

# Trappendal

## Barrow and House from the Early Bronze Age

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### INTRODUCTION

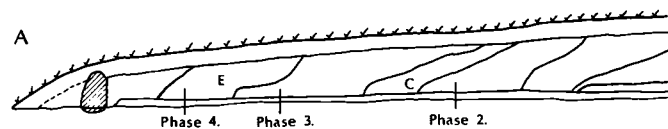
The first Danish bronze age houses were excavated as late as the mid-1950s (Thorvildsen, 1960), but they were soon to be followed by others, and today far more than a hundred have been excavated. This is primarily due to the extensive investigations carried out in West Jutland by The Danish Research Council for the Humanities and the National Museum (Becker, 1968, 1972; Davidsen, 1982), but during recent years bronze age houses have been discovered in North Jutland and on Zealand as well (Lomborg, 1973, 1976, 1977; Boas, 1980, 1983). An important material that significantly changes our perception of the living conditions during the bronze age has thus been brought to light, but surprisingly, nearly all the houses date from the late bronze age. Only at Vadgard near Løgstør, Egehøj in Djursland, Lindebjerg and Røjle Mose on Fyn (see Jæger and Jeppesen, this volume), have houses from the early part of the period been found, and houses from this period are very rare in our neighbouring countries as well.

The find from Trappendal south-east of Kolding which is presented here belongs to this exclusive circle. However, the excavation was initiated as a matter of routine and with a quite different purpose in mind. In January 1975 the amateur archaeologist and farmer Frederik Klestrup, Kær Mølle, notified Haderslev Museum about ploughed up kerb stones at the cultivated barrow »Sejlsenhøj« west of Trappendal near Hejlsminde (1). This is a rather large barrow heavily eroded by ploughing, so it was decided to investigate it before it disappeared completely. At this point nobody dreamt that the barrow might contain anything else besides burials, so it came as a surprise when it turned out that the barrow had been built on top of the site of a regular long house whose position indicated that it must have been built before the end of the early bronze age.

### THE BARROW AND THE GRAVES

The barrow had a diameter of 26½ m, but about two thirds of the kerb stones had already fallen victim to ploughing. Most stones remained at the north and north-east sections and along a small section towards the south-west, but some of the removed stones had left clear imprints in the clay underneath. The stones varied in height from 50 to 70 cm. In several places gaps between the stones were filled with smaller, mostly cleft stones. Originally the barrow must have been quite tall, probably between 3 and 4 m, but at the beginning of the excavation only one metre was left. It turned out that the barrow must have been built in four stages. At all stages or building phases turf had been used with a varying admixture of the clayey subsoil. The transitions between the individual phases were manifest as colour differences of the filling and as thin stripes of hard pan and clay. The kerb-stones clearly belonged to the fourth and latest building phase.

The barrow contained three single burials and one double burial. The north-western quarter contained a southeast-northeast oriented cremation grave (grave 13), cp. fig. 4. The grave was built of generally fist-sized stones that have probably served as support for a wooden coffin containing the cremated bones. The



