

The Dystrup swords: A hoard with eight short swords from the Early Bronze Age

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ABSTRACT

The finding of a sword in a potato harvester in the autumn of 1993 led to the excavation of a monotype hoard comprising a total of eight short bronze swords at Dystrup in Northeastern Djursland (Fig. 1)¹. The swords had been deposited by a large stone on dry land. They are bronze-hilted swords, cast in one piece, and have the form of Hajdusámson-Apa swords. The ornamentation is composed of elements from various swords from period I and from the Fårdrup bronzes. It could be shown that the swords come from the same workshop, which must be domestic. As a hoard find the Dystrup swords are normal for the style, period and zone I. The number of swords is, however, unique and the find is therefore extraordinary, which appears to be the norm for the period!

INTRODUCTION

It is rarely the case today that a single archaeological find results in significant changes in the statistics regarding an individual artefact type. This happened, however, with the finds of the Dystrup swords. Firstly, no monotype hoard comprising so many weapons from the Early Bronze Age had been found previously. Secondly, there were, prior to the find, only a few swords of the Dystrup type known. The way in

which the swords were discovered was unusually spectacular. The farmer's children caught sight of the hilt end of the sword among the potatoes on the belt of the potato harvester. It was unusually well-preserved and withstood therefore being washed and presented at school before it came to the attention of Djursland Museum. The children had clearly memorised the



Fig. 1. The location of the Dystrup hoard

1. Djursland Museum DJM 2511, Dystrup, Ørum parish, Djurs Nørre district. The search with metal detectors was carried out by museum curator Niels Axel Boas and, from the regional council, by Ove Madsen. The Hougård family from Dystrupgård is thanked for the co-operation and interest.

whereabouts and in which row of potatoes the piece of sword came up on the belt. They pointed out the spot and using a metal detector the rest of the sword and the hoard were located.

FIND SITE AND TOPOGRAPHY

The find site for the swords lies 0.5 km west of the town of Dystrup, approximately halfway towards Dystrup Lake. The terrain is elevated and approximately flat, but about 100 m to the north it starts a gentle rise. To the northwest there is a rather more undulating and partly forested area with several large Bronze Age burial mounds, which crown the high slopes running down towards Dystrup Lake to the west. 4-5 burial mounds have been registered within 2-300 m of the find site. With the lake, the slopes and the row of burial mounds, the find site today must be said to be distinctive. However, at the time when the swords were deposited the burial mounds had perhaps not been built.



Fig. 2. Five of the swords in situ. Two swords have been removed and one is unexcavated.

2. Niels Axel Boas and Lisbeth Wincentz Rasmussen DJM carried out the excavation in October 1993. Frank Jensen is thanked for voluntary efforts involved in the taking up of the cast of the sword impressions. Stud.mag. Peter Lundby participated in the following year's excavation.

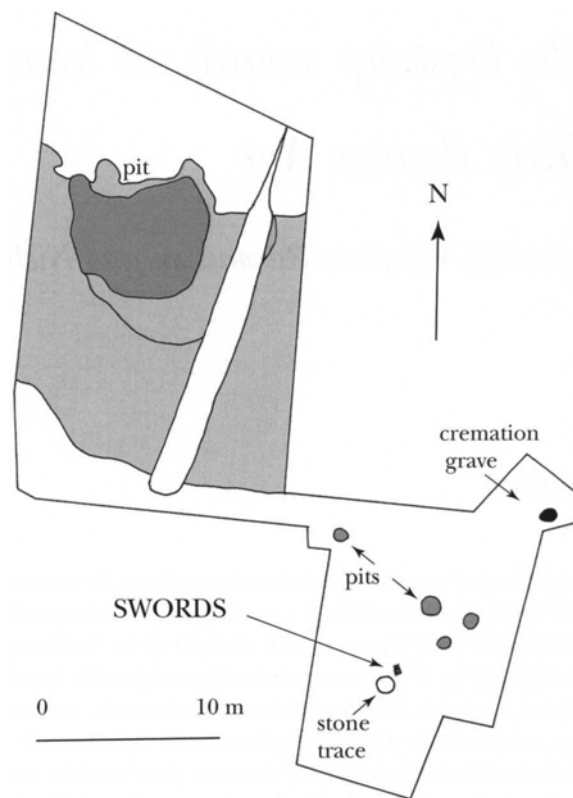


Fig. 3. The excavated area around the hoard.

FIND SITUATION

With the aid of a metal detector another fragment of the blade of the sword and a piece from another blade were found uppermost in the plough soil within a few metres of each other. A further sword was located deeper in the plough soil. By clearing away the area around this it could be seen that further swords lay beneath this at the base of the plough soil. An excavation field of a few square metres was laid out and a further six swords were exposed². The swords lay close to each other in two layers with the hilts lying as if they had been bound together (Fig. 2). The hilts lay to the north, the sword tips to the south. A small piece of wood, not necessarily prehistoric, lay over the tip of one of the swords. No other organic material was preserved to indicate, for example, the presence of wrappings. There were no visible stratigraphic changes in the soil around the hoard, which extended a maxi-



Fig. 4. The marks from the excavated swords is seen in the front of the trace of a big stone.

imum of only 5 cm down into the subsoil.

Immediately an area of approximately 180 m² around the hoard was investigated (Fig. 3). Rather more than 0.3 m southwest of the hoard the imprint of a large (1 m) stone could be seen (Fig. 4). Remains of the eroded surface of the stone could be seen at the base and on the sides of the feature. The landowner said that he had recently removed a large and unusually flat stone from this very place in the field. Other features within the excavated area included four cooking pits (Fig. 3) and the remains of a cremation grave (Fig. 3). In addition, there were a few potsherds from the Early Bronze Age period II-III and a little flint in the remains of a culture layer towards the north of the area.

After the harvest the following year, an area of 160 m², 60 m to the east, and an area of c. 400 m², a little to the northwest of the hoard, were investigated in order to see if further features could be linked to the find. The area to the east lay on the flat part of the low hill on which the swords had been buried. A few cooking stones were seen on the surface. Potsherds from cooking pit A4 could be dated to the Late Bronze Age.

In the area to the northwest of the hoard a compact concentration of cooking stones measuring 7 x 7 m was found. This was bordered to the south, west and east by a prehistoric culture layer. Pottery from the features and the culture layer can, for the most, be dated to the Middle or Late Bronze Age. A small fragment of a mould used in metal casting was also found. Coarse flint sickles from the surface of the field can also have their origin in this settlement environment.

Only a very few potsherds can be dated to the Early Bronze Age. The concentration of cooking stones was not excavated further. Similarly, the culture layer was not excavated in full. The investigations showed that there had been settlement at the site through the greater part of the Bronze Age.

At all the larger, well-investigated settlements in the vicinity of Dystrup it is normal that the occupation extends over several periods of the Early Bronze Age. Indeed, in some cases it can be continuous from the Late Neolithic to the Late Bronze Age (Boas 1997). The lack of pressure-flaked flint around the find site suggests that there was no long-term or comprehensive settlement nearby in the Early Bronze Age. The settlement traces in the form of features, concentrations of cooking stones and cooking pits around the hoard are, however, so frequent that a more comprehensive settlement, in both time and space, could easily have been present. It cannot therefore be finally decided whether there was a settlement in the area, in the vicinity of which the hoard was deposited. It is striking that the hoard lay just below the surface without having been damaged during a long period of settlement activity. This is almost only possible if the site was naturally sealed or marked. In addition to the large stone which is known to have been present, there can for example have been large trees which hindered direct access.

THE SWORDS

Description (Cf. also table 1 p. 96)

X1³ (B17617). Bronze-hilted sword broken into two pieces. The outermost 12-13 cm of the blade is missing. The piece has been slightly bent along its length by contact with agricultural implements. Broken approximately in the middle and at the end of the blade. At the outermost break a green patina is visible as on the surface. The edge has suffered mechanical damage but is partially preserved. Clear striations run parallel to the edge. Five imitation rivets. Ornamentation: Uppermost on the hilt there is a plain band, under

3. DJM artefact registration numbers X1-X8 correspond to National Museum Inv. nos. B17617-B17624 respectively.



Fig. 5-5b. Sword X1 and detail of the pommel.



Fig. 6-6b. Sword X2 and detail of the pommel



Fig. 7-7b. Sword X3 and detail of the pommel.



Fig. 8-8b. Sword X4 and detail of the pommel.

Figs. 5 – 12 by Søren Harbo Andersen. Figs. 2-3 by the authors.



Fig. 9-9b. Sword X5 and detail of the haft and pommel.



Fig. 10-10b. Sword X6 and detail of the haft and pommel.



Fig. 11-11b. Sword X7 and detail of the pommel.



Fig. 12-12b. Sword X8 and detail of the haft and pommel.

this a group comprising two sets of closely-spaced lines bordered by alternating hatched triangles, forming plain lozenges. Framed uppermost by a row of dots, lowermost by small double arches. Separated from these and from each other by plain bands there are two further sets of closely-spaced lines, each framed by double arches (three on each side of the hilt). There is a row of dots around the rivets, along the two forks and in the arch of the hilt. On the pommel, there are five lines around the edge and within these stacks of four-five small arches, forming a row. Within this, with the length of the crest as their diameter, there are five lines surrounded by rows of dots. On the blade, a V-shaped feature extends from the forked tips of the hilt. This is formed by an approximately 0.5 cm broad band which is broadest in its central part. The band is completely filled out with transverse bundles of short strokes or flat arches. The feature is bordered by very fine rows of dots (Fig. 5).

