

A Late Neolithic House Site at Tastum, Northwestern Jutland

by JOHN SIMONSEN

Excavated houses from the Late Neolithic Period in Denmark are extremely few in comparison to the evidence of population density given from the thousands of graves dating to the period (in conventional carbon fourteen years approx. 1900 to 1500 b.c.). For this reason the main types of the Late Neolithic (abbr. LN) graves are fairly well known while the knowledge of the houses is quite limited in several respects. Thus a recent discovery and excavation of a house from this period might still add some new information.

The settlement is situated 5 km south of Skive on a hill near the southwestern edge of the now drained lake, Tastum Sø. 200 m south of the settlement a brooklet flows into the lake.

The site is situated in a modern ploughed field, but no traces of the house on the surface caused the find. This can be explained by the fact that later wind-deposits of sand had accumulated on the site and in this way increased the actual distance between the soil surface and the remains underneath. So this physical factor helps to preserve such remains from being destroyed by modern agricultural activities. On the other hand, however, this factor also works against discovery of the remains. It is then often quite incidental circumstances that finally lead to discovery. At Tastum the house was found in connection with road works, where machines had cut a cross-section of the western end of the sunken floor.

After a minor trial excavation near the roadside, the topsoil was removed with machine over an area of approx. 200 m² (later the excavation was extended to a somewhat larger area). Thereby the sunken floor of the LN-house was uncovered¹. It generally appeared as a rectangular, dark mould, about 11 × 5 m, contrasting with the surrounding yellow moraine sand.

Traces of a settlement from the Late Bronze Age were also documented on the site. A longhouse and some pits were excavated. The longhouse lies almost E–W

and measures 19.5 × 6.2 m. It is placed in such a way that it covers a large part of the LN-house. The Bronze Age house belongs to the now well known type with two inner rows of bigger (wooden) posts carrying the roof. These deep postholes have an internal distance of 3.4 m (measured from the centers of the holes). The distance between the two rows of postholes is 3 m.

The walls of the Bronze Age house were constructed by means of regularly placed posts. The holes are smaller and not particularly deep. Normally the distance between each hole is about 1.4 m.

The Bronze Age settlement naturally caused some disturbance to the LN house. Problematic are some of the smaller postholes, because it is difficult to determine whether they belong to the LN settlement or are later.

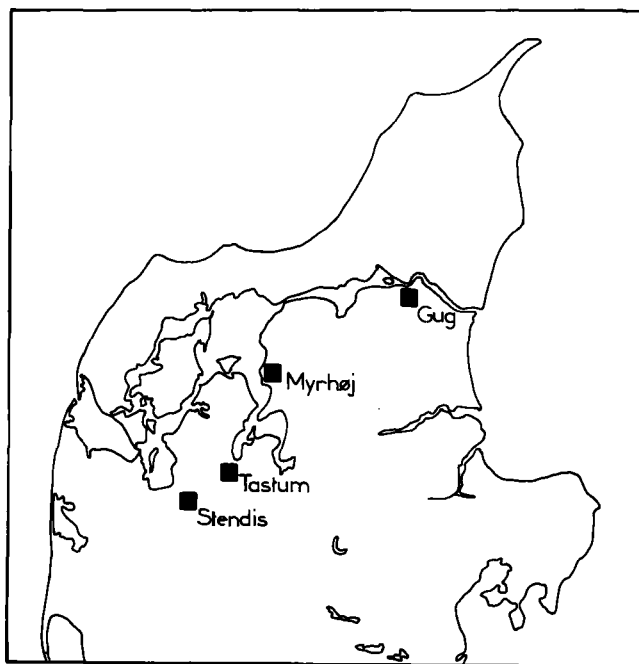


Fig. 1. Map of Late Neolithic settlements in Northern Jutland with houses with sunken floors.



Fig. 2. Tastum. The house-site seen from the south after removal of the topsoil.

STRATIFICATION OF THE HOUSE

The mould in the LN-house seems to belong to two main strata. The lower part represents the floor layer, while the upper part is interpreted as a secondary filling of the »pit« after the house ceased to function. This interpretation is supported by the ceramic finds. The way of depositing seem different. In the floor layer the potsherds generally lie almost flat. In contrast the potsherds in the upper part are often found turned in different directions and the ceramic sherds are fewer and scattered. In the floor they are often found in concentrations.