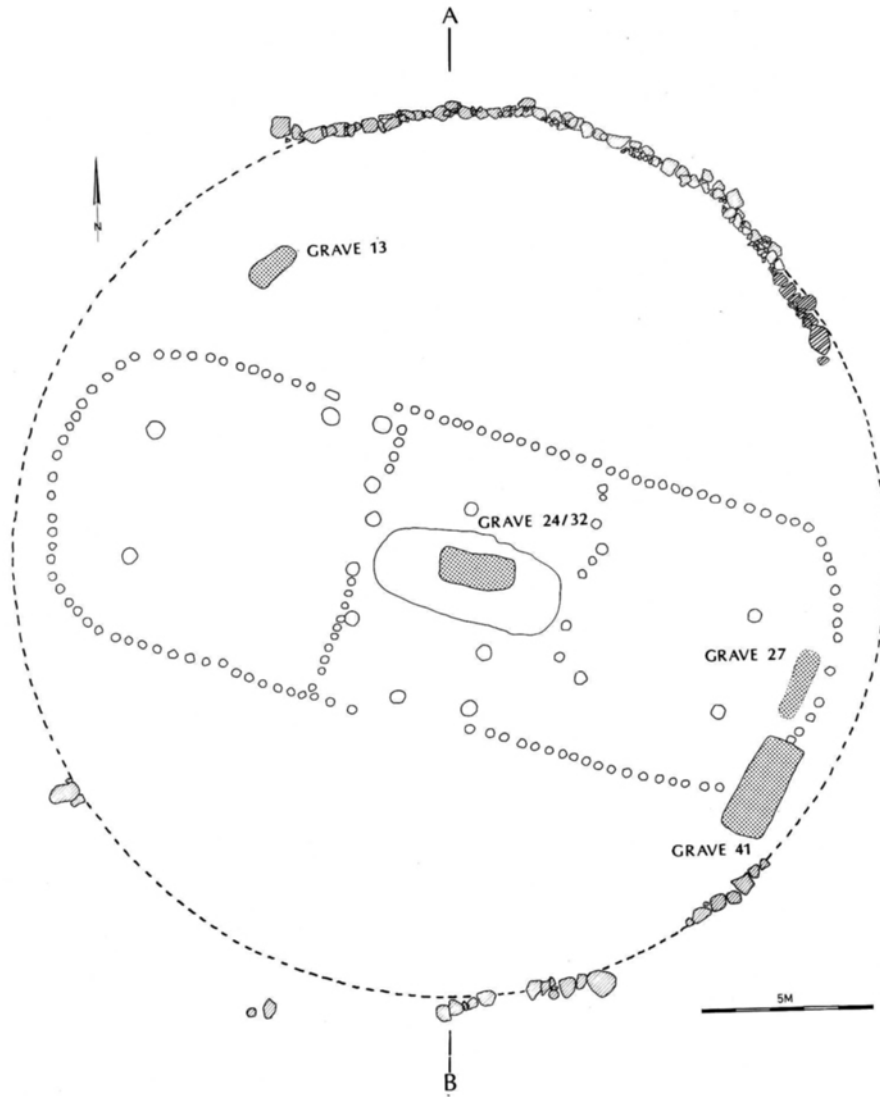


Fig. 1. Slightly simplified map of the excavation. The kerb stones are hatched and the graves screened. The post-holes are indicated without signature. Drawing by Lars Kese. 1:200.

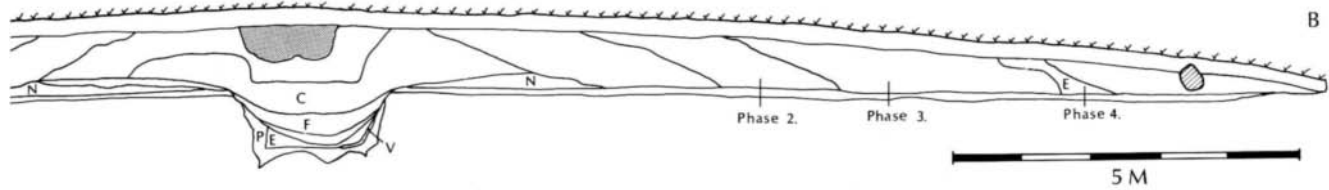


Fig. 2. North-south cross section of the barrow. The exact position of the cross section is indicated by perpendicular strokes in fig. 1. Drawing by Lars Kese. 1:100.



Fig. 3. The excavation seen from the south after the barrow has been removed. Only the partly preserved kerb stones can be seen at the edge of the light area. In the centre of the picture the site of the house with the big pit can be seen.

stone lining of the grave had an overall length of approx. 150 cm and a width of 60 cm, and the layer of cremated bones measured  $80 \times 22$  cm and had a thickness of 8 cm. The grave clearly belonged to the third building phase. In the middle of the layer of cremated bones was a bronze razor, and close to it lay a 6 cm long bronze awl, cp. fig. 5. The presence of the razor shows that this must be a man's grave, and the examination of the cremated bones indicates that he must have died at the age of 30–50 (2).

