



# Valsgärde

## ~ Development and change of a burial ground over 1300 years

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This article investigates the 62 cremation burials at Valsgärde, hitherto never discussed as a contextual whole. A chronology over the entire cemetery is constructed, on the basis of which it is possible to map activities on the site and to investigate the structural development of the cemetery in a long-time perspective. The earliest burials date to the Pre-Roman Iron Age; then, after a lacuna of maybe 400 years, there is a more or less unbroken chain of burials from the Late Roman Iron Age until the earliest, Scandinavian Middle Ages. Variations in burial customs suggest that at times, the cemetery was used for occasional, exclusive burials, whilst at other times it appears to have been used by a community of people of varying status.

## INTRODUCTION

The Valsgärde cemetery is known primarily for its fifteen boat-graves. Less well-known are the at least 62 cremation burials and the fifteen inhumations and chamber graves. From the very beginning of the excavations in Valsgärde, focus centered upon the boat-graves. This was quite understandable, since most of them were spectacular.

The history of the excavation of the cremation burials runs parallel with the excavation of the boat-graves, but, of course, mainly in the shadow of the latter. A few of the cremation burials were excavated already in 1929 or in the 1930s, for example, the large grave 57 in 1932. Others were found to have been destroyed or partly disturbed by later boat-graves. A large proportion of



**Fig. 1.** The Valsgärde burial ground with the location of different graves. Some fragmentary cremation graves that were found during the excavation of boat-graves are listed with the number of the boat-grave in paranthesis: 40 (11), 42 (7), 43 (10), 44 (13), 45 (14), 53 (4), 54 (3), 58 (6), giving their approximate position.

the cremation graves were excavated between 1950 and 1952. During these later years, the intention was to excavate the cemetery completely. Many trial trenches were dug across the hill in attempt to find graves with no visible outer construction. Some additional graves were indeed found.

The cremation burials are distributed all over the cemetery, which is divided in two parts by an ancient hollow-way in a natural depression, running NNW–ESE (cf. Herschend in this volume). Almost the whole ridge in the western part seems to have been covered by cremation burials. On the eastern part, the pattern is somewhat different. Here, most of the cremation burials are concentrated in the north while a few are scattered around the three Vendel Period boat-graves in the south (fig. 1).

## Aims

There are two main purposes behind this text. The primary aim is simply to present the Valsgärde cremation burials in context with the different types of inhumations. This means that not only males in boats but also females, juveniles and non-boat-grave males will have a role in the interpretation of the site. A full catalogue of the graves is not included. Relevant information has been summarized in Excel sheets. Full grave descriptions can be found at the archive of the Uppsala University Museum. The efforts have been concentrated on summarizing and interpreting the existing documentation in order to determine gender, age, material status, etc. for the buried individuals, and on dating the graves.

The second aim is better to understand the development of the burial ground and the relations between the individuals buried there. The instrument used for fulfilling this objective is an overall chronology of the cemetery. A detailed discussion of the boat-grave datings has been avoided since these have been extensively discussed by other authors (Arwidsson 1980; Arrhenius 1983; Schönback & Thunmark Nylén 2002). However, where disagreements occur in the interpretations, these issues are addressed. Therefore, other graves than the cremations are also discussed and in some degree described.

This is a cemetery with graves from the Pre-Roman Iron Age to the Early Middle Ages, in absolute terms from at least the 3<sup>rd</sup> century BC to the 11<sup>th</sup> and perhaps even the 12<sup>th</sup> century AD. Most of the datable graves are from the Vendel Period and the Viking Age. This is also the periods when

the richest find and animal assemblages appear in graves in Central Sweden. Many of these graves are moreover also intact. Chronology is an essential part of the study, and therefore it is relevant to present how time is dealt with.

For the main periods concerned, the late Migration Period to the beginning of the Scandinavian Early Middle Ages, in absolute terms 475–1100 AD, there is a number of loose chronological links. It has, for example, resulted in a discussion about the transition between the Vendel Period and the Viking Age (see e.g. Jansson 1985, Thunmark-Nylén 1995) and on whether style I and II existed simultaneously in Scandinavia (Åberg 1947, 1949; Lindqvist 1926, 1949; Høilund Nielsen 2002). During the last twenty years, research on chronology in Sweden has not been coordinated with research in England, Germany, France, and in some degree Denmark (see Hines *et al.* 1999 with refs.). Find chronologies for the Viking Age are more agreed upon (see Skibsted Klæsøe 1999, Callmer 1997, Pedersen 1997), but different opinions still exist, especially regarding absolute dates.

The last fifteen years of Iron Age research with a dominating sociological approach have been extremely beneficial in removing some of the innocence in the archaeological discipline. At the same time, there has been more or less a standstill in the production of new basic research on find materials. This has, for example, led to an excessive longevity for ‘old truths’. One of these is the theory of Sune Lindqvist (1949, p. 41) that the helmet in the East mound of Gamla Uppsala was manufactured more than fifty years before the construction of the grave (Arrhenius 1995; Duczko 1996, p. 77; Ljungkvist 2005). Other long-lived views are that gold ceased to be imported or at least deposited after the end of the Migration Period or that the big mounds in the Middle Swedish landscape originate in the Migration Period (Ljungkvist 2008 with refs.). There is, in short, a need for many chronological clarifications. Some problems will be dealt with in the ongoing chronological work of the project *Death's Snug Chamber* (Ljungkvist ms; Ljungkvist & Victor ms.).

## Chronological statements

Migration and Vendel Period graves have primarily been dated on basis of Petré (1984b) with complements from Åberg (1953), Arrhenius (1983), Nørgård Jørgensen (1999), and Høilund Nielsen (1999). Viking Age datings are mainly based on Callmer (1997), Petré (1984b), Skibsted Klæsøe (1999) and Solberg (1984).

With a lack of a chronology for the beginning of the Migration Period in Middle Sweden, the reference material is so far incomplete. The transition between the late Roman Iron Age and the Migration Period has been studied extensively by Lund Hansen (summary with refs. 1988) and more recently by Rundkvist (2003). The few early graves from Valsgärde make those studies important here. For the present study, the Migration Period is divided into two phases. It is considered to begin c. 400 AD and end 560/70 AD. In part, the present discussion is based on the preliminary results of the chronology established by the project *Death's Snug Chamber*.

