# A Late Neolithic/Early Bronze Age Settlement at Vejlby, East Jutland

## by JENS JEPPESEN

In the spring of 1982 Forhistorisk Museum, Moesgård (Århus), carried out a number of excavations in areas that were going to be affected by construction work. One of these sites contained settlement remains with flint tools and pottery which can be dated to the Late Neolithic/ Early Bronze Age (1).

The site is located directly above the southern slope leading to the Egå valley at Vejlby, north of Århus (2). The entire area is characterised by heavy clay soil, under which there is clay with scattered patches of sand.

A preliminary investigation of the site had revealed a pit containing waste flakes of flint, pottery and charcoal. When the pit was excavated, it appeared as an almost square course of fill, c.  $4^{1/2} \times 4$  m large (fig. 1 E). As can be seen in fig. 1, it was interrupted at the western end by a later intrusion which, however, affected only a minor part of the pit. The fill of the pit consisted of heterogeneous greyish brown and blackish brown sand and clay with a considerable admixture of charcoal. There were numerous small fragments of granite, shattered by fire, scattered in the fill and at the bottom of the pit. The largest of them had a diameter of c. 10 cm. Nowhere did they form concentrations that might be interpreted as fire places. The section (fig. 1, below right) shows that the pit was a nearly flat-bottomed, shallow depression with a depth of c. 20 cm at the centre.

The *flint tools* from the pit comprised the following: 1 pressure-flaked, crescent-shaped sickle (fig. 2 a), the ends of 2 equilateral arrowheads, neither of which were notched (fig. 3 c, d), the tip of a small equilateral arrowhead (fig. 2 b), 3 scrapers formed from crude flakes, 4 fairly crude blades and 1 thick core borer. Furthermore, there were 1 unfinished sickle, 3 cores, 1 core transformed into a hammerstone and 880 waste flakes. The flakes include large, crude flakes as well as small chips from pressure-flaking. Some of the waste flakes show

traces of careful pressure-flaking and may well be tools begun but later rejected.

The pottery in the pit included 44 sherds representing at least 4 different pots. Some of the sherds have been assembled to form the base and the lower part of a pot (fig. 3 c). It has a poorly defined base, 12 cm in diameter and a slightly convex lower part. The base and sides are c. 1.2 cm thick and made of coarse material. The colour is reddish brown throughout. The rimsherd (fig. 3 b) is of the same material and colour as the pot (fig. 3 c) and probably belongs to it. The sherd shows that the pot also had a slightly convex upper part and a splayed, attenuated rim. Below the rim the pot is 0.7 cm thick. The sherd in fig. 3 d comes from the transition between the side and the base of a pot with a base diameter of 10 to 11 cm. As was the case with those mentioned above, the material is coarse-grained and c. 1 cm thick. On the outside the colour is reddish brown while the inside is blackish brown. The base is marked with finger impressions. Fig. 3 a shows another type of pottery. It is a sherd from a rounded vessel with a sharply marked transition between the side and a splayed rim. As very little is left of the rim, its shape cannot be accurately determined. The vessel had a rim diameter of c. 14 cm and was fairly thin-walled, the sherd being 0.5 cm thick. The material is fine and well-baked, and is greyish brown throughout. The last type of pottery found is represented only by a single sherd. It is an undecorated sherd from the side of a pot, 0.5 cm thick. Like the preceding one it is fine-grained and well-baked. It is light brown on both sides, with a smooth surface.

### Dating

The symmetrical, pressure-flaked sickle is a type of implement known from the Late Neolithic as well as the Early Bronze Age (Lomborg 1959: 164 ff.). As far as the

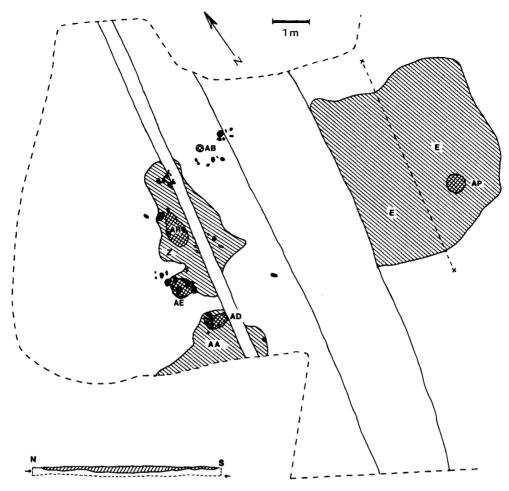


Fig. 1. Plan of the excavation. 1:100.

arrow-heads are concerned, the pressure-flaked, equilateral arrow-head is a type that has been dated to the end of the Late Neolithic or the Early Bronze Age, in contrast to the broad triangular arrow-head with curved edges, which has been assigned to the beginning of the Late Neolithic (Brøndsted 1966: 325-26; Glob 1952: 70). M. Strömberg has stated, however, that the broad triangular arrowhead with curved edges occurs not only during the Late Neolithic but continues through the Bronze Age, though mainly during the early periods (Strömberg 1954: 357 ff.). Furthermore, E. Lomborg has pointed out that it appears to be impossible to identify arrow-heads from the Bronze Age that do not occur also in the Late Neolithic (Lomborg 1959: 169). As the flint sickle and the three arrow-heads are types known from both the Late Neolithic and the Bronze Age, these tools cannot provide an accurate dating of the Vejlby

find. It should be pointed out, however, that the narrow, equilateral arrowhead as well as the crescent-shaped flint sickle are characteristic types at the Egehøj settlement site, which dates from the Early Bronze Age, period I (Boas 1983).

