MARTIN RUNDKVIST

BARSHALDER 2

Studies of Late Iron Age Gotland

University of Stockholm

For YuSie, Samuel and Sprout,
with all my love

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Preface

This book is the analytical companion of *Barshalder 1*, my monograph on Gotland's largest prehistoric cemetery. Having pondered the outlines of the studies in the present volume during data collection, I began writing them in mid-1998 when I was allocated a doctoral student's salary by the Faculty of the Humanities. The manuscript benefited greatly from constructive criticism by Ingmar Jansson, Karen Høilund Nielsen and Bo Petré who read full versions of it in 2002 and early 2003. At that late date, however, they were given no opportunity to influence the general lines of inquiry or the choice of methods.

Being headstrong and set at an early age in my archaeological ways, I have been a self-sufficient doctoral student. This ensured autonomy but also meant that I did not have any close contact with my own university department, although I otherwise enjoy an extensive professional network. This alienation was largely due to what I perceived as a constricting post-modern orthodoxy at the post-graduate seminar. Here, theoretical pluralism appeared to mean that you could have your Ford any colour you liked, as long as it was black. The Faculty of the Humanities, luckily, had less dogmatic views, for which I am very grateful.

Years of bickering with theoretically inclined colleagues had not prepared me for the final hurdle that the manuscript had to pass on its way to publication. I was dismayed to find that empiricist, common-sensical scholars whose work I admire were not terribly enthusiastic about it. If I understand them correctly, they found my style too terse and my way of thinking too categorical. These traits are still evident in the present text, for the simple reason that they are intentional. I have little patience with scholarly verbiage, and I think like a taxonomist. This work owes its shape not to an inability to do otherwise, but to the conscious pursuit of an ideal.

Like any writer, I am anxious to have readers. I am also keen to communicate with them. Any comments or questions will therefore be most welcome.

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1. Introduction

These studies deal with the Late Iron Age on Gotland, an island in the Baltic Sea and a province of Sweden. The point of departure is the largest cemetery of the time, Barshalder, which is located along the main road on the boundary between Grötlingbo and Fide parishes, near the southern end of the island. The cemetery was used from c. AD 1-1100, in other words during the Roman Iron Age (AD 1-400), Migration Period (AD 375-540), Vendel Period (AD 520-790) and Viking Period (AD 790-1150). In the absence of a Roman invasion, Sweden's Iron Age is considered to have continued up to the final abandonment of paganism c. AD 1100. The Late Iron Age encompasses the Migration, Vendel and Viking Periods.

This book grew out of the compilation of the Barshalder cemetery corpus (*Barshalder 1*). Many archaeologists routinely extract information from cemetery publications to answer questions formulated beforehand. Such is the ideal method of science: 1) come up with a question, 2) devise an experiment, 3) collect the necessary materials, 4) perform the experiment. Blindly compiling all available data on a site, to the extent that any data collection can be called blind, is not an efficient way to do research. But that is how these studies came about. I accepted the task of publishing a cemetery. The site could of course not answer all the questions I had about its time of use, so, to a great extent, I had to tailor my questions to the source material at hand.

The main draw-back to this method of research is of course that it is time-consuming. There are, however, advantages too. If one looks only at selected data to answer certain questions, then one is unlikely to learn much beyond these questions. Processing reams of documentation and handling thousands of artefacts has been a great education to me. It has served to give me both an analytical and a wordless sensory familiarity with the material, and to provoke questions that I could not have conceived of before I immersed myself in it. I have spent eight years thus immersed, all the while reading and writing extensively on archaeology.

The main source material for this book are graves from a period of more than seven centuries (the Late Iron Age, c. AD 375-1100) with a gap of two centuries near the end (the Early and Middle Viking Period, c. AD 790-1000). It would be hard to merge all my studies of this material within the framework of a single line of inquiry. Instead, the book is a Late Iron Age miscellany, where the dead are made to speak of such matters as they can. Its contents are organised under three headings: chronology (chapter 2), social identity (chapter 3) and religious identity (chapter 4).

One over-arching aim of this work is to make explicit and test the often somewhat intuitively conceived results of much previous research. In a field where research has been actively and constantly pursued for more than a century it is often hard to find the origins and justification of established views. Thus, I have tried to keep an open mind, to unlearn my preconceptions and to approach Barshalder as if it were the first site of its kind to receive scholarly treatment. It would, of course, be useless to take this charade of ignorance to extremes, particularly since the archaeological record relevant to Barshalder's period of use and cultural environment is so very rich and well researched. Nevertheless, I have attempted to avoid justifying my statements by reference to traditional archaeological opinion, seeking instead to anchor my arguments explicitly in the best available empirical sources and methodically stringent analyses.

1.1 The research tradition

I was encouraged to begin writing this book by Jan Peder Lamm, who specialises in the aristocracy of the Migration and Vendel Periods. Jan Peder inherited this specialism from Greta Arwidsson through their work together at the cemeteries of Lovö (Lamm 1973). Arwidsson, in turn, inherited the specialism from Sune Lindqvist through their work together at Valsgärde (Arwidsson 1942a, 1942b). Lindqvist inherited it from Knut Stjerna through his work with the barrows at Vendel and Old Uppsala (Lindqvist 1936). With Stjerna, finally, we find the roots of the tradition in general archaeology, saga literature and national romanticism. Stjerna combined Montelius with Beowulf and the Icelanders (Stjerna 1912 with refs.).

While claiming this august pedigree for much of this book's subject matter, I hope the perspectives, methods and terminology will bear witness to the outstanding influence of Mats P. Malmer (e.g. 1962, 1963, 1984). Bertil Almgren's school of uncompromising source criticism (represented by Näsman 1970, 1972) has also provided important conceptual tools (cf. section 1.4).

Thanks to exceptionally rich finds, the study of Iron Age Gotland has been a thriving field (Nerman 1945) since the beginnings of Swedish archaeology. There is a strong typochronological tradition (ÄEG, VWG, VZG, WKG, Nylén 1955, Anders Carlsson 1983 & 1988, Thunmark-Nylén 1983, W&G, Høilund Nielsen 1999a & 1999b), and in recent decades much work has been done on landscape history (Dan Carlsson 1979, Östergren 1989, Cassel 1998) and political geography (Hyenstrand 1989, Kyhlberg 1991). The study of Late Iron Age harbour sites (Lundström 1981; Dan Carlsson 1998 with refs., 1999a), hill forts (Engström 1992 with refs.), picture-stones (Lindqvist 1941-1942, Nylén & Lamm 1987, Göransson 1999) and coin hoards (SGW, Lind 1988 with refs., the Corpus Nummorum series, the Commentationes de Nummis series with refs.) form specialised fields. The detailed study of rural settlement sites has not produced anything on a grand scale since the excavation and publication of the settlement at Vallhagar in Fröjel (Stenberger & Klindt-Jensen 1955). Burge in Lummelunda parish (Thunmark 1979) and Fjäle in Ala parish (Dan Carlsson 1979) have not been published in any detail. John Huttu (1996a, 1996b) has published two of Dan Carlsson's small-scale excavations of settlements. The Bandlundeviken harbour settlement is treated in Brandt 1986, 2002; Burenhult 1997; and Larsson 2002.

1.2 Gender terminology

Throughout this book, I have distinguished strictly between biological sex and social gender roles. This is not due to any suspicion of transvestism among the rigidly gendered and homophobic societies of Late Iron Age Scandinavia (cf. Göransson 1999:149). Here, gender ambiguity and cross-dressing were seen with fear and loathing (Meulengracht Sørensen 1983) and tolerated only in religious symbolism, as with Loki in drag on the Three Gods bracteates (Axboe 1991:193-194, fig. 11) and the generally queer ways of Loki and Odin (Solli 1999).

Rather, it has to do with my conviction that whereas gender was to some extent negotiable and useful for symbolic play, biological sex was not. The two dimensions of classification, biological sex and gender, depend on different source materials. Gender appears as a symbolic dichotomy in the grave furnishings, leaving many poorly furnished or robbed graves gender-neutral. Biological sex is a characteristic of the living body, in other words the more decomposed the body, the less certain can the sex assessment be. Most of the preserved and curated human remains from Barshalder consist of bags of cremated bone fragments, which can only rarely be sexed. Therefore, the dimension of gender takes centre stage. All unqualified references to women, men, female and male in this book deal only with gender: the social roles played out in action and symbolism by living people. The complicated relationship between these roles and the data recovered from graves, including the concept of gender-transgressive attributes, is treated in detail in chapter 3. Biological sex is referred to by the terms female-sex and male-sex.

1.3 Chronological basics

For a critical evaluation of previous work in the field of Gotlandic Late Iron Age chronology, see section 2.0 below and *Barshalder 1* sections 7.3 & 8.3. The chronological ordering of graves as strictly gendered as these requires two sets of definitions for artefact types and period assemblages: one for the female graves and one for the male graves.

Most of the female graves can be ordered in a chronological series spanning the entire Late Iron Age on the strength of the well-understood main sequence of brooch types, from the tapered-foot fibula to the pitted-surface animal-head brooch (ÄEG, VWG, VZG, WKG, Anders Carlsson 1983). This exercise reveals a hiatus among the Late Iron Age finds from Barshalder during the Early and Middle phases of the Viking Period (Anders Carlsson 1983 period A-C). However, the brooch finds that do exist suggest this gap to be due to the location of the modern gravel pits and quarries in relation to the cemetery's topochronology.

The chronological order of the male graves is less readily apparent as there is no abundant male artefact category with a clear typological development spanning the entire Late Iron Age. For the Migration and Vendel Periods the chronology of a single class of object, for example brooches, cannot help. Instead a combination analysis with entire grave inventories as the analytical unit must form the chronological backbone until the beginning of the penannular brooch sequence in the Viking Period (Anders Carlsson 1988 period B, WKG).

1.4 Standards of source criticism

For standards of source criticism in the following studies, Näsman's scheme (1972:90-91) has been taken as a point of departure. Here, the categories are as follows:

1. A complete closed find combination. Typically an undisturbed and well-documented grave find.
2. A reasonably complete and probably closed find combination. Typically a disturbed, well-documented grave find that is not lacking any of the commonly found object categories of its period and gender.
3. A badly incomplete or uncertain find combination. Typically either a) a visibly robbed well-documented grave find, or b) a decontextualised set of single-period and single-gender artefacts. It is not uncommon for a find to be badly incomplete but still certainly closed, as when half of an inhumation grave has been robbed and the other half left untouched.
4. A probably non-closed find combination. Typically a decontextualised set of multi-period and/or multi-gender artefacts.

This scheme works with two parameters, completeness and closedness. A complete find combination retains all the object categories that usually survive under the preservation conditions at hand. For example, an undisturbed Iron Age grave lacking preserved textiles is considered complete, whereas one that has been robbed of its bronze metalwork is not. Completeness is obviously important when the wealth of a find combination is assessed. It is also important when dating an individual find combination, because a missing object may have been the youngest one in the assemblage. However, completeness is not a central concern when the aim is to establish a chronological sequence of artefact types: here closedness is the important factor. (Nevertheless, the more incomplete a find combination is, the fewer types does it contain, and the lower is the likelihood that the remaining types form a chronologically useful combination.)

The concept of the closed find is the foundation of chronological combination studies (cf. Bo Gräslund 1987). A closed find combination is one that has not been added to since its date of deposition (cf. Näsman 1972:90-91). For example, an undisturbed Viking Period grave containing a re-used Vendel Period picture-stone is a closed find combination, whereas a set of mixed-period metalwork bought from an antiquities dealer is not. A single-period set of metalwork from an antiquities dealer is also a non-closed or at best uncertain find combination.

Our scheme is not stringently formulated but contains elements of subjective judgement: "reasonably complete", "probably primary", "badly

incomplete". It does, however, work as an aid in steering clear of circular reasoning and wishful thinking. The reader is encouraged to check my source evaluations, particularly the grave assemblages used to establish a stringent Migration Period chronology in chapter 2.

I have used finds of source quality 1-2 to study gender and social hierarchy, and finds of source quality 1 to study chronology, with the addition of a few selected and clearly indicated quality 2 finds to allow chronological study of uncommon artefact categories.

1.5 Statistical methods

Of the three main lines of inquiry pursued in this book, two are followed with the abundant aid of computer-assisted statistics. Three basic methods are used, all of them as implemented in the Bonn Archaeological Statistics Package, Windows version (WinBASP 1994).

Gender roles and typochronology are studied with the aid of seriation and correspondence analysis (CA; cf. Greenacre 1984; Høilund Nielsen 1995a, 1995b; Høilund Nielsen & Jensen 1997:29-61). Both of these tools are useful to establish series of graves and artefact types on the basis of similarity. The latter also allows the identification of groups and degrees of similarity among graves and artefact types. While seriation always produces output no matter how murky the data used, CA also provides a method to evaluate the result.

Seriation works with a combination table where graves ("units") are enumerated on one axis and artefact types ("attributes") on the other. Each type found in a grave is marked at the intersection of the respective column and line in the table. If the number of specimens of each type is marked, for example with a "3" on the buckle line for a grave with three buckles, the table is called a frequency matrix. If the number is disregarded, and the three buckles are recorded only as an "X" on the buckle line, then the table is called an incidence matrix (cf. tables 2a & 2b).

The two types of matrix are treated each with its own seriation algorithm: frequency seriation or incidence seriation. In either case, the aim of seriation is simply to re-arrange the graves and artefact types along the two axes of the matrix, so that the marks or figures in the table follow a diagonal line as closely as possible (cf. figs. 2:3, 2:5). In this way the most dissimilar graves of those under study end up at opposite ends of the grave series, just as the two types that share the least combination links end up at opposite ends of their series. Between these extremes is found a series of small steps of gradually mounting dissimilarity.

Correspondence analysis (CA) works with the same kind of database as does seriation. The principle behind a CA diagram (cf. figs. 2:2, 2:4) is that the more consistently two types are found together in the studied graves, the closer together they appear in the diagram. If, instead, graves are plotted, two graves are plotted closer together the more similar their type assemblages are. Clustered data points in a CA diagram thus denote either types that occur together consistently, or graves with very similar inventories. From a mathematical point of view, attributes and units are equivalent: a type may be said to contain graves equally well as a grave contains types. It is possible either to plot types and graves separately or to plot them in the same diagram. The latter allows their inter-relationships to be viewed together but is not very good in terms of legibility. Where attributes replace each other smoothly along a graduation of units, as in a chronological seriation or a male-neutral-female gender continuum, the CA plot forms a parabola or "horse-shoe plot".

Høilund Nielsen (1995a, 1995b) has pointed out that earlier DOS-based versions of the Bonn Archaeological Statistics Package did not, in fact, perform seriation with the independent algorithm described above. These program versions produced seriations that depended on the result of a CA. The seriations could therefore not be verified through comparison with their respective CAs. This fault has been amended in the version of WinBASP used for the present studies.

All CA plots in this book display the first and second dimensions of the analyses (as indicated by the numerals at the ends of the axes), which chart the greater part of the variation in the data sets being studied. In each case it would also be possible to plot less significant dimensions of variation against each other, but any discernible

patterns would be correspondingly less significant. The co-ordinate axes in a CA plot should not be interpreted as dividing lines. However, the position of a point in relation to the origin is informative: the more a type contributes to the total variation of the data set, the farther it is plotted from the origin. Outliers tend to be uncommon types with only a few instances in the data set under study.

The third statistical method used pertains to social status. There are at least four quantitative methods of measuring burial status. The simplest one is to count the number of artefacts in a grave, a parameter called AF (Sw. "Antal Föremål", Kent Andersson 1995:15). Another parameter that has been used is the number of artefact types in a grave, a parameter called AOT (Da. "Antal Oldsags-Typer, Hedeager 1992). A more sophisticated approach is to calculate the relative frequency of an artefact type in the grave population under study, where rare types are assumed to be more prestigious than common ones (Jørgensen 1990:63). Jørgensen justified this method with reference to the fact that the rarest types in his sample occurred exclusively in rich graves (i.e. those with high AF values), which leads us to the method used here.

It was first presented by Hodson (1990:71-72) and is implemented in WinBASP 1994. Here, for each artefact type in the sample, the average AOT value of the graves in which the artefact type occurs is calculated. Thus, each artefact type is assigned a status score based on the degree to which it occurs in rich graves. These status scores may be summed up for each grave to produce a ranking list. Where an artefact type occurs in sets of widely varying sizes, for example beads or decorative belt mounts, the AF value may be used instead of the AOT value. All status score calculations in this book are, however, based on AOT, that is, the number of objects of each type in a grave has been disregarded. I have given the Vendel Period bead sets special treatment to study their size variation (section 3.4.0).

2. Migration Period typochronology

The chronology of the Vendel and Viking Period graves of Gotland has recently been studied with modern methods by other scholars (see *Barshalder 1* sections 7.3 and 8.3 for evaluation and improvements). The purpose of this chapter is to establish a sound chronology for the Migration Period graves.

2.0 Previous work and methodological critique

In 1923 Birger Nerman published a preliminary study of the chronology of the Migration Period on Gotland. His analysis was the first to divide the period into two phases. Furthermore he offered some very far-reaching interpretations including a dramatic population decrease, large-scale emigration, and Vendel Period re-colonisation from mainland Sweden, amongst others. Sune Lindqvist (1926 chapter 5) responded with severe criticism, pointing out among other things that Nerman's second phase was based on a limited number of find combinations characterised by imported goods. These graves prominently featured crossbow fibulae, which show typological continuity from the Late Roman Iron Age. Lindqvist (1926:92) offered an alternative interpretation where Nerman's two phases actually represented two contemporaneous social groups, one of which had greater access to imported goods.

Nerman's full study of the period, *Die Völkerwanderungszeit Gotlands* (VWG) was published in 1935. His only response to Lindqvist's criticism was a footnote to the introduction, where he advised the reader to study the finds closely. Nerman expressed his confidence that this would be sufficient to convince anyone of the correctness of his views.

VWG presented three main analytical contributions to the chronological field: a definition of the archaeological culture of Migration Period Gotland (Montelius period VI); a subdivision of this culture into two phases (VI:1 and VI:2); and suggested absolute dates for these (AD 400-475/500 and AD 475/500-550/600). No comprehensive study of Migration Period typochronology in Gotland has been published since.

In 1970, however, Ulf Näsman (1970, 1972) revived Lindqvist's critique against VWG and produced many additional arguments against it. He made a painstaking source-critical and methodological evaluation of the period's subdivision and absolute chronology, and found them both very badly lacking. Näsman's most valuable positive contribution to the field was a clear identification of the previously rather nebulous typological core of Nerman's phase VI:2, however slim its material base turned out to be. Although Näsman showed phase VI:2 to be rooted in very few secure find combinations, he failed to disintegrate it. It retains a typological identity separate from that of VI:1, whose source-critical base is firmer than that of VI:2 given its far larger VWG sample size.

Näsman left the Migration Period chronology of Gotland in a dilapidated state, and it has not since been re-built into a sounder structure, although he did suggest some outline plans. Jozef Saers's (1978) seriation of the VWG dataset, while pioneering in its use of a computer, added little of independent analytical value to the study of the Migration Period chronology as he provided no type definitions and made no attempt at improved source-critical standards. What remains unshaken in terms of VWG's analysis is the overall definition of the archaeological culture of Migration Period Gotland (Montelius period VI). It should, however, be noted that the VWG dataset includes at least one Viking Period grave: VWG grave 138 in Visby's Eastern Cemetery, which includes lance head VWG text fig. 211 and neck ring VWG 401. This grave was re-evaluated by Thunmark-Nylén and re-published in WKG

Table 2a. Original combination matrix for female graves of Gotland from the Late Roman Iron Age to the Early Vendel Period.

Grave		bA2d	bE2	bG4	brel	clasp0	clasp1	clasp2-	claspBe	combedg	combpnt	combsing	dpbird	dpflat	dphdisc	dpkmplat	dpmush	dpring	fibch1	fibch2	fibpoin1	fibpoin2	fibrel	fibwide1	fibwide2	fing3	pendvase	pots	smbcrest	smbhigh	smbval a	smbval b	smbval2	smbval3	smbquad1	smbquad2	smbquad3	smC8	smeC6b1	smeC6c	smedisc	smeopen1	smeopen2	smeopen3	smeophou	smesword	smh	smrecas1	smreshee	spangle
Bh58:01	Q1, Barshalder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bh60:11	Q1, Barshalder	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Bh67:13	Q2, Barshalder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bh67:18b	Q2, Barshalder	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bh67:20	Q1, Barshalder	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bh67:32	Q1, Barshalder	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ire250	Q1, Ire in Hellvi, SHM 20826:250	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Ire252	Q1, Ire in Hellvi, SHM 20826:252	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ire268	Q1, Ire in Hellvi, SHM 20826:268	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Ire285b	Q1, Ire in Hellvi, SHM 20826:285b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ire286	Q1, Ire in Hellvi, SHM 20826:286	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ire289	Q1, Ire in Hellvi, SHM 20826:289	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ire292	Q1, Ire in Hellvi, SHM 20826:292	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ire394	Q1, Ire in Hellvi, GF C8653	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ire395	Q1, Ire in Hellvi, GF C8653	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S28051	Q1, Lau backar in Lau, grave 1/61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S31125:1	Q2, Hägvards in Hall, grave 1a/74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S31125:3	Q1, Hägvards in Hall, grave 3/74	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S32382:3	Q2, Kisslings in Fole, grave 3/89	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÄG338	Q1, Havor in Hablingbo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0
ÄG347	Q1, Havor in Hablingbo	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
ÄG348	Q1, Havor in Hablingbo	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0
ÄG350	Q1, Havor in Hablingbo	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
ÄG351	Q1, Havor in Hablingbo	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
ÄG354	Q1, Vallstenarum	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
ÄG358	Q1, Havor in Hablingbo	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
ÄG362	Q1, Kälder in Linde	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
VWG004	Q1, Havor in Hablingbo	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG005	Q1, Havor in Hablingbo	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG007c	Q2, Stora Karlsö	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
VWG042	Q1, Havor in Hablingbo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG044	Q1, Havor in Hablingbo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG047	Q1, Havor in Hablingbo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
VWG049	Q1, Havor in Hablingbo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
VWG050	Q1, Havor in Hablingbo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG052	Q1, Havor in Hablingbo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Grave		bA2d	bE2	bG4	bre1	clasp0	clasp1	clasp2-	claspBe	combedg	combpnt	combsing	dpbird	dpflat	dpfldsc	dpfrplat	dpmush	dpring	fibcb1	fibcb2	fibpoin1	fibpoin2	fibrel	fibwide1	fibwide2	fing3	pendvase	pots	smbcresc	smbhigh	smbova1a	smbova1b	smbova2	smbova3	smbquad1	smbquad2	smbquad3	smCB	smeC6b1	smeC6c	smedisc	smeopen1	smeopen2	smeopen3	smeophou	smesword	smh	smrecas1	smreshee	spangle
VWG056	Q1, Broa in Halla	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG065	Q1, Björs in Lärbro	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG069	Q1, Björs in Lärbro	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG071	Q1, Björs in Lärbro	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
VWG085	Q2, Bhr 1882:33	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
VWG087	Q1, Bhr 1928:03	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG094	Q1, Björs in Hejnum	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG096	Q1, Björs in Hejnum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
VWG097	Q1, Björs in Hejnum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG098	Q1, Amunde in Burs	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG099	Q1, Broa in Halla	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG106	Q1, Lilla Björges in Lau	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG113	Q1, Stora Hästnäs in Visby	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG114	Q1, Stora Hästnäs in Visby	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG161	Q1, Havor in Hablingbo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG165	Q1, Björs in Lärbro	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG166	Q1, Björkomne in Västkinde	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG168	Q1, Bhr 1882:23	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG169	Q1, Bhr 1882:26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG177	Q1, Brucebo in Västkinde	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG183	Q1, Lilla Björges in Lau	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
VZG002	Q1, Trullhalsar in Arga	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
VZG005	Q1, Björs in Hejnum	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
VZG006	Q1, Björs in Hejnum	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
VZG009	Q1, Björs in Hejnum	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
VZG012	Q1, Björs in Hejnum	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
VZG045	Q1, Björs in Hejnum	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
VZG055	Q1, Trullhalsar in Arga	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
VZG062	Q1, Trullhalsar in Arga	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
VZG090	Q1, Broa in Halla	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0

Table 2b. Original combination matrix for male graves of Gotland from the Late Roman Iron Age to the Early Vendel Period.

Grave		beadp3	bridle	chapsnar	clasp0	clasp1	clasp2-	combedg	combpnt	combsing	fibcb1	fibcb2	fibwidel	fing2	fing3	goldbrac	javfjell	javrommu	javtoftv	javtveit	lahavor	lakrageh	lall	lamolles	lavoien	pots	saxk	shb5b	shb7	shbsba1	shbsba2	shh3a	shh3b	shh3c	smbcresc	smbgu1	smbgu3	smbgu7	smbhigh	smbval a	smbval b	smbva2	smbva3	smbva4	smbprof	smbprotr	smbquad1	smbquad3	smbu
Bh31:20	Q2, Barshalder	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Bh34:03	Q1, Barshalder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Bh47:02	Q1, Barshalder	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Bh51:01	Q1, Barshalder	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bh57:02	Q1, Barshalder	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bh57:03	Q2, Barshalder	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
Bh61:33a	Q1, Barshalder	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bh67:03	Q1, Barshalder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bh67:05	Q1, Barshalder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bh67:12	Q1, Barshalder	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bh67:29	Q1, Barshalder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
S21781	Q1, Rommunds in Gammelgarn	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
S22833:1	Q1, Broa in Halla	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S25386	Q2, Salands in Linde, SHM 25386	0	0	1	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
S26707:7	Q1, Börsarve in Björke, grave 7/57	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S26707:9	Q1, Börsarve in Björke, grave 9/57	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
VWG011	Q2, Bhr 1927:07	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG013	Q1, Lilla Bjärges in Lau	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
VWG014	Q2, Lilla Bjärges in Lau	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
VWG055	Q1, Havor in Hablingbo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
VWG070	Q1, Bjärs in Lärbro	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
VWG089	Q1, Havor in Hablingbo	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
VWG103	Q1, Kylver in Stänga	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
VWG104	Q2, Lilla Bjärges in Lau	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
VWG109	Q2, Lilla Bjärges in Lau	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG110	Q2, Lilla Bjärges in Lau	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
VWG116	Q1, Stora Hästnäs in Visby	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0
VWG117	Q1, Stora Hästnäs in Visby	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG142	Q1, Havor in Hablingbo	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG159	Q2, Bhr 1930:07	0	0	1	0	0	1	0	0	0	0	1	0	0	1	1	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
VWG171	Q1, Bhr 1882:34	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0
VWG172	Q1, Bhr 1921:04	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0

Grave		beadp3	bridle	chapsnar	clasp0	clasp1	clasp2-	combedg	combpnt	combsing	fibcb1	fibcb2	fibwide1	fing2	fing3	goldbrac	javfjell	javrommu	javtoftv	javtveit	lahavor	lakragelh	lall	lamolles	lavoien	pots	saxk	shb5b	shb7	shbsba1	shbsba2	shh3a	shh3b	shh3c	smbcresc	smbgu1	smbgu3	smbgu7	smbhigh	smbova1a	smbova1b	smbova2	smbova3	smbova4	smbprof	smbprotr	smbquad1	smbquad3	smbu
VWG178	Ql, Kälder in Linde	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG185	Ql, Lilla Bjärges in Lau	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VZG018	Ql, Broa in Halla	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VZG024	Ql, Brucebo in Västkinde	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VZG049	Ql, Havor in Hablingbo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VZG074	Ql, Bhr 1899:32	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VZG091	Ql, Broa in Halla	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VZG100	Ql, Bhr 1899:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÄEG346	Ql, Havor in Hablingbo	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
ÄEG352	Ql, Havor in Hablingbo	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÄEG360	Ql, Broa in Halla	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÄEG362	Ql, Kälder in Linde	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÄEG406	Ql, Havor in Hablingbo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÄEG407	Ql, Havor in Hablingbo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÄEG408	Q2, Havor in Hablingbo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÄEG409	Ql, Kälder in Linde	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Grave	smbwide	smedisc	smespdls	smeopen2	smerect	smeswond	smezr1	smezr2	smih	smjhing	smjopen	smrcavet	smrecas1	smrecas2	smrnt2	smreshee	smrr1a	smrr4	smrr1a	smtr1	sp2	sp3	spangle	style2	swivel
Bh31:20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Bh34:03	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bh47:02	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Bh51:01	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Bh57:02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Bh57:03	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Bh61:33a	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	1	0	1	0	0	1	0	1	0
Bh67:03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Bh67:05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Bh67:12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Bh67:29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
S21781	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
S22833:1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
S25386	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S26707:7	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S26707:9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
VWG011	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG013	0	0	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
VWG014	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
VWG055	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG070	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
VWG089	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG103	0	0	1	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
VWG104	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
VWG109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG110	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG116	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
VWG117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG159	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
VWG171	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG172	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG178	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
VWG185	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
VZG018	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
VZG024	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
VZG049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VZG074	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
VZG091	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
VZG100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÄEG346	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
AEG352	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AEG360	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÄEG362	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
ÄEG406	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AEG407	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AEG408	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
ÄEG409	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0

(II:144:4, IV:2 p. 873). Nerman's mistake probably stems from a desire to flesh out phase VI:2 and to tie the Migration Period neck rings more securely to this phase by means of a systematically excavated find combination.

With current knowledge of the absolute chronology, the Migration Period in southern Scandinavia should probably be dated to between c. AD 375 (Lund Hansen 1994:1-2) and c. AD 540 (Jørgensen & Nørgård Jørgensen 1997:38, Axboe 1999:141). The Migration Period, then, lasted c. 165 years. On the Continent it was characterised by continual dramatic political change, and in Sweden by an absence of the serialised jewellery copying typical of the Viking Period. It should be possible to subdivide the Gotlandic graves of the period into more than two chronological phases in the same way as has been done for Norway (Kristoffersen 1999).

2.1 Data set and methodology

A sample of source-critically sound Migration Period grave finds from Gotland has been used to establish the chronology. It includes finds of source quality 1 with the addition of a few selected and clearly indicated quality 2 finds to allow chronological study of uncommon artefact categories. A number of source quality 3 find combinations that can be determined as badly incomplete but certainly closed are all too decimated or chronologically indeterminate to be useful in combination studies.

The sample encompasses all source quality 1 finds published in VWG that are useful for combination studies. To them have been added all such finds from subsequent excavations at Barshalder up to and including 1971 (*Barshalder 1*), all such finds added to the SHM inventory after the end of Nerman's data collection for VWG (*Tillväxten*, on-line version, inventory numbers 19000 and higher), and a few such finds added to the GF inventory after this time (Näsman 1970 with refs.).

In order to provide a forward and backward demarcation of the Migration Period, a selection of graves of the final phase of the Roman Iron Age (ÄEG) and the earliest phase of the Vendel Period were also added. As it turned out, however, the Vendel Period material had to be removed from both the female and male seriations. The discontinuity at the start of the Vendel Period is so dramatic (cf. VZG p. 8) that it cannot be studied on the same scale level as a chronological subdivision of the Migration Period. The two periods are, however, linked by the common combedg comb type and S-stamped pottery, as well as by the SP2 (cf. W&G) sword pommel type and curated Migration Period relief brooches. The development from the final phase of the Late Roman Iron Age to the Migration Period, however, is continuous and poses no obstacle to study by seriation and CA.

The objects have been classified from good depictions or photographs when available, and all non-illustrated ones (and many illustrated ones, too) from first-hand examination in the stores of SHM and GF.

With the aid of the gender attribute study in section 3.1.1, the data set was divided into female and male groups. The original incidence matrices, encompassing 66 female and 48 male graves, are presented in tables 2a and 2b.

As to methodology, carefully chosen, experimentally developed, rigorous type definitions (Malmer 1962, 1963; Hill & Evans 1972) were combined with computer-assisted CA and seriation (Høilund Nielsen & Jensen 1997, Hines et al. 1999). Typologically indeterminable objects, very uncommon types and types shown by the analyses to have been very long-lived were disregarded. The separate sequences for the two genders were correlated using their gender-neutral types and gender-transgressive furnishings, with supplementary looks at stratigraphy and topochronology (i.e. "horizontal stratigraphy", cf. Thunmark-Nylén 1995a).

Please note that this typology rests upon verbal type and phase definitions. The illustrations referred to for each type (cf. figs. 2:6-7) are a valuable aid to the understanding of the definitions, but they are not the definitions, nor part of them. Ideally, any typological classification system should be comprehensible and unambiguous even in the complete absence of illustrations.

2.2 Pottery

The most common class of artefact from the Migration Period graves is pottery. Much of it is very finely made and richly stamp-decorated. Starting from Nerman's hints in VWG, Näsman (1970, 1972:101-102) identified the S-shaped stamped motif as apparently relevant to a chronological subdivision of the Migration Period. I have been unable to find any common stamped motifs other than the S that have chronological significance.

Type code and definition

pots Pottery with a stamped S or rounded Z, cf. VWG 617-622; *Barshalder 1* figs. 10:24, 10:26.

2.3 Combs

The second most common grave artefact is the comb. A summary of the Migration Period typological development, and its continuation through the Vendel Period, is found in Nerman 1947. To my knowledge, these Gotlandic combs have since received no further treatment.

The first systematic study of Migration Period combs from the Lake Mälaren area was published by Petré (1984b:70-80, 128-135). The most recent study of these combs, incorporating the results of Nerman and Petré, is Brynja 1998. Brynja's system of typological classification is, however, not particularly useful for the chronological study of the Gotlandic finds. The majority of the Gotlandic combs from good find combinations are composite handle-less single-sided specimens that are too badly preserved to permit differentiation between Brynja I and Brynja IIIA. In the present study these combs have instead been divided on the grounds of a typological element indicated by Nerman (VWG pp. 15, 84), namely, whether the ends of a comb's grip ribs taper to a point or form a vertical edge.

Type codes and definitions

combsing Single-piece handle-less comb (Brynja 1998 type IV), cf. ÄEG 566, VWG 218-221; *Barshalder 1* fig. 10:20 C. *Excluded from the analysis, too long-lived.*

combpnt Composite handle-less comb, ends of grip ribs taper to a point (subtype of Brynja 1998 type I), cf. ÄEG 567, VWG 222-225.

combedg Composite handle-less comb, ends of grip ribs form a vertical edge (subtype of Brynja 1998 type I, supertype of IIIAB), cf. VWG 543-545; *Barshalder 1* fig. 10:22 G.

combhndl Handle comb (Brynja 1998 type II), cf. VWG 227-229, 546-547; *Bhr 1* fig. 10:11 G. *Excluded from the analysis, too long-lived.*

2.4 Strap buckles

The third most common grave artefact is the strap buckle. A buckle consists of a frame and a tongue, and usually also a fastening plate. The main chronological distinction among the strap buckles, according to VWG, is that between a "low" and a "high" frame, as seen from the side. As Näsman (1970:14, 1972:98) points out, this distinction is not defined in VWG. I have formulated the following definitions.

Type codes and definitions

smbhigh Plate width smaller than plate length, and no greater than frame width. High frame, in other words at least one of the following two criteria must be met:

1. The frame is visibly thicker at the front end than at the rear. Cf. VWG 495-496, 498-499, 502.

2. The fastening plate meets the frame above its horizontal mid line, in other words most of the frame's thickness at the point of contact is below the plane of the fastening plate. Cf. VWG 493-494, 497.

smbwide High frame. Plate width greater than plate length, and greater than frame width, cf. VWG 486-487.

smbprof Low profiled frame, cf. VWG 506.

smbprotr Low frame with frontal protrusion, cast in one piece with fastening plate, cf. VWG 161-162.

smbcresc Low oval or circular frame, crescent-shaped, with a sheet metal fastening

plate folded over the frame's thinnest part. Cf. ÄEG 540-541, VWG 166-167.

smbu Low quadrangular or U-shaped frame, separately fashioned transverse axis, no fastening plate. Cf. ÄEG 530.

smbquad1 Low quadrangular frame, straight front side and sides, cast in one piece with rectangular fastening plate, cf. VWG 144-147; *Barshalder 1* fig. 10:11 C, 10:22 C.

smbquad2 Low quadrangular frame, cast in once piece, straight front side and sides, no fastening plate, cf. ÄEG 524, VWG 139-140. *Excluded from the analysis, too uncommon.*

smbquad3 Low quadrangular frame, concave front side and/or sides, cast in one piece with fastening plate, cf. ÄEG 526-528, VWG 141-143.

smbova1a Low oval frame, cast in one piece with quadrangular fastening plate. Plate width greater than plate length, cf. VWG 154-156.

smbova1b Low oval frame, cast in one piece with quadrangular fastening plate. Plate length greater than plate width. Plate may have openwork but must have a simple quadrangular outline. Cf. VWG 157-160, 491-492; *Barshalder 1* figs. 10:11 D, 10:21 A.

smbova2 Low oval frame, cast in one piece with openwork or pronged fastening plate. Plate must not have a simple quadrangular outline. Cf. ÄEG 531-535, 537; VWG 150-153, 489. *Excluded from the analysis, too long-lived.*

smbova3 Low oval frame joined to a separately fashioned cast quadrangular fastening plate by a transverse axis. Cf. ÄEG 536, 539; VWG 164-165.

smbova4 Low oval frame without fastening plate, cf. VWG 148-149. *Excluded from the analysis, too long-lived.*

Only two of 24 determinable buckles from the female graves had a high frame, an observation that might profitably be used in a gender attribute seriation.

2.5 Sundry strap mounts and staple rings

Because of their variability these mounts permit only a rather simple typology, which excludes many specimens. This avoids a system comprising numerous single-member types.

Type codes and definitions

smh Strap mount shaped like an H or an hourglass (often termed "X-shaped"), cf. ÄEG 552-558, VWG 189-192.

smjopen Strap joiner, hinged, openwork. cf. ÄEG 545; *Barshalder 1* fig. 10:21 B. *Excluded from the analysis, too uncommon.*

smjhing Strap joiner, hinged, rectangular, non-openwork, cf. ÄEG 544, VWG 168-171. *Excluded from the analysis, too long-lived.*

smrcavet Cavetto ring, Sw. *hålkälad ring*, cf. VWG 171, 173, 175, 177, 186, 195, 197-198, 510-512, 515-519; *Barshalder 1* figs. 10:11 EF, 10:18 Z, 10:21 D, 10:22 D. *Excluded from the analysis, too long-lived.*

2.6 Strap retaining mounts

Type codes and definitions

smrecas1 Strap retaining mount, cast, sides straight or smoothly curved. Cf. ÄEG 549-551, VWG 179-180.

smrecas2 Strap retaining mount, cast, sides with small protrusions at middle. Cf. VWG 181-182.

smreshee Strap retaining mount, made from bronze sheet. Cf. VWG 202-205, 520; *Barshalder 1* fig. 10:22 E.

2.7 Strap end mounts

On the basis of Näsman's (1970:30-47) classification system A, I have formulated a set of typological definitions for the openwork strap end mounts. These definitions have been formulated in terms of the mount's fastening plate being orientated upward. The Migration Period mounts consist of no more than the following parts, in order from the top down: fastening plate, ribbed cuff, upper intermediate part, central frame, lower intermediate part, end plate, knob.

Type codes and definitions

smeophou Openwork, hour-glass-shaped with central ring. Cf. ÄEG 514-516.

smeopdis Openwork, not hour-glass-shaped, ending in a disc. Cf. ÄEG 518-521, VWG 128.

smeopen2 This definition takes precedence over those for smeopen1 and smeopen3.

Openwork, Näsman's group II, cf. VWG 121, 123, 126, 459; *Barshalder 1* fig. 10:23 D. At least one of the following two criteria must be met.