When it comes to the Vendel Period male burials, I consider the Vendel Period to start with Nørgård Jørgensen's (1999) Stufe I or Nerman's (1969, 1975) Period VII:1 on Gotland. Characteristic for the early Vendel Period female burials are primarily small equal-armed brooches (see discussion by Åberg 1953) and bead horizon P3 (Petré 1984b, pp. 61 ff.). In absolute dates, the Vendel Period is here considered to begin around 550 AD. Objects in Stufe I or period VII:1 largely coincide with the beginning of Style II.

Petré and Høilund Nielsen (1999) divide Vendel Period female burials into three phases that roughly correspond to Petré's bead horizons P3, P4, and P5. A fairly easily distinguished phase on the islands of Bornholm and Gotland belong to a phase between P4 and P5. In Middle Sweden, this phase is not as distinguishable. Compared to Bornholm and Gotland, this is largely because distinguishable bronze jewellery is rare among the cremation burials (Nerman phase VII:3, Høilund Nielsen 1987; 1999; Jørgensen & Nørgård Jørgensen 1997). Sometimes, however, graves turn up with contents that do not correspond with the established phases. Concrete examples from Valsgärde are grave 56 and 57. Therefore, the Vendel Period is here divided into four phases, Vet 1–4.

The beginning of the Viking Age has been set to the second part of the 8<sup>th</sup> century (see Skibsted Klæsøe 1999, fig. 1; Callmer 1997, p. 198, plate 16a). The male graves in Valsgärde are dated mainly according to the classifications of Solberg (1984) and Pedersen (1995; 1997). The female graves are primarily dated on basis of Skibsted Klæsøe and Callmer (refs. as above). A few of the last graves on the cemetery can belong to what some might call the Early (Scandinavian) Medieval Period, since in absolute terms they are dated to the late 11<sup>th</sup> or even the 12<sup>th</sup> century. The Medieval Period is here considered to begin with the 12<sup>th</sup> century.

Objects and decoration elements used for distinguishing a certain phase are presented in table 1 with short references.

**a**

<b>MALE BURIALS</b>			
<b>Phase</b>	<b>Approx. date</b>	<b>Corresponding Scandinavian phases</b>	<b>Examples</b>
Vet 1	560/70–620/30	Nørgård Jørgensen 1999, phase I-II	Vendel XII, XIV, Valsgärde 8
Vet 2	620/30–700/710	Nørgård Jørgensen 1999, phase III	Valsgärde 7
Vet 3	660–700/10	Nørgård Jørgensen 1999, phase III-IV	Valsgärde 5, Valsgärde 6
Vet 4	710–750	Nørgård Jørgensen 1999, phase IV	Vendel III, Valsgärde 13
Vit 1	750–800	Nørgård Jørgensen 1999, phase V ; Skibsted Klæsoe 1999, per. I	Valsgärde 14
Vit 2	800–850	Nørgård Jørgensen 1999, phase VI-VII; Skibsted Klæsoe 1999, per. I	Birka 942?
Vit 3	850–900	Pedersen 1996, –900	Tuna i Alsike IV
Vit 4	900–950	Pedersen 1996, 900–950	Valsgärde 4
Vit 5	950–1000	Pedersen 1996, 925–975	Valsgärde 12, 15
Vit 6	1000–1050	Pedersen 1996, 975–	Valsgärde 1, 11,

**b**

<b>FEMALE BURIALS</b>			
<b>Phase</b>	<b>Approx. date</b>	<b>Corresponding Scandinavian phases</b>	<b>Examples</b>
Vet 1	560/70–620/30	Petré bead horizon P3, Jørgensen (Høilund Nielsen) 1B1, 1B2	Lunda 27 A36
Vet 2	620/30–700/710	Petré bead horizon P4, Jørgensen (Høilund Nielsen) 1C, 1D1	Lunda 27 A78
Vet 3	660–700/10	Jørgensen (Høilund Nielsen) phase 1D2, Petré bead horizon P4 late?	Tureberg A19
Vet 4	710–750	Jørgensen (Høilund Nielsen) 1D2–2A, Petré bead horizon P5, Callmer 1997 PI 15A	Brista A178
Vit 1	750–800	Callmer 1997, PI 16A, Skibsted Klæsoe 1999, per. I	Birka 655
Vit 2	800–850	Callmer 1997, PI 16B-C, Skibsted Klæsoe 1999, per. I–2a1	Birka 850, 854
Vit 3	850–900	Callmer 1997, PI 17A, Skibsted Klæsoe 1999, per. 2a1–2a2	Gamla Uppsala 36
Vit 4	900–950	Callmer 1997, PI 17B, Skibsted Klæsoe 1999, per. 2a1–2b	Tuna in Alsike VI
Vit 5	950–1000	Callmer 1997, PI 18A–B	Roma kloster
Vit 6	1000–1050	Callmer 1997, PI 18C	Eke äng

**Table 1a–b.** Late Iron Age phases used for Valsgärde in relation to corresponding Scandinavian phases and examples of ‘typical’ male and female graves from each phase. The examples can be tied to the following references: *Arbman 1940–43* (Birka); *Arne 1934* (*Tuna i Alsike*), *Petré 1984a* (Lunda), *Nordahl 2001* (Gamla Uppsala), *Stolpe & Arne 1912* (Vendel), *Walller 1996* (Brista), *Waller 1996 SHM 4366* (Roma kloster), *SHM 29783* (Tureberg), and *SHM 18684* (Eke Äng). The approximate dates for earlier and later phases are *Fvt1*: –475, *Fvt2*: 475–560/70, *Vit7*: 1050–1100, and *Met*: 1100–.

## The historical use of the hill

The cemetery is situated right next to the River Fyris in the Upplandic 'plain'. This area is a low and wide valley with moraine deposits on higher ground and clay deposits below. In the bottom flows the River Fyris. Parallell to the river runs a boulder-ridge, *Uppsalaåsen*, which sometimes goes below the present surface but at other times rises steeply above the clay sediments. The Valsgärde cemetery is situated on one of a group of small hills belonging to this boulder-ridge. Its highest point rises over 25 meters above present sea level.