X2 (B17618). Bronze-hilted sword broken into three pieces. The outermost c. 3 cm is missing. The breaks lie just before the middle of the sword and near the tip. The edge is corroded and partially preserved. One side of the hilt is heavily corroded. The crest of the hilt is slightly displaced relative to the middle of the pommel. It has five imitation rivets which on the two sides are slightly displaced relative to one another. The rivets on one side are, moreover, arranged in a larger arch than on the other. The outermost rivet on one side is small and almost triangular. Ornamented as X1 apart from there being fewer lines innermost on the pommel (Fig. 6).

X3 (B17619). Bronze-hilted sword completely preserved. A few millimetres are missing from the tip. A little corrosion on the lowermost 3 cm of the blade which makes the edge uneven. A few examples of mechanical damage on the edge. A small notch caused by an agricultural implement can be seen on the edge of the pommel. Clear striations. Five imitation rivets. Ornamentation as X1 (Fig. 7).

X4 (B17620). Bronze-hilted sword broken into two pieces. The outermost 5 cm of the blade is missing. Very well preserved. A number of holes (from casting) in the surface of both the hilt and the blade. Clear striations. Five imitation rivets slightly displaced relative to each other on the two sides. Possible traces of "the hammer" used for hammering out the edge are seen as irregularities along the inner side of the edge facet. Ornamentation as X1 (Fig. 8).

X5 (B17621). Bronze-hilted sword. The outermost

few millimetres of the blade are missing. The edge is partially corroded. A few holes in the blade from casting. Five imitation rivets which are slightly displaced on the two sides. Ornamented as X1 apart from a row of dots along the crest of the pommel (Fig. 9).

X6 (B17622). Bronze-hilted sword broken near the tip into two pieces. The outermost few millimetres of the blade are missing. Partially corroded. Occasional large holes in the blade from casting. Regular hammering traces 1.1-1.4 mm broad can be seen on the edge facet near the hilt and on the blade. Clear striations, which in some places can be seen to continue "through" the pattern. Five imitation rivets, more-or-less symmetrically arranged on the two sides. Ornamented as X1, apart from the lowermost set of lines on the "reverse" of the hilt, which is bordered upwards by alternating arches "waves!", as well as a row of dots along the crest of the pommel (Fig. 10).

X7 (B17623). Bronze-hilted sword. The outermost few centimetres of the blade are missing. Partially corroded and with a few notches in the blade. Has a heavy rough patination over the entire surface. Many holes from casting, especially on the blade. Clear striations can be seen on one side. Clear traces of hammering out on the edge facet, 1.2 cm long. Pommel slightly displaced from the centre. Four imitation rivets, which are only slightly displaced relative to one another on the two sides. Unornamented (Fig. 11).

X8 (B17624). Bronze-hilted sword. Preserved intact. The original surface can be seen on the greater part of the hilt. Partially dark brown or green patina. Four imitation rivets, slightly displaced from side to side. Ornamented: Uppermost on the hilt a blank zone. Below this a set of ten lines bordered uppermost by hatched triangles with their points upwards, lowermost by small arches. Below this a set of 6-7 lines bordered uppermost by small arches, lowermost by large double arches. Lowermost 6-7 lines bordered at the bottom by small arches. There are no rows of dots in the arch of the hilt. Pommel as X1 apart from that the inner rows of strokes are replaced by three lines around the crest itself. The V-feature on the blade is formed by an outer row of dots and two closely-spaced lines which, in towards the back of the blade, are edged by a row of small arches (Fig. 12).

FORM

All the swords are short swords between 43.7 and 46.6 cm in length (average 44.7 cm for the intact examples). They have all been cast in one piece with imitation rivets. Six of the swords have five imitation rivets, two of them have four (X7, X8). The hilt arch on six of the swords is open and circular, whereas it is more closed and oval on two of them. The forked terminals of the hilt are in all cases set at an angle to the blade, but varies somewhat in their outline which is either straight, slightly convex or very slightly concave. The hilts are broadly pointed oval in cross-section. The pommels vary from almost circular (X1, X2, X3, X5, X6) to slightly oval (X4, X7, X8) and the long, (pointed) oval crests rise directly from the surface to a height of between 0.3 and 0.4 cm. The shoulders are rounded. The sword blades have a flared outline; they narrow sharply a little below the hilt and broaden again around the middle of the blade. As shown in table 1, the difference between the broadest and the narrowest point of the flare is only 0.5 cm throughout, but the form is further emphasised by the V-feature. The blades have a distinct mid-rib and their cross-section has the form of a flat rhombus. The hammered-out facet is clearly seen along the edge of the blades and in several places the individual hammer strokes can be distinguished. Striations from polishing can be seen on all the swords.

ORNAMENTATION

X1, X2, X3, X4 and X5 have completely identical ornamentation on the blade and hilt (Figs. 13-14). X6 deviates in a few details, whereas X8 deviates with regard to rather more details on the blade and hilt (Fig. 14). Finally there is X7 which is without ornamentation (Fig. 11).

The V-feature on the blades begins at the terminals of the hilt arch and the two sides meet, after their characteristic curved course, at the back of the blade around its broadest extent. The V-feature is formed by a 0.5 cm broad band which around the middle becomes a few millimetres broader, which emphasises its curved form. The band is completely filled out with transverse bundles of strokes or flat arches and bordered by fine rows of dots (Fig. 13).

On X8 the V-feature is formed by an outer row of dots and two closely-spaced lines, which in towards

the back of the blade are bordered by a row of small arches (Fig. 14).

The edges of the hilt and the imitation rivets are marked by a row of dots on all the swords, with the exception of X7. On X8 there are no rows of dots on the hilt terminals (Fig. 14).

The hilts of the swords all have their ornamentation organised into three zones with variations on sets of closely-spaced lines. X1-X6 have uppermost on the hilt a combination consisting of two sets of lines bordered by alternating hatched triangles which form blank lozenges. These are framed uppermost by a row of dots, lowermost by small double arches. Separated from this and from each other by blank sections are two arrangements of sets of lines, bordered by a double row of arches (Figs. 13-14).

On X8 the ornamentation of the hilt is also slightly different from that on the other swords. The upper set of lines is terminated uppermost by hatched triangles and lowermost by small arches. The lowermost set of lines is terminated by a double row of arches. The middle set of lines is bordered uppermost by small arches and lowermost by large double arches (Fig. 14).

The pommels have 3-5 lines along the edge, within this a circle is formed by stacks of 4-5 small arches forming a row. With the length of the crest as their diameter there are within this 2-3 lines which are surrounded by rows of dots (Fig. 5-8). On X5 and X6 there is a row of dots around the crest itself (Fig. 9-10). On X8 there are two lines around the crest itself, while the inner row of lines "is missing" (Fig. 12).

It has been shown that ornamentation in the Early Bronze Age, rather than being punched in after casting, was produced by a technique where the decoration was cut or punched into the wax form prior to casting (Rønne 1989, 126-143; 1991, 32-49). Signs of punching in the wax form can be seen through small irregularities, which are continuously repeated, whereas engraving can be difficult to demonstrate (Rønne 1991, 45). We have not been able to find any visible signs of punches on the Dystrup swords, but the ornamentation appears, however, so sharp and without traces of single punch-marks that it seems probable that it was carried out on the wax form prior to casting. There are, furthermore, clear striations on the surface of the swords which appear to be secondary relative to the decoration.

It is tempting to interpret the unornamented sword in the Dystrup find as an unfinished example. A piece,

