) is that in the period 1500–1650 the knobs on the shaft tenon were replaced by a screw. Fragments of wooden arrowshafts were also found in grave 1 on Nordø (plate 3, no. 13).

Throwing Stick: A considerably fragmented throwing stick was found in grave 1 on Nordø; nothing but the grip is intact. The grip is carved, and slightly hollowed out on its back. About 30 cm away from the broad grip there lay a small bone peg; there can scarcely be any doubt that this throwing stick was used with a wing harpoon, a bird dart or a bladder dart. To a great extent the form resembles the forms FABRICIUS described in the 18th Century (HOLTVED, E., 1962: 36.37).

Bird dart: Two side prongs of a bird dart, one made of antler, one of ivory, were found in grave 8 on Sātoq (plate 4, no. 14). Bird darts of this type have been found before in the earliest layer on Inugsuk, and were made as late as into this century (BIRKET-SMITH, K., 1924: 352–354).

Ice Pick: An unused ice pick made of bone was found in grave 13 on Angmaussaḡ, and a rather disintegrated example turned up in grave 1 on Nordø. Both examples belong to the types known both from the earliest cultural layer on Inugsuk (MATHIASSEN, TH., 1930: 189–190) and Nûgârssuk (HJARNØ, J., 1968); apparently they were made as late as in the 19th Century (plate 6, no. 1).

Miniature Harpoon: An almost complete model of a harpoon was uncovered in grave 4 on Sātoq (plate 2, no. 3). The piece is a knob harpoon with a wooden shaft, an oval bone socket, and a foreshaft with three perforations. Foreshafts with three perforations are known from Nûgârssuk, where the type occurred in house II, which was inhabited at the close of the 17th Century or possibly in the early 18th Century (HJARNØ, J., 1968).

Snow Probe: A snow probe made of whalebone was uncovered in grave 8 on Angmaussaḡ. Snow probes of this type are known from all phases of the West Greenlandic Neo-Eskimo cultural tradition.

Means of Transportation

Sledge: Sledge shoes were found in several graves (graves 9, 6, 25, and 29 on Angmaussaḡ, and in grave 2 on Sātoq). The type is known from

all phases of the Neo-Eskimo cultural tradition in West Greenland. A trace buckle was found in grave 2 on Upernaviarssuk (plate 4, no. 15). The type also is known from all phases of the Neo-Eskimo cultural tradition, and is still made.

Kayak: A kayak scraper was found in grave 9 on Angmaussaḡ. The type is known from the earliest layer on Inugsuk and continues to be made today.

Tools

Fire-making: Grave 20 on Angmaussaḡ contained a piece of iron pyrite and a flint (plate 1, nos 13–14). This kind of fire-making is unknown ethnographically as occurring in West Greenland, but has been used in Thule (JENS ROSING, personal communication) in the present century, and is also known from archaeological finds in Thule (HOLTVED, E., 1944: 260). Flint flakes were found in several graves, but we do not know whether these pieces of flint were used for fire-making.

Knives: A sturdy knife handle made of antler (plate 3, no. 12) which had a short groove for a blade on the side at one end was found in grave 19 on Angmaussaḡ. The type is known from the earliest layers on Inugsuk (MATHIASSEN, TH., 1930: 212–213). Other knives, which were found in graves 12, 18, and 29 on Angmaussaḡ, grave 4 on Sātoḡ, and in grave 4 on Nordø, are all of European origin and could be dated to the 18th Century or the first half of the 19th Century (plate 3, 7–11).

Snow Knives: A snow knife was found in each of graves 1 and 2 on Angmaussaḡ. The type is known from the earliest Inugsuk layer (MATHIASSEN, TH., 1930: 208–209), and handles of the same form were found in Nūḡārssuk Houses II and VI, which were inhabited in the 17th Century (HJARNØ, J., 1968).

Grinding Stone: A small, box-shaped grinding stone was found in grave 20 on Angmaussaḡ. Grinding stones were used in all phases of the Neo-Eskimo cultural tradition in West Greenland (plate 1, no. 1).

Woman's Knife (ulo): The handle of an ulo was found in grave 20 on Angmaussaḡ (plate 1, no. 5). The type is known from the earliest cultural layer on Inugsuk island (MATHIASSEN, TH., 1930: 219–220) and from 17th Century cultural layers on Angmaussaḡ (HJARNØ, J., 1968).

