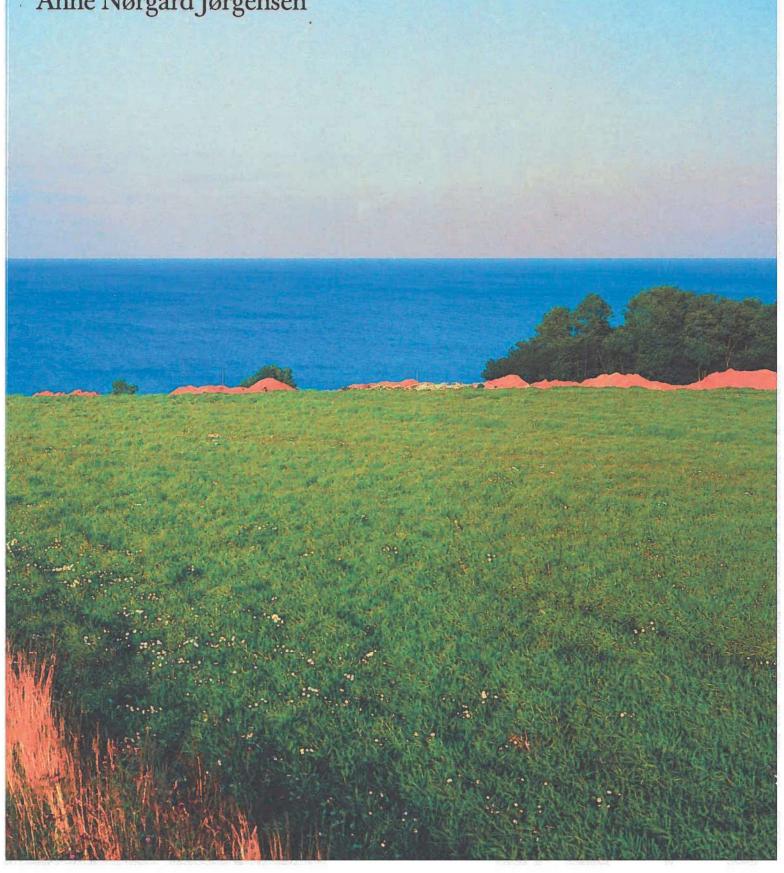


A Cemetery from the 6th-8th Centuries on Bornholm

Lars Jørgensen and Anne Nørgård Jørgensen



Nørre Sandegård Vest, but the very low proportion indicates that the majority of the possible children's graves have been ploughed away, as they were not buried as deep as the adults. This is supported by the fact that many of the adult graves with rich grave goods have evidently also been ploughed away at this site.

There are only 3 graves in the cemetery that can definitely be identified as children's graves, graves 22, 34 and 53. In grave 22 a 6-7 years old girl was buried with quite a large collection of jewellery. In grave 34 only weak skeletal traces of a buried child were visible with a knife and a wooden container as grave goods. In grave 53 a comb and a pot were found. The small dimensions of both graves also indicate that they were the burials of children.

Of the remaining unidentified graves, V1 and V2 were excavated by Vedel and contained no grave goods. During the re-excavation of these two graves, however, two large features were observed, which could possibly be adult graves. The only certain adult's grave amongst this set is grave 75 in which clear skeletal traces of a fully grown person could be seen. The only grave goods here was a knife. Grave 48 also contained a knife alone, but in this case it was impossible to offer any closer age-determination on the basis of skeletal traces. Finally, the suspected grave 95 should be noted, probably a robbed grave. Vedel excavated no graves in this area, but the size and alignment of the feature imply that an inhumation grave must have been excavated at this spot. It may have been the then landowner who undertook a single excavation on his own initiative after Vedel's excavation.

#### 3.2. The Women's Graves

# by Lars Jørgensen

Fifty-nine graves at Nørre Sandegård Vest (60 if feature 95 is counted in) can definitely be assigned to the Late Germanic Iron Age. 27 of these can securely be identified as women's graves on the basis of their gender-specific grave goods (including the girl's grave 22). The women's graves of Bornholm in this period often contain a very substantial set of jewellery that allows us to sex the graves without osteological analyses. In the same way, many of the men's graves contain weaponry identifying the sex of those buried there.

The 26 women's graves excavated in the cemetery also contain rich grave goods which can shed light on important chronological and social details of this period on Bornholm. The starting point for these analyses is a dating of the relevant grave finds in the chronology for the Late Germanic Iron Age on Bornholm.

## 3.2.1. Chronology

The women's graves of Bornholm of the Late Germanic Iron Age have already been used in chronological analyses (Ørsnes 1966; 1970; Høilund Nielsen 1987; Jørgensen 1990). There is a rich and varied set of grave finds from this period, and the supplementary finds from Nørre Sandegård Vest provide the opportunity for a new chronological analysis. This does not imply that the earlier works are inadequate; rather that the new graves make it possible to re-assess the earlier chronological results.

The work of Ørsnes from 1966 still forms the foundation for the chronology of southern Scandinavia with his division of the period into the main phases 1-3. His system was revised, however, by Høilund Nielsen in 1987, where the finds from Bornholm were divided up into 8 phases, 1A-1D, 2A-2C and F, with Phase F representing the Viking Period proper (Høilund Nielsen 1987). Høilund Nielsen similarly undertook some minor adjustments to Ørsnes's typology, and introduced, for the first time, a typology of bead strings, which proved to involve some clear chronological trends. In the present work Høilund Nielsen's typology is followed strictly.