The E–W baulk gives some more details about the floor (fig. 4). The floor layer above the moraine sand (6) can be subdivided in three layers (3, 4, and 5). Layer 5 is a dark, brownish, and sandy soil with a few traces of charcoal. This layer does not seem to be present in the western end of the profile. It must represent the oldest sedimentation in the floor stratum.

Most of layer 5 is covered by a thin layer of yellow

sandy soil (4). Presumably it had been spread here to renew the floor surface. It cannot be excluded, however, that it could also have been deposited here by wind.

Above layer 4 and 5 is a dark, almost black, sandy soil colored by some admixture of charcoal. This layer (3) seems to be present in the whole length of the baulk (except perhaps in the eastern end, where it is not possible to distinguish between layers 3 and 5).

Outside the earth bench it is not always possible to distinguish between the sublayers of the floor. Particularly it is very difficult to discern between layer 3 and 5 near the edge of the pit and in some other places where layer 4 does not occur. From the Bronze Age settlement there are also some intrusions in the LN floors (post-holes etc.).

The high content of charcoal (as dust and very small pieces) in layer 3 is remarkable. This layer is present over most of the sunken floor. It is likely that the house finally burned down with the charcoal in layer 3 being remains of this fire.

When the house had been demolished it presumably

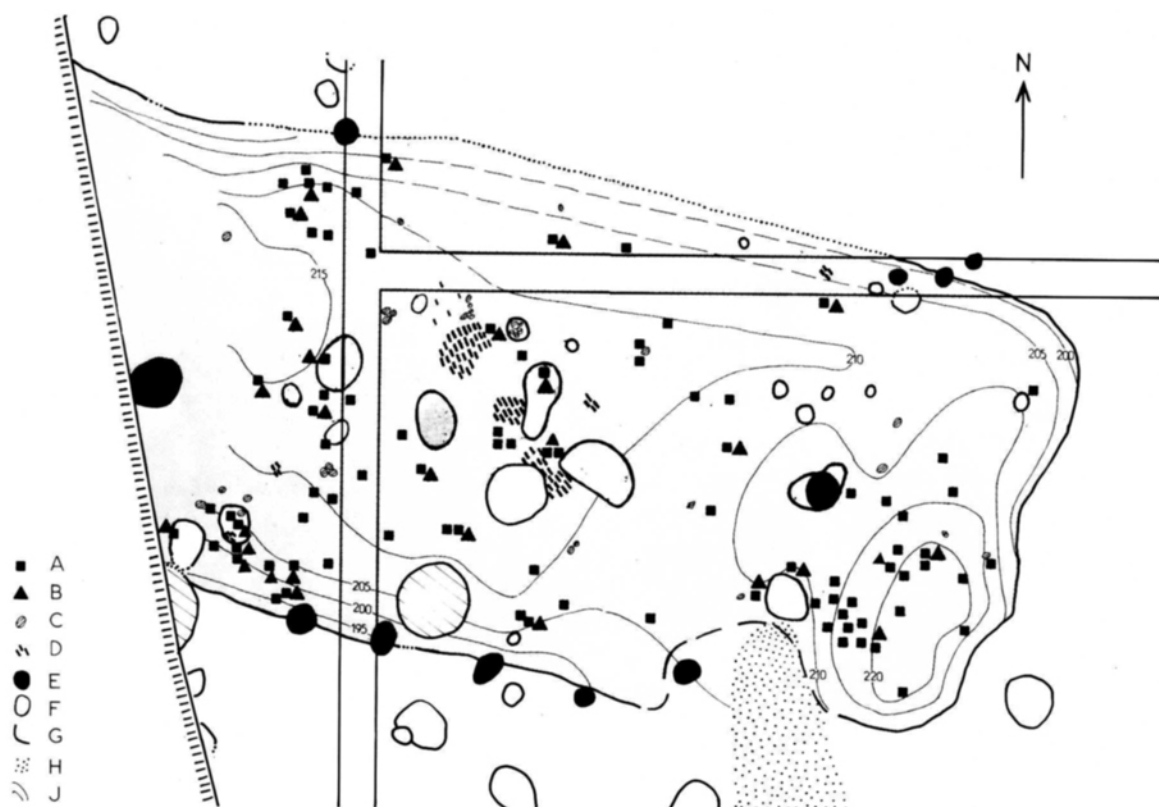


Fig. 3. Tastum. Plan of the Late Neolithic house with finds in the floor layers. A, 1–10, potsherds. B, worked flint. C, stone. D, charcoal. E, postholes belonging to the Late Neolithic house. F, postholes belonging to the Bronze Age house or of uncertain age. With oblique lines: Bronze Age cooking pits. G, shallow depression with darker mould. H, coarse sand with gravel stones. J, contours with 5 cm interval. 1:80.

