

## HUNEBED D6A NEAR TINAAARLO

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**ABSTRACT:** This article reexamines the ground plan and finds from the destroyed *hunebed* formerly known as D6e/f, excavated by Van Giffen in 1928. The site is shown to be the remains of a single 4-pair chamber with traces of what is possibly the construction frame preserved around the chamber. The pottery has been fully resorted. A new catalogue and reconstructions are presented. The history of activity at the site is briefly reconstructed. A brief description of finds from a private collection are included.

**KEYWORDS:** Netherlands, Neolithic, TRB culture, *hunebedden*, pottery, typochronology.

### 1. INTRODUCTION

In 1928 Van Giffen excavated the remains of what he thought were two destroyed small megalithic tombs near Tinaarlo, *gemeente Vries*, The Netherlands (fig. 1). He listed these as *hunebedden* D6e and D6f, on the assumption that clear evidence existed for the destruction of four other megalithic tombs in the neighbourhood which he numbered D6a–d. The excavation was published by Van Giffen in 1944 together with detailed descriptions of the finds and drawings by Kat-Van Hulten. A re-evaluation of the excavation showed that Van Giffen's interpretation of the site required some correction. In fact, the remains of only one megalithic tomb were found. In this publication, the re-numbering of this *hunebed* as D6a is proposed, the function of the postholes around the chamber has been re-interpreted and the pottery has been reclassified following Brindley (1986b). The construction date and period of use of the tomb have been clarified.

### 2. THE SITE

#### 2.1. Location

D6a lies towards the northern end of the main concentration of Dutch *hunebedden*. The site is located at the southern end of a low sandy ridge which runs towards the village of Eelde and lies west of the Hondsrug on which the majority of the *hunebedden* are situated (Van Heuveln, 1965: fig. 2). A short distance east of the site a small stream, the Zeegsterloopje, meanders northeastwards towards the Drentse Aa about a kilometre away. The map of 1812 by d'Epailly appears to show a mound on the site. This feature is not marked on the ordnance survey (Topografische en Militaire Kaart) of 1852/53 nor the 1899 ordnance survey which is more detailed and which indicates with haclures the slight elevation on which

the monument had formerly stood. It also shows the location of D6 on a neighbouring slight rise c. 1 km to the west. Van Giffen (1944: fig. 1) indicates two mounds between the two megaliths. He excavated one of these (Tumulus 1) at the same time as the excavation reported here. What happened to the other mound (if it indeed existed) is not known. The area was heathland which was gradually reclaimed during the last decades of the 19th century and the first half of the 20th century. The site of D6a was only reclaimed around 1927–30. Apart from D6 (Tinaarlo), the nearest known *hunebedden* are D7 (Schipborg) to the east and D10 (Gasteren) to the south, each about 2.5 km distant. The nearest excavated sites are D9 near Annen (De Groot, 1988) c. 5.5 km ESE, G2 and G3 on the Glimmer Es (Brindley, 1983; 1986a) c. 6.5 km to the north, and G1 near Noordlaren (Bakker, 1982/83) c. 5 km NNE (see fig. 2).

#### 2.2. Rediscovery of the site

Although Van Giffen (1944: p. 93) states that he heard of the discovery of the remains of a destroyed megalithic tomb near Tinaarlo only in October 1927, this must be incorrect. In a letter to the 'Directeur van de Rijkscommissie voor de Monumentenzorg' dated 2nd December 1927, Van Giffen wrote that the site was discovered during an excursion made by participants at a natural history conference in Assen shortly before 27th August of that year, that some participants returned to the site while the majority of the group visited the Provincial Museum in Assen, and that he heard of the discovery and subsequent 'looting' of the site some days later. In his publication he referred to this incident, but confused the natural history conference with the International Conference on Anthropology and Archaeology in Amsterdam who visited Drente on 28th September 1927. In any case, Van Giffen's description of the discovery seems to be inaccurate. According to the

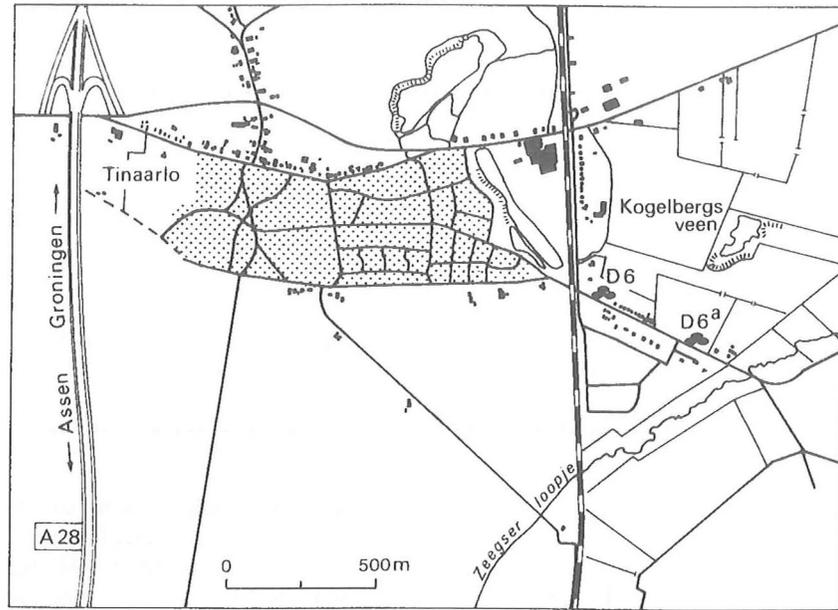


Fig. 1. Locations of D6 and D6a near Tinaarlo.

programme and proceedings of the Nederlandse Natuurhistorische Vereniging (N.N.V.) this meeting took place between Friday 26th and Tuesday 30th August 1927. The Provincial Museum in Assen was visited on Saturday 27th and the excursion to Tinaarlo was held on Sunday 28th August (*Natura*, 1927, pp. 97–99 and 161–163). ‘Looting’ of the site while other participants visited the museum on 27th August would therefore have been impossible. Van Veldhuizen, the owner of the Adderhorst estate mentioned in Van Giffen’s publication, also describes the discovery of the site in his book on the fauna and vegetation on and around his estate (Van Veldhuizen, 1933). According to him, the destroyed tomb was discovered by ‘Dr. R. Van Wijk and a group of HBS-pupils’ during a botanical fieldtrip (Van Veldhuizen, 1933: p. 30). Despite the different rendering of the name and the type of school this can only refer to Doctor (later Professor) R. van der Wijk, who was director of the training college in Groningen and an active member of the N.N.V. Shortly after this, participants at the N.N.V. meeting in Assen visited the site. It is very likely that Van der Wijk took part in that excursion and that when his recent discovery was mentioned, some small scale digging *met knipmessen en vingers* (with pocket-knives and fingers) took place (Van Veldhuizen, 1933: p. 30). Extensive digging at that time seems unlikely given the programme of the meeting. According to Van Veldhuizen, Van Giffen was informed of the discovery almost immediately.

### 2.3. The excavation

Although Van Giffen must have heard of the discovery before the end of August 1927, he was unable to carry out an excavation immediately. He had already started a series of excavations for the excursions of the International Conference on Anthropology and Archaeology in Amsterdam. These included the *terp* of Ezinge, *hunebedden* D13, D14 and D28, several burial mounds and an early medieval cemetery. These excavations occupied him and his field technicians throughout September and October 1927. He visited the site (cadastral plot Gem. Vries, section G, number 2184) and discovered that sherds of pottery had been found largely during levelling part of an irregular mound in advance of the reclamation of the plot. In fact, only a relatively narrow strip between this mound and the road had been reclaimed at this stage. Van Giffen contacted the owner, R. Brink, a farmer in Tinaarlo, who was willing to postpone further levelling until the following spring. This arrangement was apparently not widely known; Van Veldhuizen (1933: p. 39) recorded in his book that several people, including his own son, collected sherds and flints at the site during the winter, apparently mistakenly believing that an excavation would not take place. The excavation took place between 9th March and 5th April 1928, and was carried out by Van Giffen’s field technicians, J. Lanting and L. Postema, assisted by Brink with a horse and cart to transport soil. Although no field notes were made, it is easy to reconstruct the sequence in which the

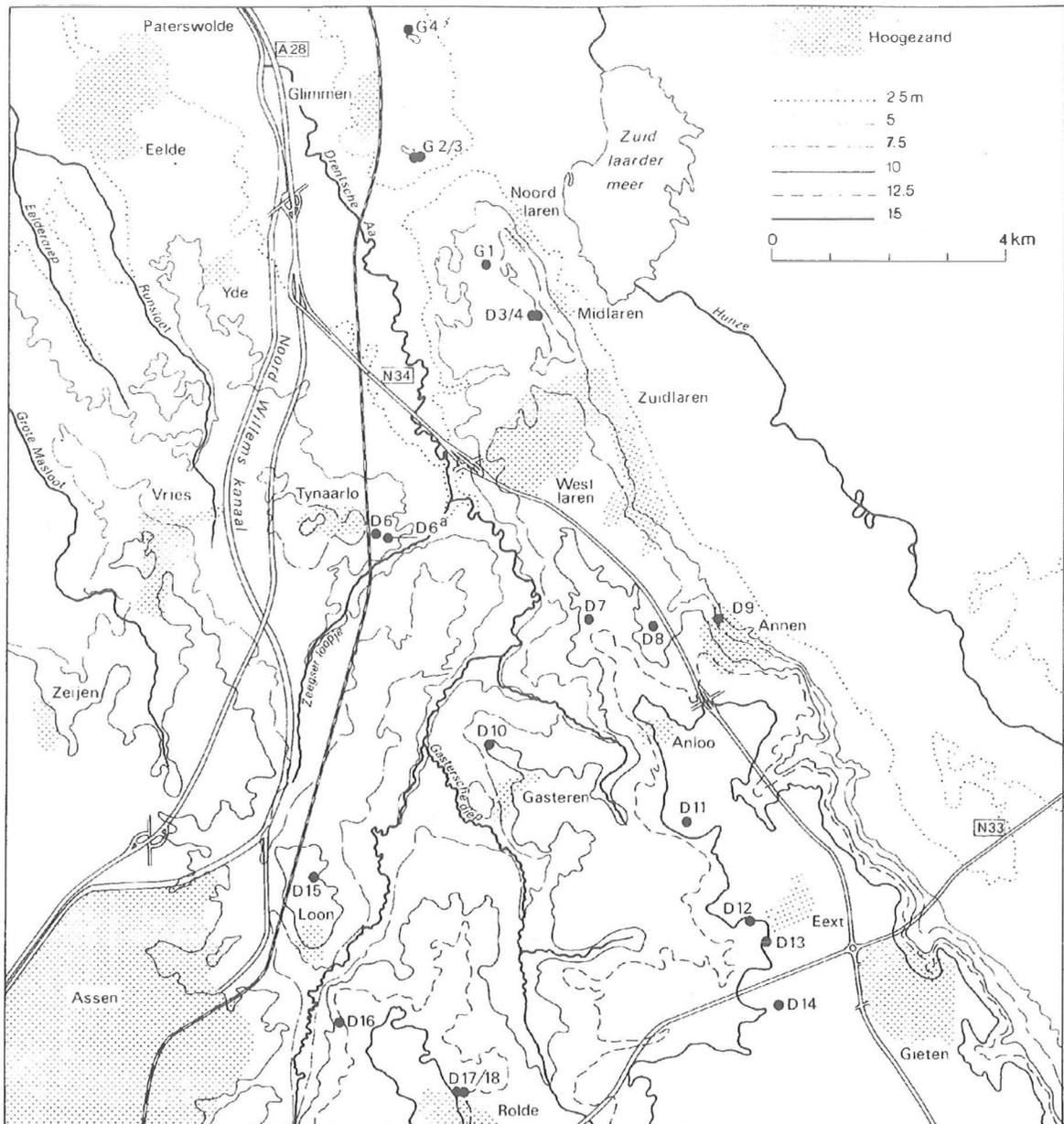
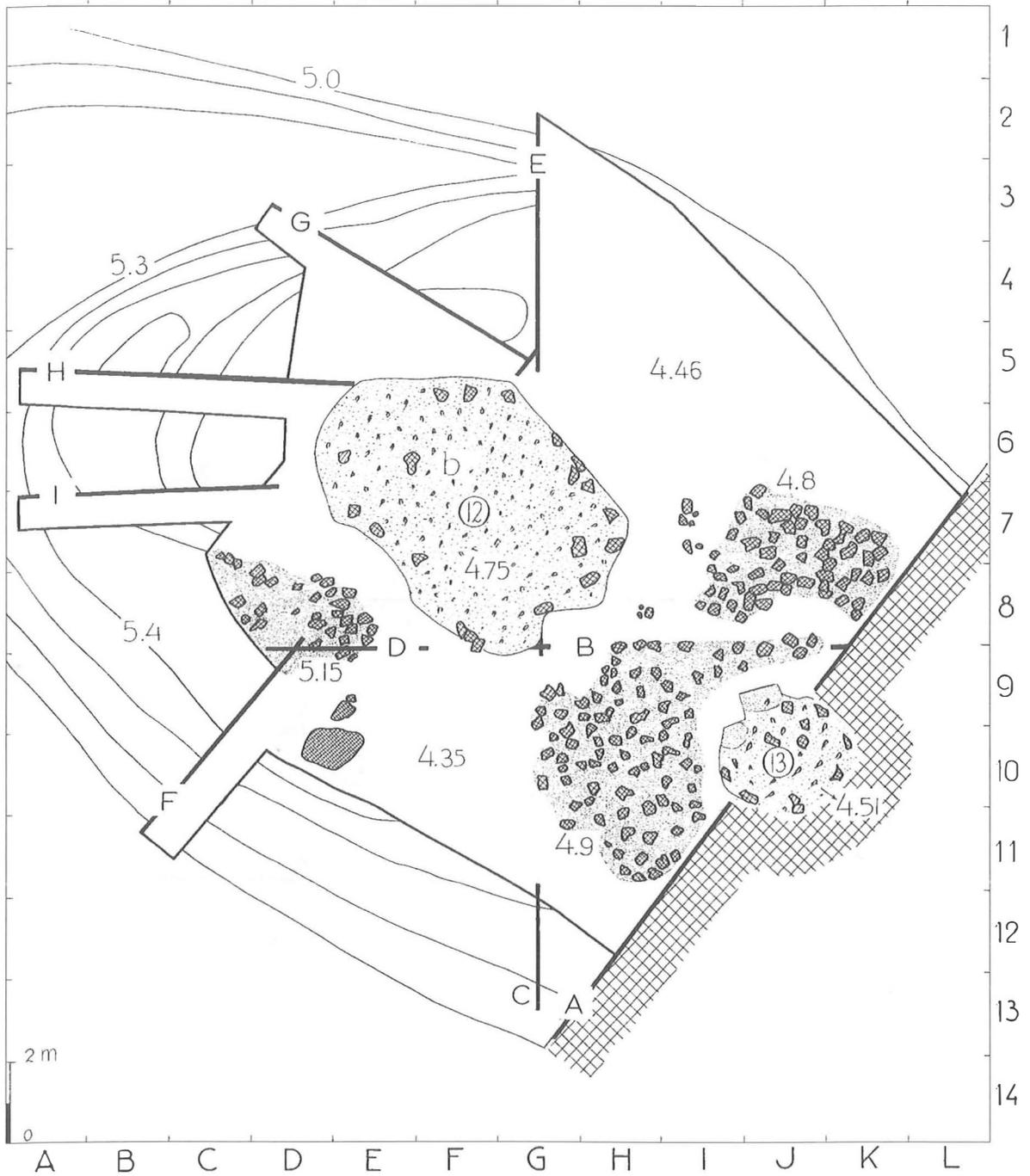


Fig. 2. Topographic map of northern Drenthe, with 5, 7.5, 10, 12.5 and 15 m contour lines emphasized. The relatively steep eastern edge of the Hondsrug is clearly visible. The western edge of the Hondsrug is less pronounced. The contour lines suggest in fact a plateau, gently sloping towards NW and cut by a series of erosion gulleys, of which the Hondsrug is merely the eastern edge. Locations of extant and of destroyed hunebeds are indicated. Most remarkable are the locations of G2, G3 and G4(?) on small outcrops higher than 5 m NAP. Drawing: J.H. Zwier (GIA).

excavation was carried out. The field drawings with the original numbering of the sections and the excavation photos are quite clear in this respect.

A contour map of the site was made during the excavation (fig. 3). This shows an irregularly shaped oval mound, orientated NW–SE, with a depression running from the NE side towards the centre. Along the NE side of the mound was a NW–SE running natural depression. Only a relatively small part on the SE side had been dug away. It is not clear why

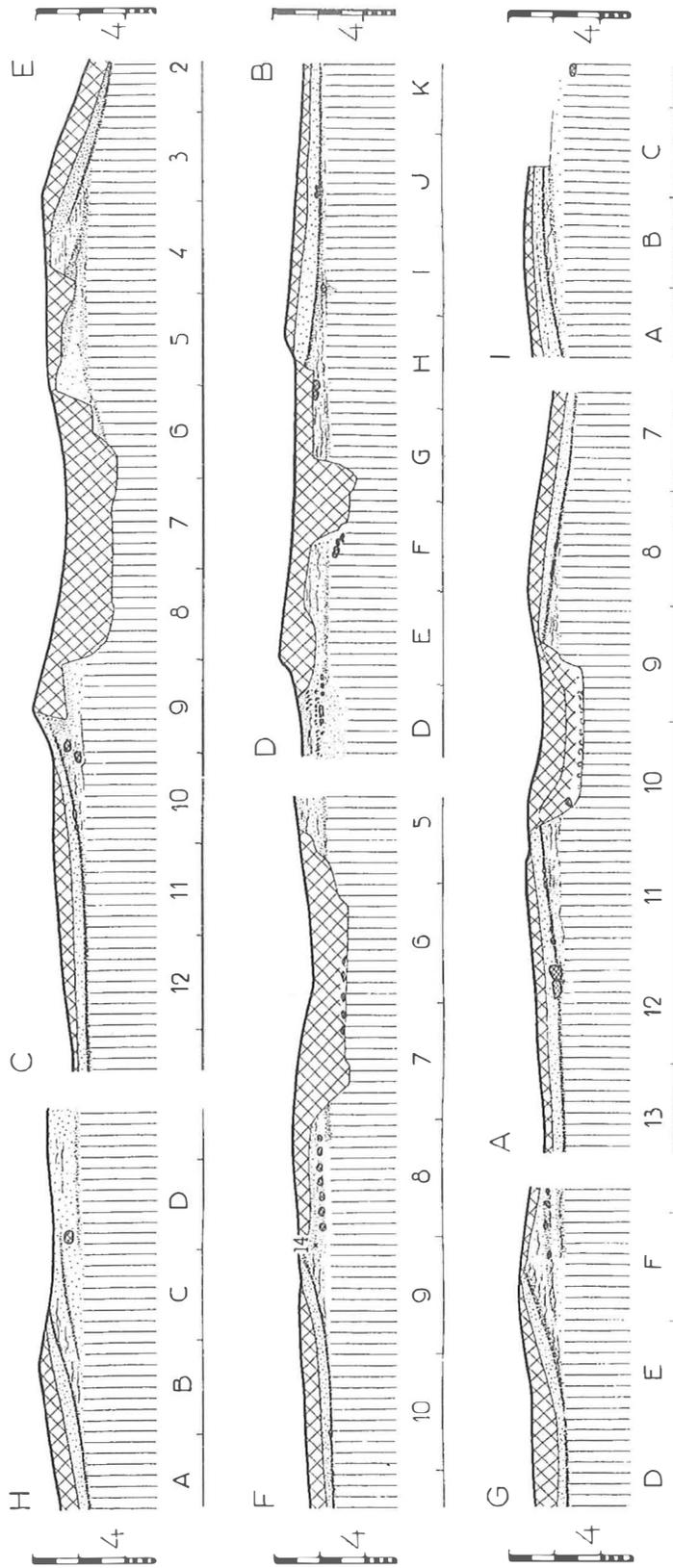
Van Giffen (1944: p. 93) described this mound as consisting of two separated elevations. The dimensions of the mound had been c. 20–25 m and it was still c. 0.8 m high in places. Some TRB sherds had been found during the levelling of the SE part of the mound, but the actual findspot of these had not been dug away completely. Other sherds may have been found in the depression in the top of the mound.



A

Fig. 3. (A) Excavation plan of hunebed D6a, after Van Giffen (1944: afb. 1). The sections are renumbered according to the field drawings, to demonstrate the sequence in which the excavation was carried out. (B) Sections through the mound of hunebed D6a, after Van Giffen (1944: afb. 1), but with small changes and corrections based on the field drawings. Driftsand deposits on the slopes of the mound are included in the symbol for 'recent disturbance'.

B



The excavation began with cleaning the dug away area and cutting a straight vertical section along its edge (fig. 3, section A). This showed that the sherds had been found in a circular pit with a diameter of c. 3 m and a depth of c. 1 m which had been dug into the slope of the mound. The fill consisted of fractured stone, cobbles and stone grit amongst which more sherds and flint objects were found. This mixture reminded Van Giffen of the debris found at the levelled megalithic tombs he had excavated previously. Because Van Giffen expected to find two destroyed *hunebedden*, the method he chose to continue the excavation is surprising. The mound was excavated according to the quadrant method without taking its elongated NW–SE orientated shape into consideration. The mound was divided into four parts with N–S and E–W axes through the centre as if it was an ordinary barrow. As in a barrow excavation the SW and NE quadrants were removed, and the N–S and E–W sections were drawn (fig. 3, sections B and C). In the central part of the NE quadrant the edge of a second pit was found. This was filled with dark soil, stone grit and cobbles and contained sherds and flint artefacts suggesting the anticipated, second destroyed megalithic tomb. Following this, the SE quadrant was excavated. This revealed a layer of cobbles in the mound and the remainder of the circular pit at the edge of the already levelled part.

The NW quadrant was excavated in stages. First, a relatively small triangular area near the centre of the mound was dug out but this was too small to uncover the full extent of the destroyed *hunebed*. Before widening the cutting, a NE–SW section across the chamber area was drawn (fig. 3, section D). A narrow trench was dug to extend this section to the edge of the mound. The NW quadrant was then enlarged, probably in two stages, until the site of the destroyed chamber had been fully uncovered. Three narrow trenches were dug to provide sections through the mound (fig. 3, sections E, F and G). The plan (fig. 3) shows all features uncovered during the excavation. These were not all found at the same level. Both pits with stone fragments, sherds, etc. were recorded at the level of the undisturbed subsoil while the stone packing was found in the mound. It is very likely that parts of this packing material were dug away without being recorded, especially in the NE and SW quadrants. This is shown by the sharply defined edge of the stone packing in the SE quadrant.

The large pit in the centre of the mound was carefully excavated in horizontal spits. Extraction pits of four pairs of side stones and two end stones were recorded; eight of the ten extraction pits even at two levels. Parts of a cobbled floor and the stone packing around the chamber were still present. The undisturbed subsoil within the chamber was found at a depth of c. 4.2 m +NAP. If only the cobbles had been removed, the top of the floor would have been lo-

cated between 4.30 and 4.35 m +NAP. Given the fact that the old ground surface was located at 4.9 m +NAP the foundation pit for the *hunebed* must have been 0.7 m deep. The chamber was orientated NW–SE and measured 4.8×2 m internally. There were no extraction pits for either portal stones or a sill stone but it is likely that the entrance was in the middle of the long SW side. Immediately outside the site of the chamber two rows of three postholes were discovered, forming a rectangular groundplan of 5.5×4.5 m in which the chamber just fitted (fig. 4). At least one of the postholes was found underneath an intact part of the stone packing around the chamber, showing that the post holes had lost their function before the megalithic tomb was completed. This probable function is discussed below. Approximately in line with the longer sides of this post structure some faint traces were uncovered which Van Giffen (1944: p. 96) interpreted as the remains of side walls of a rectangular wooden building predating the *hunebed*. Given the irregular nature of these traces and their location, it is more likely that they were the edges and last traces of the original foundation pit in which the chamber had been constructed. The absence of any other traces of the foundation pit can be explained by the somewhat greater depth of the excavation within the area of the chamber. The edge of the foundation pit is recorded in section D (fig. 3) and this corresponds with the outer side of the faint traces visible in plan.