The analytical method used for the chronology is the same as that used by Høilund Nielsen in 1987 and involves a seriation and correspondence analysis of the combinations of types in the Bornholm grave finds. This method, and its possible weaknesses, has been described in several articles, and the reader will therefore not be wearied with long mathematical accounts of the statistical basis of this method (cf. Høilund Nielsen 1987; 1988; Madsen 1988; Hines 1992; Palm and Pind 1992; Scollar 1993). Put briefly, the place of a grave in a seriated matrix is calculated on the basis of a mathematical mean value for that grave's combination of types. The major drawback of this statistical method lies precisely here, as a majority of old types will weigh more heavily than the latest artefact-type which is otherwise perhaps the most appropriate for dating the act of burial. This source of possible error, however, only seems to occur in a small number of blatant cases, all of which will be noted in the following discussion of the result of seriation.

A total of 111 women's graves from Bornholm and 46 artefact-types were included in the analysis (Figs. 15-16). The seriation reveals the gradual replacement of types that can be seen in the grave groups down through the phases (Fig. 16). The phase boundaries in the seriation are primarily defined on the basis of relatively conspicuous typological innovations. The seriation produced 10 phases, in which phases 1A-2C constitute the Late Germanic Iron Age and phase VIK is the classical Viking Period. The relevant correspondence analysis to check this seriation clearly shows that there is a gradual chronological development in the furnishing of the graves (Fig. 17). A neat parabola shows how the individual phases follow one another along the first axis which stands as the chronological indicator in this type of analysis.

A number of adjustments can be made to Høilund

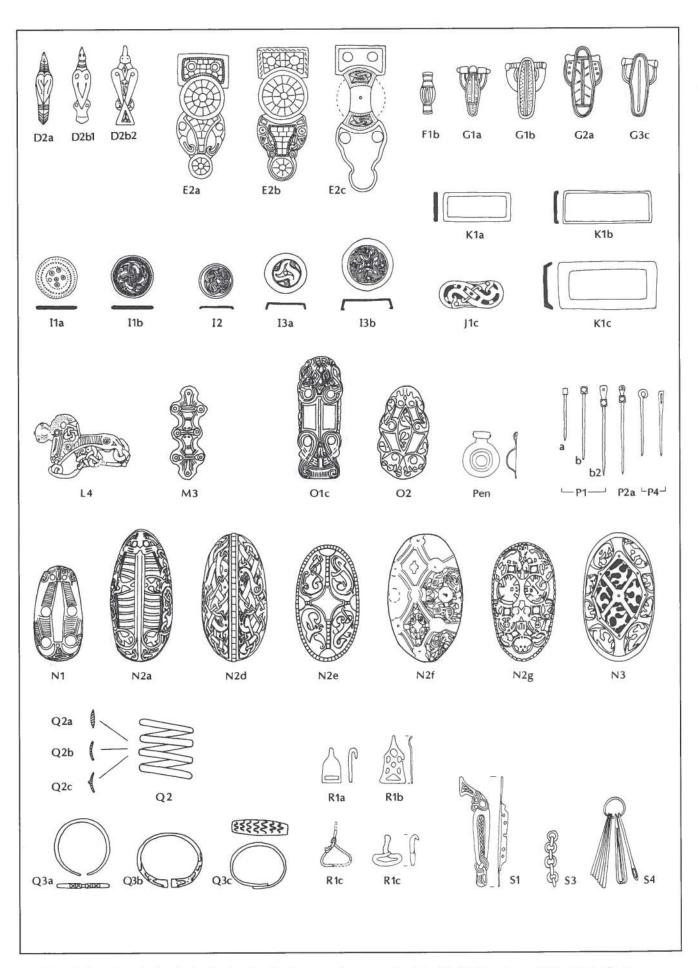


Fig. 15. Type scheme showing the classification of jewellery from women's graves on Bornholm of the Late Iron Age and Viking Period. The type numbers refer to Høilund Nielsen 1987 and are used in the seriation, Fig. 16.

