

An Uncompleted Fortification on Sejerø

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In 1978 the National Museum carried out a small exploratory excavation at Borrebjerg on Sejerø. Borrebjerg is a steep natural knoll rising to 20 m above sea level from surrounding fields at 5–10 m. It has a flat top and a curious shelf on its western side, both of which give a deceptive appearance of being artificial. At various places around the northern and eastern foot of Borrebjerg there is (or was earlier) a substantial occupation layer with finds from fairly late in the pre-Roman Iron Age. Excavations were carried out by Carl Neergaard and Hans Kjær just before the turn of the century, and the locality is mentioned in a number of publications. It is necessary to give a brief account of the background in order to explain the aims of the 1978 excavation.

1. In 1897–98 extensive excavations were carried out by the National Museum under Carl Neergaard and Hans Kjær. Their excavation plan, redrawn with additions, is shown in fig. 2. They found a very substantial occupation layer at the foot of the hill in cuttings L – P, and also to some extent in cutting B at the top of the hill as well as fainter traces in other cuttings. Their work is described in four handwritten reports at the National Museum. These include many photographs, detailed if rather schematic plans and sections, lists of finds with their number and provenance, etc. The excavation was very well conducted according to the standards of the time, but failed in fact to elucidate the structural features of the site. Much space is devoted to various accumulations of stones, which appear to have been accidental, and to the places of the objects found. The finds consisted of a considerable quantity of pottery and animal bone, and also a number of bone artifacts, which are not common at Iron Age Settlement sites because of soil acidity, and, as is rather strange, a number of iron spearheads. Some of the objects are illustrated by Liversage (1975, figs. 13–14), and the pottery is referred in Liversage (1980) to the Rørby phase of the

pre-Roman Iron Age of Zealand, which can be related to C.J. Beckers pre-Roman Iron Age IIIa in south and central Jutland.

2. The site was described by Sophus Müller in an article on Roman Iron Age settlement sites (Müller 1906), where it was grouped together with the shell midden at Eltang Vig as being an abnormal site. With present knowledge of pottery development Müller's dating can be corrected, but this is not so important. He regarded the terrace as artificial and of Iron Age date as there were thin traces of occupation earth on it in some of cuttings F-J. He suggested that the terrace might have been for an audience to stand on and watch ceremonies taking place on the flat top of Borrebjerg. The finds of weapons were interpreted as indicating that a battle had taken place at the site, of which the name Borrebjerg or Borgbjerg might be a reminiscence. He also thought there were traces of terraces on the opposite side of the hill and on the neighbouring hill of Bybjerg, but his imagination was already beginning to play up as photographs show that these were doubtful even at that time (ploughing notches).

3. In 1928 Hans Kjær published an article suggesting that a quite different hill, "Borgbjerg" at Boeslunde on Zealand, where much Bronze Age gold had been found, had been a cult site with terraces (Kjær 1928). Admittedly the supposed terraces were only known from a landscape painting and had been destroyed decades earlier. In this article he also mentions the terraces at Borrebjerg on Sejerø, which he wrote were "strange and so far not explainable". His memory must have been playing him tricks, for he described the "terraces" (in my opinion there was never more than one) as leading obliquely up to the top. In reality the highest point of the terrace is four meters below the top in vertical distance and falls from there in both directions to peter out in the lower slopes. The hunt was now out for terraced ritual sites. In 1938

J. Winther described a terraced hill, Solbjærget, near Illebølle on Langeland, and mentioned a further one at Nymark Skov on the Egeskov estate on Funen. He regarded the terrace on Solbjærget apparently as artificial, prehistoric, and of cultic significance, but there was really no evidence. Nymark Skov he passed more quickly over. The idea that there had existed a class of ritual site characterised by terraced hills was given verisimilitude by its treatment in the second edition of Brøndsted's *Danmarks Oldtid* (1957–60, ii, 278 and iii, 178–79). However nothing can conceal the fact that none of the sites have been properly investigated and described. Seemingly Borrebjerg on Sejerø is the only one whose terrace is at all striking. It may be hoped that the investigations described below and those carried out recently at Boeslunde by Henning Nielsen will de-mystify one of the wilder footnotes in Danish archaeology.