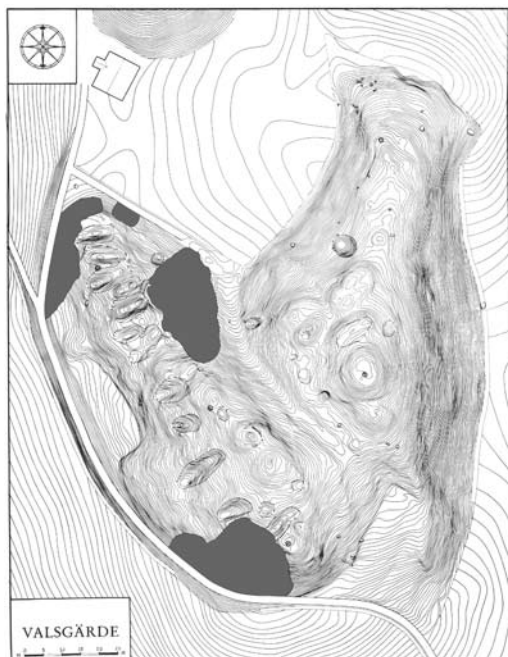
Due to the last glacial phase, Valsgärde did not rise above the water until the Late Neolithic or the Early Bronze Age. For a time, the hill was only a small island in an inner archipelago. The oldest object from the site originates from this phase. It is a fragmentary, bifacial spearhead or dagger point of flint. The surrounding area as we know it today probably did not emerge until some time in the Bronze Age. The oldest dated feature from the site is a skeleton from one of the older burials in grave 57. This marks the beginning of an intensive use of the hill and lands in Valsgärde. A closer discussion on these matters can be found below.

For the entire Medieval Period neither archaeological nor written sources indicate a settlement on the site. When Valsgärde finally is mentioned in 1540, it is a rather small farm. It might have been quite established when it appear in the sources. The villages in the vicinity are all mentioned much earlier, Ensta in 1302, Fullerö in 1299, Hämringe in 1365 and Vallskog in 1321 (DMS 1:2; 1:3).

## Damaged and completely excavated site?

Graves are the central features of the hill in Valsgärde but as briefly mentioned above, it has probably been affected by human activities ever since it rose from the sea, although initially it was not used as burial ground. More important questions to answer is to what extent the cemetery has been affected by human hands since it was abandoned, and how many graves have been damaged or destroyed by later burials.

To begin with the first question, it is obvious that the western part of the cemetery has been damaged by gravel pits. Three major and one small



*Fig. 2. Areas of the hill, damaged by gravel pits (highlighted areas).*



*Fig. 3. Excavation picture of the damaged grave 59 on the edge of a gravel pit (Unknown photographer, by courtesy of Uppsala University Museum)*



pit were documented in a detailed survey in the 1930s (fig. 2). To this, we should probably add minor damages that are invisible today and have not been documented. Damage to the same extent has not been noted in the eastern part, but based on the topography, a number of small probable gravel pits can be seen.

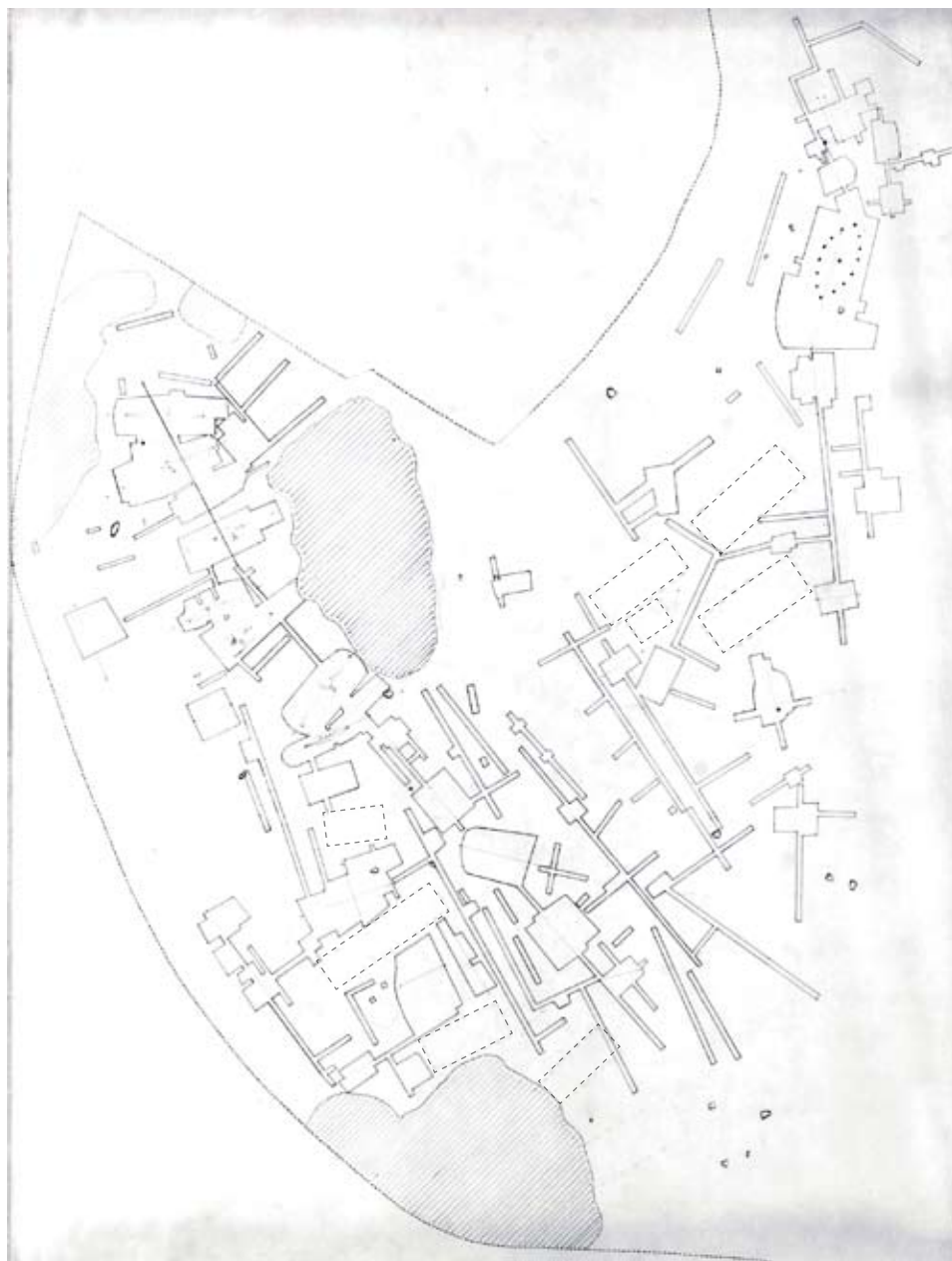
It is impossible to know but important to discuss how many graves have been lost due to different activities. There is definite evidence of two cremation burials (grave 53 and 59) that have been damaged by gravel pits (fig. 3). It was gravel digging that led to the discovery of the first boat-grave in Valsgårde, when a horse bit was found in what later became boat-grave 1 (Lindqvist 1929, p. 165). Also, grave 8 was partly damaged by gravel digging.