The central part of the barrow contained a double burial consisting of two heavily disintegrated log coffins placed side by side (graves 24 and 32). They were deposited in the same grave, so we must assume that they have been buried at the same time, cp. fig. 6. The coffins were eastwest oriented with a slight twist towards the south, and they were both 190 cm long. The northernmost grave (grave 24) had a width of 30 cm and the southernmost one (grave 32) was 40 cm wide. The double grave had been dug down into the oldest barrow, so at the earliest it must have been made in connection with phase 2. In spite of the length of the coffins they were both cremation graves. Approximately in the

middle of each of the graves was a heap of cremated bones whereamong some grave goods were found. In grave 24 was a partly molten piece of bronze. It is probably an ornament for a piece of garment as the back side showed traces of an eye. Grave 32 was more copiously equipped. Close to each other were a razor and a pair of tweezers, cp. fig. 7. The razor was surrounded by thin wooden flakes, probably the remains of a holster. Next to the bronze artefacts were furthermore small pieces of leather that may be the remains of a sack or bag that has contained these toilet requisites. A little north of these lay pieces of a single-edged bronze knife.

Judging by the razor grave 32 must be a man's grave, and the examination of the skeletal parts indicates that he must have died at the age of 20–35 (2). Neither the cremated bones nor the artefacts of grave 24 give us a hint as to the sex of the deceased, but the examination of the skeletal parts yielded the astounding result that two people must have been buried here: a child of around two and an adult at the age of 30–50. This double burial may bear witness to a family tragedy!

In the south-eastern quarter, at the transition between ploughed layers and the filling was a heavily di-

sturbed grave (grave 27). Approximately oriented northsouth was an extensive layer of cremated bones measuring approx.  $100 \times 38$  cm, but the stones that must have surrounded the grave had already gone. On the west side, however, were 5 head-sized stones. Among the cremated bones were the remains of a bronze awl (?), and at the bottom of the grave were a few sherds. Little can be said about the sex and age of the deceased, apart from the fact that it was an adult person. The grave rested in filling mixed with clay and must belong to the third phase of the barrow.

The last of the graves (grave 41) was immediately south of grave 27, cp. fig. 8. The grave appeared as a big stone lining measuring  $200 \times 80$  cm, that had supported a now completely disintegrated wooden coffin. It seems as if the grave has been entirely covered by stones as the transition to the ploughed layer showed obvious traces of the missing stones. Most of the stones employed were cleft. Like the other graves this was a cremation grave. The cremated bones lay in a 5–6 cm thick layer measuring approx.  $125 \times 25$  cm. The grave contained a few very fragile fragments of a fibula.

Scattered in the filling were furthermore a great many artefacts of various kinds mostly made of flint, but there were also sherds and a couple of crushing stones. Most of the flint pieces were large and irregular flakes that leave the impression of a rather rough flint technique. Of proper tools were only a few large scrapers, bladeknives, a core-axe, a flake-axe, and a small fragment of a polished thin-butted axe. The sherds in the filling consisted of a small number of fragments of sides and bottoms of thick-walled vessels made of coarse-tempered clay. Apart from a concentration of flint flakes in a small area in the north-western quarter the artefacts were scattered all over the barrow. This seems to indicate an arbitrary admixture, so they are of little interest in this connection. They probably derive from one or more stone age sites in the neighbourhood and have been brought to the barrow along with the turf used for its construction.

#### THE HOUSE

As already mentioned it was primarily the presence of a well preserved site of a house below the barrow that caught our attention (fig. 9). It appeared as rows of post-holes that were clearly visible in the prehistoric

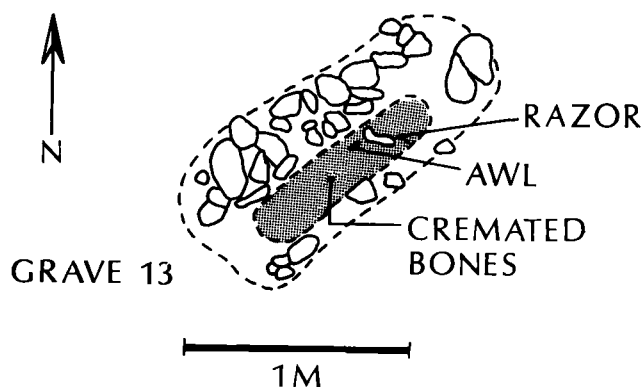


Fig. 4. Grave 13. The position of the artefacts is shown.