Bow Drill: The mouthpiece of a bow drill made from an astralagus was found in grave 3 on Upernaviassuk (plate 4, no. 13). Drill mouthpieces of this type are known from all periods of the Neo-Eskimo cultural tradition in Northwest Greenland.

Other Kinds of Grave Goods

Lamps: An almost complete soapstone lamp was uncovered in grave 9 on Angmaussaq (plate 5, no. 1). It is semicircular and divided into two rooms. The type is known from the 17th Century (HJARNØ, J., 1968) and has been found before, i. a. in the earliest layer on Inugsuk (MATHIASSEN, TH., 1930: 228). Some indeterminate fragments of soapstone vessels were found in graves 2, 6, and 15 on Angmaussaq and in grave 2 on Upernaviarssuk.

Bowls: Two kinds of bowls were found in the graves, partly small oval bowls with flat wooden or bone bottoms and baleen sides, partly flat bowls carved from one piece of wood (plate 5, nos 2-4). Bowls of this type are known from all periods of the Neo-Eskimo cultural tradition. They were, i. a., made in the latter part of the colonial period (BIRKET-SMITH, K., 1924: 384).

Drinking tubes: Narwhal tusk drinking tubes were found in grave 2 on Angmaussaq. Drinking tubes have been described ethnographically from East Greenland (HOLM, G., 1911: 39) and are known archaeologically from finds in Thule (HOLTVED, E., 1944: 268). But a more accurate dating of this piece is impossible (plate 6, no. 2).

Lamp trimmer: An asbestos lamp trimmer was found in grave 7 on Angmaussaq. Since this implement is known from several periods of the Neo-Eskimo cultural pattern, a more accurate dating cannot be made.

Combs: A comb made of bone was found in grave 20 on Angmaussaq (plate 1, no. 6). Combs are well-known from the earliest cultural layers on Inugsuk (MATHIASSEN, TH., 1930: 248-249).

Snuff box: A cylindrical snuff box made of antler with oval lids at both ends was found in grave 11 on Angmaussaq (plate 1, no. 6). At its narrowest end the lid has a small aperture which can be closed with a sliding bone cover. A similar snuff box was found in Nûgârssuk settlement in a house dating from the beginning of the 19th Century (HJARNØ, J., 1968).

Horn buttons: Horn buttons of European origin were found in graves 11 and 18 on Angmaussaq (plate 1, nos 2-3).

Needle cases: Needle cases of the so-called "winged" type were found in graves 19, 22, and 31 on Angmaussaq and in grave 1 on Nunâ. One example was found i. a., in one of the 17th Century dwellings in the Nûgârssuk settlement (HJARNØ, J., 1968). This example, which appeared in grave 31 (fig. 6) had an incised pattern consisting of parallel lines with

alternating spurs between them. This form of ornamentation is characteristic of the Inugsuk phase (MATHIASSEN, TH., 1930: 270). (Plate 1, nos 9 and 10).

Dolls: Wooden dolls were found in grave 12 on Angmaussaq, graves 2 and 3 on Sâtoq, and in grave 4 on Nordø. Dolls of this kind are known from all phases of the Neo-Eskimo cultural tradition in West Greenland, and have been made as late as in the present century (plate 1, no. 8).

Two-handed scrapers: An antler two-handed scraper was found in grave 8 on Angmaussaq (plate 6, no. 4). The type is known from all phases of the Neo-Eskimo cultural tradition in West Greenland and was used well into the 18th Century (HJARNØ, J., 1968).

Ornamental bodkins: An ivory bodkin was found on Angmaussaq in grave 8. The piece has a rectangular cross section, and is topped by a round plate, under which two knobs can be seen (plate 1, no. 4). An oval with spurs on the inside is incised on one side of the plate. As far as is known, the type is not known from other finds. An ornamental ivory bodkin profiled at one end was found in grave 22 on Angmaussaq. The type is known from the earliest layer on Inugsuk (MATHIASSEN, TH., 1930: 270) and was used as late as in the 17th Century (HJARNØ, J., 1968).

A small, nail-shaped bone object, possibly a wound needle was found in grave 8 on Sâtoq. Wound needles of this type are known from all phases of the Neo-Eskimo cultural pattern in West Greenland (HJARNØ, J., 1968).