Relating the spatial distribution of graves with documented gravel pits, it seems very likely that a number of graves have been destroyed. In the SW part, graves have been documented from the crest of the hill and almost all the way down to the road along its western side. Also, the southernmost gravel pit drives a clear wedge into an otherwise even pattern of graves.

What we have seen of destruction in Valsgårde is a problem that exists on every cemetery on the Uppsala boulder-ridge. Despite this, Valsgårde is probably one of the best preserved sites. Examples of the opposite are, for example, found in Gamla Uppsala (Raä 123), Ultuna in Bondkyrko parish (Raä 401), and Gränby in Ärentuna parish (Raä 105).

Another question is whether the cemetery as we know it should be considered as completely excavated or not. This problem will be addressed under two separate subtopics.

The first question is whether all graves on the hill have been found. There was in the early 1950s a clear ambition to excavate all or as many as possible of the graves. Beside trenches dug for visible graves, a large number of narrow test trenches were made across the hill (fig. 4). However, experiences from grave excavations since the 1960s have shown that cemeteries cannot be considered as completely excavated if the topsoil has not been completely removed over the whole site. Nevertheless, in Valsgårde a very thorough job has been done considering that this was before the time of mechanical excavators. What might have been missed is primarily a number of small cremation burials with anonymous construction, post-holes, hearths etc. There is evidence for quite anonymous graves on the site (e.g. graves 58, 61, 67, and 97); at least nine of the cremation burials had no documented outer grave construction that was visible on the surface. We cannot rule out that a number of cremation burials remains to be found on the hill.



*Fig. 4. Documented trenches on the hill. Original plan by Else Nordahl and Bengt Schönbäck, with some boat-grave trenches graphically enhanced for visibility.*

Second, one must ask if graves were placed in what today is cultivated land and if graves can still be found beneath the topsoil. There is still no definite answer to this question. On the field north of the hill, a small area was excavated in 2001 in order to investigate indications of a burial in the form of a Viking Age bronze belt ornament, found on a metal detector survey in 1996 (Lindbom 1997). However, no grave was found (Sundkvist 2001).

## Methods, analyses and some source critical problems

The Valsgärde cremation graves have been excavated by a number of different archaeologists over a long time span and with some variation in ambition and methods. Most graves have been completely excavated with a complete set of plan and profile drawings as well as high-quality photographs. After the excavations, the material has also been professionally handled. No material has disappeared during more than 50 years in the museum. Some iron objects have not fared well during the years, but not worse than many other materials.

Some graves have eluded satisfactory interpretation. Especially in the case of grave 57, excavated in 1932, some important information is lacking (fig. 5). It seems that only the centre of both the early and the late grave were excavated. Further, proper text documentation of the stratigraphy has not been found, and all its separate burials (grave 57: Vendel Period cremation, grave 57A–D: Pre Roman Iron Age inhumations, and 57E–F: eventual additional cremations represented by boxes of burnt bones) and layers are not documented on plan or profile drawings.

The stratigraphy of the Valsgärde cemetery is in some cases complicated. Different types of graves are often stratigraphically related to one another. As a high percentage of the graves contain no artefacts that can be precisely dated, this complexity is an important instrument. Especially Bengt Schönback and Else Nordahl were observant on stratigraphical matters.

An important source-critical problem relates to the number of graves that have actually been found. It is linked to several different factors. One is the interpretation of grave remains found during the excavation of boat-graves. In some cases, such as the excavation of grave 6, 7, and 2, burnt bones and pottery were found in boat-grave fills, but no traces of a construction (grave 42, 58 and 2B). In a strict sense, it is almost impossible to relate these finds to a single grave. Another factor is related to the number of burials in grave



*Fig. 5. Picture taken of grave 57 during excavation in 1932. Note how the excavation is made primarily in the central part. (Unknown photographer, by courtesy of Uppsala University Museum).*

57. Beside its four Early Iron Age inhumations, and the cremation layer from the Vendel Period burial, there exist two boxes with burnt bones from the mound. According to the notes on the boxes, they are related to two different parts of the cross profile. No documentation tells us from which layers they originate. It is, however, interesting that they have not the same coal and ash affected color as the bones from the late grave. That might indicate that they originate from earlier graves, perhaps from the Pre-Roman Iron Age. Recent excavations from, for example, Kyrsta in Ärentuna parish and the Åby cemetery, reveals that it is not uncommon with multiple burials in a single stone-setting or a concentrated area on a small outcrop. (Engström & Wikborg 2007, pp. 20 ff.; Äija 1987, pp. 31 f., 49 f.).

In at least one case, grave 73, it has been difficult to determine whether the grave consists of one or two different burials. Today, it is interpreted as grave 73a and b; there is no clear evidence that they are separate burials.

A more definite answer to the status of the above-mentioned graves might be provided in the future by osteological analyses.

In all, 63 cremation graves are interpreted as found on the hill. Among these are the cremation burials in the original series as well a grave 2B and at least one probable grave from mound 57, here given the designation grave 57E. The four older inhumations in grave 57 are accordingly designated as grave 57A–D. The remains of an inhumation in grave 22 are designated as grave 22b.

## Osteological determinations

Three different osteological analyses have been made on parts of the material (table 2–3).

Nils G. Gejvall analysed parts of the material on at least two occasions. His determinations were based on quick surveys of the material, with interpretations of sex, age and the different species present. Ylva Bäckström has made a thorough analysis of seven graves (67, 69, 70, 85, 86, 94, and 96). It has covered MIND, age, body parts represented, species, etc. To avoid influence by archaeological determinations, the analysis was a blind test with no previous knowledge of the graves.