1. Lower intermediate part rectangular with two opposed slots.

2. End plate has circular outline.

Excluded from the analysis, too long-lived.

smeopen1 Openwork, Näsman's group I, cf. VWG 114-118. Fastening plate must not have parallel-then-concave sides. No cuff. Upper intermediate part rectangular with two opposed rounded slots. No knob.

smeopen3 Openwork, Näsman's group III, cf. VWG 460-465. Cuff present. Upper intermediate part must not be rectangular with two opposed *rounded* slots, but may be rectangular if slots are triangular or rectangular. Central frame has two opposed angles on its outline and is filled with an inverted T or a horizontal bar. Lower intermediate part must not be disc-shaped. Triangular end plate.

smesword Solid, straight-sided outline similar to a two-edged sword blade, cf. VWG 473-482; *Barshalder 1* fig. 10:22 F.

smerect Solid, partly concave sides, ending in a rectangular crossbar, cf. VWG 134-136, 471. *Excluded from the analysis, too long-lived.*

smedisc Solid, ending in a disc, cf. VWG 129-130, 132-133. *Excluded from the analysis, too long-lived.*

Only two openwork strap end mounts have been found in Migration Period male graves (VWG grave 103 & Bhr 1934:03). This is another nicety of the period's gender symbolism that has not been made use of in the gender attribute study in chapter 3.

2.8 Fibulae

The fibula types of Migration Period Gotland are fiercely local. They have little affinity with the contemporaneous cruciform fibulae of the North Sea area (Reichstein 1975, Bode 1998:23-72), of which not a single specimen is known from the island. The best overseas parallels to the fibulae of Gotland are found on nearby Öland (cf. *Ölands Järnåldersgravfält*).

One characteristic that the Gotlandic fibulae share with their western contemporaries is a very wide typological variability. Starting with Näsman's (1970, 1972) suggestions, and adding a statistical study of the proportions of all fibula feet with non-divergent sides illustrated in VWG, the following typological division has been developed. It pertains only to the foot and head of the fibula as seen from above. The objective has been to discern chronological variation. It should be noted that the term *fibula* refers to objects with a visible spiral-rolled spring-loaded pin, extant or strongly presumable; whereas the term *brooch* is used for objects with a decorative front that hides the pin, for instance the great relief brooches of the Migration Period and the proto-animal-head brooches of the Vendel Period. No phase C3 or Migration Period fibula from Gotland possesses a returned (*umgeschlagen*) foot.

The shape of a fibula's foot is classified as follows.

fwmax: Maximum width of the foot.
fwmin: Minimum width of the foot.
flen: Length of the foot.

Foot index = (fwmax – fwmin) / flen

Foot index < 0.08: foot with parallel sides.
Foot index > 0.07, foot widest at bow: foot with convergent sides.
Foot index > 0.07, foot widest at end: foot with divergent sides.

Type codes and definitions

fibcb1 Headless. Length <49 mm. Foot with parallel sides. Foot may end in knob or endplate, whose dimensions are not included when determining parallelism. No relief decoration.

("Short crossbow fibula"). Cf. ÄEG 487-489, VWG 376.

fibcb2 Headless. Length >48 mm. Foot with parallel sides. Foot may end in knob or endplate, whose dimensions are not included when determining parallelism. No relief decoration. ("Long crossbow fibula"). Cf. ÄEG 491; VWG 65, 366-375, 378.

fibpoin1 Foot with convergent sides, ending in a point or knob. No relief decoration. Head shaped as a knob or a disc. ("Early tapered-foot fibula"). Cf. ÄEG 492-494.

fibpoin2 Foot with convergent sides, ending in a point or knob. Head shaped as a trefoil, a rhomb, a transverse spool, a supine crescent, a pair of antithetical animal heads, two of these five combined, or absent. No relief decoration. ("Late tapered-foot fibula"). Cf. VWG 54-56, 58-63.

fibrel Cast relief decoration on foot and/or head. ("Relief fibula"). Cf. VWG 355-356, 359, 362.

fibwide1 Foot with divergent sides. Must have head in the shape of a knob. No relief decoration. Cf. VWG 1-26.

fibwide2 Foot with divergent sides. Must not have head in the shape of a knob. No relief decoration. Cf. VWG 27-50, 357-358, 360-361.

2.9 Dress pins

Type codes and definitions

dpflat Flat-hammered, vertical, pierced head, cf. VWG 76-77, 382.

dphdisc Cast horizontal disc head, cf. VWG 80, 383.

dpbird Cast bird-figure head, cf. VWG 392.

dpknplat Cast mushroom or polyhedral head on top of a pierced vertical plate, cf. VWG 388-390. *Excluded from the analysis, too uncommon.*

dpmush Cast mushroom head, no hole, cf. VWG 82-84, 384-387; *Barshalder 1* fig. 10:22 B. *Excluded from the analysis, too long-lived.*

dpring Ring head. Cf. VWG 73-74.

2.10 Pendants

Type codes and definitions

pendvase Vase pendant, cf. VWG 99-102.

goldbrac Gold bracteate, Montelius 1869 type A-D, not type E. Cf. VWG 327-343; *Barshalder 1* fig. 10:23 A.

2.11 Clasps

Type codes and definitions

clasp0 Clasp without buttons or with a single ornate button per side. Cf. ÄEG 561-565, VWG 211.

clasp1 Clasp with a single disc-shaped featureless (possibly bevelled-edge) button per side, cf. VWG 212-215.

clasp2- Clasp with 2-4 buttons per side, cf. VWG 525-537.

clasph&e Metal wire hook-and-eye (Hines 1993 class A.). Cf. VWG textfig. 196.

2.12 Weaponry

Weaponry has been classified according to Bemmann & Hahne 1994, with the addition of the Gotlandic local javelin head type Rommunds (see below).

Type codes and definitions

sp2 Sword pommel mount, hat-shaped. Cf. VWG 586-588; VZG 513, 515; *Barshalder 1* fig. 10:12 A. *Excluded from the analysis, too uncommon.*

chapsnar Sword chape, type Snartemo/Fairford. Cf. VWG 586b, 590, 591.

lahavor Lance head, type Havor. Cf. ÄEG 633. *Excluded from the analysis, too uncommon.*

lakrageh Lance head, type Kragehul. Cf. VWG 596.

lamolles Lance head, type Mollestad. *Excluded from the analysis, too uncommon.*

lavoien Lance head, type Vøien. Cf. ÄEG 635. *Excluded from the analysis, too uncommon.*

javfjell Javelin head, type Fjellberg. Cf. VWG 276. *Excluded from the analysis, too uncommon.*

javrommu Javelin head, type Rommunds (see below). *Excluded from the analysis, too uncommon.*

javtoftv Javelin head, type Toftvolden-Einang. Cf. ÄEG 637-638.

javtveit Javelin head, type Tveito. Cf. VWG 597. *Excluded from the analysis, too uncommon.*

shb5b Shield boss type Vb. Cf. ÄEG 643 (boss).

shb7 Shield boss type VII. Cf. VWG 277-278, 608 (bosses). *Excluded from the analysis, too long-lived.*

shh3a Shield handle type IIIa. Cf. ÄEG 642-643 (handles). *Excluded from the analysis, too uncommon.*

shh3b Shield handle type IIIb. Cf. ÄEG 645 (handle).

shh3c Shield handle type IIIc. Cf. VWG 277-278 (handles). *Excluded from the analysis, too long-lived.*

I know of two finds where lance heads of Bemmann & Hahne's type Kragehul-short with (seen proportionally) extremely long sockets are combined with javelin heads of identical length and proportions (fig. 2:1, table 2c). The weapons give every impression of having been made in sets. Existing typological systems cannot, however, accommodate the javelin heads. I refer to them as the Rommunds type after the site of the best-documented find. The Rommunds type javelins are similar to Skiaker type javelins (Bemmann & Hahne 1994, p. 435; cf. ÄEG 611–612), but lack the distinctive faceted socket of this type. This comes as a relief to the typologist, as the combination with Kragehul lance heads identify our pieces as belonging to a far later period than the Skiaker javelin type. It characterises Bemmann & Hahne's Skiaker group, roughly contemporaneous with phase C1b2 (second quarter of the 3rd century AD) in the female grave chronology (Lund Hansen 1987). The Kragehul-short lance type, however, characterises the Tveito, Vestly and Øvsthus groups of the Migration Period (AD 375–540).

Of the two find combinations, SHM 18272 is an uncertain and apparently mixed one from a gravel pit, combining the Migration Period weapon pair with weaponry of the Early Vendel Period. SHM 21781, however, is a certain combination from a well-equipped inhumation grave excavated by Mårten Stenberger in 1937. The grave's date can be fixed to the first half of the Migration Period (phase GoD1, see below) through the inclusion of a single-button clasp.

It is, of course, hazardous to base a type definition on only two specimens. Nevertheless, I wish to suggest at least provisional criteria to distinguish between javelins of Skiaker and Rommunds type. A Rommunds type javelin head:

a) has a proportionally stouter point than all Skiaker javelins (SB/SL in Bemmann & Hahne's Skiaker sample is 0.13–0.25),
b) lacks facets on the socket,
c) is shorter than most Skiaker javelins on all measurements (their total length, for instance, in Bemmann & Hahne's sample is 200–450 mm),
d) has a proportionally shorter point than most Skiaker javelins (SL/TL in Bemmann & Hahne's sample is 0.33–0.66).

Table 2c. Rommunds type javelin heads. Measurements in millimetres.
Metric parameters according to Bemmann & Hahne 1994, p. 414.
GL = total length,
SL = length of point to base of barb notches,
TL = length of socket to base of barb notches (GL=SL+TL),
SB = width of point at base of barb notches,
SD = greatest thickness of point.

	GL	SL	TL	SB	SD	SL/TL	SB/SL	Ref
SHM 18272 Go, Lau psh	195	55	140	26	8	0.39	0.47	*Tillväxten* 1927 fig. 17.
SHM 21781 Go, Gammelgarn, Rommunds	187	42	145	20	7	0.29	0.48	

Fig. 2:1 Two sets, each of a Kragehul-short lance head and a Rommunds javelin head. Left-hand set SHM 18272. Right-hand set SHM 21781. Photograph by the author 20 August 2002.

2.13 Other artefacts, unsuitable for chronological study

A number of artefact classes were excluded from the seriations either because they displayed no apparent chronological patterning or because the available sample was too small to allow any conclusions to be drawn. These classes are: bead, glass vessel, gaming piece, sword, arrowhead, neck ring, finger ring, open metal sheet cylinder, key, casket handle, lock part, sewing needle, knife, whorl, bronze sheet vessel, bronze joint rivet, bear phalanx, and fossil.

2.14 Graves with heirloom objects

When studying the chronology of graves, one sometimes comes across graves that must be excluded from seriation because they include objects that can be identified as heirlooms. Such an object shows up as a single type incidence far from the type's main cluster in the seriation diagram, pulling its grave to an earlier part of the seriation than warranted by most of the included types. It follows that only fairly common artefact types allow the identification of heirlooms: without a sizeable main cluster of incidences there can be no outliers.

In this manner, VWG grave 169 was disregarded. It combines pottery stamped with the S motif with a fibwide2 fibula. This fibula appears out of the type's usual chronological context and was probably one of the last of its kind to be buried.

2.15 The female sequence

Starting with the type incidence data set in table 2a, types were weeded out through repeated runs of CA, either as uniques, or because they ruined the CA parabola. The data set was reduced down to 41 graves (of which 13 are not found in ÄEG or VWG) and 28 types, producing a clean CA parabola and seriation (figs. 2:2 & 2:3). All the graves are source quality 1 combinations with the exception of Bhr 1967:13 & 18b. These source quality 2 combinations were kept to allow treatment of two clasp types and the smbquad1 strap

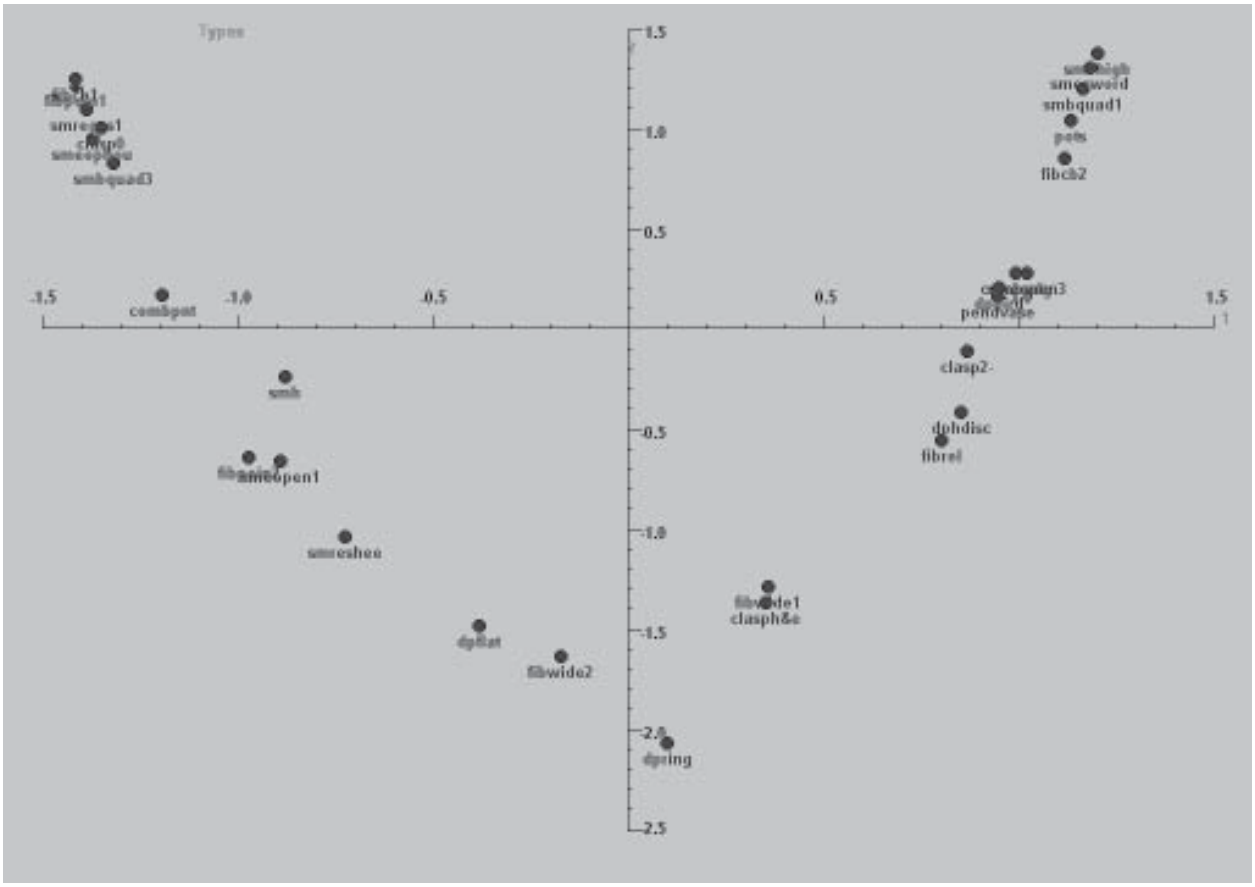
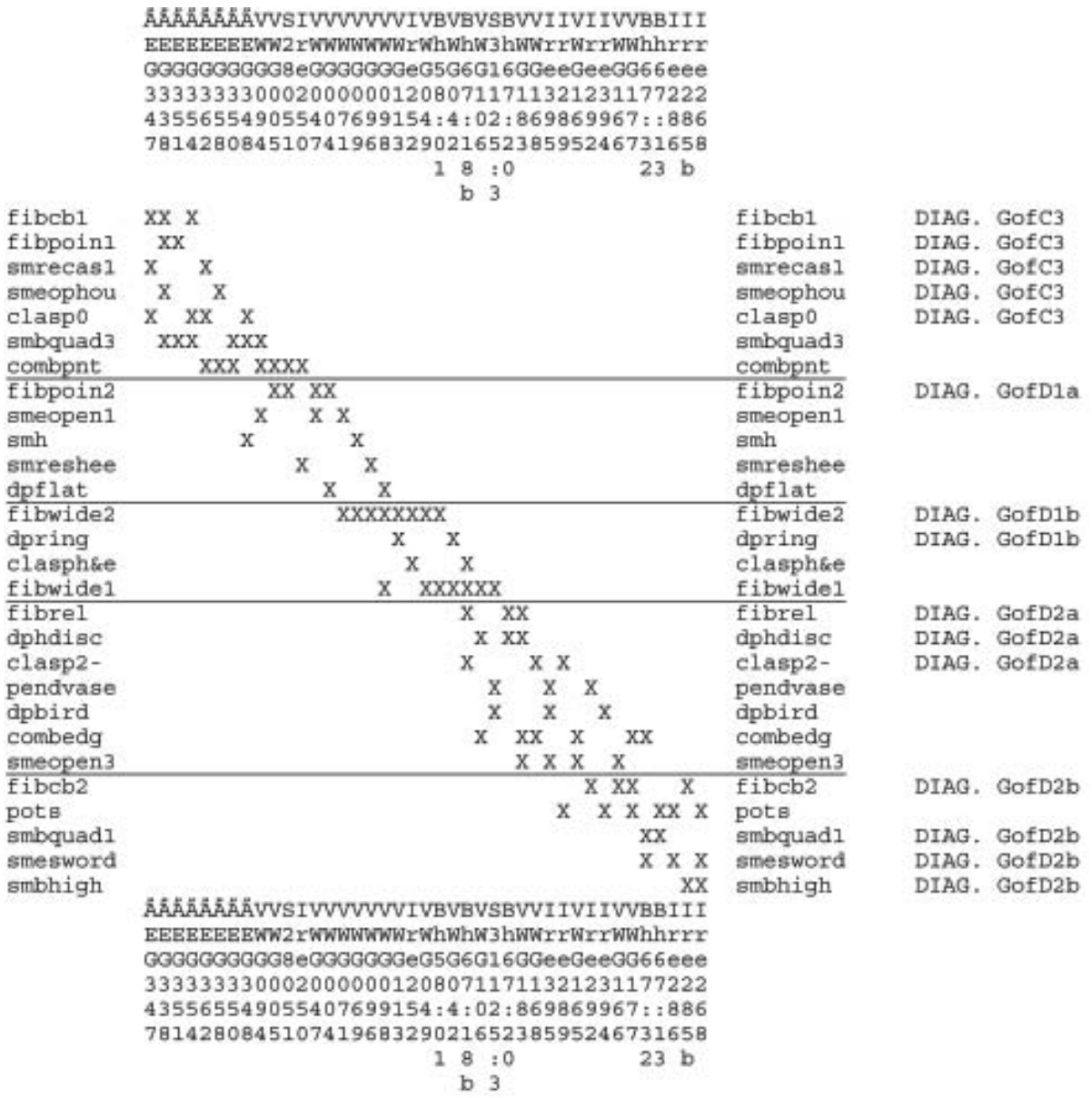


Fig. 2:2 Migration Period female grave chronology. CA scattergram.

Fig. 2:3. Migration Period female grave chronology. Seriation diagram.

MIGCHFEM
Input Correlation: 0.2611 Output Correlation: 0.9853 % Variance: 9.3716



buckles. The chronologically useful classes of artefact turned out to be fibulae, combs, strap buckles, sundry strap mounts, strap end mounts, dress pins, S-stamped pottery, vase pendants and clasps.

Accepting the continuum in figs. 2:2 & 2:3 provisionally as a chronological sequence of deposition, the first task is to determine which end is early and which is late. This is made easy by the Montelian backbone of the Iron Age chronology upon which we are elaborating. At one end we find Late Roman Iron Age types, at the other types that survived into the Vendel Period. These observations confirm that we are indeed dealing with a chronological sequence.

Having established the direction of the sequence, we turn to its phasing. The seriation and

CA display a number of discontinuities, of which the four most marked have been chosen to divide the sequence into five phases, here termed GofC3, GofD1a, GofD1b, GofD2a and GofD2b. Each phase possesses one or two fibula types; three of them each possess one or two dress pin types. These phases may thus be interpreted in terms of successive female jewellery fashions. Graves assigned in ÄEG to phase V:2 are found only in GofC3. Graves assigned in VWG to phase VI:2 are found only in GofD2ab.

GofC3 (=ÄEG per V:2) is the final phase of the Late Roman Iron Age. It includes seven of the 28 types and has five diagnostic types that separate it from the female graves of the Migration Period: the short crossbow fibula (fibcb1), the early tapered-foot fibula (fibpoin1), the early cast strap retaining mount (smrecas1), the hourglass-shaped openwork strap end mount (smeophou) and the tiny early clasp (clasp0). It shares two types with GofD1a: the type smbquad3 strap buckle and the pointed-end composite comb (combpnt). With the present type definitions, only the type clasp0 clasp and the type smbquad3 strap buckle separate GofC3 from a Gotlandic phase C2. As can be seen at a glance in ÄEG, however, it would be easy to subdivide the artefact types of GofC3 and separate it more clearly from the preceding phase. Any serious re-study of the chronology of the Roman Iron Age graves of Gotland with modern methods must utilise the voluminous un-published material excavated since the completion of ÄEG in 1923. This task has not been attempted here.

GofD1a marks the beginning of the Migration Period. It includes seven of the 28 types and has only one diagnostic type: the late tapered-foot fibula (fibpoin2). It shares three types with GofD1b, all types that separate the Migration Period from GofC3: the openwork strap end mount of Näsman's group I (smeopen1), the sheet metal strap retaining mount (smreshee) and the flat-headed dress pin (dpflat).

GofD1b includes eight of the 28 types and has two diagnostic types: the common wide-footed fibula with its sundry head designs (fibwide2) and the ring-headed dress pin (dpring). It shares two types with GofD2a: the metal wire hook-and-eye (clasph&e) and the common wide-footed knob-headed fibula (fibwide1).

GofD2a includes ten of the 28 types and has three diagnostic types: the relief fibula (fibrel), the disc-headed dress pin (dphdisc) and the multi-button clasp (clasp2-). It shares five types with GofD2b: the vase pendant (pendvase), the bird-headed dress pin (dpbird), the vertical-edged composite comb (combedg), the openwork strap end mount of Näsman's group III (smeopen3) and the S-stamped pot.

GofD2b ends the Migration Period. It includes nine of the 28 types and has four diagnostic types: the long crossbow fibula (fibcb2), the smbquad1 strap buckle, the sword-shaped strap end mount (smesword) and the high strap buckle (smbhigh). The Early Migration Period hiatus among crossbow fibulae, pointed out by Lindqvist (1926 chapter 5), still remains.

With direction and phasing established, we would under more favourable circumstances have confronted the question of chronological overlap between the phases. However, the data-sets used for the present chronological studies are unfortunately far too small to permit such deliberations.

2.16 The male sequence

A chronological sequence for the male graves was established in the same way as for the female graves. The original data set (table 2b) was honed down to 30 graves and 26 types, producing a clean CA parabola and seriation (figs. 2:4 & 2:5). The resulting data set is small and the quality of the data not very good. Only 21 of the graves are first-class assemblages, the remaining nine being source quality 2. However, this is the best that can be achieved until a sizeable sample of additional well-excavated male graves of the Migration Period on Gotland are published or at least written up. Nine of the 30 seriated graves are post-VWG assemblages.

Accepting the continuum provisionally as a chronological sequence of deposition, we begin analysing the seriation by establishing its direction in the same manner as with the female sequence. We do, indeed, seem to be dealing with yet another chronological sequence.

As to phasing, this must be done with an eye to the phasing of the source-critically more secure female sequence established in the previous

section. It turns out that, due to its small size, the male sequence cannot be divided into five phases, but three phases can be established. They are termed GomC3, GomD1 and GomD2. Graves assigned in ÄEG to phase V:2 are found only in GomC3, which also includes VWG grave 103 that was placed in phase VI:1 by Nerman. Graves assigned in VWG to phase VI:2 are found only in GomD2.

GomC3 (=ÄEG per V:2) is the final phase of the Late Roman Iron Age. It includes ten of the 26 types and has seven diagnostic types that separate it from the male graves of the Migration Period: the H-shaped strap mount (smh), the openwork strap mount ending with a disc (smeopdis), the type IIIb shield handle, the early cast strap retaining mount (smrecas1), the type Toftvolden-Einang javelin head, the type Vb shield boss, and the U-shaped strap buckle (smbu). It shares three types with GomD1: the type smbova3 strap buckle, the tiny early clasp (clasp0) and the crescent-shaped strap buckle (smbcresc). The present type definitions appear to separate GomC3 rather well from a Gotlandic phase C2.

GomD1 marks the beginning of the Migration Period. It includes ten of the 26 types and has three diagnostic types: the late cast strap retaining mount (smrecas2), the single-piece strap buckle with a frontal protrusion on the frame (smbprotr) and the single-plain-button clasp (clasp1). It shares four types with GomD2: the sheet metal strap retaining mount (smreshee), the type smbquad3 and smbquad1 strap buckles, and the type Kragehul lance head.

GomD2 ends the Migration Period. It includes 13 of the 26 types and has nine diagnostic types: the type smbwide, smbhigh and smbprof strap buckles, the multi-button clasp (clasp2-), the S-stamped pottery (pots), the type Snartemo-Fairford sword chape (chapsnar), the long crossbow fibula (fibcb2), the type A-D gold bracteate (goldbrac), and the sword-shaped strap end mount.

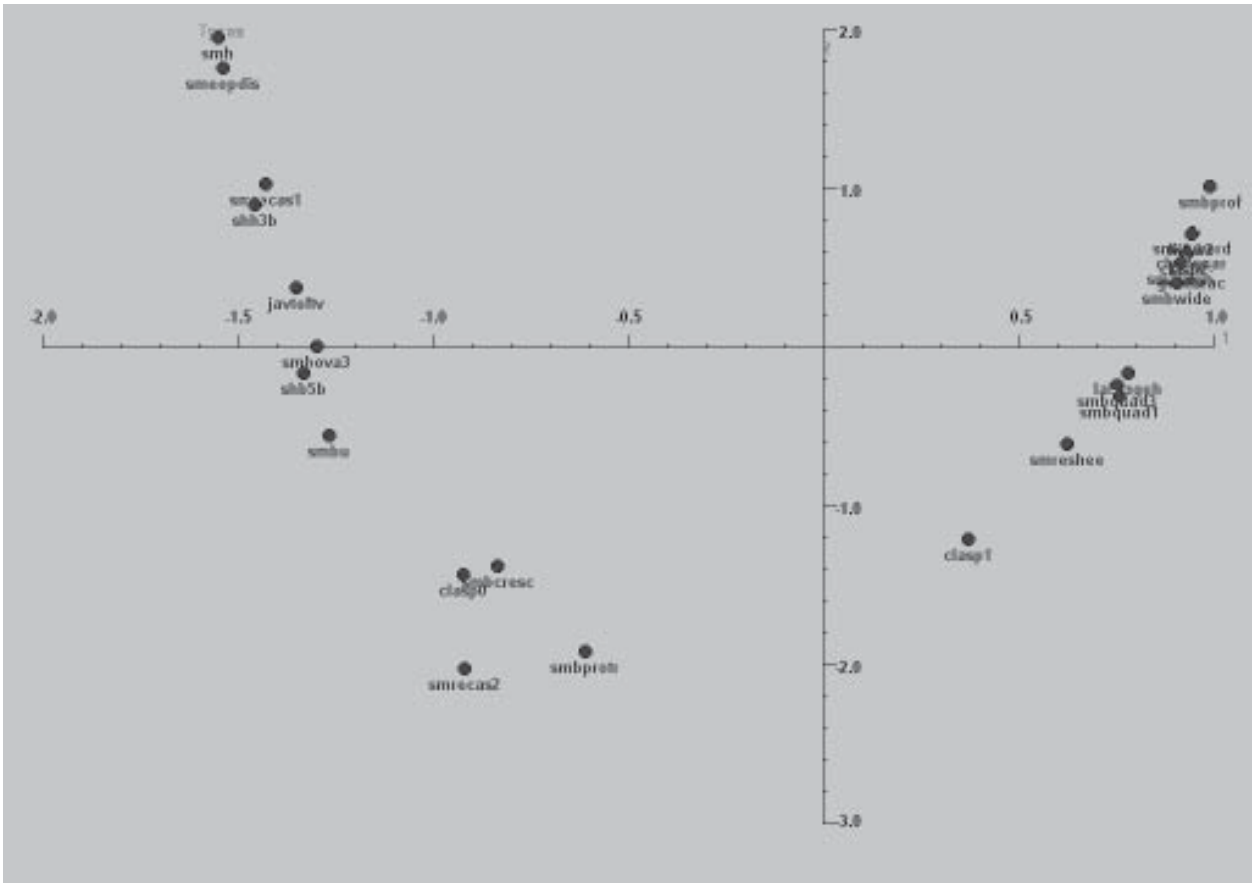
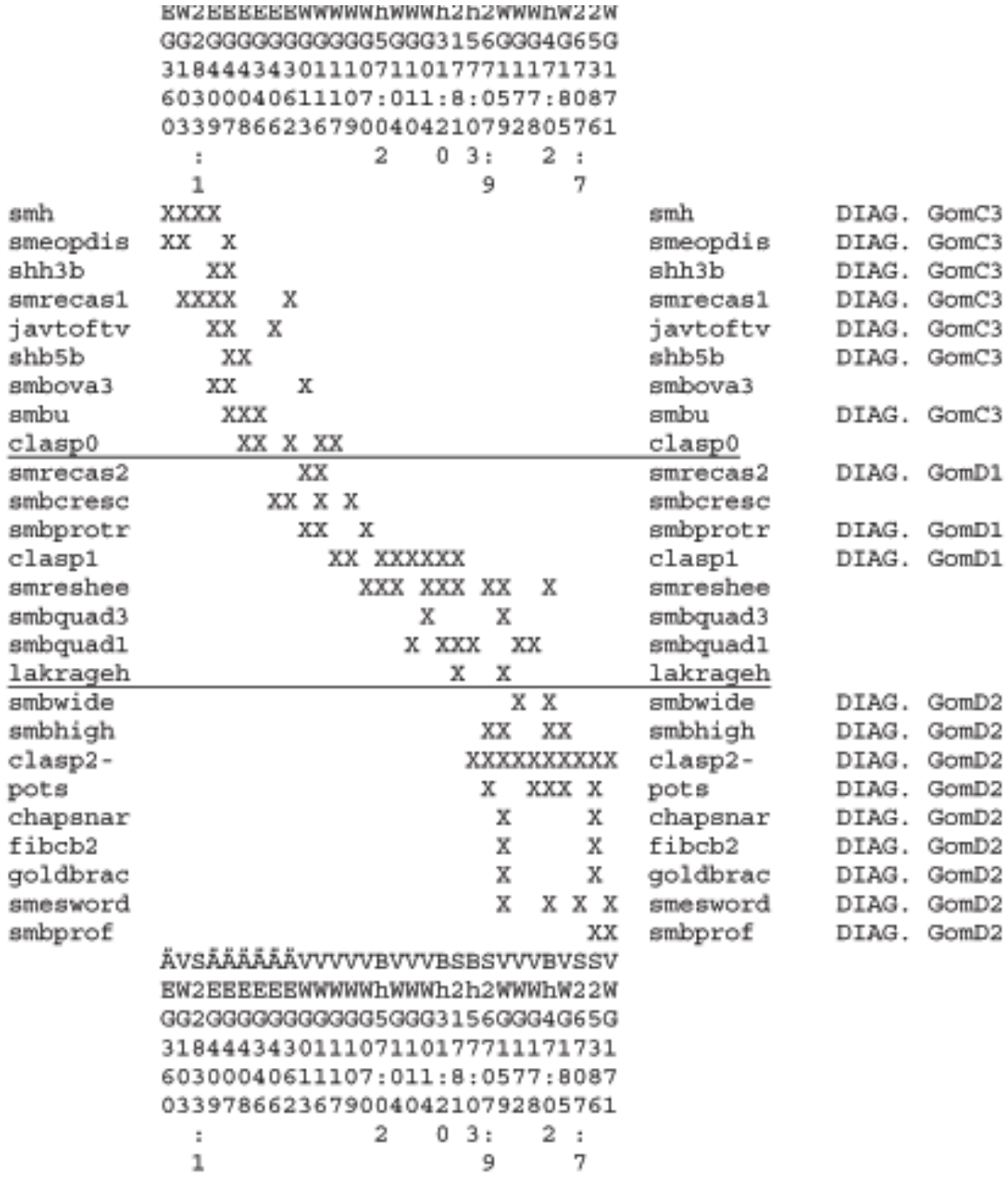


Fig. 2:4. Migration Period male grave chronology. CA scattergram.

Fig. 2:5. Migration Period male grave chronology. Seriation diagram.

MIGCHMAL
Input Correlation: 0.2349 Output Correlation: 0.9799 % Variance: 15.5422



2.17 Correlating the two sequences

The separate sequences for the female and male graves are independent of each other, and their phase boundaries need not be contemporaneous. However, enough types are shared throughout the two sequences, gender-neutral types and gender-transgressive furnishings, that it is possible to merge the two into a single depositional chronology for the graves of the Migration Period and the immediately preceding period on Gotland (table 2d). It has three main phases, GoC3, GoD1 and GoD2, and we can split both GoD1 and GoD2 when dealing with female graves. A corresponding independent fine chronology for

Table 2d. Chronology for the graves of the Migration Period and the immediately preceding period on Gotland.

	GoC3	GoD1a	GoD1b	GoD2a	GoD2b	VII:1	Diag.	Cf.
fibcb1	1	0	0	0	0	0	Diag. GoC3	ÄEG 487-489; VWG 376
fibpoin1	1	0	0	0	0	0	Diag. GoC3	ÄEG 492-494
javtoftv	1	0	0	0	0	0	Diag. GoC3	ÄEG 637-638
shb5b	1	0	0	0	0	0	Diag. GoC3	ÄEG 643 (boss)
shh3b	1	0	0	0	0	0	Diag. GoC3	ÄEG 645 (handle)
smbu	1	0	0	0	0	0	Diag. GoC3	ÄEG 530
smeopdis	1	0	0	0	0	0	Diag. GoC3	ÄEG 518-521; VWG 128
smeophou	1	0	0	0	0	0	Diag. GoC3	ÄEG 514-516
smrecas1	1	0	0	0	0	0	Diag. GoC3	ÄEG 549-551; VWG 179-180
clasp0	1	1	?	0	0	0		ÄEG 561-565; VWG 211
combpnt	1	1	?	0	0	0		ÄEG 567; VWG 222-225
smbcresc	1	1	?	0	0	0		ÄEG 540-541; VWG 166-167
smbova3	1	1	?	0	0	0		ÄEG 536, 539; VWG 164-165
smh	1	1	1	0	0	0		ÄEG 552-558; VWG 189-192
smbquad3	1	1	1	1	?	0		ÄEG 526-528; VWG 141-143
fibpoin2	0	1	0	0	0	0	Diag. GoD1a	VWG 54-56, 58-63
smbprotr	0	1	?	0	0	0	Diag. GoD1a?	VWG 161-162
smrecas2	0	1	?	0	0	0	Diag. GoD1a?	VWG 181-182
clasp1	0	1	1	0	0	0	Diag. GoD1	VWG 212-215
dpflat	0	1	1	0	0	0	Diag. GoD1	VWG 76-77, 382
smeopen1	0	1	1	0	0	0	Diag. GoD1	VWG 114-118
smbova1a	0	1	1	1	0	0		VWG 154-156
smreshee	0	1	1	1	?	0		VWG 202-205, 520; *Bhr 1* fig. 10:22 E
lakrageh	0	?	1	1	?	0		VWG 596
smbova1b	0	?	1	1	1	0		VWG 157-160, 491; *Bhr 1* fig. 10:11 D
smbquad1	0	?	1	1	1	0		VWG 144-147; *Bhr 1* fig. 10:11 C, 10:22 C
fibwide2	0	0	1	0	0	0	Diag. GoD1b	VWG 27-50, 357-358, 360-361
dpring	0	0	1	0	0	0	Diag. GoD1b	VWG 73-74
clasph&e	0	0	1	1	0	0	Diag. GoD1b-2a	VWG textfig. 196
fibwide1	0	0	1	1	0	0	Diag. GoD1b-2a	VWG 1-26
fibrel	0	0	0	1	0	0	Diag. GoD2a	VWG 355-356, 359, 362
dphdisc	0	0	0	1	0	0	Diag. GoD2a	VWG 80, 383
clasp2-	0	0	0	1	1	0	Diag. GoD2	VWG 525-537
goldbrac	0	0	0	1	1	0	Diag. GoD2	VWG 327-343; *Bhr 1* fig. 10:23 A
pendvase	0	0	0	1	1	0	Diag. GoD2	VWG 99-102
dpbird	0	0	0	1	1	0	Diag. GoD2	VWG 392
combedg	0	0	0	1	1	0	Diag. GoD2	VWG 543-545; *Bhr 1* fig. 10:22 G
smeopen3	0	0	0	1	1	0	Diag. GoD2	VWG 460-465
smbwide	0	0	0	1	1	0	Diag. GoD2	VWG 486-487
chapsnar	0	0	0	1	1	0	Diag. GoD2	VWG 586b, 590, 591
pots	0	0	0	1	1	(1)	Diag. GoD2	VWG 617-622; *Bhr 1* figs. 10:24, 10:26
smbhigh	0	0	0	1	1	(1)	Diag. GoD2	VWG 493-499, 502
smbprof	0	0	0	?	1	0	Diag. GoD2b?	VWG 506
smesword	0	0	0	?	1	0	Diag. GoD2b?	VWG 473-482; *Bhr 1* fig. 10:22 F
fibcb2	0	0	0	0	1	(1)	Diag. GoD2b	VWG 65, 366-375, 378

the male graves may one day be established when additional well-preserved and documented finds become available.

As for stratigraphy, none of the relationships described in VWG or documented later at Barshalder are useful in relating the sequences to each other. During the Migration Period graves were rarely placed in clear stratigraphic relationships with other recent graves. The cases that exist include no two graves that are each closely datable and of different genders.

The synchronisation of the sequences can be roughly tested against cemetery topochronology at a number of cemeteries (see cemetery plans in VWG p. 120-124, Nylén 1955:62, Thunmark-Nylén 1995a:571). This kind of evidence cannot, however, bear much weight as it invites self-fulfilling prophecies. The method includes an easy way to discount unattractive results: it has always been possible to return to an abandoned cemetery plot and dig a new grave there, thus producing uninformative topochronology.

An analysis of the topochronology of the Migration Period cemeteries of Gotland would entail the examination, dating and gender assignment of a large number of unpublished grave finds with few or single artefact types. In view of its doubtful analytical value, topochronology has therefore only been studied at Barshalder where the material is easily accessible. There is no apparent topochronological development among the Migration Period graves along the two kilometre length of this cemetery. In cemetery sections 1, 2 and 7, however, sizeable clusters of Migration Period graves have been excavated, allowing study of the spatial relationships between female and male graves on a local level.

Three source quality 1-2 male graves here can be dated within the Migration Period and has a close female neighbour fulfilling the same requirements: Bhr 1882:34 (GomD2) + Bhr 1882:33 (GofD2), Bhr 1957:02 (GomD1) + Bhr 1958:01 (GofD1b), Bhr 1951:01 (GomD2) + Bhr 1967:32 (GofD2). These topochronological relationships all support the synchronisation of GomD1 with GofD1 and of GomD2 with GofD2, for what that is worth.

On a larger scale, all Migration Period cemeteries on Gotland that have been extensively excavated and well documented have yielded graves of both GoD1 and GoD2. They can therefore not be seriated as meta-units in the way that Anders Carlsson (1988:58, tab 15) has done with the Viking Period cemeteries.