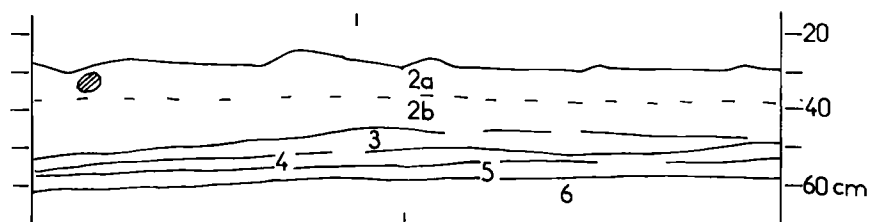


Fig. 4. Tastum. Part of the E–W section with the stratigraphy of the floor (description in the text). 1:20.

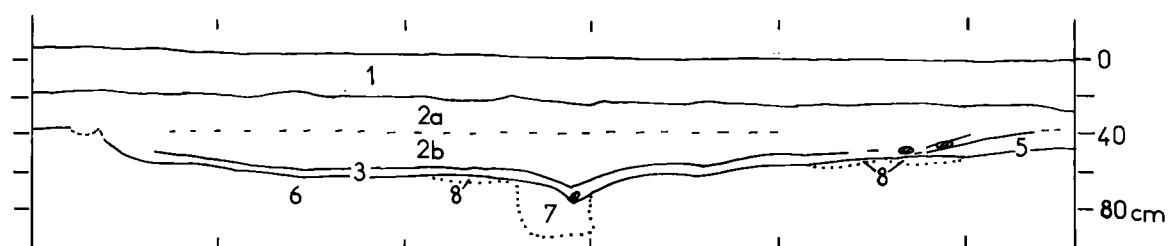


Fig. 5. Tastum. Transverse section N–S. Cf. fig. 3 (description in the text). 1:40.

appeared as a shallow pit in the terrain. It was then filled with some different garbage. Layer 2b represents this phase of the pit. It is a light, brownish sandy soil with small stones, scattered potsherds, worked flint, and small pieces of charcoal. It is implied in this interpretation of the stratification of the house that life continued near the house after it had ceased to function as such. Above this layer is found an almost similar, but somewhat darker soil (2b). It contained only a few sherds, some of them belonging to the LN period and others to the Bronze Age. Uppermost layer 1 represents the modern ploughed layer.

From the western part the N-S section have the layers 1, 2a, 2b, 3 and 6 represented what is described in the foregoing (fig. 4 and 5), but layers 7 and 8 are new. Layer 8 consists of thin spots of brownish sand and seem to be moraine sand colored by precipitation. The same seems to be the case with layer 7. It is yellow-brownish sand.

TRACES OF THE CONSTRUCTION OF THE HOUSE

A shallow depression in the western part of the sunken floor can be seen in the N-S section (fig. 5). Layer 3 is significantly sunken in the middle, but does not seem to be penetrated. A wooden post might have been placed here to support the roof. It is found approximately on the axis of the house, about 2.5 m from the northern and southern edges of the sunken floor. There are a few other shallow depressions in the floor, but presumably they are not traces of the construction of the house.

In the western end is found a posthole, about 20 cm deep (in the moraine sand). It is not unlikely that a roof-supporting post could have been placed here, but the posthole is not found precisely on the long axis. In the eastern part of the house a second posthole is found on the long axis. It consists of a brown soil, where the inner part is dark brown. The depth is only 20 cm. Like the posthole in the western end it would be deep enough to prevent the lower end from creeping but it seems far from deep enough in itself to stabilize the construction of a house.