The circular pit on the SE side of the mound did not show any evidence suggesting a destroyed megalithic tomb. Neither extraction pits nor traces of a cobbled floor were found and the diameter of the pit, c. 2.8 m at floor level, is too small for even the smallest type of megalithic tomb known to occur in the TRB West Group. *Hunebedden* with two pairs of sidestones have external dimensions of c. 5×3 m. Even the unusual megalithic structure D31a near Exloo (Lanting, 1994; 1997) had a foundation pit with a diameter of c. 4 m. It is therefore virtually impossible that this pit ever contained a megalithic structure. It is far more likely that the pit was dug into the slope of the mound when the megalithic chamber at its centre was being destroyed, probably to dispose of some of the rubble. This is supported by the discovery of sherds in this pit which belong to and in some cases even join sherds found in the destroyed chamber. Van Giffen (1944: p. 98) explained this as the mixing up of pottery during the destruction phase but this is highly unlikely, especially when the amount of mixing is taken into account.

The irregular shape of the mound recorded on the contour plan was clearly the result of the destruction of the chamber at the centre and the digging of the large hole in the edge of the mound. These irregularities were subsequently obscured by erosion and

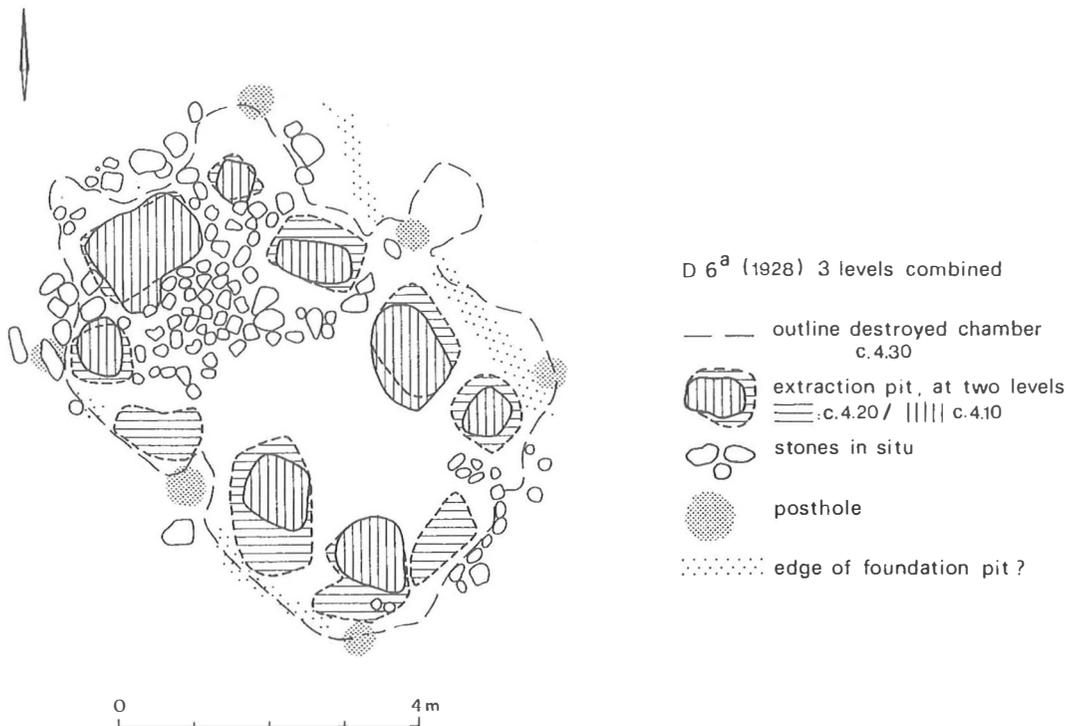


Fig. 4. Three excavation plans of the destroyed chamber area of hunebed D6a combined. The posthole near the NW corner of the chamber was found underneath a stone *in situ*, belonging to the stone packing around the chamber. On the SE side a series of smaller cobbles shows the circumference of the foundation pit of the endstone.

the accumulation of drift sand. The mound itself showed two periods of construction (fig. 3, sections A–G). The old ground surface was recorded in several sections as a thin greyish layer, at c. 4.9 m +NAP although somewhat lower on the NW side of the mound. The first period mound consisted of yellow sand and was covered by a thin, greyish layer. The dimensions of this mound were c. 25 m (NW–SE) × c. 15 m (NE–SW) and only 0.5 m high. In sections D and F (fig. 3) there is evidence for an entrance passage through this mound including the presence of a grey deposit at a low level showing the gradual silt-ing of humic material into a depression, stones at the level of the old ground surface, and the discovery of sherds and flint (findspot 14) in this area. It is possible that the stones belong to some kind of blocking of the entrance. Parallels for low, first period mounds around the megalithic chamber have been identified by Brindley and Lanting (1992) at *hunebedden* D30 and D40. The low mounds at these sites must have left the tops of the orthostats exposed. Lanting (in press) has recorded several other observations of this kind. The second period mound at D6a is only visible as a separate layer on the NW part of the first period mound. It also consisted of yellow sand. With the addition of this material, the height

of the mound increased here to 0.8–0.9 m. Elsewhere the second period mound may have been masked by the well-developed podzol over the mound. A comparable eccentric second period mound has been recognized at D39 (Emmen; Lanting, in press). The layer of stones on the slope of the first period mound must have been in place before the second period mound was added. There is no evidence as to when this happened. During or possibly after the Middle Ages, driftsand accumulated on the flanks of the mound, in places to more than 0.4 m.

During the 1928 excavation the edges of the mound were not investigated (with the exception of the NE quadrant), probably because the excavators expected only to find driftsand. During the subsequent levelling of these, Brink found two intact pots (a tureen and a funnel beaker) in the edge of the south side of the mound. The findspot is recorded on the excavation plan. Brink sold these pots to the Provincial Museum in Assen in 1931. Although it is almost certain that both pots were found together, no other information regarding their find circumstances is available.

The conclusion must be that in 1928 near Tinaarlo the remains of only one megalithic tomb were excavated. This had four pairs of sidestones and was

surrounded by a two period earthen mound. The first period mound was partially covered with stones. What Van Giffen describes as a second megalithic tomb was in fact only a pit in the slope of the mound filled with rubble from the destroyed chamber.

#### 2.4. Proposed renumbering the site

In his publication Van Giffen assigned the numbers D6e and D6f to what he assumed were two destroyed megalithic tombs. He was convinced that four other megalithic tombs had been destroyed in the neighbourhood of Tinaarlo and that he had found the remains of two more. He based this belief on a description in Smids' antiquarian encyclopedia, under the heading *Steenhoopen* (stone heaps) (Smids, 1711: pp. 325–328). *Steenhoopen* (the present spelling of the word) was the local word for megalithic tombs. *Hunebedden*, used by antiquarians, was probably an adaptation of the German word *Hünenbetten* — meaning 'long barrows', not megalithic tombs. To add to this confusion, the word *hunebedden* was also sometimes used for earthen barrows, even by antiquarians familiar with the difference. In his list of *Steenhoopen* in Drente, under Tinaarlo Smids (1711: p. 325) mentions "...vijf ophoogingen, even buiten de schutting van den ess, binnen een bolwerkje; doch zijnde de vijfde een weinig daar van af gelegen...". Although this sentence is not completely clear, the translation is likely to be: "... five mounds, just outside the wooded bank along the edge of the arable fields, within an enclosure. The fifth one lies somewhat further away [however]...". The most likely explanation is that four earthen mounds were to be seen within an enclosed field just outside the *es*, and that a fifth mound was situated somewhat further away from the *es*. It is very unlikely that four megaliths were situated within a single enclosed small field because such a concentration of megalithic tombs is unknown in the Netherlands. The fifth mound may also have been an earthen mound, although it may have been the existing *hunebed* D6, as Van Giffen thought.

There is no evidence that four *hunebedden* existed and were destroyed after 1711. It is proposed that the numbers D6a-d for these missing *hunebedden* be cancelled and the number D6a assigned to the single levelled megalithic tomb found in 1927 and excavated in 1928, it being the only destroyed *hunebed* ever discovered on the commons of Tinaarlo.

#### 2.5. The function of the postholes around the chamber

No parallels for the rectangular post structure at D6a were known until after World War II. Since then, postholes have been found in similar positions at

the *hunebedden* of Tannenhausen (Gabriel, 1966), Noordlaren (Bakker, 1982/83) and Espel (Viets, 1993). Evidence was found at Tannenhausen and Noordlaren which showed that the postholes predated the completion of the construction of the chambers, as was the case at Tinaarlo. Lanting has recently reviewed the evidence for the construction methods used in the TRB West Group megaliths (Lanting, in prep.). He showed that the earthen mounds around the chambers were too low originally to play a role in the transportation of capstones. This is also the case at Tinaarlo D6a. It is more likely that some form of temporary wooden ramp or scaffolding was used for this purpose. Postholes of the kind found at Tinaarlo, Tannenhausen, Noordlaren and Espel may be the remains of these structures.

### 3. THE FINDS

#### 3.1. Recovery of the artefacts

A large quantity of pottery sherds, flint objects and even four small beads were found during the 1928 excavation. These do not represent the full contents of the chamber as some material, especially pottery, must have been lost during the destruction of the site and both pottery and flint artefacts were collected by visitors in the months between its discovery and excavation. It is unlikely that much damage was caused by the members of the Nederlandse Natuurkundige Vereniging (rather than the participants at the International Conference for Anthropology and Archaeology). However, Van Veldhuizen (1933: pp. 32 and 39) described how increasing numbers of collectors visited the site with or without the consent of its owner. On one occasion he was shown a stone battle axe which had been found in a patch of dark soil and he also wrote that his son collected material at the site. Given the fact that Van Veldhuizen junior's collection included a flint axe, several transverse arrowheads, a perforated stone pendant and a large number of sherds (described in a letter dated 16th September 1944 from Van Veldhuizen junior to Van Giffen), a considerable amount of material may have been collected during those months.

#### 3.2. Material found at the time of the excavation

In addition to the excavated material, a blade with sickle gloss segment (No. 344) and a comparatively well preserved small bowl (No. 3) were given to Van Giffen during the excavation. In or before 1931, Brink found two intact pots (Nos 19 and 135) while clearing a small part of the mound left after Van Giffen's excavation and these were acquired by the provincial museum in Assen at that time. These two

pots and a representative selection of the excavated material were published with the excavation report in 1944, together with drawings by J.C. Kat-Van Hulten.

### 3.3. Artefacts in private collections

Van Veldhuizen (1933: p. 39) described how his son collected arrowheads, a flint axe and a perforated pendant of lydite. In 1944 Van Giffen contacted Van Veldhuizen jr., then living in Rotterdam, who described his collection in a letter of the 16th September 1944:

- a neatly polished axe of dark flint;
- a large number of arrowheads of light coloured flint;
- a pendant of black stone (he included a sketch of this object). According to Van Veldhuizen this is of lydite (Van Veldhuizen, 1933, p. 39);
- a large quantity of decorated sherds of pottery, mostly small but including some larger pieces;
- charcoal and burnt bones, found together in a long strip;
- fragments of flint.

In 1999, we discovered that a small collection of pottery, some flint material and the stone pendant were still in the possession of the children of Van Veldhuizen jr. The flint axe, some sherds and flint arrowheads had disappeared. Through the good offices of Mr J.R. van Veldhuizen (Groningen), this material (though not the stone pendant) was brought to Groningen and is included in the catalogue of material from Tinaarlo. The pots from this collection are Nos 5, 6, 10, 24, 35, 37, 53, 64, 154, 155, 161, 176, 246, 276. Sherds from Nos 5, 6, 10, 155, 161 were also found during Van Giffen's excavation.

### 3.4. The finds records and numbering system

Van Giffen believed that he had uncovered the remains of two destroyed *hunebedden*. The archaeological remains in the destroyed chamber were all given the find number 12, with the exception of a large flint axe which was numbered 11. The finds from the pit in the mound were given find number 13. Sherds etc. found in the entrance area of the tomb were originally numbered 5, but later renumbered 14. Neither the original ground plans nor the finds themselves were renumbered, and the number '5' occurs on both. The reason for the renumbering seems to have been that finds from Tumulus 1 where Van Giffen was excavating at the same time occur in the same list; find numbers 1-4 and 6-10 refer to his excavation of Tumulus 1 (published also in 1944) and find numbers 5 and 10 to 13 (original numbers) to D6a. Renumbering find spot 5 as 14 'tidied up' the finds

book. The location coordinates and the depth of finding were apparently reconstructed from the plans at the time of publication. No artefacts were found outside the four locations.

Sherds with the numbers 5 (14), 12 and 13 fit together. Van Giffen explained this as the mixing of the chamber contents during the destruction of the sites. As already described, the three locations represent the area of the former chamber, a pit in the mound and a dump of material in the entrance way:

- Location 11; chamber area; axe No. 1928/III.148;
- Location 12; chamber area; pottery, stone artefacts, beads. Also clay pipe fragment;
- Location 13; pit in mound; chamber debris, as above;
- Location 14; entrance; chamber debris, as above. Also fragment of granite with bore hole.

Later, when the pottery was sorted and analysed, 125 pots were given separate registration numbers and the featured sherds (eg. base sherds, decorated sherds) were given group numbers. These take the form 1928/III.1, 1928/III.2 etc.

## 4. THE CATALOGUE

The catalogue includes 353 entries, the major part of which consists of TRB pottery from the use of the tomb. 192 vessels are individually described, and a further 115 sherds or groups of sherds can be identified as vessels of unknown type, possibly belonging to some of the 192 individually described pots. A smaller quantity of flint and stone artefacts, several ornaments and five small sherds of Late Neolithic pottery were also recovered. Van Giffen's catalogue included 181 entries (1928/III.115-1928/III.196), 132 of which are ceramic finds, including 125 individually registered pots. The pottery is illustrated in fig. 5, the other artefacts in fig. 6.

### 4.1. TRB pottery

#### 4.1.1. Introduction

The vast majority are well preserved sherds ranging from comparatively large pieces of individual pots to small fingernail sized sherds. Although the pottery was found in three locations it is all ultimately derived from the chamber and represents a single phase of activity and will be treated as one unit. 1400-1500 sherds were found during the excavation. A minimum of 192 vessels are identified on the basis of distinctive features. The catalogue is arranged as follows:

- Pails, bowls and straight sided bowls. This includes both open and slightly closed bowls (the latter,

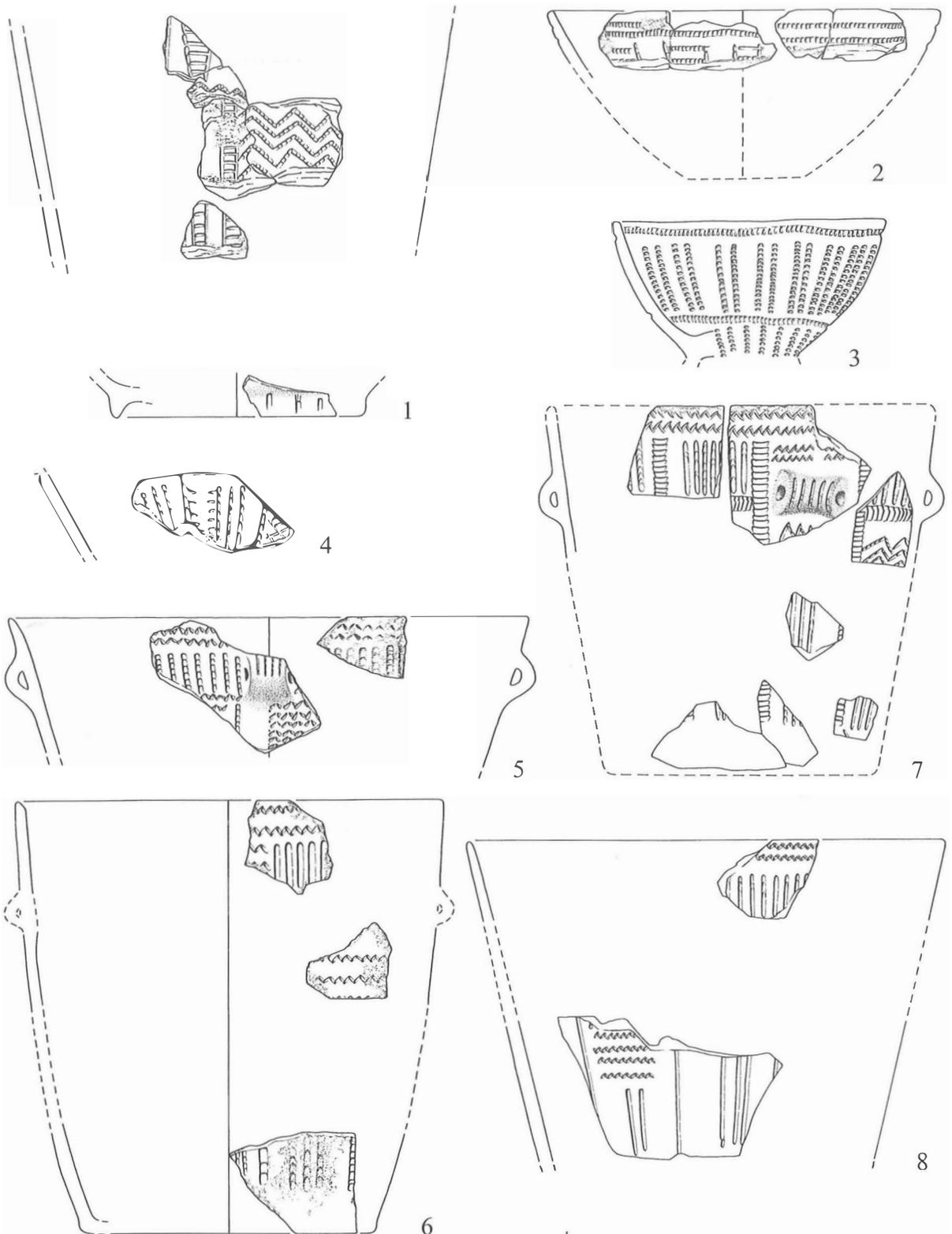
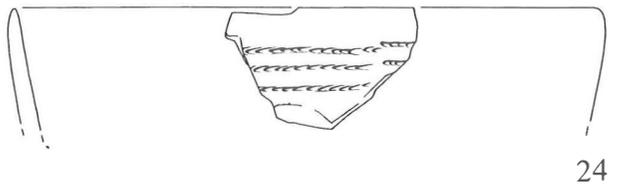
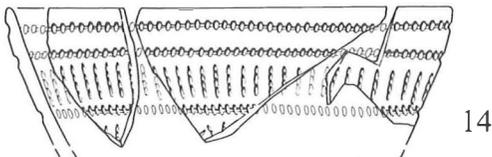
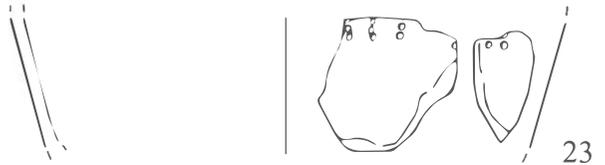
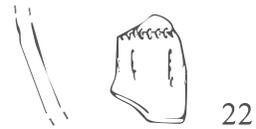
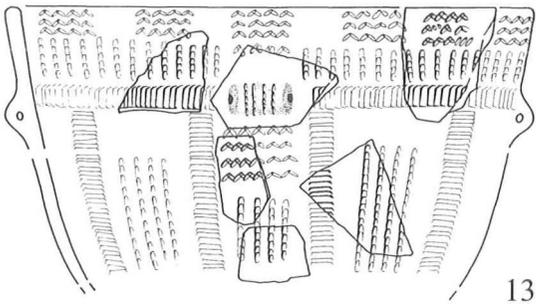
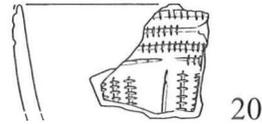
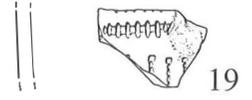
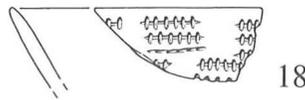
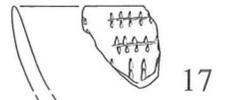
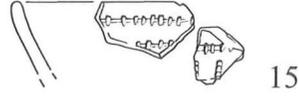
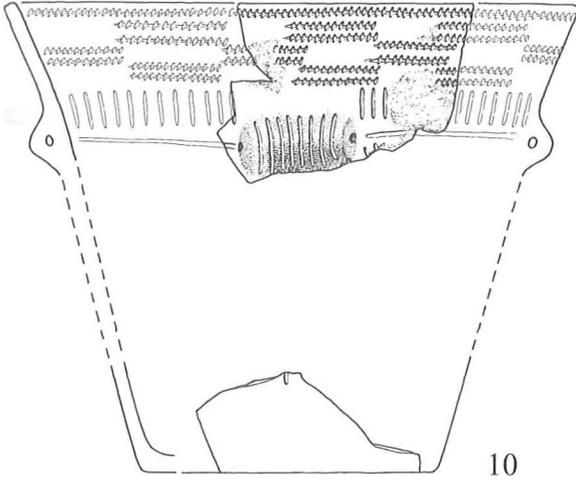
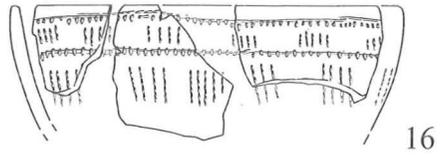
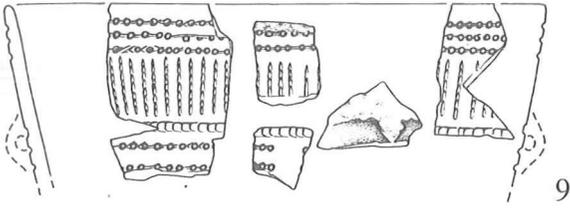
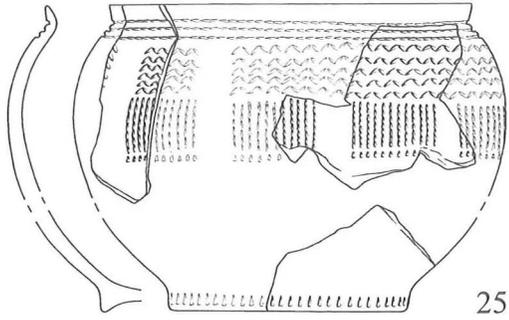
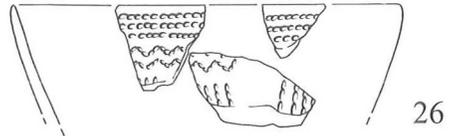


Fig. 5. Pottery found in or around hunebed D6a, before, during and after the excavation of 1928. Scale 1:3 for catalogue numbers 1–305, but 1:1 for numbers 308–312. Drawings: M.A. Los-Weijns (GIA).