Polar bear figure?: In grave 19 on Angmaussaq there was a small figure made of ivory which may represent a polar bear. No similar figure is known from earlier finds (plate 1, no. 12).

Miniature soapstone lamp: Miniature soapstone lamps, semi-circular in form and with two rooms, as well as oval forms, were found in some of the graves (plate 1, nos 15-17). These miniature versions of lamps are known from the earliest cultural layer on Inugsuk (MATHIASSEN, TH., 1930: 257) and were made as late as in the 19th Century (HJARNØ, J., 1968).

Boots: The extremely mummified corpse from grave 2 on Tapoq was clothed in boots of depilated sealskin. The type is the same as that made today and used in the district, and which BIRKET-SMITH has described (BIRKET-SMITH, K., 1924: 180).

Ajagaq: Parts of an ajagaq were found in grave 9 on Angmaussaq. Ajagaq of various forms are known in all phases of the Neo-Eskimo cultural tradition in West Greenland.

The rest of the objects found in the graves could not be identified.

Conclusion

Only a minority of the investigated graves permits dating with the help of grave goods. Yet the burial custom—the placement of the corpse in a flexed position—nevertheless seems to indicate that all of the investigated graves are heathen, for the Christian burial custom, whereby the corpse was interred in its full length in a wooden coffin covered by stones, did not occur in the investigated graves.

The heathen burial custom certainly was used well into the 19th Century. Thus, HANS LYNGE reports (LYNGE, H., 1955: 34) that the last heathen in Augpilagtoq was buried according to the heathen custom in 1858*). Possibly this burial took place in grave 2 on Tapeq (LYNGE, H., 1955: 34). As far as the introduction of Christianity to Upernavik, we know that the first missionary arrived in the district in 1779. But because of illness he already had to leave after a period of eight years, and it is believed that only a small portion of the population had been converted. Accordingly, it is assumed that there were no more than about fifty Christians in the district in 1803 (BRYDER, H., 1921: 511–512). The next missionary settled in the district in 1825, but only stayed there for two years. Not until 1833 was it possible to establish a permanent mission which gradually managed to convert the entire population. Thus, the last heathen was baptized shortly after the middle of the 19th Century (BRYDER, H., 1921: 512).

All in all, however, it is safe to assume that the majority of the investigated graves stem from the period between ca 1650 and 1850. Investigation of the dwellings on Angmausaaq (HJARNØ, J., 1968) showed that the settlement mainly consisted of communal dwellings, a type that was used in the period ca 1650–1850; dwelling sites of this type also were found on Nordø.

*) LYNGE writes: "They clothed him in his eiderdown coat, put fur mittens on his hands, and gave him a dog-skin cap with ear muffs, and fur boots, even though he died at the height of summer." The corpse in grave 2 on Tapeq was dressed in depilated sealskin boots.

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Plate 1

1. Grinding stone.....	L4.6621,	grave 20,	Angmausaq
2. Button, horn.....	L4.6658,	— 11,	—
3. Button, horn.....	L4.6664,	— 18,	—
4. Bodkin, ivory.....	L4.6703,	— 8,	—
5. Ulo handle, bone.....	L4.6619,	— 20,	—
6. Snuff box, antler.....	L4.6656,	— 11,	—
7. Comb, ivory.....	L4.6620,	— 20,	—
8. Doll, wood.....	L4.6667,	— 2,	Sãtoq
9. Needle case, ivory.....	L4.6596,	— 1,	Nunã
10. Needle case, ivory.....	L4.6648,	— 19,	Angmausaq
11. Ajagaq, antler.....	L4.6697,	— 9,	—
12. Polar bear?, ivory.....	L4.6649,	— 19,	—
13. Iron pyrite.....	L4.6622,	— 20,	—
14. Flint.....	L4.6622,	— 20,	—
15. Miniature lamp, soapstone.....	L4.6660,	— 3,	Sãtoq
16. Miniature lamp, soapstone.....	L4.6666,	— 2,	—
17. Miniature pot, soapstone.....	L4.6659,	— 3,	—