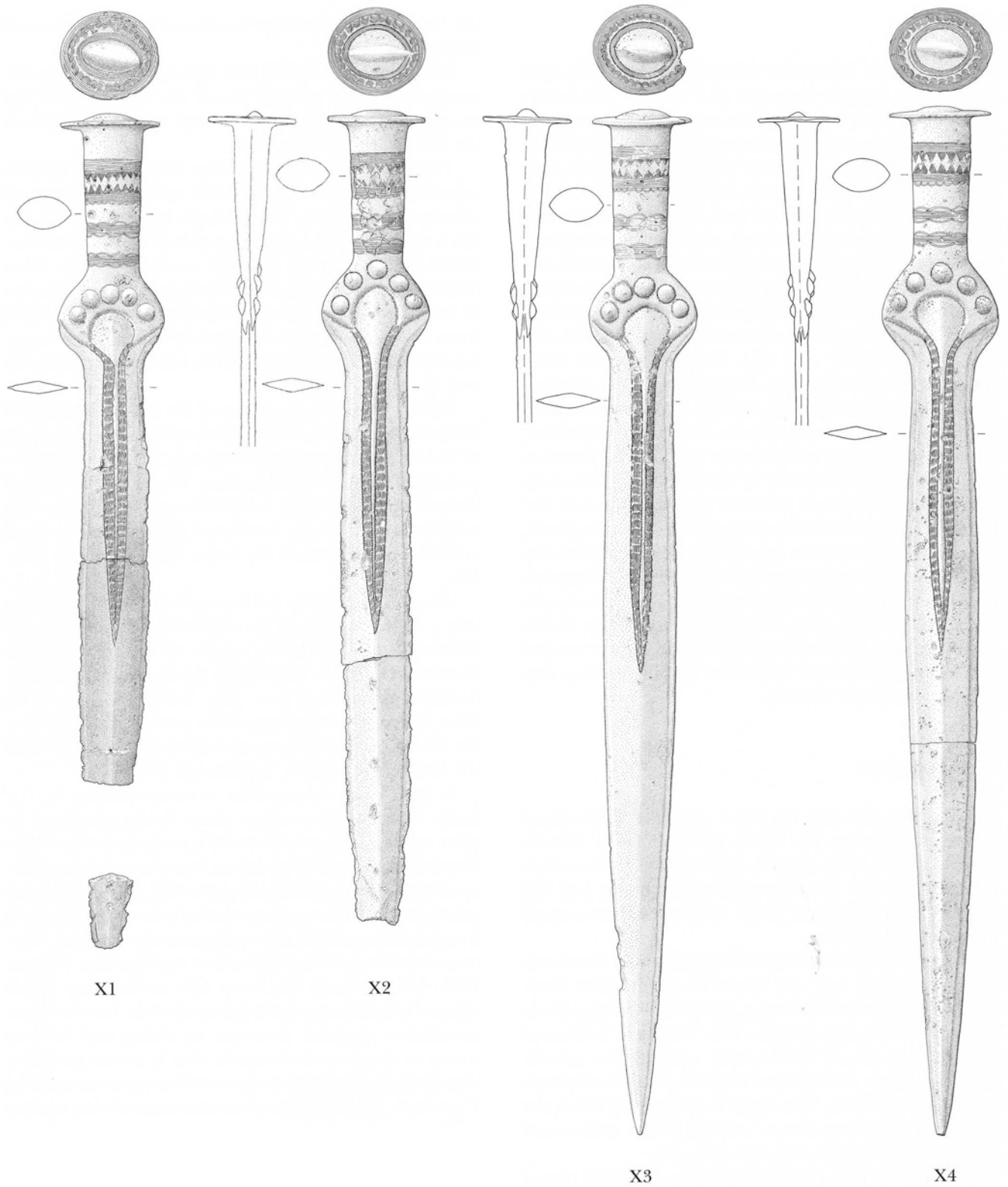


Fig. 13. The Dystrup swords X1-4. Scale 2:5.
Drawings: Malgorzata Hansen.

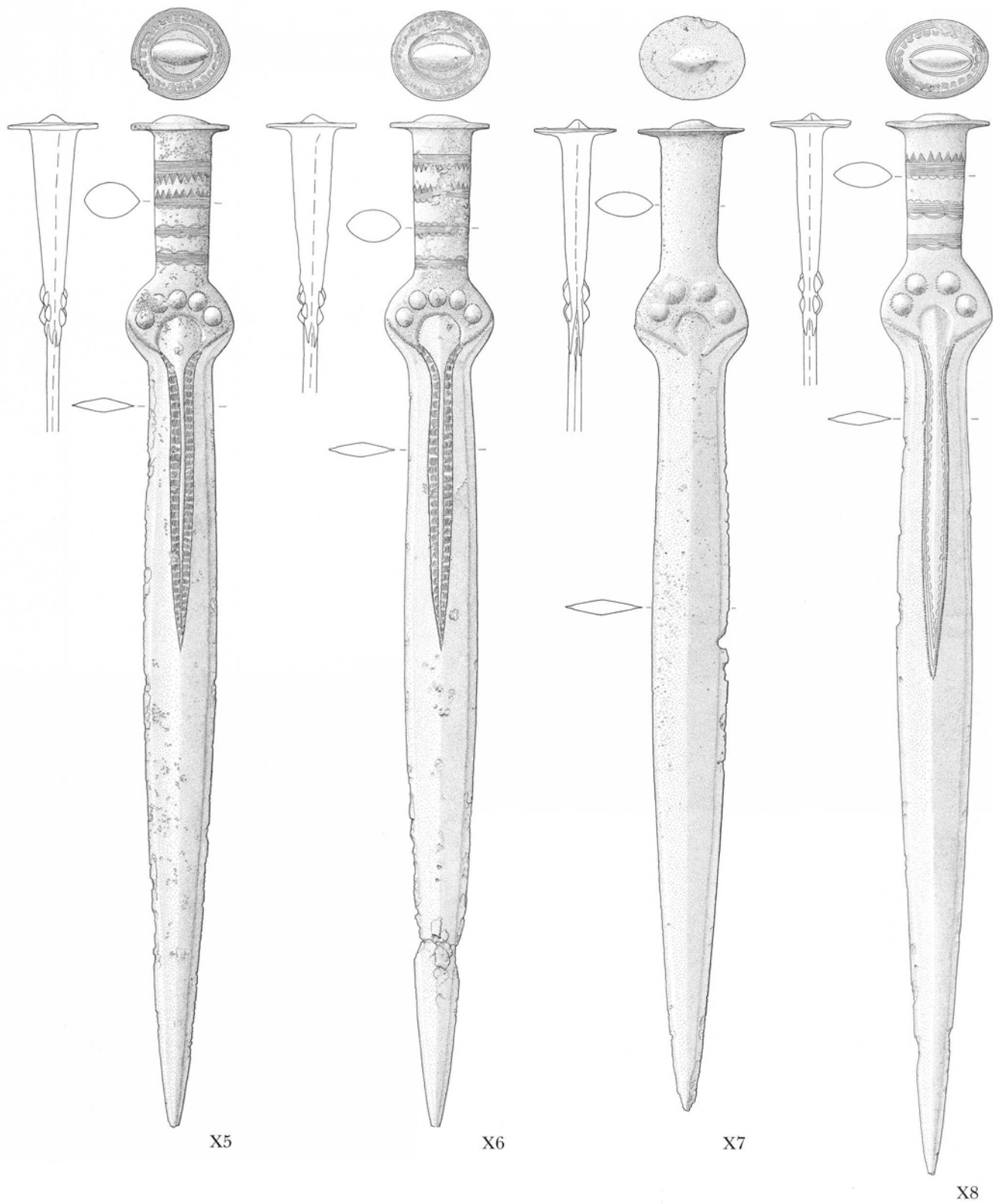


Fig. 14. The Dystrup swords X5-8. Scale 2:5.
Drawings: Malgorzata Hansen.

SWORD	X1	X2	X3	X4	X5	X6	X7	X8
A	32,7	40,7	44,7	44,9	44,3	44,5	43,5	46,5
B	8,5	7,7	8,6	8,2	8,8	8,8	8,5	8,5
C	5,7	6	6,4	5,9	6,6	6,3	5,4	5,5
D1	2,7	2,6	2,6	2,9	2,6	2,6	2,8	2,9
D2	2,3	2,2	2,3	2,5	2,4	2,3	2,5	2,45
E1	1,9	1,6	1,9	1,6	1,9	1,9	1,4	1,2
E2	1,1	1	1	0,9	1	1,1	0,85	0,8
F	4,35	4,2	4,3	4,5	4,2	4,4	5,1	4,6
G	3,9	3,7	3,9	3,6	4	3,8	3,7	3,5
H	2,6	2,7	2,4	2	2,6	2,8	2,2	2,7
I	1,1	0,6	1,1	0,65	1,1	1,1	1	1
K	0,4	0,35				0,35	0,4	
L	4,7	4,7	4,7	5,2	4,8	4,8	5	5
M	1,7	1,8	2	1,6	1,8	1,9	0,7	1,2
N	1,6	1,8	1,3	1,8	1,4	1,5	1,8	1,5
O	3,1	3,1	3,2	3,2	3,2	3,2	3,4	3,4
P		2,7	2,8	2,7	2,8	2,7	2,9	2,75
R	0,35	0,4	0,32		0,4	0,5	0,45	0,4
S	15,6	15	15,9	15,6	14,5	14,7		16,1
T	0,6	0,57	0,6	0,6	0,6	0,6	0,7	0,65
U	37,1	36	36,2	37,2	36	36,2		
V	385	336	423	395	418	400	355	398
X	45,6	43,7	44,8	45,4	44,8	45	43,7	46,6

Table 1. Measurements of all swords in cms and their weight.

LEGEND

A	Preserved length
B	Hilt, lenght from top of pommel to lower part of hilt plate
C	Hilt, lenght from lower part of pommel to the transition from hilt to hilt plate
D1	Hilt, upper width
D2	Hilt, lower width
E1	Hilt, upper thickness
E2	Hilt, lower thickness
F	Pommel, length
G	Pommel, width
H	Pommel crest, length
I	Pommel crest, width
K	Pommel crest, height
L	Hilt plate, width
M	Hilt arch, distance between lozenges
N	Hilt arch, distance from lozenge tips to bottom
O	Blade, max. width
P	Blade min. width between hilt and middle af blade
R	Blade edge, width
S	V-shaped feature on blade, length from tip to hilt arch
T	Blade, max. thickness
U	Blade, estimated original length from tip to hilt arch
V	Weight in grammes
X	Total lenght, reconstructed

which could be decorated as desired. The arguments against punching as the usual decoration technique are, however, so convincing, that we are inclined to believe that it was the intention that the sword was without decoration. The sword deviates from the others with its slightly coarser surface and heavier patination, which can be due to events prior to deposition.