Gejvall's determinations were, as he himself stated, very preliminary. Here, they have not been used for sex determinations of the graves. Concerning closer age determinations, only Bäckström's are used.

A lingering question during the work with the cremations is the relation to the material in the boat burials. The amount of bones from each grave was either weighed or measured according to volume before Gejvall's analysis. When the amount of bones from Valsgärde is compared with other excavations where the total material has been determined (Sigvallius 1994, Petré 1984; 1999; 2000), we get a rough estimate about the amount of animals in a grave. For natural reasons, especially horses give a very distinct offprint in the total weight of a bone material.

Some graves with more than 5 liters of bones stick out clearly from the majority (fig. 6). Among these, grave 66 is outstanding. Gejvall identified bones from horse, pig, goat/sheep, at least two dogs, and birds. But this is most probably a minimum. It is, for example, highly likely that it contains at least two horses.

Grave	Kilo	Litre	Grave	Kilo	Litre
44	-	1,1	78	0,2	-
57	-	10,3	79	-	2,0
59	-	1,2	80	-	2,0
60	-	2,0	81	-	0,6
61	0,08	-	82	3,6	3,9
62	-	1,1	83		2,2
63	-	3,4	84	0,06	0,05
64	-	1,1	85	6,5	-
65	-	2,7	86	1,5	1,6
66	-	31,2	87	0,04	-
67	-	5,7	88	0,7	-
68	-	1,9	89	0,6	-
69	-	12,6	90	0,075	0,05
70	-	2,1	91	1,6	2,2
71	-	1,0	92	3,1	4,6
72	-	1,5	93	1,1	1,5
73	-	2,0	94	7,0	7,6
73b	-	1,5	95	-	2,05
74	-	1,5	96	-	0,5
75	-	3,1	97	0,5	0,45
76	-	2,0	98	-	0,1
77	-	0,3	99	-	1,3
Sum total				26,655	122
Sum average				1,78	7,17

*Table 2. Bone rich cremation burials in Valsgärde. One liter of bones seems to weigh a little less than a kilo.*

Grave	Phase	Elite status? Y/N	Sex	Bones liters or kilo
57	Vet 3–4	Y	F	10.3 l
66	Vit 2–3	Y	M and ?	31.2 l
67	Vit 1	N	F	5.7 l
69	Vet	N	M?	12.6 l
85	Vit 4	Y	F	6.5 kg
94	Vit 4	Y	F	7.6 l

*Table 3. Weight or volume of bones collected from the different graves according to the documentation.*

**Fig. 6.** The bone filled pottery vessel of grave 94 standing in the cremation layer. Next to the vessel are the two partially revealed oval brooches visible (photo by Bengt Schönback, by courtesy of Uppsala University Museum).



## Dating the graves

### Radiocarbon datings

Six  $^{14}\text{C}$ -datings have been made on material from inhumation burials (table 4, fig. 7).

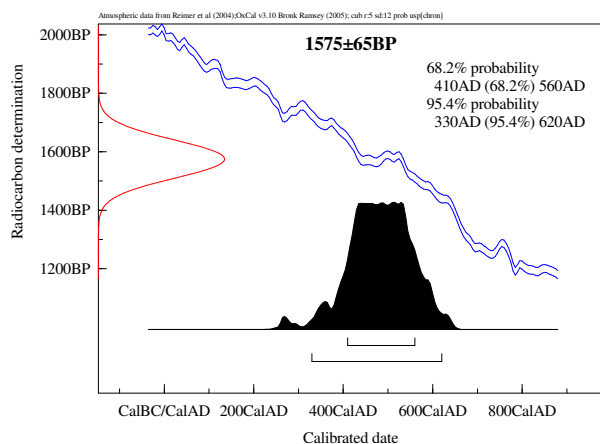
The dated object from grave 57 was a femur, probably from the most preserved skeleton mentioned by Lindqvist (1934, p. 140).

Three conventional datings were made on material from Valsgärde 7 in 1963. Sample 1 consisted of oakwood from the boat, while sample two and three were taken from the roof-timbers that once covered the boat/chamber (Norr on Valsgärde 7 in this volume; Arwidsson 1977, p. 132).

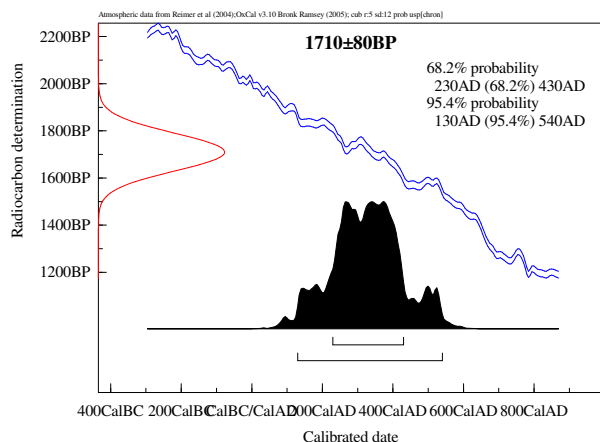
I have not been able to find out what material from the chamber graves was used for radiocarbon dating.

Grave/sample	Date	Calibrated 2 $\sigma$	Calibrated 1 $\sigma$	Datable finds?
7, sample 1	1260 $\pm$ 70 (boat)	640AD (93.1%) 820AD 920AD (2.3%) 950AD	660AD (93.1%) 900AD 840AD (5.4%) 860AD	Y
7, sample 2	1430 $\pm$ 75	430AD (93.2%) 720AD 740AD (2.2%) 770AD	540AD (68.2%) 670AD	Y
7, sample 3	1485 $\pm$ 80	400AD (95.4%) 680AD	440AD (12.9%) 490AD 530AD (56.2%) 650AD	Y
24	1575 $\pm$ 65	330AD (95.4%) 560AD	410AD (68.2%) 560AD	N
27	1710 $\pm$ 80	130AD (95.4%) 540AD	230AD (68.2%) 430AD	N
57, grave	2305 $\pm$ 65	750BC (2.4%) 650BC 550BC (93.0%) 150BC	420BC (33.6%) 340BC 320BC (34.6%) 200BC	N

**Table 4.** Calibrated  $^{14}\text{C}$ -samples from Valsgärde Calibrations in OxCal 3.10 according to Bronk Ramsey 1995 and 2001.