4. A few years ago while studying Hans Kjær's reports the author was struck by various indications that there had been a ditch in the excavation north of the hill, though it had not actually been mentioned by the excavator. The evidence was presented in an article on the finds and monuments of Sejerø (Liversage 1974), where some of the relevant drawings and photographs were reproduced, and this was followed up in 1978 by the trial excavation which it is intended to describe here.

THE 1978 EXCAVATION

This was carried out with the strictly limited aims of: –

a) ascertaining whether the terrace was natural or artificial, and

b) checking whether there had been a ditch in Kjær's or Neergaard's cuttings on the lower slope.

Five radial trenches were cut by machine on the lower slopes of the hill on the north and east, and three more were dug by hand across the terrace, where the machine could not dig in a radial direction because of the slope. In fig. 2 the new cuttings are shown added to Neergaard and Kjær's plan from 1897–98, and at this point something must be said of the problem of planning the site.

There are two difficulties. In the first place the old plan is not very precise, and in the second there are no fixed points whereby the new cuttings can be keyed

into it. If the terrace had proved artificial there would certainly have been made a complete new survey, but it would still have been impossible to fit the old cuttings in correctly, so in the event it was decided to try to place the new cuttings on the old plan. This was done by choosing an arbitrary base point at the centre of the flat top of the hill, from which compass bearings were taken to the new cuttings and the distance was measured by tape in horizontal segments. A check of the distance between trenches showed that sufficient accuracy had been achieved. The new plan was then correlated with the old by drawing it on transparent film at the original scale, centering the new base point at the middle of the top of the hill on the old plan, and aligning the orientation so as to allow for the slight clockwise shift of the magnetic deviation since the turn of the century. The result reveals some errors in the old plan, particularly in the placing of the hachuring that is supposed to indicate the slope. This is worst on the western side. Cuttings VII and VIII and the wider part of cutting VI were in fact dug across the terrace, while the separate western outlier of cutting VI is 5½ m lower at the bottom of the very steep slope below the terrace. The gap is there because the 45° slope was too steep to dig on. Cuttings I to IV come right in to the steep upper slope of Borrebjerg instead of beginning a few meters out in the field as the old plan suggests. On the other hand the relation between cuttings IX and B and between I and II and P agrees fairly well with what was observed during excavation, when traces of Kjær's digging were found. Cutting III falls nicely between Kjær's cuttings O and P, where a gap in the black earth is shown in the original reports (Liversage 1974, fig. 11). Thus the composite plan, though not cartographically correct, is still serviceable for relating the two excavations.

We may first consider the new trenches I – III. They were dug from the steep grass-clad slope of Borrebjerg out into the sloping ploughed field, and must have passed through Kjær's cuttings. An old ditch cut into the boulder clay showed quite clearly in the sections of cuttings I and II (fig. 3). It was about 2 m wide and 1 m deep, steeper on its inner than its outer edge, and had an irregularly rounded bottom. The material filling it was quite clearly the backfill of Kjær's excavation. The idea that Kjær had encountered an old ditch at this place was thus confirmed.

In cutting III there was no ditch, which coincides



Fig. 1. Borrebjerg seen from the SSW (photo 1897).

with information indicating there was a gap in the occupation layer between Kjær's cuttings O and P.

Cutting IV, which despite the different impression given by Neergaard and Kjær's slope hachuring also lay right up to the steep slope of Borrebjerg, was quite remarkable. The mechanical excavator cut across a filled-up ditch that had been 3.75 m wide and 2.50 m deep with V-shaped section and undisturbed fill (fig. 4). At the bottom there was a deposit of primary silt consisting of sand and gravel and capped by a streak of brown mould. It had been deposited mostly from the uphill side of the ditch, where the slope above became steep. Over this lay a thick mixed layer which was obviously a deliberate backfill. It consisted of dense clay, which was the same as the bedrock surrounding the lowest part of the ditch, and sand, which was the bedrock higher up, and contained also streaks of surface loam and a gritty mixed layer as explained in the figure text. The ditch had been refilled with this material, so that it survived afterwards only as a gentle depression in which a brown-coloured soil or turf layer formed, presumably indicating some interval

between the refilling of the ditch and the formation of the overlying dark layer. This latter was blackest below and browner higher up, and contained sherds of the same kind as found by Neergaard and Kjær as well as also happening to produce a human occipital bone, determined by Berit Sellevold as belonging to a young adult, probably male, and C-14 dated to 2300 ± 80 B.P, or 425 B.C. calibrated (K-3582). This seems rather earlier than is likely in view of the pottery from the same layer.