The edge of the house-pit is fairly steep in the northern side, while in the southern side it is less clear-cut, because the terrain is slightly sloping. Along the edge in this side there are some smaller postholes up to

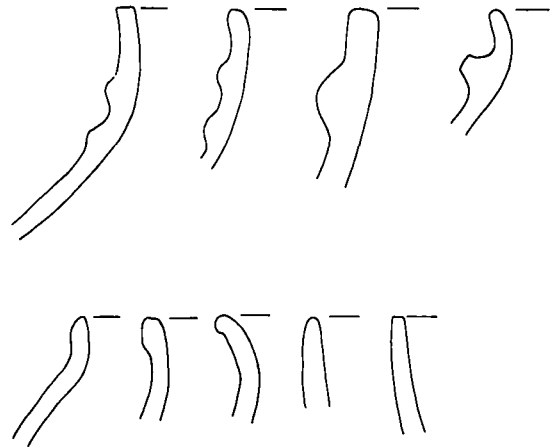


Fig. 6. Tastum. Rim sherds without decoration and sherds with cordoned rim. 1:2. Jan Opstrup del.

20 cm deep and they must be traces after the construction of the walls (fig. 3). At the northern edge there are also a few postholes. The hole in the N-S section is dubious since it is only a few centimeters deep.

Near the eastern end of the house there is an area with very coarse, brownish sand. It can be followed across the edge of the house some meters south². It is possible that there was an entrance here with the path covered with well-drained sand³. This area continues into the house as a slight elevation, which would be a gradual passage to the sunken floor in the middle of the house or to the small deep area in the south-eastern end.

The question of house-construction will be discussed later.

THE FINDS

Apart from a few small fragments of burned bones, some small pieces of charcoal and a few fragments of cooking-stones, the main finds in the house are potsherds and worked flint. The following is based on a preliminary examination of the find material.

In the house approx. 1380 potsherds are found. About half of them belongs to the floor stratum, the rest to the layers above as part of the secondary filling. A few potsherds from the upper layer are from the Bronze Age. The Neolithic sherds from the floor and the secondary filling of the pit do not seem to have any observable differences and will here be described as a whole.