**Fig. 7.**  $^{14}\text{C}$  curves for chamber graves 24 (above) and 27 (below). Calibrations in OxCal 3.10 according to Bronk Ramsey 1995 and 2001.



## Artefact datings

Of 62 cremation burials, 49 contain datable finds. Of the remaining 14 graves (42, 43, 52, 58, 73a, 73b, 81, 84, 87, 90, 91, 2B, 57E, and 57F), eight have been partly or completely destroyed by later burials, which in some cases might explain the lack of datable finds.

The graves have here been dated on basis of the above-mentioned chronologies. In a few cases, closer examinations of the osteological material could perhaps give better datings, as comb fragment in many cases are hidden among the rest of the often very dirty bones in the museum's storage. Washing and examination of the bone materials from grave 63 and 91 gave very promising results. From each grave came additional comb fragments and from grave 63 several fragments of an elephant ivory ring together with glass fragments from a vessel.



### *Relative stratigraphy – graves with no find datings*

The densely packed graves have, as previously mentioned, led to the damage and destruction of many cremation burials. On the other hand, the stratigraphy is useful for identifying relative dates. Of the 12 cremation burials with no datable finds (42, 43, 45, 46, 52, 58, 73a, 73b, 81, 87, and 90), all have some kind of relative datings. In most cases, they are covered or disturbed by Viking Age boat-graves, which gives a rather crude relative dating. But it does give some information that can help strengthen patterns from find datings.

Of the above-mentioned graves, two (graves 42 and 58) are from the Vendel Period or before as they have been completely destroyed by boat-graves from the same period. Of the remainder, one (grave 43) is earlier than the beginning of the Viking Age as it is covered by grave 14. All the others are covered by 10<sup>th</sup> and 11<sup>th</sup> century burials. How they are interpreted chronologically is shown below (table 5 and 6).

Nine graves, 47, 55, 62, 69, 71, 79, 84, 89, and 96 can only be find dated to one or two main periods. Grave 79 has a stratigraphical relation to another grave, but that does not help much.

A combination of find datings with relative stratigraphy gives 44 cremations that can be tied to one or two phases. All the boat-graves can be closely dated (Schönbäck & Thunmark-Nylén 2002, fig. 11). Of the old chamber graves, no. 21, 24, 26, and 27 lack find datings; however, graves 24 and 27 have one <sup>14</sup>C-date each (see above).

Grave	Earlier than grave	Later than grave	Relative age	Estimated age
42	7	-	<Vet 2	<Vet
43	10	-	<Vit 6	<Vet
45	14	-	<Vit 1	Fvt-Vet
46	28 and 15	-	<Vit 5	<Vit 5
52	4	-	<Vit 4	<Vit 4
58	6	-	<Vet 3	<Vet 3
73a	28	15	Vit 6	Vit 6
73b	28	15	Vit 6	Vit 6
81	25	-	<Vit 6	<Vit 6
87	3	-	<Vit 4	<Vit 4
90	4	-	<Vit 4	<Vit 4

*Table 5. Relative datings of graves not datable by finds. Fvt= Migration Period (sv. folkvandringstid, Vet= Vendel Period (vendeltid), Vit=Viking Age (vikingatid).*

Phase	Cremations	Boat graves	Chamber graves	Total
Sen RJ–fvt	-	-	27 ( <sup>14</sup> C), 21?	1
Fvt	-	-	20 (M)	1
Fvt 1	-	-	-	-
Fvt 2	49 (F) 40 (J),	-	-	1
Fvt–Vet 1	41 (M), 47, 61, 91	-	-	5
Fvt–Vet 2		-	24 ( <sup>14</sup> C)	1
Vet	44, 55, 62, 69, 75 (M?), 79, 97	-	-	7
Vet 1	48 (F), 63 (F), 68 (F), 76 (M), 80 (M), 82 (M), 83 (M), 88	-	29 (M)	9
Vet 1–2	50	8 (M)	-	2
Vet 2	65 (M), 70, 78 (F)	7 (M)	-	4
Vet 2–3	60	5 (M)	-	2
Vet 3	56 (F)	-	-	1
Vet 3–4	57 (F), 72 (F)	6 (M)	-	3
Vet 4	64 (F), 99 (F)	13 (M)	-	3
Vit	96 (F?)	-	-	1
Vit 1	59 (F), 67 (F)	14 (M)	-	3
Vit 1–2	74, 92 (F)	-	-	2
Vit 2	98 (F)	-	-	1
Vit 2–3	51 (I?), 66 (M)	-	-	2
Vit 3	-	-	-	-
Vit 4	85 (F), 86 (F), 94 (F)	2 (M), 3 (M), 4 (M)	-	6
Vit 5	-	12 (M), 15 (M)	-	2
Vit 5–6	-	10 (M)	-	1
Vit 6	77 , 73a, 73b	1 (M), 11 (M)	-	5
Vit 6–7	-	9 (M)	22 (M), 23 (M), 28 (M), 26	6
Vit 7–Met	-	-	25, 28 (M)	2

*Table 6. Graves per determined phase on the Valsgårde cemetery. Archaeological sex determinations are in paranthesis. (M)=Male, (F) Female, (I)=Infant, (J)=Juvenile, (<sup>14</sup>C)=<sup>14</sup>C-dating only.*

## Grave forms

The constructions of the Valsgärde burials are discussed below according to outer and inner grave construction. These are purely technical descriptions, used to distinguish different graves.

A large variety of outer grave constructions has been distinguished among the cremation burials (fig. 8). There are mounds, round and square stone-settings, irregular stone packings, and a number of obscure constructions. The interpretation of these constructions can vary. Therefore, the definitions between some types are defined below.

Mounds are here defined as having a rounded profile. They have in most cases a central cairn, small or large, which is in its turn covered by layers of earth, sand, gravel or clay, more or less mixed with stone. The material of the hill itself consists of sand, gravel and stone from the boulder ridge.

Stone-setting is a family name for a multitude of different constructions. Some consist of a round frame of stones with no filling, while others have a distinct stone packing. The size of the chosen stone materials for the graves can vary considerably.

