Ljungbacka

- a Late Iron Age Cemetery in South-West Scania

BY BENGT-ÅKE SAMUELSSON



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This paper discusses the results of the rescue excavation of a mixed burial ground in Lockarp parish, south-west Scania, Sweden. Apart from a pre-existing barrow of Early Bronze Age character in the middle of the field and a single cremation burial dated to the Late Bronze Age, most of the burials can be considered as of Late Iron Age date. A remarkable feature is the topographical division of the burials into smaller groups or clusters, which might be interpreted as a reflection of the local pattern of settlements rather than of purely chronological or social implications. Because of the complexity of the burial customs applied, signs of cult in connection with some of the interments, such as the killing of additional individuals, are discussed. Two of the Viking Age inhumation burials, one containing an axe and the other a pair of spurs, are evident examples of the Scandinavian 10th-century warrior graves. Viking riding gear has hitherto not been found in Scanian burials, so this brings up the question of the military structure of the Late Viking Age in this part of Denmark. Also, the location of the cemetery next to a former main road is discussed.

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The study of graves often brings up a whole series of archaeological problems such as questions of chronology and continuity, burial customs and rites as well as the spatial and social strata within the material obtained. In this article, the results of the rescue excavation of a principally Late Iron age cemetery investigated on the southern outskirts of the city of Malmö will be discussed. Besides introducing an important body of material, not published before, to a wider circle of readers, the main purpose of the study is to analyse the burial ground in terms of the aspects above and to suggest interpretations related to societal and ideological contexts including the political situation of the closing Viking Age.

Site description

The site (Fig. 1) in question is located only a few kilometres east of the south-west Scanian coast, in a suburban and industrial area just south of the city of Malmö. Here, in the parish of Lockarp, intense archaeological fieldwork over several decades has provided material for highly qualified analyses of ancient patterns of settlements, dating from the Late Neolithic onwards (Björhem & Säfvestad 1989, 1993). Burials, however, have not been reckoned in this area nor been scientifically investigated to the same extent, leaving important aspects of ancient societal conditions partly beyond our reach.

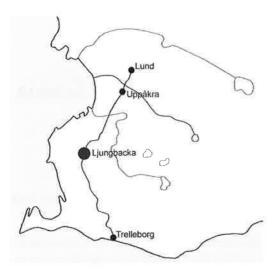


Fig. 1. Map of Scania, Sweden. The prehistoric road from Lund to Trelleborg passes through the Ljungbacka area.

In 1976, on a property formerly belonging to a homestead called Ljungbacka, the antiquarian department at Malmö Museum was archaeologically supervising earth being removed owing to the building of a railway siding track. Here, scattered along the railway section for about 200 metres and very close to a Bronze Age burial mound ("Grötehög"), a large number of ancient burials were exposed, suggesting the presence of a major cemetery. With the increasing development of land, archaeologists repeatedly revisited the site until 1987, and with the progress of their archaeological fieldwork, the structure of the cemetery became more and more evident and the total number of excavated burials finally reached 191. Today, due to antiquarian demands, a protection area surrounding the barrow and the non-excavated parts of the cemetery will secure the site from future development.

Due to the fertile soils of the Malmö region, this area was densely inhabited throughout prehistory. With the modern development of the city, the surrounding agricultural districts are rapidly being transformed into huge residential and industrial areas, a process constantly revealing the hidden traces of ancient remains damaged by hundreds of years of

cultivation. With a few exceptions, the only major monuments still to be seen in this landscape are the burial mounds generally dated to the Bronze Age. Between the western coastal plain and the hummocky landscape in the eastern parts of the region, these barrows probably still form the same visual landmarks as when erected, presumably signalling messages of power and wealth. Also, a great many of the barrows tend to be lined up in rows as if, as often stated, reflecting contemporary roads. In a recent study, all recorded prehistoric burials along a section of the historical main road from Trelleborg on the southern coast of Scania to the early medieval city of Lund, and also passing the important Iron Age central place of Uppåkra, have been mapped and analysed in an attempt to verify the hundred-year-old assumption that roads may have constituted attractive elements of landscape for the location of ancient burials. The results show that such a connection may exist, starting with the latest graves of the Late Neolithic, developing into an established pattern during the subsequent periods and not ending until the close of the Viking Age (Samuelsson 2001). Returning to Lockarp, as a part of the survey, the Grötehög barrow at Ljungbacka and its surrounding burial ground are located very close to this former main road and, as will be seen, this is a circumstance of interest for the interpretation of some of the Viking Age burials when viewed in a wider context.

Below, the Ljungbacka cemetery will be given a brief description emphasizing the complex and varying burial customs to be observed here, comprising inhumation as well as cremation. Also, some remarkable features of importance for the interpretation of the site, including the significance of the road, will be discussed. However, it should be stressed that the cemetery is not totally excavated and that still more burials may have been wiped out by the intense cultivation, as well as by the improper choice and use of heavy equipment in the earth-moving process preceding at least some of the earlier archaeological excavations.

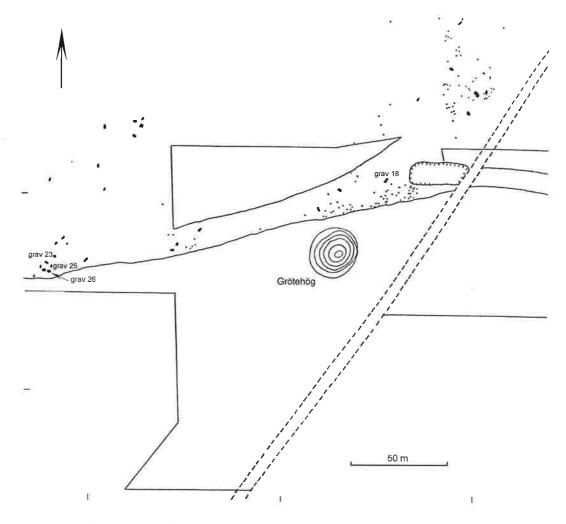


Fig. 2. Ground-plan of the Ljungbacka cemetery. Numbers refer to burials discussed in the article.