Cutting V was placed where it would intercept Neergaard's cutting M out in the more gently sloping ploughed lower part of Borrebjerg on the east (the outer belt of hachuring in fig. 2 here represents the gentle lower slopes, which are not hachured at all on the north). At its western end were encountered two undisturbed parallel ditches, which crossed the trench at approximately right angles. They were both flat-bottomed, about 2 m wide and 1 m deep, and they were separated from one another by a one meter wide baulk of undug till (fig. 5). Each had at its bottom a deposit of primary silt that had accumulated from the

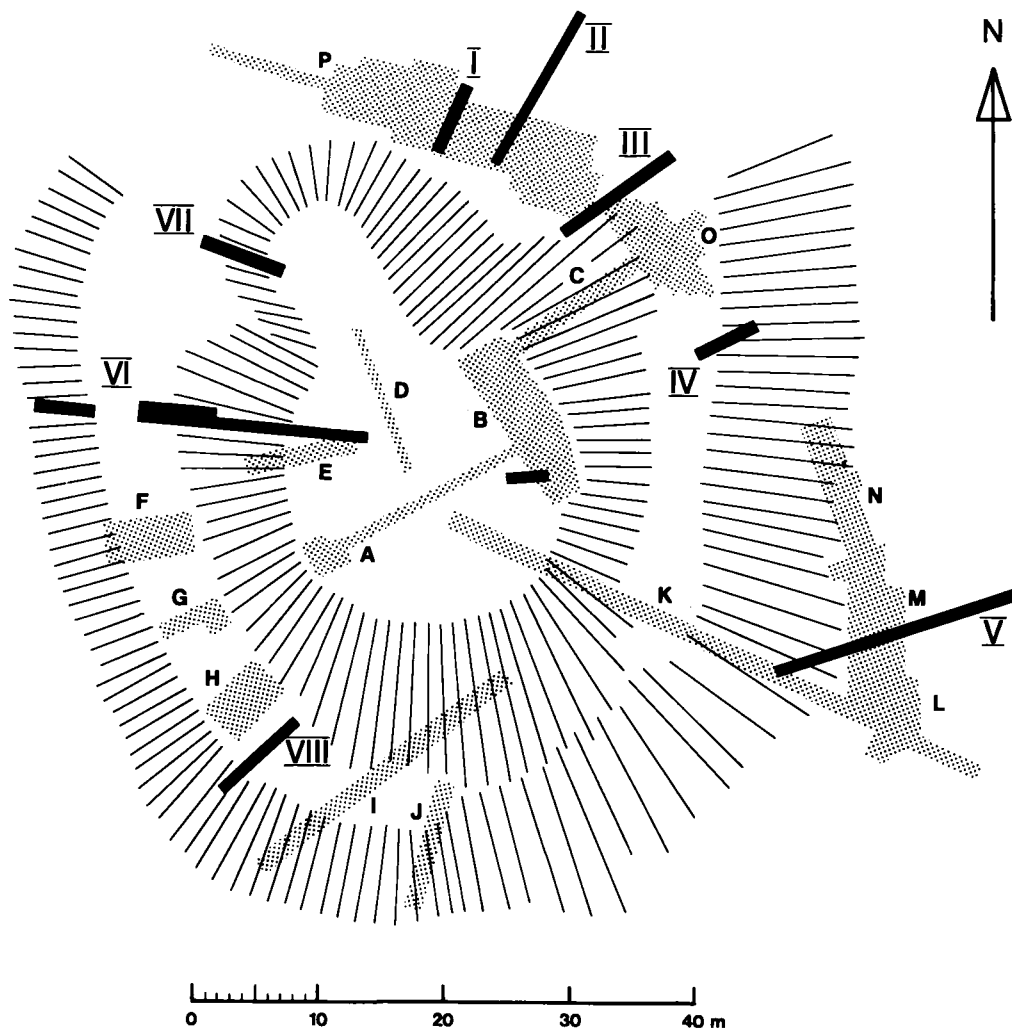


Fig. 2. Borrebjerg, Sejerø. Cuttings I–IX according to 1978 survey, areas A–P and relief hachuring after Neergaard and Kjær's plan, 1897–98.