2.18 Correlating the female sequences for Gotland and Bornholm

The island of Öland and the Lake Mälaren area on the Swedish mainland are the areas whose Migration Period finds are most similar to those of Gotland. Unfortunately, no independent chronological sequences have been established for the Migration Period graves of these areas. In the case of Öland it is doubtful whether it would even be possible with present materials, as its record of furnished Migration Period graves is scanty. Lars Jørgensen (1989) has, however, published a seriation-based chronology for the female graves of Bornholm in the southern Baltic, spanning the Late Roman Iron Age and the Migration Period. His material for Eggers's phase C3 and the Migration Period consists of only 19 graves and 17 types, but he has divided it into three phases that may be compared with our system for Gotland.

Of Jørgensen's 17 types, only 6 (all of them fibulae types) can be identified in grave finds from Gotland. Type F19, found in Bornholmian phases C2b and C3, is a narrow crossbow fibula with returned foot, comparable to those of ÄEG phase V:1. Type F21, a diagnostic type of Bornholmian phase C3, is vaguely defined, described as "heterogeneous", and includes cast fibulae comparable to our types fibcb1 and fibpoin2, diagnostic types of GoC3 and GoD1a. Type F23, a diagnostic type of the Bornholmian Early Migration Period, is a long crossbow fibula comparable to our type fibcb2, a diagnostic type of GoD2b. Type F24, found in both phases of the Bornholmian Migration Period, is comparable to our fibwide2, a diagnostic type of GoD1b. Type F25, also found in both phases of the Bornholmian Migration Period, is comparable to our type fibpoin1, a diagnostic type of GoC3. F26, finally, also found in both phases of the Bornholmian Migration Period, is a small relief brooch comparable to the one found in grave 3/74 at Häg-

vards in Hall (SHM 31125:3, Pettersson 1974). This grave dates from GoD2a.

These comparisons do not reveal any systematic chronological skew in the relationship between the two phase systems. Similar fibulae flourish at different times on each island, with no tendency for one or the other area to be more or less conservative than the other. This emphasises that Gotland and Bornholm each had their own local jewellery styles during the period under study. All that can be learned is that we must indeed be dealing with roughly the same overall period on both islands. Also, we should keep in mind the possibility that the typological links that we do find may be due to exchange of jewellery items between the two islands, and that import pieces may not have the same lifespan in their new environment as their siblings at home.

2.19 Correlating the female sequences for Gotland and Norway

With regard to phasing systems for Migration Period graves in other parts of Scandinavia, only the two Norwegian ones are robust enough in their own right to merit comparison. The chronology of the Norwegian female graves was set out by Bakka (1973) and has been elaborated by Hines (1984, 1993), Straume (1987) and Kristoffersen (1999). However, there are no frequently-occurring artefact types of the period common to graves both in Norway and Gotland. Instead, comparison must be based on the occurrence of the Sösdala, Nydam and Salin's Style I decorative styles. There are precious few examples of these styles in the Gotlandic material, and they belong to a status level that makes them likely to have been kept as heirlooms for a long time. VZG grave 2 and Bhr 1957:01 are cases in point, where relief brooches decorated in Salin's Style I were found in graves of the Early Vendel Period.

Discussion of decorative styles presupposes definitions, and I have formulated such on the basis of Lennart Karlsson's (1983) excellent critical survey. An object decorated in the Sösdala style has rows of punch decoration along the edges but no cast relief decoration. With this definition, the Sösdala style is useless for the purpose of subdividing the Migration Period on Gotland. Even if the definition is narrowed down to include only silver objects it does not confine itself to objects found in graves of GoD1. Partly gilded silver objects with Sösdala punch decoration are entirely lacking from the material. Thus, the Sösdala style must be discarded as an analytical tool here.

An object decorated in the Nydam style (cf. Bemmann & Bemmann 1998:233-240) has surface-covering chip-carved cast relief depicting spiral or angular patterns but no animal or human figures; articulated figures may cling to the object's edges. An object decorated in Salin's Style I has surface-covering cast relief depicting disarticulated animal or human figures; it may also include edge-clinging figures and chip-carved abstract patterns.

The known source quality 1-2 Migration Period grave assemblages from Gotland include no examples of Salin's Style I. They do, however, provide three examples of the Nydam style: a relief brooch from grave 3/74 at Hägvards in Hall (SHM 31125:3, Pettersson 1974), and fragmentary relief fibulae from VWG grave 162 and Bhr 1967:18b. All of these graves belong to phase GoD2a, of which the relief fibula is a diagnostic type. The result of these style studies, then, is not very useful. They show that GoD2a, the penultimate phase of the Migration Period on Gotland, post-dated the genesis of the Nydam style. Nor does Hines' clasp chronology (1993) help us here, as almost all of the Gotlandic clasps are of the chronologically unspecific plain-button B1i type whose definition does not take the number of buttons into account.

In conclusion, there is very little to link our sequence for Gotland with that of Norwegian female graves (Kristoffersen 1999:109). Judging from the close Danish contacts evinced in the materials of the two areas, it appears that we may assume a common start date for GofD1 and the Norwegian phase D1. If, as is commonly accepted (Axboe 1999:138), the earliest Migration Period gold bracteates coincided with the genesis of Salin's Style I, then the beginning of our first phase with gold bracteates, GoD2a, post-dates or coincides with the beginning of the Norwegian phase D2a. The beginning of the Norwegian phase D2b with its late Style I and small equal-armed brooches probably coincides with the be-

ginning of the Vendel Period in south-eastern Scandinavia, Høilund Nielsen's (1999a, 1999b) phase VIIA, which is defined by similar brooches (KHN type F) and early Style II among other things. The final western phase of Style I is absent here. Regarding the possibility of regionally separate but contemporaneous phases of Style I and Style II in the mid-6th century, see Näsman 1984a:62 with refs., Magnus 1999, Høilund Nielsen 2002.

2.20 Correlating the male sequences for Gotland and Norway

Bemmann & Hahne (1994) have divided the Norwegian weapon graves of the Migration Period and the immediately preceding period into four chronological phases: 1) Vøien, 2) Mollestad, 3) Kvamme + Tveito, 4) Vestly + Øvsthus + Snartemo. The latter two phases each consist of two or three contemporaneous social or regional groups. The authors warn against attempts such as Ilkjær's (1990 and later works) to establish a pan-Scandinavian weaponry typology, but as these types are actually far more widespread than contemporaneous jewellery styles they do provide more hope for interregional synchronisation.

The full combination matrix in table 2b includes nine weaponry combinations from Gotland that can be classified according to Bemmann & Hahne 1994. The combinations indicate that many types survived longer on Gotland than in Norway, blurring the lines between Bemmann & Hahne's groups. All nine graves were at first assigned to the group of their latest included type according to Bemmann & Hahne's seriation. This indicated unproblematically that GoC3 (5 graves) was contemporaneous with the Vøien and Mollestad groups in Norway. Both GoD1 and GoD2 (4 graves), however, appeared to be contemporaneous with the Vestly-Øvsthus group. This was surprising as it left the Early Migration Period weapon grave groups of Norway (Kvamme and Tveito) without any representation whatsoever on Gotland, despite the fact that a number of their constituent types are known from the island. The most likely explanation is that the type VII shield boss appeared earlier on Gotland than in Norway. When this type was disregarded, however, only two Migration Period weapon graves could be classified in the Norwegian scheme, and they indicated that both GoD1 and GoD2 were contemporaneous with the Tveito group! At this point I gave the exercise up, contenting myself with the realisation that the Migration Period weapon sets of Gotland are too few to allow any chronological subdivision on their own. They are, however, reassuringly distinct from the weapon sets of the Late Roman Iron Age.

There is, however, one more observation to be made regarding the chronology of the Migration Period weapon graves in relation to Norway. Only two pieces of weaponry of the Norwegian Snartemo group, contemporaneous with the final western phase of Style I, are known from southeast Scandinavia (Bemmann & Hahne 1994, Abb. 81, Abb. 93). This is a further indication that, as suggested above, the last phase of the Norwegian Migration Period was contemporaneous with the first phase of the Vendel Period in southeast Scandinavia. Bemmann & Hahne (1994: 334-335), however, do not accept this idea. They place the earliest Merovingian type weapon graves of Norway, the Nerhus group, after the Snartemo group. Nevertheless, Style I is about as common in the Nerhus group as in the Snartemo group (one and two pieces, respectively), and the type Snartemo lance head is similar in length and shape both to the "very long lance head" type of the Nerhus group and to W&G's type L1 lance head of the early Vendel Period (cf. VZG 554-570). It seems that the Snartemo and Nerhus groups may have been largely or entirely contemporaneous, one representing a conservative mode of armament with lance, javelin and spatha sword; the other, with lance and seax sword, a fruit of the Frankish influences that swept over southeast Scandinavia from the second quarter of the 6th century onward.

2.21 Absolute dating

In assigning absolute dates to the GoC3-D1-D2 sequence, we have no numismatic or dendrochronological evidence from the graves themselves. With current knowledge of interregional absolute chronology, the final phase of the Late Ro-

man Iron Age (Eggers C3) in southern Scandinavia dates to c. AD 310-400 (Lund Hansen 1994: 1-2). The Migration Period in the same area dates to between c. AD 375 (Lund Hansen 1994:1-2) and c. AD 540 (Jørgensen & Nørgård Jørgensen 1997:38, Axboe 1999:141).

This, most importantly, leaves us the task of dating the start of GoD2. Gold bracteates, of which the start date is c. AD 450 (Axboe 1999: 138), have been assigned to GoD2 on the strength of only three graves (VWG grave 159, SHM 25386, Bhr 1967:43). None of these bracteates belong to Axboe's earliest group, but at least we may state that GoD2 began no earlier than AD 450.

Under certain circumstances, the relative length of two chronological phases might be calculated from the ratio between their grave counts. This assumes that a number of other parameters are constant: population size, portion of population buried with datable objects, and ratio of archaeological recovery. The first and second parameters cannot be studied independently of the graves' typological characteristics with present source materials. Independent knowledge of the population size seems irretrievably lost. The buried subset of the population is probably also beyond our reach as most skeletons are cremated. It is, however, possible to evaluate the ratio of archaeological recovery. A test of the VWG database's representativeness may be had from the percentage of systematically excavated graves in the VI:1-2 phase subsets. They are very similar (70% and 72%). This probably means that archaeologists and grave robbers around 1900 on Gotland were not chronologically biased when selecting Migration Period graves for excavation. The representativeness of the sample in this respect would thus seem good.

However, as shown above, many of the artefact types that Nerman placed exclusively in his early phase, VI:1, were actually long-lived and not in fact limited to the Early Migration Period. Nerman confidently assigned every find combination in VWG either to phase VI:1 or VI:2, whereas many of these graves cannot be dated unambiguously to either GoD1 or GoD2. Nerman tended to place all chronologically insensitive artefact types in phase VI:1 by default. This realisation undermines his (Nerman 1923) emigration hypothesis, criticised already by Lindqvist (1926 chapter 5). While the graves of VI:1 greatly outnumber those of VI:2 in VWG, here we have found an even ratio. Of the 54 Migration Period assemblages seriated above, 28 (52%) date from GoD2. Lindqvist's suggestion, however, that the graves of our phase GoD2 might have been a group of high-status graves contemporaneous with those of our GoD1, appears untenable in view of the seriations. Links to GoC3 are found in the graves of GoD1, links to the Vendel Period in GoD2.

The uncertainties being great, we cannot infer much from the grave counts of our phases. If we simply assume GoD1 and GoD2 to have been of equal length, we arrive at a shift during the AD 450s, coinciding with the accepted date for the genesis of Salin's Style I and the first gold bracteates (Axboe 1999:138). The phases of the Migration Period female grave sequence have a length of c. 40 years each, disregarding overlap (table 2e).

Table 2e. Suggested absolute chronology

GoC3	AD 310-400
GoD1a	AD 375-410
GoD1b	AD 410-450
GoD2a	AD 450-500
GoD2b	AD 500-540

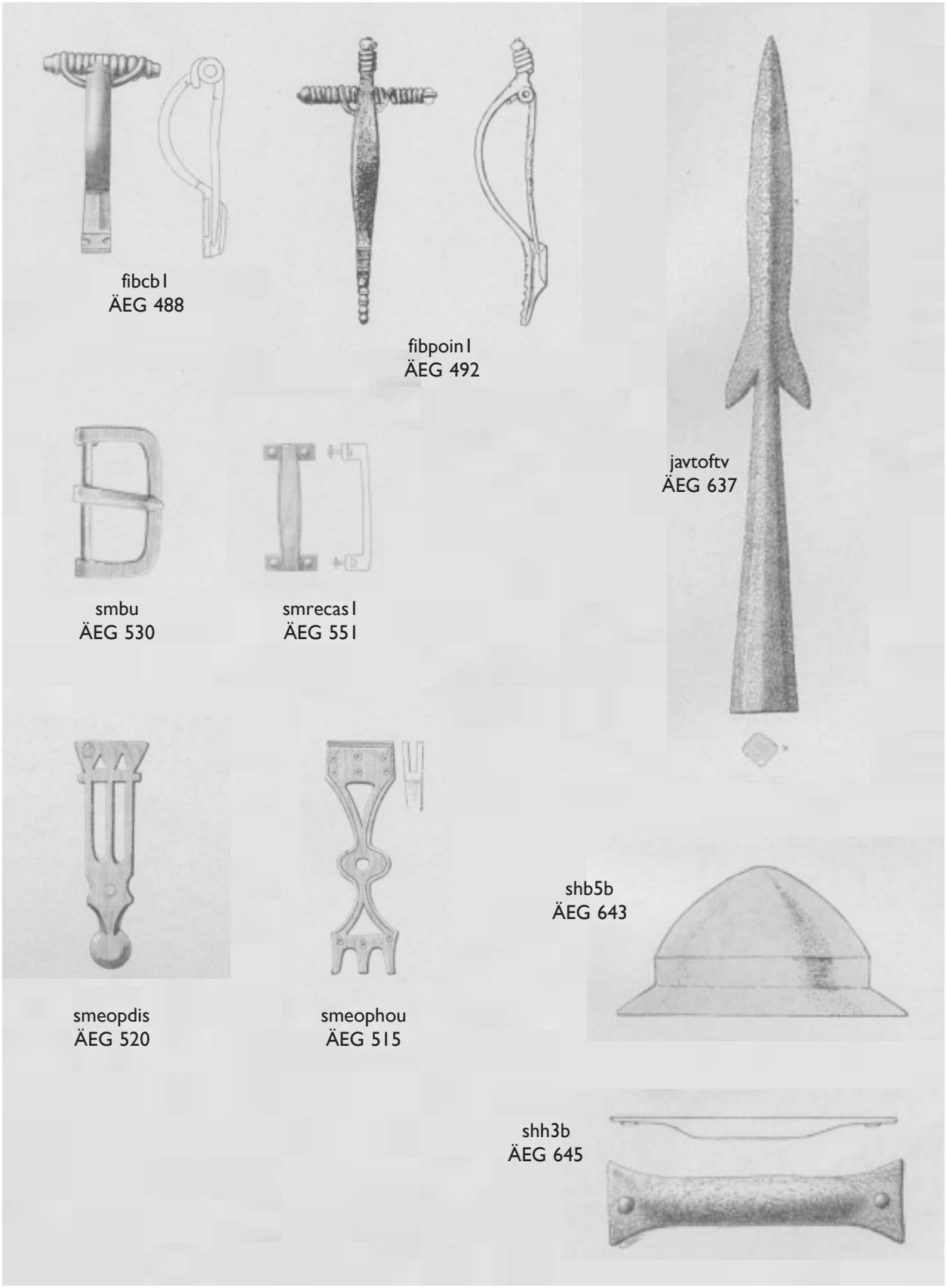


Fig. 2:6. Phase GoC3. Diagnostic types. Drawings from ÄEG, most by Olof Sörling. Various scales.

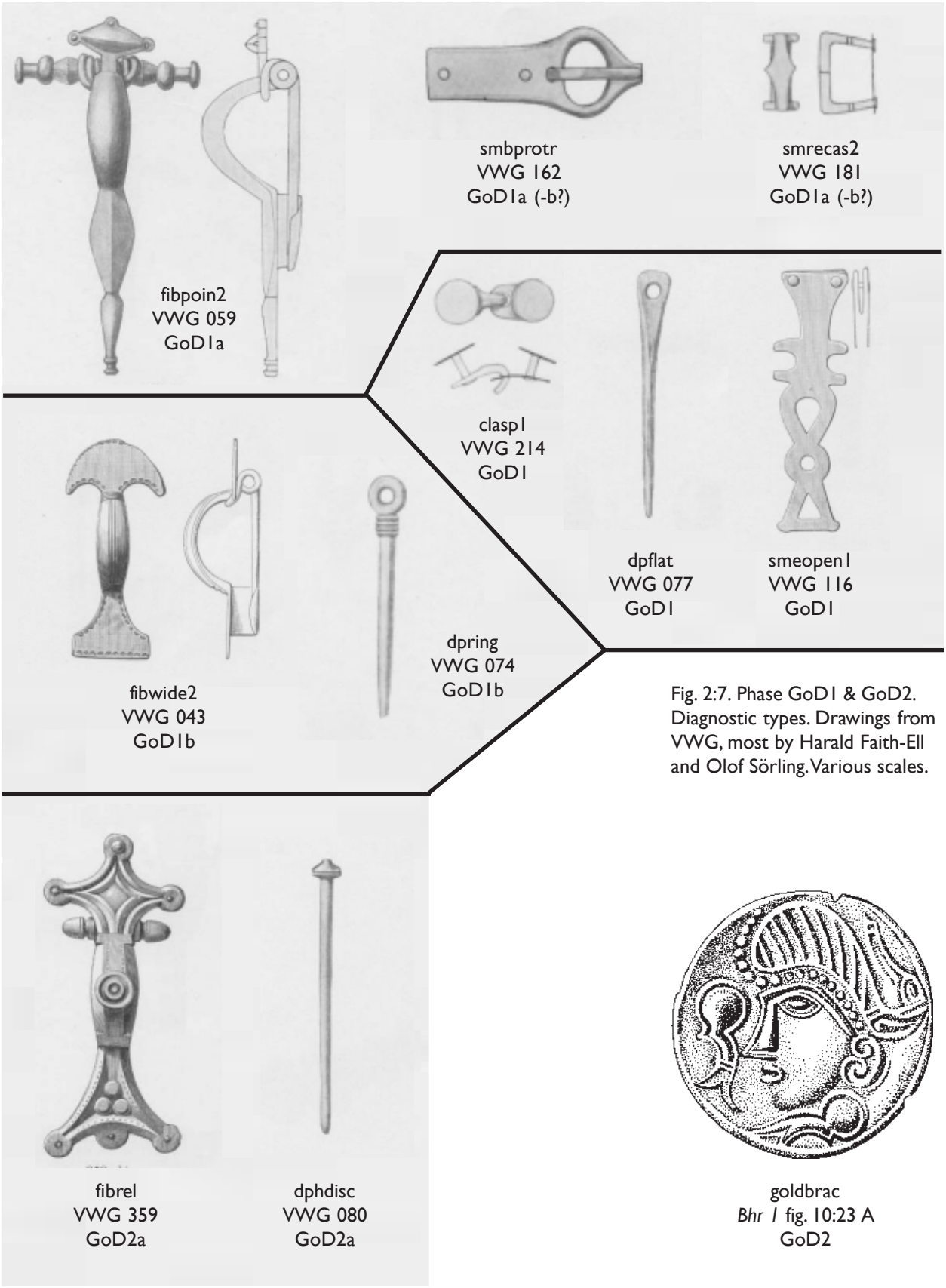
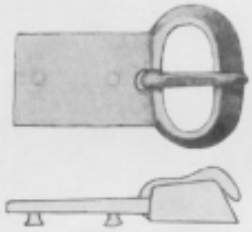


Fig. 2:7. Phase GoD1 & GoD2. Diagnostic types. Drawings from VWG, most by Harald Faith-Ell and Olof Sörling. Various scales.

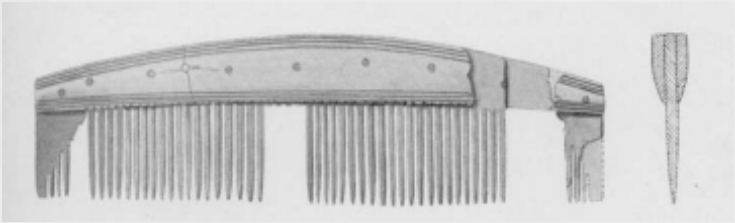
clasp2-
VWG 533
GoD2

dpbird
VWG 392
GoD2

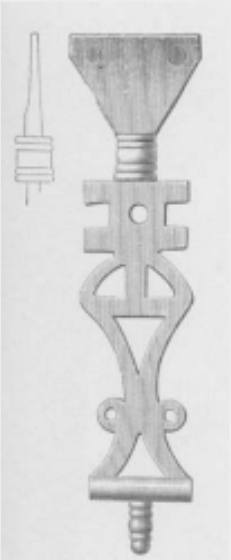
pendvase
VWG 100
GoD2



smbhigh
VWG 495
GoD2

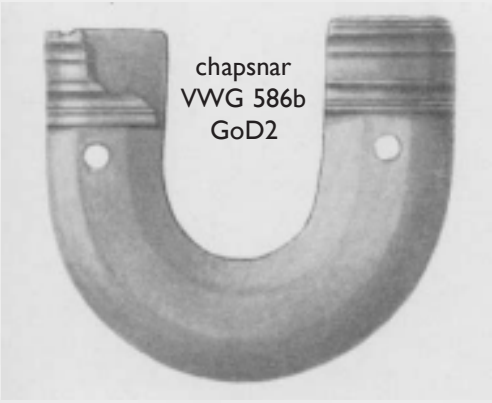


combedg
VWG 545
GoD2

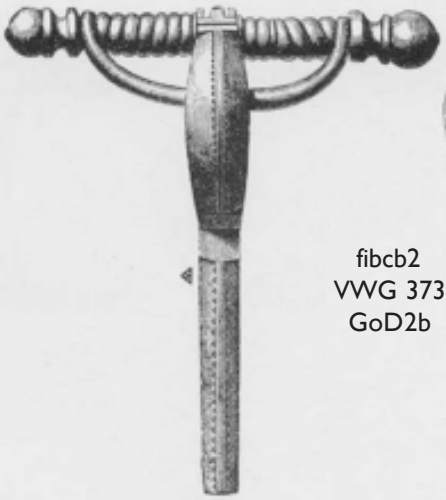


smeopen3
VWG 463
GoD2

smbwide
VWG 487
GoD2

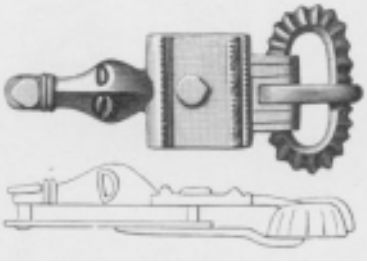


chapsnar
VWG 586b
GoD2



fibcb2
VWG 373
GoD2b

smesword
VWG 478
GoD2 (a?-) b



smbprof
VWG 506
GoD2 (a?-) b

3. Late Iron Age social roles: gender, age and status

Recalling Magritte's pipe, a grave is not a person, but a depiction of a person. The relationship between this picture and its once-living subject is a perennial theme of theoretical debate (Härke 2000 and Parker Pearson 2000, both with references). At a funeral, a group of mourners will portray the deceased in a favourable light, or at the very least one that is socially acceptable. The grave furnishings will thus symbolise a social role, pinpointing it in a number of dimensions of which gender and social status seem to have been the most important in 1st millennium AD Scandinavia.

Only an affluent group of mourners can afford an expensive funeral. Thus, an expensively built and richly furnished grave represents affluent mourners, if not an affluent deceased. The converse is, of course, not true. However, ideals of humility and ostentation in death respectively are unlikely to co-exist at a cemetery at the same time. Thus, at most cemeteries we find one of two types of behaviour that do not mix: equally and poorly furnished graves as at a Medieval Christian cemetery, or unequally and in some cases very wealthily furnished graves as at Barshalder. For reviews of the Anglophone and German debates on the theory of social status in archaeology, see Wason 1994, Härke 2000 and Parker Pearson 2000, all with references.

In this chapter, the Late Iron Age graves of Barshalder are studied with regard to social roles in four dimensions: gender, social status, osteological sex assessment, and osteological age assessment. Beyond an exploration of the present material, the aim is to establish a code scheme allowing a well-grounded classification of future finds. Unravelling the various components of each grave's social message from each other is complicated, and it cannot be done without a clear picture of chronology. This, however, cannot in turn be had without a good idea of social variability, most importantly gender, which places us in Catch 22. The way out of this catch is to work with one dimension at a time, alternating between them and moving to successively finer distinctions. First we divide the graves, regardless of gender, into Montelius's Iron Age periods, each of them one to three centuries long; then we clarify gender within each period; then we return to chronology and establish separate series of c. 50-year phases for the female and male graves of each period; then we look at each gender and phase and search for indicators of social status. This procedure produces tools (in the form of tables) allowing us to classify a set of artefacts as the trappings of, say, an Early Migration Period high status male. This information can then be correlated with other parameters, such as topochronology, burial structure or location within a war booty sacrifice.

To my mind, the most useful information in this chapter is found in its many tables. The text describes how this information has been produced and offers interpretations thereof.

3.1 Migration Period gender

At first glance, mortuary gender attributes seem fairly straightforward throughout Barshalder's period of use, with a strict dichotomy between weapon-bearing men and jewellery-wearing women. However, the Migration Period graves are in fact much less clear-cut, as both weapons and full jewellery sets are rare. In this section, I intend to identify gender attributes among the Migration Period grave furnishings; to test and clarify the prevalent views of gender during the period; and to develop a definition of transgressed gender attributes. Preliminary results were presented at the EAA Annual Meeting in Lisbon, 16 September 2000 (Rundkvist in press).

3.1.1 Gender attributes

In order to identify Migration Period gender attributes I have applied a version of the seriation-based method described both by Gebühr (1975, 1976, 1994:73-81) and Hodson (1977, 1990). For other applications of the method see Jankavs 1981 sections 5.1-5.2 and Evans et al. 1996. I entered all source quality 1-2 Migration Period grave inventories from Barshalder into a presence/absence database using WinBASP 1994. Through several runs of the analysis I then added a systematic selection of source quality 1-2 graves from VWG to enable combination studies of attributes that would otherwise have been unique or ambiguous. Six graves discussed by Näsman (Näsman 1970 chapter 7, data from Stenberger 1936, Silvén 1956 and the SHM inventory) that have been excavated since the publication of VWG were also included. After removal of single-instance types and single-type graves, the data set (MIGBASE) amounted to 77 graves and 36 types. 32 graves were from Barshalder; the remaining 45 derived from 14 other cemeteries scattered across all of Gotland within a maximum range of 80 km from Barshalder. 22 of the graves were post-VWG finds.

The type definitions used were functional ones, for example "sword" and "casket handle". Definitions based on stylistic (that is, non-functional) traits were avoided in order to suppress chronological patterning. Beyond the functional classification of artefacts, I subdivided some types according to their specimen counts in a given assemblage. This was done due to the well-known occurrence of a single bead in weapon graves (Petré 1993:151) and an impression that sets of strap fittings including more than one buckle do not occur with n>1 bead sets.

When MIGBASE was seriated (cf. section 1.5), the gender dichotomy immediately asserted itself, with weapons and the majority of belt mounts at one end; and keys, casket fittings, and most jewellery at the other. However, the seriation was noisy, with a number of non-polarised and thus gender-neutral types in the middle. These were removed through successive runs of the seriation and entered on a list of gender-neutral attributes (table 3c).

To this end, it was necessary to define the boundary between gender-neutral attributes and transgressed gendered ones. Gender-neutral attributes have varying degrees of neutrality, or, put another way, are more or less tied to one gender or the other. The gender ratio for a gender-neutral attribute is rarely the ideal 50%. At some low percentage for one gender an attribute should not be regarded as neutral, but rather as gender-specific though negotiable or transgressed. Previous studies (Gebühr 1976:120, 1994; Hodson 1977; Jankavs 1981) have disregarded these transgressions as irrelevant noise in the data: "Naturally, it would be desirable to have exact boundaries, but these are impossible to obtain and have probably never existed either. In this case one has to be content with the tendencies…" (Jankavs 1981 section 5.2.1). This was unsatisfactory procedure, separating true gender-neutral attributes (like pots) from gendered attributes with exceptions (like a sword found with a large jewellery set) without providing any formal definition of which was which. Also, these interesting patterns in the data, where gender attributes were clearly transgressed, were disregarded and subsumed within the persistent basic gender dichotomy seen in the grave inventories.

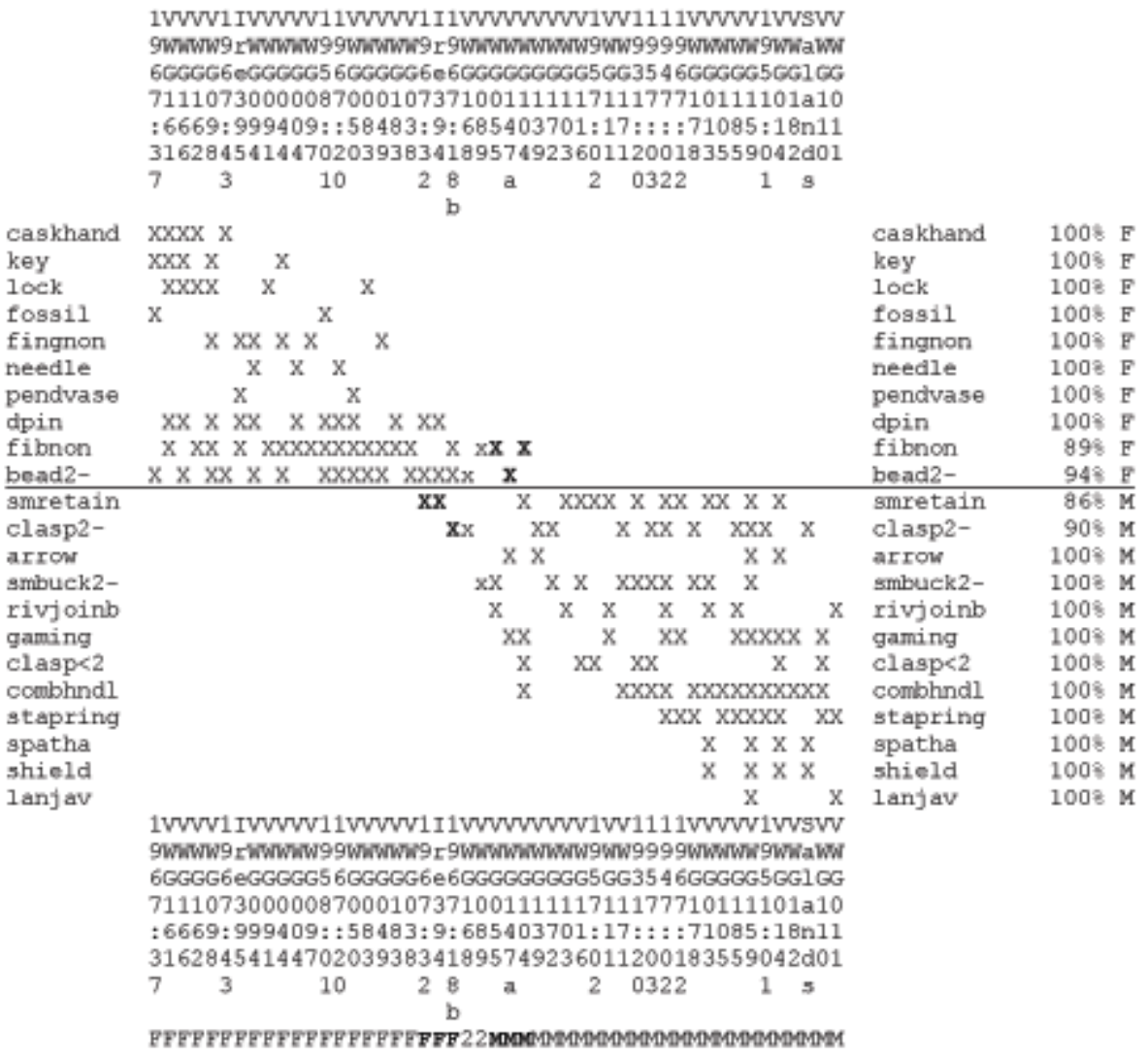
I have chosen to draw the line for gender transgression at <20% representation of one gender for an attribute, out of the total population of gendered graves with that attribute (table 3a). It should be noted that the <20% limit means that only attributes known from at least six graves can be defined as transgressed. Consequently, with a larger sample the bronze sheet vessel (n=4), for instance, deemed gender-neutral here, might actually turn out to be a transgressed gender attribute. Also, with the method used, only attributes known from at least two graves can be gendered at all, leaving a number of unique attributes unaccounted for. The seriation algorithm disregards unique objects and single-object graves. Both of these limitations to the method appear sensible from the point of view of representativeness.

Table 3a. Gender assignment of burial attributes.

	Female	Male	Attribution
Gender ratio of gendered graves with an attribute	100%	0%	Female
	>80%	1-19%	Female, transgressed
	>19%	>19%	Gender-neutral
	1-19%	>80%	Male, transgressed
	0%	100%	Male

Fig 3:1. The Migration Period gender dichotomy. Seriation diagram. The horizontal line marks the division between female and male graves and types. The bold-faced "X"s mark gender transgressive occurrences of four artefact types, i.e. the uncommon cases where a few attributes of one gender are found in combination with a greater number of attributes of the other.

MIGGEND
Input Correlation: 0.0925 Output Correlation: 0.9462 % Variance: 18.8448



The test for neutrality was performed recursively through repeated runs of the seriation until no attribute with less than 81% representation for its majority gender (that is, any gender-neutral one) remained. Finally, a subset of MIGBASE termed MIGGEND remained, with 49 graves and 22 types. MIGGEND produced a fairly clean seriation (fig. 3:1). Two central graves must be classified as ambiguous as they each possess one attribute of either gender. Six graves combining attributes of both genders but with a majority for one or the other are classified as gender-transgressive. It should be stressed that these graves do not combine full attribute sets for both genders, as might be expected in double graves with furnishings for both of the deceased. More on this issue in section 3.1.7.

To this analysis should be added the stylistic observation that only 2 of 24 determinable strap buckles from a selection of female graves had a high frame (cf. section 2.4), which marks this buckle type as a transgressed male gender attribute.

Using the same basic method as the above, Jankavs (1981 section 7) was unable to discern a gender dichotomy in his sample of Migration Period graves (n=29) from the cemetery of Havor

Table 3b. Migration Period female gender attributes.

Attribute	n of graves in MIGBASE	Abbrev.
Casket handle	5	caskhand
Key	5	key
Lock part	8	lock
Fossil	2	fossil
Non-gold finger ring	6	fingnon
Sewing needle	3	needle
Vase pendant (VWG 99-102)	4	pendvase
Dress pin	16	dpin
Non-crossbow VWG fibula, *transgressed*	21	fibnon
Beads n>1, *transgressed*	19	bead2-

Table 3d. Migration Period male gender attributes.

Attribute	n of graves in MIGBASE	Abbrev.
Lance or javelin head	3	lanjav
Sword	4	spatha
Shield	4	shield
Staple ring (VWG 197-200, 518-519; *Barshalder 1* fig. 10:18 Z)	10	stapring
Handle comb	18	combhndl
Clasp with <2 buttons	8	clasp<2
Strap buckle n>1	11	smbuck2-
Gaming piece	13	gaming
Bronze joint rivet (VWG 207-210, 522), including paired sheet rectangles with single rivets at ends, excluding strap joiners (see above)	7	rivjoinb
Arrowhead	4	arrow
Clasp with >1 buttons, *transgressed*	15	clasp2-
Strap retaining mount (VWG 202-205, 520), *transgressed*	15	smretain

Table 3c. Migration Period gender-neutral attributes.

Attribute	n of graves in MIGBASE	Abbrev.
Glass vessel	18	glass
Pot	52	pot
Comb	34	comb
Knife	5	knife
Single strap buckle	20	smbuckle
Strap ring mount	19	smring
Strap joiner, including paired sheet rectangles with rivets in all four corners (VWG 523; *Barshalder 1* fig. 10:21 C), excluding joint rivets (see below)	12	smjoin
Single strap end mount	23	smend1
Strap end mount n>1	4	smend2-
Gold finger ring	4	finggold
Gold bracteate	3	goldbrac
Single bead	11	bead1
Bronze sheet vessel	6	vesbrsh
Bear phalanx	10	phalanx
Whorl, for sword strap or spindle (VWG 217)	5	whorl
Crossbow fibula (VWG 366-378)	8	fibcb

in Hablingbo parish, not far from Grötlingbo. He interpreted this as a real difference in relation to the subsequent Vendel Period, with ramifications for the interpretation of social change (1981 sections 8.0-8.3). Jankavs's result was actually due to an over-coarse typology (1981 section 6.1) and to the absence of weapon graves from his sample.

Some of our gender attributes correspond to those identified by Petré (1993) for Migration Period cemeteries in the eastern part of the Lake Mälaren area on the Swedish mainland. The discrepancies are, however, considerable. Many of the male attributes in Petré's list have been shown here to be gender-neutral on Gotland, with a female ratio of 20-25% in the MIGGEND sample. Petré does not explain his method of gender determination in any detail, but he has in fact overlooked certain atypical find combinations as he believes them to be osteologically undetected double graves (Bo Petré, personal communication). Also, an "occasional male grave including brooches appears" (Petré 1993:153). There are for the Migration Period, however, no attributes identified here as male and by Petré as female, or vice versa.

[Digressing for a moment from the issue at hand, at first glance Petré's female attribute list appears to be full of chronological errors. Most of the female brooch types of the Vendel Period are marked already in his Migration Period column. This has in fact been done on purpose, as Petré's definition of the Vendel Period's start differs from that used by most other scholars (Bo Petré, personal communication). See, for example, Petré 1984a:41, where Lunda grave 30 is placed in the Late Migration Period. This grave contained two small equal-armed brooches (KHN

type F1a), a figure-8 snake brooch (KHN type L2a) and a small annular brooch (KHN type A2e). Høilund Nielsen (1999b:190) places the grave and all of its artefact types in her first phase of the Vendel Period.]

3.1.2 Gender ratio at Barshalder

Among the Barshalder finds recovered up to the end of 1971, 56 alleged grave assemblages clearly date to the Migration Period, in other words Montelius period VI as defined in VWG. Four of these are mixed-gender, source quality 3-4 find combinations, but the remaining 52 are either unambiguously gendered, gender-neutral or well-documented gender-transgressive combinations. The gender ratios of this sample of 52, according to the combination studies above, are female 46% (n=24), male 40% (n=21) and gender-neutral (including one gender-ambiguous grave) 13% (n=7). The percentages indicate that most of the gender-neutral burials, being poor in artefacts, actually represent low-status men.

It should be pointed out that this gender-neutrality pertains only to the preserved artefact types. One may expect gender to have been evident also in poorly furnished graves from the clothes, hairstyles and beard trims of the deceased. It should also be added that grave robbing is more likely to render a male grave of this period gender-neutral than a female one, as the robber must sieve the grave fill to obliterate a bead set entirely.