The inhumation burials

Briefly, the majority of the 31 inhumation burials can be classified as rectangular or oval in shape, less than one metre deep, and containing the remains or traces of human skeletons and sometimes also of coffins.

To what extent wooden coffins or biers were used cannot be judged with any certainty, due to difficulties in discovering their usually vague remains. We also have to consider the possibility that shrouds may also have been used, in addition to coffins, and leaving even less recognisable

traces. In ten of the burials true remains or traces of coffins or biers could be proved. In most cases the coffins were rectangular in shape and made of wooden boards, and only one example of hollowed log is present. Nails or rivets possibly deriving from coffins have been found in four burials, but no more than two in each burial, perhaps indicating that only the lids were nailed or recycled materials with pre-existing nails were used.

One of the burials (G18) was quite exceptional in several respects. Its size, 2.55 by 1.23 m, was far beyond the average for the

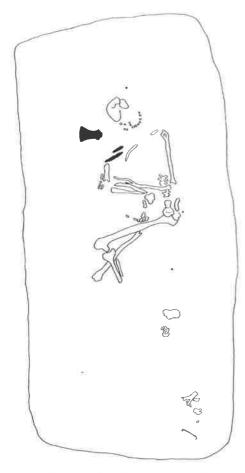


Fig. 3. Inhumation burial G18, Ljungbacka cemetery. Ground plan.

cemetery, and together with its strictly rectangular form and almost vertical sides this, at first, indicated the presence of a chamber grave, but as no traces of wooden boards or posts were observed, this could not be verified. The fill contained some soot and charcoal but also some burnt bone, partly of human nature. In the bottom of the grave, the skeleton of a young and slender man, only 19 or 20 years old, was lying in a crouched position together with fairly rich furnishings including an iron axe.

In the cemetery, the orientation of the skull could be determined for 19 of the buried individuals. The most common sectors were W-NW or N-NE with only one example (G26) of a deviating orientation (S-N). In nine cases the position of the body was also determinable either as stretched back, belly or crouched position. Late Iron Age graves with the skeleton in belly position are extremely rare, and the one found at this site (G26) will be discussed below in relation to some other odd features connected with this grave.

Blocks of stone were found in six graves, each containing one to six blocks. In some cases the blocks were so big and numerous that they would fill up the most of the inner space of the grave, thus indicating that they might originally have been visible above the ground surface, and together with the dug-up material may once perhaps have formed smaller mounds covering the graves. With the collapse of the coffin and the putrefaction of the corpse, these mounds would gradually level out, and together with the fact the site has been cultivated for several hundred years, no traces of any such burial mounds were to be observed any longer.

Small quantities of burnt bone, usually less than 10 g, have been collected from 13 of the inhumation graves, both as scattered fragments and as minor concentrations. The osteological analysis shows that they derive from Homo as well as from animals (Canis and Ovis/Capra) (Nilsson 1994). In recent years, burnt human bones have often been collected from Danish Viking Age inhumation burials, as in the cemeteries at Kjølvejen in Jutland, at Rytterkjær and Ottestrup in Zealand, at Kaagaarden in Langeland, and at Køstrup in Funen (Nielsen et al. 1985 and 1986; Ericsen 1992; Jønsson 1992; Lindblom 1993; Grøn et al. 1994). In Scania, similar observations were made in the cemeteries at Önsvala, Nevishög par. (Persson & Persson 1982, p. 199) and at Råga Hörstad, Asmundtorp par. (Kleiminger 1993, p. 103). Formerly, this category often was said to derive exclusively from pre-existing cremation pits being damaged in the grave-digging situation. However, this explanation may be applicable when discussing burial grounds with mixed inhumations and cremations belonging to separate periods, but

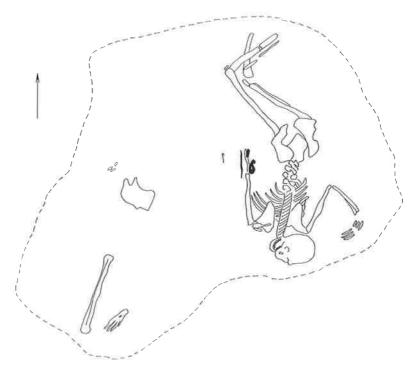


Fig. 4. Inhumation burial G26, Ljungbacka cemetery. Ground plan. Scale 1:40.

hardly not when they are contemporary inhumations or when solely inhumations are present. As will be seen, the latter is the case in the western part of the cemetery at Ljungbacka, suggesting that these burnt human remains should be treated and interpreted rather as a ritual element of the burial tradition.

Collective graves – human sacrifices?

At the Ljungbacka cemetery the skeletal bones of two and even three individuals were observed in six of the inhumation burials. In most cases these burials are not to be considered as actual double graves or as graves with secondary interments. Instead, some features, most convincingly illustrated by graves G23 and G26, indicate that the additional individuals in these burials should be interpreted as male slaves killed as a part of the ritual.