| Input Corr           | MNNRNQNNQRI<br>3323232233 | INNRNQNNQRNONOIRQIKRPQSPKQKDJSPQTEGERRPIGPFGIP 0323232331221333211e212121 13424232131121 111 fddcgabc e ba ccnc abba c a a baabb c aa |       |                      |   |          |          |        | Animal Styles |          |          |  |  |  |  |
|----------------------|---------------------------|---|-------|----------------------|---|----------|----------|--------|---------------|----------|----------|--|--|--|--|
|                      |                           | c d b   |       |                      | В | С        | D        | E      | DF            | F        | GB       |  |  |  |  |
| LILLEV9              |                           |   |       | LILLEV9<br>LOUSGD29  |   | =        |          |        |               |          |          |  |  |  |  |
| LOUSGD29<br>LOUSGD28 | 1                         | MV  |       | LOUSGD28             |   |          |          |        |               |          |          |  |  |  |  |
| BAKGD156             |                           | VIK   |       | BAKGD156<br>NS-BMR   | - |          |          |        |               |          |          |  |  |  |  |
| NS-BMR<br>LILLMEL5   | ; ;                       |   | - 1   | LILLMEL5             |   | =        |          |        |               |          | )        |  |  |  |  |
| LILLV1<br>BAKGD166   | 111                       |   |       | BAKGD166             |   |          |          |        |               |          |          |  |  |  |  |
| LILLEV2              | 1 111                     |   |       | LILLEV2<br>LOUSGD47  |   |          |          |        | -             | -        |          |  |  |  |  |
| LOUSGD47<br>SALTUN14 |                           | 2C  |       | SALTUN14             |   |          | -        |        |               |          |          |  |  |  |  |
| LILLMEL2             | ٠٠                        |   |       | BAKGD159             |   |          |          | 8 1    |               |          | 70       |  |  |  |  |
| BAKGD159<br>BAKGD105 | 1.1                       | <u> </u>  |       | BAKGD105<br>LOUSGD12 | - | -        |          |        |               | $\vdash$ | 372      |  |  |  |  |
| LOUSGD12<br>BAKGD44  | : '                       | '. '.i  |       | BAKGD44              |   |          |          | =      |               |          |          |  |  |  |  |
| ELLEGARD             | ::                        |   | - 1   | LILLMEL4             |   |          |          |        |               |          |          |  |  |  |  |
| BAKGD153             |                           | ' .'. 2B  |       | BAKGD153<br>NSV77    |   | =        |          |        | $\vdash$      |          |          |  |  |  |  |
| NSV77<br>BAKGD132    |                           | :   |       | BAKGD132             |   |          |          |        |               |          |          |  |  |  |  |
| BAKGD66              |                           | 1. 1  |       | BAKGD66<br>BAKGD50   | - |          |          |        | -             |          |          |  |  |  |  |
| BAKGD50<br>BAKGD59   | · · · ·                   |   |       | BAKGD59              |   |          |          |        |               |          |          |  |  |  |  |
| KANGD195<br>LOUSGD6  | V:::                      | LOUSGD6   |       |                      |   |          |          |        |               |          |          |  |  |  |  |
| BAKGD143             |                           | 0.00  |       | BAKGD143             | - | $\vdash$ |          |        |               | $\vdash$ |          |  |  |  |  |
| NSVV6<br>LOUSGD3     |                           |   |       | LOUSGD3              |   |          |          |        | 100           |          |          |  |  |  |  |
| LIMENSGD             |                           | 2A  |       | LIMENSGD             |   |          |          |        |               |          |          |  |  |  |  |
| LOUSGD11<br>NSV23    |                           | č., je .  |       | NSV23<br>BAKGD63     |   |          | Ĭ.       |        |               |          |          |  |  |  |  |
| BAKGD63<br>BAKGD3    | 1                         | ""  |       | BAKGD3               |   |          |          |        |               |          |          |  |  |  |  |
| NSVv4                |                           |   | 2-2-1 | NSVv4<br>NSV58       |   |          |          |        |               |          |          |  |  |  |  |
| NSV58<br>LOUSGD16    |                           |   |       | LOUSGD16<br>BAKGD64  |   |          |          |        | -             |          |          |  |  |  |  |
| BAKGD64<br>BAKGD5    |                           | h '' ,  |       | BAKGD5               |   |          |          | $\Box$ |               |          |          |  |  |  |  |
| BAKGD62              |                           | £. • £.   |       | BAKGD62<br>BAKGD77   |   |          |          |        |               |          |          |  |  |  |  |
| BAKGD77<br>LOUSGD9   |                           | 111 111   | - 1   | LOUSGD9              | - |          |          |        |               |          | =        |  |  |  |  |
| NSV47<br>BAKGD11     |                           | *:. * ** *  |       | BAKGD11              |   |          |          |        | =             |          |          |  |  |  |  |
| BAKGD76              | 1D2                       |   | ļ     | NSV16                |   |          |          |        | -             |          |          |  |  |  |  |
| NSV16<br>BAKGD88     |                           | 1 1 11 11 11  | 1     | BAKGD88              |   |          |          |        | =             |          |          |  |  |  |  |
| LOUSGD18<br>BAKGD89  |                           | : " " ,   |       | BAKGD89              |   |          |          |        | =             |          |          |  |  |  |  |
| NSV64                |                           | 1 1 1 1   |       | NSV64<br>BAKGD163    |   |          | -        |        | +             | $\vdash$ |          |  |  |  |  |
| BAKGD163<br>BAKGD17  |                           | 1 . 1 5   |       | BAKGD17              |   |          |          |        |               | =        |          |  |  |  |  |
| NSV26<br>LOUSGD10    |                           | ; 5 ;   |       | NSV26<br>LOUSGD10    |   |          |          |        |               |          |          |  |  |  |  |
| BAKGD2               |                           | · · · · · · · · · · · · · · · · · · ·   |       | BAKGD2<br>MELB2      |   |          |          |        | -             | $\vdash$ |          |  |  |  |  |