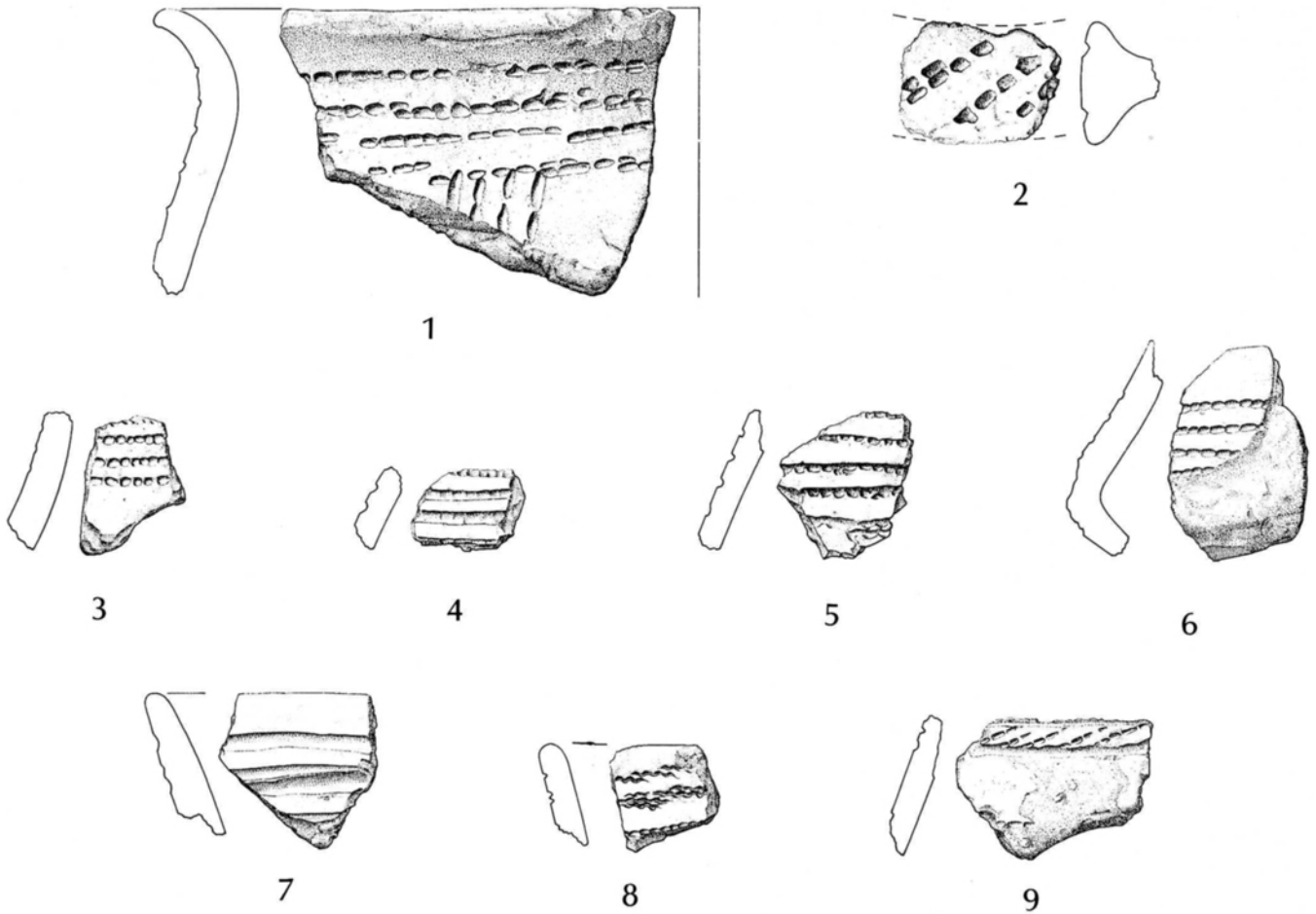


Fig. 7. Pottery from the house-site: Rim sherds with notch-stamped decoration (1–2) and examples of sherds with horizontal decoration of notch-stamped lines (3–6), grooves (7), cardium (8), and zones with short oblique notch-stamped lines (9). 3:4. Orla Svendsen *del.*

Sherds from varying forms of undecorated pottery are found. Another group of pottery is vessels with cordoned rim (fig. 6).

Bell-beaker influence can be seen in the ornamented potsherds. The beaker, fig. 7:1, has a zone of notch-stamped lines under the rim combined with a »picture area« with oblique, notch-stamped lines. Other sherds have zones of parallel cardium impressed lines. There are also sherds with horizontal zones with short oblique, notch-stamped lines (fig. 7:9).

Another group of decorated beakers is formed by potsherds with several horizontal grooves (fig. 7:7).

Remarkable is a small sherd with oblique notch-stamped lines on the top of the rim (fig. 7:2). Such decoration is normally connected with the Single Grave Culture and its presence in the Late Neolithic milieu is unusual.

Most of the worked flint are flakes of different size and shape. About 400 pieces of worked flint are found. A fragment of the shaft of a flint-dagger and a preliminary shaping for a triangular flint-arrowhead are from the secondary filling.

The find material dates the house to the older part of the Late Neolithic. Primarily this is shown by the ornamented sherds with affinity to the bell-beakers, which belong to a horizon in the early part of the danish LN (cf. Ebbesen 1978, Lomborg 1977).

The beakers with horizontal grooves support this dating⁴. The sherd with oblique notch-stamp on top of the rim also indicates an early dating within the LN because of its relation to certain types of Single Grave pottery.

The dating is to some degree supported by the beakers with cordoned rim, but such plastic decoration

cannot be confined to the older part of LN alone. The varying forms of undecorated potsherds can only be dated to LN in general.

For the time being a more definite dating than to the older part of the Late Neolithic cannot be presented. The fragment of the flint-dagger and the triangular arrowhead cannot contribute to a more detailed dating, but their presence confirms the exclusion of a dating of the house to the period previous to LN (Lomborg 1973: 84).

LATE NEOLITHIC HOUSES IN THE LIMFJORD AREA

The excavated houses with sunken floor from LN in Denmark are so far concentrated in the northern part of Jutland, near the Limfjord (figs. 1 and 8). From this area are known three other sites with houses with sunken floor:

In 1952 the first house was excavated at *Gug*, Sdr. Tranders parish by the amateur-archaeologists A. Strøbye and J. Fønss (in cooperation with C.L. Vebæk, The National Museum, Copenh.). Unpublished, but briefly referred to at several places in the literature⁵.