Burial G23 contained the skeletons of two men placed on top of each other. Primarily, a man about 30 years old was buried on his back with the skull to the WNW. In view of the gravegoods, including a pair of spurs, this burial is identified as a Viking Age warrior grave. On top of this man were some additional skeletal bones of another man, who seems to have been beheaded, the skull being placed between his feet facing ESE.

In grave G26, primarily a woman of 45-55 years of age was buried in a coffin oriented W-E. Above her some scattered male skeletal bones were found together with the complete skeleton of yet another man, 50-60 years old. He was lying in a somewhat distorted belly position with his limbs violently bent upwards and with the skull facing S. A cranial chop mark might indicate that the man was injured by some kind of weapon, and it is not unlikely he had fallen, unconscious or dead, or had been ruthlessly shoved down into the open grave.

As a common feature of these graves, the additional individuals, besides being killed, tend to be placed in opposite directions or opposite

positions versus the underlying deceased, a treatment perhaps stressing their underprivileged social position as slaves. Likewise, the cremated human bones collected in a third of the inhumation burials of this cemetery may express a similar phenomenon, indicating that the treatment itself (here, the cremation) was the decisive point in the accomplishment of this burial custom, separating these individuals from the primarily buried ones. A problem of great importance when judging these burials is the question whether they express the idea of sacrifice, as often stated, or not. However, the circumstances connected with these burials make it more likely to consider the additional individuals as a part of the grave-goods and as such the purpose probably was to continuously serve their late masters rather than benefiting the survivors. Viewed in the light of the economic effort and value these individuals may represent, we are here probably facing the members of a class of society whose superior position also includes the power of deciding on the life and death of other people. In these burials, the gravegoods in general clearly reflect a certain wealth, also indicating the presence of individuals of a somewhat higher class of society. The situation somewhat resembles a much discussed burial at Sewerby, Yorkshire, England. Here, the twisted skeleton of a woman was found just above a richly furnished woman's grave of Late Iron age date, and the frightening position of the additional woman's body suggested that she even might have been buried alive (Hirst 1993).

Though rare, parallels do occur, in both Denmark and Sweden, and also signs of beheading have been observed (Strömberg 1961, p. 42; Hemmensdorf 1984; Skaarup 1989; Holmquist Olausson 1990). In Denmark, wellknown Viking Age examples of collective graves were found in the cemeteries at Stengade in Langeland, Lejre and Gerdrup in Zealand (Andersen 1960; Skaarup 1976, pp. 56 ff.; Christensen 1982). In Scania, similar burials have been found at Stävie, Stävie par. in the western part of the province (Nagmér 1979) and at Fjälkinge, Fjälkinge par. in the north-east (Helgesson 1993). Altogether, the distribution of these burials indicates they are concentrated in the eastern parts of Denmark (Nielsen 1991, p. 260), a tendency further strengthened by the Scanian material.

Grave goods

The following presentation and analysis of some of the various objects found in the inhumation burials of the Ljungbacka cemetery will concentrate only on the most important categories and on those of major interest or significance as to the problem of dating or the interpretation of the burials in a wider sense.

In the woman's grave G25 a sliding lock (Germ. Gleitverschluß) consisting of the two pieces of small bronze fittings once riveted to both ends of a narrow girdle or belt were found (Fig. 5a and 5b). In Denmark, parallels, with both pieces found together, have been found at Stengade II (grave DW) in Langeland, at Dover

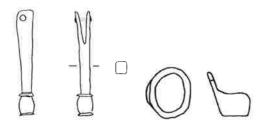


Fig. 5a. Sliding lock from the inhumation burial G25, Ljungbacka cemetery. Drawing by the author. Scale 1:1.



Fig. 5b. Girdle with sliding lock. Reconstruction by Gabriel 1989.

(grave 132) and Brandstrup III (grave B) in Jutland, and also from Oldenburg (graves 17 and 19) on the German Baltic coast (Skaarup 1976, p. 104; Gabriel 1989, p. 229; Petersen 1989, pp. 50 ff.; Ifversen & Nielsen 1995, p. 145). More often, only the staff-shaped strap end mounting is found (Fig. 6), but from Sweden only two examples are known; one from a grave at Birka (grave no. 1059) and one from Uppåkra in Scania (LUHM 31000:1310). Contributing as many as eight pieces, Hedeby may have been the place of manufacture for this category of objects (Gabriel 1989, p. 229). As to dating, sliding locks belong to the 10th century and especially to the second half of the century. Belts with these fittings were probably parts of a certain type of costume worn only by members of a higher-ranking class of society (Hägg 1991).

A single penannular brooch of bronze with an iron needle and with faceted end knobs without stalks was found in burial G21. Typologically, this brooch belongs to Carlsson's group FAC:US*ova:c (Carlsson 1988, pp. 15 ff.). In Scania, no such brooches have previously been found in connection with graves and, in Denmark, only one example of the present type is known from a grave at Ludvigshave on Lolland, dated to the end of the 10th century (Brøndsted 1936, pp. 180 ff.). In present-day Germany, burials in both Hedeby and at Thumby-Bienebek have yielded several penannular brooches (Müller-Wille 1987, p. 467), but still the central areas of circulation are the Fenno-Baltic region and Gotland (Ginters 1984, p. 27), and the items found in southern Scandinavia are mainly to be interpreted as imported from those regions

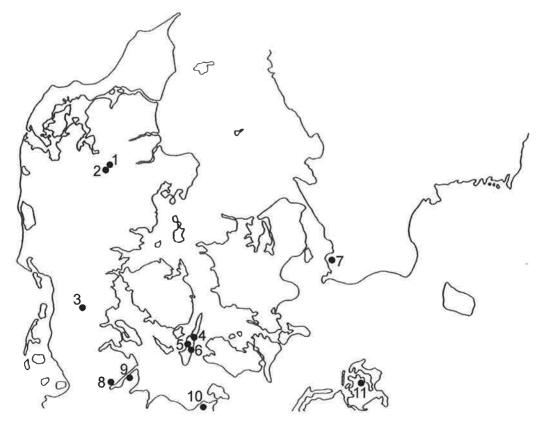


Fig. 6. Distribution of Viking sliding locks in Viking Age Denmark and the south-west Baltic region. 1. Mammen. 2. Brandstrup III. 3. Dover. 4. Stengade I and II. 5. Bogøvej. 6. Kaagården. 7. Ljungbacka. 8. Hedeby. 9. Thumby - Bienebek. 10. Oldenburg. 11. Ralswiek.