| MELB2<br>BAKGD93     |                           |   |       | BAKGD93              |   |          |          |        |               |          |          |  |  |  |  |
| BAKGD35              |                           | 1 1   |       | BAKGD35<br>BAKGD106  |   |          |          |        | -             |          |          |  |  |  |  |
| BAKGD106<br>BAKGD109 |                           | 1 1 1111  |       | BAKGD109             | - |          |          | =      | -             |          |          |  |  |  |  |
| BAKGD16<br>BAKGD141  |                           | : ' '.'' '.   |       | BAKGD16<br>BAKGD141  |   |          |          |        |               |          |          |  |  |  |  |
| BAKGD60              |                           |   |       | BAKGD60<br>NSV71     | - | $\vdash$ | -        |        | +             |          | $\vdash$ |  |  |  |  |
| NSV71<br>NSV28       | 1D1                       |   |       | NSV28                |   |          |          |        |               |          |          |  |  |  |  |
| NSV10<br>BAKGD157    |                           | 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   |       | NSV10<br>BAKGD157    |   |          |          |        |               |          |          |  |  |  |  |
| NSV32                |                           | 1.11  |       | NSV32<br>NSV70       |   |          | -        | -      | -             | -        |          |  |  |  |  |
| NSV70<br>BAKGD74     |                           | : " ';' ;   |       | BAKGD74              |   |          | =        |        | =             |          |          |  |  |  |  |
| BAKGD112             | Į.                        | 0, 19, 9  |       | BAKGD112<br>NSV12    | + | CAR SE   |          |        |               |          |          |  |  |  |  |
| NSV12<br>BAKGD20     |                           | 1 1 1 1   |       | BAKGD20              | 1 |          | =        |        |               |          | -        |  |  |  |  |
| NSV56<br>BAKGD95     | -                         | <del></del>   |       | NSV56<br>BAKGD95     |   |          |          |        |               |          |          |  |  |  |  |
| BAKGD14              |                           | ':: : :   |       | BAKGD14              |   |          |          |        | -             |          |          |  |  |  |  |
| NSV54<br>NSV22       | 10                        |   |       | NSV22                |   |          |          | -      | +             | -        | -        |  |  |  |  |
| NSV20<br>NSV9        | 1C                        | ******** ***  |       | NSV20<br>NSV9        |   |          | $\vdash$ |        | 1             |          |          |  |  |  |  |
| BAKGD104             |                           | 1 1   |       | BAKGD104             |   |          |          |        |               |          |          |  |  |  |  |
| NSV55<br>LOUSGD39    |                           | <u> </u>  |       | LOUSGD39             |   |          | $\vdash$ | -      | -             |          | $\vdash$ |  |  |  |  |
| NS426<br>BAKGD90     |                           |   |       | BAKGD90              |   |          | =        |        |               | $\vdash$ |          |  |  |  |  |
| BAKGD24              |                           | 1.1   |       | BAKGD24BAKGD103      |   | _        |          |        |               |          |          |  |  |  |  |
| BAKGD103<br>BAKGD139 |                           |   |       | BAKGD139             |   | -        |          |        | -             | -        |          |  |  |  |  |
| BAKGD94<br>BAKGD23   | 1B2                       | 1. 11   |       | BAKGD23              |   |          |          |        |               |          | 口        |  |  |  |  |
| KOBBEA2              |                           | **. ** *.   | •     | KOBBEA33             |   |          | _        |        |               |          |          |  |  |  |  |
| KOBBEA33<br>NYMOLLE2 |                           |   |       | NYMOLLE2             |   |          | $\vdash$ | -      | -             | -        |          |  |  |  |  |
| LOUSGD35<br>SALTUN10 |                           |   |       | SALTUN10             |   |          | =        |        | =             |          | $\Box$   |  |  |  |  |
| LOUSGD40             |                           |   |       | LOUSGD40<br>LOUSGD37 |   | -        | $\perp$  |        | 1             |          |          |  |  |  |  |
| LOUSGD37<br>GUDMINGE |                           |   |       | GUDMINGE             | - | F        | -        |        | $\vdash$      |          | $\vdash$ |  |  |  |  |
| NS397<br>BAKGD30     |                           | # 2   |       | NS397<br>BAKGD30     |   |          | =        |        | =             |          | 口        |  |  |  |  |
| LOUSGD36             | 1B1                       | 11.111  |       | LOUSGD36             | 1 |          | 1        |        | 1             |          |          |  |  |  |  |
| KOBBEA4<br>KOBBEA6   |                           | 1   |       | KOBBEA6              |   |          | =        |        |               |          | -        |  |  |  |  |
| MEL15                |                           | 1. 1  |       | MEL15<br>KNARRE1     |   |          |          |        | =             |          |          |  |  |  |  |
| KNARRE1 _            |                           |   |       | GRYET                |   | +        | $\vdash$ |        | +             | +        | $\vdash$ |  |  |  |  |
| LENSGARD<br>BAKGD155 | 4.6                       | , ;   | ٠     | BAKGD155             | 1 |          |          |        |               |          | 口        |  |  |  |  |
| MELKOB9A             | 1A                        | •   | ١.:   | MELKOB9A             |   |          | 1        |        |               |          |          |  |  |  |  |
| LILLB2               |                           |   |       |                      |   |          |          | 10000  | -             | o- 0-00  |          |  |  |  |  |
|                      | 2222222223                | NONOIRQIKRPQSPKQKDJSPQTEGERRPIGF<br>1221333211e212121 13424232131121  |       |                      |   |          |          |        |               |          |          |  |  |  |  |
|                      | fddcgabc                  | e ba conc abba c a a baabb c  | aa    |                      |   |          |          |        |               |          |          |  |  |  |  |
| 0.0                  |                           | c d b   |       |                      |   |          |          |        |               |          |          |  |  |  |  |
| 26                   |                           |   |       |                      |   |          |          |        |               |          |          |  |  |  |  |