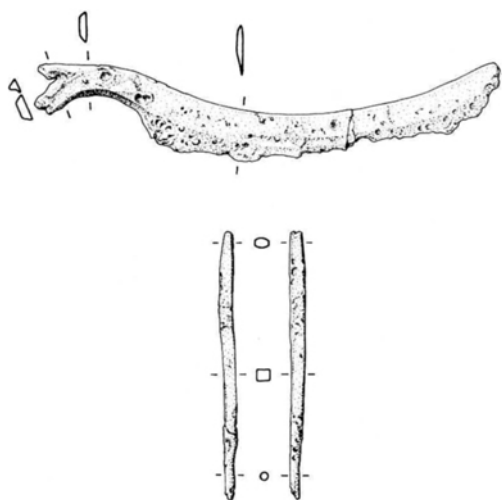


Fig. 5. Razor and awl from grave 13. Drawing by H.H. Steen. 2:3.

surface. The house was oriented eastwest and measured approx.  $23\frac{1}{2} \times 8\frac{1}{2}$  m. It has had rounded ends and the walls have consisted of posts standing close together. The roof has been supported by 10 heavy posts in two rows along the house. The rows are almost parallel and the distance between them is approx. 3.75 m. However, the post-holes furthest to the east are a little closer together than the others. Each long side has had an entrance in both cases reinforced by a set of powerful posts slightly withdrawn from the wall-line. The two entrances are staggered. The northern entrance is in the west end of the house, and the southern entrance is roughly at the middle. In front of the northern entrance was a paved area measuring  $4 \times 1$  m.

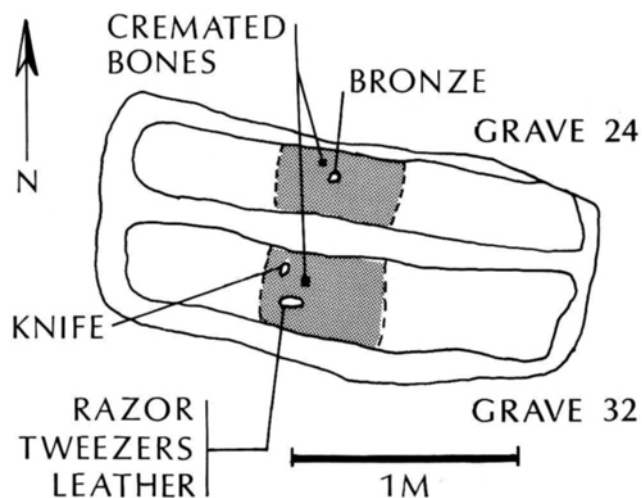


Fig. 6. The double graves (24 and 32). The extension of the cremated bones and the position of the artefacts are indicated.

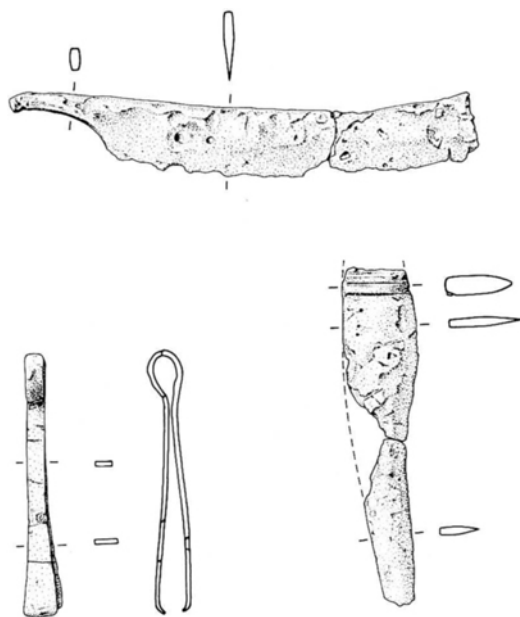


Fig. 7. Razor, tweezers and knife from grave 32. Drawing by H.H. Steen. 2:3.