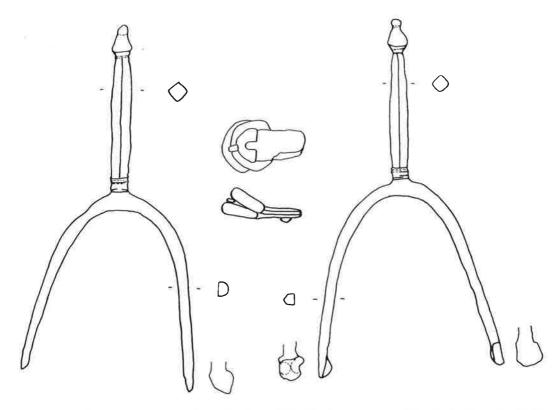


Fig. 7. A pair of iron spurs from the inhumation burial G26, Ljungbacka cemetery. Drawing by the author. Scale 1:2.

(Müller-Wille 1989, p. 759). These brooches exist throughout the Viking Age, but the major material collected from the burials in Birka mainly dates from the 10th century, a dating probably applicable to the south Scandinavian pieces too (Thålin 1984, p. 19).

From the collective grave G23 there is a pair of well-preserved iron *spurs* with long, biased pikes, each pike ending in a profiled knob and with a plain inlay of copper (wire) at the base of the pike (Fig. 7). Together with the spurs, two strap mountings of iron were found. Similar spurs are previously known from several Danish Viking burials with riding gear, but in Scania evidence of this type of burials has not been found up to now (Pedersen 1997a), making the interpretation and significance of this particular burial interesting in a wider sense, as will be discussed below. Apparently, this type of spurs does not appear in the Nordic countries until the 10th century (Gabriel 1984) and the ones

with biased pikes are usually considered as of later dating than those with straight pikes (Pedersen 1997b, p. 84), suggesting the pikes from Ljungbacka belong to the second half of the century.

The above-mentioned grave G18 contained the head of an iron *axe* of Petersen's type H (Petersen 1919, p. 43) (Fig. x). In Denmark, a great number of Viking warrior graves contain axes but, in Scania, the corresponding material found is of much smaller proportions, consisting of only four burials; at Önsvala, Nevishög par., at Ruuthsbo, Bjäresjö par., at Stävie, Stävie par. (Strömberg 1961:II, pp. 17, 26; Nagmér 1979, p. 32) and at Norrvidinge, Norrvidinge par. According to Petersen, the axes of type H are to be dated to the first half of the 10th century (Petersen 1919, p. 43).

It is very likely, as has been suggested, that the presence of the axe symbolizes higher rank or status gained within the community of young

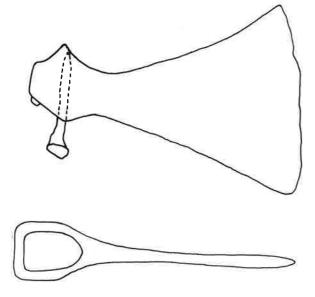


Fig. 8. Iron axe from the inhumation burial G18, Ljungbacka cemetery. Drawing by the author. Scale 1:2.

men fit for military service (Trotzig 1985). Accordingly, contemporary scenes depicting men with axes, as seen on the Bayeux Tapestry, might be expressing a similar meaning and, in the south of Scania, yet another example can be seen in the complex, and partly runic, monument at Hunnestad, Skårby par. (Näsman 1991, p. 172).

A clasp knife was found in grave G22. The cover is made from a thin sheet of iron to which the blade is riveted and can be folded out when in use. Due to heavy corrosion, the shape of the blade cannot be judged. These knives are extremely rare in Scandinavian finds. The majority have been found in Viking Birka but single clasp knives have also been found in one of the ship burials at Tuna, Alsike par. in Uppland, and in a grave at Källby in Lund, dated to the Vendel Period. They should all probably be considered as imported and mainly from the mid-Rhine region (Arbman 1937, p. 236). As to age, clasp knives cannot be dated any closer than to the Vendel/Viking period (von Freeden 1984, p. 467).

Beside these objects of special interest and of indubitable Late Iron Age or Viking Age character, some other categories of artefacts indicate a similar dating. The most numerous of these are the 27 simple single-edged knives of iron that have been registered from 23 of the graves, sometimes found together with whetstones of slate. Other categories to be mentioned are keys, spindle-whorls, beads and a single strike-a-light. Finally, some pottery, usually only small sherds, was collected and when identifiable classified as domestic AIV ware of Viking Age character. Grave G21 was the only one to hold a complete vessel of AIV ware and of the ordinary Viking shape (Fig. 9).