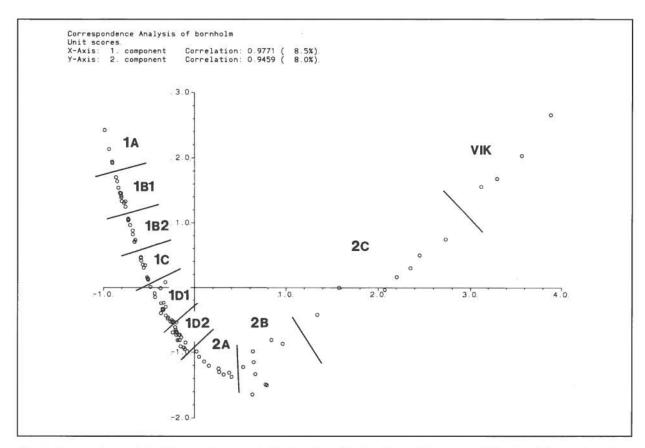


Fig. 17. Correspondence analysis of the women's grave goods from Bornholm of the Late Germanic Iron Age and Viking Period showing the 10 chronological phases of the seriation.

Nielsen's chronology of 1987, partly as a result of the omission of several grave groups which formed part of Høilund Nielsen's Phase 1A, partly because of the substantial impact of Nørre Sandegård Vest, and finally from the introduction of several subtypes of what were included only as main types in Høilund Nielsen's study. The latter applies to the pins Høilund Nielsen P1-2, armrings Høilund Nielsen Q2-3 and the so-called terminals of type Høilund Nielsen R1. In Høilund Nielsen's chronology, chains of both copper alloy and iron were included as type S3. It has already been pointed out that it does not make good sense to put these two types together as one type (Jørgensen 1990, 39). In this chronology, consequently, only iron chains are included as type S3. In her work Høilund Nielsen also

— Fig. 16. Seriation of the women's graves of the Late Germanic Iron Age and Viking Period from Bornholm with the chronological phases 1A-VIK marked. Supplementary to the seriation, the occurrence of the southern Scandinavian animal styles in the individual graves is marhed.

Abbreviations followed by grave number: Bakgd = Bækkegård, Ellegard = Ellegård, Gryet = Gryet, Gudminge = Gudmingegård, Kangd = Store Kannikegård, Kobbea = Kobbeå, Knarre = Knarregård, Lensgard = Lensgård, Lillev = Lillevang, Lillmel = Lillevang-Melsted, Limensgd = Limensgård, Lousgd = Lousgård, Melb2 = Melsted b2, Melkob = Melsted-Kobbeå, Nymolle = Nexø Nymølle, NS = Nørre Sandegård, NS-BMR = Nørre Sandegård (Bornholms Museum), NSV = Nørre Sandegård Vest, NSVv = Nørre Sandegård Vest (Vedel grave), Saltun = Saltuna.

included grave finds that probably represent mixed grave goods from both the Early and the Late Germanic Iron Age (cf. Jørgensen 1990, 26), and these have therefore been omitted from this analysis. This has led to a situation in which it is extremely difficult to differentiate the remaining graves of Høilund Nielsen's Phase 1A from Phase 1B1, as the Phase-1A graves virtually appear as an earlier part of phase 1B1. For the purposes of comparison with Høilund Nielsen, therefore, we have chosen here to use the term Phase 1A/1B1 for the earliest graves in this seriation. This chronology thus includes grave groups of the Late Germanic Iron Age proper, and Phase 1A/1B1 can best be equated with Høilund Nielsen's Phase 1B.

In Høilund Nielsen's chronology there were also two phases that were clearly quite long lasting, Phases 1B and 1D. The new analysis shows that Høilund Nielsen's Phases 1B and 1D should probably be subdivided into 1B1-1B2 and 1D1-1D2 respectively. Basically, however, the new chronological analysis confirms the main, general features of Høilund Nielsen's typesequence, although several graves have been attributed to different phases (compare Fig. 16 with Høilund Nielsen 1987, Tab. 4). The marked increase in the number of graves will always lead to modifications. This will no doubt also be the case with the chronology presented here, if there is any further influx of new grave finds.

### 3.2.2. Description of the phases

In the discussion of the inventory of types in the individual phases, Høilund Nielsen's typology of 1987 is consistently followed. In addition, occurrences of Ørsnes's southern Scandinavian animal styles B-F and the gripping beast style are noted. It must be noted that the animal styles were not included in the seriation itself; there were only subsequently added to the resulting seriation in Fig. 16.

Phase 1A/1B1 marks the transition from the Early Germanic Iron Age, when the types of dress accessory characteristic of the Late Germanic Period such as equal-armed brooches of Type F and beak brooches of Types G1-2 were introduced (Fig. 18). In the erstwhile Phase-1A graves there were copper-alloy pins of Type P1a while in Phase 1B1 there are dress pins of Type P1b-c – pins of Types P1a and P1c are, moreover, leading types of this phase. Also found in this phase are disc brooches of Types I1a and I1b, and bead-string terminals of Type R1a. The bead sets of this phase consist of R3a strings with monochrome yellow and red beads. Phase 1B1 marks the end of dress pins of Type P1a and c and disc brooches of Type I1a.