The house has been divided by transverse walls into three rooms respectively approx. 9, 6½, and 7½ m long. The division between the western and the central room is clearest. It appears as a row of post-holes from south to north with an opening in the middle. As appears from the drawing (fig. 9) the dividing wall in the

eastern part of the house is somewhat problematic. The post-holes are somewhat scattered and irregular, but it can hardly be doubted that they must indicate some sort of subdivision. Besides the post-holes that could be interpreted as roof supporters or part of the subdivision there was a small number of holes inside the house whose function was not self-evident. Between the roof supporters furthest towards the west were four post-holes forming a crescent, and at the easternmost supporters there were also some »extra« post-holes. Perhaps these post-holes are the remains of a small room at the end of the house or perhaps they have supported benches or cots.

The house has no less than two fireplaces, one at either end. This seems to indicate that both end-rooms have been used as living quarters. The fireplaces appeared as depressions in the original surface, filled with dark earth containing charcoal. At the edge of the western fireplace was a stone-lined pit dug approx. ½ m into the subsoil. The bottom as well as the sides were lined with stones. The stones had obviously been made brittle by fire, and between them was dark earth containing charcoal. This may be a kind of earth oven or a place where embers were kept.

To all appearances the house has been burned down. Charcoal was found in many of the post-holes, especially in the south-eastern part of the house, and several spots inside the house showed signs of a fire.

#### THE CENTRAL STRUCTURE

In the centre of the barrow and the house was a big, oblong pit measuring approx. 4½ × 2 × 0.85 m. When first discovered it was interpreted as a grave, but ensuing investigations showed that it called for a far more intricate interpretation. Besides some small, scattered potsherds and a flint flake no artefacts at all were found in the pit. Some almost completely disintegrated wood fragments and some heavily disintegrated bone fragments that unfortunately could not be determined were also found scattered in the filling. Along the sides and the bottom of the pit was a lining of yellow clay succeeded on the inside by a some cm thick layer of dark, greasy earth with traces of disintegrated wood, cp. layer V in the section in fig. 2. To all appearances this is the remains of a wattled wall along the edges of the pit. The section furthermore shows that this wooden structure



Fig. 8a. Grave 41 seen from the southwest.

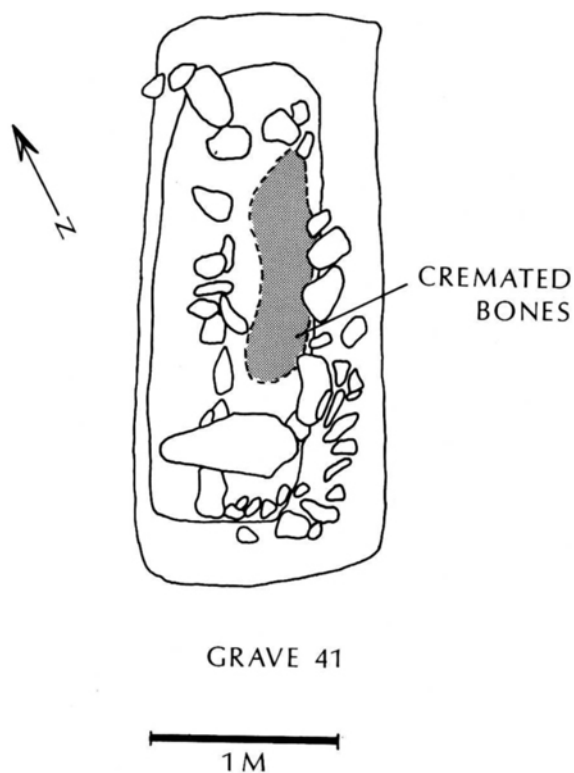


Fig. 8b. Grave 41.

has had some sort of cover, and that this has been topped by clay like along the sides of the pit. At some point of time after the erection of the oldest part of the barrow the wooden structure has no longer been able to support the pressure of the topsoil and the whole affair has collapsed. Thus the covering layer of clay has fallen into the pit and has deposited itself along the sides (fig. 2, layer E), and in the fall it has carried along the dark layer with charcoal, heavily disintegrated wood and lumps of burned clay probably deriving from the burning of the house (fig. 2, layer F). Above a corresponding collapse of the filling from the oldest phase has ensued (fig. 2, layer C).