3.1.3 Sub-gender groups

It is common to find inhomogeneities within the main gender categories of mortuary symbolism, forming sub-gender roles expressing social status and age (Jankavs 1981 section 5.2, Huggett 1997, Ravn 1999). To study this in the case of Migration Period Gotland, I returned to the MIGBASE sample and from it extracted a female (MIGFEM, n=35) and a male (MIGMALE, n=36) subset according to the gender attributes identified in section 3.1.1. Following Ravn 1999 and using WinBASP 1994, I then performed correspondence analysis (CA, cf. section 1.5) on the two samples. Unfortunately, due to the dominant rite of cremation, the available osteological age and sex assessments (section 3.1.7) were too few to use for CA as Ravn did for Spong Hill.

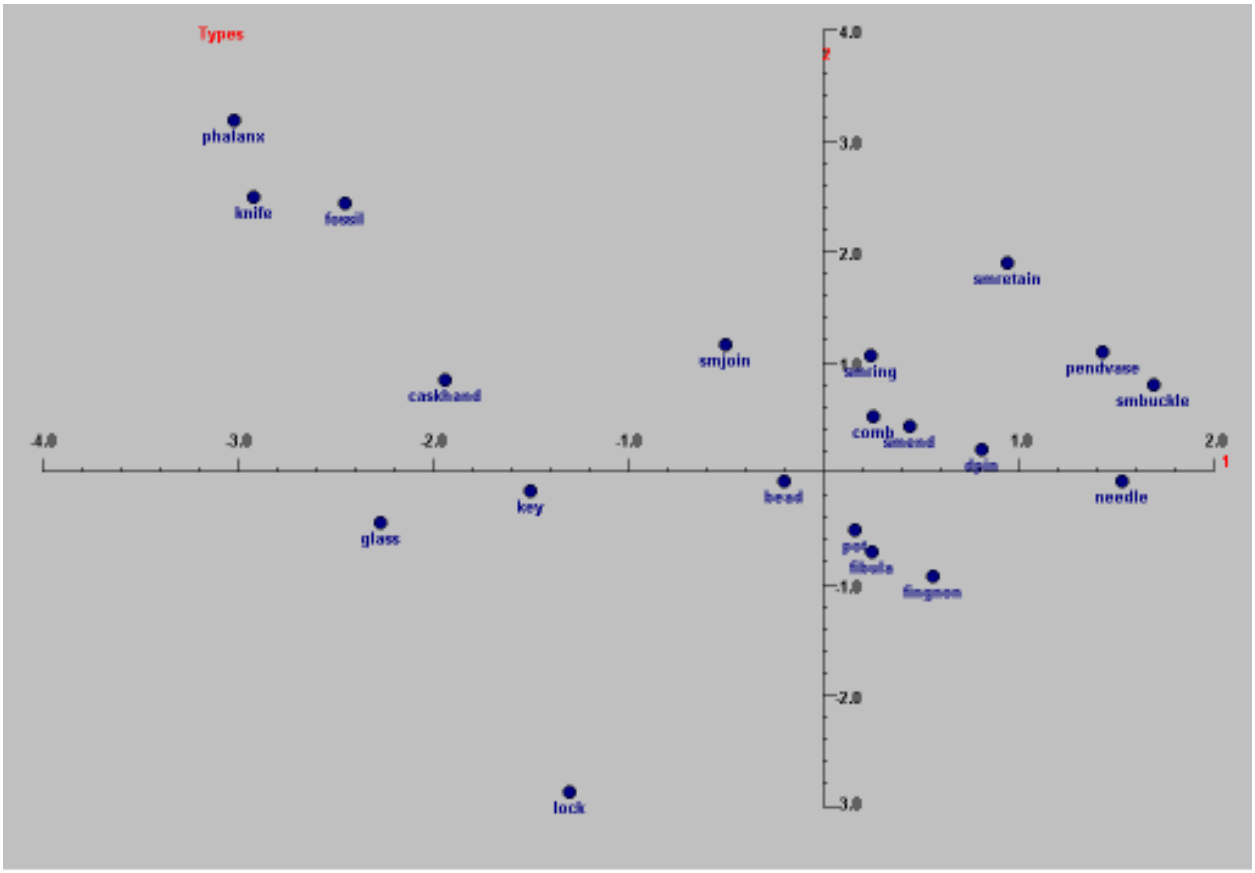


Fig. 3:2. Migration Period female graves. CA scattergram.

Prior to CA of MIGFEM, the female data set, the crossbow fibula was grouped together with the non-crossbow fibula to suppress chronological patterning; and strap end mounts and beads were grouped as single respective types regardless of the number of specimens. CA of the remaining data set (MIGFEM2, n=35) produced a type scatter showing two main groups, interpretable in the dimension of social status (fig. 3:2). This interpretation is strongly supported by the status score calculations in section 3.2.0. The high-status attribute group in the diagram includes casket handle, lock, key, bear phalanx, fossil, glass vessel and knife. The status-neutral attribute group includes bronze jewellery, belt mounts, sewing needle, beads, pot and comb. This distribution is vaguely similar to Jankavs's (1981 section 7 & fig. 9) status division of the Migration Period finds from Havor, but is not comparable in detail due to his mixed-gender data set and coarse typology, and his exclusion of, for example, glassware and bear phalanges from the analysis.

Turning to MIGMALE, the male data set, the crossbow fibula was grouped together with the non-crossbow fibula, and the two clasp types with each other, in order to suppress chronological patterning. The handle comb was subsumed within the general comb type, which may already have included a number of badly preserved handle combs. Strap buckles and end mounts were grouped as single respective types regardless of the number of specimens. CA of the remaining data set (MIGMALE2, n=34) produced a hopelessly jumbled type scatter showing no discernible groupings save for the fact that the strap mounts clustered together. The different weapon types were widely scattered, as were the attributes interpreted as high status markers in the CA of the female graves. No amount of tinkering with the data and removal of outlying types led to any improvement. My conclusion is that this is probably a matter of scale: the MIGMALE2 data set has no systematic internal patterning because its most important boundary is an external one, separating it from the poorly furnished gender-neutral graves. These were identified above mainly as male by observing the Barshalder sample's gender ratio. The corollary of this is that all identifiably male Migration Period graves are of relatively high status.

3.1.4 Women in mortuary symbolism

The female attributes in table 3b and their division into high-status and status-neutral ones in the previous section allow us to ponder female identity as it is depicted in Migration Period graves. Femininity is strongly connected with jewellery. Aristocratic women are associated with small portable caskets whose contents unfortunately elude us, and with keys that unlock these caskets or possibly in some cases the lids of larger chests or the doors of houses. Women are also associated with textile crafts through sewing needles. Finally, the fossil organisms that are common on Gotland are connected to femininity, possibly as amulets.

3.1.5 Men in mortuary symbolism

Men monopolise armed conflict in Migration Period mortuary symbolism, but this is not a very common theme in the graves. Instead, the most common male attributes are handle combs, clasps and the mounts of paired belts (cf. Högom mound 2, Ramqvist 1992). The ideal Migration Period man thus seems to be a well-groomed and rather foppishly dressed person. However, gaming pieces also mark him as a strategist (Ravn 1999:48-51), which may mean that we should in fact see him as a warrior who has laid down his weapons for the festive occasion of his own funeral. The handle comb harks back to the Chernyakhov culture of previous centuries and may have been a badge of the far-reaching contact network that brought e.g. Pontic glassware to Scandinavia during the Migration Period (Näsman 1984a, 1984b).

3.1.6 Gender-neutral attributes

Not only those attributes specific to a particular gender merit our attention. It is also of interest to look at attributes placed in graves despite their lack of any apparent gender connotation. It turns out that the 16 attributes that can be determined as gender-neutral (table 3c) form functional groups. Vessels, single belts, bearskins (indicated by phalanx bones, cf. Petré 1980), whorl, knife and comb are gender-neutral attributes in the Migration Period graves of Gotland. The four remaining gender-neutral attributes (gold finger

ring, gold bracteate, single bead, and crossbow fibula) form a systematic deviation from the basic weaponry-jewellery dichotomy: these jewellery types are found in wealthy and late graves of both genders.

Over much of the gold bracteates' extensive area of distribution they do not occur in burial contexts, but where they do they derive exclusively from female graves (Andrén 1991). The male graves Bhr 1930:07 and SHM 25386 Salands, each of which includes a gold bracteate, are thus anomalous. This explains Nerman's hesitation in attributing gender to Bhr 1930:07 (cf. *Barshalder 1* section 6.1.0). The third well-documented gold bracteate grave from Gotland, Bhr 1967:43, is a female grave. It should be pointed out, however, that all three bracteates are type C specimens that have had their loops and borders removed, with only the central motif remaining. They have thus been made useless as jewellery. Instead they resemble Roman coins, and may have been intended as payment for the journey to the underworld (Silvén 1956). Therefore, gold bracteates were probably actually worn only by women on Gotland as elsewhere, but could be modified and used as a gender-neutral burial attribute.

3.1.7 Gender and bone data at Barshalder

To date, Barshalder has produced ten osteological sex assessments made on bones from graves containing Migration Period artefact assemblages (table 3e). Considering that only 18 securely dated Migration Period graves from the cemetery have received osteological treatment and that most of them are cremations, the ratio of sex assessments is impressive. None of the sexed individuals is certainly sub-adult.

All ten graves have yielded gendered artefact assemblages. Comparing gender and osteological sex assessment, we find them to correspond unproblematically in eight cases. In one of the others, the bones from the male grave Bhr 1967: 12 have been assessed as "female-sex?", and we may conclude that this sex assessment is indeed questionable. For a discussion of the principles of using osteological data, see section 7.3.7.

The remaining grave, inhumation Bhr 1967: 18b, presents more of an interpretational challenge. The grave goods include three gendered attributes: a clasp set belonging to the male gender; a set of three beads and two finely wrought fibulae belonging to the female gender. Simply in terms of a majority vote, this marks the grave as female with a transgressed male attribute. The osteologist has, however, assessed the bones unequivocally as male-sex. From the detailed documentation of the grave, it appears that we may exclude the possibility of intrusive artefacts from the female burial that was inserted into the cist shortly after the first interment. Part of a fibula, and possibly other objects, were, however, taken from Bhr 1967:18b at this time. The original assemblage may have contained more male attributes. Be that as it may – here a mature male-sex individual has been buried with jewellery.

How flagrant was this case of gender-bending considered to be? There are only three beads from the grave. These were found at the top of the head and may originally have adorned e.g. a cap. We have determined a single bead to be a gender-neutral attribute. Most of the graves in the sample used to determine gender attributes were cremations, where the number of beads had probably been decimated by the heat of the pyre. Three beads found in an inhumation grave should thus not be seen as much of a statement genderwise. We do however find a much larger bead set as a transgressed attribute in male grave VWG 147a (source quality 2). As for the fibulae, these too are known as transgressed attributes in male graves VWG055 and VWG104 (source quality 1 and 2). It appears that we are in fact dealing with a small group of richly furnished male graves with a few pieces of female jewellery each. None appears particularly late in the Migration Period sequence.

Summing up, with one gender-ambiguous grave to nine with unproblematic sex-gender correspondence, it appears that gender did in fact correspond rather closely with biological sex in the Migration Period at Barshalder.

Table 3e. Migration Period graves with osteological sex assessments. "f+" denotes female graves with transgressed male attributes.

Grave	Date	Gender	Ost sex	Ost age	MIND	Inhum
Bhr 1930:07	GoD2b	m	m?	ad	1	1
Bhr 1947:02	GoD2	m	m	ad	1	0
Bhr 1947:03	GoD	m	m?	ad	1	0
Bhr 1951:01	GoD2b	m	m & ?	ad & ad	2	0
Bhr 1967:12	GoD	m	f?	ad	1	0
Bhr 1967:18a	GoD2b	f	f	mat	1	1
Bhr 1967:18b	GoD2a	f+	m	mat	1	1
Bhr 1967:25c	GoD	m	m?	juv-ad	1	0
Bhr 1967:32	GoD2	f+	f	ad	1	0
Bhr 1967:42	GoD	f	f	ad	1	0

3.2 Migration Period social status

Peter Jankavs (1981 section 7.1, fig. 9) studied the variation in affluence among a sample of Migration Period graves from Havor in Hablingbo parish, Gotland, taken from VWG. No attempt was made to grade the source-critical value of the find combinations and avoid doubtful or incomplete ones. He found that certain wide artefact categories, including imported glass and bronze sheet vessels, were mostly found in graves with numerous furnishings. He offered three alternative interpretations of this fact, rejecting the gender-based one and leaving the choice open as to the status-based one or that based upon age at death. Jankavs's (1981) method constitutes a simpler version of the algorithm presented by Hodson (1990:71-72) and implemented in WinBASP 1994 (cf. section 1.5).

Most of the gender-neutral attributes removed from our gender seriation (section 3.1.1) were heavily weighted to the male side of the diagram, but not heavily enough to mark them as transgressed male gender attributes. At first glance, this might be taken to mean that expenditure was greater at the funerals of men than at those of women. In fact, however, it probably reflects greater inequality in expenditure among the funerals of men than among those of women. The male graves in the gender seriation do have greater numbers of gender-neutral attributes than the female graves, but there are also a considerable number of poorly furnished gender-neutral graves that could not be seriated at all. Judging from

Table 3f. Social ranking of Migration Period artefact types. "+" denotes transgressed gender attributes.

Gender	Average number of artefact types in Migration Period graves where a certain type occurs.	
m	Lance or javelin head	12.0
m	Shield	12.0
m	Spatha sword	12.0
-	Knife	10.5
-	Gold object	9.7
-	Bronze sheet vessel	9.3
m	Arrowhead	9.3
f	Casket handle	9.2
m	Bronze joint rivet	8.9
f	Key	8.6
-	Bear phalanx	8.6
-	Strap joiner	8.5
m+	Strap retaining mount	8.0
m	Gaming piece	7.9
-	Glass vessel	7.7
-	H-shaped strap mount	7.5
-	Strap ring mount	7.4
f	Non-gold finger ring	7.0
f	Fossil	7.0
m	Handle comb	6.9
f	Sewing needle	6.7
-	Strap end mount	6.6
-	Strap buckle	6.4
m+	Clasp	6.4
-	Bead	6.3
f	Lock part	5.9
f	Dress pin	5.8
f+	Fibula	5.6
f	Vase pendant	5.5
-	Pot	5.5
-	Handle-less comb	5.4
-	Whorl	5.0

Table 3g. Social ranking of Migration Period graves.
"+" denotes graves with transgressed gender attributes.

	Gender	Score of highest status type in grave	Sum of status scores for all types in grave
VWG159	m	12.0	153
Bhr 1947:02	m	9.7	98
VWG014	m	12.0	91
VWG013	m	12.0	91
VWG103	m	9.3	84
Bhr 1967:43	f	9.7	84
VWG161	f	9.7	70
SHM 25386	m	12.0	64
Bhr 1967:37	f	10.5	63
VWG104	m+	8.5	63
VWG166	f	9.2	62
VWG185	m	9.3	59
Bhr 1967:12	m	8.6	58
VWG094	f	7.4	57
Bhr 1967:32	f+	8.0	57
VWG055	m+	8.9	57
VWG162	f	9.2	54
VWG098	f	8.6	52
VWG044	f	8.6	51
Bhr 1951:01	m	8.6	50
VWG171	m	8.6	48
Tre395	f	7.0	48
Tre394	f+	8.5	45
Bhr 1965:06	m	9.7	45
VWG047	f	7.4	43
VWG178	m	8.6	41
VWG110	m	7.9	40
VWG105	m	8.0	40
VWG049	f	7.4	38
VWG111	m	8.9	38
VWG106	f	7.4	37
Bhr 1967:20	f	6.7	36
VWG071	f	6.6	36
VWG182	m	7.9	36
VWG183	f	6.6	35
Bhr 1958:01	f	7.0	35
VWG050	f	6.4	35
Bhr 1967:18b	f+	10.5	34
VWG043	0	9.3	34
VWG061	m	8.6	34
VWG070	m	8.0	33
VWG089	2	8.5	33
Bhr 1957:03	m	7.4	33
VWG056	f	7.4	32
VWG099	f	7.4	30
VWG117	m	6.6	30
VWG165	0	6.6	29
VWG107	f	6.6	29
VWG004	f	6.7	29

	Gender	Score of highest status type in grave	Sum of status scores for all types in grave
VWG147a	m+	9.3	29
VWG139	m	9.3	29
VWG179	m	6.4	29
Bhr 1931:20	m	8.0	28
VWG116	m	8.0	27
Tre292	f	8.5	27
Bhr 1957:02	m	8.0	26
Lau1959	m	7.4	26
VWG109	m+	6.9	25
VWG069	f	7.5	25
VWG113	f	7.4	25
VWG172	m	6.6	25
VWG052	m	6.9	24
VWG092	f	6.6	24
VWG173	f	6.6	24
Bhr 1967:26	0	9.3	23
Tre285b	f	6.4	23
VWG042	f	6.3	23
VWG083	f	6.3	23
VWG163	0	6.6	23
VWG065	f	6.4	23
VWG041	f	6.3	23
VWG005	f	6.3	23
VWG038	f	6.3	23
VWG145	m	7.9	21
Bhr 1934:03	m	6.9	20
VWG170	0	7.4	20
VWG096	f	8.0	19
VWG057	f	7.7	19
VWG085	2	6.6	18
VWG097	f	7.0	18
VWG168	2	6.4	18
VWG091	f	6.3	18
VWG160	f	6.6	18
VWG114	0	6.6	18
VWG079	m	6.9	17
Bhr 1967:24b	m	9.7	17
VWG177	0	5.6	16
VWG007c	0	6.6	13
VWG084	0	6.4	12
Bhr 1967:18a	f	6.3	12
Bhr 1967:13	0	6.4	12
VWG075	0	6.4	12
VWG142	m	6.4	12
Bhr 1954:02	f	5.9	11
VWG037	f	5.8	11
VWG087	f	5.8	11
VWG002	f	5.6	11
VWG169	f	5.6	11

the gender ratio at Barshalder, many of these were probably male graves (cf. section 3.1.2), which means that the average expense at male funerals was probably comparable to that of the female ones.

The status score function of WinBASP 1994 was applied to a data set (MIGSTAT, n=99) combining all the graves studied in section 3.1. The grave furnishings were classified in functional artefact categories in order to suppress chronological patterning and allow the inclusion of badly damaged objects. Unique types and single-type graves were omitted. Gold finger rings, gold bracteates and melted gold lumps were collected in one type.

The results of the status score calculations are given in tables 3f and 3g. The ranking list for the artefact types (table 3f) supports the interpretation of the two female sub-genders, identified through CA in section 3.1.3, as a high-status and a status-neutral group respectively. The attributes of the two CA clusters are found at opposite ends of the type ranking list. Simply put, this means that not only do high status Migration Period graves contain a greater number of artefacts overall than others, they are also qualitatively characterised by a certain set of attributes. As for the male attributes, we find, unsurprisingly, weaponry at the top of the status hierarchy. Among the gender-neutral attributes, knives, gold objects and bronze sheet vessels take the lead, while glass vessels are found surprisingly far down the list. This result supports Näsman's (1984b: 21-22) suggestion that glassware was not confined to the upper-most social elite in the Migration Period. Nor was it by this token, as we shall see, in the Vendel Period.

3.2.1 Human sacrifice at Barshalder

In my opinion, the most eloquent testimony to social inequality in the archaeological record is the evidence of human sacrifice. In the context of burials, the term "mortuary murder" may be more to the point (Nordenstorm 1994 with refs.). Strictly speaking, the traumatised and bound bodies that are sometimes found in First Millennium graves in Scandinavia are probably better interpreted as part of the grave goods than as sacrifices to the gods. From a materialist point of view, this is of course a redundant distinction. In both cases, apparently low-status members of the community (with labour-induced skeletal pathologies, without grave goods) have been murdered / sacrificed for the purposes of high-status groups.

Judging from Scandinavian finds of this kind (Hemmendorf 1984), a burial should display certain characteristics to be interpreted as a sacrificial victim. It should be found inside or closely associated with another contemporary burial; there should be evidence of trauma, mutilation and/or binding; and there should be a significant difference in wealth between the two burials. In many cases, sacrificial victims can be expected to be entirely stripped of symbols of their social identity, like most bog bodies. It appears that unfurnished inhumation burials placed in furnished cremation graves may especially indicate human sacrifice (cf. the Bollstanäs grave, Hemmendorf 1984).

An example from the Late Roman Iron Age was found in cemetery section 4 at Barshalder in the 1980s (Manneke 1988b, Sigvallius 1988). Grave 1813 was a small cist placed on the periphery of a superstructure centred on a large, originally richly equipped inhumation cist. It contained the articulated bones of a badly worn woman around the age of 50, who had apparently been strangled with a belt, possibly stabbed with a knife, and finally buried in a cramped position in the cist. No conventional grave goods were found.

In the Barshalder corpus of the Migration Period, there is only one inhumation that fits the above definition of a sacrificial victim: Bhr 1939:01c. Its date is actually uncertain, but it post-dates a primary inhumation of GoD2. Some time after this burial, the cist was re-used for a poorly furnished undated cremation burial, and then Bhr 1939:01c was placed on top of the cremation layer. It was an unfurnished inhumation, and despite good bone preservation there was no trace of the body's feet. The bones have not been analysed by an osteologist, but they do not appear to have had sub-adult dimensions. I suggest that these bones represent a person murdered and mutilated at the funeral of the cremated individual.

Among the Migration Period cremation burials of Barshalder, there is one that combines the bones of more than one human: Bhr 1951:01. The furnishings are unambiguously male, respectable but not exceptional in wealth. The number of animals identified among the bones is likewise unexceptional. The human bones belong to two adults of which one was male-sex and the other sexually indeterminate. As there is no symbolic trace at all of a second person in the furnishings, I suggest that one of the buried people was actually a sacrificial victim and intended as part of the furnishings.

3.2.2 Animal bones at Barshalder

The bones from a total of 17 securely dated Migration Period graves from Barshalder have undergone full osteological analysis. In addition, excavators have identified bear phalanges in one case (table 3h).

Most if not all of the 17 graves contained animal bones. The animals are not, however, very many, either in number of species or of individuals. Only five animal groups occur repeatedly: ovicaprid (sheep and/or goat, only goat positively identified), bear, horse, seal (indeterminate species) and dog.

The evaluation of these species determinations is complicated by the fact that many of the graves at the Rojrhage 1:1 property in cemetery section 2 have proved to contain residual material from the Neolithic substratum at the site. This problem can be approached by means of the radiocarbon dates for different animal species (cf. *Barshalder 1* table 4a), the number of fragments per species and the burn state of the bones. Many of the cremation graves have yielded both burnt and unburnt bones. Not disregarding the possibility that some of the unburnt bones may be due to uneven heat on funeral pyres, we may

Table 3h. Osteologically analysed Migration Period graves with animal bones. U = unburnt individual. "f+" denotes female graves with transgressed male attributes.

Grave	Date	Gender	Inhum	Sheep / goat	Bear	Horse	Seal	Dog	Other
Bhr 1882:34	GoD2	m	0		1				
Bhr 1930:07	GoD2b	m	1	0	1 U	0	0	0	0
Bhr 1947:02	GoD2	m	0	0	2	0	0	0	0
Bhr 1947:03	GoD	m	0	1 U	1	0	0	0	Bird
Bhr 1951:01	GoD2b	m	0	1 U	1	0	0	1	0
Bhr 1965:06	GoD	m	0	0	1	0	0	1	0
Bhr 1967:07	GoD2	m & 0	2	1 U	1 U	0	0	0	Hedgehog U
Bhr 1967:12	GoD	m	0	? U	1	0	0	0	0
Bhr 1967:13	GoD2	0	0	1 U	0	0	1	0	0
Bhr 1967:18a & b	GoD2	f & f+	2	1 U	0	0	0	0	0
Bhr 1967:20	GoD2a	f	0	1	0	0	1 U	0	Frog, modern U
Bhr 1967:24b	GoD	m	0	0	0	1 U	1	0	0
Bhr 1967:25abd	GoD1	2	0	1	0	1	1	0	Fish
Bhr 1967:25c	GoD	m	0	0	0	1	1	1	0
Bhr 1967:32	GoD2	f+	0	1 U + 1	0	1	0	0	0
Bhr 1967:37	GoD	f	0	2	1	1	0	0	0
Bhr 1967:42	GoD	f	0	1 U	1	0	0	0	Hare, *Lep. tim.*
Bhr 1967:43	GoD2	f	0	0	1	0	0	0	Pig

nonetheless assume that most of them entered the cremation deposits after cremation, either in the form of foodstuffs or as residual Neolithic bones from the substratum.

Ovicaprid bones from ostensibly Neolithic contexts at Barshalder have given two radiocarbon dates, both in the Late Iron Age, but there are numerous Neolithic dates for ovicaprids from other sites on Gotland (Rundkvist et al. in prep.). The large number of ovicaprid bones identified in the graves under study and the uniquely high percentage (50%) of unburnt ovicaprid individuals in cremation graves indicate a Migration Period custom where mutton was commonly placed in the graves, either placed on the pyre or buried fresh along with the cremated remains. This does not, however, rule out the possibility that a few of the ovicaprid bones may be Neolithic in date.

The bear bones are all third or second phalanges with the same burn state as their respective human burials. All are most probably the remains of imported Migration Period bear skins (cf. Petré 1980). Gotland has never had a wild bear population (*Nationalencyklopedin*, entry "Gotland"). Bhr 1947:02, the second-most wealthy Migration Period grave known from Gotland, is unique at Barshalder in having been equipped with two bear skins. No other grave appears to have had more than one.

No horses are known from the Neolithic of Sweden (Liljegren & Lagerås 1993:40). The horse bones in the graves should thus all be contemporaneous with the burials.

The seal bones are all most probably Neolithic in date, as the main component of the Neolithic substratum at Rojrhage 1:1 is a Middle Neolithic Pitted Ware shore site used for fishing and seal hunting (Rundkvist et al. in press). Seal bones from the substratum have yielded four radiocarbon dates, three in the Middle Neolithic and one in the Late Neolithic.

Dogs were kept in the Neolithic (Liljegren & Lagerås 1993), but the substratum at Rojrhage 1:1 has yielded very few dog bones. A complete dog skeleton from Bhr 1927:07 demonstrates that dogs were placed in graves of GoC3, which suggests that the three dogs from Migration Period cremation graves were contemporary with the burials. All graves with dogs have male furnishings.

The six animal groups that occur singly in the graves will be disregarded for the following reasons. Hedgehog and frog probably represent the intrusive bones of burrowing animals. Bird, fish and pig are common in the Neolithic substratum and are thus likely to be residual. The hare is unknown from the substratum and should thus be treated as contemporary with the burial until proven otherwise, but Bhr 1967:42 is a source-critically questionable find combination.

It appears that the number and perceived value of the animals placed in graves should display the same dynamics as the number and perceived value of the artefacts. We may begin to test this argument by examining the correlation between a grave's status score and the number of animals

identified in it. This calculation will only examine ovicaprids, horses and dogs. The bear phalanges were included already in the calculation of the status scores. Only source quality 1-2 graves will be examined to avoid compromised or badly robbed ones.

Table 3i is sorted according to the status scores of the graves, and we find a good correlation in the lower and middle reaches of the status continuum. The graves with the very highest status scores, however, break the pattern. They contained no animal bones at all beyond the phalanges of bear skins, suggesting that their wealthy artefact furnishings belonged to quite another level of status or realm of significance than the animals. One might even speculate that the absence of animal bones in the wealthiest graves indicate rules of ritual purity among the social elite.

Table 3i. Status score and number of animals at Barshalder.

Grave	Status	Animals
Bhr 1930:07	153	0
Bhr 1947:02	98	0
Bhr 1967:43	84	0
Bhr 1967:37	63	3
Bhr 1967:12	58	0
Bhr 1967:32	57	3
Bhr 1951:01	50	2
Bhr 1965:06	45	1
Bhr 1967:20	36	1
Bhr 1967:18a & b	23	0.5
Bhr 1967:24b	17	1
Bhr 1967:13	12	1

3.3 Vendel Period gender at Barshalder

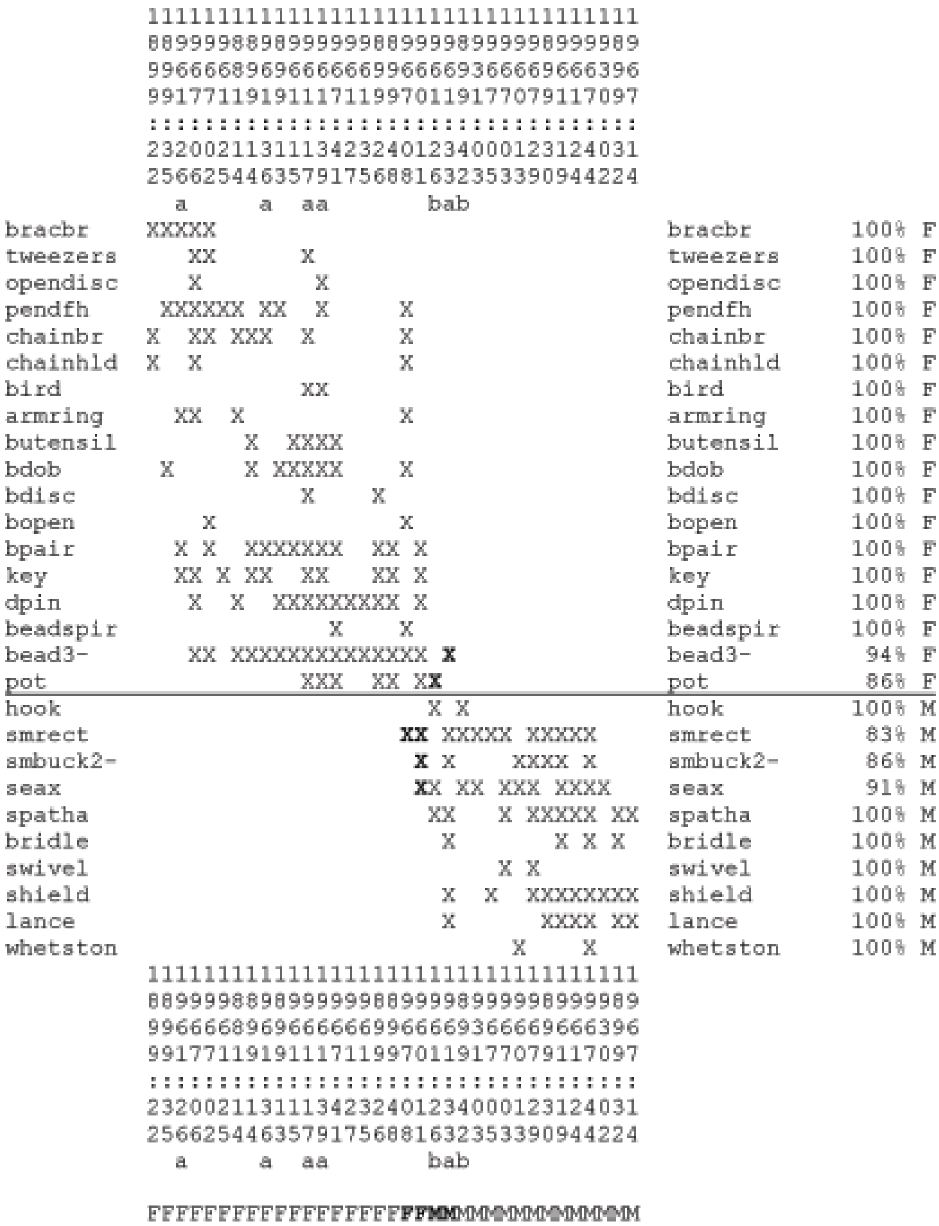
3.3.1 Gender attributes

The same CA and seriation method as that applied to the Migration Period finds in section 3.1.1 was used to study the Vendel Period gender attributes. Here, however, the Barshalder sample of source quality 1-2 Vendel Period graves was large enough to use on its own, without support from other cemeteries in Nerman's VZG sample. There is no apparent local variation in the gender symbolism of burials across Gotland. The results of the present analysis should thus be valid for the entire island. An original database (VENBASE) of 52 graves and 62 types produced a seriation (data set VENGEND) with 35 graves and 28 types (fig. 3:3).

To this analysis should be added the observation that lynx phalanges are strongly tied to female graves (cf. section 3.4.2): eight of nine cases are female graves and one male, which marks the lynx skin as a transgressed female gender attribute.

Our female gender attributes correspond to the ones identified by Jankavs (1981 section 5.2.1) for three other Vendel Period cemeteries on Gotland. Pottery forms the only discrepancy, as pots were evenly distributed among the male and female graves in Jankavs's sample. Our identification of pottery (occurring in seven gendered graves in VENBASE) as a transgressed female attribute is thus apparently due to a statistical accident. Regarding the male attributes, however, there are a number of discrepancies that indicate a male bias in Jankavs's study. He classified the iron rivet as a male attribute, despite the fact that ten out of 33 gendered graves (30%) with rivets in his sample were female ones. Strap buckles, gaming pieces and arrowheads were for some reason very uncommon in the female graves of Jankavs's sample, and he duly classified them as male attributes. As Jankavs used VZG indiscriminately as the source for his data, the three latter under-representations may hark back to Nerman's data collection practices. Nerman constructed many of his find combinations out of sets of decontextualised objects, using his great experience, but very likely also his pre-conceived ideas about gender, to select objects for inclusion in a combination.

Fig. 3.3. The Vendel Period gender dichotomy. Seriation diagram. The horizontal line marks the division between female and male graves and types. The bold-faced "X"s mark gender transgressive occurrences of five artefact types, i.e. the uncommon cases where a few attributes of one gender are found in combination with a greater number of attributes of the other.



The situation is the same with Petré's (1993) gender attributes for the Vendel Period in the eastern part of the Lake Mälaren area, and with his attributes for the Migration Period as discussed in section 3.1.1. Jewellery is assigned to the female gender, and many artefact types that are gender-neutral on Gotland are assigned along with the weaponry to the male gender. A main point of the present gender studies is to show that, like most archaeological issues, gender attributes cannot be studied impressionistically if we are to reach valid conclusions.

The Vendel Period graves from Barshalder display a ratio of gender-transgressive graves, according to the definition offered in section 6.3.1, comparable to that of the pan-Gotlandic Migration Period sample. In the Migration Period seriation, we find six gender-transgressive graves out of 49, that is, a 12% ratio. In the Vendel Period Barshalder sample (discounting the probably actually gender-neutral pottery), we find three transgressive graves out of 35, a 9% ratio.

Table 3j. Vendel Period female gender attributes.

Attribute	n of graves in VEN-BASE	Abbrev.
Bronze bracteate, Montelius 1869 type E	5	bracbr
Tweezers	3	tweezers
Openwork disc (VZG 977-982, 1451-1462, 1880-1882)	2	opendisc
Fish-head pendant	11	pendfh
Bronze chain	9	chainbr
Bronze chain holder	3	chainhld
Arm ring	4	armring
Bird mount (VZG 191-206)	2	bird
Disc-on-bow brooch	9	bdob
Utensil brooch	5	butensil
Disc brooch	2	bdisc
Round openwork brooch (VZG 100, 903-913)	2	bopen
Pair brooch (proto-animal-head, duckbill, small equal-armed)	12	bpair
Key	10	key
Dress pin	13	dpin
Spiral bead	2	beadspir
Beads n>2, *transgressed*	18	bead3-
Pot, *transgressed, probably actually gender-neutral*	9	pot

Table 3l. Vendel Period male gender attributes.

Attribute	n of graves in VEN-BASE	Abbrev.
Whetstone	2	whetston
Swivel mount (Sw. lekane)	2	swivel
Shield	11	shield
Lance head	7	lance
Two-edged sword	12	spatha
Bridle	4	bridle
Seax (single-edged sword) , *transgressed*	13	seax
Strap buckle n>1, *transgressed*	7	smbuck2-
Iron hook	2	hook
Strap mount, rectangular, non-functional, *transgressed*	12	smrect

Table 3k. Vendel Period gender-neutral attributes.

Attribute	n of graves in VEN-BASE	Abbrev.
Glass vessel	8	glass
Bead n=1	7	bead1
Beads n=2	2	bead2
Single strap buckle	7	smbuckle
Strap loop mount	2	smloop
Strap end mount	5	smend
Knife	28	knife
Gaming piece n=1	4	gaming1
Gaming pieces n>1	9	gaming2-
Comb	33	comb
Handle comb	2	combhndl
Arrowhead	7	arrow
Composite bronze & iron rivet	5	rivcomp
Iron joint rivet	4	rivjoini
Iron rivet	29	riviron
Nail	8	nail
Bronze or silver sheet spangle	12	spangle
Bronze sheet vessel	8	vesbrsh
Bear phalanx	15	phalanx
Fossil	6	fossil
Whorl	3	whorl

3.3.2 Changing gender roles

When the gender attribute lists produced for the Migration and Vendel Periods are compared, it turns out that interesting changes occurred at the period shift (tables 3n, 3o & 3p). Preliminary findings were presented at the EAA Annual Meeting in Lisbon, 16 September 2000 (Rundkvist in press). Many attributes were innovated, a few were discontinued, and the gender symbolism of some changed. It should be noted that the innovations and discontinuations listed below pertain only to artefact types that can be studied in a combination diagram, that is, that have more than one representative in the sample. For instance, there is a single Vendel Period grave with a lingering staple ring (Bhr 1961:33a), but it has not been considered sufficient grounds for a gender assignment. The following general tendencies in the changes can be noted.

The Vendel Period mortuary assemblage is close to a superset of the Migration Period one, with few discontinued types. The most interes-

Table 3m. Constant attributes.
* denotes transgressed gender attributes.

Attribute	Mig	Ven
Dress pin	F	F
Key	F	F
Non-bracteate pendant	F	F
Dress brooch	F*	F
Bead set	F*	F*
Lance or javelin	M	M
Sword or chape	M	M
Shield	M	M
Two belts	M	M*
Glass vessel	N	N
Bronze sheet vessel	N	N
Bear skin	N	N
Single belt	N	N
Knife	N	N
Handle-less comb	N	N
Iron rivet	N	N
Whorl	N	N
Strap ring mount	N	N
Bead n=1	N	N
Pot	N	N*

Table 3o. Discontinued attributes.

Attribute	Mig	Ven
Casket & lock part	F	-
Non-gold finger ring	F	-
Sewing needle	F	-
Staple ring	M	-
Strap retaining mount	M*	-
Clasp	M*	-
Gold finger ring	N	-

Table 3n. Innovated attributes.

Attribute	Mig	Ven
Arm ring	-	F
Chain holders & chains	-	F
Tweezers	-	F
Utensil brooch	-	F
Openwork disc	-	F
Bird mount	-	F
Iron hook	-	M
Swivel mount	-	M
Whetstone	-	M
Bridle	-	M
Seax	-	M*
Strap mount, rectangular, non--functional	-	M*
Sheet metal spangle	-	N
Strap loop mount	-	N
Composite rivet	-	N
Nail	-	N

Table 3p. Switched attributes

Attribute	Mig	Ven
Beads n=2	F	N
Fossil	F	N
Gaming piece	M	N
Joint rivet	M	N
Arrowhead	M	N
Handle comb	M	N
Bracteate	N	F
Cloak brooch	N	F

ting discontinuations are the casket, the finger ring and the clasp, which seem to have been high-status attributes in the Migration Period. However, the key, previously closely associated with the casket, remained in the female attribute set after the period shift.

Among the numerous innovations of the period shift, the most eye-catching ones form an explosive proliferation of jewellery types in the female graves. The innovations in the male graves are mainly parts of horse gear and one weaponry type, the seax.

The situation regarding gender-transgression in graves does not seem to have changed with the period shift, neither as to frequency nor to symbolic blatancy. However, a number of attributes changed genders. There is no case of diametrical gender switch among the attributes, but eight moved from gendered to neutral or vice versa. Summing up the gains and losses of the male and female genders respectively, we find that the male gender lost four attributes to neutrality, while the female gender retained the status quo. Differently put, the female gender expanded into symbolic territory previously reserved for the male gender.