In 1968–72 a site with three houses was excavated at *Myrhøj*, Strandby parish, by J. Aarup Jensen for Aalborg Historiske Museum and Forhistorisk Museum, Århus (Jensen, 1973).

In 1973 a house was excavated at *Stendis*, Ryde parish, by T. Skov, Holstebro Museum (Skov 1978 and 1982). In the following some of the characteristics of these houses will be discussed.

Dimensions of the sunken floors

Generally, the sunken floors become gradually deeper near the middle of the houses and only a minor part of each floor is quite flat (fig. 8).

House EAB at *Myrhøj* has a length of 14 m and a breadth of 7 m. This house has the deepest floor with 0.6 m below the prehistoric top soil. The dimensions of house GAB are 12.5 × 6 × 0.5 m. The dimensions of the sunken floor, house D, are 14 × 7 × 0.5 m.

At *Stendis* the dark area is very long, about 15 m, while the breadth is only 4–5 m. The excavator is probably right when he points out that the irregular shape of the dark area might be due to the existence of more than one phase of the house. It does not seem possible

therefore to determine the original length of the house. The recorded depth of the house is only 25 cm, but the top of the feature may possibly have been cut off by modern agriculture.

At *Tastum* the depth of the floor below the ground surface is about 25 cm. Corresponding to this the other dimensions of the sunken floor are also smaller. The breadth is about 5 m and the length is hardly much more than 11 m.

At *Gug* the sunken floor seems to be about 9 m in length and 5 m in breadth. The recorded depth of the sunken floor is about 35 cm.

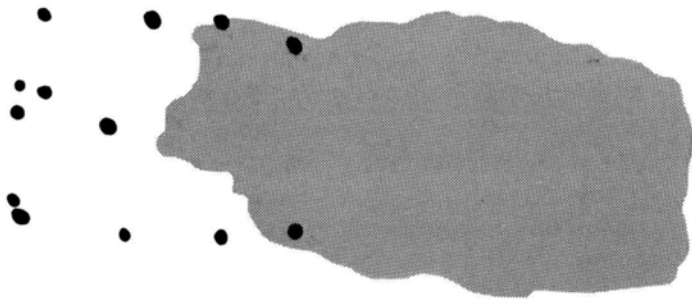
From the above can be seen that there are some variations in the dimensions of the floors of the six houses. The depth of the floors seem to vary between 0.25–0.6 m, the length between 9–14 m and the breadth between 5–7 m. But at the same time there seems to be some regularity in the dimensions. Generally, the length of the sunken floors are about twice the breadth. And, the larger floors also seem to be the deepest.

Construction of the houses

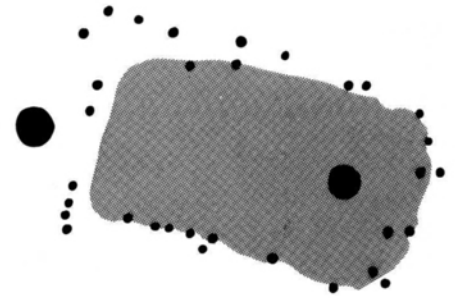
With only one recorded phase of the floor, house GAB at *Myrhøj* seems to be the most regular. Along the northern edge there is a row of postholes with an equidistance of 2.5 m and along the southern edge there is a row almost as regular. No doubt wooden posts placed in these holes constitute the framework of the walls. In the long axis near each end of the sunken floor there is a larger posthole. It is likely that wooden posts placed here have supported the roof.

The other houses conform more or less to this scheme. At *Gug*, *Tastum* and *Myrhøj* house EAB, are found smaller postholes along the edges of the sunken floor, but not quite regular. At *Stendis* there are many postholes around the dark area, but it is not possible to say anything certain about the wall line. Only at *Myrhøj*, house D, no row of postholes is recorded around the sunken floor.