#### INTERPRETATION

As shown on the key map (fig. 1) the house is placed symmetrically under the barrow, and the above mentioned pit is in turn symmetrical in relation to the bar-

row and the house. There must undoubtedly have been some sort of connection between the three structures. They cannot possibly have been placed with such symmetrical regularity by mere chance. Of course the barrow must be later than the house and the pit. However, the temporal relationship between the house and the pit seems somewhat more complicated. In the first place clay dug up from the pit lay in a thick layer around it (fig. 2, layer N), but the layer stopped at the wall-line of the house. This must mean that the house has been standing when the pit was dug, and that the earth dug up from the pit has been thrown against the walls of the house. In the second place, on top of the earth from the pit was a layer of charcoal that must derive from the burning of the house. The fact that the earth dug up from the pit has been allowed to remain lying in the house shows that it cannot have been in regular use after the pit was dug.

As already mentioned the pit contained nothing that

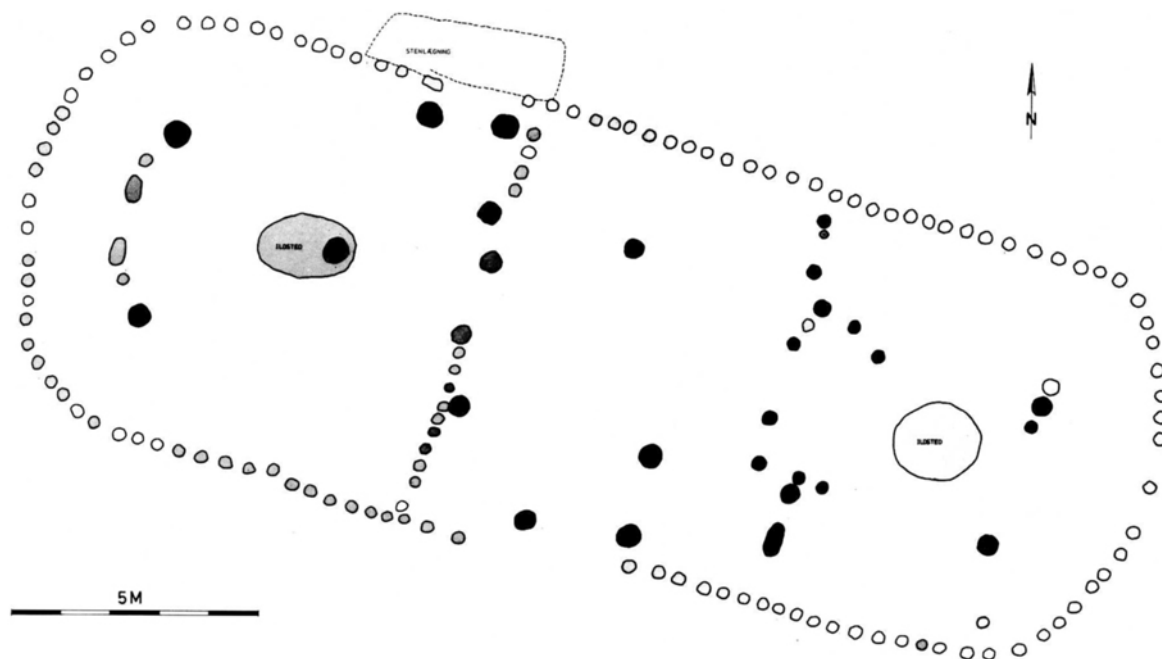


Fig. 9. Plan of the house. The difference in depth between the different post-holes is indicated in the screening. Drawing by Lars Kese.

might associate in with a burial. The actual bottom of the pit (the transition between layers E and P, cp. fig. 2) yielded no finds of any kind. Furthermore, the bottom was strangely uneven and full of small depressions into the underlying clay. It is of course possible that the skeleton has disintegrated completely, and that all grave goods have been of perishable material. There are absolutely no signs of maraudering.