IDENTIFICATION AND DATING

The short swords from Dystrup can be fitted into Lomborg's Fårdrup horizon as copies of swords of Hajdusámson-Apa type (Lomborg 1969, 97-99; 1959, 93ff.; Vandkilde 1996, 224ff.). Both formally and stylistically there is close agreement between the Dystrup swords and the swords from Torupgårde, Stensgård and Sandbygård, which are seen as being genuine, imported Hajdusámson-Apa types. The Hajdusámson-Apa swords have five rivets, as have six of the Dystrup swords, or four rivets and a more closed hilt arch as on the two others from Dystrup. Furthermore, the blade and hilt are often cast separately and most often the two lowest rivets are genuine or imitation ring rivets. The pommel can be a loose pin (Fig. 15). In contrast to this, all the Dystrup swords have been cast in one piece. The mid-rib of the blade is less protruding and the cross-section of the hilt and the pommel are not all as round, but slightly oval. The most oval of the pommels are those on the two swords with four rivets, which tend to be arranged to form a trapezium. Others deviate only in detail from the other swords in the find. There is no doubt that all the swords must be variations of the same type.

Four rivets arranged in a trapezium is mentioned as a later feature of the Hajdusámson-Apa swords and daggers. The same is said to apply to the thinner blade, which is clearly drawn in under the hilt. These swords and daggers have features in common with the Wohlde blades, but according to Willroth it cannot be determined whether these are variants of Hajdusámson-Apa swords or independent later types in the Apa tradition under the influence of Wohlde-like blades (Willroth 1985, 62; Sicherl 1996, 294). In connection with this, reference can also be made to three very similar daggers from Sweden which, according to Lomborg, are copies of the Apa type of sword (Lomborg 1959, 96; Forssander 1936, taf. XLVI). The two swords with four rivets from Dystrup are, in terms of form, close to

these daggers and, furthermore, also to the Guldbjerg dagger (Ke 3, taf. 94, 1882). According to Willroth, the daggers, together with the sword from Bøgeskov (Ke 3, taf. 55, 1682), belong to a later part of period I (Willroth 1985, 62).

The find from Dystrup shows that swords with five and four rivets can be contemporaneous. The variations mentioned above can be seen partly as domestic traits, partly as a mixture of styles, as occurs both on the Continent and between Middle Danubian (Carpathian) and Siebenbürgian (Central European) swords and in Southern Scandinavia between swords of the Valsømagle and Fårdrup horizons (Lomborg 1959, 97; Vandkilde 1996, 224ff & 236). There is not, however, as marked a mixture of styles as one for example sees on the dagger from Allerslev (Lomborg 1059b, 97).

The unornamented sword from Dystrup distinguishes itself from the others solely by its lack of ornamentation. It is worth noting that only few of the early swords are of any significant length. This applies to the Danish swords from Torupgårde, Stensgård, Sandbygård and the possibly slightly later example from Engestofte (Lomborg 1959, 121; Ke 3, taf. 55, 1682). The swords from the Hajdusámson and Apa hoards are, on the contrary, on average only 50 cm long and those from the Zájta hoard are only a few centimetres longer. The other examples from Denmark are daggers, all less than 35 cm in length. On the contrary, several of the Sögeler and Wohlde blades appear to be of a length such that when they are hafted they become short swords of approximately the same length as the Dystrup swords⁴. The swords from Dystrup, with an estimated length of between 43.7 and 46.6 cm, are thus considerably shorter than the Danish swords of Hajdusámson-Apa type, but considerably longer than the daggers. On the other hand, they are only a few centimetres shorter than the European swords of similar type.

No other swords or daggers are known with exactly the same ornamentation as the Dystrup swords. Similar single elements and patterns are, however,

4. Calculated on the basis of the measurements on drawings in Hachmann 1957 and Kerstin & Arner 2 and 3. In research so far there is no uniform definition for distinguishing swords, short swords and daggers. Willroth puts the boundary between swords and daggers at 30 cm (Willroth 1985, 63)

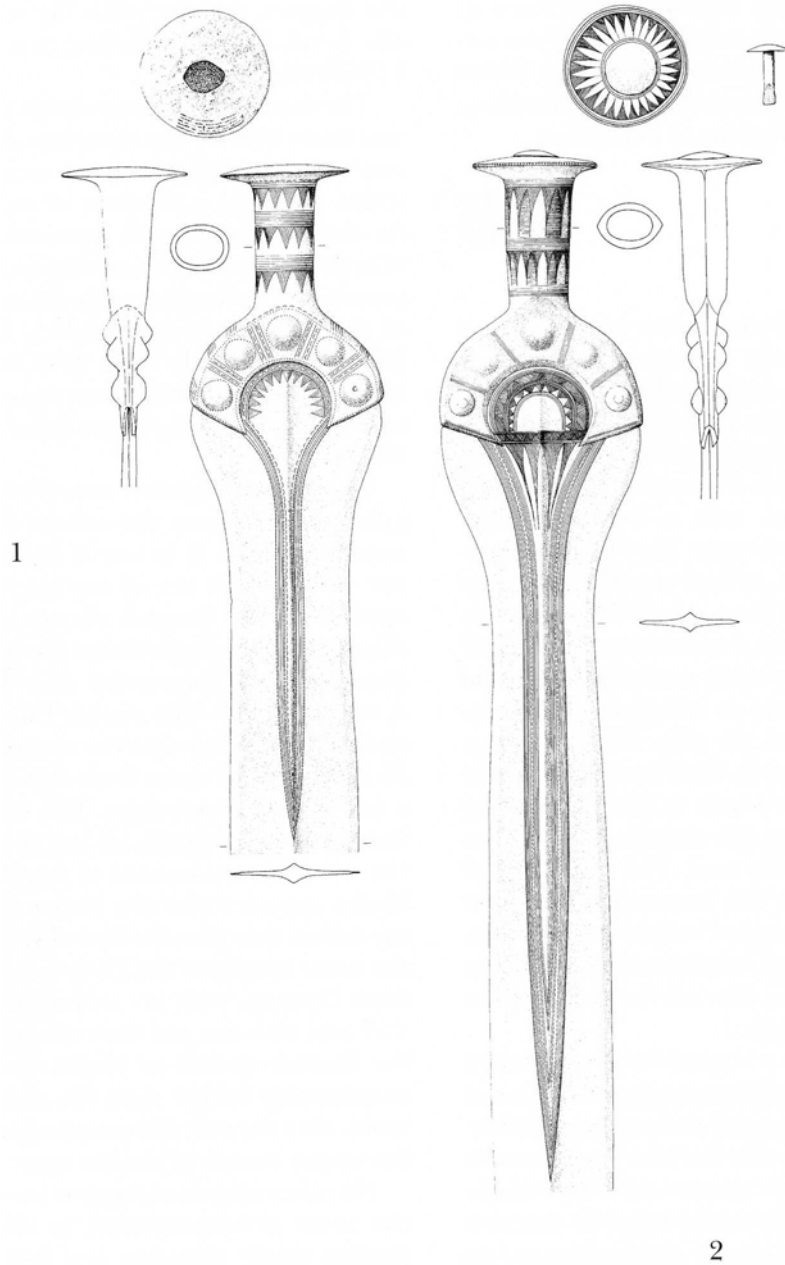
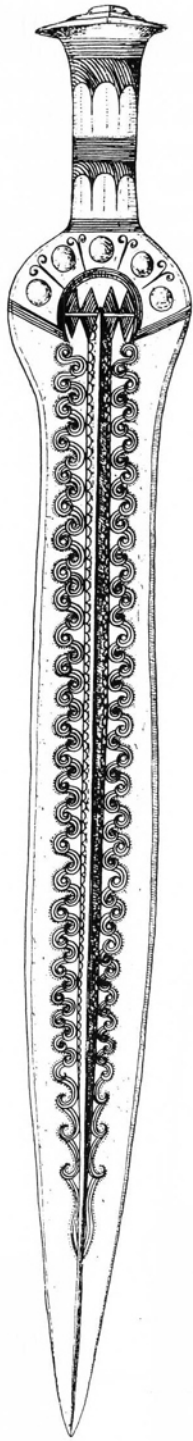
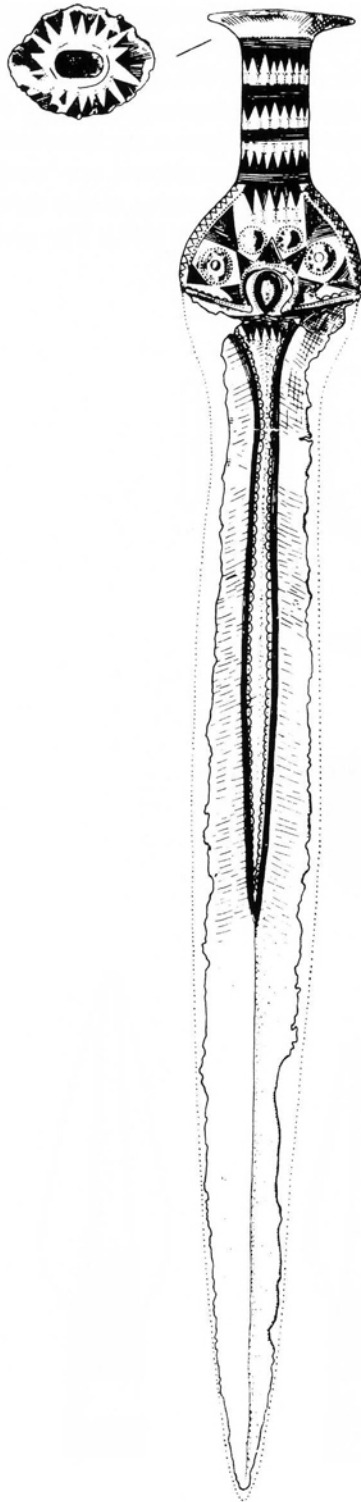