Dating

According to the listed specification shown in Table 1, five burials cannot be dated at all because of the lack of datable grave-goods, and 18 burials cannot be given a more precise dating than to the Late Iron Age. Probably, as none of these belong to the Migration Period or the pure Vendel Period, the majority of the inhumation burials of the Ljungbacka cemetery are to be considered as Viking Age. Within this period four burials are clearly dated to the 10th century, ranging the whole of this period. Due to their character in general, the poorly furnished burials,

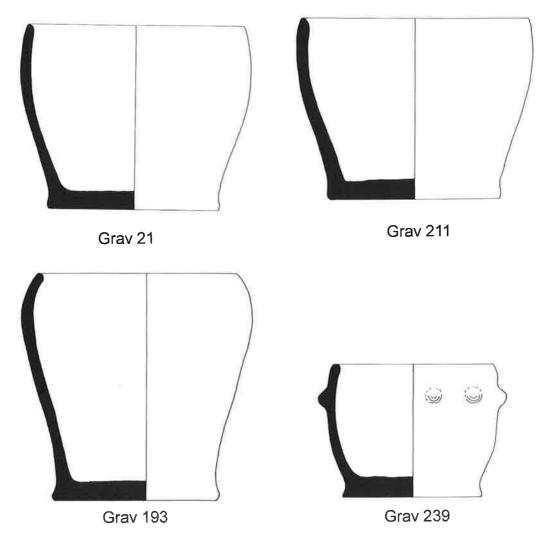


Fig. 9. Viking pottery from the Ljungbacka cemetery. 1. G21. 2. G211. 3. G193. 4. G239. Drawings by the author. Scale 1:2.

like those with a single knife, probably should likewise be considered Viking Age, and when one considers the distribution within the cemetery, this impression is further stressed.

The cremation burials

At the Ljungbacka cemetery a total of 160 cremations have been excavated, predominantly cremation pits, usually containing only small quantities of burnt bone, sometimes also including animals, with no grave-goods or only poor ones, and thereby difficult to appraise as to dating.

To the north of the Bronze Age barrow in the middle of the cemetery, a single urn grave was discovered containing a ceramic vessel of biconical shape and of late Bronze Age character

Tab. 1. Inhumation burials with dating objects, Ljungbacka cemetery.

Burial	Datable finds	Date
no		
1	Knife, spindle-whorl	Younger Iron Age, probably Viking Age
2	Knife, ceramics	Younger Iron Age, probably Viking Age
3	Knife, ceramics	Younger Iron Age, probably Viking Age
4	*	
5	Knife	Younger Iron Age, probably Viking Age
6	E .	0 01 7 8 8
7	Spindle-whorl	Younger Iron Age, probably Viking Age
8	Knife, whetstone	Younger Iron Age, probably Viking Age
9	Knife	Iron Age
10	Knife	Iron Age
11	ž.	8
12	Knife, wooden barrel	Viking Age
13	Knives, buckle	Viking Age
14	16	,
15	Knife	Iron Age
16	Knife	Iron Age
17		
18	Axe	First half of 10th century
19	Knife, ceramics	Younger Iron Age
20	Ceramics	Younger Iron Age, probably Viking Age
21	Penannular brooch,	10th century
	ceramic pot	,
22	Pocket knife	Vendel-/Viking Age
23	Spurs	Later part of 10th century
24	Knife	Iron Âge
25	Slide lock	10th century, probably late
26A	Keys	Viking Age
26B	Knife, spindle-whorl, bead	Younger Iron Age, probably Viking Age
27	Knife	Iron Age
28	Knife, whetstone	Younger Iron Age, probably Viking Age
29	Knife	Iron Age
30	Bead	Younger Iron Age, probably Viking Age
31	(2)	0 1 7

together with some bronze objects and 704.9 g of burnt bones of human nature (G241).

A specific and seldom observed type of cremation burial, the hearth-grave, is represented here by 16 graves. Instead of the burnt bones being deposited in a cremation pit, they were placed in a burning hearth. A characteristic of these graves is the rich presence of charcoal at the bottom of the structure. Graves of this type were first published in connection with the excavation of the burial ground at Vätteryd, Norra Mellby par. in northern Scania (Strömberg 1961, p.

185). Similar graves are also known from Jutland in Denmark. They all seem to be dated to the Vendel Period.

Apart from grave G241, the amount of collected burnt bone was very modest, usually varying between <0.1 gram and 53.6 gram. Also animals are present in 19.4% of the graves representing *Canis* (11 graves), *Ovis/Capra* (10 graves), *Aves?* (2 graves) and *Sus* (1 grave) (Nilsson 1994).

Secondary cremations in inhumation burials Five of the inhumations showed traces of one to five secondary cremations. It is hardly likely this was accomplished regardless of or without any awareness of the pre-existing burials. Instead, the assumption that this custom expresses a wish to actually stress a kind of kinship to the previously buried is a more reasonable explanation. Simultaneously, this may also express a certain ambivalence within the burial tradition, showing inhumation to be a custom not always approved by everyone. Also, some topographic differences within the cemetery, with the western parts showing a much lower frequency of secondary cremations than the eastern parts, might be related to chronological differences, suggesting a more stable burial custom by the end of the Viking Age, with inhumation as the prevailing custom. This was most obviously observed in the westernmost part of the field. As stated above, cremation was only practised here in given situations connected to the ritual of inhumation itself. Generally speaking, cremation as a burial custom was maintained longer in Scania than in the rest of Denmark (Strömberg 1961, p. 192). However, this change in tradition might well have been gradual and with great local variations, depending on the differing disposition of the population to the acceptance of new ideas and customs.