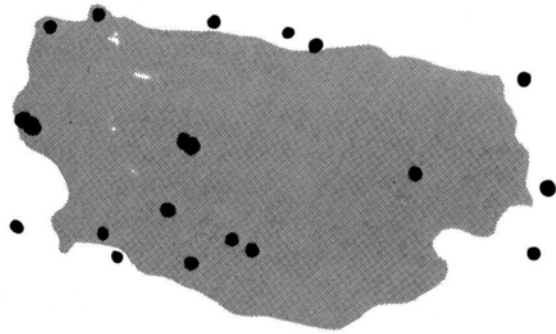
More problematic are the postholes in the interior. Smaller postholes in dry sand may easily avoid the attention of the excavator, but this would probably not be the case with larger and deeper postholes. At *Gug*, *Stendis*, and *Myrhøj*, house D, no larger postholes in the length axis of the sunken floor were recorded. This is an interesting trait and it seems to indicate that the construction of the houses can have been of such a cha-



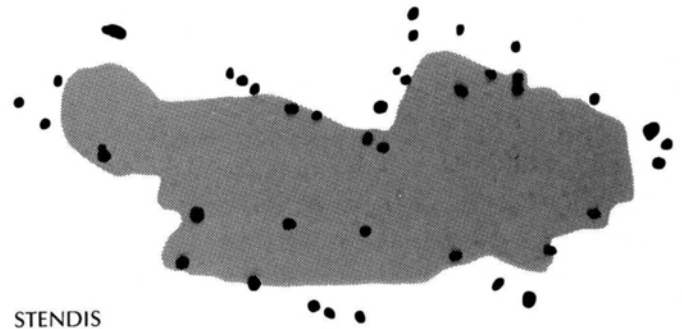
MYRHØJ (D)



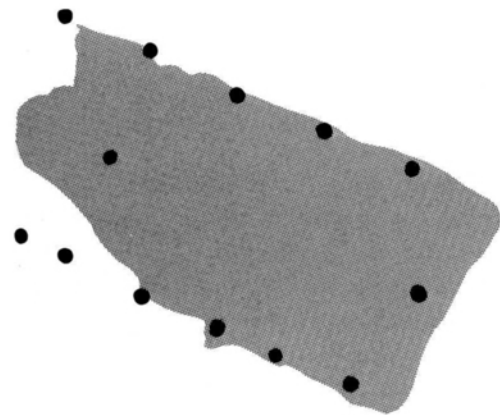
GUG



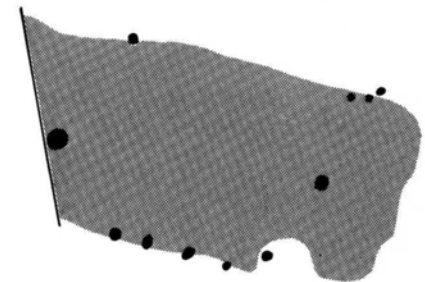
MYRHØJ (EAB)



STENDIS



MYRHØJ (GAB)



TASTUM

Fig. 8. Plans of the six Late Neolithic houses from the Limfjord area: Myrhøj (drawn after Jensen 1973), Stendis (after Skov 1982), Gug (based on the original drawing by Axel Strøbye and drawing by Catharina Oksen), and Tastum. 1:200.

racter, that deep holes for wooden posts to carry the roof are not always absolutely necessary. If there were roof-carrying posts in the long axis without the lower end placed in a (stabilizing) hole, they would at the most have left some shallow depressions and maybe stone slabs (cf. Calmer 1973: 126 and Strömberg 1971: 239–40). In the foregoing was shown a shallow depression in the long axis of the house at Tastum, which might be interpreted as the vestige of a wooden post supporting the roof.

In continuation of the sunken area of house D at Myrhøj two rows of postholes in alignment with the edges and a row of postholes in the middle were found. Such features are not recorded in connection with the other houses at Myrhøj, where only the sunken floors were excavated. Therefore it is not possible to determine, whether such structures are present in connection with the other houses⁶. At Stendis this possibility is mentioned by the excavator (Skov 1978: 43). At Tastum it could not be determined, since the area west of the sunken floor was cut off by the modern road works.

At Tastum there are two phases of the floor separated by a thin layer of sand. Similar observations are made at Myrhøj, where two phases are separated in house EAB. In house D are even indications of three phases of the sunken floor. In the foregoing it was mentioned that there is possibly more than one phase of the house at Stendis, but in contrast to the other houses the phases of the sunken floor seem to be somewhat displaced. Whether the phases of the floor at Tastum and Myrhøj are combined with a renewal of the construction of the houses is difficult to say and none of the houses seems to give a definite answer to the question.