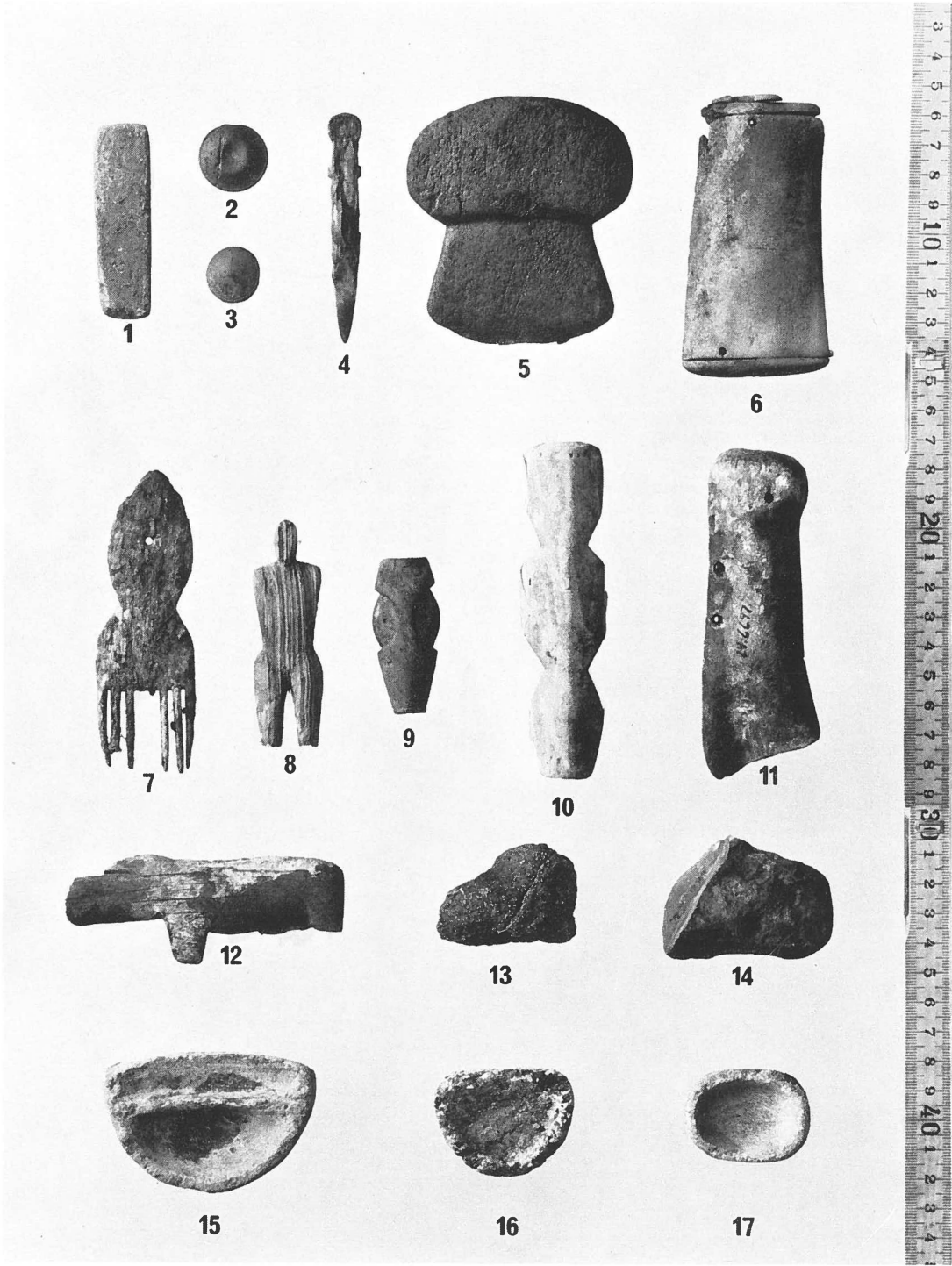


Plate 2

- | | | | |
|-----------------------------------|----------|----------|------------|
| 1. Composite bow..... | L4.6710, | grave 1, | Nordø |
| 2. Foreshaft, bone..... | L4.6702, | — 8, | Angmaussaḡ |
| 3. Miniature harpoon..... | L4.6586, | — 4, | Sãtoḡ |
| 4. Throwing stick..... | L4.6712, | — 1, | Nordø |
| 5. Snow probe, bone..... | L4.6704, | — 8, | Angmaussaḡ |
| 6. Foreshaft, wood..... | L4.6632, | — 15, | — |
| 7. Unidentified object, wood..... | L4.6645, | — 17, | — |