Grave goods and dating

Only 28 of the cremation burials contained any grave goods, and because of the combustion on the pyre the majority of the metal objects are heavily fragmented and thus hard to identify. However, there are a few datable finds, such as a double button of bronze, belonging to period IV of the Bronze Age (G241), and an iron buckle of Vendel type (G254) (Björhem & Säfvestad 1993, p. 181). Pottery makes up the biggest category of finds, collected from 21 graves. Only four complete vessels are present and only in one case, a biconical vessel of Late Bronze Age character, was used for holding

burnt human bones (G241). The majority consist of domestic Viking AIV ware.

An analysis of the total amount of grave goods from the 160 excavated cremation burials shows that only a minor part can be given a somewhat appropriate dating. Of these, one single grave was dated to period IV of the Bronze Age (G241), one grave to the Vendel Period (G256) and nine graves to the Viking Age. Finally, the secondary cremations in pre-existing inhumation burials of Late Iron Age character can be added, making a total of 22 dated graves. However, the distribution of Viking Age pottery within the cemetery is fairly even, thus supporting the probability that still more graves belong to this period. Also, the total lack of overlapping speaks of a high degree of contemporaneity. If, hypothetically, all hearth-graves could be dated to the Vendel Period, this number would increase to 48.

Grave groups

One of the main topographic features of the Ljungbacka cemetery is the division of the burials into separate groups or clusters. Five such groups have been separated and the map (Fig. 10) shows the distribution of these groups and Table 2 the breakdown of graves into types. Very few burials do not fit within these groups (G17, G200, G254) or cannot be located at all (G196, G249–251).

The group is situated in the northernmost part of the cemetery and very close to the former main road. Counting 90 burials, the group forms the largest of them all. Within the group cremations predominate heavily (84 burials) in relation to the few and scattered inhumations (6 burials). Four of the inhumation burials showed obvious signs of secondary cremations and five of them contained burnt bones of human nature. Burnt animal bones were collected from only one of the inhumations but from 12 of the cremation burials.

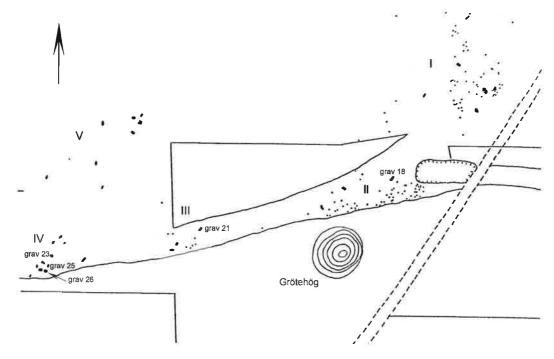


Fig. 10. Grave groups within the Ljungbacka cemetery.

- II Like the previous one, this group is situated very close to the road but also to the preexisting burial mound Grötehög. It consists of 62 burials with cremation as the predominant burial custom (59 burials). Compared to these, the three inhumation burials hold a peripheral position within the group as to location. They all contained burnt human bones, and there were secondary cremations in two of the graves. In view of the grave goods, one of the inhumation burials has been classified as a warrior grave (G18). Among the cremations 12 burials contained burnt animal bones. A single Late Bronze Age cremation burial was found within this group (G241).
- III The group consists of only 13 burials (10 cremations and 3 inhumations) located in the western part of the cemetery and at some distance from the road as well as from the burial mound. Burnt human and also burnt animal bones occurred in all of the inhumation graves and in one case also the

- skeletal bones of two individuals were found (G21). Burnt animal bones were collected from three of the cremations.
- IV Forming a small group of only 11 inhumation burials, this group is situated in the westernmost part of the cemetery and quite distant from the burial mound and also from the road. Four of the burials contained the skeletal bones of two or even three individuals. Burnt human bones were found in five of the burials and burnt animal bones were collected from three of them. One grave is identified as a warrior grave (G23).
- V Finally, the seven poorly furnished inhumation graves located to the north of groups III and IV compose the smallest group of the cemetery. In one of the graves burnt animal bones were found.

When the reasons for this grouping are investigated, several hypotheses are conceivable: the groups may represent separate chronological or social strata, or may reflect different

Tab. 2. Distribution of burial customs within the different grave groups at the Ljungbacka cemetery.

	Burial group		Burial group		Burial group		Burial group		Burial		Total	
	I		II Î		III		IV		V			
Cremation pits	44	48,90%	33	53,20%	6	46,20%	0	3	0	-	83	45,40%
Burial pits	6	6,70%	12	19,40%	1	7,70%	0	2	0	-	19	10,40%
Urn in I	18	20,00%	0	9	0		0		0		18	9,80%
cremation pits Burials in	6	6,70%	8	12,90%	2	15,40%	0	5	0	ē	16	8,70%
hearths Cremation	1	1,10%	4	6,50%	1	7,70%	0	3	0	ž,	6	3,30%
layers Sec. cremations layers	9	10,00%	2	3,20%	0	3	0	2	0	×	11	6,00%
Inhumation burials	6	6,70%	3	4,8%	3	23,10%	11	100%	7	100%	30	16,40%
Sum	90	100%	62	100%	13	100%	11	100%	_ 7	100%	183	100%

communities (settlements) or a combination of all these. In some respects, an analysis of the character and the structure of the different groups will show important variations when compared. Most evident is the varying frequency of cremation versus inhumation, with cremation dominate groups I-III and inhumation groups IV and V. Likewise, the presence of cremated human bones in the filling of the inhumation graves is most prevalent in groups I-III. The number of inhumation burials containing the skeletal bones of additional individuals predominates within group IV, but the phenomenon also occurs within group II. Secondary cremations dug into pre-existing inhumation burials are only known from groups

These variations may partly imply chronological differences, though this is not truly indicated by the archaeologically datable material. From the assumption that the Late Iron Age burial customs gradually changed from cremation or mixed customs to pure inhumation, a tendency towards a topographical seriation may possibly be established as suggested by the following sequence:

A Initially, grave groups I–II were established close to the pre-existing Bronze Age burial mound and also to the road. Cremations are predominant within both these groups. The

distribution of the few inhumations of these groups may indicate a parallel use of both customs, also suggested by the high rate of secondary cremations in existing inhumation burials, a custom chiefly observed in group I. The inhumations of group II should possibly be interpreted as somewhat younger than the cremations of this group, and the warrior grave (G18), dated to the first half of the 10th century, probably as one of the latest interments of this group. Finally, the numbers of burials within these two groups also may reflect a continual use of relatively long duration.