uphill side and was overlain by a mixed backfill over which again there were traces of a dark occupation layer. The stratigraphy was thus the same as in cutting IV, but the backfill was more homogeneous, probably because the bedrock at this place also was more homogeneous, and the occupation material was less pronounced.

Let us now turn to the three cuttings made across the terrace on the other side of the hill. In cuttings VII and VIII nothing whatever was found. Under the sod came the undisturbed till with no intervening occupation layer or any sign of human interference. Cutting VI was more interesting (fig. 6). It was placed on the highest part of the terrace and the part of it dug across

the terrace itself was supplemented by a narrow strip taken up to the top of Borrebjerg and by a separate little area dug at the bottom of the slope down to the surrounding field. There did not appear to have been any human interference with the natural deposits. Material dug out to make the terrace had neither been piled up to build out the flat top of Borrebjerg nor thrown out over the slope, where it would certainly have revealed itself at the bottom. However the section across the terrace was not without features. It could be seen that there originally at this spot had been no real terrace but merely a local reduction in the steepness of the slope. Onto this had been thrown a deposit of stones of various sizes mixed with dark earth, animal

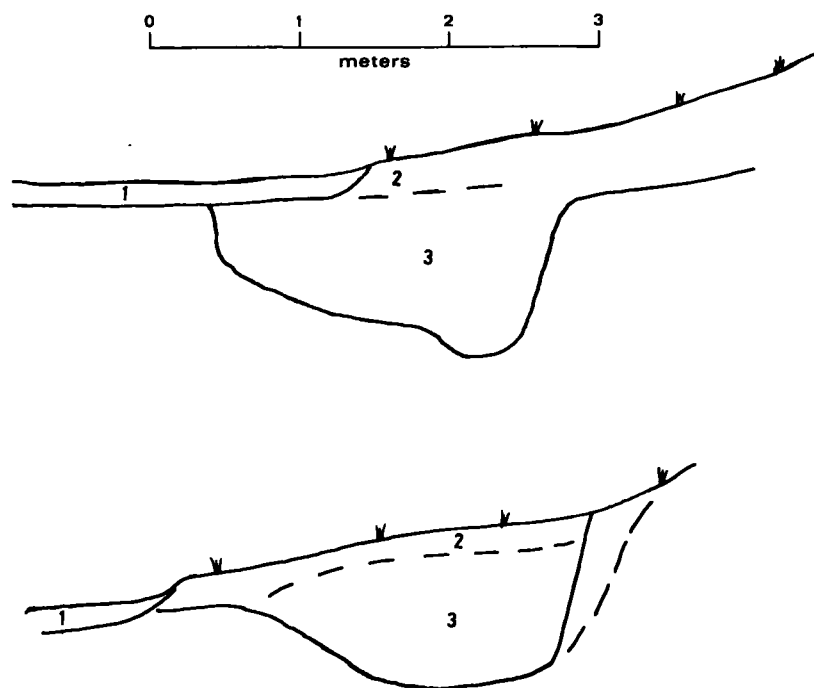


Fig. 3. Borrebjerg. Cutting I above and II below, E sides' section. 1: plough soil. 2: older plough soil. 3: Kjær's fill.