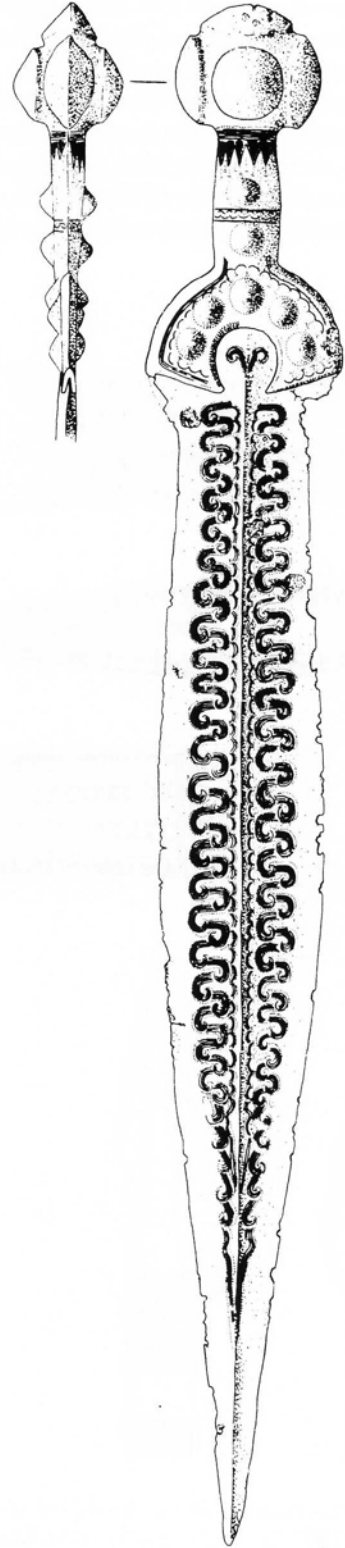
Fig. 15. Swords from the danish hoards of 1)Torupgårde and 2)Stensgård (Ke 3 Taf. 146), from the hoard of 3)Hajdúsámson (Hachmann 1957 Taf. 64,1) and from the hoard of 4-5)Apa (Hachmann 1957 Taf. 63,2-3).



3



4



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seen on various early swords and daggers both from Southern Scandinavia and Europe. Ornaments and patterns are found, furthermore, in an almost identical form on other artefacts in the Fårdrup style. Common features include the sets of lines, delimited by repeated arches on the hilts of the swords, and the hatched triangles. On six of the swords the latter are arranged alternating uppermost on the hilt producing

a blank geometric pattern. This pattern is typical of the Bagterp spearheads and is seen in a similar form on the axes from Fårdrup (Fig. 16). The same pattern is known from one of the swords in the Zájta hoard, whereas the hatched triangles on the Hajdusámson-Apa swords are “suspended” (Fig. 17). Similar ornamentation is also seen on the curved swords (Lomborg 1959, 118ff.). The arches which border the sets of lines

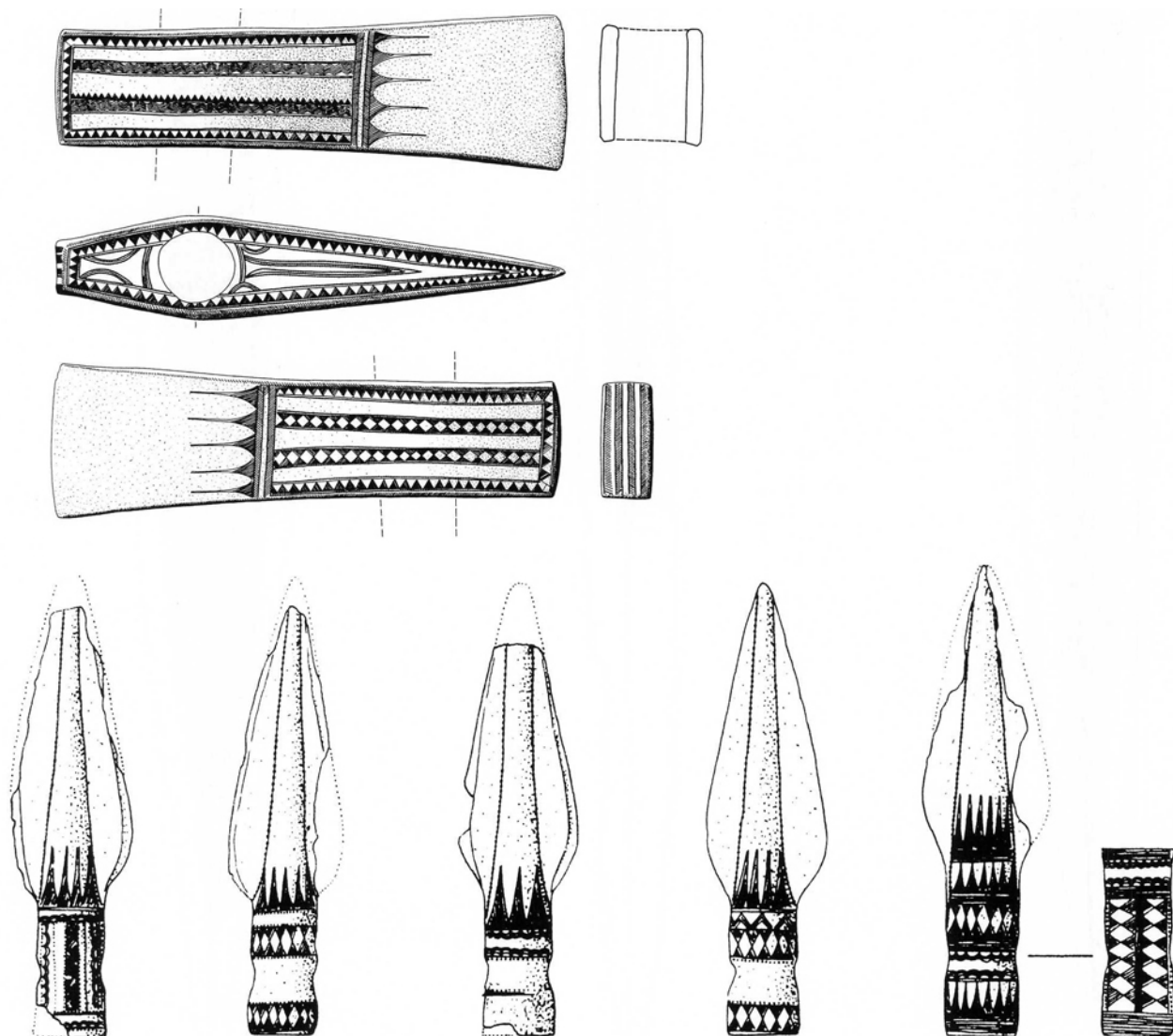


Fig. 16. Shafthole axe of Fårdrup type (Ke 2, Taf. 96, 1178). Spearheads of type Bagterp (Hachmann 1957 Taf. 27,8-11, 16).