If, as it is assumed, the pottery base (fig. 3 c) and the rimsherd (fig. 3 b) are asociated, we are dealing with a type of pottery rather like *Danske Oldsager* II, No. 567, which Glob has assigned to the Late Neolithic. Two similar vessels were found at the Norrvidinge settlement site in Sweden (Callmer 1971–72: 132, fig. 9), which has been dated to the Late Neolithic or the Early Bronze Age (Callmer 1971–72: 120–43). The majority of the pottery found belongs to the same type of coarse red-baked clay as fig. 3 b, c & d. This type of pottery corresponds very closely to the description of pottery from the settlement site at Egehøj, which also contained pots of the kind mentioned above (Boas 1983). It has proved impossible to find parallels to the rimsherd (fig. 3 a) and the sherd with a smooth surface mentioned above, but according to M. Strömberg, Swedish settlement sites dated to the Early Bronze Age have been found to contain pottery that is both thin-walled and well-baked. There is also a reference to pottery with a smooth surface. Incidentally, she states that as far as the simple vessels are concerned, it is impossible to date them more precisely than the Late Neolithic/Early Bronze Age (Strömberg 1954: 365 ff.).

A radiocarbon date of  $1470 \pm 80$  bc (K-4024) was obtained from a sample of charcoal from the fill of the large pit. This date supports the conclusion reached above that the find dates from the beginning of the Early Bronze Age or from the transition Late Neolithic/ Early Bronze Age (c. 1500 bc).

#### Interpretation

As the almost square pit (fig. 1 E) resembled the sunken eastern ends of the Myrhøj houses, which date from the early part of the Late Neolithic (Jensen 1972: 61-122), the excavation trench was extended westwards to examine whether there were any demonstrable post holes like those of the Myrhøj houses. As shown by fig. 1, this excavation revealed a probable post hole (AB), which appeared as a blackish brown course of fill, c. 4 cm deep. Furthermore, there were two courses of fill (Z and AA), cut through by a modern drain. Both turned out to be blackish brown culture layers, c. 5 cm thick, with scattered patches of yellow sand. They contained some charcoal, a few waste flakes of flint as well as some pottery of the coarse-grained, red-baked type shown in fig. 3 b, c & d, which indicates that they are contemporaneous with the pit (E). Underneath the fill (Z and AA) were the probable post holes AD, AE and AR. They appeared as heterogeneous, greyish brown and blackish brown courses of fill and were 5 to 10 cm deep. They contained some charcoal and fire-shattered fragments of stone of the same type as those found in the pit (E). The post hole AD also contained a blade scraper made from a thick blade, 8 cm long and c. 2.8 cm wide, which was retouched along both sides, as well as a round flint hammerstone 8 cm in diameter. In AE a similar hammerstone was found also with a diameter of 8 cm. Another probable post hole (AP) was found underneath

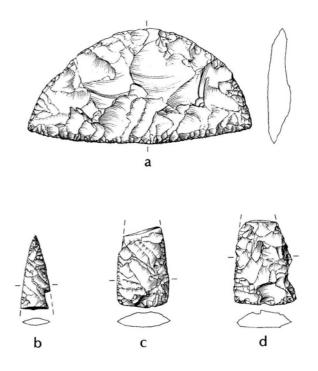


Fig. 2. Flint artifacts. a, crescent-shaped sickle. -b-d, arrowheads. Drawn by Orla Svendsen. 2:3.

the south-eastern part of the pit (E). It was c. 10 cm deep, and its fill was blackish grey, containing scattered particles of charcoal and a round granite hammerstone 8 cm in diameter.

The site appears less regularly laid out than the Myrhøj houses, which have distinct post holes and rows of posts, but this may be because of the different conditions of preservation. The Myrhøj houses were well protected under a sand deposit, whereas the Vejlby site was found just below the topsoil in an area of high ground and was cut through by two later disturbances. In his paper on the Myrhøj houses J. Aarup Jensen writes that if these house sites had not been protected by an overlying sand deposit but had been found in an ordinary ploughed field, where erosion and farm work would have removed the top of the sites, they would probably have found only "diffusely defined courses of fill, measuring no more than  $5 \times 8$  m and with a maximum depth of 20 to 30 cm. The culture layer that makes up the fill would contain potsherds and other artefacts as well as some fire-shattered stones. It would hardly be possible to demonstrate post holes ..." (Jensen 1972: 106). This description corresponds very closely to the Vejlby site, and it is therefore likely that the pit (E)