Qualitatively speaking, among other things women gained at least symbolic access to the board game sets that may be associated with the battle strategy of war leaders (Ravn 1999:48-51), to archery equipment and to that erstwhile emblem of masculinity and international contacts, the handle comb. Women also began to monopolise the bracteates that had been an important medium for religio-political propaganda in the Migration Period (Andrén 1991), although due to the post-Migration Period gold shortage most Vendel Period specimens are made of embossed bronze sheet.

In the light of these findings, I believe that the social changes connected with the Migration-Vendel Period shift entailed a change in the way that gender worked among the aristocracy. More specifically, it seems that aristocratic women gained in political power. Conversely, the warrior with a bead necklace (Bhr 1961:33a) may be taken to indicate respect among male leaders for the role, that is, the rights and authority, of the Late Iron Age Lady, known from so many picto-

rial and literary sources (Göransson 1999). This grave also brings to mind the 11th century cross-dressed Saami shaman of Vivallen (Price 2002: 271-272 with refs.).

Independent support for this posited improvement in female status is found in the picture stones of the time, where only men were depicted in the Migration Period, whereas in the Vendel and Early Viking Periods women were also commonly depicted (Göransson 1999:71-72). The picture-stones, however, depict no armed women like those on a contemporary tapestry fragment from the Oseberg ship-burial (Göransson 1999:145). Göransson's attractive hypothesis (1999:129) that the stone-carvers may have been men while the tapestry-makers were almost certainly women offers an explanation for this fact.

The stones with female representations concentrate to the southern half of Gotland, a distribution pattern that has been interpreted as an indication of patriarchal power-bases in the northern half of the island (Göransson 1999:72-79, cf. Thunmark-Nylén 1984 regarding the Viking Period). This difference in gender-politics may be expected to be visible also in the mortuary symbolism of northern and southern Gotland. If the Migration Period and Vendel Period graves of, for example, the well-excavated cemetery of Ire in Hellvi parish in northern Gotland (Stenberger 1962, VZG, Thunmark-Nylén 1995a) were analysed with the methods used here, then we might expect to find the Vendel Period move of the female graves into male symbolic territory less pronounced than at Barshalder.

A third symbolic medium of the Vendel Period, heroic poetry headed by Beowulf, allows no comparison with the Migration Period because of the lack of preserved texts. But the aristocratic lady, head of the household and filler of mead-cups, is of course ubiquitous there.

To summarise, with the Vendel Period, we find new symbolic openings in the dividing line of the gender dichotomy. Mainly, women were moving into male territory.

3.3.3 Gender ratio

Among the Barshalder finds recovered by the end of 1971, there are 98 alleged grave assemblages clearly datable to the Vendel Period (Montelius period VII, as defined in VZG per VII:1-4). Five of these are mixed-gender, source quality 3-4 find combinations, but the remaining 93 are either unambiguously gendered, gender-neutral or well-documented gender-transgressive combinations. The gender ratios of this sample of 93, according to the combination studies above, are female 49% (n=46), male 38% (n=35) and gender-neutral 13% (n=12).

As with the Migration Period graves, the percentages indicate that most of the gender-neutral burials belonged to low-status men. Again, it should be pointed out that this gender-neutrality pertains only to the preserved artefact types. Gender may be expected to have been evident also in poorly furnished graves from the clothes, hair-styles and beard trims of the deceased. It should also be added that grave robbing is more likely to render a male grave gender-neutral than a female one, since the robber must sieve the grave fill carefully to obliterate a bead set entirely.

3.3.4 Female sub-gender groups

Having established the main gender dichotomy, we turn once more to subdivisions, starting with female sub-genders. A female subset of VENBASE (VENFEM, n=25) produced the CA scattergram in fig. 3:4. Note the centrally placed cluster with pair brooches (bpair), disc-on-bow brooch (bdob), dress pin (dpin), glass vessel, comb, key, beads and knife. This is the full traditional jewellery set, found in its entirety only in rich graves with glass vessels. Around this core, mainly to the right, is found a corona of less common jewellery items. This demonstrates the existence of two alternative sub-gender sets of pectoral jewellery: a traditional brooches-and-beads set (cf. *Barshalder 1* figs. 10:12-14), and a new Vendel Period set with bronze chain-holders and chains, fish-head pendants, bracteates and arm rings (cf. *Barshalder 1* figs. 10:17, 10:19).

The relationship between these two jewellery sets is complicated. They are neither mutually exclusive within the chronological context of the Vendel Period nor on the level of a single grave. Yet the graves seriate acceptably from rich Early brooch set graves to poor Late chain set graves. The chain sets are associated with round openwork brooches, an inter-regional type indicative of the emergence of the Vendel Period in the

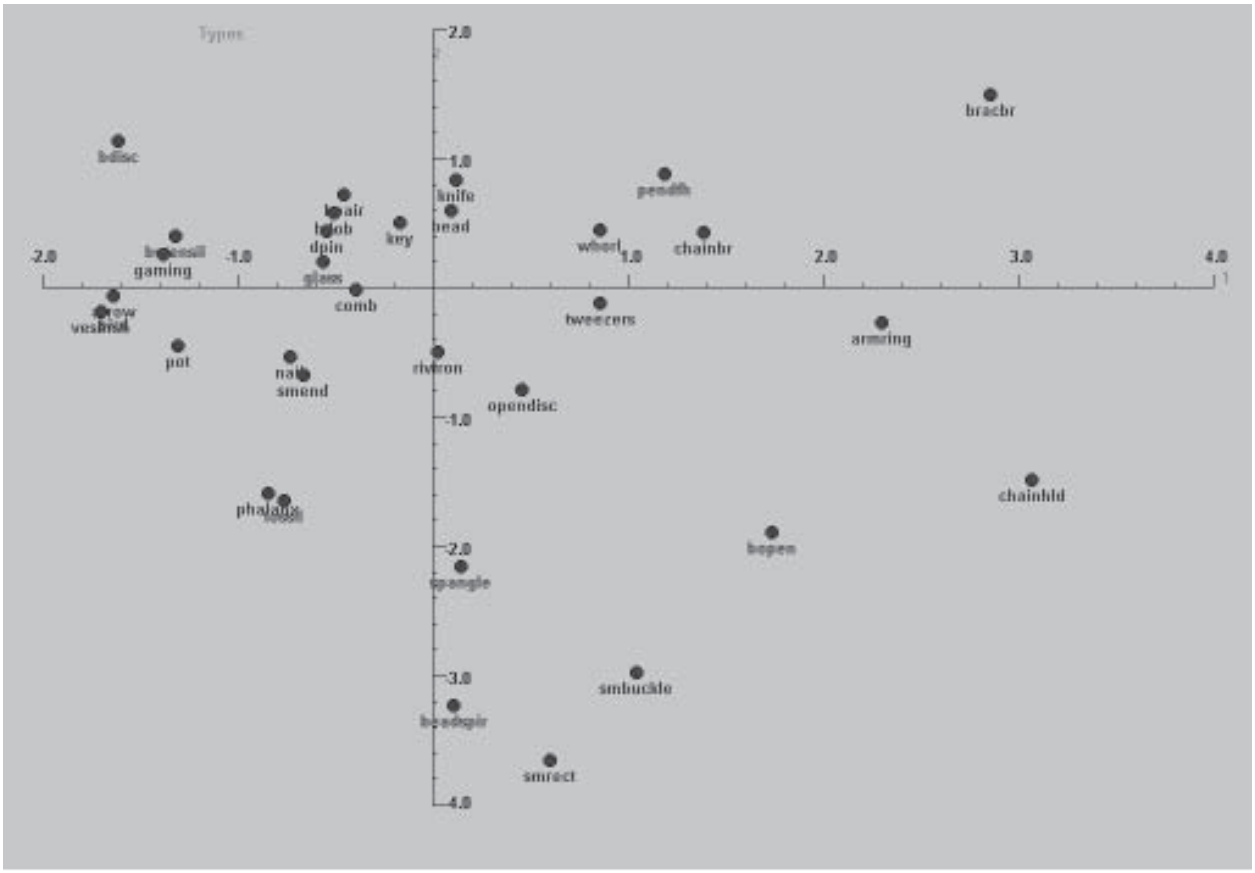


Fig. 3:4. Vendel Period female graves. CA scattergram.

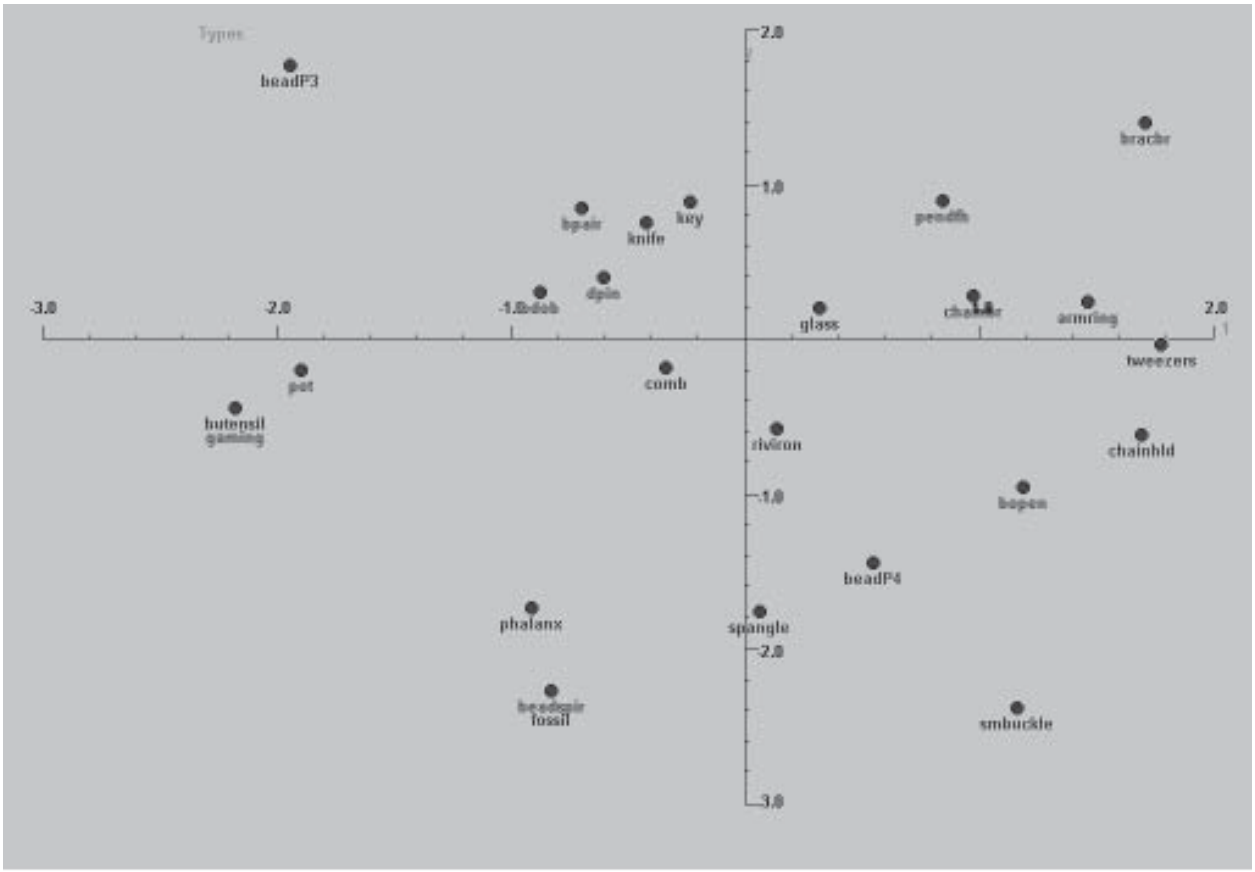


Fig. 3:5. Late Vendel Period female graves. CA scattergram.

Lake Mälaren area (Arrhenius 1960) but probably introduced to Gotland considerably later (Høilund Nielsen 1999b:187, 189, 192). It is not, however, a question of the difference between local and inter-regional fashion: both sub-genders incorporate specifically Gotlandic components. It appears that in order to try to make sense of the Vendel Period's female sub-genders, the Vendel Period sample must be divided into an early and a late group. For an evaluation, improvement and correlation of the KHN and W&G chronologies for the Vendel Period, see *Barshalder 1* section 7.3.

A late subset of VENFEM (VENFLATE, n=16) was produced through the removal of the four graves datable to Høilund Nielsen's (1999b) phases GOKV1 & 2a and all graves that cannot be dated closely within the Vendel Period. As the bead set types P3 and P4 (Petré 1984b:60-69) do not appear to have chronological significance on Gotland, the bead sets in VENFLATE were classified according to this typology in order to study the placement of P3 and P4 in contemporary Late Vendel Period attribute sets. CA of this data set (fig. 3:5) reinforces our view of two separate sub-genders, each distinguished by different jewellery and bead set types. Their contemporaneity is attested by the fact that both the brooch sets and the chain sets survived into the Early Viking Period.

Neither bead set type is richer than the other: the P3 sets display the same bead-count range as the P4 ones associated with the chain sets. Both jewellery sets have about the same mean status score (cf. section 3.4). As to osteological age: might one of the jewellery sets signify girls and very young women? Apparently not. Very few sub-adults have been identified among the Vendel Period bones, and none of them is the single human individual in a grave with female attributes. The resolution of the age assessments is too low to permit differentiation between women of child-bearing age and older women.

Not chronology, not regionality, not social status as measured in the level of burial investment, not childhood. The luxury items (gaming piece, bear skin, glass vessel) may provide the beginnings of an explanation. Whereas the glass vessel is equally strongly linked to both jewellery sets, both the gaming piece and the bear skin is associated much more strongly with the brooch set. The key, that was part of the high-status attribute set in the Migration Period, clusters with the traditional brooch set, for what that is worth in this context. It was a less prestigious attribute in the Vendel Period according to the status score analysis in section 3.4.

The meaning of the two alternative pectoral jewellery sets remains elusive, but it seems to have something to do with political power in the form of military strategy (gaming piece) and overseas trade (bear skin). As stated above, the graves with traditional jewellery are not richer than the other ones, but their wealth is invested differently. Perhaps the answer is obscured by the "adult" age assessment of the bones. One might hypothesise that when a woman in a three-generation household became a grandmother she began to wear the traditional pectoral jewellery. Old age may also have been the time of her life when a woman wielded the most political power. This issue can only be resolved by more osteological analyses, preferably of inhumated bones.

7.3.5 Male sub-gender groups

A male and neutral subset of VENBASE (VENMAL, n=20) produced the CA scattergram in fig. 3:6. The most striking feature of this plot is the polarisation of functionally equivalent types of piercing weapons and horse equipment. To the left, we find the seax, the swivel mount and the rectangular iron strap mount; to the right, the lance, the bridle and the rectangular bronze or composite strap mount, together with luxury items like glassware, gaming pieces and bronze sheet vessels. Between these groups are found the staples of the weapon set, the spatha sword and shield. This distribution appears to indicate a higher and a lower status male sub-gender. The attributes of the high status role hark back to the weapon graves of the Migration Period, whereas all three identifiable attributes of the lower status role are Vendel Period innovations. The dichotomy is not, however, chronologically determined. In the context of these weapon graves, the status difference may be interpreted as a difference in military rank. We thus find traditional weaponry among the higher ranks and new Vendel Period arms among the lower. The osteological age assessments are not informative.

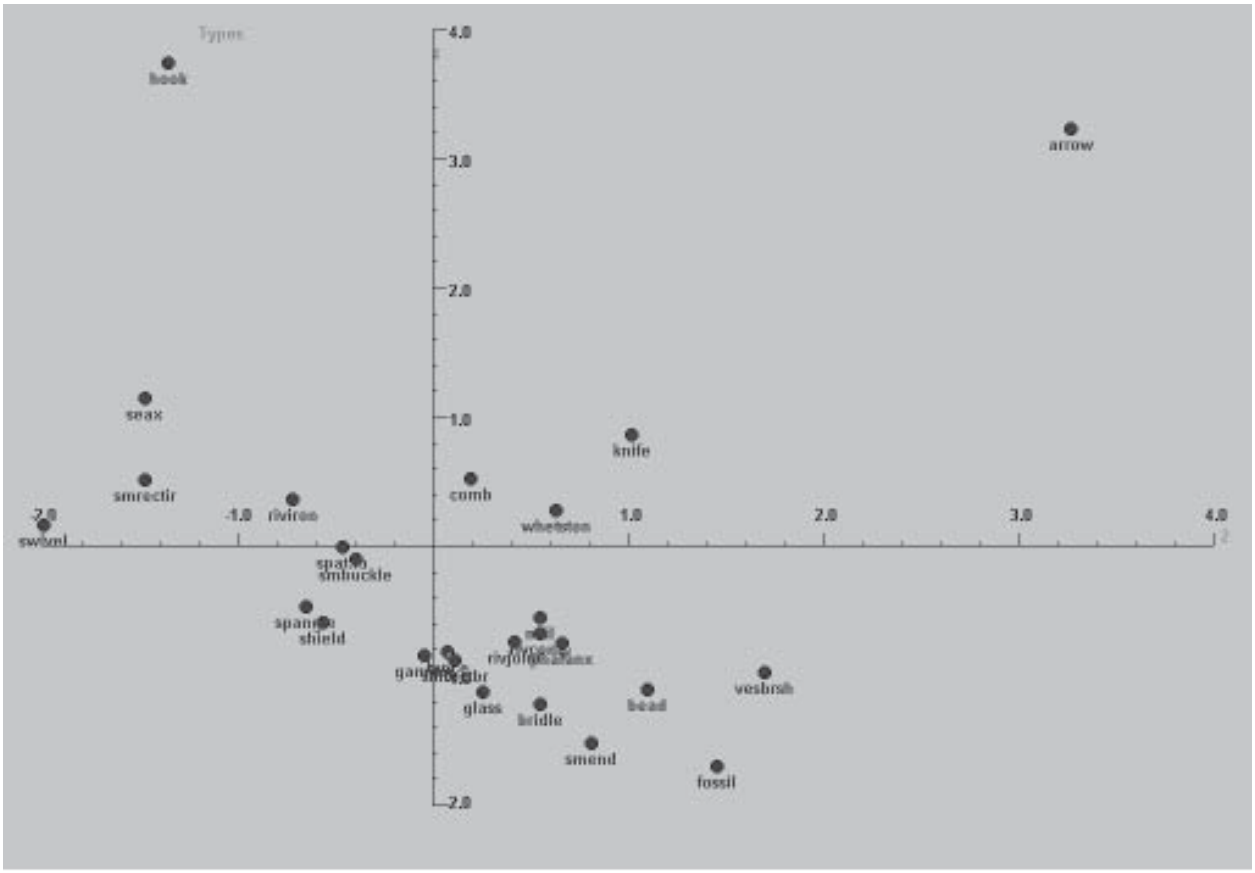


Fig. 3:6. Vendel Period male graves. CA scattergram.

7.3.6 Gender-neutral attributes

The gender-neutral attributes of the Migration Period largely remained gender-neutral in the Vendel Period, as detailed in section 3.3.2. There are, however, two changes that are noteworthy as they contradict the weaponry/jewellery dichotomy: paired beads and arrowheads lost their gender-association.

The single or paired beads found in male graves may be sword beads or hat adornments. However, there is no reason a priori to interpret arrowheads found in male graves differently from those found in female graves. Either all arrowheads were symbolic gifts, in which case we cannot tell if archery was a gendered activity, or they were all possessions of the deceased, in which case it was clearly not.

On the other hand, as noted in section 3.3.1, Jankavs (1981) using data from VZG has documented a strongly asymmetric gender distribution (14% female of gendered graves) for the arrowheads from three other Gotlandic Vendel Period cemeteries. There is thus reason to suspect that although the arrowhead can only be determined as gender-neutral (40%, two female out of five gendered graves) with the VENBASE sample from Barshalder, it might reveal itself as a transgressed male attribute if more Vendel Period graves were excavated at the cemetery.

7.3.7 Gender and bone data

There are, to date, 13 osteological sex assessments for graves with Vendel Period artefact assemblages from Barshalder (table 3q), all of them from cremations. Thirteen sex assessments out of 36 full analyses is about half the ratio achieved for the Migration Period, indicating that cremation practice became more destructive, energy-consuming and expensive with the Vendel Period.

Comparing gender and osteological sex assessments, we find them to correspond unproblematically in ten cases. There is one uncertain sex assessment that conflicts with the gender of the grave furnishings and may thus be disregarded. We cannot, however, disregard the two cases where unequivocal sex assessments conflict with the gender of the grave furnishings. Bhr 1961:19 and 1967:41 have both yielded cranial fragments with clear sexual characteristics, in the first case four fragments and in the second a single one, and they do not agree with the genders of the artefact assemblages. These people were ei-

Table 3q. Vendel Period graves with osteological sex assessments. "+" denotes graves with transgressed gender attributes.

Grave	Date	Gender	Ost sex	Ost age	MIND
Bhr 1960:13	WG1234	m	m + f? + ?	ad + ad + juv	3
Bhr 1961:19	WG34	m	f	ad	1
Bhr 1961:33a	WG12	m+	m?	ad	1
Bhr 1961:35	Vendel P	f	f	ad	1
Bhr 1961:36a	GOKV2ab	f	m?	ad	1
Bhr 1961:37	GOKV2bc	f	f?	ad	1
Bhr 1961:39a	GOKV2ab	f	f? + ?	ad + inf	2
Bhr 1961:40	Vendel P	0	m	ad	1
Bhr 1967:06	GOKV2ab	f	f	ad	1
Bhr 1967:08	GOKV2ab	f+	f	ad	1
Bhr 1967:41	GOKV2ab	f	m	ad	1
Bhr 1967:44	WG34	m	m	ad	1
Bhr 1967:45	Vendel P	m	m	ad	1

ther cross-dressed for their funerals or had non-standard crania. A less plausible explanation would be that the graves actually harboured the bones of two people each, only one of which (the one invisible in artefact symbolism) has in each case been identified by the osteologist.

As the two problematic skeletons are male- and female-sex respectively, it does not appear to be a question of biased assessments. Discrepancies of this kind are common in Late Iron Age contexts (e.g. Petré 1984b:199-200), and it is uncertain how they should be interpreted. In my opinion, unambiguous statements about bones by a qualified osteologist must be accepted at face value unless challenged by another qualified osteologist.

3.4 Vendel Period social status at Barshalder

As with the Migration Period, Peter Jankavs (1981 section 5.2) identified broad artefact categories in Vendel Period graves that were more often than others part of rich find combinations, and interpreted the difference in social terms. He did not commit himself to either of his alternative interpretations: status groups or age groups.

I ranked the graves and artefact categories in the VENBASE sample from Barshalder (cf. section 3.3.1) with the status score function of WinBASP 1994 (see the discussion in section 1.5), producing tables 3r and 3s. The grave furnishings were classified in functional artefact categories in order to suppress chronological patterning and allow the inclusion of badly damaged objects. Unique types and single-type graves were omitted, leaving a 46-member data set. In order to study the apparently social significance of the contemporaneous bead set types, the bead sets were divided into four groups: n<10, n>9 type P3, n>9 type P4, n>9 other. It turned out that there was no great difference in status score between the three n>9 groups, but that the <10 group is the lowest-ranked attribute of all.

We may now compare the status symbolism of the Migration Period (section 3.2.0) and the Vendel Period on Gotland. The most obvious difference is that the maximum figures for the Vendel Period are nearly twice as large as those for the Migration Period. The number and typological diversity of grave furnishings skyrocketed with the beginning of the Vendel Period. This is, of course, the reason that the relative chronology of the Vendel Period has been so much better known than that of the Migration Period.

For comparison, the status scores must be converted from absolute values to percentages of the maximum for each period. In this way, both the bird mount of the Vendel Period (absolute score 20.5) and the shield of the Migration Period (absolute score 12.0) receive a 100% status score. The relative status scores of artefact categories present in both periods are compared in table 3t. As can be seen in the difference column, there is a quite astonishing degree of continuity in the status system, particularly regarding imports like glass and bronze sheet vessels and bear skins – note the unchanged and

Table 3r. Social ranking of Vendel Period artefact types.

Gender	Average number of artefact types in graves where a certain type occurs	
f	Bird mount	20.5
f	Openwork disc	17.5
-	Fossil	17.3
-	Strap end mount	17.3
m	Bridle	16.5
-	Iron joint rivet	16.0
-	Strap loop mount	16.0
-	Composite bronze & iron rivet	15.4
f	Metal wire spiral bead	15.0
-	Nail	14.8
f	Tweezers	14.7
f	Utensil brooch	14.4
-	Bronze sheet vessel	14.1
-	Sheet metal spangle	14.0
m	Lance head	13.9
-	Gaming piece	13.8
-	Glass vessel	13.6
f+	Bead set type P3	13.1
f	Round openwork brooch	13.0
m	Whetstone	13.0
-	Bear phalanx	12.8
f	Disc-on-bow brooch	12.6
-	Strap buckle	12.4
m+	Rect.non-functional strap mount	12.3
m	Shield	12.2
f	Key	12.1
f	Bead set other	12.0
f	Bead set type P4	11.8
f	Pair brooch	11.7
m	Spatha sword	11.6
f	Chain holder	11.3
-	Pot	11.3
-	Arrowhead	11.1
-	Iron rivet	10.9
f	Disc brooch	10.7
-	Knife	10.4
f	Dress pin	10.4
f	Bronze chain	10.3
f	Arm ring	10.3
-	Comb	10.1
m	Swivel mount	10.0
m+	Seax	9.8
f	Fish-head pendant	9.5
-	Whorl, for sword strap or spindle	8.7
f	Bronze bracteate	8.0
m	Iron hook	7.0
-	Bead set n<10	5.8

Table 3s. Social ranking of Vendel Period graves.

	Gender	Score of highest-status type in grave	Sum of status scores for all types in grave
Bhr 1961:39a	f	20.5	282
Bhr 1961:33a	m+	17.3	258
Bhr 1961:17a	f	20.5	257
Bhr 1961:19	m	17.3	236
Bhr 1960:11	f+	16.0	205
Bhr 1967:08	f+	17.3	194
Bhr 1967:44	m	16.5	190
Bhr 1967:41	f	17.3	177
Bhr 1899:32	m	17.3	177
Bhr 1961:24	m	16.0	165
Bhr 1967:06	f	17.5	163
Bhr 1967:29	m	15.4	145
Bhr 1960:13	m	15.4	135
Bhr 1961:36a	f	17.3	132
Bhr 1967:05	m	16.0	125
Bhr 1899:14	f	14.4	119
Bhr 1967:02	f	14.7	114
Bhr 1899:30	m	14.0	108
Bhr 1899:48	f	13.6	105
Bhr 1967:14	m	14.0	99
Bhr 1967:03	m	14.8	92
Bhr 1899:26	f	13.1	90
Bhr 1961:15	f	14.4	83
Bhr 1899:13	f	13.1	78
Bhr 1899:42b	m	12.4	73
Bhr 1961:26b	m	11.6	72
Bhr 1961:27	f	14.1	67
Bhr 1961:26a	f	12.1	57
Bhr 1899:35	f	12.6	55
Bhr 1961:25	f	12.1	53
Bhr 1899:31	0	14.1	48
Bhr 1881:14	f	10.4	46
Bhr 1967:01	f	12.4	45
Bhr 1960:10a	f	13.8	40
Bhr 1899:22	f	11.3	40
Bhr 1961:35	f	10.9	37
Bhr 1931:03	m	12.3	33
Bhr 1967:45	m	11.6	33
Bhr 1881:09	0	11.1	32
Bhr 1930:02	m	12.2	31
Bhr 1967:04	f	10.4	27
Bhr 1931:09	f	10.4	27
Bhr 1930:03	f	10.9	26
Bhr 1899:16	0	11.1	22
Bhr 1899:33	m	10.1	20
Bhr 1961:22a	0	11.3	17

rather mundane status of the glassware. However, there are some systematic differences. There is a general decline in the status of weaponry as, with the Vendel Period, weapon sets become common and sometimes rather small. The formerly prestigious knives become ubiquitous. The raised status of strap end mounts has to do with the introduction of display bridles in the wealthiest weapon graves of the Early Vendel Period. In the Migration Period, strap end mounts apparently entered the graves only as part of belts. The fossils are too few, and probably too inconsistently collected, to bear the weight of much interpretation.

Table 3t. Changes in the status of artefact types.

	Migration Period status	Vendel Period status	Diff
Strap end	55%	84%	29%
Fossil	58%	84%	26%
Pair brooch	47%	57%	10%
Pot	46%	55%	9%
Strap buckle	53%	60%	7%
Dress pin	48%	51%	3%
Gaming piece	66%	67%	1%
Whorl	42%	42%	0%
Comb	45-58%	49%	0%
Bead	53%	28-73%	0%
Glass vessel	66%	66%	0%
Bronze sheet vessel	78%	69%	-9%
Bear phalanx	72%	62%	-10%
Key	72%	59%	-13%
Arrowhead	78%	54%	-24%
Lance	100%	68%	-32%
Knife	88%	51%	-37%
Shield	100%	60%	-40%
Spatha sword	100%	57%	-43%

7.6.1 Human sacrifice and slavery

For an introduction to this subject, see section 3.2.1.

Among the very few Vendel Period inhumations from Barshalder, there is one that stands out as a possible sacrificial victim: Bhr 1961:33c. This was the unfurnished burial of a 4-5 year old child with vague male-sex characteristics, placed under the same uncommonly large and monumental superstructure as one of the wealthiest Vendel Period weapon graves of the entire cemetery, the Early Vendel Period cremation grave Bhr 1961:33a. The two burials were demonstrably contemporary as they shared an internal oval boulder frame with the cremation layer placed in the SE half and the inhumation in the NW. The child had been placed in extended position on its right-hand side. There was no sign of trauma or binding.

With this burial in mind we turn to the period's cremation graves. Out of 36 analysed cremations, seven proved to contain bones of more than one person (table 3u), which is roughly a fourfold increase from the Migration Period ratio. All seven multi-person Vendel Period graves contained the bones of a sub-adult and at least one adult. None of the securely datable Vendel Period graves has produced only sub-adult bones. The children in Bhr 1961:24 & 25 were placed in the graves after the remains of the adults had been cremated. Were all these children sacrificial victims? Hardly.

To begin with, four of the seven graves contain more than the common number of certain artefact types, indicating that the children may have been provided with furnishings of their own (table 3u, extra artefacts column). We may look to the Early Vendel Period double inhumation excavated in Lau parish in 1997 (Nydolf & Wickman-Nydolf 1997), where a woman and an infant had been buried together, each with their own associated furnishings. Furthermore, there is the undated Bhr 1961:31, where a one-year-old had been treated to a painstakingly constructed but unfurnished inhumation burial on its own, right beside Bhr 1961:33 with its likewise unfurnished child inhumation. The bones are in immaculate condition.

Seen together, these child graves give the impression that children were probably not sacrificed at funerals, but that deceased children were generally not buried alone. In at least half of the cases they have been given furnishings of their own. Judging from Bhr 1961:31 and 33, unfurnished inhumation may have been preferred for the deceased children of the elite. Nydolf & Wickman-Nydolf's (1997) assumption that a child buried along with a woman must be that woman's child, however, seems unwarranted in view of the fact that single sub-adult graves are so uncommon. More likely, deceased children were buried along with the first adult relative who happened to die conveniently. According to osteology, the Lau woman was probably beyond fertile age at the time of her death. This suggests a procedure of primary and secondary burial for children, where their remains were considered unfinished business until they could be put to rest in the grave of an adult.

Table 3u. Osteologically analysed Vendel Period burials with more than one human individual (all cremations).

Grave	Date	Gender	People	Ost age	Ost sex	Extra artefacts
Bhr 1960:10a	GOKV2ab	f	2	ad + <12 yr	?	-
Bhr 1960:13	WG1234	m	3	ad + ad + juv	m + f? + ?	2 knives
Bhr 1961:17a	GOKV2ab	f	2	ad + 1 yr	?	Brooch, tweezers
Bhr 1961:24	WG56	m	2	ad + 1-2 yr	?	2 swords, 2 seaxes, knife
Bhr 1961:25	GOKV2ab	f	2	ad + inf1	?	-
Bhr 1961:39a	GOKV2ab	f	2	ad + inf	f? + ?	Brooch, comb
Bhr 1971:06	Vendel P	0	2	ad + juv	?	-

Let us not, however, forget the second adult in the male cremation grave Bhr 1960:13. Having vague female-sex characteristics, this person was accompanied only by a knife, if anything, into the grave. This appears to be the strongest, though by no means certain, candidate for the doubtful honour of Vendel Period sacrificial victim among the Barshalder bones analysed to date.

At the suggestion of Gustaf Trotzig (personal communication), I have hinted that the composite kerb of igneous stones covered by a sandstone flake brim may be a chronologically diagnostic attribute of Early Vendel Period graves (*Barshalder 1* section 7.5). If this is true, then the unfurnished male-sex disarticulated inhumation Bhr 1961:28 dates from the Early Vendel Period. It does not necessarily represent a sacrificial victim, but very likely a slave. The person buried in this unusual way had developed skeletal alterations and pathologies associated with heavy manual labour (report IV Molnar 1999). We do not, of course, know how common these traits were relatively among the free and unfree of the time, but the uncommonly low level of burial investment (neither furnishings nor pyre fuel) indicates an unprivileged status.

7.6.2 Animal bones

The bones from a total of 34 securely dated Vendel Period graves from Barshalder, all containing cremation burials, have undergone full osteological analysis (table 3q). In addition, excavators and osteologists have identified bear and/or lynx phalanges in seven cases (table 3v).

All but three of the 34 graves contained animal bones. Compared to the Migration Period graves, both the number and diversity of the animals are higher. As with the Migration Period graves from the Rojrhage 1:1 property, we may expect residual Neolithic bones from these graves. The same arguments regarding the dates of the different animal groups hold for the Vendel Period graves as for those of the preceding period. Ovicaprids, bears, horses and dogs are probably Vendel Period grave furnishings, seals are probably residual. To these groups the Vendel Period adds the lynx, unknown among the Migration Period graves. In this context it is comparable to the bear. The lynx, too, is represented only by phalanges and has never been part of the fauna of Gotland. The lynx bones should thus represent imported Vendel Period lynx skins.

As for the animal groups that are represented with less than four individuals (table 3v, "other" column) they might all equally well be Neolithic and Vendel Period in date. They do tend to occur in graves with large and diverse sets of animal bones, and might thus be interpreted as part of the grave furnishings. They will, however, be disregarded in the following calculations.

The number and perceived value of the animals placed in a grave should display the same dynamics as the number and perceived value of the artefacts. We may test this argument by examining the correlation between a grave's status score and the number of animals identified in it. This calculation will only treat ovicaprids, horses and dogs. Phalanges were included already in the calculation of the status scores. Only source quality 1-2 graves will be examined to avoid compromised or badly robbed ones.

It transpires that the correlation is very weak (correlation coefficient 0.21). Nor is it much improved by the removal of the wealthiest graves that were poor in animal bones in the Migration Period sample. It appears that the interpretation suggested in section 3.2.2 for the wealthiest Migration Period graves, that animals and artefacts were not symbolically commensurable, applies to all graves of the Vendel Period. A recent interpretation (Räf 2001; Jennbert 2002) of animal bones in Late Iron Age burials suggests that the animals were intended as soul guides, psychopomps, for the deceased on their way to the other world.

The figures do, however, correlate with the graves' gender. The average number of animals in the male graves is twice as high as that in the female graves, regardless of status score. Also, lynx phalanges are strongly tied to female graves: eight of nine cases are female graves and one male, which marks the lynx skin as a transgressed female gender attribute. Two of the nine graves with lynx phalanges (22%) have also produced identifiable infantile human bones, a ratio more than twice that among Barshalder's osteologically analysed Vendel Period graves without lynx phalanges. It is still, however, a low ratio. In the Early Vendel Period double inhumation excavated in Lau parish in 1997 (Nydolf & Wickman-Nydolf 1997), the woman was associated with bear phalanges and the infant with lynx phalanges. One might speculate that infants may actually have been cremated along with all the lynx skins known from Barshalder, without leaving any identifiable bones in most cases, but this hypothesis is impossible to test conclusively. It is also possible, as the scanty data in table 3u hints but cannot confirm with statistical significance, that infants were more often buried with women than with men. Suffice to say that for analytical purposes lynx skins are clearly a female attribute, regardless of whether this is because they were intended as furnishings for the women themselves or for infants that were preferentially buried along with women.

Table 3v. Osteologically analysed Vendel Period graves with animal bones. "+" denotes graves with transgressed gender attributes.

Grave	Date	Gender	Sheep / goat	Bear	Horse	Seal	Dog	Lynx	Other
Bhr 1881:10	Vendel P	0		1					
Bhr 1899:31	Vendel P	0		1					
Bhr 1899:32	WG12	m		1					
Bhr 1899:48	GOKV2ab	f		1					
Bhr 1928:01	Vendel P	f		1					
Bhr 1957:01a	GOKV2ab	f		1				1	
Bhr 1960:10a	GOKV2ab	f	0	0	0	0	1	0	0
Bhr 1960:11	GOKV1	f+	1	1	2	1	2	1	0
Bhr 1960:13	WG1234	m	2	1	1	1	1	0	Cattle + pig
Bhr 1961:17a	GOKV2ab	f	0	1	0	0	0	1	0
Bhr 1961:19	WG34	m	1	1	1	1	1	0	Bird
Bhr 1961:21	Vendel P	0	0	0	0	0	0	0	0
Bhr 1961:22a	Vendel P	0	3	0	0	0	0	0	0
Bhr 1961:24	WG56	m	1	1	1	0	1	0	0
Bhr 1961:25	GOKV2ab	f	1	0	0	0	0	0	0
Bhr 1961:26a	GOKV2bc	f	0	0	0	0	0	0	0
Bhr 1961:26b	WG12	m	2	0	1	0	1	0	0
Bhr 1961:27	Vendel P	f	0	1	0	0	0	1	0
Bhr 1961:33a	WG12	m+	1	1	1	0	2	0	Pig + bird + fish
Bhr 1961:35	Vendel P	f	1	0	0	0	0	0	Fox
Bhr 1961:36a	GOKV2ab	f	2	1	0	0	0	0	0
Bhr 1961:37	GOKV2bc	f	0	0	0	0	0	0	0
Bhr 1961:39a	GOKV2ab	f	0	1	0	0	0	1	0
Bhr 1961:40	Vendel P	0	1	0	1	1	1	0	0
Bhr 1967:01	GOKV2ab	f	1	0	1	1	1	0	0
Bhr 1967:02	GOKV2ab	f	0	0	0	0	1	0	0
Bhr 1967:03	WG12	m	2	0	1	0	1	0	0
Bhr 1967:04	Vendel P	f	0	1	0	0	0	0	0
Bhr 1967:05	WG12	m	4	1	1	0	1	1	Pig
Bhr 1967:06	GOKV2ab	f	1	0	1	0	1	1	Bird
Bhr 1967:08	GOKV2ab	f+	1	1	1	0	0	1	0
Bhr 1967:14	WG34	m		1			1		
Bhr 1967:24a	GOKV2ab	f	3	0	1	1	0	0	0
Bhr 1967:29	WG12	m	1	1	1	0	1	0	Cattle
Bhr 1967:40	Vendel P	f	2	0	1	0	1	0	0
Bhr 1967:41	GOKV2ab	f	0	1	0	0	0	1	0
Bhr 1967:44	WG34	m	2	0	1	0	2	0	0
Bhr 1967:45	Vendel P	m	1	0	0	0	1	0	0
Bhr 1971:03	WG1234	m	1	0	1	0	1	0	0
Bhr 1971:04	Vendel P	m	0	0	0	0	1	0	0
Bhr 1971:06	Vendel P	0	0	0	0	0	1	0	0

3.5 Late Viking Period gender and age at Barshalder

The same CA and seriation method as that applied to the Migration Period finds in section 3.1.1 and the Vendel Period finds in section 3.3.1 was used to study the gender attributes of Late Middle and Late Viking Period graves. The Barshalder sample of source quality 1-2 Viking Period graves was large enough to use on its own, without support from other cemeteries in Thunmark-Nylén's WKG sample. There is no apparent local variation in the gender symbolism of burials across Gotland. Only those artefact classes that survive regardless of chemical preservation conditions were registered, thus excluding the organic contents of brass bowls and those wooden bowls whose existence is indicated by wood fragments and surviving sheet metal repair mounts. An original database (VIKBASE) of 43 graves and 49 types produced a seriation (data set VIKGEND) with 37 graves and 32 types (fig. 3:7).