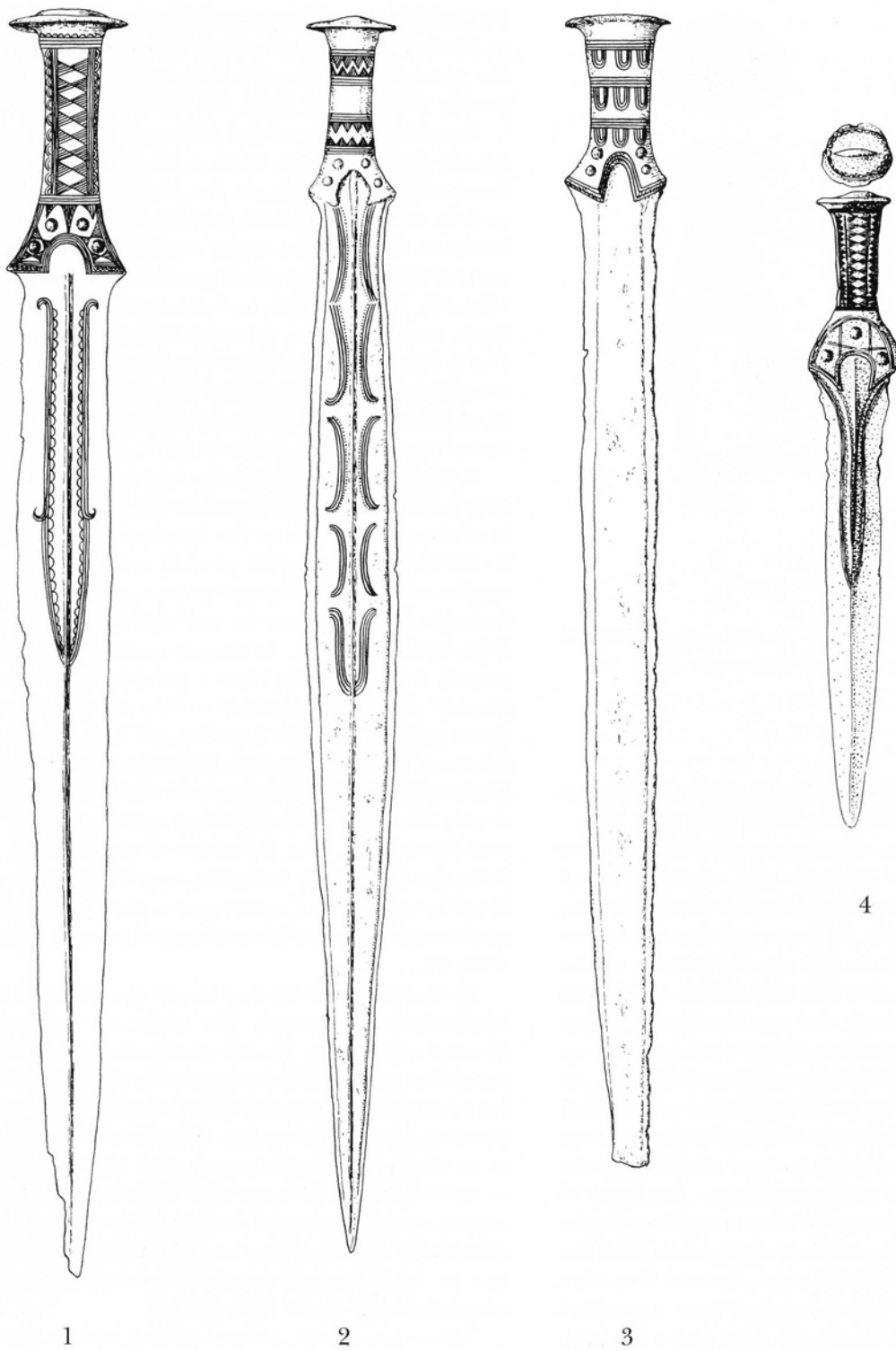


Fig 17. Swords 1-3) from the hoard of Zaita (Hachmann 1957, Taf. 65, 4) Dagger from Grenaa (Hachmann 1957, Taf. 19).

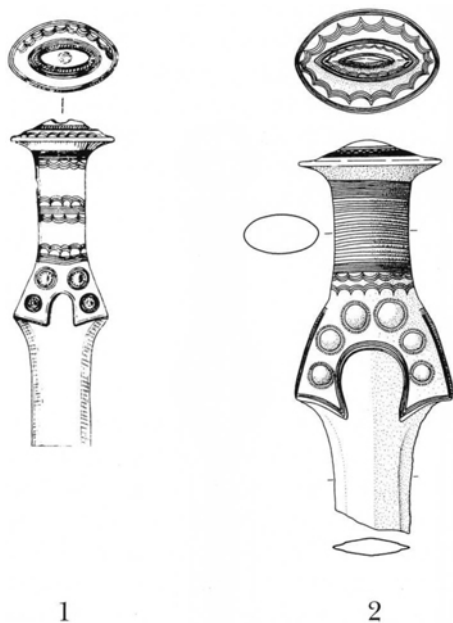


Fig 18. 1) Sword from the hoard of Au (Hachmann 1957 Taf. 49,18), 2) Sword from the hoard of Valsømagle (Ke 2, Taf. 80, 1098).

are an ornamental element which is typical of the Au-Valsømagle swords (Lomborg 1965, 226) (Fig. 18).

The ornamentation of the pommels is in all cases dominated by groups of lines and stacks of small arches, forming rows, which follow the circumference of the pommel. Only on X8 do we see that the innermost row of lines follows the circumference of the crest, whereas it is marked by a row of dots on X5 and X6. The Torupgård sword, the Apa sword and others have all hatched triangles forming a radial pattern on the pommel. The Au and Valsømagle swords have, on the contrary, rows of arches arranged in a "circular" pattern, which is reminiscent of that on the Dystrup swords (Fig. 18). The ornamentation on the majority of the Dystrup swords only emphasises the form of the pommel itself, whereas the ornamentation on the Au-Valsømagle and other swords emphasises both the form of the pommel and the crest. Several Southern Scandinavian bronze-hilted daggers have a pommel ornamented like the Valsømagle type and a hilt arch and rivet count of Hajdusámson-Apa type (Lomborg 1959b, 97). The same is the case for European swords such as Goldberg and Pella (Lomborg 1959, 74 & abb.

12-13; 1965, 225). Three Swedish daggers, about which no further information exists, have ornamentation on the pommel which is very close to that of the Dystrup swords (Forssander 1936, taf. XLVI).

Bands of transverse sets of lines forming an approximate zigzag pattern, such as that which fills out the band of the V-feature on the blades of the Dystrup swords, are not known from other swords. These are, however, seen on the upper surface of the large axe and on the side of the small axe from the Fårdrup find (Fig. 16). Bands of dots and rows of arches are known from, among others, the axes in the Bregninge find (Ke 2, taf. 55). The V-feature on Dystrup sword X8 has a combination of ornamental elements which is known from other bronze-hilted swords and, in several cases, from Sögeler blades (Sicherl 1996, 289) (Fig. 15).

A dagger of Hajdusámson-Apa type, of which it is only known that it was found in the parish of Grenaa, is of interest relative to the Dystrup swords, because its hilt is decorated with vertical rows of hatched triangles, which are arranged point to point form blank lozenges very like those on one of the swords from the Zájta hoard (Fig. 17). As already mentioned, six of the swords from Dystrup have a pattern uppermost on the hilt which corresponds to that on another of the three swords from the Zájta hoard. The patterns are, however, as already mentioned, also common on the Fårdrup bronzes. The pommel of the Grenaa dagger is very like that of the Dystrup swords both in form and decoration. The V-feature of the blade is, apart from the fact that it is double, exactly the same as on Dystrup sword X8. Lomborg sees the Grenaa dagger as a Nordic copy of the Siebenbürgian bronzes (Lomborg 1959, 96).

To summarise, the Dystrup swords have the same form as Hajdusámson-Apa swords. The blades are ornamented in the same way as these. The hilt ornamentation in the form of sets of lines and hatched triangles is like Hajdusámson-Apa, but resembles Zájta swords in pattern and has rows of arches like those from Au-Valsømagle. The pommel is not so round as on Hajdusámson-Apa swords, and not so pointed oval as Au-Valsømagle. The same applies to the crest which is not stepped and not so pointed oval as the latter. The pommel is ornamented with sets of lines and rows of arches very like those seen on Au-Valsømagle swords. Several of the ornamental compositions are "pure" Fårdrup style.

There are seven bronze-hilted swords and one bronze-hilted dagger of Hajdusámson-Apa type from Denmark. Few of them can, as already mentioned, be said to be genuine imported pieces (Lomborg

1959, 94; Vandkilde 1996, 224-225, Fig. 238)⁵. The others must be seen as copies, produced outside the Carpathian area. None of them has been found in a dated context, but as already mentioned Lomborg links them to the Fårdrup bronzes. The find situation for the Dystrup swords brings us no closer to a date for this type of sword in relation to domestic types.

All the previously known swords and daggers of Hajdusámson-Apa type, or close derivatives of these, are single finds. Even the short sword found in a grave at Guldbjerg was without accompanying finds (Lomborg 1959, 94ff.; Ke 3, taf. 94, 1882; Vandkilde 1996, 224). Swords and daggers of this type have generally been dated typologically to an early part of period I. As Lomborg, among others, points out, the type is different in style from, and not found together with, Valsømagle types (Lomborg 1969, 101). As Vandkilde argues, the Hajdusámson-Apa hoard horizon can best be matched with the Central European Bz. B1, although an early part of this. This implies that the swords from Denmark can be dated to her period IB and can be related to, among others, blades of Sögel type (Vandkilde 1996, 143 & 225). As mentioned above, there are certain features of the Dystrup swords that can be compared with swords and daggers of Valsømagle type. This is also consistent with the fact that the different groups, Sögel-Wohlde, Valsømagle, Fårdrup and Hajdusámson-Apa, in period IB represent contemporaneous bronze craftsmanship with two different ornamental styles but with a common background in the ornamentation of the Carpathian bronzes (Vandkilde 1996, 256).