Plate 3

1. Arrowhead, antler.....	L4.6700,	grave 8,	Angmaussaq
2. Arrowhead, antler.....	L4.6708,	— 1,	Nordø
3. Arrowhead, antler.....	L4.6708,	— 1,	—
4. Arrowhead, antler.....	L4.6708,	— 1,	—
5. Arrowhead, antler, iron.....	L4.6708,	— 1,	—
6. Arrowhead, antler.....	L4.6708,	— 1,	—
7. Shaft of a clasp knife, bone.....	L4.6657,	— 11,	Angmaugssaq
8. Knife, iron/wood.....	L4.6631,	— 12,	—
9. Knife, iron/bone.....	L4.6587,	— 4,	Sãtoq
10. Knife, iron/wood.....	L4.6683,	— 4,	Nordø
11. Knife, iron/bone.....	L4.6665,	— 18,	Angmaussaq
12. Knife, handle, bone.....	L4.6650,	— 19,	—
13. Arrowhead, wood.....	L4.6709,	— 1,	Nordø

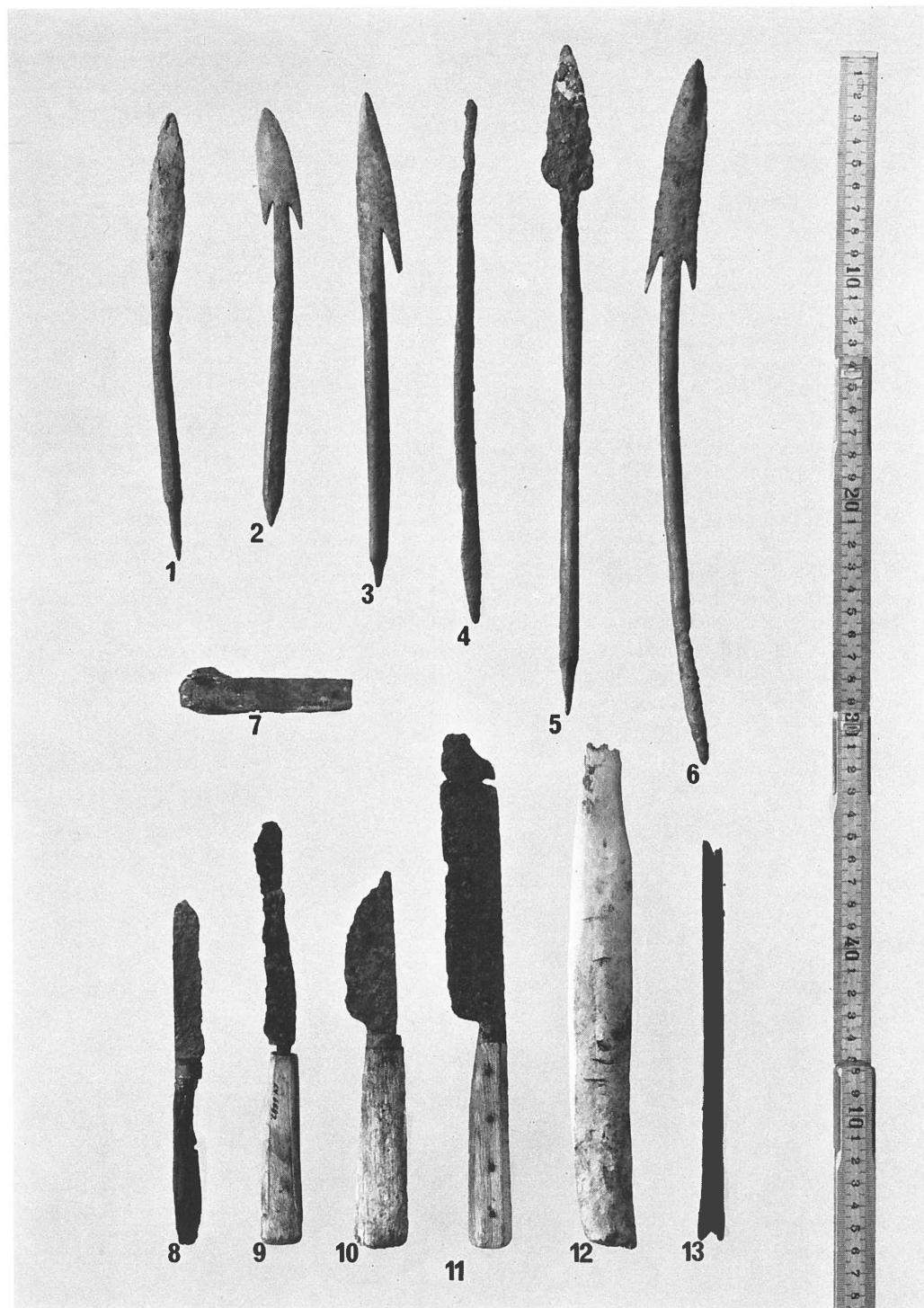


Plate 4

1.	Harpoon head, antler.....	L4.6610,	grave	3,	Upernaviarssuk
2.	Harpoon head, antler.....	L4.6606,	—	3,	—