What has been the purpose of the wooden structure and the pit if it is not a grave? One explanation is obvious: it might simply be a cellar. But that does not square with the above mentioned pile of earth, unless the house was burned down before the inhabitants had time to remove the pile of earth. The only explanation left open to us is that the structure has served some sort of religious purpose in connection with the conflagration of the house and/or the erection of the oldest barrow.

Let us try to recapitulate the course of events: the first thing must have been the construction of the house. Furrows in the original surface show that it has been erected in a tilled field. It is difficult to say for how long the house has been in use, but the two fireplaces seem to indicate that it has been used for habitation. At some point of time the oblong pit has been dug in the middle of the house, the mud and wattled structure has

been inserted, and the whole affair has probably been covered by mud and topped by a lid or roof.

Immediately hereafter the house was burned down and charcoal and other remains from the fire have been deposited on large areas of the site. Immediately thereafter the oldest part of the barrow has been built symmetrically on top of the house and with the pit as its centre, and this has happened before the cover over the pit collapsed.

#### DATING

The dating is important for an understanding of the house in a wider context, and in this matter the superjacent graves may be of help. Three of the graves contained artefacts that can be dated to a particular period of the early bronze age. Razors with formalized horses' heads like the one found in grave 13 are characteristic of the end of the early bronze age (period III) and so are the razors and the tweezers from grave 32 (figs. 5 and 7). Thus grave 24 has also been dated, as it must be contemporaneous with grave 32. It is difficult to determine the heavily disintegrated fibula from grave 41, but from the fragments appears that the fibula has a round cross

section and is decorated with oblique lines (false twisting). The end plates are made of coiled thread hammered flat. It is probably a cross shaped fibula from period III. The dating is in accordance with the type of grave; cremation graves with coffins the size of a human body are characteristic of this transition period between the early bronze age with its inhumations and the cremation customs of the late bronze age.

The filling of the mysterious pit under the barrow and the post-holes also contained artefacts – flint flakes of the same rough character as in the filling of the barrow, a few uncharacteristic potsherds, and a crushing stone – but none of these could be dated with any certainty.

Though neither the house site nor the central structure bellow the barrow can be dated by the artefacts found, grave 32 shows that they cannot be later than the end phase of the early bronze age. From an archaeological point of view it is difficult to say how much older than the grave these structures are, all the more so since we have no definite dating of the oldest phase of the barrow. But the structure of the barrow does not in any way suggest that a particularly long span of time has passed between its separate phases. So everything seems to suggest that the barrow belongs in the early bronze age. This is in agreement with the C 14-datings of charcoal from the post-holes (4). Admittedly these datings are somewhat spread out, but this may be due to the individual age of the separate samples. It is, however, important to note that the four samples examined all belong to the early bronze age, and three of them more specifically to the 2nd period of the early bronze age, i.e. the time span between approx. 1450 and approx. 1200 B.C. (in calendar years).

So there is little doubt that the house was built during the early bronze age and to all appearances around the middle of this period. It should furthermore be noted that a dating of charcoal from the pit also points to this period though it is somewhat later than the datings of the house proper. This is also in agreement with the archaeological observations.

#### OTHER EARLY BRONZE AGE HOUSES

As already mentioned only few houses from the early bronze age are known. During the early 1970s a settlement from the middle of the period was examined at Vadgård near Løgstør (Lomborg, 1973, 1976). A series

of different types of houses were represented: houses with turf walls, and a pit house, and houses with mud and wattled walls supported by posts. Among the latter one, possibly two, had two rows of posts supporting the roof, rounded ends and two entrances, like the Trappendal house. However, they differ from the Trappendal house in that they are somewhat smaller, and in structural details. It should also be noted that several of the Vadgård houses, like the Trappendal house, contained pits, many of them with stones made brittle and cracked by fire.