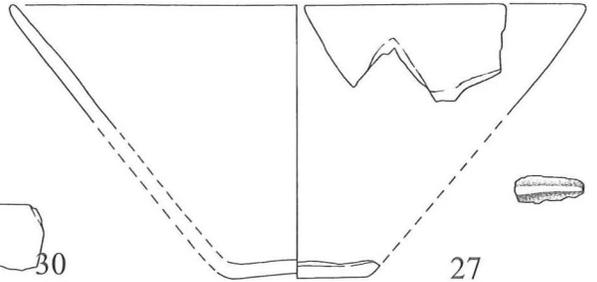




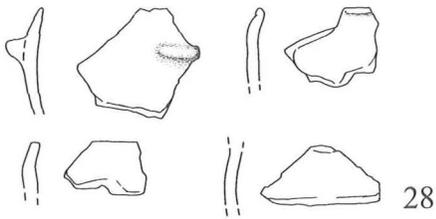
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26



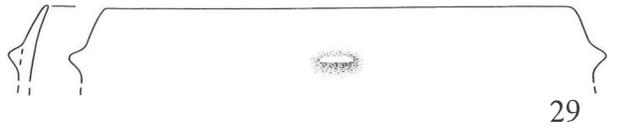
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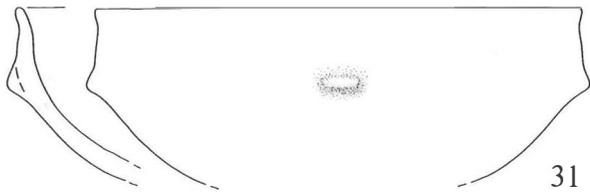
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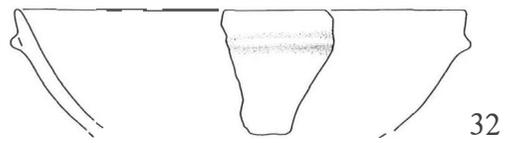
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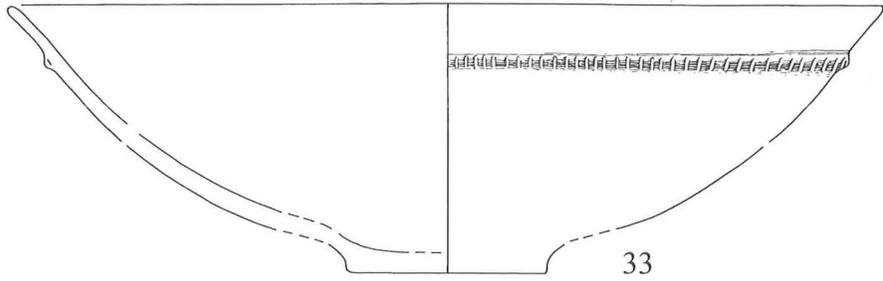
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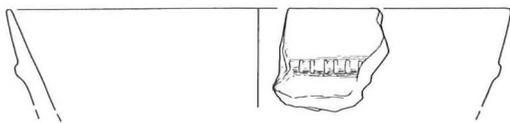
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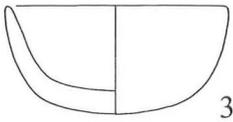
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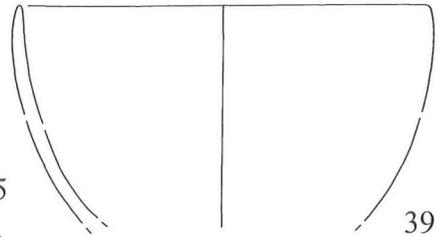
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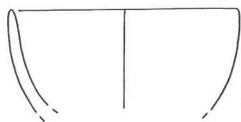
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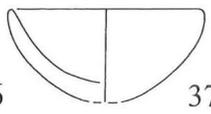
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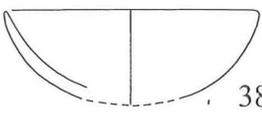
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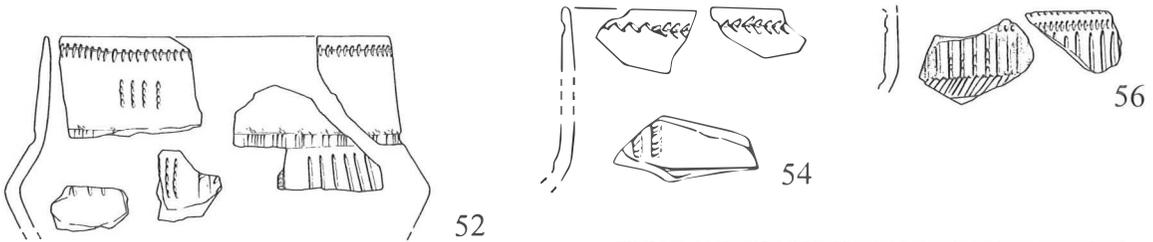
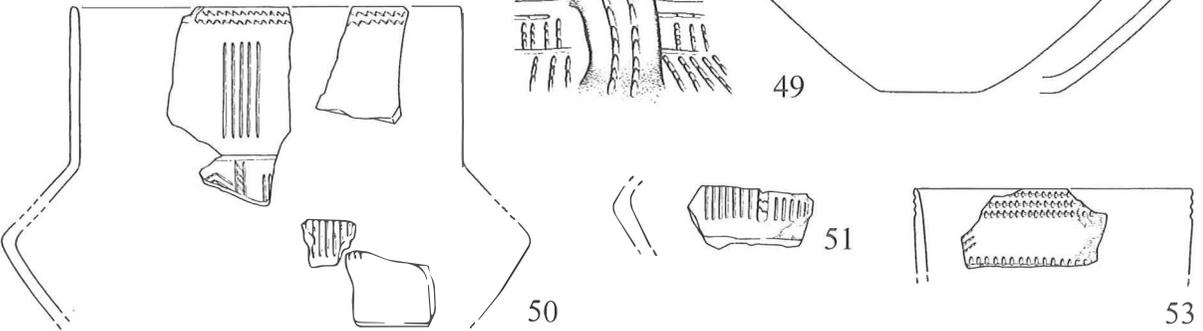
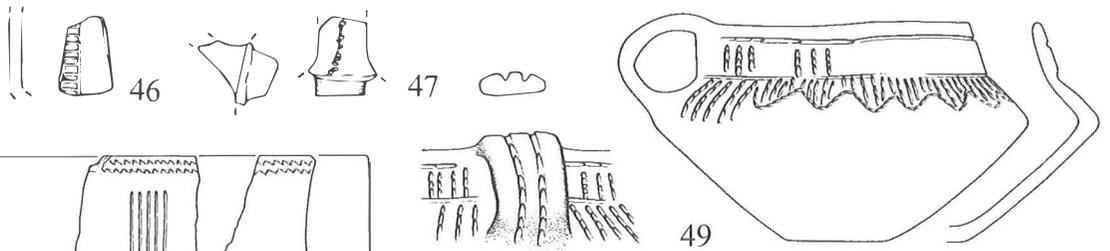
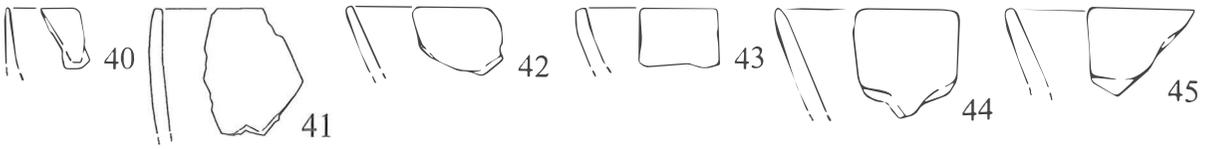
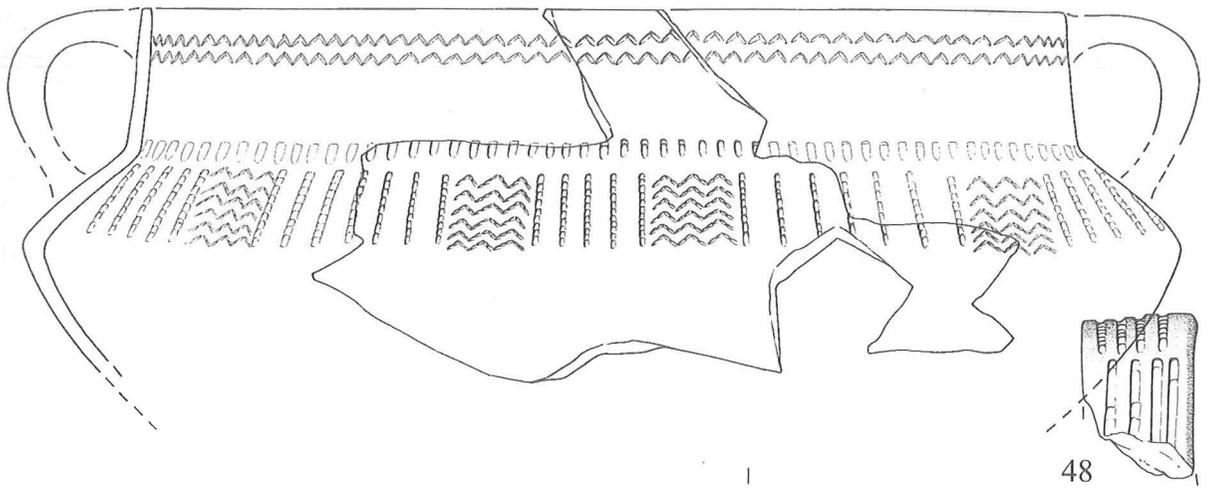
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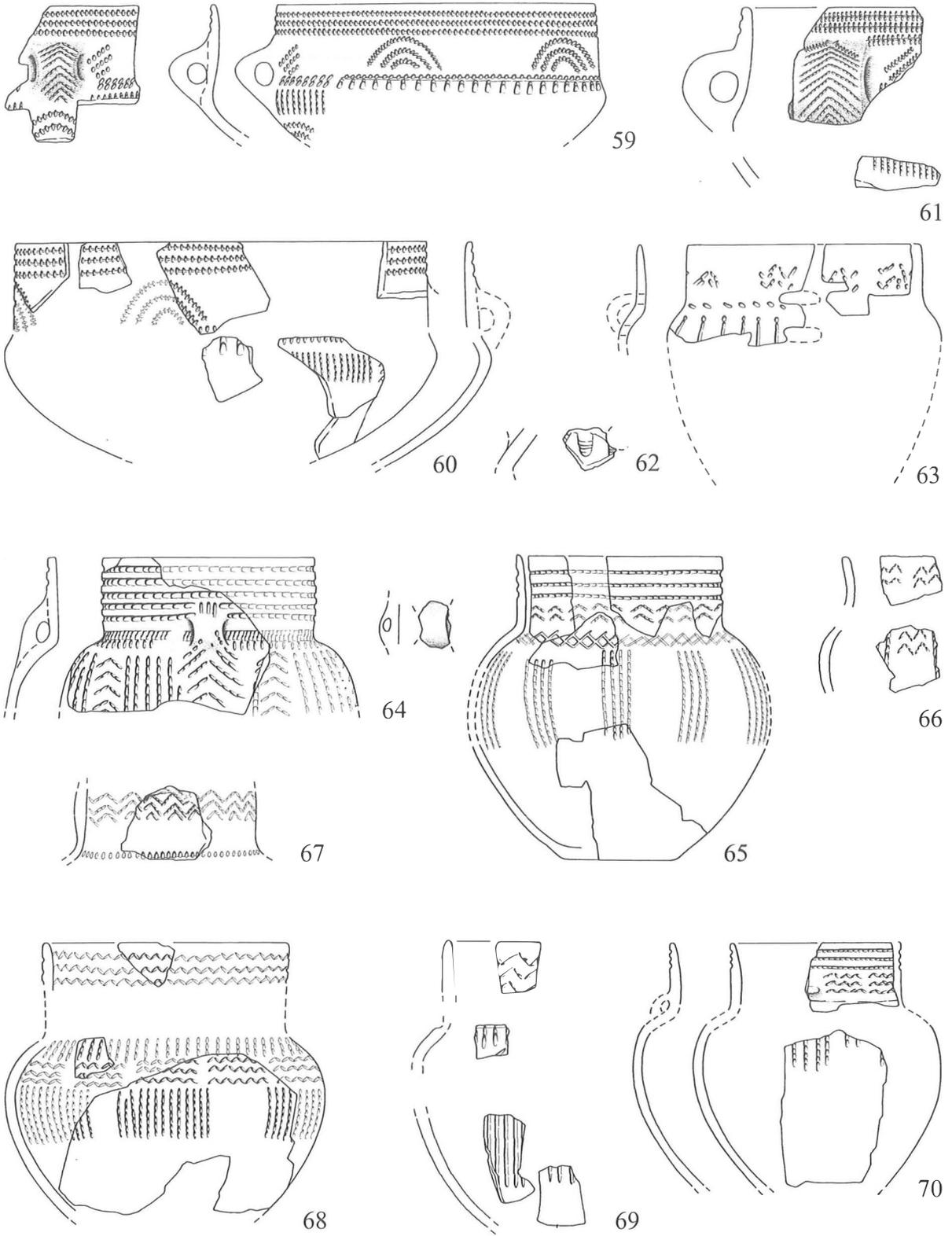


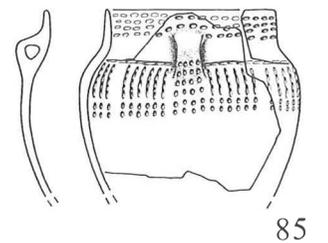
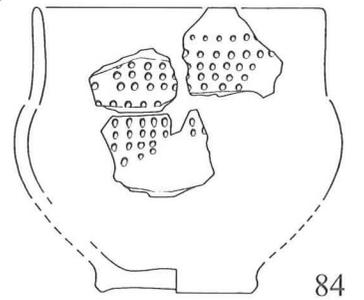
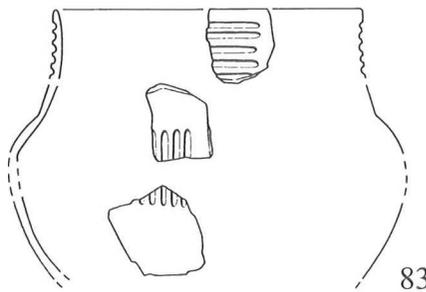
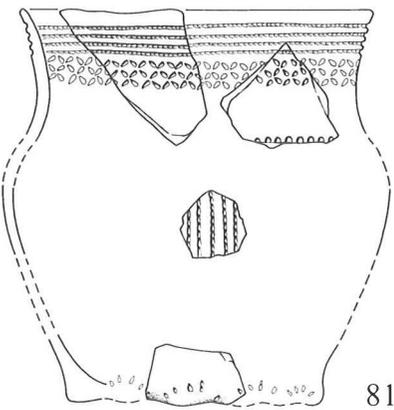
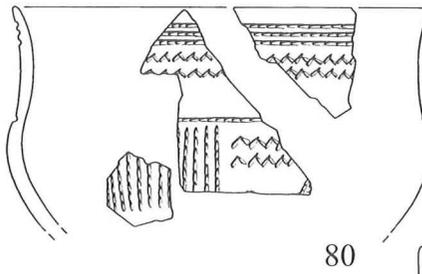
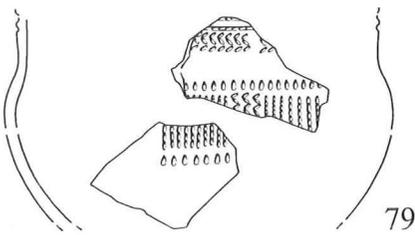
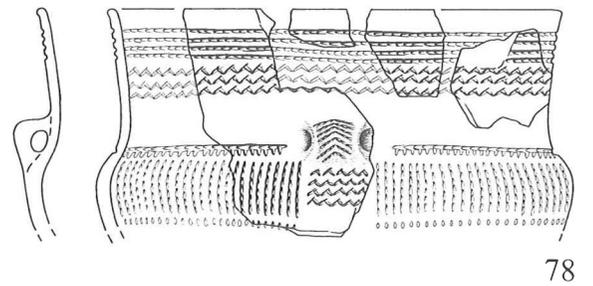
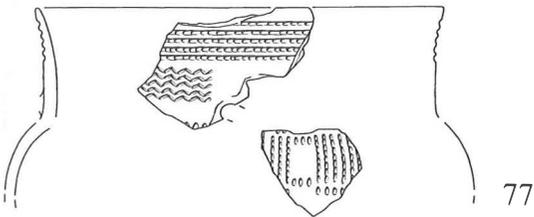
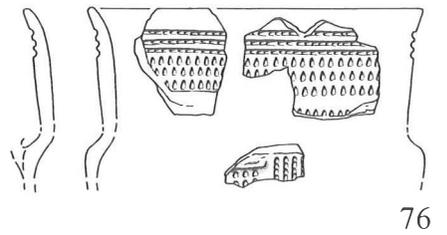
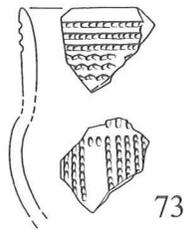
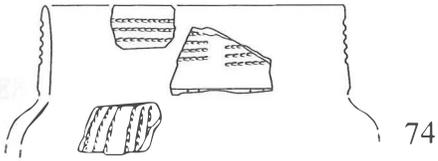
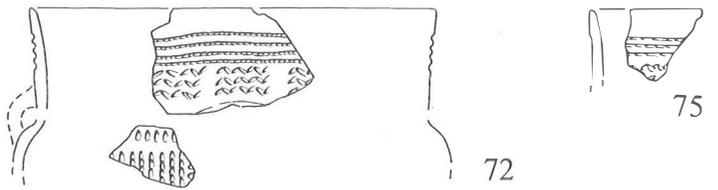
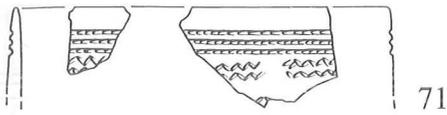
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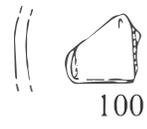
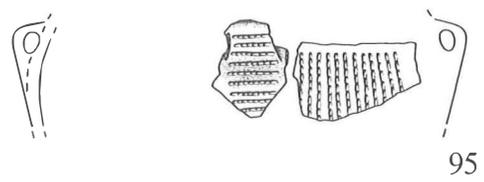
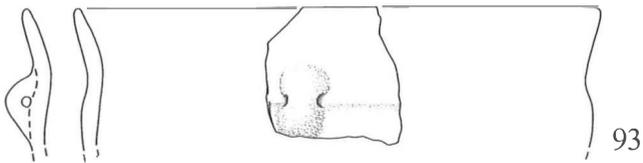
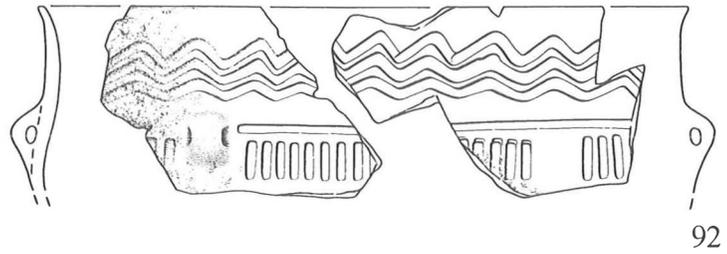
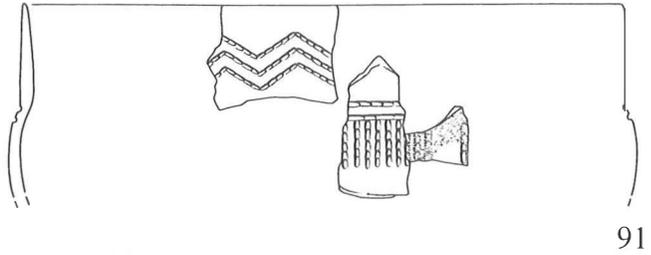
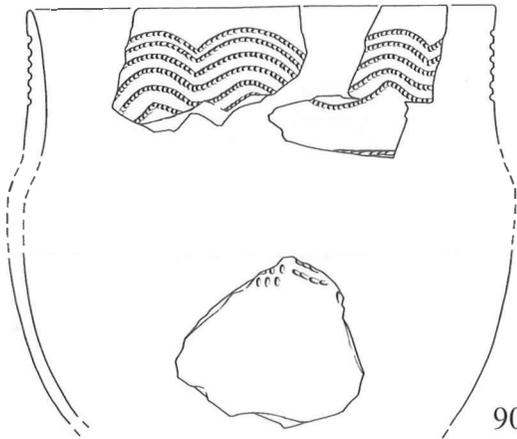
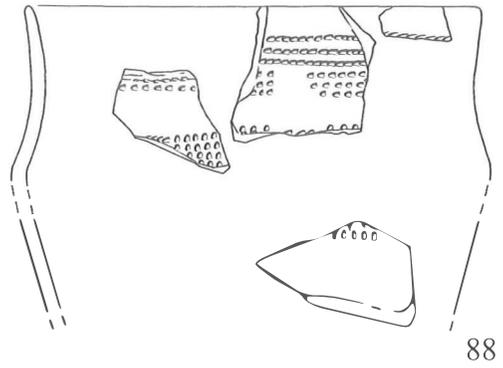
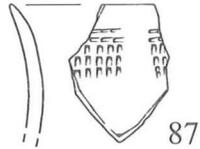
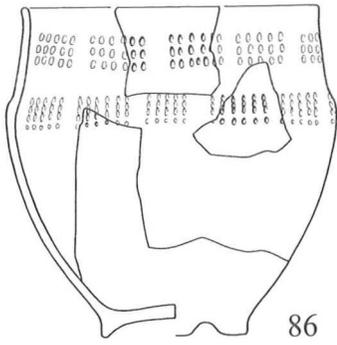