The Valsgärde graves have been classified in the following categories:



*Fig. 8. Grave 55 from the Vendel Period, excavated in 1929. On the photo Svante Sandberg (Photo by P. Olsén, by courtesy of Uppsala University Museum).*

Mounds (17);  
Stone-settings (16);  
Irregular stone packings (5);  
Square stone-setting (1);  
Stone-setting or cairn (1).

The rest of the graves were classified as indefinable constructions, more or less destroyed or simply without outer construction.

### ***Inner grave construction***

Among the inner grave constructions in Valsgärde, the cremation layer dominates completely. This is hardly surprising, given that cremation layers are most common among Late Iron Age burials in Middle Sweden. In Valsgärde, however, the definition is somewhat problematic inasmuch as 27 graves have distinguishable black layers with substantial quantities of coal and ashes beside bones and objects. In 12 cases, bones and objects are also found in layers, but the amount of coal and soot is so small that the excavators used the term *fyndlager* ('find layer'). This kind of layer nonetheless seems to represent the idea of the cremation layer; therefore, the field-definitions *cremation layer* and *find layer* are both referred to below as a *cremation layer*.

Fire pits exist in six cases. Three of these (graves 46, 47, and 86) are shallow pits in cremation layers, two are interpreted as shallow fire pits (graves 48 and 80) and only one is a true fire pit (grave 88). The find datings of these graves suggest a correspondence between fire pits and early dates for cremation burials (table 7).

## **Sex and age determinations**

### ***Source criticism and method***

Sex determinations are based partly on the finds material, partly on osteological determination. The archaeological sex determinations follows the discussion by Petré (1984, pp. 191 ff.). Objects that according to Petré with certainty indicate male sex are weapons and weapon equipment, strike-a-light flint and gaming pieces/dices. He also states that whetstones can be attributed to males during the 5<sup>th</sup>, 6<sup>th</sup> and 7<sup>th</sup> centuries.

Grave	Burial form	Period/phase
46	Shallow pit in cremation layer	Iron age
47	Shallow pit in cremation layer	Fvt-Vet
48	Shallow fire pit	Vet 1
80	Shallow fire pit	Vet 1
86	Shallow pit in cremation layer	Vit 4
88	Fire pit	Vet 1

*Table 7. Fire pits and their relation to a phase/period.*

Petré (1984, pp. 191 ff.) classifies graves with more than three beads as female. It seems to be a correct assumption but a number of beads can occur in high status burials that are otherwise related to males, as in Rickeby, Vendel and Broby (Sjösvärd 1987, pp. 72 f.; Stolpe & Arne 1912, pl. XII; Lindqvist 1936, p. 36). Other objects in all probability attributable to women are dress needles, fibulas, ear spoons, and keys. Petré also attributes hide scrapers, ivory rings, thread inlaid stone pendants and lynx claws to females.

In these cases, archaeological sex determinations have precedence over osteological determinations. The primary reason is that all the graves are cremations with more fragmented bones than the inhumations, and thus they are generally lacking important sex determining elements. Boat and chamber graves are in most cases almost void of human bones, while animal bones in the boat-graves are generally in better condition.

Bo Petré also attributes the grave construction element *stone ball* to female graves. A survey of the grave descriptions has not produced a similar pattern for Valsgärde. In order to get a reliable result, it is necessary to study all drawings and photographs in more detail in search for these elements. There has, however, not yet been enough time to do that.

### *Cremation burials*

According to the above-mentioned criteria, 17 cremation burials have been determined as female. Cremations determined as male are seven, and three have been defined as uncertain males.

Osteologically, four out of seven determinations by Bäckström (65, 85, 86, and 96) fit with the archaeological determinations. Two graves (69 male? and 70 male) had no archaeological sex determination. Grave 94 was determined as a male but contained a complete jewellery set and no artifacts signaling male sex. Based on the objects, this person is interpreted as a female, although with some uncertainty (cf. Gräslund in this volume, pp. 73 ff.). A combination of

the archaeological and osteological sex determinations among the cremation burials thus makes 17 individuals considered as females, 8 as males and 4 as probable males.

Infants and juveniles are a special group according to both sex and social status. Five infants have been identified through osteological analyses. Bäckström has found one infans II (grave 65). Gejvall identified a child, a few months of age in grave 40, a probable child in grave 50, a child or youth in grave 72, and a child below 18 years, probably around 12 years of age, in grave 88. The human remains in grave 72 is archeologically determined as female; the rest are undeterminable.

Cremation graves with no sex determinations number at present 22. The osteologically identified infants are not counted into this group.

### *Chamber graves, inhumations and boat-graves*

Regarding the early chamber graves, grave 20 and 29 have sex indicating objects (Tjernberg 1948; Groop 2000; Uppsala University Museum).

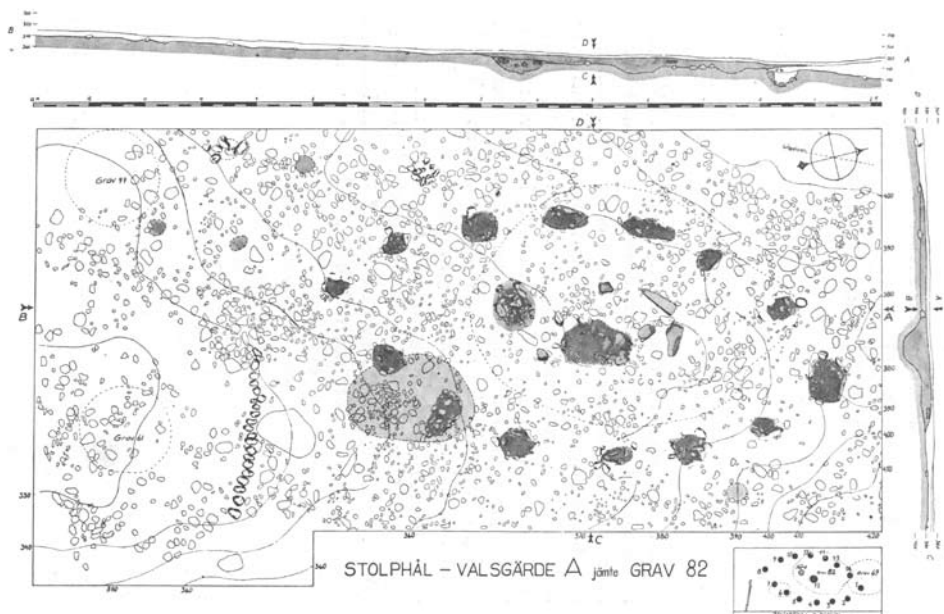
Among the five late chamber graves, graves 22, 23, and 28 contain clearly male indicating burial goods in the shape of weapons and riding equipment. All 15 boat-graves can be considered as male according to the same equipment. Like the boat-graves, no chamber grave has any equipment indicating female sex and no graves have been osteologically determined.