The Late Middle and Late Viking Period artefact assemblages display a clear-cut gender dichotomy and there are no clearly transgressed gender attributes. The female grave Bhr 1935: 07 did contain only two beads (attribute bead-3), a number otherwise only known from male graves, but beads are easy to overlook during fieldwork and there may have been a few more of them in the grave.

The tasks depicted in mortuary symbolism were obviously not the only ones performed in daily life, but they may well have been the most strongly gendered and gender-defining ones. At the very least it can be said that these tasks were considered important in death, possibly in connection with beliefs about the afterlife. The main associations of the two genders are, again, men with armed conflict on one hand, and women with textile crafts on the other (cf. Arwill-Nordbladh 1998:204-213 with refs.). Women are also, again, associated through keys with responsibility for the house or precious possessions.

Fig 3:7. The Late Middle and Late Viking Period gender dichotomy. Seriation diagram. The horizontal line marks the division between female and male graves and types.

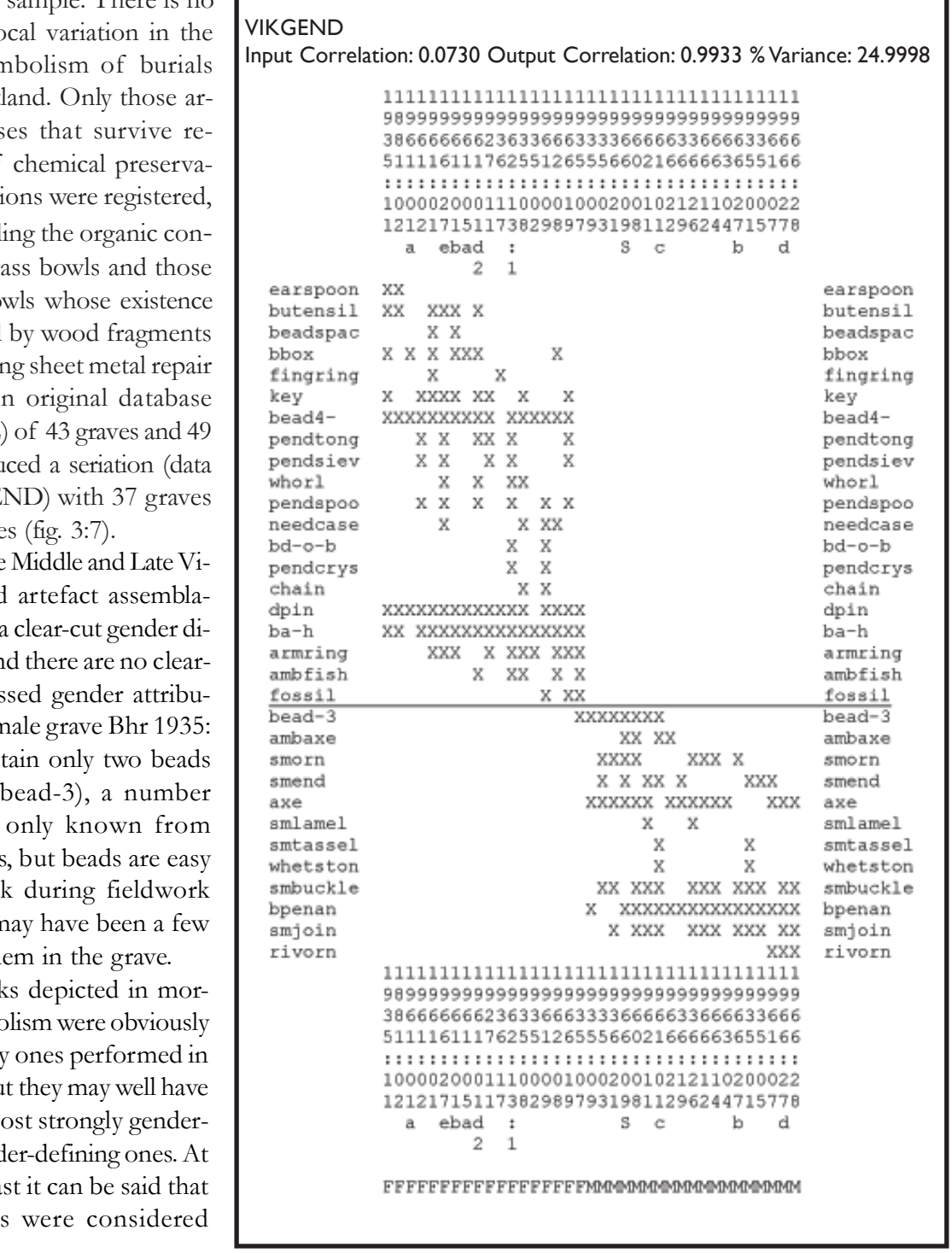


Table 3w. Late Viking Period female gender attributes.

Attribute	n of graves in VIKBASE	Abbrev.
Ear-spoon	2	earspoon
Utensil brooch	6	butensil
Bead spacer	2	beadspac
Box-shaped brooch	7	bbox
Finger ring	2	fingring
Key	9	key
Beads n>3	17	bead4-
Tongue pendant	6	pendtong
Sieve pendant	5	pendsiev
Spindlewhorl	4	whorl
Spoon pendant	6	pendspoo
Needle case	4	needcase
Disc-on-bow brooch	2	bd-o-b
Crystal pendant	2	pendcrys
Jewellery chain	2	chain
Dress pin	17	dpin
Animal head brooch	17	ba-h
Arm ring	10	armring
Amber amulet, fish head	5	ambfish
Fossil	3	fossil

Few osteological sex and age assessments will be possible for these graves, as very little bone has survived. Most of cemetery section 1 is on a gravel ridge, which of course invited the gravel extraction that led to the graves' excavation. I have attempted a coarse age classification (table 4a, *Barshalder 1* table 8a) based on the length of the skeletons, or, lacking these, the grave trenches. Here, children are identified by lengths of 150 cm or less (cf. Donié 1999:60-62). This method gives a minimum count of the children in the graves, as all full-length trenches without preserved bones are classified as the graves of adults by default.

Most of the common artefact types do not appear to be age-specific, but there are a few exceptions. Weapons have only been found in the graves of adults. As suggested by Trotzig (1985), the small long-hafted axe may have been an attribute of adult male status. The tassel belts (Geijer

Table 3x. Late Viking Period gender-neutral attributes.

Attribute	n of graves in VIKBASE	Abbrev.
Pot	23	pot
Knife	31	knife
Knife butt ring mount	10	knbutring
Knife butt staple	3	knbust
Knife sheath cover or edge mount	15	knsh
Knife sheath ring mount	11	knshring
Rattle	2	rattle
Coffin	17	coffin
Comb	14	comb
Copper alloy vessel	8	vesbrsh
Rivet cluster	3	rivetclu
Single iron rivet or nail	4	rivnail

Table 3y. Late Viking Period male gender attributes.

Attribute	n of graves in VIKBASE	Abbrev.
Beads n<4	8	bead-3
Amber amulet, axe head	4	ambaxe
Ornamental strap mount	8	smorn
Strap end mount	8	smend
Axe head	16	axe
Belt lamella	2	smlamel
Tassel belt	2	smtassel
Whetstone	2	whetston
Strap buckle	13	smbuckle
Penannular brooch	20	bpenan
Strap joiner	12	smjoin
Ornamental bronze rivet	3	rivorn

& Arbman 1940) and whetstones found in two Late Middle Viking Period graves (Bhr 1935:01 & 1961:01c) indicate another adult male attribute set. As discussed in section 4.1.10, the placement (but not the presence per se) of vessels in the graves seems to correlate with the age of the deceased.

A few uncommon artefact types are known only from children's graves, probably for functional, symbolic and chronological reasons (cf. *Barshalder 1* section 8.3.5). Some may have been toys, another a baby bottle: a stick twined with bronze wire and a horn in Bhr 1961:01a; a pair of boar tusk pendants and a domed bronze sheet mount in Bhr 1966:27a. The rattles in Bhr 1961:01d2 and 1966:17 may both have been intended to be used by children although one of them was found attached to the dress of an adult woman (cf. Gräslund 1973).

The attributes of neither the male nor the female subsets of VIKBASE produced any intelligible sub-gender clustering or continuum when analysed with CA (cf. sections 3.1.3 and 3.3.4-5).

3.6 Late Viking Period social status at Barshalder

I ranked the graves and artefact categories in the VIKBASE sample (cf. section 3.5.0) with the status score function of WinBASP 1994 (see the discussion in section 1.5), producing tables 3z and 3aa. Unique types and single-type graves were omitted, leaving a 42-member data set. Trotzig (1991a:162) has pointed out the exceptional qualitative wealth of Bhr 1961:09 and 1962:13:1, and they also occur at numbers three and four on the quantitative ranking list in table 3aa. The general pattern to note in table 3z is the great dominance in quantitative status of female gender attributes over male ones. Female graves were simply much more richly equipped than male ones. This may indicate that women had special rights of ownership to their jewellery, preventing its continued circulation after the owner's death. Female graves were, on the other hand, generally less intricately built than male graves.

As shown in *Barshalder 1* section 8.5.2, the graves of children were generally very simply arranged as to their architecture. They were not, however, generally less richly equipped than the graves of adults. A number of children were afforded rich grave furnishings, which indicates that social status was hereditary, as known from contemporaneous written sources from north-western Europe.

As discussed in *Barshalder 1* section 8.4, the highest level of burial investment is found in the smallest spatial clusters of cemetery section 1. None of the five clusters was untouched by looters, so this is not simply due to the greater difficulty of locating a smaller group of graves. In any case the looters could probably still easily see the superstructures of the graves.

Bhr 1960:02b was an inhumation grave in a trench that, although rather short, was structurally similar to its datable Late Middle and Late Viking Period neighbours. It held one of the few well-preser-

Table 3z. Social ranking of Late Viking Period artefact types.

Gender	Average number of artefact types in graves where a certain type occurs.	
f	Jewellery chain	16.0
f	Needle case	15.8
f	Spindlewhorl	15.3
f	Disc-on-bow brooch	15.0
f	Crystal pendant	15.0
f	Spoon pendant	14.0
f	Sieve pendant	13.8
f	Tongue pendant	13.7
-	Rivet cluster	13.7
f	Key	13.2
f	Amber amulet, fish head	12.8
-	Knife sheath ring mount	12.6
f	Bead spacer	12.5
-	Knife butt ring mount	12.5
f	Arm ring	12.2
m	Belt lamella	12.0
f	Utensil brooch	11.8
f	Fossil	11.7
-	Knife sheath cover or edge mount	11.4
-	Comb	11.4
f	Dress pin	11.1
f	Animal-head brooch	11.0
f	Beads n>3	10.8
-	Knife butt staple	10.7
-	Copper alloy vessel	10.5
f	Box-shaped brooch	10.1
m	Amber amulet, axe head	10.0
m	Tassel belt	10.0
m	Whetstone	10.0
-	Knife	10.0
-	Pot	9.9
-	Coffin	9.8
-	Beads n<4	9.5
m	Ornamental strap mount	9.4
m	Strap end mount	9.1
-	Single iron rivet or nail	9.0
m	Strap buckle	8.9
m	Strap joiner	8.8
-	Rattle	8.5
m	Axe	8.1
m	Ornamental rivet	7.7
f	Ear spoon	7.5
f	Finger ring	7.5
m	Penannular brooch	7.5

Table 3aa. Social ranking of Late Viking Period graves.

Grave	Gender	Score of highest-status type in grave	Sum of status scores for all types in grave
Bhr 1966:27e	f	15.8	220
Bhr 1935:08	f	16.0	199
Bhr 1961:09	f	16.0	197
Bhr 1962:13:1	f	15.3	175
Bhr 1927:11	f	13.8	162
Bhr 1961:01d2	f	15.3	153
Bhr 1962:08	f	15.8	152
Bhr 1961:01b	f	13.7	148
Bhr 1961:02	f	14.0	143
Bhr 1961:01	f	13.2	132
Bhr 1966:19	f	14.0	131
Bhr 1936:26	m	13.7	123
Bhr 1960:08	m	12.6	119
Bhr 1962:11	m	12.6	118
Bhr 1935:11	f	13.2	106
Bhr 1966:09S	m	11.4	105
Bhr 1935:03	m	12.6	101
Bhr 1935:01	m	11.4	97
Bhr 1961:01c	m	10.7	94
Bhr 1966:27b	m	12.6	91
Bhr 1935:07	f	12.8	88
Bhr 1966:28	m	11.4	83
Bhr 1936:21	m	11.4	76
Bhr 1961:07	m	10.0	71
Bhr 1936:19	m	12.6	69
Bhr 1966:22	m	11.4	68
Bhr 1961:05a	f	11.4	64
Bhr 1966:14	m	11.4	64
Bhr 1966:12	m	10.0	53
Bhr 1881:02	f	11.8	52
Bhr 1966:27d	m	10.0	51
Bhr 1963:04	m	12.5	48
Bhr 1935:09	m	10.5	45
Bhr 1935:05	m	10.0	44
Bhr 1961:01a	f	11.1	42
Bhr 1961:04	f	10.8	40
Bhr 1966:09N	m	10.5	38
Bhr 1966:17	m	9.9	36
Bhr 1935:02	f	12.2	34
Bhr 1936:17	f	11.1	30
Bhr 1934:01	m	10.0	17
Bhr 1962:10	m	9.9	17

ved skeletons from cemetery section 1 but had apparently originally been unfurnished. Under the model of status-dependent burial expenditure used here, this should be interpreted as the grave of a socially insignificant member of a none-too-wealthy group. Alternatively, the grave might be interpreted as an isolated Christian statement: no furnishings and no foot-space (cf. section 4.1.19). As the trench had the typical orientation of the furnished graves (190°) and not the westward orientation that could be expected of a Christian burial, the former interpretation should be preferred. The inhumation might even be interpreted as the remains of a sacrificial victim for the Late Middle Viking Period cremation burial (Bhr 1960:02a) that had been slightly cut by the trench.

4. Religious identity in the 11th century

Christianity was in all likelihood known on Gotland at least from the time of its official adoption by the Roman empire. There are indications of Arian influence in the iconography of the Migration Period picture-stones (Swanström 1993). Only in the early 11th century, however, did an organised Christian conversion process begin on the island, ending in the early 12th century with the final abandonment of Scandinavian paganism. For recent overviews of previous research on the conversion process on Gotland, see Fontell 1994; Nordanskog 1996 and Staecker 1997a, 1997b, 1998.

This century-long process can be studied in the cemeteries of Anders Carlsson's phases Csn D (c. AD 1000-1100) and Csn E (c. AD 1100-1150, furnished burial ceased c. 1125). Csn D saw the first establishment of Christian churchyards on Gotland. The cemeteries of Csn D-E display a strict division into Christian and pagan ones with distinctive rites (cf. section 4.2.3). The furnished Christian churchyards have recently become the subject of renewed research (Thunmark-Nylén 1989, 1995b; Nordanskog 1996; Staecker 1997a, 1997b, 2000b, 2001). The contemporaneous pagan cemeteries, however, have not been studied in much detail. The aim of this chapter is to study and interpret the relationship between pagan and Christian cemeteries during the conversion process.

As argued extensively in section 4.2.3, Barshalder is a pagan cemetery, in fact the site of most pagan graves of Csn D that have been professionally excavated to date on Gotland. Its period of use was probably terminated by conversion and the establishment of a Christian churchyard with unfurnished burials near the site of Grötlingbo parish church. The end date of Barshalder around AD 1100 coincides neatly with that given by Strelow (1633/1978, cf. Kyhlberg 1991: 271, Wase 1995) for the foundation of the church of Grötlingbo, AD 1090. If correct, this date pertains to a wooden church, no traces of which have been found at the excavations undertaken to date beneath the present structure (Gustafsson 1958). The Romanesque stone church of Grötlingbo, materials from which were re-used in the present Gothic structure, dates from about AD 1200 (Stolt 2001). It seems unlikely that the prosperous inhabitants of Grötlingbo would have waited a century after terminating their pagan cemetery before they built a church of their own. Strelow's date for the church of Fide, AD 1166, is also too early to fit the present stone structure there.

4.1 Burial ritual at Barshalder

A major change of burial ritual took place during Csn A-C, a time from which Barshalder has so far not produced many finds. During this time inhumation replaced cremation as the dominant rite. Burial weaponry was scaled down from the full cavalry equipment of the Vendel Period to a symbolic axe. These changes were already fully established when Csn C-D burial began in cemetery section 1. Eleven graves of Csn C have been documented here. It is tempting to see this establishment of new burial plots with a radically new set of burial customs in the late 10th century as an indication in itself of the societal changes of the time. At Barshalder, burial was removed from both physical and symbolic association with the past at about the same time as Harold Bluetooth boasted at Jelling that he had Christianised the Danes.

A preliminary version of this section and part of section 4.2 were presented at the EAA Annual Meeting in Bournemouth, 16 September 1999 (Rundkvist 2001).

4.1.1 Sampling

The sample under study in section 4.1 has been selected as follows.

Graves
datable to Csn C-D by artefacts, or, lacking such, grave structure and topochronology;
in cemetery section 1;
adequately preserved and documented.

The sample consists of 109 graves (see *Barshalder 1* table 8a) and omits only 17 of the securely datable Viking Period graves known from Barshalder. The reason for this procedure is the fact that so few graves of Csn A-C have been excavated at the cemetery. The topochronology of cemetery section 1 indicates that Viking Period burial began in the area near the end of Csn C and continued according to similar customs until the end of Csn D. The two Csn C graves from cemetery section 2 probably date from an earlier part of the phase and are thus not immediately commensurable with those in section 1.

4.1.2 Non-dress artefacts

As detailed in *Barshalder 1* section 8.5.2, the inhumations were placed in over-long trenches with the head at one of the ends. This formulated a basic division of the grave-space into one area occupied by the body, and one, between the feet and the other end of the trench, where artefacts could be placed. The artefact types from the graves (table 4a) follow this division and thus form two sets: one related to the body through the placement of the artefacts and one found in the foot-space and thus indifferently related to the body (table 4b). Among the types not belonging to the dress, many signify a strictly gendered task specialisation as demonstrated in section 3.5.

In view of recent studies (Anders Carlsson 1988, Eriksson 1990, Rundqvist Nilsson 1990) and pending the completion of WKG, I have not studied the placement of dress accessories on the bodies at Barshalder. It appears to offer few surprises. Instead I have concentrated on the placement of other burial attributes. In order to discern a pattern with validity beyond the anecdotal I will unless explicitly stated discuss only attributes occurring in more than one grave. This leaves us with 16 artefact categories (cf. table 4a).

4.1.3 Axes

Men were symbolically linked to armed conflict by the placement of axes and maces in their graves, though the actual function of these weapons may have been more ceremonial than martial. Most of the axe heads are small and ornate, and in the single case where the length of the haft can be determined (Bhr 1962:11) it seems to have been too long for practical use (Trotzig 1985).

28 Csn D male graves yielded axes, in no case more than a single one. Three distinct types are found: 20 small ornate beard axes (WKG II Tafel 255) including eleven with trefoil protrusions, three large broad axes (WKG II Tafel 258) and two simple narrow axes (WKG II Tafel 256), plus fragments of three axes of indeterminable type.

The position of the axe head in relationship to the body can be closely determined in 20 cases. In only three of these (15%) was the axe placed to the left of the body's centre-line. In modern human populations, 10-15% are left-handed (*Nationalencyklopedin*, entry "hänthet"), which corresponds neatly with the Barshalder axes' placement. No axe head was placed farther from the head of the deceased than the knees. The hafts were all aligned with the body, toward the head as often as toward the feet. The edge of the axe was more often oriented toward the body's left than toward the right (eleven of 15 determinable cases). These observations indicate that the axes were simply placed where they would be handy to the deceased. One was attached to the belt and one had its haft stuck under the belt. To summarise, the axe was an exclusively body-related artefact.

4.1.4 Maces

Two Csn D male graves contained bronze mace heads. There is also a decontextualised Late Viking Period mace head from Grötlingbo parish (SHM 10928:10). The function of these objects has been a matter of some debate – were they finials of ceremonial staffs (Trotzig 1978), end-knobs of ship's tillers (Nylén 1983:143) or weapons (Sandstedt 1992)? I am inclined to agree with Sandstedt and Lena Thunmark-Nylén (WKG II, table of contents & Tafel 264; personal communication, Lena Thunmark-Nylén) that in view of comparative material from post-Viking Period Gotland and Eastern Europe, and considering

Table 4a. Non-dress artefacts in the Late Middle and Late Viking Period graves of cemetery section 1 at Barshalder.

Grave	Date	Gender	Age	Rite	Axe	Whetstone	Mace	Rattle	Rivet clust	Comb	Knife	Amber amul	Vessel	Pic-stone	Animal bone	Key	Spindlewhorl	Needle	Needle case	Fossil
Bhr 1927:11	Csn D	f	A	inh	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0
Bhr 1931:02	Csn D	m	A	inh	1	0	0	0	>=5	1	1	0	1	0	0	0	0	0	0	0
Bhr 1934:01	Csn C	m	C	inh	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Bhr 1935:01	Csn C	m	?	inh	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
Bhr 1935:02	Csn D	f	C	inh	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Bhr 1935:03	Csn D	m	A	inh	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
Bhr 1935:04	Csn D	f	A	inh	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0
Bhr 1935:05	Csn C	m	C	inh	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
Bhr 1935:06	Csn D	f	A	inh	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0
Bhr 1935:07	Csn D	f	A	inh	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
Bhr 1935:08	Csn D	f	C?	inh	0	0	0	0	6	0	1	1	4	0	0	1	1	0	1	0
Bhr 1935:09	Csn D	m	A	inh	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0
Bhr 1935:11	Csn C	f	A	inh	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0
Bhr 1935:12	Csn D	m	A	inh	1	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0
Bhr 1935:13	Csn D	f	A	inh	0	0	0	0	0	1	0	0	1	0	0	4	1	0	0	0
Bhr 1935:14	Csn D	f	A	inh	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
Bhr 1936:16	Csn C	f	A	inh	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
Bhr 1936:19	Csn D	m	A	inh	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
Bhr 1936:20	Csn CD	f	A	inh	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0
Bhr 1936:21	Csn D	m	A	inh	1	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0
Bhr 1936:22	Csn D	m	A	inh	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
Bhr 1936:23	Csn CD	0	A	inh	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Bhr 1936:24	Csn D	m	A	inh	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Bhr 1936:25	Csn D	m	A	inh	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0
Bhr 1936:26	Csn D	m	A	inh	1	0	0	0	6	1	1	0	1	0	0	0	0	0	0	0
Bhr 1937:31	Csn D	f	A	inh	0	0	0	0	0	0	1	0	2	0	0	0	0	1	0	0
Bhr 1950:01	Csn D	m	A	inh	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
Bhr 1960:02a	Csn CD	f	?	crem	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Bhr 1960:05	Csn CD	m	A	inh	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Bhr 1960:06	Csn D	m	A	inh	1	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0
Bhr 1960:07	Csn D	m	A	inh	1	0	0	0	0	0	1	1	5	0	1	0	0	0	0	0
Bhr 1960:08	Csn D	m	A	inh	1	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0
Bhr 1960:18a	Csn D	m	?	crem	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Bhr 1961:01	Csn D	f	C	inh	0	0	0	0	0	1	1	0	1	0	0	2	0	0	0	0
Bhr 1961:01a	Csn C	f	C	inh	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Bhr 1961:01b	Csn C	f	C	inh	0	0	0	0	6	1	2	0	0	0	1	1	0	0	0	0
Bhr 1961:01c	Csn C	m	A	inh	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Bhr 1961:01d1	Csn C	f	?	crem	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
Bhr 1961:01d2	Csn C	f	A	inh	0	0	0	1	0	0	1	1	2	0	0	2	3	0	0	0
Bhr 1961:02	Csn D	f	A	inh	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0
Bhr 1961:04	Csn CD	f	C	inh	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Bhr 1961:05	Csn D	0	A	inh	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0
Bhr 1961:05a	Csn D	f	A	inh	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0
Bhr 1961:06	Csn CD	f	A	inh	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0
Bhr 1961:07	Csn D	m	A	inh	1	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0
Bhr 1961:08	Csn D	m	A	inh	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bhr 1961:09	Csn D	f	A	inh	0	0	0	0	0	1	1	1	3	0	0	0	0	0	1	2
Bhr 1961:10	Csn CD	m	A	inh	0	0	0	0	>=5	0	0	0	1	0	0	0	0	0	0	0
Bhr 1961:11	Csn D	f	A	inh	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
Bhr 1961:12	Csn CD	0	A	inh	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Bhr 1961:13	Csn CD	0	A	inh	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Bhr 1962:02	Csn D	m	A	inh	1	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0
Bhr 1962:04	Csn D	m	A	inh	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Bhr 1962:06:1	Csn D	m	A	inh	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0
Bhr 1962:06:2	Csn D	m	A	inh	1	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0
Bhr 1962:07	Csn D	m	A	inh	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0

Grave	Date	Gender	Age	Rite	Axe	Whetstone	Mace	Rattle	Rivet clust	Comb	Knife	Amber amul	Vessel	Pic-stone	Animal bone	Key	Spindlewhorl	Needle	Needle case	Fossil
Bhr 1962:08	Csn D	f	C?	inh	0	0	0	0	0	1	1	1	1	0	0	0	0	0	1	0
Bhr 1962:09	Csn D	m	A	inh	1	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0
Bhr 1962:10	Csn D	m	A	inh	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Bhr 1962:11	Csn D	m	A	inh	1	0	0	0	10	0	1	0	1	0	0	0	0	0	0	0
Bhr 1962:12	Csn CD	f	A	inh	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Bhr 1962:13:1	Csn D	f	A	inh	0	0	0	0	0	0	0	1	3	0	0	0	1	0	0	0
Bhr 1962:13:2	Csn D	f	A	inh	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0
Bhr 1962:14:1	Csn D	m	A	inh	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
Bhr 1962:14:2	Csn D	m	A	inh	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Bhr 1963:01	Csn D	m	A	inh	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0
Bhr 1963:02	Csn CD	f	A	inh	0	0	0	0	0	1	0	0	2	0	0	0	1	0	0	0
Bhr 1963:03	Csn D	m	A	inh	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Bhr 1963:04	Csn D	m	A	inh	1	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0
Bhr 1963:05	Csn D	f	A	inh	0	0	0	0	0	1	1	0	1	0	0	1	0	0	0	0
Bhr 1963:06	Csn D	m	A	inh	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
Bhr 1965:01a	Csn D	f	A	inh	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Bhr 1965:01b	Csn D	f	A	inh	0	0	0	0	11	0	0	1	7	0	0	0	1	0	0	0
Bhr 1965:02	Csn D	m	A	inh	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0
Bhr 1966:01a	Csn D	f	?	crem	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0
Bhr 1966:01b	Csn D	m	A	inh	0	0	0	0	0	0	1	0	1	2	0	0	0	0	0	0
Bhr 1966:07	Csn D	f	A	inh	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0
Bhr 1966:08	Csn D	f	A	inh	0	0	0	0	0	0	0	1	2	0	0	0	0	1	0	0
Bhr 1966:09N	Csn D	m	A	inh	1	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0
Bhr 1966:09S	Csn D	m	A	inh	1	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0
Bhr 1966:10	Csn D	m	A	inh	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Bhr 1966:11b	Csn D	m	A	inh	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Bhr 1966:12	Csn D	m	A	inh	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Bhr 1966:13	Csn CD	f	A	inh	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
Bhr 1966:14	Csn D	m	A	inh	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Bhr 1966:17	Csn D	m	C	inh	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0
Bhr 1966:19	Csn D	f	A	inh	0	0	0	0	0	0	1	0	1	0	0	1	0	0	0	1
Bhr 1966:20	Csn CD	m	A	inh	0	0	0	0	0	0	1	1	1	0	1	0	0	0	0	0
Bhr 1966:22	Csn D	m	A	inh	1	0	0	0	0	1	1	1	2	0	1	0	0	0	0	0
Bhr 1966:23	Csn D	m	A	inh	1	0	0	0	7	0	1	0	1	0	0	0	0	0	0	0
Bhr 1966:27a	Csn D	0	C	inh	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
Bhr 1966:27b	Csn D	m	C	inh	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0
Bhr 1966:27c	Csn D	2	A	inh	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
Bhr 1966:27d	Csn D	m	A	inh	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Bhr 1966:27e	Csn D	f	A	inh	0	0	0	0	0	1	1	0	1	0	0	1	1	0	1	0
Bhr 1966:28	Csn D	m	A	crem	1	0	0	0	0	1	1	0	1	0	1	0	0	0	0	0
Bhr 1966:29	Csn D	m	A	inh	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0
Bhr 1966:30a	Csn D	0	A	inh	0	0	0	0	0	1	1	1	2	0	0	0	0	0	0	0
Bhr 1966:31	Csn D	m	A	inh	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0
Bhr 1968:01	Csn D	f	A	inh	0	0	0	0	0	0	0	0	3	0	0	2	0	0	0	0
Bhr 1971:01	Csn D	f	A	inh	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
Bhr 1971:02	Csn D	m	A	inh	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0

the fact that the mace heads appear to be weighted with lead, they must indeed have been weapons.

The two mace heads from the Barshalder graves were found at the feet of the deceased, one at the right foot and one at the left, with the hafts originally orientated headward. The extension of these hafts places the mace heads in the body-related group but outside the area of the axes. In the third mace grave documented on Gotland, at Hemse Annexhemman, the mace head was also found at the right foot (Nylén 1983: 143; WKG I:227, IV:459). The fact that the mace heads are found farther from the head of the deceased than the axes may indicate that their hafts were longer.

4.1.5 Whetstones

Two Csn C male graves yielded a single whetstone each, one placed above the head of the deceased on the right-hand side and one at the belt. With such a small sample the lack of correspondence is hardly surprising, although it can be noted that the whetstones were found in the same area as the axes. The whetstone was thus a body-related artefact.

4.1.6 Rivet clusters

Eight graves of Csn C-D, with deceased of varying gender and age, contained a dense cluster of iron, bronze or composite rivets. The number of rivets varies within a narrow interval (two graves with at least five rivets, two with six, one with at least six, one with seven, one with ten, one with eleven) as does the rivet span (4-11 mm), and in some cases the rivets hold wood remains. All this indicates a common purpose, probably to hold together small wooden boxes or caskets. The only grave containing indisputable casket mounts (Bhr 1936:20) did not, however, contain any rivets.

The position of the rivet cluster in relation to the body is known in five cases, where four were in the foot-space and one at the top of the head of the deceased (Bhr 1961:01b). Details of this particular grave are sketchy due to the inconsistent placement of the jewellery and the bad state of preservation of the bones. It seems to be an exceptional case where the jewellery was not worn by the deceased but placed in a box at the head. All in all, the rivet clusters mainly belong to the foot-space artefacts.

4.1.7 Combs

28 graves contained combs, in no case more than a single example. It should be noted that this is a minimal number: preservation of unburnt bone and antler in cemetery section 1 is bad, the rivets of the composite combs are easily overlooked during excavation, and there are examples of single-piece combs without any rivets. Date, gender and age varied among the comb graves.

Three of the combs are single-piece double-sided ones and the rest are composite single-sided ones. There is no sign of the composite double-sided comb type discussed in the debate on the absolute end-date of the Viking Period on Gotland (see *Barshalder 1* section 8.3.2). Nor are there any comb cases. About 75% of the composite combs have bronze rivets, with iron rivets making up the remainder. Here, too, differential preservation should be taken into account.

The position of the comb in relation to the body is closely determinable in 14 cases. Ten of these combs were placed on the torso or in one case beneath it. One was placed beside the right hip or thigh. The remaining three were found in the foot-space, one of them beneath a pot. In addition to the 14 well-documented comb positions there are three further graves where no more can be stated than that the comb was placed in the body-half of the trench. Thus the comb, while occurring sparingly in the foot-space, was mainly associated with the body.

4.1.8 Knives

57 graves of Csn C-D, with deceased of varying gender and age, contained knives. Three of these contained a pair of knives each, the rest each a single one. Many of the knives are associated with elaborate bronze mounts for the handle and sheath.

The position of the knife in relation to the body is closely determinable in 37 cases from 35 graves. 33 of the knives were placed on or beside the torso, mainly in the abdominal and pelvic areas. Of the remaining four knives, two from the same grave were placed at the head, one was placed at the right foot and one was placed in the covering stone layer at the head-end of the trench. Where a clear placement on either side of the body's centre-line could be observed, 18 knives were on the right-hand side and eight (31%) on the left-hand side. This indicates that the knife was not always considered most practical worn on the side of the preferred hand (cf. the standard placement of sword scabbards through the ages).

The knives were as strongly linked to the torso as the dress jewellery, reminding us that they were in effect part of the dress. Men seem to have worn them at the belt, often tied to a strap joiner at the side, while the women's knives were commonly attached either to one of the paired chest brooches or to a utensil brooch. The knife, thus, was a body-related artefact.

4.1.9 Amber amulets

25 amber amulets have been found in Csn C-D graves at Barshalder, all of them singly. Many of them are crudely fashioned from large beads and they were apparently made exclusively for funerals (Trotzig 1983:375-376, 1991a:168-169). Two strictly gendered types are found and an uncommon third variety is represented by a single specimen. Axe-shaped amulets (thirteen determinable specimens) are male attributes and fish-head amulets (eight specimens) female ones. A chair amulet, probably representing the throne of a deity (Arrhenius 1961, Trotzig 1983:365-366), was found in a female grave.

The position of the amulet in relation to the body is closely determinable in 15 cases. Of these amulets, ten were in the foot-space, often associated with a vessel. Three amulets of both gendered types were placed in the area of the feet and lower legs. One was at the left shoulder and one (the chair amulet) at the head. Amber amulets of the two gendered types are thus almost exclusively associated with the foot-space.

Trotzig's (1991a:136) suggestion that the amulets might have been affixed to cords tying the feet of the deceased together, in order to keep them from haunting the living, is not supported by the positions of the amulets in the graves. Most of the amulets have been found not at the feet but at the extreme footward end of the trench along with vessels.

Amber amulets of both types are found in contemporaneous graves in Latvia (Mugurevics 1965 plate VII figs. 15-24). Axe-shaped bronze amulets are found in contemporaneous male graves in Old Russia (Makarov 1992) and at sites within its sphere of contact including Sigtuna on Lake Mälaren (Edberg 1999). Most of these amulets depict beard axes with a lower edge protrusion, similar to the small axes of Gotland. In the two graves illustrated by Makarov (1992:50, figs. 7-8), the amulets seem to have been placed in the lower leg region of the dead. These burial trenches do not, however, display an interior division like the one at Barshalder.

Axe-shaped amber amulets were produced c. AD 750-850 at the trade and craft centre of Åhus II in north-east Scania (Callmer 2002:133). One has also been found in the Black Earth of Birka (SHM 5208), dating from the Early and Middle Viking Period.

4.1.10 Vessels

77 Csn C-D graves of both genders contained vessels. These graves yielded evidence for a total of 119 vessels, which is a minimal number as only pottery (cf. Roslund 2001) and metal vessels (cf. Trotzig 1991a & 1991b) were consistently preserved. Wooden and bark vessels had only survived when in contact with copper alloys, that is, either metal vessels or repair mounts. There may originally have been any number of flawless wooden vessels that did not survive, for instance in the many cases where a pot had been placed in the corner of the trench as if to leave room beside it. Counting only vessels made entirely of imperishable materials, there is evidence for 90 vessels from 75 graves. No grave contained more than two imperishable vessels.

Due to the badly preserved bones there is a risk of circular argument as to where the vessels were placed in relation to the bodies if body orientations are determined on the grounds of the vessels' placement. In the present study, this reasoning is actually consistently applied in the interpretation of orientation when other artefact types are studied. Therefore it is important to investigate how secure the association of the vessels with the foot-space really is.

For 92 vessels from 58 graves body orientation and vessel placement can both be independently determined. Body orientation is here determined either through preserved bones or the placement of jewellery and dress accessories. 65 of these vessels were placed in the foot-space, in other words between the feet and the foot-end of the trench. Adding vessels placed between the knees and the feet brings the total to 86, that is 93% of these vessels. Vessels are thus a foot-space artefact.

A look at the 14 cases where vessel placement is known but body orientation cannot be independently determined shows that all but three of these vessels were placed in the expected north or east ends of the trenches, that is, the probable foot-ends.

The exceptions to this rule of placement in the foot-space are six vessels from six different graves. Three of them were placed at the head, two at the hip or thigh, and one apparently originally on top of the coffin over the chest of the deceased. Children are strongly over-represen-

ted among these graves with exceptional vessel placements (50% compared to 9% in the total population of graves with vessels), indicating age-specific burial rites.

Where the vessels were clearly placed to the side of the trenches' centre-lines the left-hand side of the deceased was preferred to the right-hand side, with 25 cases to 8. This forms an opposition to the artefact types placed handily at the right-hand side of the body.

4.1.11 Re-used picture-stones

Three Csn D graves in the sample, all of them male, featured picture-stones of the Late Vendel or Early Viking Periods re-used in the internal burial trench structure. One of them incorporated two stones (Nylén & Lamm 1987 #82 & 83) and the others one each (Nylén & Lamm 1987 #80 & 81), one of them oxymoronically blank but recognisable thanks to its characteristic shape. The two single stones had been trimmed and placed as end-slabs at the foot-ends of the burial trenches. The pair had been used as lid slabs for an inhumation trench.

In this context Bhr 1952:01b, an exceptional Csn D female grave not included in the sample, should be mentioned to complete the list of re-used picture-stones from Barshalder's Viking Period. The burial was secondarily placed in Bhr 1952:01a, a grave structure from the earlier part of the Migration Period, located in cemetery section 2 (Rojrhagen). The picture-stone (Nylén & Lamm 1987 #89), a blank specimen, was set as a secondary end-slab in the cist at the head of the Viking Period individual.

The sample is too small to allow any significant conclusions, but it should be noted that two of three end-slabs made of re-used picture-stones at Barshalder were at the foot-end, delimiting the foot-space. In the only case where the stone was both decorated and still in its original position (Bhr 1963:06), the picture faced into the burial trench.

[The Migration Period picture-stone SHM 16124 (Bhr 1918:02, Nylén & Lamm 1987 #85) was not actually found with the Viking Period objects (Bhr 1918:01) that share the same inventory number.]