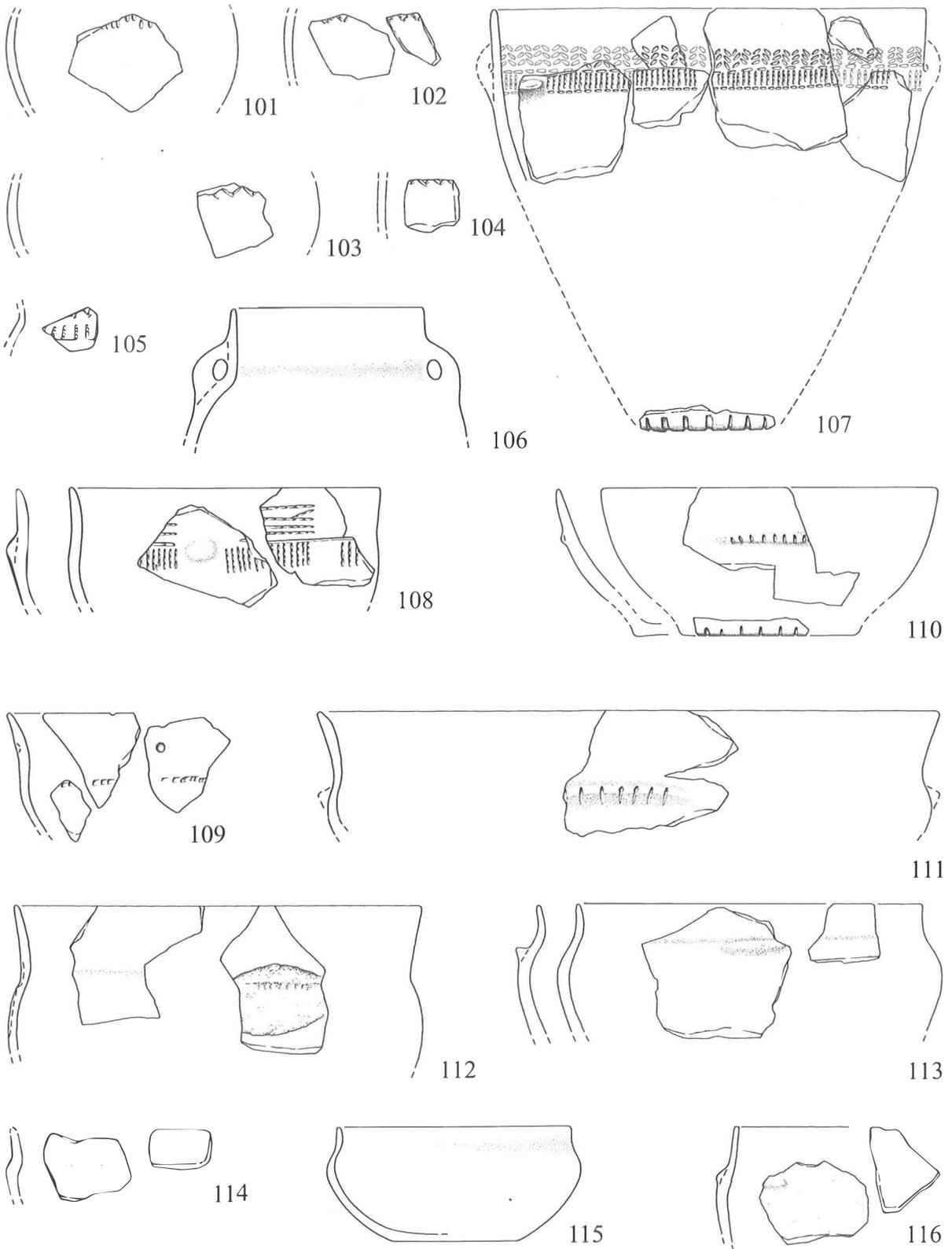
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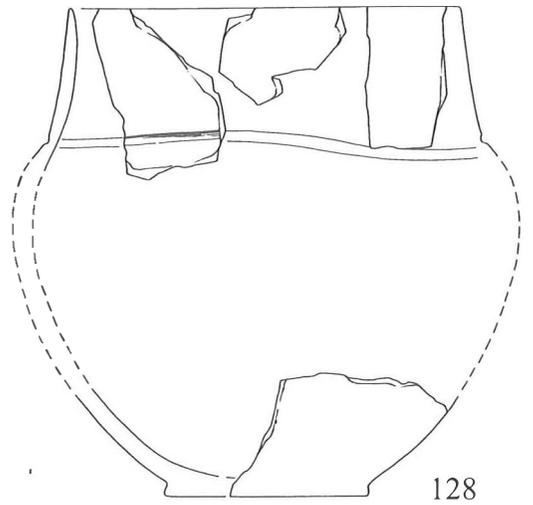
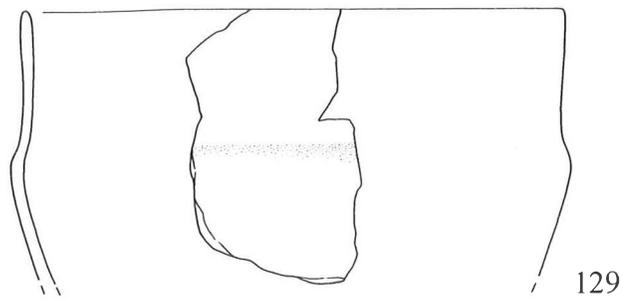
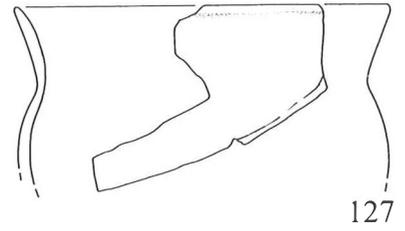
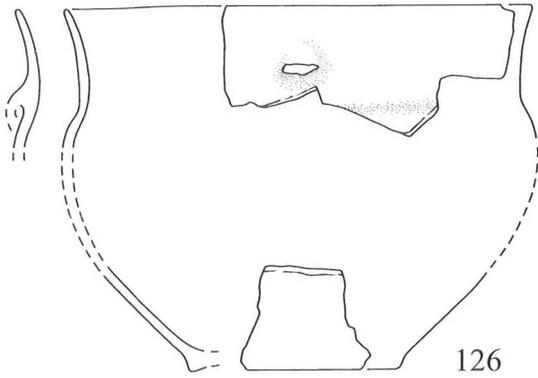
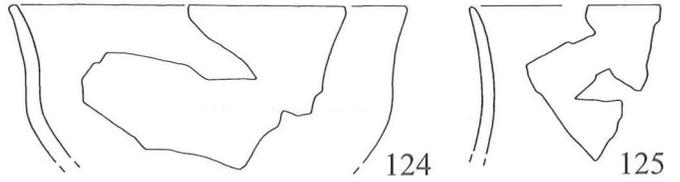
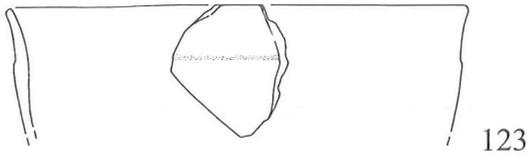
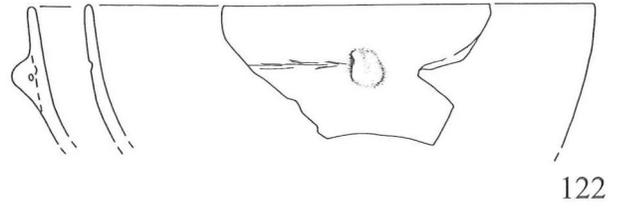
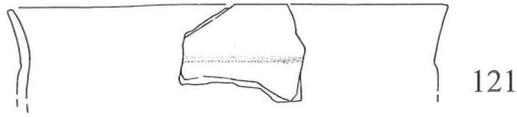
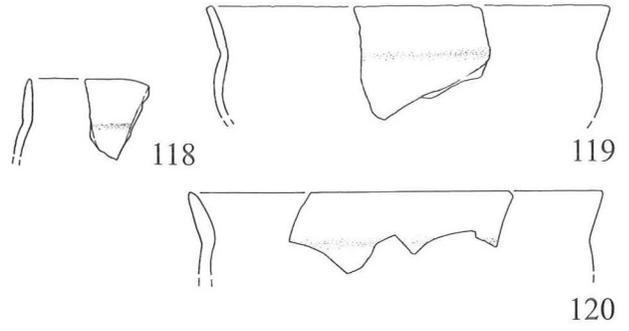
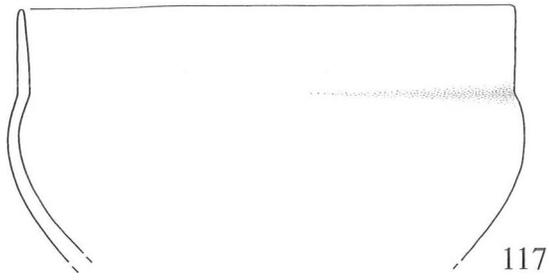


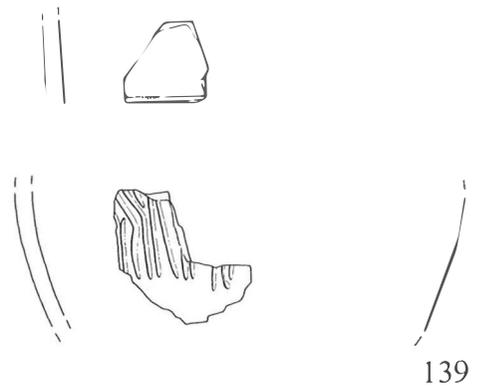
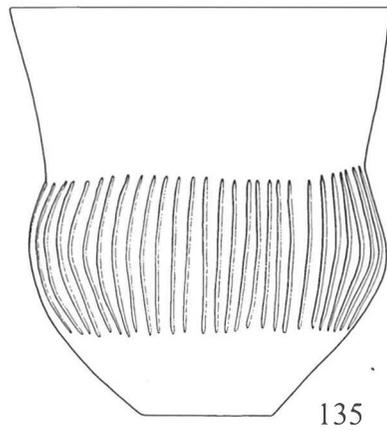
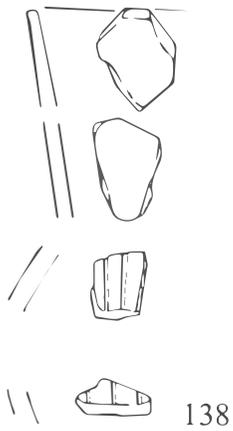
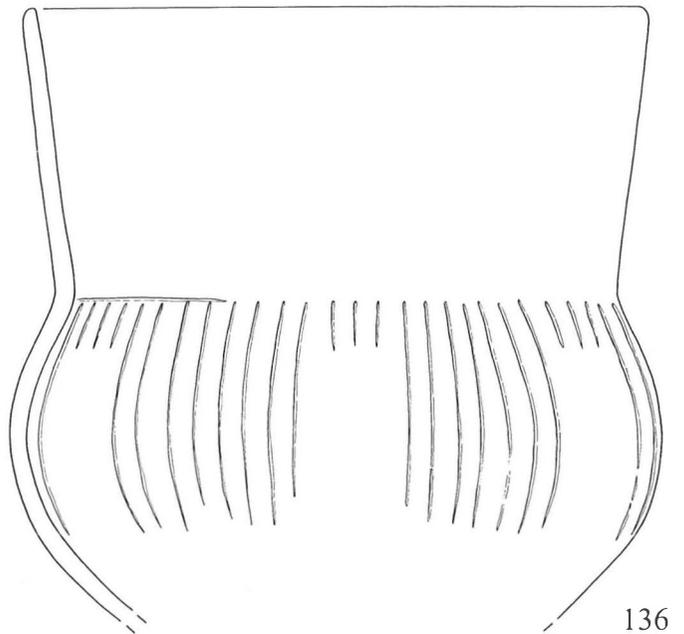
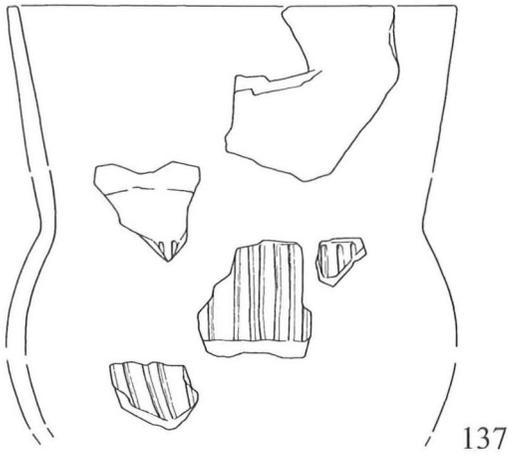
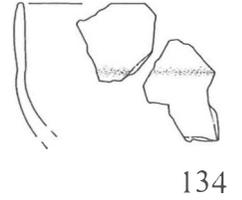
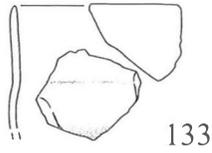
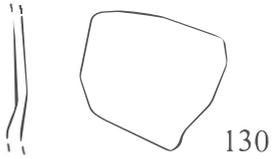
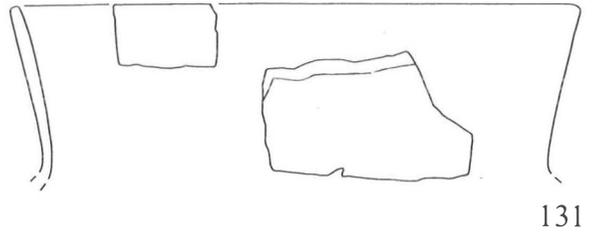
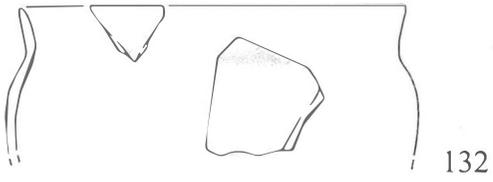


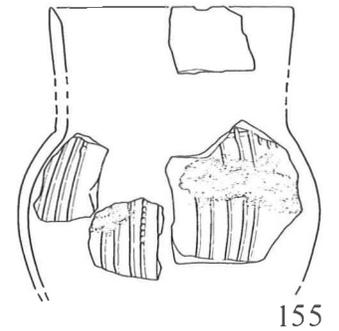
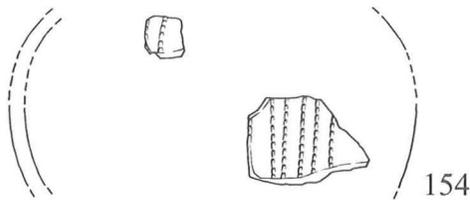
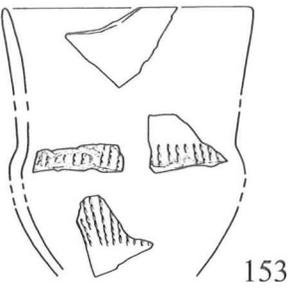
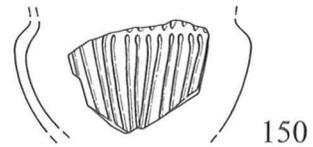
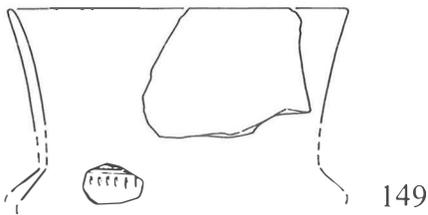
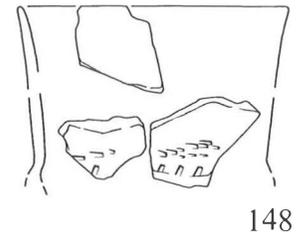
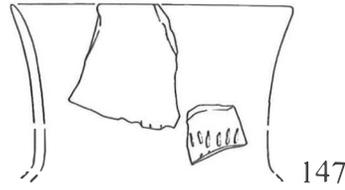
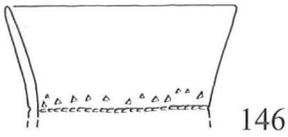
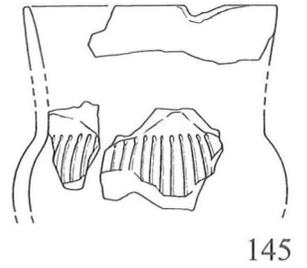
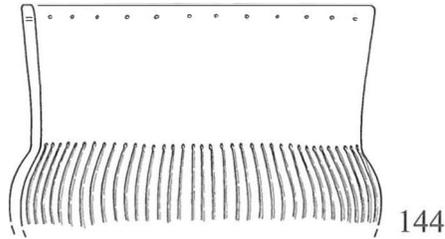
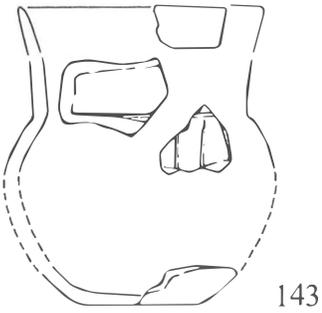
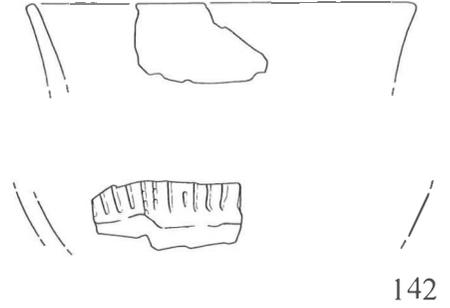
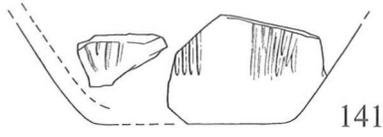
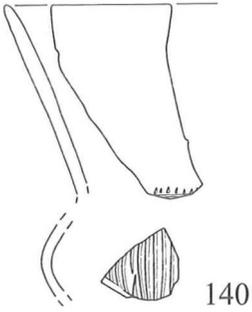


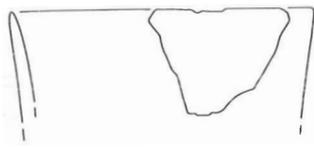












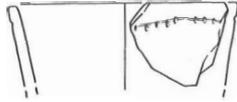
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159



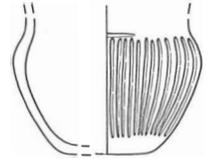
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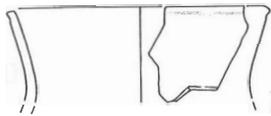
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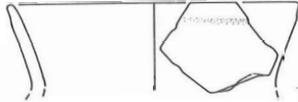
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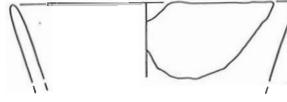
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162



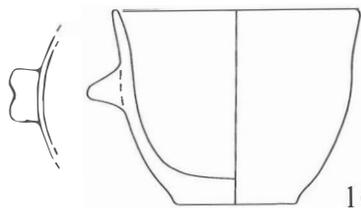
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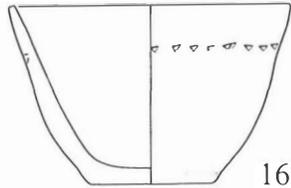
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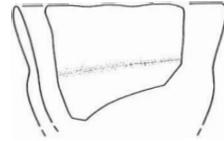
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166



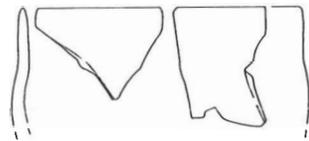
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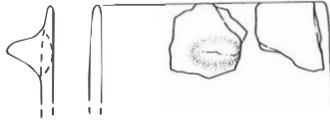
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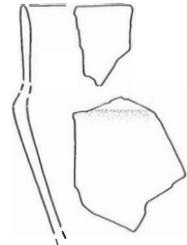
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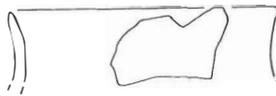
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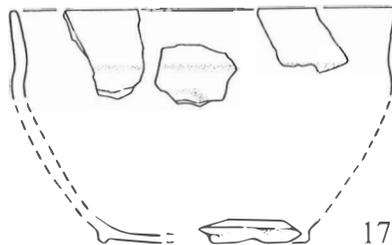
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172



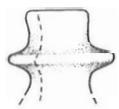
173



175



174



176



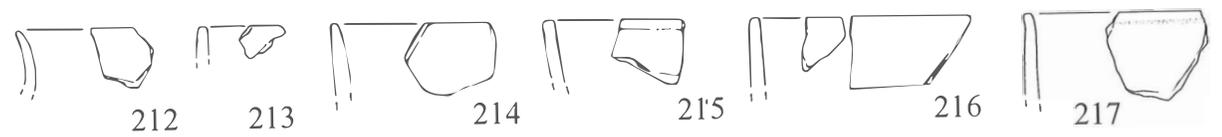
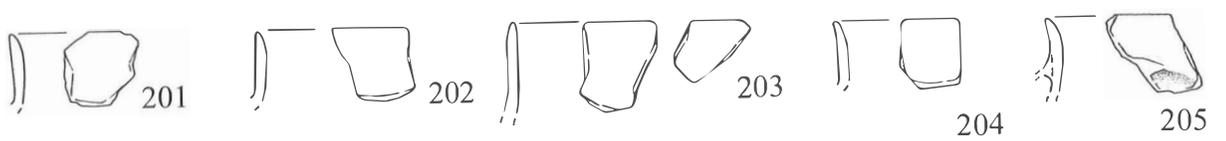
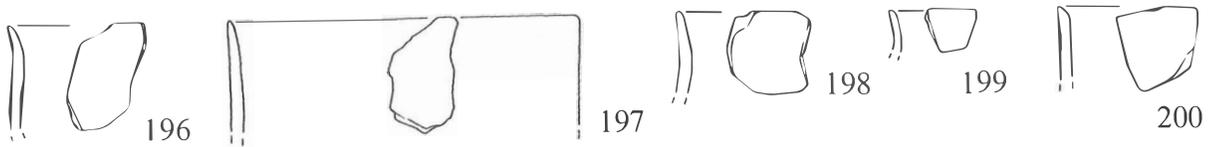
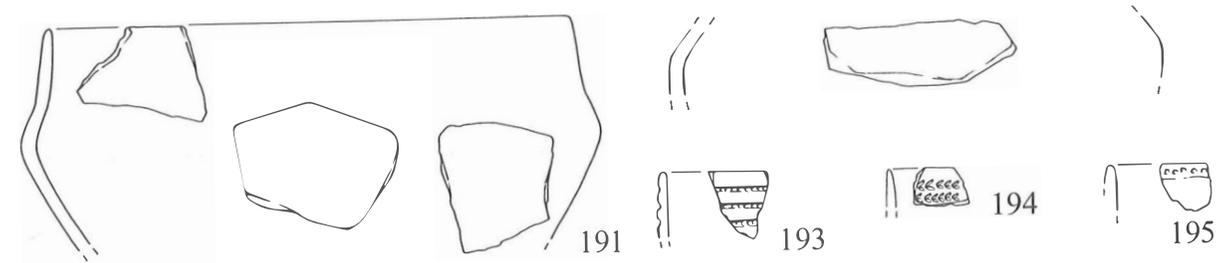
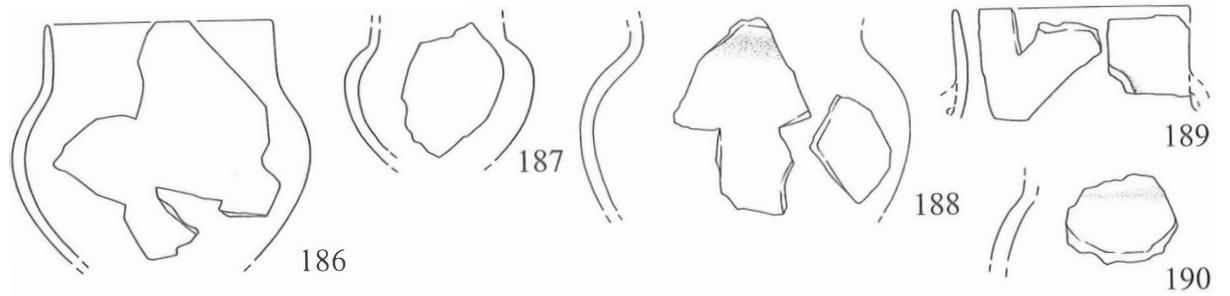
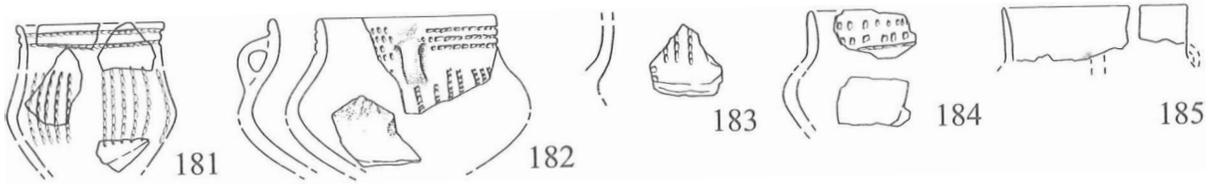
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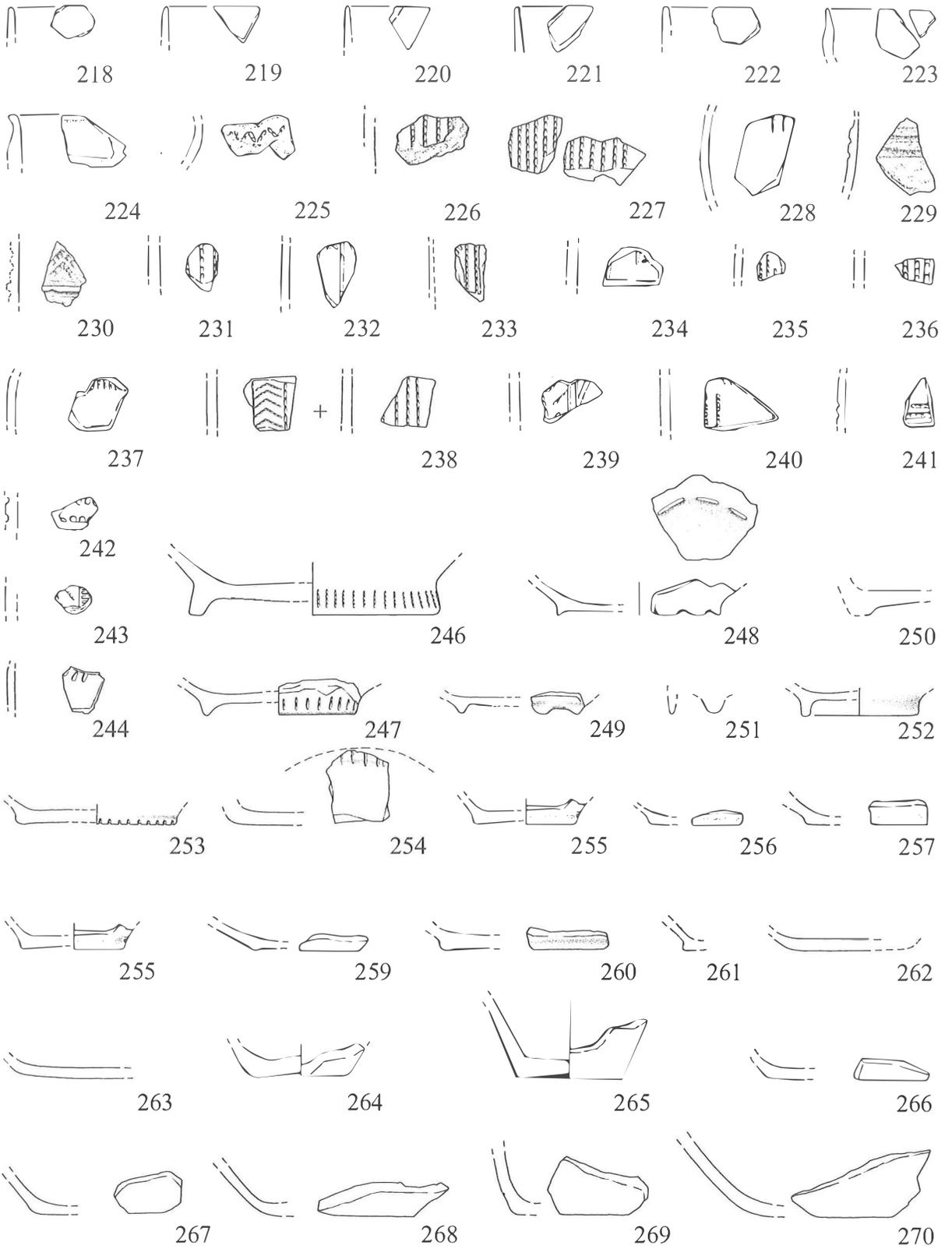