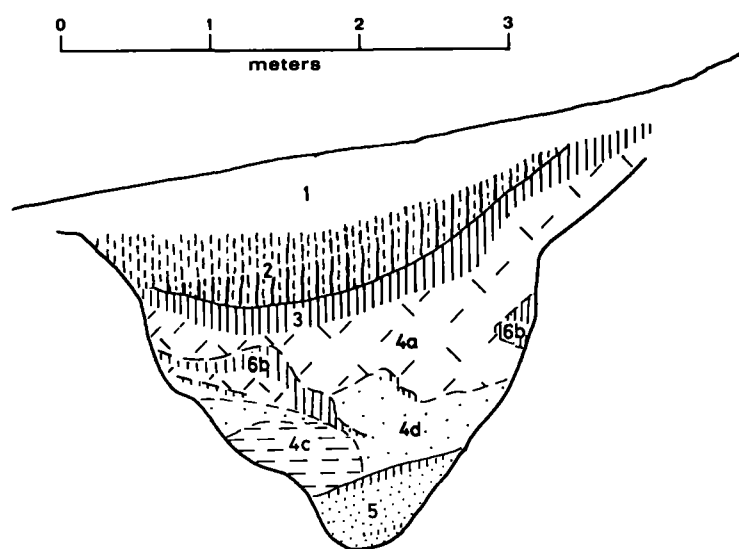


Fig. 4. Cutting IV, SE side, section. 1: blackish plough-soil. 2: brown to black clayey loam, darkest below. 3: brown loam. 4a: rust-coloured gritty fill. 4b: brown to dark brown loam. 4c: tough yellow clay. 4d: calcareous sand. 5: coffee-coloured sand and gravel with lenses of brown loam.

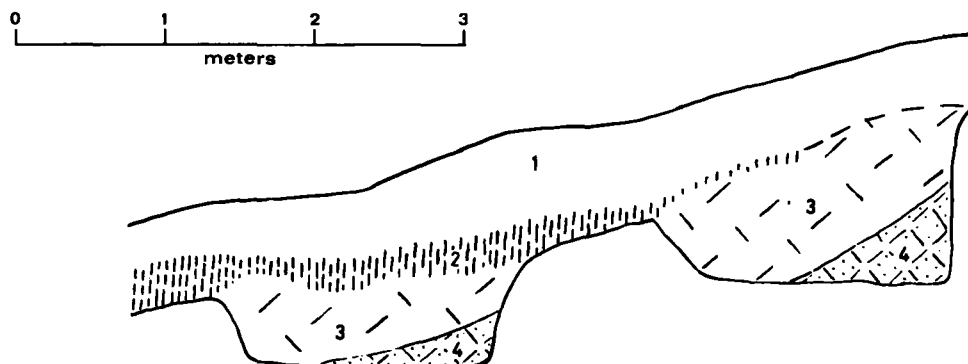


Fig. 5. Cutting V, S side, section. 1: ploughsoil. 2: dark brown loam. 3: redeposited natural clay with humic pockets. 4: dark grey sandy loam.

bones, and pottery of the same kind as found in the old excavation. This was not a makeup layer intended to level out the terrace, but a perfectly ordinary rubbish deposit such as is frequently found in pits or natural hollows (see Liversage, 1980, 41). Not only did the stones slightly level the slope, but it seems that the nutrients from the rubbish stimulated biological activity in the soil resulting in an especially thick surface layer at these places. Because of the limited extent of the excavation is not possible to say how extensively the rest of terrace was altered by rubbish dumping, but it is clear that it was not formed by the hand of nature in quite the shape it has had since the Iron Age occupation. The changes, however, were not a deliberate building-out, but only a fortuitous consequence of the casting of rubbish into hollows in the slope. A possible post-hole was intersected by the cutting, but it is not possible to say anything about it because the excavation was so small.

THE INTERPRETATION OF THE RESULTS

The hypothesis that there were prehistoric ditches at the foot of Borrebjerg has now been amply confirmed. Combined with the unusually many finds of weapons this really suggests that the name may be a reminiscence of events that took place more than two thousand years ago – as indeed was suggested by Sophus Müller.

However the fortification – and it is hard to see that the ditches can have had any other purpose than to fortify the site – was never finished. We found a

finished ditch only in cutting IV, where it was deep and pointed with a definitely military character. It can be suggested that the double ditches in cutting V only indicated a preliminary stage, the intention being later to join them up as a single large V-shaped moat. Nor does it seem likely that the ditch in cuttings I and II was finished, because as found it was not big enough to have great defensive value. The absence of any trace of a ditch in cutting III may also reflect the incompleteness of the work, but of course it is always conceivable that there was intended to be an entry at this place.