Another site with early bronze age houses is located at Egehøj in north-eastern Djursland (Boas, 1980, 1983). Some ten years ago three eastwest oriented mud and wattled long houses with rounded ends were found here. However, they only had one row of posts supporting the roof, so they were obviously of a markedly different construction. The houses were dated to the earliest phase of the early bronze age and were thus older than both Vadgård and Trappendal.

In the Northern culture area outside Denmark there are only two indisputable early bronze age houses, both of them in southern Schleswig. The first one was excavated in 1953–54 in the dunes on the isle of Amrum (Struwe, 1954). Unfortunately the house was very poorly preserved, but it was obviously a three-aisled long house measuring approx. 10 m × approx. 4 m.

The other one was found roughly at the same time as the Trappendal house and under quite similar circumstances. In 1974 a cultivated barrow was excavated at Handewitt immediately south of the Danish-German border (Bokelmann, 1977). The barrow only contained one grave roughly at its centre. It was obviously a burial in a log coffin, but there were no traces of the deceased and no grave goods. However, bellow the northern part of the barrow was the rather well-preserved site of a eastwest oriented long house. Not only its position but also its construction was very similar to that of the Trappendal house. It is of roughly the same size, approx. 25½ × 9½ m, has two rows of posts supporting the roof and rounded ends, is subdivided into 3 rooms, and its door posts are slightly withdrawn from the wall-line. But unlike the Trappendal house this house had a deep wall ditch with traces of perpendicular, tightly packed wall planks, and no less than three, possibly four entrances. An important difference between the two houses is furthermore their position in relation to the barrows. Whereas the Trappendal house was sym-



metrically placed in relation to the centre of the barrow, the Handewitt house was placed under the northern part of the barrow with its eastern end beyond the kerb stones. It seems as if its position under the barrow is quite incidental. Perhaps it had already been demolished and levelled when the barrow was erected. As regards the dating of the Handewitt house the grave was of little help, but fortunately a couple of charcoal samples could be C 14-dated. They both show that the house must have been built during the early bronze age.

Though the parallels are few they do show that the Trappendal house is not an isolated phenomenon. The closest parallel is the Handewitt house, but the Amrum house and some of the mud and wattled houses from Vadgård display important similarities. All the houses are eastwest oriented long houses with two rows of posts supporting the roof and rounded ends. It is a type of house that clearly foreshadows the houses of the late bronze age, on which the prevalent house types of the iron age were modelled.

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## NOTES

<sup>1</sup> Haderslev Museum, parish register no. 27, Hejls s., Nr. Tyrstrup h., Vejle amt (county).

<sup>2</sup> Bones determined by Pia Bennike, the Anthropological Lab., the University of Copenhagen (letter of 21/7 1980).

<sup>3</sup> The excavation only covered the barrow proper, so it is uncertain whether it was a solitary house or part of a settlement.

<sup>4</sup> A total of five charcoal samples were examined of which four (K-3475 – K-3478) derive from different post-holes, whereas the last (K-3479) derives from the pit in the centre of the house. The samples yielded the following results:

K-3475: 1100±80 b.c. – 1385±80 B.C.

K-3476: 1350±80 b.c. – 1650±80 B.C.

K-3477: 1110±80 b.c. – 1395±80 B.C.

K-3478: 1180±80 b.c. – 1475±80 B.C.

K-3479: 970±80 b.c. – 1205±80 B.C.

The dates are stated in C 14-years (b.c.) and calender years (B.C.). The calibrations are based on the tables in R.M. Clark, *Antiquity* XLIX, 1975 p. 251. I wish to thank Dr. Henrik Tauber, the Copenhagen Radio-carbon Laboratory, for permission to publish the results.

For purposes of comparison should be added that 8 oak coffins from the early bronze age period II have been C 14-dated to 1450–1190 B.C.

(stated in calender years. Information kindly made available by Ebbe Lomborg, keeper at the National Museum, 1st Dept.).

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