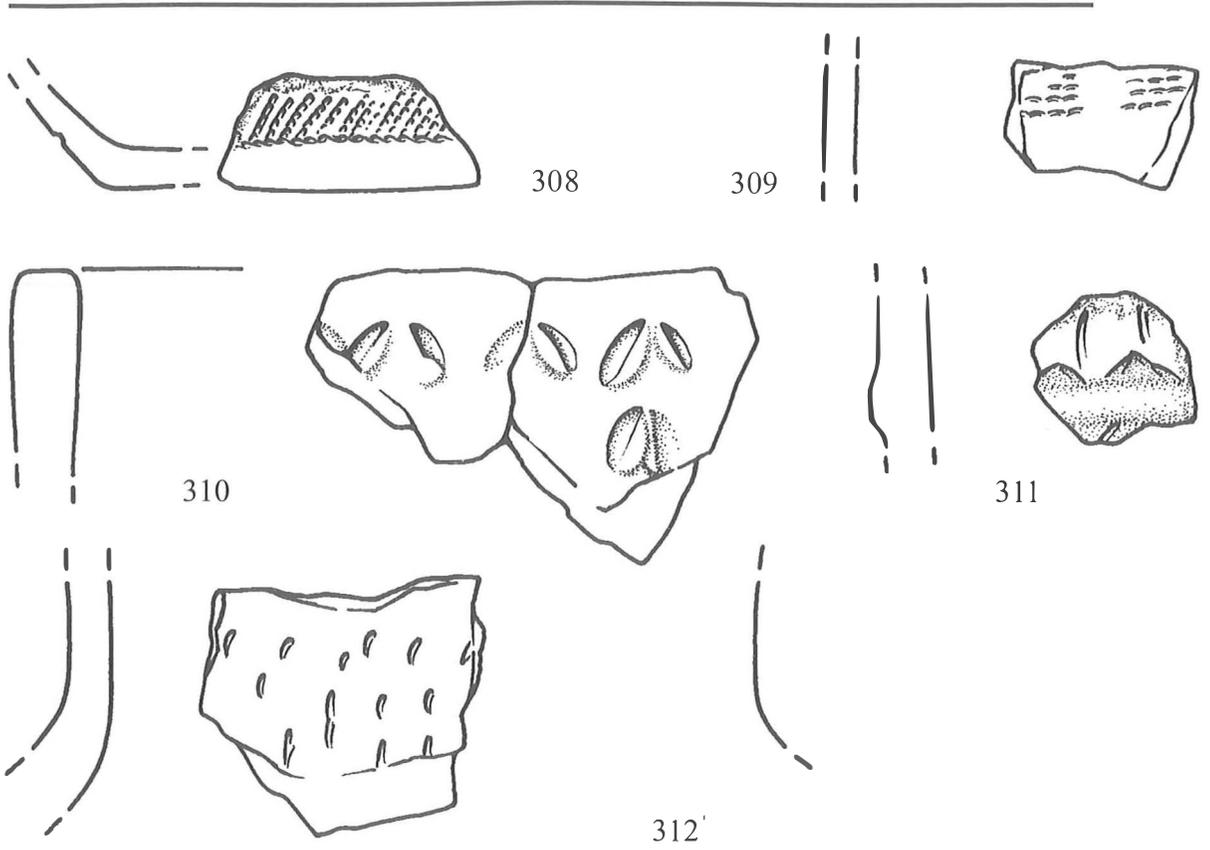
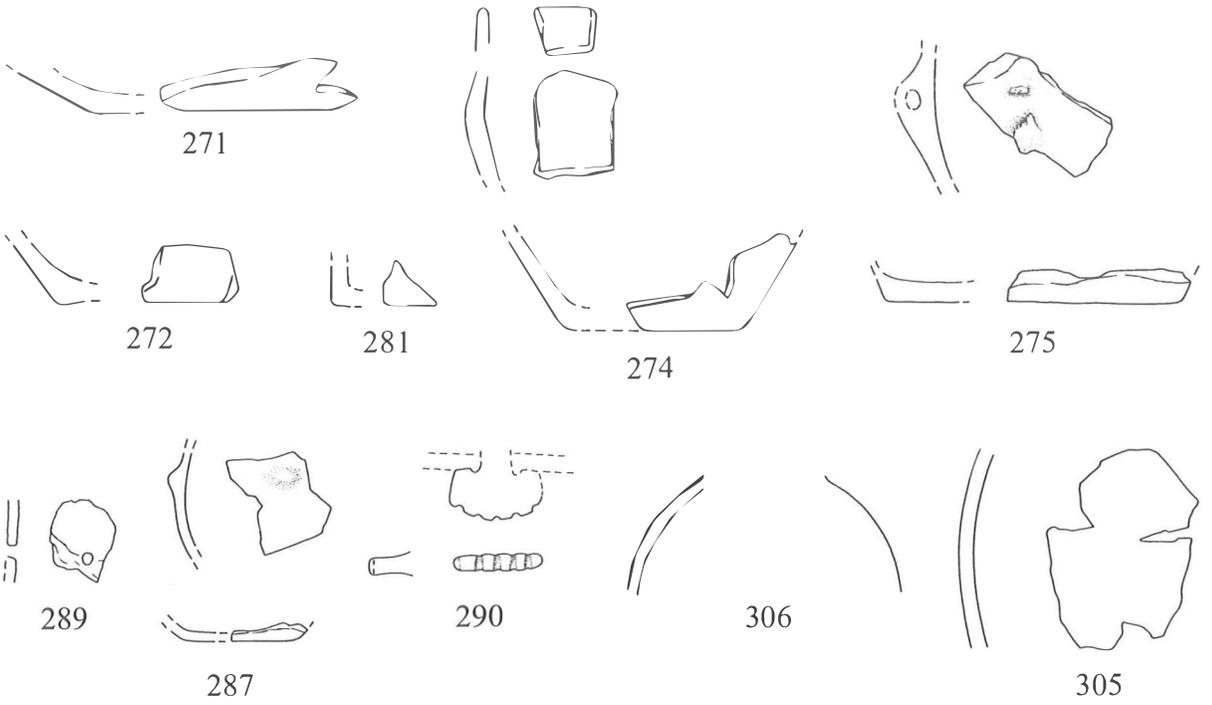
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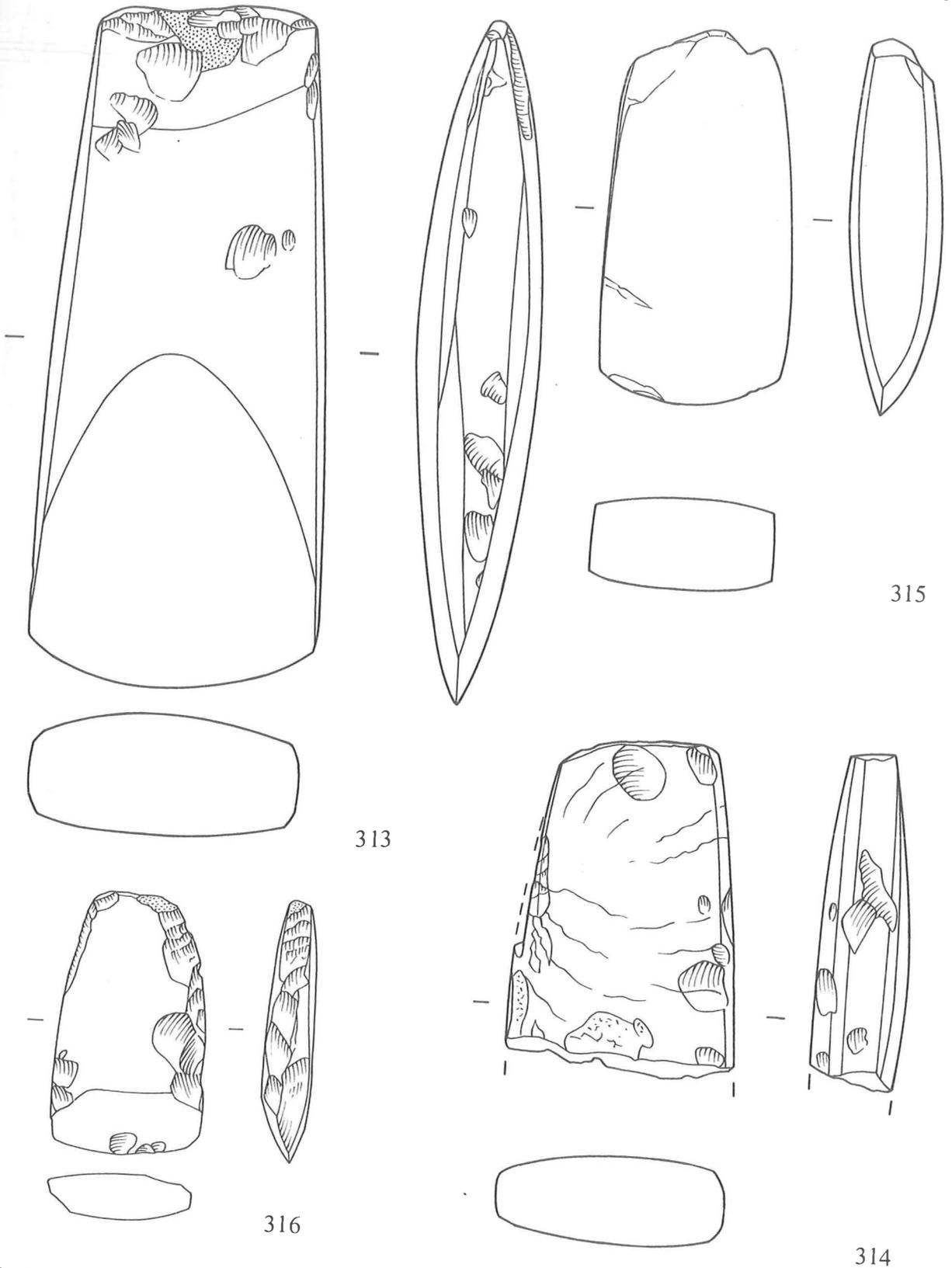
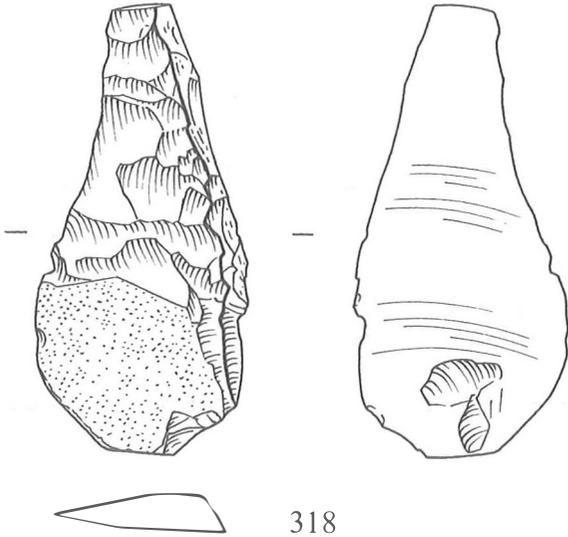


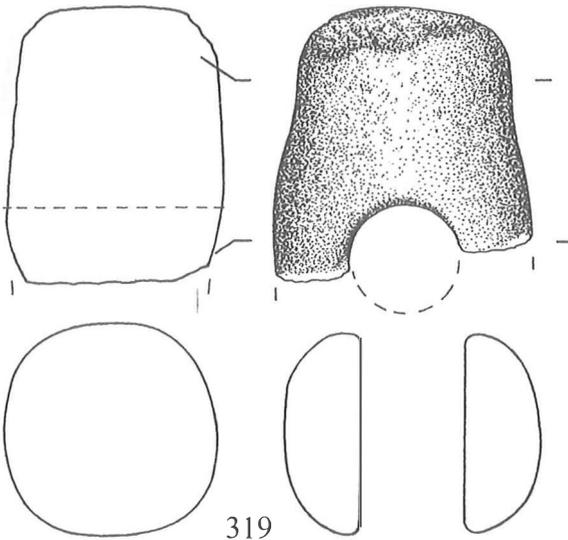
Fig. 6. Artefacts of flint, stone, amber and jet found in hunebed D6a, before and during the excavation of 1928. Scale 2:3 for catalogue numbers 313-344 and 352, but 1:1 for numbers 346-350. Drawings: M.A. Los-Weijns (GIA) and J. Kat-van Hulst.



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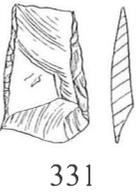
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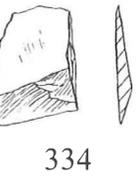
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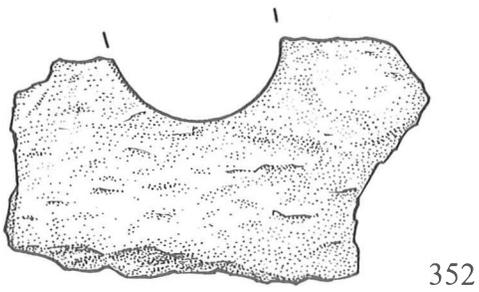
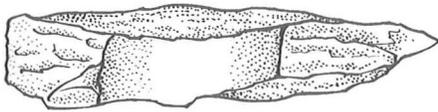
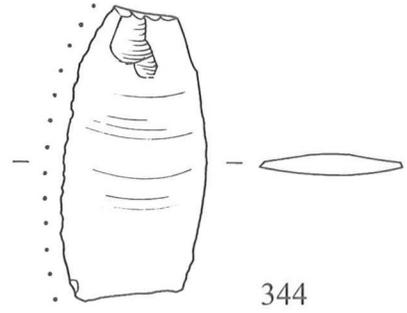
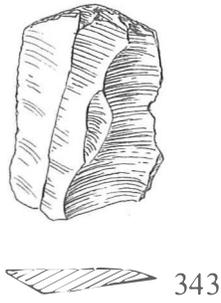
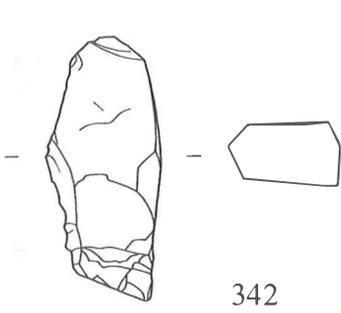
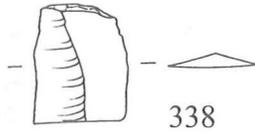
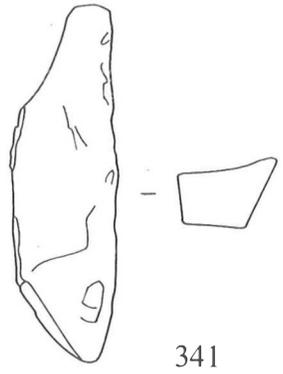
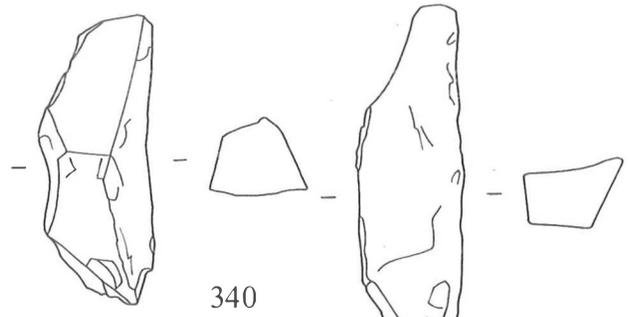
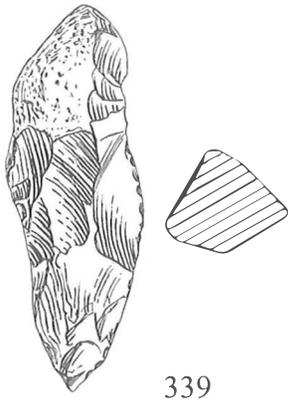
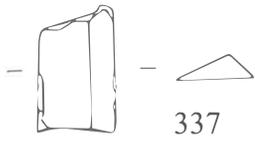
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rare), with a straight or curved profile and a smooth and continuous inside wall;

- tureens, and amphorae, including single and two handled tureens, tureen-amphorae and amphorae type 2;
- shouldered bowls, including both open and closed, deep and shallow forms with a break in the line of the inside wall;
- funnel beakers and funnel beaker cups;
- collared flasks;
- other miscellaneous forms, chiefly lugged and non-lugged vases.

#### 4.1.2. *The catalogue (figs 5 and 6)*

Catalogue entries include the following information: catalogue number (also used in the figures); class; preservation; shape; decorative technique; pattern; comment; horizon; Van Giffen catalogue number; figure; inventory number. Under preservation the following terms are used: complete; almost complete profile; incomplete; fragmentary.

##### 4.1.2.1. *Pails, bowls and straight sided bowls*

###### *Decorated bowls*

1. Pail, incomplete. *Tiefstich*. Two zones defined by horizontal zigzag, upper with short tapering ladders (rim edge decoration missing), lower with ladders and broad panels of zigzag. Footring with radial stabs. H2 30;4:54;1928/III.51;
2. Open bowl, incomplete. *Tvaerstik-tiefstich*. Two horizontal lines below rim, vertical ladders. H2 42;4:39;1928/III.65;
3. Bowl, almost complete. *Tiefstich-tvaerstik*. Two zones defined by horizontal line. Pairs of vertical lines in both zones. Break on base shows presence of former footring. H2 45;4:40;1928/III.70;
4. Dish, incomplete. Small portion of lower zone of straight sided dish. *Tiefstich*. Panels of vertical lines, cross-hatching and zipper type strip. H3 34;4:46;1928/III.55;
5. Pail, incomplete. *Tiefstich*. Upper zone of verticals between zigzags, lower zone includes isolated single lines and undefined panels of zigzag. Lug is within the upper zone. H3 37;4:42;57;
6. Pail, incomplete. *Tiefstich*. Two lines zigzag below rim. Upper zone band of verticals interrupted by zigzag blocks. Two sherds of lower zone suggest similar ornament in lower, panelled zone. H3. 1928/III.50;
7. Pail, incomplete. *Tiefstich*. Two zones with well marked panels in both, defined by broad shallow *tiefstich*. Two lines skating below rim, verticals in upper zone; zigzags and vertical lines in panels of lower zone. Horizontally pierced lug between zones. H3 32;4:50;1928/III.53;
8. Pail, incomplete. *Tiefstich*. Two zones, two lines zigzag below rim, band of verticals in upper zone, panels with vertical lines and zigzags below. H3 28;4:47;1928/III.49;
9. Pail, incomplete. *Tiefstich* and *tvaerstik*. Two zones divided by horizontal *tiefstich* line. Three *tvaerstik* lines below rim, band of *tiefstich* verticals. Horizontal *tvaerstik* lines at top of lower zone. H3 31;4:49;1928/III.52;
10. Pail, incomplete. *Tvaerstik*. Widely flaring upper part. Broad upper zone with two bands of ornament, including three courses of blocks of two horizontal lines and a narrower band of verticals (incised). Lower zone not preserved. H4 41;-;1928/III.62;

11. Pail, fragment of lower zone showing panelling and vertical lines. *Tiefstich*. H3;

12. Pail, fragment of upper zone, showing horizontal *tvaerstik* lines below rim and vertical *tiefstich* lines. H3;

13. Bowl with horizontal pierced lug, incomplete. *Tiefstich*. Two zones divided by broad line. Upper zone: blocks of 3 zigzag lines below rim, band of verticals; lower zone: panels of vertical lines and zigzags. H3; 33;4:43;1928/III.54

14. Bowl, incomplete. *Tiefstich* and *tvaerstik*. Two zones separated by horizontal *tvaerstik* line. Two lines *tvaerstik* below rim, band of vertical *tiefstich*. H3 38;4:41;1928/III.59;

15. Bowl, fragments of upper zone. Two lines *tvaerstik* below rim, band of verticals. H3 44;-;1928/III.67;

16. Bowl, incomplete. Two zones without panels, defined by single *tvaerstik* lines and both filled with groups of vertical *tiefstich*. H3 39;4:38;1928/III.60;

17. Bowl, fragmentary. Rim sherd showing two discontinuous *tvaerstik* lines below rim and vertical *tiefstich* in upper zone. H3 41;-;1928/III.64;

18. Dish, fragmentary. Rim sherd. *Tvaerstik* and possibly *tiefstich*. Blocks of horizontal lines below rim. H4 36;-;1928/III.57;

19. Bowl, fragmentary. Body sherd showing horizontal *tvaerstik* blocks above vertical *tiefstich*. H3 41;-;1928/III.63;

20. Bowl, incomplete. Rim sherd. Undefined zones. Upper zone of three horizontal *tvaerstik* lines and one line of discontinuous lengths of *tiefstich* and *tvaerstik*, lower zone vertical *tiefstich* and *tvaerstik* lines. H4 43;4:26;1928/III.66;

21. Pail, fragmentary. Sherd of lower zone, showing panels of vertical *tiefstich* and vertical *tvaerstik*. Probably H3;

22. Bowl, fragmentary. Body sherd, lower zone with horizontal *tvaerstik* line and well spaced vertical *tiefstich* lines. Probably similar to No. 16. H3? 44;-;1928/III.68;

23. Bowl, incomplete. Large, represented by two fragments of lower body with vertical lines of dots. Probably H3. 44;-;1928/III.69;

24. Bowl, fragmentary. *Tiefstich*. Horizontal lines under rim, apparently separated into tightly spaced blocks. H4;

25. Bowl, incomplete. Small outturned rim, partly closed body and low foot ring. *Tiefstich*. Three horizontal lines below rim, wide blocks of five zigzag lines above blocks of vertical lines ending in drop shaped impressions. Similar impressions on footring. H5 82;5:23;1928/III.115;

26. Bowl, incomplete. *Tiefstich* (imprints are well separated). Three horizontal lines below rim, two discontinuous zigzag lines with blocks of vertical *tiefstich* lines below. H5 40;4:25;1928/III.61.

###### *Undecorated bowls with lugs or cordons*

27. Shallow dish with horizontal lugs. One body sherd shows edge of lug. Incomplete. *Laat Havelte* style. 91;-;1928/III.130;

28. Fragments of small bowl with irregular walls and small horizontal lug close to rim. *Laat Havelte* style. 92;-;1928/III.131;

29. Incomplete. Two sherds of slightly closed bowl with lug on thinnish wall. *Laat Havelte* style. 93;5:5;1928/III.132;

30. Fragmentary. Rim of bowl with lug close to rim. *Laat Havelte* style;

31. Bowl, incomplete. Slightly sinuous profile, with slight lip and horizontal lug on widest part of body. *Laat Havelte* style? 81;5:30;1928/III.114;

32. Incomplete. Open shallow bowl with either a long horizontal lug or a discontinuous cordon below the rim. H7 47;4:37;1928/III.72;

33. Open fairly straight sided dish with continuous narrow cut cordon. H7 70;5:31;1928/III.100;

34. Almost complete profile. Straight sided dish represented by rim with cut cordon. H7 46;4:30;1928/III.71.

#### *Undecorated bowls without lugs*

35. Bowl, almost complete. Small, shallow scoop;

36. Bowl, almost complete, small, undecorated. 48;4:31;1928/III.73;

37. Bowl, almost complete. Small, shallow scoop;

38. Small undecorated bowl. 48;4:31;1928/III.73;

39. Thin walled bowl, fragmentary.

#### *Undecorated bowls represented by small portions only* (i.e. insufficient to show presence or otherwise of applied features)

40. Incomplete. Sherds of smallish, thin walled bowl;

41. Fragmentary. Rim sherd of largish, thin walled bowl;

42-45. Fragmentary. Rim sherds of four undecorated bowls.