In Phase 1B2 the main types are still bead strings of Type R3a and beak brooches of Type G2. Terminals of Type R1a-b also occur frequently. New types are beak brooches of Type G3, disc-on-bow brooches of Type E2a-b, iron dress pins of Type P4, toilet sets with spatulate tweezers of Type T4, while the first iron chains of Type S3 used for suspending toilet sets and knives are also seen. With Phase 1B2 the beak brooches of Type G2 and disc brooches of I1b disappear. In Phase 1B2 we also now find the first Style-II animal art in the form of artefacts with Ørsnes's southern Scandinavian Style B.

With *Phase 1C* the first armrings of Type Q2a and openwork plate brooches of Type J1c-d appear. Types that occur frequently are iron dress pins of Type P4, bead strings of Type R3a, metal chains of Type S3, toilet sets of Type T4, beak brooches of Type G3 and discon-bow brooches of Type E2a. With Phase 1C types such as G2 beak brooches and P1b dress pins disappear. Phase 1C also marks the appearance of the first dress accessories with southern Scandinavian Style C.

Phase 1D1 marks the introduction of new types of common brooch in the form of bird brooches of Type D and rectangular brooches of Types K1a and K1b. These brooches clearly supersede the beak brooches of Type G2-3 as the normal brooch in the women's costume. The most conspicuous innovation, however, is the introduction of bead strings of Type R3b, replacing the R3a strings. In association with the large strings of Type R3b we now also see plate-like bead spacers of Type S1, while terminals of Type R1a-b also cease with Phase 1D1. With Phase 1D1, in addition, comes the end of earlier display types such as disc-on-bow brooches of Type E2a-b, although this does not

mean that disc-on-bow brooches disappear completely from the costume. Thus on Bornholm there are several stray finds of later disc-on-bow brooches of Type E2c, 2 of which are stray finds from the same number of disturbed graves at Nørre Sandegård Vest (cf. Fig. 28-29, C 10206 and C 11371). These brooches do not belong to Phase 1D1 as they are decorated in Style D. The brooches must come from destroyed graves of Phases 1D2-2A.

Phase 1D2 develops steadily out of Phase 1D1, being characterized in particular by a more frequent occurrence of types that are only rarely found in Phase 1D1. Important new types, however, are rectangular brooches of Type K1c (of which one example had nonetheless appeared in Phase 1D1 in Nørre Sandegård Vest grave 32), disc brooches of Type I2, wide spiral armrings of Type Q2c and the first massive armrings of Type Q3a. The latter type indeed appears only in Phase 1D2. Another important point is that the first artefacts with animal ornament in southern Scandinavian Style D are found in Phase 1D2. Altogether, therefore, there is no doubt that the range of finds of Phase 1D2 is of later character than that of Phase 1D1.

In respect of Phase 1D2, however, correspondence analysis and seriation display their weaknesses too, as a tortoise-type brooch of type O1b which occurs in Nørre Sandegård Vest grave 16 is placed in this phase. Nørre Sandegård Vest grave 16 is untypical in that it contained many old objects and it is clear that these pull the O1 brooch, and thus the grave group, back to Phase 1D2. It is reasonable to assume that the O1 brooch, which is a very common type in the succeeding phase, 2A, should be the chronologically diagnostic object in this grave, which perhaps should have better been placed in Phase 2A. It is, however, very rare that this type of methodological problem turns up in the chronological analysis. It can be pointed out in addition that although Nørre Sandegård Vest grave 16 is assigned to the middle of Phase 1D2, this does not exclude the possibility that this burial could have taken place within the last 5 years of the 7th century.

Phase 2A marks a clear break between the earlier range of grave goods and a later one, and it is reasonable to place the boundary line between an earlier and later main set of phases within the Late Germanic Iron Age here. As the main characteristics of this change, we can see that rectangular plate brooches, dress pins and spiral armrings come to an end. In their place completely new types of brooch in the form of the tortoise-type brooches of Types N1, N2e and O1-2 are introduced. The only one of the earlier brooch-types that survives into Phase 2A is the disc brooch in the from of the late type I3, which is clearly linked to Phase 2A. Style D is now evidently dominant, and it clearly supplants Style C, which only occurs in Nørre Sandegård Vest graves 23 and 58. In Phase 2A we find the earliest examples of southern Scandinavian Style E in Bækkegård graves 63 and 143.

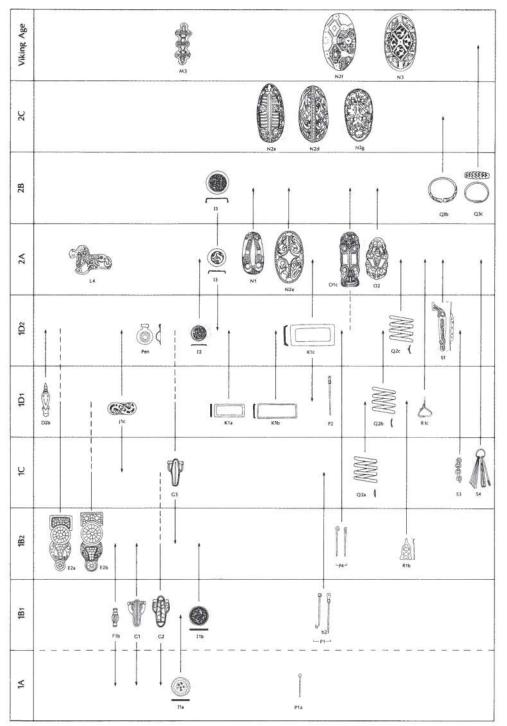


Fig. 18. The chronological distribution of artefacttypes in the phasing of the women's graves from Bornholm of the Late Germanic Iron Age.