- B Groups III—IV, partly because of their location in relation to the pre-existing burial mound and also to the road, and partly because of the low rate of cremations and the total lack of secondary cremations, seem to have been established during a later phase of the Viking Age, as also suggested by the datable gravegoods. Group IV is probably the younger of the two, this being reflected in warrior grave G23, dated to the latter half of the 10th century.
- C. Grave group V probably also belongs to this later part of the Viking Age, primarily due to its total lack of cremations and also of burnt human bones but also because of its poorly furnished graves in general.

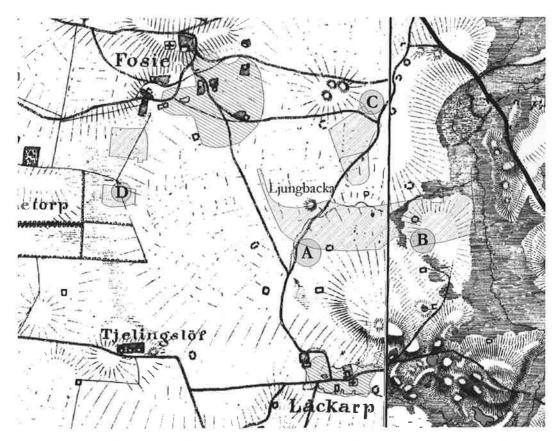


Fig. 11. Adjacent settlements coeval with the latter phase of the Ljungbacka cemetery.

Though the different groups do to some extent represent a certain degree of chronological strata, primarily reflected by the continual change in burial custom and tradition, this interpretation cannot, in this case, be said to be the whole truth, because continuous and long-term use

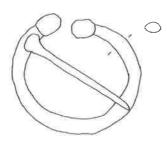
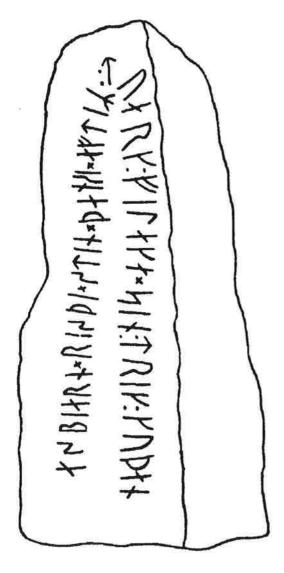


Fig. 12. Pinbrooch from grave 21. Scale 1:2.

would probably have implied a topographically more united cemetery. Likewise, with the exception of some of the burials in groups II and IV, belonging to members of a higher-ranking class of society, no evident socio-economic differences can be adduced to explain this topographic appearance.

As neither chronological nor social variations seem sufficient to explain the presence of the existing grouping within the Ljungbacka cemetery, the third point of view might be considered: that the groups should be interpreted as a reflection of the local pattern of settlements. Within a distance of 1,500 m four different settlements dated to Late Iron Age have been investigated (Fig. 11). During the large-scale excavations at Fosie IV near Ljungbacka, two major settlements were found (A and B) ranging

over a time span corresponding also to that of the Ljungbacka cemetery. The large settlement A is situated next to the former main road some two hundred metres south of the cemetery. The establishment of this habitation might be put at the time of the birth of Christ, and it was finally



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Fig. 13. Runic monument of "after Jelling" type, now by the church of Fosie. Drawing by Lars Enoksen.

deserted during the 10th century (Björhem & Säfvestad 1993, pp. 294 ff.). The second site (B) is located almost one kilometre ESE of the cemetery and ranged from the Roman period throughout the Viking Age and, besides, some indications suggest the site to have been of fairly major importance (Björhem & Säfvestad 1993, pp 308 ff). A third settlement (C) is situated about 600 metres to the north of the cemetery and rather close to the road. Because of the presence of AII ware and some distinguished pieces of jewellery, the abandonment of this site could be fixed in the earliest part of the 11th century (Jönsson 1974).

As already mentioned, those burials representing the latest phase of interments belong to the second half of the 10th century. By that time the two settlements A and B were probably already abandoned, also illustrated by the total lack of pottery defined as Baltic ware or AII ware and thus possibly making these settlements associated with grave groups I and II. Also, the large numbers of burials within these groups speaks in favour of a connection with dwelling sites of long-term duration and of considerable size. The warrior grave G18 found within group II and dated to the earlier half of the 10th century might also fit into this interpretation. The material from settlement C at Dubbelknappen, Fosie par., reflects a smaller and later community, probably of short-term duration, thus suggesting the connection with a smaller and later burial ground as the grave group IV. Close to this settlement, however, a Viking boat burial has been found, somewhat contradicting any such connection (Burenhult 1971). Instead, the small dwelling site at Vårsången, Fosie par., to the west of the cemetery, could be seen as an alternative possibility. Here, pottery of AIV as well as of AII ware was found together with a coin (Otto III/Adelheid, AD 991-97), making it plausible that occupation ceased at the beginning of the 11th century. Also, the limited habitation might reflect only a short-term occupation of settlers and rapid desertion in connection with the contraction of the earlier settlements as the regulated villages were established, showing a parallel to the development of grave group IV. Corresponding to the rise of the regulated villages, the burial grounds were replaced by Christian cemeteries, here reflected by the parish centres of Lockarp and Fosie.