Sicherl believes he can prove that the origin of the bronze-hilted swords lies in the Upper Middle Danubian area, from where swords of Wohlde type are thought to originate and that it is from this area and

not Eastern Hungary or Siebenbürgen that imported bronzes reached the Danish zone I (Sicherl 1996, 296). The Dystrup swords must be linked with the Fårdrup bronzes and be dated to period I (Vandkilde IB). It is difficult at present to decide on a more precise dating because, as has already been shown, they contain elements which traditionally are seen as being early, and elements which traditionally are seen as being later in the period.

FIND TYPE

The Dystrup find is a monotype hoard. Monotype hoards and multitype hoards appear in approximately equal numbers in period IB and are both small find categories relative to graves and single depositions (Vandkilde 1996, Fig. 262). The Dystrup hoard can, furthermore, be characterised as a dry-land find. This is contrary to the majority of single depositions and hoards from the period which apparently presumed to be from bogs or other wet environments (Lomborg 1969, 99; Willroth 1985, 68). In a large number of cases the finding environment has been determined on the basis of the obvious patination on the bronzes and without knowledge of the actual circumstances of the find. The surface of the bronzes has not been analysed further, so "bog patina" is a subjective evaluation which cannot be the decisive factor in determining the find environment (Bodilsen 1989, 92). The sharp distinction between wetland and dry-land finds is, however, only of importance if the difference is considered significant. Levy distinguishes between ritual and non-ritual votive finds on the basis of whether they were found on dry land or wetland (Levy 1982, 24). The fundamental significance of bronzes that are deposited in one way or the other must be their symbolic value (Larsson 1986, 158). The depositions take place intentionally, but the specific reason is difficult to recognise. It is not, according to several researchers, possible to distinguish between secular and votive deposits (e.g. Willroth 1985, 228; Larsson 1986, 159). Whether the deposition takes place on dry land or wetland is thus without significance for their symbolic value. In a wider chronological perspective there is nevertheless a clear connection between water and hoards (Larsson 1986, 174ff.). Therefore a ritual value in connection with deposition in a wet environment could have been significant.

According to Willroth, hoards on dry land are

5. In addition, a sword SIM 64/1996, recently acquired by Silkeborg Museum, which together with some now lost small bronzes, is said to have been found during house construction the Silkeborg area in 1865. The sword is just more than 50 cm in length and very crude in form. The blade is, for example, double the breadth of the Dystrup swords! The hilt is attached by way of five rivets, of which the two lowermost at least are genuine. The shoulders are sharply rounded and the blade gently flaring. The edge of the blade is bordered by five lines. The sword is not wholly typical of one of the early types, but has several characteristics which suggest this dating.

primarily found by or under stones. This applies for example to the second Valsømagle find (Willroth 1985, 213). Others are, however, of the opinion that it is not a particularly common practice for Bronze Age hoards in general (Bodilsen 1989, 95). We believe, however, that it is likely that there was a connection between the Dystrup hoard and the large stone that was removed from the field less than half a metre away. The stone is the only one of considerable size that has been registered from the area. It must have been involved in the depositional environment and have acted as a marker for the hoard.

Swords and daggers are, in particular, common in period IB deposits. In monotype hoards they comprise around 10% of the finds, even less in multitype hoards (Vandkilde 1996, Figs. 268-270). The Danish swords and daggers of Hajdusámson-Apa type can, apart from the Guldbjerg dagger that lay in a grave, be perceived as single depositions which can be interpreted in accordance with other hoards (Willroth 1985; Bodilsen 1989, 93). Typical period IB monotype hoards contain the following in order of abundance: Fårdrup axes, Bagterp spearheads and flanged working axes. They are closely linked to single depositions, which most commonly are flanged working axes, Fårdrup axes and spearheads. Other types are rare, but swords represent the fourth largest category (Vandkilde 1996, Fig. 268-270, (276-277)). Dystrup is, however, unusual due to the many swords in one find. By weight, the eight swords represent approximately the same amount of metal as the great axe in the Fårdrup hoard (tab. 1, V) (Malmer 1989, tab. 1).

Hajdusámson-Apa swords and daggers are, like the Fårdrup bronzes, artefacts which in particular are found deposited in hoards, not in graves. The Dystrup hoard is, in this respect, "normal" for the style and the period, beyond this, the hoard is totally unique for the period. It is without parallel in either Southern Scandinavia or Europe.

PROVENANCE

Traditionally, the bronze-hilted swords and daggers of Hajdusámson-Apa type are seen as Nordic copies and imitations when they are produced more simply with the blade and hilt cast in one piece (Lomborg 1959, 96). On the contrary, it is not possible on the basis of an "quality assessment" to decide whether the pieces were imported or are copies (Lomborg 1965, 228). On

the basis of the first-mentioned criterion, the Dystrup swords must be locally produced. Furthermore, a series of factors can be highlighted which suggest that the swords were produced locally. Six of them are so similar that they must be based on the same model. Only small details, which can be attributed to variations in the production process, distinguish them from each other. This applies both to their form and their ornamentation. The other two swords are also similar, apart from the fact that one of them is without ornamentation. All the swords appear to be without visible signs of wear or damage and the ornamentation appears sharply defined and also unworn. They had either been used very little or not at all before they were deposited. There are several obvious holes or blisters in the surface of the swords, which gives the bronze a certain porosity. This is also typical of other early Nordic bronzes⁶ (Malmer 1989, 19).

In 1969 Lomborg, in his Fårdrup horizon, assigned a series of types to an early part of period I. These have in common geometric ornamentation lacking spirals in contrast to the Valsømagle horizon in late period I (Lomborg 1969, 96ff.). As explained above, it is not possible to distinguish the two styles clearly in time and space, but together with the Hajdusámson-Apa and Sögel-Wohlde bronzes they can be seen as complementary, subject to different rules for use in different areas (Vandkilde 1996, 256-267). As suggested by Vandkilde, the Fårdrup bronzes, especially in the form of socketed axes and spearheads of Bagterp type, could comprise the hoards and single finds of the Sögel-Wohlde sphere in zone II. The Fårdrup and Valsømagle bronzes are complementary in the same way. The Valsømagle bronzes can be seen as defining the grave element of Fårdrup craftsmanship in zone I. The Hajdusámson-Apa bronze craftsmanship (imported swords and daggers and close imitations of these) is limited to zone I and are primarily a hoard and single deposition horizon (Fig. 19). The two groups are very closely linked stylistically. This also prompted Lomborg to assign them to the Fårdrup horizon, whereas Vandkilde, on the basis of correspondence analysis, has them at least partly separated (Vandkilde 1996, Fig. 275).

The ornamental elements of the Dystrup swords

6. Lomborg mentions this feature as typical for the curved swords and is of the opinion that it is not common for Nordic bronzes (Lomborg 1959b, 118).

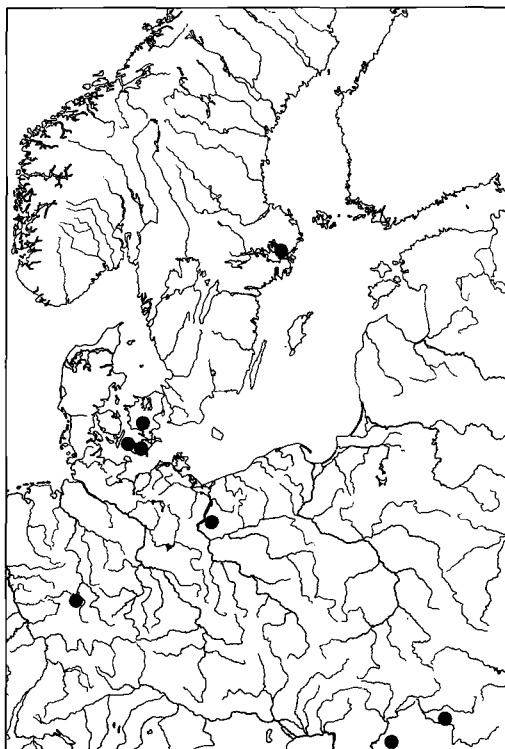


Fig 19. The distribution of swords and daggers of Hajdúsámson-Apa type.

are, as is apparent, a little more in accordance with, for example, those of the Fårdrup axes than, for example, those of the Torupgårde and Stensgård swords (Ke 3, taf. 146). The swords' ornamental elements can be recognised on various other types of sword from the period, but are combined such that the style is closer to the Southern Scandinavian Fårdrup style than that on any of the Central European bronzes. It is therefore obvious to conclude that the swords were made locally, where the preference was for these particular style elements among many others. Furthermore, it is striking that no two swords or daggers from the period show so great a similarity to each other as the six swords from Dystrup. It is characteristic of the period's swords and daggers of the same type that certain elements differ and vary within relatively wide limits. As mentioned earlier, the elements are, however, found mixed across the types. This is also the case for the Dystrup swords, and also in this respect they are remarkably similar. The swords must have been made at the same place,

in the same workshop, and there is nothing to suggest that this was not local in the broad sense of the word. The fact that this probably was the case is shown by results of analyses from Zealand from the Early Bronze Age period II. Here Rønne has demonstrated several local areas, each with its own particular preferences with regard to ornamentation (Rønne 1986, 71-124). This could suggest that production and distribution, at least in part, took place within small geographic areas (Levy 1991, 69).