4.1.12 Animal bones

Animal bones were found in only nine graves, probably partly due to the bad preservation conditions for bone. One of the few Viking Period cremations analysed by an osteologist has been included in this number, but not the food remains preserved in metal vessels. Identified species are cattle, pig, dog and wildfowl (goldeneye, Sw. *knipa*). There is little to say about the positions of the bones: two of the graves were cremations and four cases lack documentation of the bones' positions. In the three remaining cases the bones were placed in various ways: in the foot-space (partly beneath a pot), in a large post hole outside the foot-end of the trench, and at the head of the deceased.

4.1.13 Rattles

Small bronze rattles or bells with cross-shaped openings (cf. Gräslund 1973) were found in two graves, one being the resting-place of a woman of Csn C and one that of a little boy of Csn D. The woman's rattle, along with two keys and a knife, was fastened by a chain to a utensil brooch on the right-hand side of her abdomen. The boy's rattle was also placed on the right-hand side of the abdomen. The rattle, thus, was a body-related artefact whose position was probably determined by where it would be handy for the deceased. A child buried in the 11th century Christian cemetery at Grødby on Bornholm wore a similar rattle on a string around its neck (Wagnkilde & Pind 1996:181, fig. 16).

4.1.14 Keys

14 female graves of Csn C-D yielded 20 keys. One grave had four, three graves two each, and the rest a single key each. Bronze, iron and composite keys were found. Their size gives no hint as to their function: they may have unlocked doors, chests, caskets or padlocks that were used interchangeably for all three of these purposes. Their placement can be closely established in 15 cases from ten graves: all were placed on the pelvis or abdomen except two which were placed on the chest and at the head respectively. Five were fastened with chains to utensil brooches. In only one case was the key on the left-hand side of the deceased.

The keys, thus, are part of the female gender assemblage, were often physically linked to the dress, and are exclusively a body-related artefact.

Table 4b. The body/foot-space dichotomy.

Foot-space	Body
Vessel (77 graves) Riveted box (8 graves) Amber amulet (25 graves) Spindlewhorl (12 graves)	Axe (28 graves) Mace (2 graves) Whetstone (2 graves) Comb (28 graves) Knife (57 graves) Rattle (2 graves) Key (14 graves) Needle without case (4 graves) Needle case (4 graves)

Table 4c. The left/right dichotomy.

Left hand	Right hand
Vessel Fossil	Axe Knife Rattle Key

4.1.15 Spindlewhorls

Textile equipment is restricted to the female gender, possibly with the exception of a single pair of shears found in a male grave (Bhr 1963:04). Twelve female Csn C-D graves yielded 14 spindlewhorls, with one grave containing three specimens. Most of them are made of limestone; but igneous rock, sandstone and bronze also occur. Their placement can be closely established in eleven cases from nine graves: all were placed in the foot-space, often beside or in one case beneath a vessel; except two which were placed at the foot and knee respectively. Right-hand and left-hand placements were equally common.

4.1.16 Sewing needles

Four female graves of Csn C-D yielded single bronze sewing needles without needle cases. Three of them were placed at the head of the deceased and one in the foot-space. Neither position seems to permit an interpretation of the needles as shroud pins. Although the sample is small, it seems the needle was a body-related artefact.

4.1.17 Needle cases

Four female graves of Csn D yielded single cylindrical sheet metal needle cases. They are filled with corrosion products and it would take x-ray photography to investigate whether there are needles inside. In the three cases where their placement can be ascertained they were found on the abdomen, in two cases fastened to brooches. The needle cases are thus similar to the keys in their placement and linkage to the dress.

4.1.18 Fossils

Not counting beads and spindlewhorls fashioned from fossiliferous limestone, four unaltered fossils were recovered from three female graves. The placement of three specimens is known: one was on the chest, one at the abdomen, one in the foot-space, all on the left-hand side. This does not permit any generalisations as to the body/foot-space dichotomy.

4.1.19 Interpreting the pattern of placement

As has been shown, there exists a clear dichotomy between body-related artefact types and types placed in the foot-space or at least below the knees of the deceased (table 4b). There is also a less distinct dichotomy between left-hand and right-hand objects (table 4c).

The body/foot-space dichotomy coincides with the one between artefact types found in contemporaneous Christian graves at the churchyards and absent from them respectively (cf. Trotzig 1969, Thunmark-Nylén 1995b), except for the weapons. None of the foot-space types occur at the churchyards. All of the body types do, except for the axe and mace. However, due to the gender segregation of the churchyards and subsequent early destruction of the male graves, very few male graves at all have been identified in the churchyards. Thunmark-Nylén's five-page catalogue of the Gotlandic churchyard finds (1995b: 189-193) lists only five sets of belt mounts, the central artefact category of the male dress, alongside abundant female dress accessories. This means that we cannot actually tell whether or not any appreciable number of furnished graves in the Christian churchyards contained weapons.

What can be stated confidently is that in 11th century Gotland, the ideal of a pagan *female* grave was the same as its Christian counterpart, but with the addition of a foot-space containing pagan ritual objects. The same may have been true for the male graves, or the Christian male graves may actually have lacked weapons – the archaeological record known to us today is insufficient to settle this matter.

A look at the functional types in either group shows that the pagan identity was not demonstrated in the dress or in objects useful outside the house. This means that in the public sphere, pagans and Christians were visually indistinguishable. I am also inclined to believe that the spindles and various vessels used in pagan and Christian households were indistinguishable too. This would mean that only their use in the burial context was a signal of paganism. The amber amulets were manufactured exclusively for pagan funerals and were probably not seen at any other occasions.

My impression, then, is that the pagans of 11th century Gotland kept their religious identity a private matter. In the burial ritual it was kept physically apart from their public selves at least in the female graves, and I believe that this reflects the way it was managed in their social lives.

The right-hand objects are all hand-held implements and their placement on the right-hand side of the body thus does not seem to demand explanation. The left-hand artefacts, however, are not quite as easily interpreted. The fossils are too few to warrant any elaborate hypotheses, but the vessels are one of the most common artefact classes in the graves.

The only social dimension that 11th century Gotlandic society is known to have conceptualised in terms of left and right is gender. This is shown in the Christian churchyards and churches of the time, where women were buried and probably stood during Mass to the left, and men to the right, when facing the altar (Staecker 1997a,1997b, 2000b, 2001). It is also apparent among the paired parallel separate inhumations at Barshalder (see *Barshalder 1* section 8.5.3.3). One may imagine that the mourners at an 11th century pagan funeral stood in a like manner along the edges of the burial trench, women by the deceased's left-hand side, men by his or her right-hand side, each offering their last respects and depositing objects in the trench. The grave vessels contained food and drink, and it is thus not surprising to find them placed on the female side of the burial trench. Cooking and the distribution of drink are strongly female-gendered tasks in the literary sources of the time. This linkage of the gender dichotomy with the left/right dichotomy and presumably other dichotomies of a more metaphysical character amounts to a cultural universal (Needham 1973).

4.2 Religious conversion

4.2.1 Pagan mortuary symbolism

In attempting to read the Late Viking Period mortuary symbolism at Barshalder, we have identified familiar gender roles where men are warriors and women craftspeople, keepers of valuables and cooks. We have also identified the inhumation trenches' foot-spaces as the domain of a private pagan identity within the burial ritual. Now, what do the contents of this space say specifically about paganism?

The specific meaning of the amber amulets is obscure because they are entirely non-functional artefacts. They are pierced for a string, which ties them in with the spindlewhorls' symbolism, discussed below. All I feel qualified to say is that due to their long typological ancestry (see section 4.2.3) they must have carried connotations of a religious and perhaps general social conservatism, as discussed below.

Norse and Classical literature provides an instant interpretation for the spindles as symbolically connected to the Fates, or perhaps more likely, connected to the concept of fate in general. I find this interpretation attractive, as much of the Norse sources on Viking Period mentality concern humanity's struggle with fate.

The foot-space is characterised by a plethora of vessels. All cases where contents were preserved point to them originally having been filled with food and drink. The *blót*, the sacrificial feast, was a central concept in late Scandinavian paganism (Ström 1985:79 ff, Näsström 2001:248-249). It is, for instance, referred to in the Guta Saga, a 13th century compilation of older sources, where Gotlandic pagan cult partners are called *supnautar*, cooking partners (Nerman 1941, Holmbäck & Wessén 1943:292, 304 note 16). On the other hand, in a more abstract form the sacrificial meal is of course Christianity's central sacrament. A near-contemporaneous example of this conflict over sacrificial feasting is found in Hakon the Good's Saga (Sturluson, *Heimskringla* chapter 18), where the Christian king refuses his royal duty to partake of the sacrificial meal at Hlaðir (cf. Meulengracht Sørensen 1991 with refs.). Another early Christian who refused food in this manner was St. Sabas the Goth, who lived in the Pontic area in the 4th century and was murdered by pagan

compatriots for his reticence (Heather & Matthews 1991:109-117). It is hard to say whether the burial food at Barshalder should be seen as a miniature *blót,* as symbolic provisions for the afterlife, or both. The fish, fowl, eggs, hazel nuts and vegetables preserved in the copper alloy bowls of Barshalder do, however, appear to be rather far from the steaming meat cauldrons of the sacrifices described in the written sources (Ström 1985:79 ff, Näsström 2001:248-249). Trotzig (1991a:135) has interpreted the contents of the vessels as "food for the last journey".

4.2.2 Pagan reactionaries

Among the graves of Csn C-D from Barshalder, there are a few that stand out by their overtly reactionary pagan symbolism. As detailed in section 4.1.11, four Csn D graves at Barshalder featured picture-stones of the Late Vendel or Early Viking Periods re-used in the internal trench structure. Late Viking Period graves are in fact a common find context for the picture-stones. A functional interpretation of the re-used picture-stones simply as useful building material appears untenable as the graves in question also display other uncommon and archaic traits.

Bhr 1966:01b was an inhumation grave cut into the elaborate stone setting Bhr 1966:01a, also of Csn D, housing one of the phase's very few cremations. Here a reactionary monument, with the well-nigh obsolete custom of cremation burial, has been referenced by yet another pagan romantic group of mourners reinforcing their statement with a pair of re-used picture-stones and northward body orientation, an almost unheard-of custom at the time.

The mourners behind Bhr 1952:01b made even more forceful reference to the pagan past. Not only did they re-use a three centuries-old picture-stone and orientate the head of the deceased toward the north – they also re-used a seven centuries-old grave cist in the abandoned aristocratic cemetery plot at the eastern end of cemetery section 2.

All cremation burials of Csn D and later date should in my opinion be seen as symbolically reactionary or at least anti-Christian. In Bhr 1966:28 (Trotzig 1967), this stance is further reflected by unique outmoded furnishings: lance head, scythe blade, strike-a-light and a dog. Intriguingly, this symbolic statement, forcefully apparent to all who saw the pyre before it was lit, was then more or less annulled by the way the cremation deposit was buried: in a typical rectangular two-metre trench of the kind used for inhumations, with an axe and a pot placed in the positions typical for the contemporary inhumation burials.

Trotzig (1991a:149, 168) has pointed out that the custom of placing vessels in graves, so common in the Roman Iron Age and Migration Period, is almost unknown from the Early and Middle Viking Period. The reappearance of vessels in the pagan graves of Csn D was thus in itself a revival of pagan symbolism. The custom did not, however, reappear to any great extent in the northern half of the island (Trotzig 1991a:149, 151).

4.2.3 Were the churchless cemeteries in fact pagan?

In the 11th and 12th centuries, Christianity on Gotland was significantly influenced by the Eastern Christianity of Russia (Lagerlöf 1999). Jörn Staecker has suggested (1997b:77-81, 1998: 222-226, 2000b, 2001) that the early Christian graves with jewellery and dress fittings found in churchyards on Gotland and at Leksand in Dalecarlia, and even with pottery at Grødby on Bornholm, might be seen as indicators of historically undocumented missionary work on the part of the Eastern church. He bases this interpretation on a wide range of similar cemeteries from the Slavonic parts of eastern and central Europe, with the exception of Russia: early Christian cemeteries are not easily identified in Russia as they are generally not located at the churches. There is only one known example from Old Russia of furnished Viking Period graves in a churchyard, at the Desjatinnaja church in Kiev (Petrukhin & Pushkina 1998:251), and it is not entirely certain whether any of these graves post-date the adoption of Christianity in the area.

An interesting aspect of Staecker's argument is that not only can it be used to interpret the furnished churchyard graves of Gotland as indicators of Eastern Christianity. It can equally well be used to interpret Barshalder and other churchless Late Viking Period inhumation cemeteries as Christian. They would form a good parallel to the Russian churchless Christian cemeteries. Contact between Gotland and Russia was lively at the

time, as shown for example by the Oriental style belts (Jansson 1978) favoured by men on Gotland and common in the graves of Barshalder.

I, however, am nonetheless convinced that the 11th century churchless cemeteries on Gotland were not Christian in any meaningful sense, but rather that they represent a Scandinavian pagan ideology and system of religious beliefs. This is actually the generally accepted interpretation (Trotzig 1969, 1991a:151; Anders Carlsson 1989: 102, Thunmark-Nylén 1989, 1991, 1995b; Staecker 1997b:64, 1999:302-303), but in view of the slight doubt introduced by Staecker's and Valk's (see below) papers I will nonetheless set out some arguments for the pagan interpretation in the following.

1 The distinctive rites of the contemporaneous churchyards and churchless cemeteries must be explained in ideological terms. If they were indeed all Christian then we would have to assume *two different types* of historically undocumented Eastern Christianity in 11th century Gotland. Given that we must also account somehow for the end of Scandinavian pagan burial, this double-Russian hypothesis falls victim to Ockham's razor.
2 Grødby on Bornholm (Wagnkilde & Pind 1996; Wagnkilde 1999, 2000) teaches us that Christian graves can contain pottery vessels. However, many of the copper alloy vessels buried in churchless cemeteries in southern Gotland originate from the Rhine-Maas area (Trotzig 1991a:148) that was firmly in the grip of Western Christianity at the time. Most of the vessels are actually hand-washing basins. On Gotland, however, they were used to serve food (Trotzig 1991a:135).

   Interpreting the churchless cemeteries as Christian thus leads to a paradox: among Christian graves at the time, only Eastern Christian ones may contain vessels, but the actual vessels found point to close contact with Western Christianity. Also, it appears that the workshops in the Rhineland produced these vessels without the customary Christian imagery especially for the southern Baltic market (Trotzig 1991a:148).
3 The axes commonly found in male graves in the churchless cemeteries, but as yet never in the churchyards, form the end of a continuous pagan tradition of weapon burial on Gotland starting in the late 1st millennium BC. Weapon burial is extremely uncommon in Christian cemeteries west of the Baltic and to my knowledge entirely unknown in the second half of the 11th century. Note that this argument is weakened by the fact that, due to the gender segregation of the Late Viking Period churchyards and subsequent continuous use only of the male side, very few early Christian male graves have survived to be documented in the churchyards of Gotland.
4 Amber amulets are found in graves in the churchless cemeteries, but not in the churchyards. The axe-shaped amulets found in male graves form the end of a tradition starting in the Early Vendel Period in the 6th century (VZG 213-214, Bhr 1967:03). The corresponding amber amulets in the female graves have an enigmatic shape and are generally more coarsely wrought than the axe-shaped amulets, but the closest parallels to their shape are the bronze sheet fish-head pendants also introduced in the Early Vendel Period and used until the end of the Viking Period. Their meaning is obscure but, judging from the wealth of the graves, seems closely tied to a high-status female role.
5 The elaborate internal structures of the burial trenches in the churchless cemeteries (cf. *Barshalder 1* section 8.5.2) have no counterpart in the churchyards, but hark back to a continuous tradition at least from the Early Bronze Age onward. The sandstone slab cists are a particularly archaic trait, although in the 11th century they were often combined with the new-fangled wooden coffins.
6 The picture-stones of the 8th and 9th centuries re-used in graves in the churchless cemeteries of Gotland were originally pagan monuments (Andrén 1993, Göransson 1999). Their secondary placement in the graves should probably be seen as an act of identification with a more securely pagan past (cf. section 4.2.2). They are never found in graves in the churchyards, and only later in the 12th and 13th centuries were they incorporated into stone churches, then without any association to graves (Johansen 1997:215). The picture stones of

the 11th century display a few lingering elements of pagan imagery (comparable to the carvings of Medieval Norwegian wooden churches) and appear to have been erected near Christian graves, but their runic inscriptions and crosses mark them as unequivocally Christian monuments.

7 A great majority (68%) of the graves at Barshalder are orientated with the head southward, and only a small number (17%) with the head westward. In the churchyards, westward orientation is the rule.

Heiki Valk (1998) has argued convincingly for a dissolution of the Christian/pagan dichotomy in the study of burial customs in most of the Baltic Sea area. Instead he demonstrates the existence of a transitional period characterised by mixed or even syncretic burial customs, with different dates and durations in different areas (Valk 1998, fig. 1). However, this model is not directly applicable to the situation in 11th century Gotland. Here we find no uniform system of transitional burial customs, but rather two distinct transitional systems which may be attributed to Christianity and Scandinavian paganism respectively. This clear-cut dichotomy is to my knowledge unique. The religious attribution of furnished graves and cemeteries from transitional periods is a perennial problem in post-Roman archaeology (e.g. Schülke 1999 with refs.).

Nora Liljeholm (1999) has interpreted the churchless Late Viking Period cemeteries of Gotland as Eastern Christian cemeteries (cf. Anders Carlsson 2003). Her argument is based on scattered instances of Christian cult objects found at the pagan cemeteries. In my view, these cannot be taken to indicate a formal religious conversion accepted by the local community. Liljeholm fails to answer the double-Russian objection presented in the first argument listed above: why would there be two distinct cemetery types if both represented Eastern Christianity? In the pagan context, the Christian-flavoured objects are more likely to have been seen as amulets of an eclectic spiritual power, typical for non-codified religions.

In this context, a digression seems justified on the dates of the churchyard and the wooden church of Silte (Trotzig 1972, 1981; Liljeholm 1999). Here, we find a coin-dated but otherwise unfurnished grave and the foundations of a wooden church apparently respecting each other stratigraphically. The erection of the church has been radiocarbon dated (St 3885-3888) to c. 1200 cal AD (Kyhlberg 1991:161). The earliest coins found inside the church are dated at tpq c. AD 1200. This coincides with Strelow's date for Silte, AD 1204. The three coins from graves, however, are dated at tpq AD 976, AD 978 and AD 1017. According to Kenneth Jonsson (email 6 February 2000) none of these coin types circulated on Gotland after c. AD 1050, which would form a terminus ante quem for the burials: "It is impossible that all the graves are as late as 1200 (out of the question!!!)". To accommodate the conflicting dates, Liljeholm assumes that the coins were in fact antiques when buried. However, the coins found inside the church show that there was no lack of contemporaneous coinage around AD 1200 in Silte. In my opinion, the coins are clear evidence of burial at the site in the 11th century. Whatever boundary grave 3 at Silte was originally respecting, it cannot have been the western wall of the wooden church of AD 1200. As Liljeholm points out, this issue could be resolved by radiocarbon dates for the human bones.

4.2.4 Confessional geography of Gotland in the 11th century

The cemeteries of 11th century Gotland form three clearly demarcated types:

1. Furnished mixed-gender inhumation cemeteries with a few cremation graves, located away from any known church site. Many burial trenches are over-long and walled with stone. Female graves contain food vessels, riveted boxes, amber amulets and spindle whorls. These cemeteries were, in my opinion, consciously and overtly pagan. Barshalder, Hemse Annexhemman and Stora Hallvards in Silte parish are prime examples.
2. Furnished gender-segregated inhumation cemeteries at churches. Female graves contain only dress accessories. These cemeteries were in my opinion Christian in a ritually tolerant Eastern mode. These are the so-called "churchyard finds".
3. Unfurnished inhumation cemeteries at churches. These cemeteries were in my opinion

	Rune stone at church	Ch-yrd	Pagan Csn D	Pagan Csn D/E	Pagan Csn E	Strelow
Akebäck	0	0	0	0	0	0
Ala	0	0	0	0	0	1072
Alsktg	0	0	0	0	0	1160
Alva	0	Stray	Rangsarve	0	0	1086
Anga	0	0	0	0	0	1200
Ardre	1	0	0	0	0	1166
Atlingbo	1	0	0	0	0	1039
Bara	0	0	Simunde	0	0	1091
Barlingbo	0	Stray	0	0	0	1058
Björke	0	0	0	0	0	1182
Boge	1	0	Laxarve, Pilgårds	0	0	1190
Bro	0	1	Kvie	0	0	1196
Bunge	0	0	Hygfältet	0	0	1169
Burs	0	1	Amunde	0	0	1096
Buttle	0	0	0	0	0	1218
Bäl	0	0	Gute	Gute	0	1169
Dalhem	0	1	Busarve, Dungärde	Dungärde (FACS roma)	0	1046
Eke	0	0	Petsarve	0	0	1199
Ekeby	1	(Stray)	0	0	0	1182
Eksta	1	(Stray)	Prästgården & Kvie	0	0	1160
Elinghem	0	0	0	0	0	1050
Endre	0	0	Endre skog	Endre skog	0	1200
Eskelhem	0	1	Valve	0	0	1049
Etelhem	0	1	Bjärby Sandar	0	0	1182
Fardhem	0	1	0	0	0	1039
Fide	0	0	Fideriäs rwst, Grindvaktstugan	0	0	1166
Fleringe	0	0	Utroje	0	0	1166
Fole	0	(Stray)	Ryftes	0	Sojdungs	1096
Follingbo	1	0	0	0	0	1052
Fröjel	0	1	Robsarve	Sälle, Near church	0	1166
Fårö	0	0	0	0	0	1166
Gammelgarn	0	0	Gannarve, Rommunds	Glose (FACS roma)	0	1052
Garn	0	0	0	0	0	1200
Ganthem	0	0	0	0	0	1210
Garde	0	1	Kulder	0	0	1086
Gerum	0	0	0	0	0	1211
Gothem	0	(Stray)	Hjärdinge	0	0	1052
Grötlingbo	1	0	Barshalder	0	0	1090
Guldrupe	0	0	0	0	0	0
Hablingbo	1	0	Havor	0	0	1050
Hall	0	0	0	0	0	1182
Halla	1	0	Broa	0	0	1196
Hamra	0	Stray	0	0	0	1046
Hangvar	1	Stray	0	0	0	1218
Havdhem	0	1	Antarve	Antarve (FACS roma)	0	1040
Hejde	0	1	Krämplause	0	0	1090
Hejdeby	0	0	Lilla Räby	Lilla Räby	0	1211
Hejnum	0	0	0	0	0	0
Hellvi	0	0	Ire, Sajgs	Sajgs	0	1199
Hemse	0	0	Annexhemmanet	Asarve	Annexhemmanet	1210
Hogrän	1	0	0	0	0	1200

Table 4d. Gotland's parishes and their Late Viking Period cemeteries.
In the "Ch-yrd" column, a "0" means that no Viking Period finds at all have been found at the churchyard, a "1" means that certainly furnished Viking Period graves have been documented there, "Stray" means that Viking Period stray finds have been made there, and "(Stray)" means that Viking Period stray finds have been made there but that no graves of the period have been documented despite grave digging north of the church c. AD 1900 and later.

Hörsne	0	Stray	Buters	0	0	1096
Klinte	0	(Stray)	Hunninge	0	0	1046
Kräklingbo	1	0	Smiss	0	0	1211
Källunge	0	1	0	0	0	1072
Lau	0	0	Gannor	Hallbjärs (FAC:S romza)	0	1122
Levide	1	0	Pejnarve	0	0	1058
Linde	1	0	Hägvalds, Myrungs, Smiss	0	0	0
Lojsta	0	0	0	0	0	1199
Lokrume	0	0	0	0	0	1200
Lummelunda	0	0	0	0	0	1139
Lye	0	0	0	0	0	1058
Lärbro	0	0	Lekarehed	0	0	1086
Martebo	0	0	0	0	0	1130
Masterby	0	0	0	0	0	1199
Norrlanda	0	Stray	Butraifs	0	0	1169
När	0	0	Siglajvs	0	0	1122
Näs	0	0	0	0	0	1182
Othem	0	0	Slite torg	0	0	1086
Romza	0	0	Karby	0	0	1086
Rone	1	0	Burge, Hägglarve	Halor (FAC:S romza)	0	1090
Rute	0	0	0	0	0	1052
Sanda	0	0	Botvide	0	0	1058
Silte	0	1	Stora Hallvards	0	0	1204
Sjonhem	1	0	0	0	0	1040
Sproge	1	0	Kruse	0	0	0
Stenkumla	1	0	Gannarve	0	0	1199
Stenkyrka	1	0	Lillbjärs & Mos	0	0	1032
Stånga	1	1	Kylver	0	0	1160
Sundre	0	0	0	0	0	1218
Tingstäde	1	Stray	0	0	0	1169
Tofta	0	0	0	0	0	1166
Träkumla	0	0	Tjängglarve/Gottskalks	0	0	1217
Vall	0	0	0	0	0	1167
Vallstena	0	0	Uppgarde	Bjärge, Bjärs, V-rum (all FAC:S romza)	0	1091
Vamlingbo	0	(Stray)	0	0	0	1072
Viklau	0	0	0	0	0	1199
Visby	0	0	Gustavsvik	0	Erik XIII:s grand	0
Vänge	0	(Stray)	0	0	0	1058
Väskinde	0	0	Vis & Gällungs	0	0	1090
Västergarn	0	Stray	Mafrids	0	0	0
Västerhejde	0	0	Buskevik	0	0	1204
Väte	0	Stray	Mölner	0	0	1050
Öja	0	0	0	0	0	1086
Östergarn	0	0	0	0	0	1169

Christian in a ritually strict Western mode. As unfurnished graves are difficult to date, the only positively identified member of this type so far is Silte churchyard, with a coin-dated but otherwise unfurnished grave.

Table 4d lists the known pagan cemeteries and Christian churchyards of Csn D-E. The pagan grave finds have been extracted from WKG I & IV, Thunmark-Nylén 1991, Anders Carlsson 1983 & 1988, Dan Carlsson 1999a, Liljeholm 1999:152-156. The churchyard finds (certain and debatable) have been taken from Thunmark-Nylén 1995b and Dan Carlsson 1999b with the addition of the Csn D churchyard identified beneath Bro church in 2001 (Widerström 2001). Their number has been reduced with regard to Staecker's (1997a: 205) examination of churchyards with late modern graves north of the church but no known Viking Period finds. He suggests that if there are any furnished Viking Period graves at a church then one should have made finds there when graves were dug north of the church in recent decades. This argument has, however, been weakened by the recent finds inside Bro church, a church that should not have had any furnished Viking Period graves according to Staecker's observations.

Note that the parish division of Gotland postdates the Viking Period. It is used here only as a convenient way to sub-divide the island.

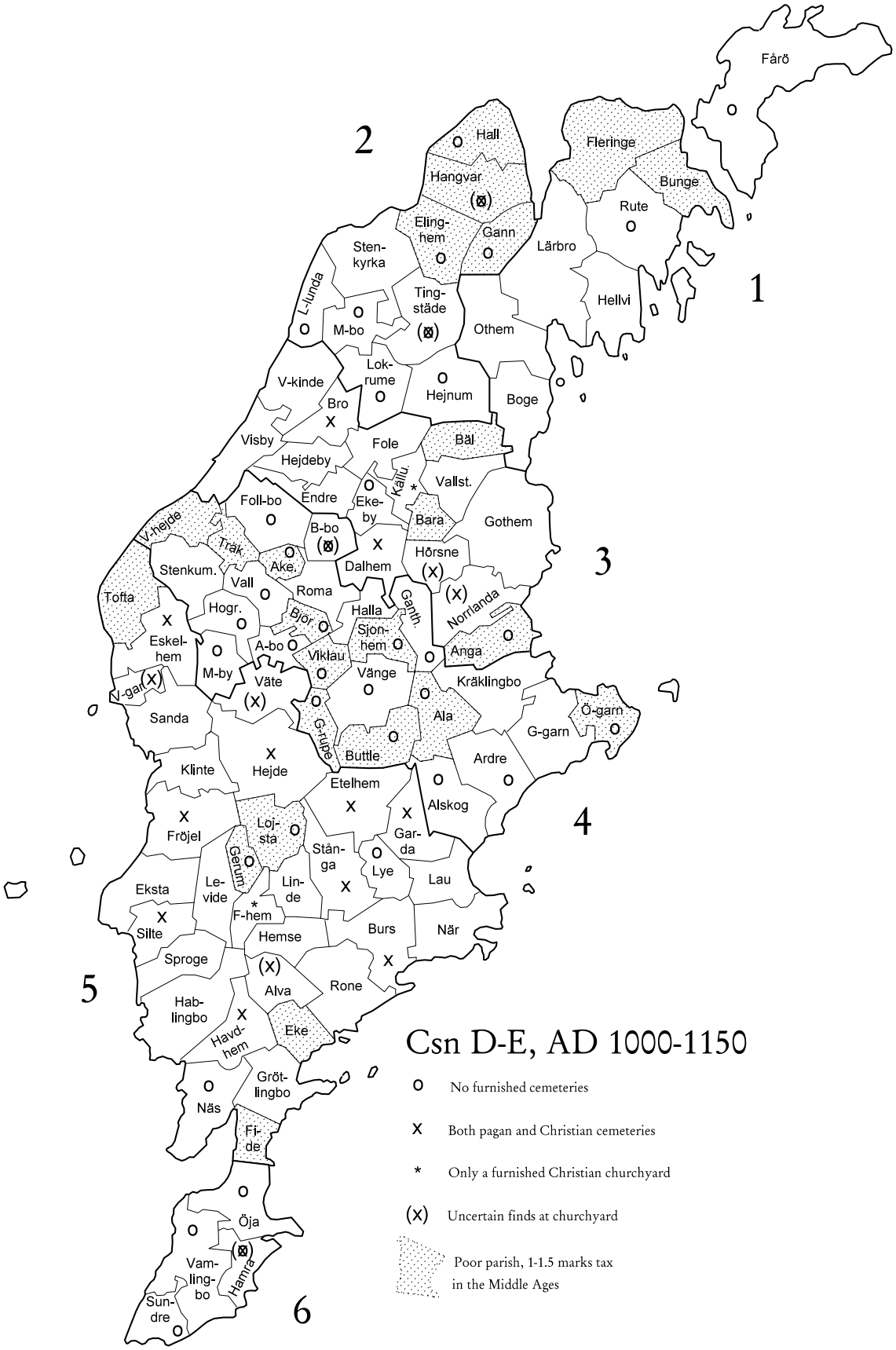
When these data are combined, we get the following results (fig. 4:1). Eleven (85%) of the thirteen parishes with definite churchyards also have pagan cemeteries, Fardhem and Källunge being the exceptions. Out of nine parishes with debatable churchyard indicators (remaining despite Staecker's clarifications), five (56%) also have pagan cemeteries. Thus, as noted by Staecker (2001:241), the two types of cemeteries do not in fact exclude each other on the parish level as has been claimed in earlier research (Anders Carlsson 1989:102; Trotzig 1991a:151; Nordanskog 1996:24-25, 41; Staecker 1997b:64; Liljeholm 1999:156; Rundkvist 2001:87). The churchyard finds from parishes with both types of cemeteries are of Csn D or even earlier date, so these are not simply cases where the change of burial site coincided with the shift between Csn D and Csn E.

Furnished Csn D-E cemeteries (pagan and/or Christian) are not evenly distributed across the island. Instead, they form three clusters separated by cemetery-less areas, dividing the island into six parts. I would suggest that the cemetery-less areas include such that were Christianised very early in Csn D and were mainly influenced by the Western Church with its strong views on proper burial rites. In such areas we may presume that churches were built very early in the 11th century and that burial at the churchyards was unfurnished already from the start. However, the cemetery-less areas should also include ones that were thinly populated at the time due to poor soils or the higher shore line. These may be identified from the distribution of Viking Period hoards (SGW) and the Medieval Episcopal tax rates for each parish, copied by Bilefeld in 1585 (*Bilefeld's inventory list*, Thunmark-Nylén 1980:30-31, Kyhlberg 1991:271-272). Finally, solitary lacunae may be expected due to varying excavation and collection histories: in some churchyards burial may have resumed north of the church uncommonly early or not at all to the present day, which would have kept any Viking Period female graves beyond the ken of scholarship. The boundaries in fig. 4:1 were drawn with these considerations in mind, underlining the distinction between parishes with Csn D cemeteries of either type and parishes without any cemeteries at all. These boundaries do not coincide with those of the thing/setting/treding territorial division known from historic times.

Staecker (2001:236-247) offers a similar classification of Gotland's parishes according to the types of their Csn D-E cemeteries. His definition of a pagan grave find has in my opinion been somewhat too liberal: the Csn D-E finds from Ekeby and Tingstäde parishes cannot, as Staecker indicates, safely be taken to originate from graves.

More importantly, and very unfortunately, Staecker fails to distinguish between the Csn D and Csn E subtypes (Anders Carlsson 1988:77-80) of the FAC:S rom:a penannular brooch. The error is evident already from the fact that of the 22 pagan cemeteries with graves dated by Staecker (2001:239-241) to Csn E, only two have any female graves dated to this phase. It has led him

Fig. 4:1. Cemetery types in Late Viking Period Gotland. The map symbols may be combined in parishes where there are no known cemeteries of the period but uncertain finds from the churchyard, e.g. Hangvar. Note that there is no symbol for parishes with exclusively pagan cemeteries. This is the normal case, advertised only by the absence of a symbol.



(2001:238) to the incorrect conclusion that pagan cemeteries and Christian churchyards co-existed for 50-100 years in many parishes. Actually, only two rural pagan cemeteries in Fole and Hemse parishes (cf. table 4d) did certainly remain in use into Csn E, and neither of them post-dates its Strelowian church date.

Looking at those penannular brooch types that Anders Carlsson (1988:75) could date no closer than Csn D/E, and adding chronologically ambiguous specimens of FAC:S rom:a, we find them in pagan graves from eleven rural parishes (excepting Hemse). Carlsson suggested that most of the Csn D/E brooches should actually date from Csn E. In five of the eleven parishes such a late date would post-date the Strelowian church date. This issue cannot be resolved with current knowledge of the brooch chronology.

On the grounds of the incorrect Csn E dates, Staecker (2001:241-247) interprets Gotland's territorial Middle Third (Sw. treding), where FAC:S rom:a brooches are under-represented at the pagan cemeteries, as the part of the island where the pagan cemeteries were abandoned first. Disregarding finds from churchyards and pagan cemeteries, the brooch type is distributed quite evenly across the island: 1.7 brooches per parish in the Northern Third, 1.3 in the Middle Third, 1.3 in the Southern Third, as per Anders Carlsson's (1988) catalogue. This indicates that the brooch type was no less popular among the living in the Middle Third than elsewhere. Its scarcity at the pagan cemeteries there is thus surprising indeed. Carlsson's (1988:75) other vaguely dated Csn D/E brooch types are uncommon at pagan cemeteries but appear to be roughly evenly distributed across the island (N: 4 pagan cemeteries, M: 2, S: 1, cf. table 4a). This indicates that what Staecker has discovered may actually be a local quirk in the pagan mortuary dress code in the Middle Third. The figures are too small to support any far-reaching hypotheses.

The brooches of Csn D and Csn E, thus, do not indicate any single innovation centre for the abandonment of the pagan cemeteries on Gotland. While neither of the two certain Csn E rural pagan cemeteries is located in the Middle Third, their number is of course too insignificant to support any conclusions in the matter. The rune stones referred to by Staecker on this issue, many featuring the Urnes decoration style, post-date the abandonment of most pagan cemeteries on Gotland and are therefore irrelevant here.

It should be emphasised that the parishes with furnished pagan graves of Csn D but no furnished graves in the churchyard should represent cases where religious conversion and the change of burial site coincided with the end of furnished burial. Given the century-long duration of Csn D, our inability to subdivide the period (cf. *Barshalder 1* section 8.3.3.1) and our incomplete knowledge of the cemeteries' periods of use, this means that many of these apparently solidly pagan communities may have converted during the period as is indicated by Strelow's dates. The parishes with both types of furnished cemeteries should likewise represent conversion during Csn D.

As mentioned above, I believe that the difference between furnished and unfurnished Christian churchyards during Csn D should be interpreted as reflecting the difference between ritually strict Western Christianity and ritually tolerant Eastern Christianity. Whereas the Western missionaries to Scandinavia in the 11th century came from areas under the full control of the church of Rome, Gotland was also in close contact with the Russian Christian area where neither the church of Rome nor that of Constantinople exercised any firm control (Anne-Sofie Gräslund 2001:131).

This interpretation is supported by the distribution of rune stones at the rural churches of Gotland (cf. table 4d & Hyenstrand 1989:93-97). Out of 21 church sites with rune stones, only one, Stånga, has yielded furnished Viking Period burials. If, as is commonly accepted, the rune stones were originally erected in the 11th and early 12th centuries at the sites of wooden churches, then the burial rite at these churchyards must have been unfurnished already at this early date. The negative correlation between rune stones and furnished churchyard burial also tallies well with the fact that the Gotlandic rune stone tradition is closely connected to that of the Lake Mälaren area, which was Christianised in the Western tradition. Furnished churchyard burial should on the other hand, as argued in section 4.2.3, be seen as an Eastern trait.

In fig. 4:1,

Area 1 has only pagan furnished cemeteries and was thus probably Christianised in the Western mode late in Csn D.

Area 2 has no furnished cemeteries at all except for the central pagan ones in Stenkyrka parish: if my interpretation is correct, then this was the main foothold on Gotland of Western Christianity from early Csn D onward.

Area 3 has both pagan and Christian furnished cemeteries, one churchyard-only parish, two certain parishes with both cemetery types and two debatable ones, indicating a non-Western level of ritual tolerance among the Christians throughout Csn D.

Area 4 is comparable to areas 1-2 in having only pagan furnished cemeteries: its coastal parts were probably early Western Christian areas and most of its interior thinly populated and poor.

Area 5 is a mix of all conceivable combinations among the cemeteries and was thus probably the centre both of lingering paganism and of ritually tolerant Eastern Christianity through Csn D.

Area 6, finally, is devoid of furnished cemeteries and should thus be seen as another early Csn D Western Christian area.

[The relationship of parish names ending in *bo* and *hem* to cemeteries of different types has been discussed in connection with the Late Viking Period political geography of Gotland (Hyenstrand 1989:63-64, Kyhlberg 1991:75). In fact, the only area where the *bo* vs. *hem* dichotomy among the parish names coincides with the pagan/Christian cemetery dichotomy is a few parishes from Levide to Grötlingbo in the south-western part of the island. Elsewhere on Gotland, although the definite furnished churchyards are indeed strongly linked to the –*hem* parish names, there is no link between pagan cemeteries and –*bo* parish names. It should be noted that although both Kyhlberg (1991:75) and Liljeholm (1999:157) ascribe the idea of this correlation to Anders Carlsson (1988: 101), he does not actually mention it at the cited locus, nor anywhere else to my knowledge.]

4.2.5 The Strelowian dates and the 11th century cemetery situation

Despite Wase's (1995) criticism, I agree with Thunmark-Nylén (1980, 1986, 1991:181), Kyhlberg (1991), Nordanskog (1996:16-19, tab. 1-2) and Staecker (2001) in accepting Strelow's dates for the rural churches of Gotland as authentic. These studies have shown that, as a data set, the Strelowian dates are far too structured in relation to other types of source material to be mere fabrications. However, as Wase very rightly pointed out, we cannot selectively amend uncomfortable Strelowian dates as misprints, as Thunmark-Nylén and Kyhlberg have suggested. Strelow's dates for the urban churches of Visby are not discussed here.

One must bear in mind that since Strelow did not specify the type of building – wood or stone – to which each date refers, at least those from the period of stone church construction (c. AD 1125 onward) must be seen as the latest possible date for the first church in each parish (Nordanskog 1996:16-19). The furnished graves in the churchyards show independently that there were at least twelve rural churches in 11th century Gotland.