The curious thing is that after the accumulation of a small quantity of primary silting at the bottom of the ditches, probably indicating a period of days or weeks rather than years, they were refilled, presumably with the earth taken out of them. It looks as though there was a change of plan. Perhaps the project was found to exceed the labour resources of the island, or the military threat seemed to have passed over, or the site had to be levelled as part of a peace agreement. Nobody knows. Afterwards the place was settled, and rubbish from the occupation is preserved in the upper parts of the ditches that had not been filled quite to the top. It is likely that the settlement followed not long after the filling-up, for in his cuttings Hans Kjær reported that there was an upper, black, and a lower, grey layer, which seem likely to be respectively the occupation layer and the backfill; the pottery was of the same kind in both layers.

A fortified site of the Early Iron Age is something of a rarity anywhere in northern Europe except on certain Baltic islands. There is a parallel on an islet in

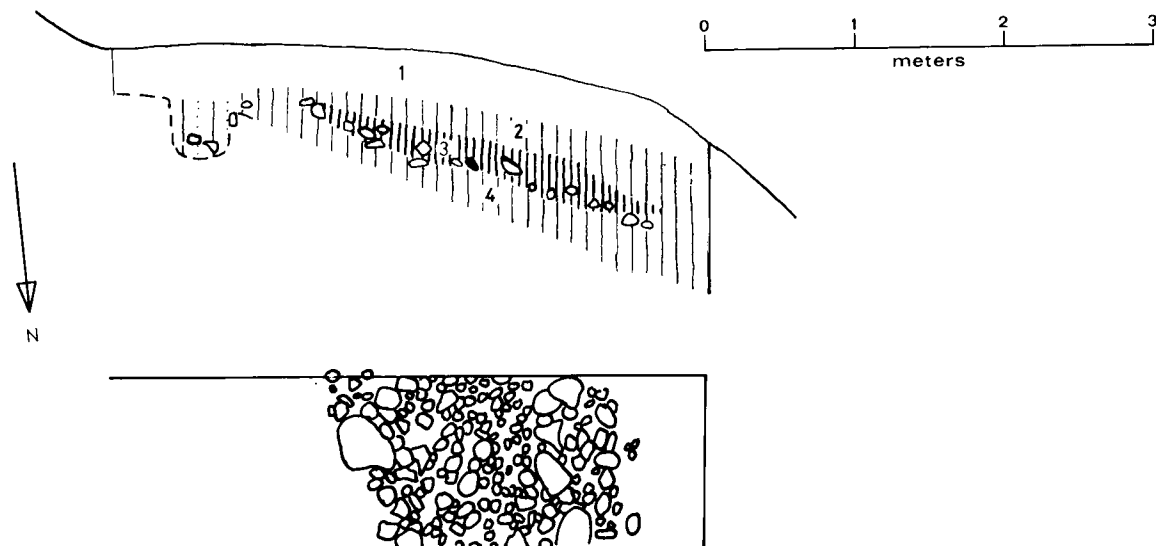


Fig. 6. Cutting VI, plan and section of S side. 1: surface soil. 2: grey sandy loam. 3: black sandy loam with occupation material. 4: grey sandy loam.

the bog, Borremose, in north-central Jutland, which was girded with a ditch early in pre-Roman times and later used as a settlement (Brøndsted 1957–60, iii, 47–54), and recently what appears to be a fortified Roman Iron Age site has been found at Priorsløkke (Skalk 1981: 5 – is it possible that the ditch here was V-shaped but only its upper more humic silting was recognized and excavated?). The linear earthwork of Olmer's Dyke in southern Jutland is also dated to the Early Iron Age. Borrebjerg is thus not completely unparallelled.

The other result of the excavation was to show that the terrace can be discounted as a deliberate man-made feature, even if its present form is somewhat the result of rubbish tipping from the settlement. This is really evident on the surface, for however artificial the shelf may look in the middle, it has no clear beginning or end. To the south it inclines increasingly outwards, narrows, and merges into the hillside. To the north its outer edge diverges from Borrebjerg and gradually assumes the appearance of a natural bank in the field. The shelf must be the result of an early landslide, when the ice was melting. Its regularity has been increased by early rubbish tipping and newer cultivation. There is no reason to hear more about terraced cult sites.

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