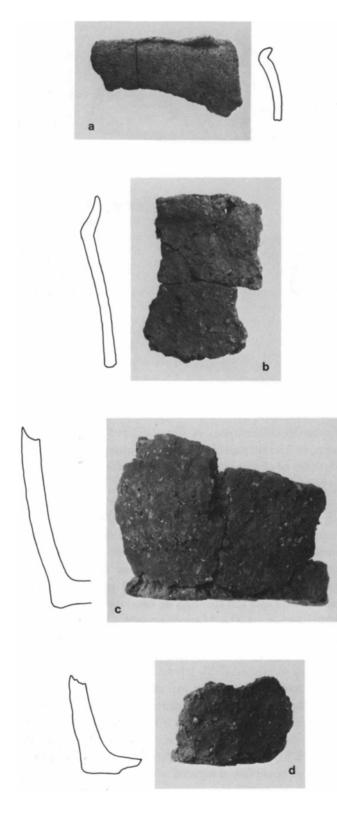


Fig. 3. Pottery. 1:2.

represents the sunken eastern end of an east-west orientated house, where the post holes AD, AE, AR and AB constitute a slightly rounded western end. If this is the case, we are dealing with a house at least 9.5 m long and 4 or 5 m wide.

Several settlement sites suggest that east-west orientated houses with sunken floors are a type characteristic of the Late Neolithic. The Vejlby site, as well as the Norrvidinge site discussed below, shows that this type of house may also have existed during the Early Bronze Age. The three Myrhøj houses dating from the early Late Neolithic are the oldest known representatives of this type of house. Furthermore, a site at Stendis near Holstebro (Northern Jutland)has been interpreted as a house of the Myrhøj type. It is a c. 15 m long and 4 to 5 m wide, east-west orientated pit with a depth of c. 25 cm in the centre. Associated with the pit there were some post holes, and the finds indicate that the pit is contemporaneous with the Myrhøj houses (Skov 1982). Similarly, the Late Neolithic house excavated in 1952 at Gug near Ålborg was east-west orientated and had a sunken floor. This house measured only  $4 \times 2$  m (Brøndsted 1966: 311-12. - Simonsen 1983).

Late Neolithic house sites with sunken floors have also been found in South Sweden. In 1967 at Stockholmsgården east of Ystad a site was excavated, which M. Strömberg has termed a pit house. It is an east-west orientated pit, 4.2 m long, 1.9 m wide and 38 cm deep. It contained three fire places at different levels, and its artefacts indicate that it dates from the early Late Neolithic (Strömberg 1968: 1–15). Similarly, M. Strömberg interprets site No. 33 at Hagestad as a Late Neolithic house with a sunken floor. The pit is almost square, 2.8  $m \times 2.4$  m, and the longer side extends east-west. The depth is given as c. 0.5 m. The northern and southern parts contained rows of stone with visible traces of wood on top, possibly the remains of benches (Strömberg 1971: 250-51). A third Late Neolithic house site, Hagestad No. 44, is discussed briefly by M. Strömberg. This house was c. 8 m long and 4 m wide. The eastern end was depressed and contained a fire place. Strömberg adds that the settlement contained several house sites. Judging by these sites, several house types apparently co-existed (Strömberg 1976: 43). A Late Neolithic site excavated at Furuland in 1962 may perhaps also be interpreted as a house with a sunken floor. It is an east-west orientated, almost rectangular pit,  $4 \times 6$  m large and c. 0.5 m deep. The pit contained a fire place and a single post hole (Tilander 1962–63: 123–35). In 1971 settlement remains dated to the Late Neolithic/ Early Bronze Age were excavated at Norrvidinge. Two of the house sites, Nos. 338 and 339, from this settlement have been interpreted as houses with sunken floors. No. 338 was an east-west orientated pit of a fairly regular rectangular shape. It was c. 8 m long, 3.5 m wide and 30 to 50 cm deep. No. 339 was also an east-west orientated pit and had a more regular rectangular shape than No. 338. It was 8.5 cm long, 4.5 m wide and 40 to 50 cm deep. The settlement site contained other structures which have been interpreted as small storage huts (Callmer 1971–72: 120–43).

As appears from the above examples, a number of structures have now been found which can be interpreted as houses with sunken floors. In most cases these pits have a regular rectangular shape, indicating that we are not dealing merely with random refuse pits. Furthermore, most of them had associated post holes suggesting different types of construction. It should be noted, however, that these sites vary considerably in size. A common feature of the sites at Myrhøj, Hagestad 44 and Vejlby is the fact that only the eastern half of the houses is sunken. The relatively small size of some of the above structures may be because we are dealing with house sites where only the eastern, sunken part has survived, or else the excavation concentrated on this part. When future sites of this kind are discovered, it will therefore be important to examine a fairly large area around such pits.

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#### NOTES

- Forhistorisk Museum, Moesgård (Århus), file No. 2701, Engvang IV.
- 2. Vejlby parish, Hasle district, Århus county.

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