To sum up, several settlements may be related to the cemetery and its separate groups. However, the difficulties are obvious and future excavations may overthrow the suggested connections in favour of others.

Conclusions

The problems of chronology and continuity have been of central importance to the analysis carried out here, but due to the scarce gravegoods from a great deal of the burials, the material has in many ways been unsatisfactory in this respect. To summarize, the earliest burial to have been established at the Ljungbacka cemetery is probably the (non-excavated) barrow of Early Bronze Age character in the centre of the burial ground. Due to the presence of a single urn grave, located just to the north of this barrow and dated to period IV of the Late Bronze Age, more burials of this kind may be assumed to exist, most likely in the (nonexcavated) area south of the burial mound, as has often been proved. Unfortunately, hitherto no burials have been possible to assign to the time span Pre-Roman Iron Age-Migration Period, leaving the question of the duration and closing of this first phase of the cemetery unsolved. At least some of the undated burials may belong to these early and mid Iron Age periods, but, on the other hand, the majority of the inhumations as well as of the dated cremations are obviously of Late Iron Age and mainly of Vendel Period or Viking Age character, thus constituting the second phase of the cemetery. Also, the wide topographical distribution within the cemetery of burials of this character and age supports this general picture.

When it comes to the possibilities of using the burials of the Ljungbacka cemetery as a topic in social studies the Viking inhumation burials will provide the best material with the warrior graves of the 10th century as the foremost examples. Fairly widespread throughout Scandinavia, this type of burial forms a clear and well-defined group. In Denmark the material has been much discussed in connection with the formation of the state, and these graves are often interpreted as related to members of the king's hird (Randsborg 1980, pp. 126 ff. and 1982). Also, some of the contemporary runic monuments are related to this question and especially those with inscriptions mentioning "drengs" or "thegns", titles possibly indicating a position within the hird (Christophersen 1982, p. 130). Not far from Lockarp, in the village centre of Fosie, we meet a good example of this type of runic monument, probably erected by AD 1000, and to the memory of a "dreng" (Salomonsson 1971, p. 163). In Denmark, the distribution of these monuments together with the distribution of the warrior graves have been considered as reflections of an explicit political and military strategy, established by royal initiative, aiming to consolidate the power and rule of the kingdom (Randsborg 1980). However, it should be stressed that also local noblemen might have kept their own hirdsmen, so a sociopolitical organization of this kind should not always be considered exclusively associated with the king in person (Nielsen 1961).

In Scania, due to the scarcity of evidence, it is difficult to confirm whether this military organization was also established east of the Sound or not, but it is hardly surprising that these two warrior graves were to be found on this very spot. In a broader perspective, this part of Viking Age Denmark constituted one of the most intensively cultivated regions in the country and consequently one of the most densely populated, as is evident from the distribution of the archaeological material of this period (Strömberg 1961, p. 202; Hårdh 1984, p. 94; Stjernquist 1996, pp. 113 ff.). Its many churches

also reflect the character of south-west Scania as a prosperous and central region of great importance within the Danish kingdom. In fact, this region shows the highest rate of early medieval churches throughout Denmark (Skansjö 1983, pp. 171 ff.). Although medieval, the number of churches quite obviously corresponds to the population density of the previous period as well.

For many reasons south-west Scania should probably be regarded as a well-integrated part of Viking Age Denmark, and its location by the Sound and the south Baltic Sea also gave favourable opportunities for national as well as international trade and communication. However, due to the constantly drifting sandy banks and reefs off the Falsterbo peninsula, these waters have always been considered risky for shipping. To avoid this risk, the presumed main road mentioned above may hypothetically have played an active part, making up the connecting link in this traffic, transferring goods and using Trelleborg as a port of transhipment (Rudebeck et al. 2001, p. 75). Perhaps the ringfort at Trelleborg was erected to secure and to financially control this long-distance trade from the southern and eastern Baltic regions. The second phase of this fort dates from the latter part of the 10th century and may thus be viewed as an expression of the aspirations of Harald Bluetooth to unite the kingdom (Jacobsson 1995, pp 55 ff.). A corresponding port, supporting the northern routes of trade, may have been located in the Löddeköpinge/ Borgeby area by the Lödde River on the Scanian western coast (Svanberg & Söderberg 2000, pp. 258 f.). Finally, the newly discovered quay structure at Sunnanå north-east of Malmö may be interpreted as a part of this trading system. Here, where the main road crosses the Sege River, a timber construction of 200 metres length together with three buildings of Viking Age character might have been a place of transhipment (Steineke 2000, p. 203).

Thus, the road may have been of major

importance not only to the local communities but also in an interregional sense, connecting Uppåkra/Lund with the outside world, and this link would surely have been a part of the king's sphere of interest. It is well known that great efforts were made to improve the military and communicational infrastructure systems during the reign of Harald Bluetooth in order to enforce his royal power, clearly evidenced by the imposing ringforts and bridges being throughout the country, not to mention the Danevirke fortifications to the south. The accomplishment of this political and societal development and change in Denmark could probably not have been fulfilled without the support of an organization of military character. In this perspective, it is very likely that the two warrior graves found at Ljungbacka may harbour members of one such military community.

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