#### 4.1.2.2. *Jugs, tureens and amphorae*

46. Jug, fragmentary. Shoulder sherd with narrow ladder. H2 35;-;1928/II.56;

47. Jug, fragmentary. Single sherd of thick handle with rounded cross-section and single vertical *tvaerstik* line. Probably from a jug. H2;

48. Incomplete. Very large tureen represented by fragments of rim, neck, shoulder lower body and one handle. *Tiefstich*. The reconstruction here is based on a shoulder diameter of 4cm. Two handles are considered likely. A small portion only of the neck is preserved, showing two zigzag lines below the rim and a line of stabs at the base of the neck. The shoulder has blocks of zigzags between verticals and groups of verticals. The handle has verticals and joins the neck close to but not at the rim. H2 21; 4:61;1928/III.41;

49. Tureen, complete. Small, with strap handle stretching from rim to shoulder edge. *Tiefstich*. Horizontal line under rim and at base of neck, vertical lines adjacent to handle on neck and shoulder, vertically hatched triangles on shoulder, lines on handle. Found with funnel beaker, No. 135. H2;

50. Incomplete, amphora with angular profile. Two lines fine zigzag below rim, groups of vertical lines on neck, panelled decoration on shoulder and upper body. Panels of verticals and ?M motif. H3 23;4:55;1928/III.43;

51. Fragmentary. Amphora similar to above? Single sherd with sharp shoulder angle and panelled decoration. H3. 27;-;1928/III.48;

52. Tureen, incomplete. *Tiefstich* and *tvaerstik*. Horizontal *tvaerstik* line under rim, groups of short verticals on neck, panelled decoration on shoulder with vertical *tiefstich*. H3 20;4:59;1928/III.40;

53. Tureen, fragmentary. Rim and neck sherd of tureen probably with languish shoulder. *Tvaerstik* line under rim, stacked W or V motif on neck in *tiefstich*. H3;

54. Tureen, fragmentary. Horizontal *tvaerstik* line below rim, group of vertical *tiefstich* on neck. H3;

55. Tureen, fragmentary. *Tvaerstik*. Two horizontal lines under rim, groups of verticals on neck. H3 22;4:60;1928/III.42;

56. Tureen(s), fragmentary. Two neck sherds only, not certainly on one pot. *Tiefstich* and *tvaerstik*. Vertical *tiefstich*, possibly continuous, on neck. H3;

57. Tureen, fragmentary. Single neck sherd with group of vertical *tiefstich* lines. H3;

58. Tureen, fragmentary. Single neck sherd with min. two lines horizontal *tiefstich* below rim. H3;

59. Tureen, incomplete. Rim, shoulder, base and handle sherds. *Tvaerstik*. Three lines under rim, stacked arches on neck, *tiefstich* on shoulder, arches under handle, chevron on handle. H4. 24;4:62;1928/III.44;

60. Tureen, incomplete. Similar to above, but less well preserved and slightly larger. H4. 26;-;1928/III.46;

61. Tureen, fragmentary. Thick strap handle. *Tiefstich* and *tvaerstik*. Three *tvaerstik* lines under rim, angled lines beside handle, *tiefstich* chevron on handle and vertical lines on shoulder. H4. 25;4:58;1928/III.45;

62. Tureen?, fragmentary. Small sherd of narrow shoulder with coarse *tiefstich* impressions on shoulder, apparently in vicinity of handle.

#### *Amphorae. Unless otherwise stated, all ornament is executed in tiefstich*

63. Incomplete. Amphora, burnt. Carelessly decorated with stabbed arcs and stacked W motif on neck, line of stabs at base of neck and deeply scored lines running over shoulder. Socket perforations for lug stretching over the shoulder. 85;5:13;1928/III.118;

64. Incomplete. Amphora type 2. Five lines on neck, line at base of neck, vertical lines on shoulder interspersed by chevron strips. H4;

65. Incomplete. Amphora type 2, with vertical neck and well marked rounded shoulder. Three horizontal lines under rim, pairs of stacked chevrons on neck, lozenge line on shoulder and groups of verticals on body. Possible base shown with this pot. H4 83;5:44;1928/III.116;

66. Fragmentary. Amphora, probably type 2, represented by neck sherd and body sherd. Pairs of M motif on neck and similar ornament on shoulder and body interspersed by vertical lines. H5;

67. Fragmentary. Amphora, probably type 2, represented by neck sherd only with zigzags on upper neck and horizontal ornament at base of neck. H5, Uddelermeer-Anlo style;

68. Incomplete. Amphora type 2 with vertical neck and rounded body. Min. three lines zigzag under rim, short verticals at top of shoulder with band of blocks of zigzag lines and band of blocks of vertical lines. H5 84;5:42;1928/III.117;

69. Fragmentary. Amphora type 2, similar to above, represented by four sherds. H5;

70. Fragmentary. Amphora type 2 represented by rim and neck sherd and possible body sherd. Three lines under rim, blocks of three zigzag lines on neck. Body sherd shows blocks of vertical lines. H5, Uddelermeer-Anlo style 84;5:44;1928/III.117;

71. Fragmentary. Tureen-amphora(?) with vertical neck. Three lines below rim, narrow blocks of two zigzag lines. H5, Uddelermeer-Anlo style 57;-;1928/III.82;

72. Incomplete. Tureen-amphora with vertical neck and small high shoulder. Four lines below rim with blocks of zigzag stabs on neck. Shoulder emphasized by line of stabs, blocks of verticals and zigzag panels in body. H5, Uddelermeer-Anlo style 57+;5:17;1928/III.86;

73. Fragmentary. Tureen-amphora(?) represented by sherd of rim and vertical neck and sherd of rounded body. Three lines below rim, narrow blocks of three horizontal slightly wavy lines. Body sherd shows stabs above shoulder and vertical lines below, with evidence for a lug. H5, Uddelermeer-Anlo style 57+;-;1928/III.84;

74. Incomplete. Amphora with vertical or slightly open neck and high prominent shoulder. Min. three continuous lines below

rim, horizontal blocks of min. three lines. Horizontal line at base of neck, vertical lines on shoulder, grouped in threes. No body sherds. H5;

75. Fragmentary. Amphora represented by single rim sherd showing three horizontal lines with small zigzag(s) below. H5, probably Uddelermeer-Anlo style;

76. Incomplete. Amphora with slightly out-turned rim. Three horizontal lines with three lines of stabs below. Short verticals on shoulder and below shoulder. Evidence for lug on shoulder. H5 50;5:29;1928/III.75;

77. Incomplete. Tureen-amphora with slightly conical neck and rounded shoulder (not joining). Five lines under rim and blocks of five zigzags on neck. Shoulder shows blocks of verticals ending in drop motif and separated by line of drops. Evidence for lug. H5, Uddelermeer-Anlo style 56;5:14;1928/III.81;

78. Incomplete. Tureen-amphora with slightly open neck and slight shoulder crossed by lug. Four lines below rim, band of three zigzags, verticals on lower body ending in line of drop motif. H5, Uddelermeer-Anlo style 55;5:38;1928/III.80;

79. Incomplete. Tureen-amphora with vertical neck (rim and upper neck missing) and slight shoulder. Horizontal lines and bands of oblique impressions below rim, line of stabs at base of neck and blocks of vertical lines ending in stabs separated by shorter blocks of opposed stabs on body. H5 53;5:12;1928/III.78;

80. Incomplete. Tureen-amphora with slightly sinuous profile. Three horizontal lines and two zigzag lines below rim, line at base of neck and blocks of vertical lines separated by pairs of horizontal zigzag lines. H5, Uddelermeer-Anlo style 54;5:18;1928/III.79;

81. Fragmentary. Tureen-amphora with sinuous neck. Four horizontal lines and three zigzag lines forming a net pattern on neck, line of stabs at base of neck. Single sherd of body shows vertical lines. Low footed base with stabs on feet. H5, Uddelermeer-Anlo style 58;5:19;1928/III.88;

82. Fragmentary. Amphora (probably tureen-amphora) represented by single poorly preserved rim sherd; three lines and minimum two zigzag lines below rim. H5, Uddelermeer-Anlo style 57+;-;1928/III.83;

83. Fragmentary. Tureen-amphora represented by single rim sherd showing block of minimum five horizontal grooves and body with vertical grooves. H5;

84. Incomplete. Tureen-amphora with slightly open neck and short shoulder. Circular impressions arranged in two horizontal lines below the rim with blocks of three lines of impressions on the neck. Line of impressions at base of neck and alternating long and short blocks of dots on the body. H5, Uddelermeer-Anlo style 61;5:37;1928/III.91;

85. Incomplete. Smallish, slender amphora with vertical neck, lugs and oval body. Four horizontal lines below rim, wide, shoulder length blocks of verticals ending in two lines of drops. Decorated lugs. H5 59;5:3;1928/III.89;

86. Incomplete. Smallish, slender amphora with blocks of stabs on the middle of the neck, horizontal line at base of neck and blocks of short vertical lines on the upper body, ending in stab marks. The base has widish feet. H5, late 16;5:27;1928/III.35;

87. Fragmentary. One rim sherd of tureen-amphora with slightly sinuous neck. Blocks on neck consisting of two horizontal lines and three lines of vertical impressions. Line at base of neck. H5 52;-;1928/III.77;

88. Fragmentary. Tureen-amphora with slightly sinuous neck. Three horizontal lines blocks of three lines on neck. Decoration on body includes blocks ending in drops. H5, Uddelermeer-Anlo style? 51;5:32;1928/III.76;

89. Fragmentary. Amphora represented by sherd of rim showing arches on neck and body sherd with vertical lines. Neck has slight curve. H5;

90. Incomplete. Neck of tureen-amphora with band of wide, slightly rounded zigzag on neck. H5, Heek-Emmeln style. 64;5:34;1928/III.94;

91. Fragmentary. Tureen-amphora with large zigzags on neck and band of short verticals on shoulder. H6, Heek-Emmeln style. 62;5:39;1928/III.92;

92. Incomplete. Tureen-amphora with slightly sinuous neck. Band of large zigzag on neck, horizontal line piercing small lugs, with band of short verticals on shoulder. H6, Heek-Emmeln style. 63;5:43;1928/III.93;

93. Fragmentary. Tureen-amphora represented by single sherd. Slightly curved neck, pierced lug on shoulder. Undecorated. *Laat Havelte* style. 94;5:21;1928/III.133.

*Tureen-amphorae represented by single or small numbers of sherds only which cannot be reconstructed*

94. Lug, small, rounded, pierced, at base of neck. H4;

95. Fragmentary. Tureen-amphora represented by two sherds of body. Applied pierced lug with horizontal lines, body with vertical lines. H5;

96. Fragmentary. Single rim sherd of tureen-amphora with band of min. five horizontal grooved lines below rim. H5;

97. Fragmentary. Sherd of lower part of amphora with blocks of zigzags and vertical lines (cf Nos 68, 69). H5;

98. Fragmentary. Two small sherds, possibly from shoulder and upper body of one amphora with horizontal line at base of neck, band of short verticals on shoulder and zigzag on shoulder (cf Nos 68, 69). H5;

99. Fragmentary. Amphora represented by two sherds of upper body showing blocks of vertical *tiefstich* running onto body alternating with a line of drops on the shoulder only (cf Nos 73, 77). H5;

100. Fragmentary. Amphora body similar to No. 99, represented by single sherd. H5;

101. Fragmentary. Lower part of amphora with vertical lines. H5;

102. Fragmentary. Two thin worn sherds of lower body of amphora with *tiefstich* zigzags on body. H5;

103. Fragmentary. Amphora represented by body sherd showing *tiefstich* zigzag panel. H5;

104. Fragmentary. Amphora body with *tiefstich* zigzag. H5;

105. Fragmentary. Amphora (?) with zigzag line at base of neck and vertical lines on shoulder. *Tiefstich*. H5;

106. Incomplete. Amphora, undecorated, of coarse manufacture. Vertical neck, lugs at base of neck, oval body. H5. 89;5:8;1928/III.122;

107. Incomplete. Amphora-bucket (deep pail-like form but with vestigial shoulder) with low bosses within narrow decorative band consisting of stabbed zigzag and vertical *tiefstich*. Base sherd 107a with small radial cuts may be from same pot. H6. 66;5:33;1928/III.96.

#### 4.1.2.3. *Shouldered bowls. Unless otherwise stated, these are undecorated*

108. Incomplete. Rim, neck, shoulder and low boss of shouldered bowl with gently sinuous profile. Horizontal lines on lower neck, band of short verticals on shoulder. H6 65;5:28;1928/III.95;

109. Fragmentary. Sinuous profile, irregular thickness. Line of ornament at base of neck. Well marked circular depression

in neck, function unclear. Poor condition. H7 71&72;5:6;1928/III.101&102;

110. Fragmentary. Open bowl with very slight shoulder marked by applied horizontal cut lug. Base with radial cuts. H7 69;5:11;1928/III.99;

111. Fragmentary. Sinuous profile. Applied, slightly curved horizontal cut lug. H7 68;5:36;1928/III.98;

112. Fragmentary. Sinuous profile with scar of former applied cut cordon. Fabric similar to No. 126. H7;

113. Fragmentary. Sinuous profile. Applied horizontal lugs on shoulder. H7 Van Giffen considered these sherds to belong to two pots, viz 76&77;5:20&25;1928/III.106&107;

114. Fragmentary. Slightly open neck, small but distinct shoulder. H7;

115. Incomplete. Small, thin walled shouldered bowl with slightly open neck and smoothly curving profile. H7. One sherd numbered 91;-;1928/III.124;

116. Incomplete. Two sherds, slightly conical neck. Small, low, applied boss at base of neck. *Laat Havelte?* 80;5:7;1928/III.113;

117. Incomplete. Vertical neck. *Laat Havelte* style. 95;5:41;1928/III.137;

118. Fragmentary. Small sherd of bowl with short vertical neck and slight shoulder. *Laat Havelte* style;

119. Fragmentary. Slightly open neck. *Laat Havelte* style. 95;5:26;1928/III.134;

120. Fragmentary. Slightly open neck. *Laat Havelte* style. 95;-;1928/III.136;

121. Fragmentary. Slightly open neck. *Laat Havelte* style. 95;-;1928/III.135;

122. Fragmentary. Slightly open bowl with shoulder marked by horizontal line and pierced lug. Lug is slightly bilobed. Both the perforation and the bilobe are unusual. *Laat Havelte* style. 78;-;1928/III.109;

123. Fragmentary. Slightly open neck and small but distinct shoulder. *Laat Havelte* style. 78;5:16;1928/III.110;

124. Incomplete. Sinuous profile. May have had an applied feature on the shoulder. *Laat Havelte* style. 78;-;1928/III.108;

125. Fragmentary. Sinuous profile. *Laat Havelte* style;

126. Fragmentary. Open neck and rounded shoulder. Small, horizontally perforated lug at base of neck. *Laat Havelte* style. 96;5:40;1928/III.139;

127. Incomplete. Slightly open neck and well rounded shoulder. *Laat Havelte* style. 97;5:35;1928/III.140;

128. Incomplete. Fairly squat thick walled bowl with open neck, well marked shoulder and slightly pressed out pedestal base. *Laat Havelte* style. 91;-;1928/III.130;

129. Incomplete. Rim, comparatively long neck and shoulder of large vessel. *Laat Havelte* style. 91;5:15;1928/III.129;

130. Fragmentary. Neck and shoulder sherd, possibly with applied feature. Probably similar to previous pot (No. 129). *Laat Havelte* style. 91;-;1928/III.127;

131. Fragmentary. Sherds of rim and neck of large vessel, probably similar to previous two pots (Nos 129, 130). *Laat Havelte* style;

132. Fragmentary. Vessel with slight shoulder and short slightly open neck;

133. Fragmentary. Rim and shoulder sherds of shouldered bowl. *Laat Havelte* style;

134. Fragmentary. Group of sherds including rim and shoulder fragments of shouldered bowl. *Laat Havelte* style.

#### 4.1.2.4. Funnel beakers and funnel beaker cups

##### *Funnel beakers*

135. Complete. Slightly open neck, and continuous incised lines to mid body. Found with tureen No. 49, probably in offering pit or flat grave in or under mound of *hunebed*. H2. fig. 1;1931xii1a;

136. Incomplete. Large, thick walled storage vessel with slightly open neck and round body, incised lines in groups of alternating mid belly and short lines. No sherds of base recognized. Possibly H2 1;4:52;1928/III.15;

137. Incomplete. Sherds of largish funnel beaker with grooved lines on rounded body. Reconstruction suggests base of neck D of c. 16-17 cm and mid body D of c. 21 cm. H2? 2;4:36;1928/III.16;

138. Fragmentary. Group of sherds of a largish funnel beaker, not reconstructed but probably similar to No. 136. Grooved lines on rounded body. Well polished on inside. H2?;

139. Fragmentary. Sherds of funnel beaker, rounded body with D greater than 16 cm. Irregularly grooved lines on body. H2? 3;4:32;1928/III.17;

140. Incomplete. Medium sized funnel beaker represented by large neck sherd. Slightly open straight neck with vertical impressions at base of neck. Single burnt body sherd with grooved lines possibly of same pot. 6;4:29;1928/III.23&38;

141. Incomplete. Sherds of lower body of large/medium sized funnel beaker with groups of irregularly incised lines on body. Not reconstructed, mid body D estimated at 18 cm. 100;-;1928/III.143;

142. Incomplete. Rim and body and base sherds of large funnel beaker. Not reconstructed. *Tiefstich* lines on body. Estimated mid belly D greater than 16 cm;

143. Incomplete. Sherds of medium sized thick walled funnel beaker with rounded body; incised line at base of neck and well spaced lines on body. Mid body D c. 13 cm. 4;4:57;1928/III.20;

144. Incomplete. Rim and body sherds of medium sized funnel beaker with rounded body. Incised lines. Mid body D c. 12 cm. Rim sherd has small pre-fired perforations, 1 cm apart below rim. Grooved lines, apparently in groups. Burnt sherds. Mid belly D c. 14 cm. 13;4:45;1928/III.32;

145. Incomplete. Sherds of medium sized funnel beaker with rounded body. Rim 14;4:53;1928/III.33;

146. Incomplete. Smallish funnel beaker represented by slightly open neck with line of small stabs at base of neck and horizontal *?tiefstich* line below. 9;-;1928/III.28;

147. Incomplete. Smallish funnel beaker represented by slightly open neck only. Line of stabs at base of neck and vertical decoration below. 16&19;-;1928/III.35&39;

148. Fragmentary. Medium/small funnel beaker represented by sherds of rim and neck only. *Tiefstich*, rough horizontal line at base of neck and vertical decoration on body. 12;4:48;1928/III.31;

149. Fragmentary. Medium sized, thin walled funnel beaker represented by sherds of rim, neck and body. Not reconstructed. Horizontal line at base of neck and vertical fingernail impressions below;

150. Fragmentary. Body sherd of small funnel beaker with short high shoulder. Line of stabs at base of neck, incised lines on body. 10;4:44;1928/III.29;

151. Fragmentary. Medium sized funnel beaker with rounded body represented by single body sherd with incised lines on body. Max. lower body D c. 13.5 cm. 4;-;1928/III.21;

152. Fragmentary. Medium sized funnel beaker with rounded body, represented by two belly sherds with vertical *tiefstich* lines, possibly in groups. Max lower body D c. 15 cm;

153. Incomplete. Smallish funnel beaker represented by sherds of rim, neck body and base. Reconstruction. Short high shoulder, vertical pointed *tiefstich* lines on body. Max. lower body D c. 9 cm. 24&26;

154. Fragmentary. Body sherd with high shoulder and vertical close set *tiefstich* lines;

155. Fragmentary. Medium/smallish funnel beaker with cylindrical neck and round body. Horizontal line at base of neck with groups of grooved lines on body. Polished inside. 37;

156. Fragmentary. Neck and body sherds, possibly of one smallish funnel beaker with open neck and probably short shoulder. Vertical *tiefstich* lines;

157. Fragmentary. Single sherd of small funnel beaker with horizontal line at base of neck and groups of lines of dots on body;

158. Fragmentary. Smallish funnel beaker represented only by neck with horizontal *waerstik* line under rim;

159. Fragmentary. Single sherd of short shouldered funnel beaker, lightly incised lines on shoulder;

160. Fragmentary. Single sherd of base of neck showing edge of vertical decoration. Probably small vessel;

161. Fragmentary. Single sherd of rounded body of smallish funnel beaker with rounded body and grooved lines;

162. Fragmentary. Slightly flared neck;

163. Fragmentary. Slightly flared neck;

164. Fragmentary. Slightly flared, possibly short neck;

165. Fragmentary. Irregularly finished neck of small funnel beaker.

#### *Funnel beaker cups*

166. Almost complete. Small, bilobed horizontal lug. 74;5:24;1928/III.104;

167. Almost complete. Line of stabs at vestigial shoulder. Some charring. H7. 73;5:22;1928/III.103;

168. Incomplete. Undecorated. 78;5:9;1928/III.111;

169. Incomplete. Rim, body and base sherds. No shoulder. Well smoothed fabric. Possibly charred on break;

170. Incomplete. Rim and body sherds with regular finish. Some charring over breaks;

171. Incomplete. Rim, lug and body sherds of coarse textured fabric. Lug oval in cross section. 75;-;1928/III.105;

172. Incomplete. Rim and body sherds of smooth polished black fabric. Some charring on outside;

173. Fragmentary. One rim and shoulder sherd;

174. Fragmentary. Two shoulder sherds. Black fabric with smooth finish and regular wall thickness;

175. Fragmentary. Funnel beaker cup or, possibly, small shouldered bowl. Base with small feet. One sherd 1928/III.113.

#### 4.1.2.5. *Collared flasks*

176. Fragmentary. Rim, neck and collar of flask with a short neck. Constructed by drawing up clay from the shoulder to form lower part of collar and joining rim and upper part of collar;

177. Fragmentary. Biconical, decorated. Two sherds of shoulder and body. *Tiefstich* chevrons on shoulder;

178. Fragmentary. Biconical, decorated. Two sherds, rough inner surface. Vertical lines, some of which project over shoulder. Previously identified as a funnel beaker, 11;4:51;1928/III.30;

179. Fragmentary. Probably biconical. One sherd showing groups of incised lines above shoulder;

180. Fragmentary. Three small body sherds with smooth curved external surface and very rough inside, probably collared flask. Not illustrated.

#### 4.1.2.6. *Miscellaneous necked and shouldered vessels*

181. Fragmentary. Small vessel, probably an amphora with weak profile. Two horizontal lines below rim, verticals on shoulder. Previously classed as a funnel beaker. 8;-;1928/III.25;

182. Fragmentary. Small vessel with short neck and rounded shoulder and lug(s), amphora? Three horizontal lines filling neck, blocks of verticals on body. 87;5:2;1928/III.120;

183. Fragment of neck and shoulder of small vessel with vertical lines on neck and discontinuous horizontal lines on shoulder. Tureen? amphora?;

184. Fragment of short vertical neck and rim with two horizontal lines of well spaced *tiefstich* on neck and line of finer *tiefstich* at base of neck. 4;-;1928/III.121;

185. Fragmentary. Rim and neck sherds of small short necked undecorated vessel with evidence of former lugs. Amphora?;

186. Incomplete. Rim and body sherds of plain vessel of well finished fabric. Distinct vertical neck and smoothly rounded body. sherds 91;5:10;1928/III.128;

187. Fragmentary, one sherd. Thin walled vessel with distinct neck (no rim preserved) and rounded oval body. 90;-;1928/III.123;

188. Fragmentary. Vertical neck (no rim preserved) and well marked smoothly rounded body. 91;-;1928/III.126;

189. Fragmentary. Vertical neck with at least one small lug at base of neck. Sharp out-turn to shoulder. 91;-;1928/III;

190. Incomplete. Shoulder, body and base sherds of vessel with distinct neck angle and possibly small lugs;

191. Incomplete. Open neck and well marked shoulder. 91;-;1928/III.125;

192. Fragmentary. Shoulder sherd similar to above but with prominent unusual grits. 91;-;1928/III.125.

The remaining material consists of single featured sherds or portions of pots which may belong to the above but are too incomplete for further discussion. These include three decorated rim fragments of pots of unknown type, 29 undecorated rim fragments which have not been identified to the pots described above; 21 decorated but otherwise featureless body sherds; 41 bases, chiefly represented by single sherds and in some cases, small edge fragments only, including two pedestal bases with vertical decoration, pedestal bases without decoration, bases with separate feet, and bases with radial cuts; featured sherds including two lugs and neck sherd with perforation from neck and shoulder, nine body sherds from below the shoulder of tureens or jugs; and eight groups of sherds representing significant parts of the lower portions of otherwise unidentified vessels. Finally there are c. 130 small featureless sherds not included in the above.