3.	Harpoon head, antler.....	L4.6607,	—	3,	—
4.	Harpoon head, antler.....	L4.6608,	—	3,	—
5.	Harpoon head, antler.....	L4.6609,	—	3,	—
6.	Harpoon head, antler.....	L4.6611,	—	3,	—
7.	Harpoon head, antler.....	L4.6612,	—	3,	—
8.	Harpoon head, ivory.....	L4.6688,	—	8,	Sãtoq
9.	Socket piece, bone.....	L4.6702,	—	8,	Angmaugssaq
10.	Drag line handle, ivory.....	L4.6615,	—	3,	Upernaviarssuk
11.	Bladder mouthpiece, ivory.....	L4.6616,	—	3,	—
12.	Toggle, antler.....	L4.6613,	—	3,	—
13.	Drill piece, astragalus.....	L4.6614,	—	3,	—
14.	Side prong for bird dart, ivory.....	L4.6686,	—	8,	Sãtoq
15.	Trace buckle, bone.....	L4.6628,	—	2,	Upernaviarssuk
16.	Sled shoe, bone.....	L4.6623,	—	25,	Angmaussaq

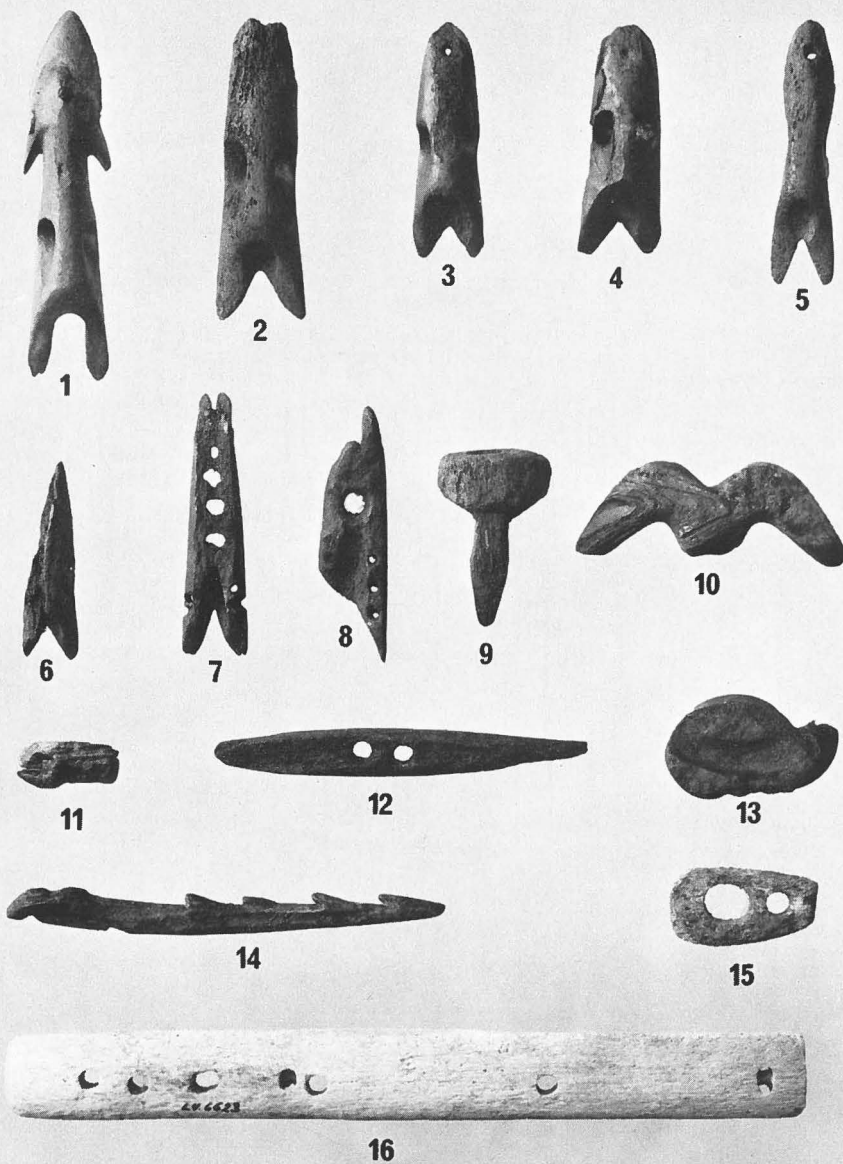
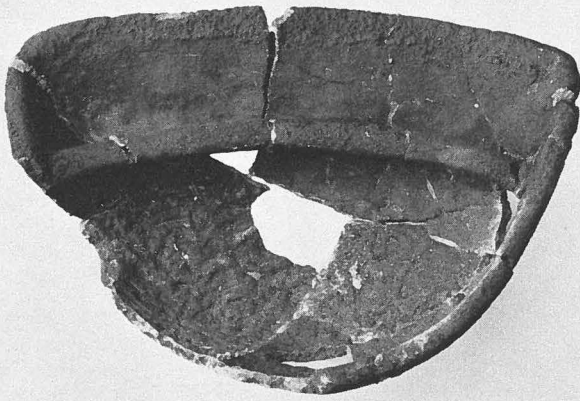