The entrance to the houses seems to be problematic. No entrance was demonstrated to the houses at Myrhøj, Gug or Stendis and the observations in the house at Tastum are unparallelled in the Danish finds.

Function of the houses

In this short note it is not possible to deal with the many problems connected with the understanding of the use of the interior of the houses. The different activity areas as reflected in the distribution of the finds cannot be discussed here.

There are no signs that separate parts of the houses has been used as cattle shed like in longhouses in the same geographical area in later parts of prehistory. The

finds of pottery, worked flint, and charcoal, etc., in the floors indicate that the houses primarily may have been used as human habitation. The house at Gug has till now been considered as a »flintworker's hut« (Brøndsted 1957: 311–12), but in the opinion of the author there are indications that a large part of the finds of worked flint and potsherds should be interpreted rather as part of a secondary filling of the pit. The house at Gug does not seem to deviate from the other LN houses concerning the function.

As human habitations the orientation and placing of the houses in the terrain is of great importance.

An orientation between E–W and WNW–ESE is common for the houses. This is probably in order to get the greatest advantage from the direct heat of the sun, which most likely was appreciated in the sub-boreal, temperate climate. Since maximum effect is attained a little while after the most southern position of the sun, this seems to give some explanation of the small deviation from the E–W orientation. Concerning protection from the wind the orientation of the houses also seem appropriate.

The houses are situated in slightly south-sloping terrains. This is probably also out of regard to the heat. Thereby the northern (cooler) side of the houses is lower than the southern side in relation to the terrain, making the houses more sound.

The careful selection of the placing of the houses supports the assumption that the houses were human habitations.

CONCLUSION

It is likely that it is a matter of coincidence that the excavated LN-houses with sunken floor cluster in the Limfjord area. Probably future excavations will show that the distribution is not limited to this area alone.

The houses seem to have been used for human habitation and vary somewhat in size. They have, however, several common features and it seems evident that they belong to a well established type. Even though the existence of other sorts of structures are known⁷, the houses with sunken floor may prove to have been predominant as human habitation in the Late Neolithic.

Dating from the preceding period, the later part of the Single Grave Culture, a house was recently excavated in Vorbasse, Central Jutland (Hvass 1977). This

house also has a sunken floor and a construction similar to the LN-houses. Apparently the Vorbasse house and the LN houses belong to the same tradition. This tradition even seems to extend into the Early Bronze Age as can be seen from the excavation at Egehøj, East Jutland (Boas 1980. See also this volume). Thus we might speak of the same tradition for this type of houses over several hundred years.

An important problem to be solved by future excavations is the question of the size of the settlements. At Myrhøj two of the three houses may have been in function at the same time, but it is not possible to be definite. To solve questions like this it is also important that the methods of dating especially of the Late Neolithic ceramics are improved.

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NOTES

¹ Skive Museum 219A. Kobberup parish. – Skive Museum is much indebted to several free-time-archaeologists for their friendly assistance during the excavation (Sept.–Oct. 1981).

² In front of the supposed entrance (see fig. 2) were some dark posthole-like markings. They were very shallow (only a few cm in depth) and they were not registered as postholes.

³ Traces of an opening in the southern side of an LN house are found at Stockholmsgården in Scania (Strömberg 1971). There are, however, some doubt about the size of the house (Jensen 1973: 105), which also may have significance for the entrance.

⁴ The ornaments belong to the B₃ beakers (Glob 1944: 67 and fig. 33, 3), which are now dated to the older part of LN (Becker 1957: 20).

⁵ I wish to thank the National Museum (I. Dept.) for permission to use the material for this article.

⁶ An excavation of the areas around and especially West of House EAB and GAB at Myrhøj would naturally be of much value.

⁷ In the Limfjord area a house was recently found under a burial mound at Nautrup. Ten deep postholes constitute the traces of the construction of the house, which measured 6 × 4 m. Radiocarbon-dated (in conventional C 14 years) to 3510 ± 85 before 1950 = 1560 b.c. (Simonsen 1982).

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