#### *Decorated rim sherds*

193. Worn fragment, thin walled. Horizontal *tiefstich*. Probably amphora;

194. Fragment, small rim with blocks of at least three lines of horizontal heart shaped impressions;

195. Fragment with line of small impressions immediately below rim;

*Undecorated rims sherds*

196. Gently curving rim and neck sherd;

197. Funnel beaker neck?;

198. Funnel beaker neck with slight flare?;

199. Tip of flaring rim;

200. Rim sherd, funnel beaker?;

201. Rim and neck;

202. Rim and full neck. H7 shouldered bowl?;

203. Two rim sherds and one neck sherd, very worn. Possibly shouldered bowl;

204. One rim and neck sherd, possibly shouldered bowl. Also six body sherds and one base fragment;

205. Rim sherd with broken lug;

206. Rim sherd, possibly from small bowl. D c. 8.5. 48;4:31;1928.III.73;

207. Small fragment;

208. Fragment;

209. Fragment, possibly shouldered bowl;

210. Fragment;

211. Fragment;

212. Fragment, flaring rim top;

213. Fragment, rim tip;

214. Fragment upper part of vertical neck. Funnel Beaker?;

215. Fragment. Rim top folded over to finish;

216. Two fragments;

217. Fragment;

218–222. Small rim fragments of five vessels;

223. Two small fragments, one of which may have a small boss on the neck;

224. Small fragment narrowing immediately below rim. This sherd is numbered 1928/III.114 but is not part of No. 33.

*Other featured sherds* (body sherds of pots not otherwise recognizable)

225. Base of gentle junction of neck and shoulder with tiefstick zigzag;

226. Body sherd with vertical *tiefstich* lines;

227. Two body sherds with vertical *tiefstich*, possibly from amphora;

228. Bodysherd with group of *tiefstich* lines, probably amphora;

229. Neck sherd, v. worn, with horizontal lines under the rim and undecorated zone;

230. Neck sherd, v. worn, with horizontal lines and largish zigzag decoration;

231. Body sherd with vertical *tiefstich*;

232. Body sherd with end of chevron and vertical line ornament;

233. Body sherd, vertical *tiefstich*;

234. Body sherd fragment;

235. Body sherd fragment, possibly from amphora with fine vertical *tiefstich* ending in a drop pattern;

236. Body sherd fragment, vertical *tiefstich*;

237. Body sherd from lower body with end of vertical *tiefstich* ornament;

238. Two body sherds: a) possibly from below a lug, fine *tiefstich* chevron strip; b) group of *tiefstich* verticals;

239. Body sherd fragment, ornament pattern not recognizable;

240. Body sherd fragment, horizontal zones and vertical lines.

*Tiefstich*;

241. Neck fragment, horizontal *tiefstich*, pattern not recognized;

242. Body sherd fragment, *tiefstich*;

243. Body sherd fragment, apparently with zipper strip and chevron;

244. Neck fragment, traces of horizontal *tvaerstik* line;

245. Fragment (not ill.).

*Bases*

246. Large piece of footing base with vertical *tiefstich* decoration. External D 11.5 cm;

247. Smaller footing base similar to above. D 7.75 cm;

248. Base with small feet. Est D c. 8 cm, estimated number of feet, 15;

249. Fragment of base with small feet, est D 6 cm. Worn;

250. Fragment of base with feet;

251. One small foot;

252. Footring base, undecorated. D 6 cm;

253. Simple base with radial cuts. D ?10 cm. H?;

254. Simple base with radial cuts, probably finger nail. D ?10 cm. H?;

255. Fragment of base with pedestal. D 6cm cm;

256. Fragment of thin walled base with pedestal. D pos c. 8 cm;

257. Fragment of neatly made base with low pedestal and shallow splay. Est D 10 cm;

258. Fragment of simple thin walled base with shallow splay. Est D 10 cm. H?;

259. Fragment of simple thin walled base with very shallow splay. Est D c. 10 cm;

260. Four fragments of base with small pedestal. Also one body sherd. D c. 9 cm;

261. Two fragments of base with small out pressed pedestal and shallow splay;

262. Fragment of simple thin walled base. D c. 6 cm;

263. Fragment of thin walled simple base. D c. 6 cm;

264. Large part of simple base with moderate splay. D 4.75 cm;

265. Complete simple base with moderate splay. D 6 cm. Also body sherds;

266. Fragment of simple base with moderate splay. D 6 cm;

267. Fragment of simple base with moderate splay. D 6 cm;

268. Fragment of simple base with moderate splay. D 9–10 cm;

269. Fragment of simple base with moderate splay. D 9-10 cm;

270. Fragment of simple base with widish splay;

271. Fragment of base with thickish walls and wide splay. D 9–10 cm;

272. Two fragments of simple base with moderate splay. Est D 6 cm;

273. Fragments of thick walled simple base with moderate splay. Also wall sherds;

274. Fragments of simple base with moderate splay. Wall sherds and one possible rim sherd. D c. 6 cm;

275. Fragments of pedestal base. Also sherds, possibly from same vessel with small lug. D 11 cm;

276. Complete simple, thin walled base with wide splay. D 6.25 cm;

277. Base, almost complete, but no side edges. D 7 cm;

278. Fragment, thin walled. No side edges. D c. 8 cm;

279. Fragment, thin walled. No side edges. D 5-6 cm;

280. Three poorly preserved thick walled fragments of simple base with wide play;

- 281. Small fragment of simple base with no splay. Pail?;
- 282. Fragment of thin walled base. No edge;
- 283. Fragment of thickish walled base. No edge;
- 284. Fragment, moderate to wide splay;
- 285. Fragment, moderate to wide splay;
- 286. Fragment, moderate to wide splay;
- 287. New base;
- 288. New base.

#### *Other sherds with features*

- 289. Neck sherd with perforation for applied lug;
- 290. Horizontal hand grip with radial cuts, from H6 or H7 cup of bowl;
- 291. Part of now detached cordon.

#### *Groups of distinctive sherds*

292–299. Of the eight partly reconstructed undecorated lower parts of otherwise unrecognized vessels, No. 292 is possibly from a shouldered bowl (H7), No. 293 is possibly from an amphora of H5 or 6 and No. 294 is fine, very regularly finished fabric; both curvature and fabric suggest a Horizon 5 amphora. Nos 295–299 appear to be from the lower bodies of tureens. Nos 300–306 are non-diagnostic;

- 307. C. 130 featureless body sherds, mostly thumbnail sized.

#### 4.1.3. *The typology of the TRB pottery*

The assemblage includes 10 pails, 23 bowls and dishes, two jugs, 11 or 12 tureens, 42 amphorae of all types, at least 25 shouldered bowls, 31 funnel beakers (+ three probable rims), 10 funnel beaker cups and five collared flasks. There are also a number of miscellaneous vessels with necks, well marked shoulders and/or lugs.

#### *Pails* (Nos 1, 7, 5, 6, 8, 9, 11, 12, 10, 21)

Ten pails have been identified from Horizons 2, 3 and 4. No. 1 has Horizon 1 type ornament with an upper zone (rim not preserved) including slightly tapering ladders and a lower zone with broad zigzag panels. The closest parallel for this is a pail from grave F at Zeijen, but ladders also occur on a pail from Rijs, F1 (Brindley, 1986b: fig. 4, Nos 23 & 24, resp.). Eight pails have Horizon 3 ornament with well-defined panels (No. 12 is represented by a single sherd of upper body but as this includes horizontal *tvaerstik*, it is likely that the lower body included well-defined panels). Pail No. 5 has a number of traits indicating an early stage in Horizon 3 ornament, including an upper zone defined by zigzags with the lug within the upper zone and a lower zone apparently without defined panels which includes a broad block of zigzag and a vertical *tiefstich* line as an isolated element. Pails Nos 6–9 and the bodysherd No. 11 are all vessels with defined panels. No. 9 has three lines of *tvaerstik* below the rim and multiple horizontal lines at the top of the lower zone, both suggesting that this is the latest of the group. Pail No. 10 has Horizon 4 ornament. The flaring upper neck

and two bands of elements in the wide upper zone part are closely paralleled by a pail from Noordlaren G1 (Bakker, 1982/83: No. 42). It is possibly a local type.

#### *Dishes* (Nos 4, 28, 27, 33, 34)

There are five fairly shallow, straight-sided bowls or dishes. No. 4 is represented by two very worn sherds of the lower zone with panels of random vertical elements of Horizon 3 type. No. 18 has *tvaerstik* blocks under the rim (Horizon 4). No. 27 is undecorated; an apparently similar vessel from Emmeln (No. 875; Schlicht, 1968) suggests that this is a Horizon 5 type. Nos 33 and 34 have narrow applied cut cordons indicating Horizon 7.

#### *Bowls*

(Decorated) Nos 2, 3, 13, 14, 15, 16, 17, 19, 0, 22, 23, 24, 25, 26; (undecorated) Nos 28, 29, 30, 31, 32, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45.

Two bowls (Nos 2 and 3) have Horizon 2 ornament. The former is decorated with vertical ladders with widely spaced bars and is generally similar to a bowl from the stone cist at Diever (Brindley, 1986b: fig. 4, No. 5). No. 3 has simple, rather deeply impressed linear ornament in two wide zones. Nos 13, 14, 15, 16, 17 have Horizon 3 ornament. No. 13 has paneled ornament, No. 16 has two zones of simple vertical blocks. The remaining bowls cannot be reconstructed. No. 22 is possibly from the lower zone of a bowl similar to No. 16. No. 20 includes blocks of horizontal *tvaerstik* and vertical *tiefstich*, but whether this belongs to an upper zone or a lower zone is unclear. Only one bowl (No. 19) has Horizon 4 ornament with a compressed upper zone of horizontal elements. Horizon 5 type ornament is present on Nos 25 and 26 which have similarly arranged horizontal and zigzag lines above vertical blocks. No. 24 is a rim sherd with discontinuous horizontal lines under the rim, possibly blocks. One bowl (No. 32) is identified as Horizon 7 on the basis of a long low cordon-like feature close to the rim. There are also three undecorated bowls with horizontal small lugs below the rim (Nos 30, 31, 32) and a vessel with a slight lip to the rim and a small horizontal lug (No. 33). These bowls do not appear to have obvious dated parallels but probably belong to the later horizons of development. Nos 36, 38–45 are undecorated bowls distinguished by rim sherds. They cannot be closely dated. The small shallow bowls, Nos 35 and 37, are probably scoops.

#### *Jugs* (No. 47, possibly No. 47)

These two vessels are represented by single small sherds; the former is a sherd of a jug with well marked shoulder similar to jugs of Horizon 2 type (Hooghalen D54b (Brindley, 1986b: fig. 4:9)); the latter is a fragment of a thick, high-arched handle with round cross-

section and a vertical *tvaerstik* line, possibly from a fairly thick jug.

#### *Tureens* (Nos 48–62)

Although included here, No. 50 is more properly an amphora (no lugs preserved), and Nos 48 and 61 probably had originally two handles although in each case only one is preserved. Two tureens (Nos 48, 49) belong to Horizon 2. No. 48 is an exceptionally large, well-made vessel with a wide shoulder and a sharp shoulder angle and ornament that includes broad panels of zigzags in both profile and decoration very similar to jugs from Zeijen Grave A, Heveskesklooster G5, Exlo D30 (Nos 28 and 29). No. 52 has an unusually high placed handle and vertically hatched triangles and is similar to a more crudely formed tureen from *hunebed* D40 (No. 13). Nine of the tureens have Horizon 3 type ornament. Nos 50, 51 and 52 have paneled decoration on and over the shoulder and groups of four vertical lines on the neck (Nos 50, 52, shoulder sherd only No. 51). No. 50 is generally similar to but probably earlier than the amphora from the flat grave of Werlte, Kr. Aschendorf/Hümmling (Schlicht, 1968: p. 59, fig. 7) and Emmeln Nos 16 and 17 (Schlicht, 1968). Six tureens (Nos 53–58) are represented only by small parts of the necks. These all appear to be fairly similar, with sparse neck decoration, only one of which may have had continuous neck ornament (No. 56), the others having small groups of verticals or in one case an incomplete element, possibly stacked 'W' or 'V' (No. 53). Three tureens have Horizon 4 features including *tvaerstik* decoration, small shoulders and arches on the neck (Nos 59–61). Tureens of this form are common (e.g. Glimmen G2, especially Nos 270–272). Nos 59 and 60 are possibly a 'service set'. One other tureen may be represented by a single small shoulder fragment (No. 62) with deeply impressed broad *tiefstich* ('pseudo-triangle').

#### *Amphorae* (Nos 63–106)

Amphorae form the largest type group. 44 vessels have been identified, of which 28 can be partly or more fully reconstructed and a further fifteen identified only on the basis of single, usually small but characteristic, sherds. The majority are of Horizon 5 type; Nos 64, 65, and 74 can be placed in Horizon 4; Nos 91 and 92 to Horizon 6. Several variations occur, including type 2 amphora and tureen-amphora (Brindley, 1986: definition) and variations of these. The type 2 amphorae range from those with well curved bodies (e.g. Nos 64, 65, and 106) to vessels with an oval body and small, high shoulders (Nos 85, 86), the height and size of the former having more in common with type 2 amphorae, and the high small shoulder of the latter group having more in common with the tureen-amphora group. The tureen-amphora group proper include examples with gently flowing

profiles and slightly out curved necks, and vessels with straight necks and more clearly marked junctions between the neck and shoulder.

There are six type 2 amphorae with well rounded shoulders (Nos 63, 64, 65, 68, 69, and 97) and at least one other is represented by small sherds (No. 98). The small lug, No. 94, is also from an amphora of this type. Nos 64 and 65 are Horizon 4 type, Nos 68, 69 and 97 have blocks of zigzags of Horizon 5 type. Two other vessels (Nos 85 and 86) have smaller shoulders and linear decoration only confined to the upper body. No. 106 is undecorated but the heavier fabric and lugs suggest Horizon 5 (Beekhuizerzand). Among the tureen-amphora group, zigzag blocks, dot blocks and less commonly continuous zigzags are the main motifs employed (other than straight lines). Sherds Nos 99 and 100 probably derive from tureen-amphora (cf. Nos 73 and 77). Nos 78, 80 and 81 (zigzags) and Nos 87 and 88 (dot and linear blocks) have slightly curved necks and Nos 71, 72 and 77 (zigzags) and Nos 73, 74, 84 (various ornament) have straight necks. Rimsherds Nos 62, 82, 83 and 96 are from similar amphorae. Nos 90, 91 and 92 all have large zigzags on the neck (Heek-Emmeln style). No. 90 is Horizon 5. Nos 91 and 92 represent Horizon 6 with ornament concentrated on the neck shoulder junction and unemphatic profiles. An undecorated lugged vessel No. 93, is either Horizon 5 or 6. The remaining five vessels (Nos 66, 67, 70, 79, and 95) are too miscellaneous and the six fragments (Nos 89, 101, 102, 103, 104, 105) too incomplete for further description.

#### *Shouldered bowls* (Nos 107–134)

The shouldered bowls include one vessel more properly a shouldered bucket (No. 107), one bowl with small lugs and decoration (No. 108) and one vessel (No. 109) with a single line of square impressions on the shoulder. The group includes some large vessels with high necks (Nos 128–131), and many bowls with slightly open necks or gently sinuous profiles (e.g. Nos 109, 119, 120 127). Two or possibly three bowls have applied cut lugs (Nos 110 and 111, No. 112 has the scar of what appears to be a former cut lug). Nos 122 and 126 have horizontally perforated lugs and No. 116 has small button lug. As a group, the Tinaarlo shouldered bowls differ from the shouldered bowls from Noordlaren G1 and Glimmen G2 (shouldered bowls are not present at Annen D9) which tend to be shallow wide bowls with vertical or slightly conical necks and more frequently bear ornamentation on the shoulder.

#### *Funnel beakers* (Nos 135–152)

Thirty-one funnel beakers have been identified on the basis of distinctive features. Eleven funnel beakers can be more-or-less reconstructed (Nos 135–138, 140, 142–145, 153, 155). The necks of seven other

funnel beakers (Nos 146–149, 162, 163, 165), and the bodies of another six (Nos 150, 152, 156, and 161, this last has neck and body sherds, but some doubt exists as to whether they are the same pot) can be likewise reconstructed. There is insufficient of the remainder for reconstruction. Neck decoration is uncommon. One funnel beaker has decoration below the rim (No. 158). Four vessels have a separate line of individual impressions at the base of the neck (Nos 146–148, 150) rather than a horizontal line. At least thirteen and probably sixteen have bodies with continuous lines to well below the belly (Nos 135, 137, 140, 142, 144, 145, 150, 151, 153, 154, 156, 161, and probably Nos 143, 147, 148) and five have lines in groups (Nos 136, 141, 152, 155, 157). The ornamentation on the remainder of the decorated funnel beakers cannot be reconstructed. The slightly open straight necked, rounded belly funnel beakers are more characteristic of Horizon 2 pottery in general and the more flared high shouldered vessels are more characteristic of the style of Horizons 3 or 4 pottery.

Funnel beakers belong to the earlier phase of activity at the site, namely Horizons 2, 3 and 4. As a group, they show a degree of consistency which suggests that they belong to a continuous but possibly not extended period of time; i.e. large neck zigzags do not occur. These are more common in hunebedden where activity stretching across Horizon 4 and into Horizon 5 is shown by other pot types (Glimmen G2 and Emmeln)

#### *Funnel beaker cups* (Nos 160–175)

Ten funnel beaker cups have been identified, two of which can be reconstructed more or less fully (No. 167, but no lug found and No. 166, reconstructed previously with two lugs, here with one, but no evidence either way). Nos 168–170 and 172–175 have smooth surfaces and are sometimes glossy. No. 177 is rough textured and not polished, the fabric is coarse and it has been identified as a funnel beaker cup on the basis of its apparently small diameter and plug lug. No. 167 has a line of irregular stabbed decoration. Similar ornament occurs on a funnel beaker cup found at Allardsoog, Gem. Opsterland (Bakker & Van der Waals, 1973: fig. 10.5) in what may have been a flat grave with a Horizon 7 shouldered bowl, although details of the find circumstances were not recorded. Nos 168, 172, 173, 175 have slight but definite vestigial shoulders. No. 170 has an almost unmarked shoulder. Bases of three cups have a very small pedestal. A base with very small low feet may belong to No. 175, but does not actually join. An unusual feature of this group is that three vessels (Nos 167, 170, 172) have traces of soot adhering to sherds. The sooting is on the outside of Nos 167 and 172, but covers one broken edge of No. 170, indicating that the vessel was deposited in broken condition. In addition to these cups, there is an

isolated lunate shaped plug lug (F1) with cuts on the edge. The fabric is similar to Nos 169 and 173. Funnel beaker cups developed during the later stages of Horizon 5 development and continued to be made through Horizons 6 and 7. These horizons are represented at D6a. Closer dating is not possible.

#### *Collared flasks* (Nos 176–180)

Parts of four or possibly five collared flasks have been identified. At least three of these (Nos 177–179) are decorated biconical flasks. Only one necked collar is preserved (No. 176, no body sherds). The fifth vessel is probably small, spherical and undecorated (No. 180). It is identified on the basis of three sherds with smooth exterior, and a markedly contrasting rough and wrinkled inner face showing where clay has been folded and shaped, thick walls and small diameter. Collared flasks cannot be closely dated; the decorated vessels probably do not belong to either Horizon 6 or 7; stacked chevrons (No. 177) occur most commonly on vessels of other types of H3 and H4.

#### *Miscellaneous necked and shouldered vessels* (Nos 181–192)

There are twelve of these, four with decoration (Nos 181–184). Some have evidence for lugs (Nos 182, 185, 189 and possibly 190). They do not form an integrated group.

## 4.2. Non-TRB pottery

Five sherds of Late Neolithic pottery. All are small sherds:

308. Small sherd of basal angle of bell beaker of maritime type. This type of pottery dates to c. 4000 BP. 103;4:45;1928/III.146;

309. Small body sherd with horizontal cord impressed lines. EGK beaker;

310. Rim sherd of large beaker with paired fingernail impressions. 104;5:4;1928/III.147;

311. Small body sherd of beaker pottery with bands of finger pinched and nail impressed ornament;

312. Sherd from junction of neck and shoulder of beaker pottery. Vertical fingernail impressions arranged horizontally on neck and shoulder. Van Giffen identified this as part of a funnel beaker. 17;4:56;1928/III.36

## 4.3. Flint and stone artefacts

The Van Veldhuizen collection included a polished flint axe which has subsequently disappeared. According to Van Giffen's inventory, the following were found during his excavation.

### 4.3.1. Axes

313. Complete axe of Scandinavian flint. High trapezoidal in outline with flat butt and gently curved cutting edge, thin butted

with 'rectangular' cross section. All four sides polished. L 18 cm. Brandt's Type 4 (1967: pp 94–101: *dünnackige Flint-Rechteckbeile*) and to the 'older type' of thin butted axes as defined by Becker (1957). The cutting edge has been neatly resharpened. 1928/III.148;

314. Butt half of a burnt flint axe of Brandt's Type 4. L 8.4 cm. Cutting edge fragment No. 317 does not belong to this axe. Found in front of the entrance to the chamber. 1928/III.151;

315. Complete axe of flint. Slightly convex broad sides, slightly rounded butt and straight cutting edge. Oval cross section, butt slightly damaged. L. 6.8 cm. Brandt's Type 3 (1967: pp 90–94: *dünnblattige Flint-Ovalbeile*). Found in the chamber area. 1928/III.149;

316. Complete axe (L 9.5 cm) of white, fine grained stone of unidentified type (not quartzite, *pace* Van Giffen; see also Beuker et al., 1992: p. 137, note 3). Brandt's Type 5 (1967: pp. 102–108: *'Lydit'-Flachbeile*). Found in front of the entrance to the chamber. 1928/III.152;

317. Part of the cutting edge and side of a large flint axe with rectangular cross section and polished sides. Badly damaged and burnt. The surviving part of the side is straight and polished. Possibly Brandt's Type 4. The axe may have been about the same size as No. 313. Found in the chamber area. 1928/III.150;

318. Large fragment from a flaked roughout of an unfinished axe of semi-translucent grey flint. The fragment retains parts of two well-flaked faces.

Axes of Brandt's Types 3 and 4 belong to the TRB culture (Ter Wal, pers. comm.). Large and complete axes of Brandt's Type 4 are found infrequently in *hunebedden*. They are more common in small hoards. A comparable axe was found at D19 near Drouwen (Deunhouwer, 1983: fig. 2, No. 61). Deunhouwer also mentions that burnt fragments of both finished and unfinished Type 4 axes were found on the same site (p. 26, Nos 53–57; 28). One of the tureens (No. 125) illustrated by Staal-Lugten (1976: fig. 2) from this site suggests that some Horizon 2 pottery is present. Burnt fragments of a Type 4 axe were found in a pit with Horizon 1 pottery between the chambers under the mound of Emmen D43 together with some Horizon 1 or 2 pottery and Bakker also mentions an old find of a less typical example from Zeijen D5 (1979: p. 167, note 5:8, no pottery is known from this site). Axes of Type 5 occur both in TRB and EGK contexts. Completely polished examples, such as No. 313, are characteristic of the TRB. Only one other example of an axe of *'Lydit'* is known, from the *hunebed* Annen D9 (De Groot, 1988: No. 155).