Plate 5

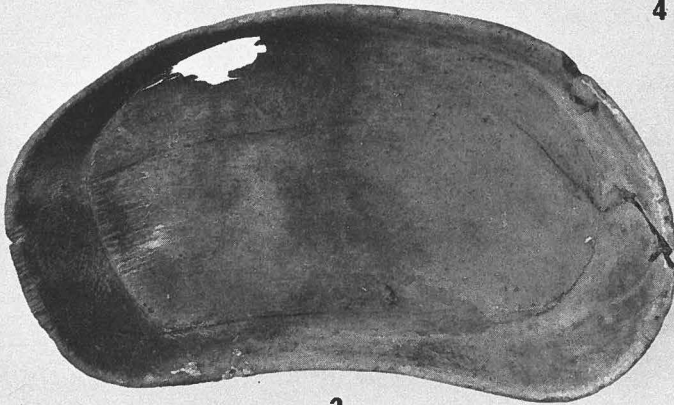
1. Lamp, soapstone L4.6717, grave 9, Angmaussaq
2. Bowl, baleen/wood L4.6698, — 1, Nunâ
3. Bowl, wood L4.6589, — 6, Angmaussaq
4. Bowl, wood L4.6699, — 1, Nunâ



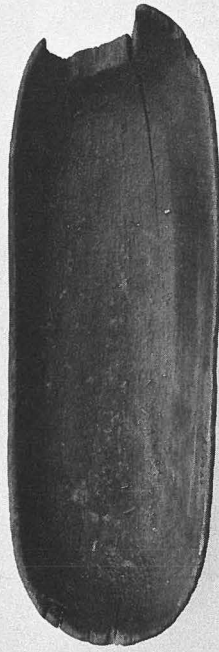
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2



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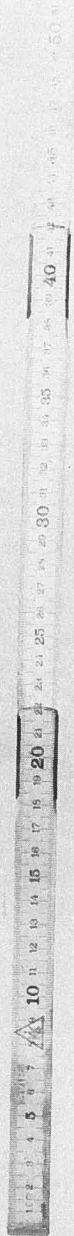


Plate 6

- | | | | |
|------------------------------------|----------|-----------|------------|
| 1. Ice pick, antler..... | L4.6585, | grave 13, | Angmaussaq |
| 2. Sucking tube, narwhal tusk..... | L4.6640, | — 2, | — |
| 3. Lamp trimmer, asbestos..... | L4.6604, | — 7, | — |
| 4. Two-handed scraper, bone..... | L4.6699, | — 8, | — |
| 5. Snow knife, whalebone..... | L4.6602, | — 1, | — |
| 6. Snow knife, whalebone..... | L4.6637, | — 2, | — |
| 7. Kayak scraper, antler..... | L4.6696, | — 9, | — |