The range of types of *Phase 2B* is clearly related to that of Phase 2A. New types, however, are bead strings of Type R3c, which are found only in this phase, and armrings of Types Q3b and Q3c. At the end of Phase 2B a range of types inherited from Phase 2A disappear: small tortoise brooches of Types O1-2 and disc brooches of Type I3. It is also significant that Ørsnes's southern Scandinavian mixed Style DF now appears in several graves. The predominant styles of animal ornament are now Styles D and E.

Phase 2C marks the end of the Late Germanic Iron Age. New types of this phase are tortoise brooches of Types N2a, N2d and N2g (Petersen 1928, Fig. 27).

Tortoise brooches of these typical, transitional forms all disappear at the crossover to the following phase, VIK, with its classical Viking-period range of artefacts. Furthermore in Phase 2C we find the first bead strings of Type R3d, which continue into the Viking Period. For the first time, too, southern Scandinavian Style F (Style III) is found on a tortoise brooch from Lillevang-Melsted grave 2, and Style-F animal heads are also found on the tortoise brooches from Bækkegård grave 166 (cf. Fig. 23). The first examples of the gripping beast style are also found on the two tortoise brooches of Type N2g in Lillevang grave 2 and Bækkegård grave 159 (cf. Fig. 23).

The last phase in the seriation, VIK, contains the classical Viking-period inventory including tortoise brooches of Types N2f (Petersen 1928, Fig. 37) and N3 (Petersen 1928, Figs. 40-41 and 51) and equal-armed brooches of Type M3 (Petersen 1928, Fig. 58).

The seriation of the grave groups from Bornholm looks credible, especially in view of the fact that we do not find concentrations of graves from particular cemeteries in individual phases. The graves from the larger cemeteries such as Bækkegård, Lousgård and Nørre Sandegård Vest are thus spread over several phases. In addition, the distribution of the Nørre Sandegård Vest graves show an increase from the start of the cemetery towards a peak in Phase 1D1 after which the number of graves falls steadily: 1 grave in Phase 1B2; 5 graves in 1C; 7 graves in 1D1; 4 graves in 1D2; 4 graves in 2A; and 1 grave in 2B. This curve is typical for the frequency of burial in a cemetery, and only the grouping of 5 Nørre Sandegård Vest graves in Phase 1C looks like over-representation, as they constitute more than 50% of the graves in this phase.

Furthermore, only in a few cases are graves found which seem to be misplaced in the seriation because of the method's mathematical calculation of the mean score of the grave. It has already been noted that Nørre Sandegård Vest grave 16 seems to be placed one phase too early on the basis of the large number of early types in the grave. The same seems to be the case with Nørre Sandegård Vest grave 32 in Phase 1D1, where a rectangular Type-K1c brooch would be more at home in Phase 1D2. This suspicion is in fact supported by the fact that the nearest man's grave to Nørre Sandegård Vest grave 32 is Nørre Sandegård Vest grave 30, which is dated to Phase IV in the male chronology, which in turn can very confidently be aligned with the later Phase 1D2 and Phase 2A (cf. section 3.2.5 on the synchronization of the male and female grave chronologies).

# 3.2.3. The animal styles and absolute chronology

The women's grave goods of the Late Germanic Iron Age are often richly decorated, especially with zoomorphic ornament, reflecting the general artistic developments of the period. In 1966, in the light of Arwidsson's studies of the Vendel Styles A-E (Arwidsson 1942a; 1942b), Ørsnes described and defined the corresponding animal ornament of this period in southern Scandinavia (Ørsnes 1966). Through analyses of the detailed elements of the animal motifs and their combinations, a sequence of southern Scandinavian Styles B, C, D, E and F was defined, together with a range of mixed styles. Southern Scandinavian Styles B-E represent Salin's Style II and Style F represents Style III (cf. Salin 1904). Ørsnes was able to show that this sequence was chronologically governed, and the new seriation of the grave finds from Bornholm largely confirms the relative chronological sequence of Ørsnes's southern Scandinavian styles (cf. Fig. 16).

Surface-covering Style B thus occurs only in Phase 1B2, where it is found on a copper-alloy box in Nørre Sandegård grave 426 and 2 disc brooches of Type I1b from Lousgård grave 40 and Kobbeå grave 2. If the profile animal heads on the disc-on-bow brooches are counted here too, then this Style-B element continues into Phases 1C and 1D1.

The earliest Style-C decoration appears in Phase 1C in Nørre Sandegård Vest graves 20 and 22 and Bækkegård grave 14. Style C reigns alone in Phase 1D1 and is still clearly dominant in the next phase, 1D2. In Phase 2A there are very few items with Style C, which appears in the seriation only in Nørre Sandegård Vest graves 23 and 58. Here too, in Nørre Sandegård Vest grave 23, it is found only on an unusual artefact-type such as the horse-shaped plate brooch of Type L4.