Fragments of burnt flint axes have also been found at *hunebedden*, including D14 near Eext (unpublished excavation, Van Giffen, 1927), D52a near Diever (reexcavation Lanting, 1988, pers. comm.), D19 Drouwen (Deunhouwer, 1983: pp. 26, 27) and Emmen D43 (Bakker, 1979: p. 190).

#### 4.3.2. Other flint and stone artefacts

##### Hammer axe

319. Butt fragment of a hammer axe of diorite (Van Giffen, 1944). 1928/III.153.

##### Arrowheads

320–334. Fifteen transverse arrowheads of grey-coloured, semi-translucent flint;

335, 336. Two round scrapers. No. 336, now incomplete, is made on a flake from a polished axe. The polish is visible on the dorsal face;

337. Sickle fragment, broken and burnt. One long edge re-touched. Gloss. 19228/III.174;

338. Blade fragment, made from polished axe. 1928/III.180; 339–342. Four *bikkels* or strike-a-lights;

343. Strike-a-light;

344. Sickle segment of grey, opaque flint made on a flake of a polished axe. Both short ends are neatly finished. The serrated edges show slight traces of gloss. Described in the report as "losse vondst" (Van Giffen, 1944: fig. 1). Neither the finds books nor the field drawings indicate where this object was found. It may have been a stray find from the excavation or found by a visitor. It is of LN date (1928/III.158);

345. Six pieces with polished or flaked surfaces of axes, five are flakes (inc. 1928/III.79–82) and one is a core (1928/III.83).

The remainder of the flint includes:

- eight pieces with some retouch (inc. 1928/III. 175);
- eight pieces which are blocks or cores (inc. 1928/III. 77 and 78);
- two flakes which fit together.
- 63 miscellaneous pieces (1928/III.184).

In addition to this material, the documentation cited above refers to an axe, a battle axe, and a large number of transverse arrowheads collected by visitors. These artefacts have not been located.

#### 4.4. Ornaments

346. Stone pendant. Described in the letter from Van Veldhuizen to Van Giffen (1944) as of black stone with a hole bored through it. A sketch, reproduced here was included with the letter.

Amber and jet. Four small beads were found in the area of the chamber:

347–349. Three disc-shaped beads of amber with cylindrical central perforations (1928/III.186–88);

350. One cylinder-shaped jet bead with cylindrical perforation (1928/III.187).

These objects have not been examined. The original drawings are reproduced here.

Jet and amber beads, probably of imported raw materials, are found frequently in *hunebedden*, the numbers reflecting accurately the type of excavation (e.g., treasure hunting, scientific examination with/without sieving).

#### 4.5. Bone

351. Five small fragments of burnt bone (human skull, identified by L. van Es, Groningen) weighing 9.3 g. Five other undetermined fragments of burnt bone weighing 10.2 g.

This material is probably the remains of cremated burials from the chamber. The very small quantity of bone is typical of this area where bone, either fresh or burnt, does not survive long in the acid soils.

#### 4.6. Modern artefacts

352. Fragment of granite boulder with cylindrical bore hole showing use of gun powder during destruction of the stone from the monument;

353. According to Van Giffen, a fragment of the stem of a clay pipe (1928/III/196) was found with the other finds in the chamber area. He describes this as seventeenth or eighteenth century date. This object cannot now be found.

### 5. ACTIVITY AT THE SITE

#### 5.1. TRB burial record

It has been suggested that the large quantity of pottery at many *hunebedden* resulted from the deposition of groups of pottery at intervals rather than the deposition of single vessels on a frequent basis (Brindley, 1986a). As support for this, the wide variety of contemporary pot types suited to different but often complementary functions can be cited. The absence of strict rules governing the quantities and combinations of pots and the differences in the quality of the pottery suggested groups of people using their own possessions rather than small numbers engaged in a strict ritual involving a lot of pottery. Finally, differences in pot types and combinations of pots which occur at different times suggests that while the *hunebedden* continued to be used sometimes for several hundreds of years by the same cultural group, the actual type of activity evolved over that period. Brindley (1997) suggested that, initially, offerings may have been left in larger storage vessels, that subsequently Horizon 3 and 4 pottery suggests feasting with a wide range of serving vessels used for eating, drinking and serving being left behind at the tomb and a small element of ritual, that the Horizon 5 pottery reflected a much greater emphasis on liquid goods although whether these were consumed or left behind as offerings is unclear, and finally that the Horizon 7 pottery appeared to reflect a greater role for offerings left with the dead. The pottery from D6a is discussed by Horizon with this in mind.

The pottery from D6a seems to be representative of the original contents of the chamber although the proportion of new pots amongst the Van Veldhuizen collection was uncomfortably high (excluding the bases, near 60% were not represented amongst the excavated pots). When the pottery is examined by Horizon, it is clear that Horizon 4 pottery is scarcely represented although Horizons 3 and 5 occur in quite large numbers. At other sites, e.g. Noordlaren G1 and Glimmen G2, gaps in activity could be identified in the sequence of deposition. These gaps were well defined; at Noordlaren, stretching from early Horizon 4 until Horizon 7, and at Glimmen G2, stretching from mid? Horizon 5 to Horizon 7. At D6a pottery from Horizons 2, 3 and early 4, and from 5, 6 and

early 7 are present, but there is a diminution in the quantity of pottery from Horizon 4. What is not clear is whether this is just a rather greater irregularity in an already episodic pattern of activity or something more definite. In either event, the activity is described here as reflecting two phases, the first coinciding with the pottery from Horizons 2–early 4 and the second encompassing material from Horizons 5–early 7.

#### *Horizon 2 (Nos 1–3, 46–49, 135–139)*

The construction of the *hunebed* can be placed during the currency of Horizon 2. The earliest pottery from the chamber includes the very large two handled tureen (No. 48) and pail (No. 1), the jug represented by a single shoulder sherd with ladder decoration (No. 46) and the bowl with ladder decoration (No. 2). Four funnel beakers with comparatively thick walls, rounded low shoulders and grooved rather than *tiefstich* lines (Nos 136–139) may also belong to this horizon of activity. Finally, a thick handle with a fairly crude line of *tvaerstik* may also belong to this stage (No. 47). Together with the Brandt's Type 4 axe of Scandinavian flint (No. 313) and possibly also the axes Nos 314 and 317, these represent the earliest material in the chamber. At about the same time, some material was also deposited in pits or possibly flat graves around the chamber. The tureen No. 49 and funnel beaker No. 135 were found southwest of the chamber, most likely in a pit or grave at the foot of or just below the edge of the mound. The small but almost complete bowl (No. 3), because it is virtually intact (the basal piece may have been missing before deposition), may also have been recovered from a pit in or under the mound. All the vessels found in the chamber are fairly large and may have been used to contain offerings.

#### *Horizon 3 (Nos 4–9, 11–17, 19, 21, 50–58) and possibly also Nos 22, 23)*

This material includes one dish (No. 4), seven pails (Nos 5–9, 11, 12 and probably 21), six bowls (Nos 13–17 and probably 19), one amphora (No. 50), eight tureens (Nos 51–57 and possibly 58) as well as an unknown number of funnel beakers and collared flasks. Stylistically this material seems to have followed directly on from the Horizon 2 pottery. The combination of larger bowls with small bowls, and scoops and smaller sized funnel beakers suggest feasting (serving and consumption of food and drink) combined with a continuation of a tradition of offering suggested by the comparatively large number of pails. It is not possible to suggest sub groups on the basis of decorative style which could represent a single episode as was possible at the *hunebedden* D30 and D40 (Brindley & Lanting, 1992: p. 139).

*Horizon 4 (Nos 10, 18, 20, 24, 59, 60, 61, 64, 65, 94)*

This activity continued with a small quantity of Horizon 4 type pottery. In addition to any funnel beakers, the eight or possibly ten vessels include a pail (No. 10), a dish (No. 18), a bowl (No. 20) and possibly a second bowl (No. 24), three tureens (Nos 59–61), and as a new element, two or three type 2 amphorae (Nos 64, 65, possibly a third indicated by an isolated lug No. 94). All the tureens and bowls (with the possible exception of No. 24) show features which suggest an early stage in Horizon 4 ornamentation. The amphorae Nos 64, and 65 have decoration of a type that has not been found in closed associations or small assemblages and is therefore not closely datable at present. Block pattern decorated bowls are not represented. Large numbers of block patterned bowls were found at G2 and Emmeln, both sites where activity continued throughout Horizon 4 and into Horizon 5. The relatively small quantity of Horizon 4 material and the absence of block patterns are the main reasons for suggesting that activity at the site ceased for a time. As regards the forms of activity which may be represented by this group of pottery, the combination of bowls, tureens and possibly some funnel beakers continue to suggest communal feasting. The amphorae anticipate a greater emphasis on liquid rather than food stuffs which came to dominate the pottery record in the following phase of activity.

*Horizon 5 (Nos 25, 26, 66–90, 95, 97–100; other possible amphorae, Nos 96, 101–105)*

A second phase of more-or-less continuous activity is introduced by the large quantity of decorated Horizon 5 pottery. This Horizon is represented almost entirely by amphorae of various forms and sizes suited primarily to the storage, serving and possibly consumption of liquids. The decorated pottery includes two bowls (Nos 25 and 26) and at least thirty amphorae (Nos 66–90, 95, 97–100; other possible amphorae, Nos 96, 101–105). Uddelermeer-Anlo style ornament far outnumbers Heek-Emmeln style ornament. Zigzags of one form or another occur on almost every vessel. One amphora is decorated in the Heek/Emmeln style (No. 90) and thirteen amphorae (nine with zigzag Nos 70–72, 75, 77, 78, 80–82; four with narrow horizontal blocks, Nos 73, 84, 87, 88 and one bowl (No. 25) are in the Uddelermeer-Anlo style. Uddelermeer-Anlo style occurs on both sinuous profiled tureen-amphorae as well as those with vertical neck and round shoulder. There is no clearcut division between the pottery from Horizons 5 and 6; Nos 86–88 have rather compressed ornament on the neck which, at least on No. 86, is confined to a narrow band on the shoulder.

The Horizon 5 pottery suggests a change in the form of activity practised at the site. The identifiable (=decorated) vessels are almost entirely types which are most suitable for liquids; there are only two, smallish, bowls. It appears that when activity resumed at D6a, its form had changed from one which included both offerings and feasting to one that placed more emphasis on liquids, whether for consumption or as offerings. The role of the undecorated pottery is unclear; it is difficult to assess how much of the undecorated, sinuously profiled pottery (see below, 'Laat Havelte' pottery) belongs in this Horizon although at least one undecorated amphora (No. 93) should probably be included here.

*Horizon 6 (Nos 91, 92, 107, 108)*

Horizon 6 ornament occurs on two amphorae (Nos 91, 92), a shouldered pail (No. 107) and a shouldered bowl (No. 108). All four vessels show the typical compression of ornament into a band on either side of the neck/shoulder junction or to an equivalent narrow band some distance below the rim. Little is known of the undecorated pottery but some of it is likely to belong to this Horizon and may even have formed a significant proportion of its repertoire (see below, 'Laat Havelte' pottery). Because the range of types in use from this time forth is unknown, it is difficult to reconstruct what forms of activity may have taken place. The amphorae and the shouldered pail probably continue the preferences of the previous Horizon, the shouldered bowl may anticipate the move towards a greater role for shallow, open bowls during the last stages of the TRB, possibly functioning as containers for offerings. The funnel beaker cups suggest the drinking of a liquid dispensed from a larger container, but in contrast to the earlier use of funnel beakers, these occur in comparatively small numbers only.

*Horizon 7 (Nos 32–34, 109–112, 167)*

The following have been identified with Horizon 7, on the somewhat tentative grounds of having either cut cordons or long narrow low lugs or a line of ornament consisting of rough stabs or impressions: two open dishes with cordons (Nos 33, 34), a bowl with a long low cut lug (No. 32), a bowl with a very slight shoulder and a long, low, cut lug (No. 110), two shouldered bowls with sinuous profile and long, cut lugs (Nos 111, 112), a shouldered bowl with sinuous profile and a line of rectangular impressions on the shoulder (No. 109), a funnel beaker cup with a line of stabs on the vestigial shoulder (No. 167). The fine, highly finished fabric, narrow panels of shoulder ornament and vertical or slightly conical necks which usually occur on Horizon 7 pottery are absent.

One possibility is that the D6a pottery falls on the boundary of the two Horizons. The small quantity of pottery and uncertainty about its dating and possibly associated pottery make discussion of its possible function difficult. The apparent absence of small vessels for individual use may be significant.

#### 'Laat Havelte' pottery

The pottery from D6a includes a group of twenty-six 'Laat Havelte' shouldered or lugged undecorated bowls, including the following: four bowls with small lugs (Nos 28–31), one sinuously profiled shouldered bowl with two flat-oval lugs (No. 113), two sinuously profiled shouldered bowls with horizontally perforated lugs and one almost shoulderless bowl with a horizontally perforated lugs (Nos 93, 126 and 122), two shouldered bowls with vertical necks and two other probable examples (Nos 118, 117, 133, 134), eight shouldered bowls with slightly open, necks and sinuous profile (Nos 119, 120, 121, 123, 124, 125, 127, 132), one straight sided dish probably lugged (No. 27) and finally four large vessels with long necks and small shoulders (Nos 128–131). Nos 93, 122, 126 are included in this group because of their horizontally perforated lugs which do not seem to be a feature of Horizon 7 shouldered bowls (although a slightly biconical pot with a horizontally perforated lug was found with Horizon 7 pottery in a surface collection near Valthe (Musch, 1970: fig. 2, No. 5). Nos 123, 124, 125 and 126 are included because of their high necks and shoulders.

Several difficulties arise in deciding the position of this pottery:

1. The general absence of domestic assemblages or small find groups of decorated or well-dated pottery and undecorated pottery of this type;

2. The scarcity of flat grave with complete vessels and a range of useful associations for Horizon 6; and

3. The differences between this body of material (the pottery enumerated above) and the Horizon 7 material known from other *hunebedden* in the vicinity, Noordlaren (G1) and Glimmen (G2).

The main sources of undecorated pottery available at present are *hunebedden*. As these often include either, or sometimes both, pottery from Horizons 5 and 7, identification of unornamented pottery specifically to Horizons 5 or 6 or 7 is largely an unsatisfactory process of elimination. The absence of undecorated pottery from Horizons 5 and 6 flat graves also means that no basic series of shapes is known and this has increased the difficulty of reconstructing types from undecorated sherds from the *hunebedden*.

Both Noordlaren G1 and Glimmen G2 included

Horizon 7 pottery but as a group this differs from the D6a pottery. The Glimmen and Noordlaren pottery is dominated by wide bowls with short, vertical or slightly conical necks and limited chiefly impressed decoration on the shoulder or low, long cut lugs. These bowls are often of fine, well finished fabric. In contrast, the D6a 'Laat Havelte' pottery is dominated by deeper, more sinuous, forms sometimes with comparatively long necks. Small round bosses and horizontally perforated lugs are present on some of the pottery. The characteristic narrow blocks of usually impressed ornament do not occur on the D6a pottery and the fabric is not especially well finished. These characteristics occur on the undecorated pottery of Horizon 5 from Beekhuizerzand (Modderman et al., 1976). This material is settlement pottery and includes both decorated pottery of the type found in *hunebedden* and undecorated pottery. There is little doubt that the undecorated pottery is directly contemporary with the decorated Horizon 5 material. No decorated Horizon 6 pottery is present. The Horizon 5 pottery, on the basis of the illustrated ornament, does not include an especially late element; there is no sign of the ornament moving in towards the base of the neck and the top of the shoulder.

This pottery is generally similar to pottery from the *hunebedden* Emmeln (Schlicht, 1968: esp. Nos 922–929, 939–959), Ostenwalde 1 (Fansa, 1978: esp. figs 32–35), and Dötlingen (Fansa, 1982: esp. figs 129–139). The decorated pottery from Emmeln includes material from early Horizon 3 through to Horizon 5. As at Beekhuizersand, there is little evidence amongst the decorated pottery at these sites for activity after Horizon 5; only one pail (Emmeln No. 110) is clearly Horizon 6. It is therefore arguable that the undecorated pottery with sinuous, often longish necks, deepish bodies and large, heavy looking handles and perforated lugs is largely, if not entirely, contemporary with the Horizon 5 material at these sites also.

#### 5.2. Industrial record

A number of artefacts and fragments of artefacts suggest that at least some of the material apparently placed in the chamber was in a damaged condition. Other material is clearly industrial waste. The role of this material and the extent to which it occurs are not clear.

'Damaged' material includes stone artefacts and pottery. The first is usually recognizable as pieces of burnt axes and fragments of burnt flint (e.g. Glimmen G2, Noordlaren, Drouwen D19, Exloo D30 and Emmen D40). Damaged pottery is less easily identified because of the difficulty in distinguishing pottery which was damaged before it was incorporated in the chamber fill from pottery broken in the cham-

ber over the course of the intervening millennia. Burnt encrusted material on pots in *hunebedden* is rare and is usually considered as an accidental occurrence on an intact pot. Several sherds from D6a, however, indicate that this was not always the case. Sherds have burnt material covering broken surfaces, showing that burnt fragments of broken pottery were apparently put into the chamber. This has implications for the interpretation of single small sherds of pottery in some otherwise quite well preserved assemblages.

Industrial waste also occurs in *hunebedden* assemblages (Noordlaren G1, Glimmen G2 and Drouwen D19), both in the form of flakes and cores of flint and the re-use of implements as cores. The latter is most clearly shown by the occurrence of polished or flaked facets of flint axes on both waste products and small implements such as round scrapers and sickle fragments (Nos 336, 338, 344, 345). These are also sometimes fire damaged. The damaged roughout of a flint axe (No. 318) is also of some significance, whether as a secondary source of flint or as an unfinished piece in its own right.

When and how these products (damaged goods and the industrial waste) came into existence is unclear. Breakage and damage need not necessarily have occurred during the use life of the artefact in question. The date of manufacture of several of the burnt D5a artefacts is known; the Brandt's Type 4 axe is an early product in the history of the site (Horizon 2); the funnel beaker cup sherd was made at a much later stage (Horizon 5 or later). It is possible that a collection of rubbish of different ages was burnt in a single episode but considering the probable length of time that the oldest pieces would have been lying around for, this seems unlikely. The alternative is that from time to time small quantities of damaged material and waste was deposited in the *hunebed* chamber. One possible source could have been the possessions of the deceased, including both artefacts and raw material.

### 5.3. Activity at *hunebedden* in one locality

At least 15 *hunebedden* (G1, 2, 3, 4; D3, 4, 5, 6, 7, 8, 9, 10, 11, 15 and 16) are known to have existed within a radius of about 12 kilometres of this D6a. Five of these have been excavated and published: Anlo D9, c. 5.5 km distant, Noordlaren G1, c. 5 km distant, Glimmer Es G2 and G3, c. 6.5 km distant. Although this excavated sample is too small for a consideration of *hunebed* use in the area, a comparison of the periods of use of four of the sites is of some interest. G3 is not included in this discussion because of the poor preservation of the assemblage but was arguably the earliest of the group to be constructed (Brindley, 1983). D6a was probably the first of the four other sites to be constructed at an early

stage of Horizon 2, followed by G2 at the very end of Horizon 2 and G1 at the beginning of Horizon 3. It is likely that the three sites were constructed within a short period of about 50 years and continued to be used simultaneously throughout Horizon 3. The earliest use of D9 depends on the significance given to three small sherds of a dish and a tureen (Nos 42 and 65) which belong to an early stage of Horizon 3. The bulk of the pottery suggests a later date within the same Horizon. All four sites were in use in the early part of Horizon 4, but only G2 remained in use throughout this Horizon and has a large collection of both Horizons 4 and 5 pottery. D9 ceased to be used at this time, G1 was abandoned for a long period, possibly several centuries, and D6a also seems not to have been used with any regularity, possibly for as long as a century. Activity seems to have increased again, especially at D6a during the later part of Horizon 5 and continued into and probably through Horizon 6, a period when activity at both G1 and G2 seems to be represented by a single vessel from the former chamber and two vessels from a flat grave from the latter. However, D6a was used apparently rather briefly during the final years of TRB development, whereas both G1 and G2 were once again the scenes of considerable activity. The waxing and waning of activity at *hunebedden* is well documented, particularly the hiatus or abandonment of sites during Horizon 4 (see also D30 and D40 and O2). The reason for this is unclear.

### 5.4. Post TRB activity

Small numbers of Late Neolithic pottery, often represented by single small sherds, occur quite commonly at *hunebedden*. The five sherds, all very small, representing a maritime bell beaker, and EGK beaker, and sherds of three miscellaneous beakers, none large are difficult to interpret. Certainly the nature of the act of deposition seems to be different from the deposition of large numbers of complete pots. It is tempting to consider sherds of this type as some sort of token pilgrimage tokens but this must be regarded as pure speculation.

### 5.5. The date of the destruction of D6a

The date of the destruction of D6a is unknown but may have occurred in the 18th century. According to Bakker (1992: p. 4), the use of bore holes and gunpowder for blasting stones became more common from about 1735. A fragment of granite with a bore hole was found at D6a. As *hunebedden* were protected by law from 1734/35 onwards, it is likely that D6a disappeared either just before this date or somewhat later in the same century when its destruction might have attracted less attention. Indeed, it may

have happened as late as 1812 when d' Epailly marked a mound here. This general date is (weakly) supported by the fragment of seventeenth or eighteenth century clay pipe found on the site. The site was apparently completely forgotten by the middle of the nineteenth century when the common land was divided up.

## 6. SUMMARY AND CONCLUSIONS

Despite the extensive structural damage that D6a had suffered and the attention it attracted from visitors after its rediscovery, a clear ground plan of the site and details relating to its construction in the form of postholes, together with a large collection of sherds and stone artefacts were recovered by Van Giffen in a short season of excavation in 1927/28. A large number of pots can still be identified and reconstructed from the sherds which suggests that what remains is probably an accurate representation of the original ceramic contents of the *hunebed*. The stone artefact assemblage cannot be reconstructed to the same degree. The ceramic assemblage can be taken as representative and the stone assemblage as incomplete.

Over 1400 sherds were found during Van Giffen's excavation. These were sorted by Van Giffen and Kat-Van Hulst and the results published in 1944. The 1944 finds list includes 147 pot numbers, 104 of which are described (Nos 98-102 are collections of undecorated unsorted sherds) and 79 illustrated by Kat-Van Hulst. In addition to the pottery described in 1944, a further 45 vessels have been identified. These include sherds of collared flasks and two more late Neolithic beaker sherds. In a number of cases, extra fitting sherds of already identified pots were found allowing the reconstruction of more accurate profiles.

All the stone artefacts and the jet and amber beads from D6a conform to the anticipated range of goods and can be readily paralleled at other *hunebedden*. Most of the axes, the beads, arrowheads, *bikkel* and scrapers are not closely datable types within the TRB complex. Evidence for on-site manufacture of flint artefacts (in the form of flint working debris, the large fragment of a flint axe roughout and the reworking of polished stone axes for smaller objects) is also not uncommon. The importance of presumably discarded axes as raw material is shown by the number of arrowheads, flakes and the sickle segment No. 344 retaining axe polishing. The large fragment of a flint roughout also indicates that axe roughouts were probably brought to the immediate vicinity of the site either for finishing or for use as raw material. Fragments of roughouts were also noted at D19 (Deunhouwer, 1983: p. 26). The presence of a range of different axe types is also common and in some cases

indicates different stages within the TRB. The large axe of Scandinavian flint (1928/III.148) is an early type and was probably deposited at about the same time as the earliest pottery in the chamber.

A small number of finds indicate activity during the Late Neolithic, single sherds of five beakers of different types, including one Maritime beaker. Maritime beakers have elsewhere been dated to c. 3950 BP. The sickle segment No. 344 made on a piece of a polished axe is of a type typical of this period. The role of these finds on the site is unclear.

The site does not appear to have been re-used to any great extent after the end of the Neolithic. The artefacts show no evidence of disturbance until the destruction of the *hunebed* several thousand years later.

The date of the destruction of D6a is unknown but may have occurred in the 18th century.

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