Finally, the flint-edged sword from Åtte is often mentioned as an imitation of a bronze-hilted sword (Hajdúsámson-Apa sword). According to the accepted reconstruction of the hilt, the Åtte sword is of about the same length as the Dystrup swords. Similarly, the form with the flared blade is very clear. Very probably many more flint-edged swords were in use than shown by the number of finds registered so far (Lomborg 1960, 146ff.; 1973, 61; Rønne 1988, 88ff.; Sicherl 1996, 197). The Dystrup find defines, with all clarity, the short sword as a type, and there were probably more of these in circulation than normally supposed. It is therefore likely that these short bronze-hilted swords were the direct models for the flint-edged swords such as that from Åtte. A link can therefore be made between hoard, grave and settlement finds that anchors the type in the domestic environment.

PERIOD I IN THE LOCAL ENVIRONMENT

Relative to the zonation of the Early Bronze Age, Dystrup is allocated to zone I. The zones are, however, defined according to groups of grave goods and without a certain number of grave finds it is therefore difficult to demonstrate whether specific characteristics are expressed locally.

In the local environment for the Dystrup find (NE Djursland) Early Bronze Age period I can be seen via settlements, graves and hoards.

Settlements. From the settlements of Egehøj and Hemmed Kirke there are two-aisled houses which can be dated to period I. The typical inventory in culture layers linked with these houses comprises pressure-flaked flint types such as sickles, daggers/strike-a-lights and arrowheads. In addition there are occasional insets for flint-edged swords (Boas 1991, Fig.16f.). There are no indications of bronze casting. Similarly, the use of bronze is only indirectly apparent (Boas 1983; 1993; 1997).

Graves. Local graves from the period rarely contain bronzes. Therefore, very few of these can be dated more precisely than to period I in general. From an area within a 5 km radius of the Dystrup hoard three Bronze Age burial mounds have been investigated in recent years. In a mound immediately west of the village of Ørum there were five graves with oak coffins lying parallel under a partially-common stone covering layer. One of the graves contained a slate pendant as grave goods, another contained a dagger-shaped strike-a-light. Otherwise only dental enamel remained. A burial mound had been raised over this, in which the central grave contained a belt-hook and a fragment of a dagger or sword blade, which cannot with certainty be determined to type 7. Also in Ørum, a centrally-placed oak coffin containing two small amber buttons has been excavated. At the foot of the coffin stood a pot 8. In Basland, a little to the south of the Dystrup hoard, an oak coffin without grave goods but with enamel has been excavated 9. From Svapkær, Rimsø parish, there are two parallel oak coffin graves, of which one contained two flint arrowheads, the other a slate pendant; dental enamel was also present in both cases 10.

From the passage grave Brøndhøj, Enslev parish, comes the well-known find of a bronze pin with a globular head and a “*noppenring*” of gold. The bronze pin is a characteristic type for Bz. A2 (Lomborg 1973, 145ff., Fig. 84). Finally, mention should be made of Diverhøj, Homå parish, which contained a flanged axe of Valsømagle type, a strike-a-light and two fibulae. The latter give a late date in period I or early period II (Asingh 1987, 130ff.). The same applies to an 18 cm long wheel-headed pin of bronze, found at the head end of a grave. The grave had been built parallel to, and close by, a similar inhumation grave lacking grave goods. Both had been cut down slightly into the subsoil under a mound at Baunehøje near Koed (Boas 1979, 41-48).

Single finds. Single finds from the area comprise five flanged axes, a Fårdrup axe and a dagger of Hajdusåmson-Apa type (Fig. 17). A dagger of Valsømagle type from Albøge is said to come from a grave (Lomborg 1959, 87). A belt-hook was found on a field in Kolindsund. One of the flanged axes can be dated to period IA, one to period I in general and the remainder to period IB 11. A fragment of an ornamented stone axe with among other things a V-feature from the shaft-hole out to the edge on the narrow side of the axe is known from Glæsberg parish 12.

The finds from the local area are not extensive but seen collectively they reflect a normal situation in zone I with the few Valsømagle types in the graves and Fårdrup types in the hoards. The graves with few or no grave goods can be dated to some time within period I.

FURTHER INFERENCES

As mentioned above, the Dystrup swords could have been produced locally in the same workshop. This could for that matter have been located in the local area, perhaps even at the find site. The settlement remains that were registered immediately around the hoard were later than the hoard itself. The probability that there was also a settlement here in period I cannot, however, be totally excluded, as a full investigation involving, for example, removal of the culture layer containing later settlement material, was not carried out. The demonstration of a contemporaneous settlement does not permit either the confirmation or the rejection of bronze production, nor does it permit localisation of such an activity. In contrast to the Late Bronze Age, there are no finds from period I of the Bronze Age to suggest that bronze casting or bronze working was linked to the settlements (Rønne 1989, 99-112; Levy 1991, 65f.). It has been suggested that there was a bipartite organisation of bronze handicraft in period IB of zone I. Specialists linked to the social elite produced the technically demanding

7. DJM 2583

8. DJM 2664

9. DJM 2621

10. Kulturhistorisk Museum Randers j.no. 88/68.

11. Vandkilde 1996, catalogue no. 373 ty. C1, no. 483 ty. C3, no. 520 ty. C4, no. 543 ty. C7.

12. DJM 2145, NM B17467

and sophisticated Valsømagle artefacts, while the more simple and traditional Fårdrup artefacts were made by independent smiths, who worked for the local community from a local base (Levy 1991, 69; Vandkilde 1996, 265).

Who and what does the hoard from Dystrup represent? What is its social context? Even though the hoard was deposited in a dry environment, and its contents, in principle, could have been re-absorbed into circulation, its ritual potential was not of minor significance. The function of hoards is related primarily to the symbolic sphere in society (Larsson 1986, 159). They can be perceived as gifts to divine powers and they demonstrate prestige and status relative to other groups, and, for example, legitimise an elite. Even though graves also represent depositions of valuable items, it can be presumed that the activities surrounding a burial served a different purpose in society than that served by the deposition of hoards (Larsson 1986, 159ff.; Vandkilde 1996, 276). In general it can be said that hoards mark the collective aspect in a society in contrast to the individual aspects which can be expressed in graves. The large number of swords in the Dystrup find represents without doubt a very great material value and not least a great symbolic strength. Weapons can be seen as symbols showing that competition and rivalry between groups or individuals has been incorporated into society. They are symbols of prestige and power. The hoards can be seen as being part of a general hierarchy with single depositions lowermost, monotype hoards in the middle and multitype hoards uppermost (Vandkilde 1996, 246). The Dystrup hoard is a monotype hoard and should therefore lie in the middle of the hierarchy, but with its content of eight swords is a very unusual monotype hoard. Its contents should perhaps be seen in the light of the fact that there appears generally to be less difference between the top and bottom of the hierarchical structure than previously thought (Vandkilde 1996, 289). The multitype hoards of this period have fewer categories of artefacts and are more uniform than is the case in the preceding periods; a certain harmonisation had taken place. This could be due to the fact that in period IB an elite was under construction and that this is manifested in the Valsømagle bronzes. The Fårdrup bronzes represent, conversely, the traditional social group (Larsson 1986, 185; Vandkilde 1996, 276 & 291). Finally, the many swords can be seen as the unique and extraordinary contents of a monotype hoard and as such should be perceived as a special

zone I period IB phenomenon in accordance with other high prestige artefacts (Vandkilde 1996, 303).

CONCLUSION

The eight swords from Dystrup constitute a monotype hoard deposited at a shallow depth on dry land, originally close to a large stone. In the immediate vicinity there are both settlements and burial mounds from the Bronze Age, but these are mainly later than the swords themselves. The possibilities with regard to settlement at the actual find site have not, however, been thoroughly investigated. All the swords are short swords with an estimated total length of between 43.7 and 46.6 cm. All were cast in one piece with four or five imitation rivets. Six of them are identically ornamented, one deviates somewhat and one is unornamented. The form is typical of the imported Hajdusámson-Apa swords and daggers and imitations of these. The ornamentation is similarly typical of the early swords but is composed of elements from different types of European sword and from the local Fårdrup bronzes. The link to the Fårdrup bronzes dates the swords to the Early Bronze Age period I (Vandkilde IB).

The stylistic similarity to the Fårdrup bronzes, the swords' great mutual similarity, certain technical details and the formal similarity to the flint-edged swords, confirm that the swords were locally produced, perhaps in the same workshop – whether this was in Southern Scandinavia in general or in the actual area where they were found.

Locally, the Dystrup find is anchored in a traditional period I, zone I environment in which the settlements comprise large two-aisled houses with no remains of bronze implements but with ones of flint. Hoards are represented by single finds such as a dagger of Hajdusámson-Apa type. The graves in the area are also poor in bronzes, but occasional examples are rich and contain pieces of Valsømagle type. The unusually large number of swords in the offering at Dystrup have great symbolic strength which demonstrates the group's prestige and power in relation to other groups. The extraordinary nature of the find must probably to be viewed in the light of changes in the social system and the construction of an elite which manifested itself even more strongly in the subsequent period.

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Manuscript submitted 2000

Acknowledgements

The present work was supported by the Danish Archaeological Board.

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