It seems that if Strelow's dates for the rural churches are authentic then they should correlate with the cemetery situation in Csn D-E in the following ways.

1. Most parishes without any known pagan graves of Csn D are areas where the local communities converted before any great number of pagan Csn D graves had been produced. Consequently, a larger fraction of the early 11th century Strelowian dates than of the late 11th century ones should pertain to parishes without any known pagan graves of Csn D.

   This expectation is fulfilled at a low level of statistical significance. Five out of twelve (42%) dates AD 1032-1050 pertain to parishes with no known Csn D pagan graves. Nine out of 27 (33%) dates AD 1052-1096 pertain to parishes with no known Csn D pagan graves, cf. table 4a.
2. Parishes with Strelowian dates in the 11th century and Csn D-E pagan graves should have a later median date than parishes with Strelowian

dates in the 11th century but no Csn D-E pagan graves, since in the first case conversion clearly occurred well into or after Csn D.

This expectation is fulfilled. The median date for the parishes with pagan cemeteries is AD 1086, the median for those without is AD 1055.

3. Parishes with Csn D pagan cemeteries apparently used until the end of the period or even past it (i.e. Fole, Grötlingbo and Hemse, cf. *Barshalder 1* section 8.3.5), should have church dates around AD 1100 or later.

   This expectation is fulfilled. Fole AD 1096, Grötlingbo AD 1090, Hemse AD 1210.

In conclusion, Strelow's dates for the rural churches appear reliable seen as the latest possible ones. His sources seem to have included Medieval records of church consecrations during Episcopal visitations, but these records clearly pertained to actual newly built churches or parts thereof, mostly not to the original consecration of each church site. In some cases, Strelow's sources preserved the date of the first building at the site, in others that of the second, and in some late cases perhaps the date of re-consecration due to reconstruction or ritual pollution.

Note that, according to my interpretation, the relationship between Strelowian dates and furnished Christian churchyards cannot be expected to be very interesting (contra Thunmark-Nylén 1991:181). Furnished graves in the churchyards are not uncommonly early Christian graves for 11th century Gotland, they are only uncommonly easy to identify and date thanks to their furnishings. Excavations at unfurnished churchyards and radiocarbon dating of the earliest stratigraphic phase of burials there would most likely in many cases give dates in the 11th century cal AD.

4.2.6 Conversion-period society

The dichotomy between pagan and Christian cemeteries indicates that the decision of conversion to Christianity was made at many different times during Csn D-E and on a local level of organisation. No blanket conversion decision comparable to that of AD 1000 in Iceland (Hugason 1997:151ff) was accepted in any large part of Gotland. Most of the territorial units involved seem to have been the size of the Medieval parishes or smaller, hinting at aristocratic estates or groups of farms with related owners. The distribution of the two furnished cemetery types indicates a century of religious Balkanisation and an absence of centralised control. The following discussion is based on the assumption that religious faith and cult was not a private matter in 11th century Gotland. Rather, I am convinced that the owner of a farmstead spoke for his or her people in the matter of conversion, and that these deliberations were more a matter of politics than of piety.

Two facts indicate that paganism lingered the longest in the southern part of Gotland, area 5 (fig. 4:1). The distribution of rune stones (c. AD 1050-1150) with crosses and with traditional human representations respectively is complementary, with the first group found in the north and the second one in the south (Hyenstrand 1989:92, 99). Of the four silver hoards with Thor's hammer pendants, all with tpq in the 11th century, three are from the Southern Third of the island (Staecker 1999:242-244; 2000a:98, table VI). This distribution may, however, be influenced by the fact that about half of all silver hoards with tpq 1075-1099 have been found in the Southern Third (Östergren 1989:27, fig. 13 K).

The distribution of late pagan graves, on the other hand, cannot contribute to this question. The fact that most known pagan graves of the period have been found at Barshalder and Hemse Annexhemman in area 5 has more to do with recent gravel extraction than with Viking Period confessional geography. After all, most Christian graves datable to the same period have also been found in area 5.

The difference between southern and northern Gotland in the Late Viking Period was thus not mainly one of paganism versus Christianity, nor of conservatism versus progressivism. The main differences lay in the geographical scale of confessional, and thus probably social, organisation (viz. the homogeneity of areas 1-2 in fig. 4:1 and the heterogeneity of area 5); and in the level of conformity to Western Christian ritual rules.

The uniquely heterogeneous confessional map of 11th century Gotland is illuminated by Staecker's tables of coin-dated religious-symbol pendants in different areas (1999:235-243, tables 27-

32; 2000a:96-98, tables IV-VI). Denmark displays a decisive shift from Thor's hammers to crosses at tpq AD 1018, central Sweden except Uppland also a decisive shift in the interval tpq AD 997-1044. Gotland, however, exhibits both symbols between tpq AD 991 and tpq AD 1099. The hoards of Uppland and Gästrikland contain no Thor's hammers, but there is a pagan strike-a-light pendant from a hoard dated at tpq AD 1017 (Zachrisson 1998 #50, p. 331) and cross-pendants from hoards dated at tpq AD 1079 and AD 1083 (Zachrisson 1998 #36, p. 305; #61, p. 351). I believe that these differing patterns reflect the ideology of the silver-hoarding social groups, indicating final collective conversion decisions in Denmark and mainland Sweden, and local religious autonomy throughout the 11th century on Gotland. It should, however, be pointed out that the number of hoards from Gotland is much greater than that from the other areas, which means that our chances of identifying a period with mixed religious symbols is commensurately greater there.

As bulwarks of pagan propaganda in an era of encroaching Christianity, the final phase pagan cemeteries of Gotland are surprisingly soft-spoken and unobtrusive. Why were the overtly pagan features of the burial rite confined to a separate part of the burial trench away from the body? Where is Thor's hammer? Why did mortuary ritual emphasise axes and vessels, an ambiguous set of attributes that would at least from the mid-12th century onward signify St. Olav (Hallencreutz 1981:90-91)? What happened to the heavily armed horseman featured in burials up to the 9th century? Why was the burial dress of these pagans identical to that of the Christians in the churchyards? Where are the sacrificed slaves? Why are there so very few cremations? Why are coffins so common? Why is an appreciable fraction of the graves orientated westward and so very few toward the pagan north? Why was a cross-pendant placed on the coffin of a grave containing an axe and four vessels (Bhr 1966: 09N)? Why were the flamboyant pagan reactionaries so few (see section 4.2.2)? In short, why were these pagans not burying their dead in an unequivocally pagan style?

I believe that the answer to these questions must be that there was no great tension between the two faiths on Gotland at the time (cf. Gräslund 2001:127-128). Indeed, with half of the preparochial territories pagan and half of them Christian, any tendencies to evangelisation by force on a higher organisational level would have led to large-scale armed conflict of which there is no hint. This indicates an absence of centralised power, or at least that any centralised power had little interest in religion. This of course rules out the kingship institution of the time. The religious tolerance displayed by the Christians also rules out any formally established presence of the Western Church. As has often been pointed out, it is hardly a coincidence that in the 1070s Adam Bremensis made no mention of Gotland in his history of the see of Hamburg-Bremen. The religious and organisational situation on Gotland was probably not a topic of polite discourse in Adam's circles.

Although the relationship between the two faiths seems to have been peaceful, I do not believe that they existed on entirely equal terms. The island's most powerful groups seem mainly to have been based in the early Christianised northern part (Thunmark-Nylén 1984). The Late Viking Period Christians were advertising their faith rather ostentatiously with churches, rune stones and cross-pendants; whereas, judging from the Barshalder burial ritual, the pagans were marginalising theirs and keeping it a private matter. Excepting cemeteries and perhaps the silver hoards, there are no contemporary sources, historical or archaeological, that give any insight into pagan cult in 11th century Gotland. Late Viking Period paganism on Gotland shows the marks of a dying faith, lingering discreetly as quaint provincial customs until it was finally abandoned in the early 12th century.

5. Conclusions and Summary

The studies in this book chronicle five centuries of change in mortuary symbolism on Gotland, with special reference to the cemetery of Barshalder in Grötlingbo and Fide parishes. Most of the work concerns the Late Iron Age, that is, the Migration, Vendel and Viking Periods, c. AD 375-1100. I have not treated the Early and Middle phases (c. AD 790-1000) of the Viking Period. This is because the graves of this period at Barshalder have not yet been excavated to any great extent.

5.1 Migration Period typochronology (Ch. 2)

Chapter 2 establishes fine chronological phasing for the previously neglected Migration Period and the final phase of the Late Roman Iron Age (Eggers phase C3). A comprehensive sample of source-critically sound grave finds from Gotland is classified with experimentally developed, rigorous type definitions, and treated with computer-assisted correspondence analysis and seriation. The separate male and female sequences are correlated using gender-neutral types and gender-transgressive furnishings, with supplementary looks at stratigraphy and topochronology (i.e. "horizontal stratigraphy").

The five phases for the female graves and three phases for the male graves represent two parallel series of successive dress and jewellery fashions. In the current state of chronological research, the female graves of the Late Iron Age can thus be divided into eleven such phases of 40-100 years each. Regarding Vendel and Viking Period chronology, see *Barshalder 1* sections 7.3 & 8.3. There was constant change, but also deep constancy. The greatest upheaval in the successive replacement of artefact types in the graves marks the beginning of the Vendel Period in the second quarter of the 6th century. The beginning of the Migration Period in the final quarter of the 4th century, on the other hand, was not a shift of any greater magnitude than the phase boundaries within the Late Roman Iron Age and Migration Period.

This tallies well with the development of settlement and agriculture on Gotland (Dan Carlsson 1979; cf. *Barshalder 1* section 2.2.6). The most dramatic changes during the 1st millennium AD were a) the establishment of Stone Wall settlement at the beginning of the Late Roman Iron Age in the mid-2nd century, and b) the abandonment of the selfsame settlement system four centuries later at the beginning of the Vendel Period. The settlements and cemeteries of the Late Roman Iron Age and Migration Period thus give an impression of societal stability, while a number of wealthy male graves from c. AD 500 may be seen as stress symptoms heralding the imminent change. On a larger political scale, the shift from the Migration Period to the Vendel Period in Scandinavia appears to have entailed a re-orientation among the elite, from south-easterly contacts with the Germanic speakers of the Pontic area (Fabech 1991; *Germanen, Hunnen und Awaren*) to south-westerly contacts with Merovingian Francia (Steuer 1987).

5.2 Gender (Ch. 3)

Mortuary gender roles were largely the same during the entire time under study, with armed men and bejewelled, textile-working, key-bearing women. In Scandinavia similar roles can be followed far back into prehistory, and forward to the present day. To determine more exactly the gender connotations – female, male or gender-neutral – of an artefact category in graves of a certain period, refer to tables 3bcd (Migration Period), 3jkl (Vendel Period) and 3wxy (Late Viking Period).

Chapter 3 presents and implements computer-assisted methodology to investigate and stringently define such gender attributes without resorting to preconceived ideas. The particulars of this symbolic dichotomy were subject to constant re-negotiation during the Migration and Vendel Periods. C. 10% of the adequately furnished graves include gender-transgressive furnishings, that is, a few attributes of one gender combined with

a full set of attributes of the other. The graves of the Late Viking Period, on the other hand, include no cases of gender transgression. The majority gender of each grave assemblage has, where determinable, been found to correspond to osteological sex with few exceptions.

The dramatic shift from the Migration Period to the Vendel Period entailed subtle changes in the mortuary gender symbolism. There is a tendency among the female graves to adopt, as gender-neutral, attributes that had been exclusively male in the Migration Period. This change coincides with the appearance of women on picture stones, a medium previously reserved for the depiction of male warriors. With the Vendel Period, we find new symbolic openings in the dividing line of the gender dichotomy. Mainly, women were moving into male territory.

5.3 Social status (Ch. 3)

Social hierarchy has an even longer history (or, rather, archaeology) in Scandinavia than the gender dichotomy. The Late Iron Age graves of Gotland provide rich material for the student of inequality. Quantitative status score calculations allow the ranking of individual graves, and, more importantly, of artefact categories. Such status scores are presented in tables 3fg (Migration Period), 3rs (Vendel Period) and 3z & aa (Late Viking Period).

The ranking list for Migration Period artefact types supports the interpretation of two female sub-genders, identified through correspondence analysis in section 3.1.3, as a high-status and a status-neutral group respectively. Not only do high status Migration Period graves contain a greater number of artefacts overall than others, they are also qualitatively characterised by a certain set of attributes. Caskets with handles, locks and keys, as well as fossils, were high status female attributes in this period. As for the male attributes, we find weaponry at the top of the status hierarchy. Among the gender-neutral attributes, knives, gold objects and bronze sheet vessels take the lead, while glass vessels are found surprisingly far down the list. This result supports Näsman's (1984b:21-22) suggestion that glassware was not confined to the upper-most social elite in the Migration Period. Nor was it by this token in the Vendel Period.

The relative status scores of artefact categories present in both the Migration and Vendel Periods are compared in table 3t. There is a quite astonishing degree of continuity in the status system, particularly regarding imports like glass and bronze sheet vessels and bear skins. However, there are some systematic differences. There is a general decline in the status of weaponry as, with the Vendel Period, weapon sets become common and sometimes rather small. The formerly prestigious knives become ubiquitous.

The general pattern to note regarding Late Viking Period status symbols in table 3z is the great dominance in quantitative status of female gender attributes over male ones. In the 11th century, female graves were simply much more richly equipped than male ones. This may indicate that women had special rights of ownership to their jewellery, preventing its continued circulation after the owner's death. Female graves were, on the other hand, generally less intricately built than male graves.

5.4 Human sacrifice and slavery (Ch. 3)

In my opinion, the most eloquent testimony to social inequality in the archaeological record is the evidence of human sacrifice. Judging from Scandinavian finds of this kind, a burial should display certain characteristics to be interpreted as a sacrificial victim. It should be found inside or closely associated with another contemporary burial; there should be evidence of trauma, mutilation and/or binding; and there should be a significant difference in wealth between the two burials. In many cases, sacrificial victims can be expected to be entirely stripped of symbols of their social identity, like most bog bodies. It appears that unfurnished inhumation burials placed in furnished cremation graves may especially indicate human sacrifice. Throughout the studied period, there are a number of graves from Barshalder with bones that can be interpreted according to the abovementioned parameters as those of sacrificial victims. Wear-induced skeletal pathologies among these suspected victims also hint at slave labour.

5.5 Animal bones (Ch. 3)

The bones from 17 Migration Period graves and 34 Vendel Period graves from Barshalder have undergone full osteological analysis. With few exceptions, they all included animal bones. The evaluation of the species determinations is complicated by the fact that many of the graves have proved to contain residual material from a Neolithic substratum.

Five animal groups occur repeatedly in the Migration Period graves: ovicaprid (sheep and/or goat, only goat positively identified), bear, horse, seal (indeterminate species) and dog. The seal bones appear to be Neolithic in date. In the Vendel Period graves, both the number and diversity of the animals are higher. To the animal groups of the Migration Period graves, the Vendel Period adds the lynx. Both the lynx and the bear are represented only by phalanges and have never been part of the fauna of Gotland. The phalanges of these species should thus represent imported skins.

It appears that the number and perceived value of the animals placed in graves should display the same dynamics as the number and perceived value of the artefacts. We may test this argument by examining the correlation between a grave's status score and the number of animals identified in it. Regarding the Migration Period graves, the hypothesis holds true for the lower and middle reaches of the status continuum (cf. table 3i). The graves with the very highest status scores, however, break the pattern. They contained no animal bones at all beyond the phalanges of bear skins, suggesting that their wealthy artefact furnishings belonged to quite another level of status or realm of significance than the animals. One might even speculate that the absence of animal bones in the wealthiest graves indicate rules of ritual purity among the social elite. A recent interpretation (Räf 2001; Jennbert 2002) of animal bones in Late Iron Age burials suggests that the animals were intended as soul guides, psychopomps, for the deceased on their way to the other world.

The Vendel Period graves display no correlation whatsoever between artefactual and animal investment. The Vendel Period animal counts do, however, correlate with the graves' gender. The average number of animals in the male graves is twice as high as that in the female graves, regardless of status score. Also, lynx phalanges are strongly tied to female graves.

In the Late Viking Period graves, animal bones have mainly been preserved along with other foodstuffs in copper alloy vessels. It is hard to say whether the burial food at Barshalder should be seen as a miniature sacrifice to the gods, as symbolic provisions for the afterlife, or both. The fish, fowl, eggs, hazel nuts and vegetables preserved at Barshalder do, however, appear to be rather far from the steaming meat cauldrons of the sacrifices described in the written sources.

5.6 Religious identity in the 11th century (Ch. 4)

Conversion to Christianity took a century (c. AD 1030-1125) on Gotland, from the first church to the last pagan burial (cf. *Barshalder 1* section 8.3.2). It seems to have happened peacefully and gradually. The decision of conversion to Christianity was apparently made at many different times and on a local level of organisation. No blanket conversion decision comparable to that of AD 1000 in Iceland was accepted in any large part of Gotland. Most of the territorial units involved seem to have been the size of the Medieval parishes or smaller, hinting at aristocratic estates or groups of farms with related owners. The distribution of the two furnished cemetery types indicates a century of religious Balkanisation and an absence of centralised control.

Gotland displays a uniquely clear spatial and symbolic distinction between pagan and Christian cemeteries through the conversion period, with few indications of cultic syncretism. In most cases, but not in all, furnished burial ceased with conversion. The cemeteries of 11th century Gotland form three clearly demarcated types:

1. Furnished mixed-gender inhumation cemeteries with a few cremation graves, located away from any known church site. Many burial trenches are over-long and walled with stone. Female graves contain food vessels, riveted boxes, amber amulets and spindle whorls at the foot end of the trench. These cemeteries were, in my opinion, consciously and overtly pagan.

Barshalder, Hemse Annexhemman and Stora Hallvards in Silte parish are prime examples.
2. Furnished gender-segregated inhumation cemeteries at churches. Female graves contain only dress accessories. These cemeteries were in my opinion Christian in a ritually tolerant Eastern mode. These are the so-called "churchyard finds".
3. Unfurnished inhumation cemeteries at churches. These cemeteries were in my opinion Christian in a ritually strict Western mode. As unfurnished graves are difficult to date, the only positively identified member of this type so far is Silte churchyard, with a coin-dated but otherwise unfurnished grave.

Furnished 11th century cemeteries (pagan and/or Christian) are not evenly distributed across Gotland. Instead, they form three clusters separated by cemetery-less areas, dividing the island into six parts. I would suggest that the cemetery-less areas include such that were Christianised very early and were mainly influenced by the Western Church with its strong views on proper burial rites. In such areas we may presume that churches were built early in the 11th century and that burial at the churchyards was unfurnished already from the start. However, the cemetery-less areas should also include ones that were thinly populated at the time due to poor soils or the higher shore line. These may be identified from the distribution of Viking Period hoards and the Medieval Episcopal tax rates for each parish. Finally, solitary lacunae may be expected due to varying excavation and collection histories. The boundaries in the map fig. 4:1 were drawn with these considerations in mind, underlining the distinction between parishes with furnished 11th century cemeteries of either type and parishes without any known cemeteries at all. These boundaries do not coincide with those of the thing/setting/treding territorial division known from historic times.

In the map fig. 4:1,

Area 1 has only pagan furnished cemeteries and was thus probably Christianised in the Western mode late in the 11th century.

Area 2 has no furnished cemeteries at all except for the central pagan ones in Stenkyrka parish: if my interpretation is correct, then this was the main foothold on Gotland of Western Christianity from the early 11th century onward.

Area 3 has both pagan and Christian furnished cemeteries, one churchyard-only parish, two certain parishes with both cemetery types and two debatable ones, indicating a non-Western level of ritual tolerance among the Christians throughout the 11th century.

Area 4 is comparable to areas 1-2 in having only pagan furnished cemeteries: its coastal parts were probably early Western Christian areas and most of its interior thinly populated and poor.

Area 5 is a mix of all conceivable combinations among the cemeteries and was thus probably the centre both of lingering paganism and of ritually tolerant Eastern Christianity through the 11th century.

Area 6, finally, is devoid of furnished cemeteries and should thus be seen as another early 11th century Western Christian area.

A study of pagan mortuary symbolism at Barshalder indicates that most pagan families kept a low symbolic profile through the conversion period. Pagan symbols were kept physically apart from the body of the deceased at least in the female graves, and I believe that this reflects the way in which the pagan identity was managed in social life. Excepting cemeteries and perhaps the silver hoards, there are no contemporary sources, historical or archaeological, that give any insight into pagan cult in 11th century Gotland. Late Viking Period paganism on Gotland shows the marks of a dying faith, lingering discreetly as quaint provincial customs until it was finally abandoned in the early 12th century.

6. Slutsatser och sammanfattning på svenska

Studierna i denna bok följer fem hundra år av förändring i gravsymboliken på Gotland, med särskilt avseende på gravfältet på Barshalder i Grötlingbo och Fide socknar. Arbetet berör främst yngre järnåldern, d.v.s. folkvandringstiden, vendeltiden och vikingatiden, ca 375-1100 e.Kr. Jag har inte behandlat vikingatidens äldre och mellersta fas (ca 790-1000 e.Kr.). Barshalder-gravfältets gravar från denna tid har nämligen ännu inte grävts ut i någon större omfattning.

6.1 Folkvandringstidens typokronologi (kap. 2)

Kapitel 2 etablerar en finkronologisk fasindelning för den tidigare eftersatta folkvandringstiden och den romerska järnålderns sista fas (Eggers C3). Ett uttömmande urval av källkritiskt hållbara gravfynd från Gotland har klassificerats med experimentellt framtagna, stringenta typdefinitioner, samt behandlats med datorstödd korrespondensanalys och seriation. De skilda sekvenserna för mans- och kvinnogravarna korreleras med hjälp av genusneutrala typer och genusöverskridande gravgåvor, plus kompletterande studier av stratigrafi och topokronologi (d.v.s. ”horisontell stratigrafi”).

Kvinnogravarnas fem faser och mansgravarnas tre representerar två parallella serier av successiva moden inom dräkt och smycken. I dagens kronologiska forskningsläge kan yngre järnålderns kvinnogravar därmed delas in i elva sådana faser om 40-100 år vardera. Rörande vendeltidens och vikingatidens kronologi, se *Barshalder 1* avsnitt 7.3 & 8.3. Ständig förändring ägde rum, men det fanns också djupt beständiga drag. Den största omvälvningen i det gradvisa utbytet av föremålstyper i gravarna markerar vendeltidens början under 500-talets andra fjärdedel. Folkvandringstidens början under 300-talets sista fjärdedel var, å andra sidan, inte en mera markant övergång än någon av fasgränserna inom yngre romartiden eller folkvandringstiden.

Detta stämmer väl överens med utvecklingen inom bosättning och jordbruk på Gotland (Dan Carlsson 1979; jfr. *Barshalder 1* avsnitt 2.2.6). De mest dramatiska förändringarna under första årtusendet e.Kr. var a) stengrundsbygdens etablering vid den yngre romartidens inträde i mitten av andra århundradet, och b) samma bebyggelsesystems övergivande fyra hundra år senare vid vendeltidens inträde. Yngre romartidens och folkvandringstidens boplatser och gravfält ger därmed ett intryck av samhällelig stabilitet, medan ett antal rika mansgravar från omkring år 500 kan ses som stressymptom förebådande den kommande omvälvningen. I ett större politiskt perspektiv verkar övergången från folkvandringstiden till vendeltiden i Skandinavien ha inneburit en omorientering hos eliten, från sydöstliga kontakter med germanskspråkiga grupper vid Svarta Havet (Fabech 1991; *Germanen, Hunnen und Awaren*) till sydvästliga kontakter med det merovingiska frankerriket (Steuer 1987).

6.2 Genus (kap. 3)

Könsrollerna i gravarna var i stort sett desamma under hela den studerade tiden, med beväpnade män och smyckade, handarbetande, nyckelbärande kvinnor. Liknande roller kan i Skandinavien följas långt bakåt i förhistorien och fram till nutiden. För att mera exakt ta reda på genuskonnotationerna – kvinnligt, manligt eller genusneutralt – hos en artefaktkategori i gravar från en viss period, se tabellerna 3bcd (folkvandringstiden), 3jkl (vendeltiden) och 3wxy (sena vikingatiden).

Kapitel 3 presenterar och begagnar datorstödda metoder för att undersöka och stringent definiera sådana genusattribut utan att grunda sig på förutfattade meningar. Finesserna i denna symboliska dikotomi var föremål för ständig omförhandling under folkvandringstiden och vendeltiden. Omkring 10% av de någorlunda välutrustade gravarna innehåller genusöverskridande grav-

gåvor, d.v.s. enstaka attribut för det ena genuset kombinerade med en full uppsättning attribut för det andra. De senvikingatida gravarna, å andra sidan, uppvisar inga fall av genusöverskridande. Majoritetsgenuset för varje gravfynd har, där det kan bedömas, med få undantag visat sig överensstämma med den osteologiska könsbedömningen.

Det dramatiska skiftet från folkvandringstiden till vendeltiden innebar subtila förändringar i gravarnas genussymbolik. Det finns en tendens hos kvinnogravarna att anamma, som genusneutrala attribut, sådana som varit uteslutande manliga under folkvandringstiden. Denna förändring sammanfaller i tid med uppdykandet av kvinnofigurer på bildstenarna, ett medium som tidigare varit reserverat för avbildningen av manliga krigare. Med vendeltidens inträde finner vi nya symboliska öppningar i genusskillnadens gränslinje. Huvudsakligen rörde sig kvinnor in på manligt symbolterritorium.

6.3 Social status (kap. 3)

Den sociala hierarkin har en ännu längre historia (eller snarare arkeologi) i Skandinavien än genusdikotomin. Yngre järnålderns gravar på Gotland erbjuder ett rikt material för den som vill studera ojämlikhet. Kvantitativa beräkningar av statuspoäng gör det möjligt att rangordna gravar, och, viktigare, föremålskategorier. Sådana statuspoäng presenteras i tabellerna 3fg (folkvandringstiden), 3rs (vendeltiden) och 3z & aa (sena vikingatiden).

Rangordningen för folkvandringstidens föremålskategorier stödjer tolkningen av två kvinnliga subgenus, identifierade med korrespondensanalys i avsnitt 3.1.3, som en högstatusgrupp respektive en statusneutral grupp. Folkvandringstidens högstatusgravar innehåller inte bara ett större antal föremål än andra gravar, de utmärker sig dessutom kvalitativt genom särskilda attribut. Skrin med handtag, lås och nycklar, liksom fossiler, var kvinnliga högstatusattribut under denna tid. Bland mansattributen finner vi vapen högst upp i rangordningen. Genusneutrala högstatusattribut är knivar, guldföremål och bronsplåtkärl, medan glaskärl påträffas förvånansvärt långt ner på listan. Detta stödjer Näsmans (1984b:21-22) åsikt att glas inte var förbehållet eliten under folkvandringstiden. På samma grund kan man konstatera att det var likadant under vendeltiden.

De relativa statuspoängen hos föremålskategorier som återfinns både i folkvandringstida och vendeltida gravar jämförs i tabell 3t. Statussystemet uppvisar en ganska förbluffande kontinuitet, särskilt vad gäller importvaror som glas, bronsplåtkärl och björnfällar. Det finns dock några systematiska skillnader. Vapnen tappar status vid periodskiftet i och med att vapenuppsättningarna blir vanliga och ibland ganska små i vendeltidens gravar. De tidigare så prestigeladdade knivarna blir alldagliga gravgåvor.

Det allmänna mönstret att notera angående den sena vikingatidens statussymboler i tabell 3z är de kvinnliga genusattributens (mestadels smycken, nycklar och textilredskap) stora kvantitativa statusdominans över mansattributen (huvudsakligen bältebeslag, ringspännen och yxor). 1000-talets kvinnogravar är helt enkelt mycket mera välutrustade än tidens mansgravar. Detta kan tyda på att kvinnor hade särskild äganderätt till sina smycken, vilket förhindrade att de lämnades i arv till de efterkommande och smältes ner när de blivit omoderna. Å andra sidan är kvinnogravarna i gemen långt mindre påkostade till sin konstruktion än mansgravarna.

6.4 Människooffer och träldom (kap. 3)

Enligt min mening är spåren av människooffer de mest vältaliga vittnesbörden om social ojämlikhet i det arkeologiska källmaterialet. Att döma av skandinaviska fynd av detta slag bör en gravlagd individ uppvisa särskilda kännetecken för att tolkas som ett människooffer. Benen påträffas i eller strax intill en annan samtida grav; de uppvisar spår av våld, stympning och / eller bindning; och det är en markant skillnad i hur rikt utrustade de två gravsättningarna är. I många fall är den offrade individen helt utan symboler för sin sociala identitet, i likhet med de flesta mosslik. Det verkar som om obrända lik utan gravgåvor som placerats i brandgravar med gravgåvor särskilt ofta kan tolkas som människooffer. Genom hela den studerade tiden finns det ett antal gravar från Barshalder med ben som kan tolkas utifrån det ovan sagda som rester av människooffer. Förslitningsskador på benen antyder också att dessa misstänkta offer varit trälar.

6.5 Djurben (kap. 3)

Benen ur 17 folkvandringstida och 34 vendeltida gravar från Barshalder har genomgått heltäckande osteologisk analys. Med få undantag innehöll de alla djurben. Bedömningen av artbestämningarna kompliceras av att många av gravarna har visat sig innehålla omdeponerat material från ett underliggande stenålderslager.

Fem djurgrupper uppträder i mer än en folkvandringstida grav: får/get, björn, häst, säl (oviss art) och hund. Sälbenen förefaller vara av neolitiskt datum. I de vendeltida gravarna är djuren mera talrika både vad gäller individer och arter. Till de från folkvandringstiden kända djurgrupperna lägger vendeltiden lodjuret. Både lodjuret och björnen är representerade blott av tåben och har aldrig ingått i den gotländska faunan. Benen av dessa två arter representerar alltså förmodligen importerade hudar.

Man kan vänta sig att antalet och det upplevda värdet hos djuren som lades i gravar skall uppvisa samma dynamik som antalet och det upplevda värdet hos artefakterna. Detta kan undersökas genom att man studerar korrelationen mellan en gravs statuspoäng och antalet djur som identifierats bland dess ben. Beträffande folkvandringstiden stämmer hypotesen för den nedre och mittersta delen av rangordningen (jfr. tab. 3i). Gravarna med allra flest statuspoäng bryter däremot mönstret. De innehöll inga djurben alls utöver tåben från björnskinn, vilket antyder att deras rika artefaktinnehåll hörde till en helt annan statusnivå eller symbolrepertoar än djuren. Man kan till och med spekulera i om frånvaron av djurben i de rikaste gravarna kan ha något att göra med regler för rituell renhet hos eliten. Nyligen har det annars föreslagits (Räf 2001; Jennbert 2002) att djur i yngre järnålderns gravar var avsedda som beledsagare och vägvisare, psykopomper, för de dödas själar på deras väg till dödsriket.

De vendeltida gravarna uppvisar ingen korrelation alls mellan investeringarna i artefakter respektive djur. Däremot korrelerar djurantalet med gravarnas genus. Det genomsnittliga antalet djur i vendeltidens mansgravar är dubbelt så stort som i kvinnogravarna, oavsett deras statuspoäng. Dessutom är tåben av lodjur starkt knutna till kvinnogravar.

I de senvikingatida gravarna har djurben främst bevarats ihop med andra matvaror i kärl av kopparlegeringar. Det är svårt att säga om gravmaten från Barshalder skall ses som gudablot i miniatyr, som symbolisk färdkost åt den döde, eller både och. Fisken, fåglarna, äggen, hasselnötterna och bladgrönsakerna som bevarats på Barshalder verkar dock vara ganska långt från de skriftliga källornas skildringar av blotens ångande köttgrytor.

6.6 Religiös identitet under 1000-talet (kap. 4)

Övergången till kristendomen tog ett århundrade (ca 1030-1125 e.Kr.) på Gotland, från den första kyrkan till den sista hednabegravningen (jfr. *Barshalder 1* avsnitt 8.3.2). Den verkar ha skett fredligt och gradvis. Beslutet om trosskifte fattades av allt att döma många gånger och på en lokal organisationsnivå. Inget övergripande beslut om trosskifte i stil med det på Island år 1000 antogs i någon större del av Gotland. De flesta av de inblandade territoriella enheterna verkar ha varit av en medeltida sockens storlek eller mindre, vilket antyder att det rörde sig om lantgods eller grupper av gårdar med besläktade innehavare. Fördelningen över ön av de två typerna av begravningsplatser med gravgåvor tyder på ett århundrade av religiös balkanisering och en frånvaro av central kontroll.

Gotland uppvisar en unikt klar rumslig och symbolisk uppdelning mellan hedniska och kristna begravningsplatser under tiden för religionsskiftet, med få tecken på kultisk synkretism. I de flesta fall, men inte i alla, upphörde man med gravgåvor i samband med trosskiftet. 1000-talets begravningsplatser fördelar sig på tre klart avgränsade typer:

1. Begravningsplatser med gravgåvor, gravar av båda genus blandade, mest skelettgravar men även en och annan brandgrav, belägna långt från någon känd kyrka. Många gravschakt är längre än nödvändigt och klädda med sten. Kvinnogravarna innehåller matkärl, nitar från små askar, bärnstensamuletter och sländtrissor i fotänden. Dessa begravningsplatser var, enligt min mening, medvetet och öppet hedniska.

Barshalder, Hemse Annexhemman och Stora Hallvards i Silte är goda exempel.

2. Begravningsplatser med gravgåvor, genus-segregerade, idel skelettgravar, belägna vid kyrkor. Kvinnogravarna innehåller bara dräktdetaljer. Dessa begravningsplatser var, enligt min mening, kristna efter en rituellt tolerant östlig modell. Denna grupp är de så kallade kyrkogårdsfynden.
3. Begravningsplatser utan gravgåvor belägna vid kyrkor. Dessa begravningsplatser var, enligt min mening, kristna efter en rituellt strikt västlig modell. Då artefaktlösa gravar är svåra att datera har bara en medlem av denna grupp ännu kunnat konstateras, nämligen kyrkogården i Silte, med en myntdaterad men annars artefaktlös grav.

1000-talets begravningsplatser med gravgåvor (hedniska och / eller kristna) är inte jämnt fördelade över ön. I stället bildar de tre klungor skilda åt av tomma områden som delar in ön i sex delar. Jag vill föreslå att de tomma områdena bl.a. är sådana som kristnades tidigt och främst stod under påverkan av den västliga kyrkan med dess bestämda idéer om gravskicket. I sådana områden kan man anta att kyrkor byggdes tidigt under 1000-talet och att redan de första gravarna på kyrkogårdarna var artefaktlösa. De tomma områdena bör dock även omfatta sådana som var glest befolkade under denna tid på grund av magra jordar eller den högre strandlinjen. Dessa kan identifieras med hjälp av de vikingatida skattfyndens spridningsbild och den medeltida biskopsskatten för varje socken. Slutligen kan man vänta sig enstaka lakuner till följd av olika förhållanden rörande utgrävningar och insamling av fornsaker. Gränslinjerna på kartan i fig. 4:1 är dragna med dessa överväganden i åtanke och understryker åtskillnaden mellan å ena sidan socknar med begravningsplatser av ettdera slaget med gravgåvor från 1000-talet, å andra sidan socknar utan några kända begravningsplatser alls från denna tid. Gränslinjerna sammanfaller inte med den från senare tider kända tings-, settings- och tredingsindelningen.

På kartan i fig. 4:1 har

Område 1 bara hednagravfält och kristnades därmed troligen enligt västlig modell under det sena 1000-talet.

Område 2 har inga kända begravningsplatser alls utöver de centralt belägna hednagravfälten i Stenkyrka socken: om min tolkning stämmer var detta den västliga kristendomens främsta brofäste på Gotland från början av 1000-talet och framåt.

Område 3 har både hednagravfält och kyrkogårdar, en socken med endast kyrkogård, två säkra socknar med båda typerna av begravningsplatser och två oklara fall, vilket tillsammans tyder på en icke-västlig grad av rituell tolerans bland de kristna genom hela 1000-talet.

Område 4 är jämförbart med område 1-2 då det bara har hednagravfält: dess kustområden blev förmodligen tidigt västkristna medan dess inland till större delen var glest befolkad och fattig.

Område 5 blandar alla tänkbara kombinationer av de olika typerna av begravningsplatser och var därmed troligen centrum både för kvarlevande hedendom och för en rituellt tolerant östlig kristendom under hela 1000-talet.

Område 6, slutligen, saknar kända begravningsplatser bör därför ses som ännu ett tidigt västkristet område.

En studie av det hedniska gravskicket på Barshalder tyder på att de flesta hedniska familjer höll en låg symbolisk profil under trosskiftestiden. De hedniska symbolerna hölls fysiskt skilda från den avlidnas kropp åtminstone i kvinnogravarna, och jag tror att detta speglar det sätt på vilket man hanterade sin hedniska identitet i livet. Bortsett från gravfälten och kanske skattfynden finns det inga samtida källor, historiska eller arkeologiska, som sprider det minsta ljus över den hedniska kulten på 1000-talets Gotland. Den senvikingatida hedendomen på Gotland uppvisar särdragen hos en döende tro – den levde diskret kvar som ett system av pittoreskt lantliga sedvänjor tills den slutligen övergavs i början av 1100-talet.

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8. Abbreviations

ÄEG	*Die Ältere Eisenzeit Gotlands* (Almgren & Nerman 1914-1923).
AF	Antal Föremål. The number of artefacts in a grave.
AOT	Antal Oldsags-Typer (Da.). The number of artefact types in a grave.
ATA	Antikvarisk-Topografiska Arkivet. Central archives of the Raä and SHM, Stockholm.
Bhr	Barshalder. In excavated feature numbers, this abbreviation is followed by the year of excavation, a colon, and an individual number, usually the one given by the excavating archaeologist. See catalogue in *Barshalder 1*.
CA	Correspondence analysis.
Csn	Carlsson's (1983, 1988) typological phases of Viking Period jewellery, cf. *Barshalder 1* section 8.3.3.
Da	Danish.
EAA	European Association of Archaeologists
GF	Gotlands Fornsal. The County Museum of Gotland, Visby.
GOKV1 etc.	Høilund Nielsen's (1999a, 1999b) chronological phases for the Vendel Period female graves of Gotland, cf. *Barshalder 1* section 7.3.9.
KHN	Høilund Nielsen's (1987, 1991, 1999a, 1999b) typology for Vendel Period and Early Viking Period jewellery, cf. *Barshalder 1* section 7.3.
KVHAA	Kungliga Vitterhets-, Historie- och Antikvitetsakademin. The Royal Academy of Letters, History and Antiquities; Stockholm.
Raä	Riksantikvarieämbetet. The State Board of National Antiquities.
SGW	*Die Schatzfunde Gotlands der Wikingerzeit* (Stenberger 1947-1958).
SHM	Statens Historiska Museum. The Museum of National Antiquities, Stockholm.
Sw	Swedish.
Tpq	Terminus post quem, earliest possible date.
VWG	*Die Völkerwanderungszeit Gotlands* (Nerman 1935).
VZG	*Die Vendelzeit Gotlands* (Nerman 1969-1975).
W&G	*Waffen und Gräber* (Nørgård Jørgensen 1999).
WG12 etc.	Nørgård Jørgensen's (1999) chronological phases for the Vendel Period male graves of Gotland, cf. *Barshalder 1* section 7.3.10.
WKG	*Die Wikingerzeit Gotlands* (Thunmark-Nylén 1995-).
#	Number.