The first objects in Style D are found in Phase 1D2, and in several graves Style D is found together with objects carrying Style C. Style D becomes the dominant style in Phase 2A, clearly superseding Style C. Style D is also very common in Phase 2B, but is represented only in Lousgård grave 47 of Phase 2C.

Style E makes its first appearance in Phase 2A where it is found only on the typical Bornholm tortoise brooches of Type N2e. This style continues in Phase 2B and 2C, in which it appears more often. It should be noted, however, that Bækkegård graves 159 and 166 of Phase 2C have tortoise brooches of Types N2a and N2d with animal decoration that can best be associated with Arwidsson's Vendel Style E, and which does not have a lot in common with Ørsnes's southern Scandinavian Style E (cf. Fig. 23).

In Phase 2B, the first examples of Ørsnes's mixed Style DF are found, a style which also occurs in Phase 2C. Pure Style F (Style III), however, does not appear before Phase 2C in the seriation, in Lillevang-Melsted grave 2. The first tortoise brooches with the gripping beast style appear in Phase 2C, in Bækkegård grave 159 and Lillevang grave 2, subsequent to which this animal style becomes widely used in the early Viking Period on the large group of tortoise brooches of Type P37 (Petersen 1928, Fig. 37), which are identified as Type N2f in the seriation.

The distribution of styles in the seriation of the graves from Bornholm thus confirms the presence of a clear sequence of development in the styles of southern Scandinavia, while the chronological tendencies in the history of the animal style are clearly reflected in Ørsnes's classification.

In his study, Ørsnes pointed out the close connexions that could be seen between the development of the southern Scandinavian animal styles and the development of animal ornament in both the Contintental Germanic and the Insular areas (Ørsnes 1966). In respect of southern Scandinavian Style B, Ørsnes belie-

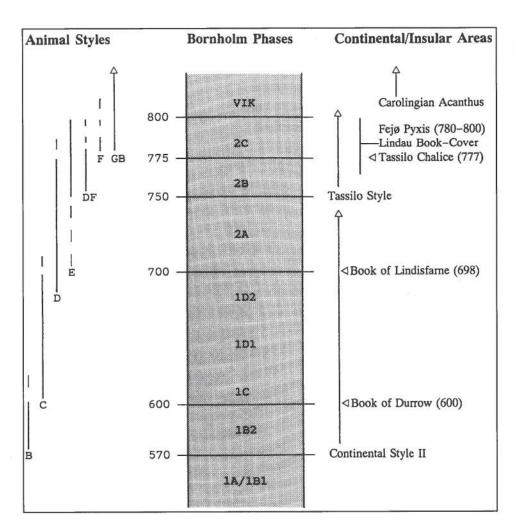


Fig. 24. Absolute datings of the phases on Bornholm derived from a synchronization between southern Scandinavian Styles B-F and GB (the gripping beast style) and Insular and Continental material.

the burial chamber in the Oseberg ship grave to 834, the gripping beast decoration in which she regards as the earliest securely dated examples (Bonde & Christensen 1993; Thunmark-Nylén 1995, 557 and 606ff.). It must be emphasized, however, that the gripping beasts on the Berdal brooches should not be equated with the Oseberg Style (Horn Fuglesang 1987, 219). The question is now how much older the gripping beast-decorated artefacts in the Oseberg Style will prove be according to a dendrochronological dating: they are presumably from before 834. This dating clearly shows that the Oseberg Style must belong to the early 9th century and that Ribe's gripping beastdecorated Berdal brooches, which contain no Oseberg elements, could therefore perfectly well be of the late 8th century. In her discussion of the absolute dates, Thunmark-Nylén also does not include the Continental finds, such as the Lindau book cover which clearly shows the use of gripping beast motifs from before 800. The datings of the Continental finds thus show that the beginning of Ribe's much discussed horizon with the production of tortoise brooches of the Berdal type with gripping beast decoration should probably be dated around 775.

Through Continental parallels to the artefacts from Bornholm, Høilund Nielsen proposed absolute datings for her phases 1A-2C (1987, 69). Phase 1A-B

was dated to the period ?-600, Phase 1C-D to ca. 600-680/700, and Phase 2A-c to ca. 680/700-775/800. The new style datings of the phases on Bornholm introduced above thus confirm the main lines of Høilund Nielsen's datings and can also provide us with datings for several subphases. Adjustments, however, can be made at the transition from Phase 1D to 2A, which is now, probably, to be dated around 700, while the transition from Phase 2C to the Viking Period returns to the classical date of 800. There are also some indications that the boundary between Phase 2A and 2B is to be placed around 750, while it seems more certain that Phase 2C covers the period ca. 775-800, as pure Style F appears first in Phase 2C. After this, however, it has to be noted that apart from the dating of the transition between Phase 1B1 and 1B2 to around 570 it is not possible to produce well-founded datings of the other phases on Bornholm which are based on the typological comparison of women's grave goods and animal ornament.

#### 3.2.4. The burial sequence

The distribution of the women's graves at Nørre Sandegård Vest reveals certain horizontal stratigraphical tendencies. It is clear that the earliest burials, from Phase 1B2-1C, are found in two clearly distinct groups.