## **Other features**

Activity traces and features beside pure burials will hopefully be dealt with in detail in the future. Some of the 17 features are, however, important to mention here. During the excavations of graves, features (beneath grave 71, 72, and 79) and culture layers (beneath grave 46, 66, and possibly 21 and 22) were found. Next to one of the older burials in grave 57, the above-mentioned Late Neolithic or Early Bronze Age flint point was also found.

A source critical factor concerning other features than graves is that they hardly were a priority during the excavations. It was also a time when the knowledge about post-holes and other features was undeveloped.

Regarding these features, one must initially ask whether it is likely that a settlement was ever placed on the hill. Its generally steep elevations and lack of larger flat surfaces speaks against this. Perhaps one can assume some



*Fig. 9. Construction A with surrounding graves and features. From Schönback 1957, fig. 1.*

temporary activities during the Late Neolithic or Early Bronze Age, but the single flint point is so far the only indication.

Most of the features and culture layers can probably be related to the graves, or being traces of activities in the margin of settlements. So far, only one of these features has attracted special interest. Construction A (Schönback 1957) is a ship setting, although of a very unusual kind (fig. 9). Instead of being made of stones, it was made of raised posts. 14 regularly spaced posts represent the sides of the ship while a central pit seems to represent another construction element.

The ship setting is 9 m long, 4.2 m wide and oriented NNE–SSW. To determine the age of this construction is problematic insofar as it only can be dated relatively through the stratigraphy. No feature can be considered stratigraphically older, so strictly we cannot say when it was built. Grave 82 from Vet 1 was placed above construction A since its filling covered a number of the post-holes. Fragments of pottery was found on the surface of one the posthole, and bones were found in the central pit. However, they seem to have been placed in remaining depressions from the abandoned ship setting. The same phenomenon can be found in grave 66, where fragments of the glass beaker were found in the top layer of the much older chamber grave 21.

The age of construction A is so far TAQ Vet 1. It is most probably older than any of the boat-graves, and is it therefore tempting to regard it as a symbolic precursor of the later, real ships.

## Event phases and cemetery development

Reconstructing different phases aim primarily at presenting structural changes on the cemetery (fig. 11–25). This means that the presented phases do not necessarily follow ordinary archaeological chronologies for the Iron Age. For example, one phase stretches from the late Vendel Period to the early Viking Age.

A methodologically difficult group contains the non-datable graves that in many cases have been damaged or destroyed by later burials. A large proportion of these graves are found in the NW part of the cemetery, just north of grave 11. Eleven graves with non-datable material were found in this part. One of these was covered by an early Viking Age grave (14) and the remaining ones by 10<sup>th</sup> or 11<sup>th</sup> century graves. The large number of these graves and their proportion of the total number of graves makes it important to at least estimate their dates. Among the cremation burials in this area, we have two graves dating to the late Migration or the early Vendel Period, and six ones dating to the early or mid-Vendel Period or the Vendel Period in general. There is no grave in this area from the late Vendel Period and, apparently, only two from the early Viking Age. Thus, it seems like most of these graves should be dated to the middle of the Vendel Period and earlier, perhaps also the Migration Period.

Not be forgotten in this discussion are the remains of grave 22b, found during the excavation of grave 22. That these remains represent a late Viking Age grave, let alone a boat-grave seems unlikely. Instead, they would seem to represent a destroyed inhumation or chamber burial from a period between the Late Roman Iron Age and the early Vendel Period. This interpretation is tempting, not least because grave 22 lies close to and in line with early chamber burials.

Some dated graves cannot be tied to a single phase with significant certainty (see table 6). In order to be able to present a theory regarding the development of the cemetery these have, nevertheless, in some cases been placed in a phase that they have been considered *likely* to belong to.



### *Event Phase 0*

In addition to all the graves, at least 17 non-grave features have been found on the hill. To this category, also culture layers and old surface layers with traces of cultural activities can be included. These activities can in some instances be related to funeral activities; in other cases, they probably represent more profane activities in areas when the hillock was not actively or yet used as a burial ground. The start of this phase is defined by the land uplift, and it infiltrates all later phases.

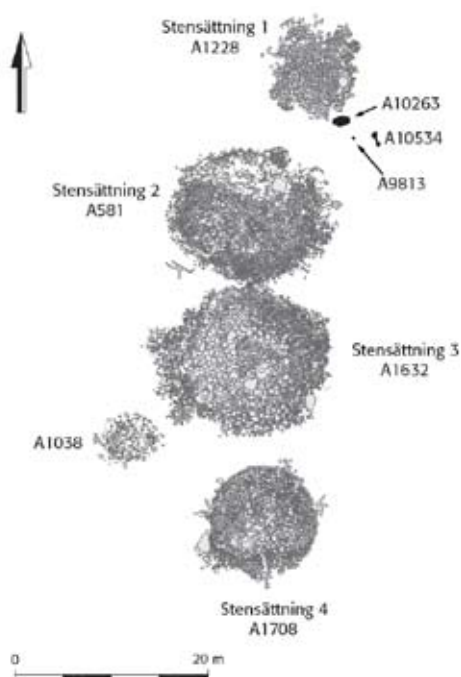
### *Event Phase 1 (fig. 11)*

During the Pre-Roman Iron Age (500–0 BC) at least four inhumations graves (57A–D) are constructed on the highest location of the site, and they are covered by a large stone-setting. One of them is  $^{14}\text{C}$ -dated to  $2305 \pm 65$  BP (Ua-15530). It is very likely that at least one cremation burial relates to this grave (see above). There is also a possibility that the remains of a cremation grave(s) found during the excavation of Valsgårde 6 (Arwidsson 1942, p. 151) belongs to this phase.

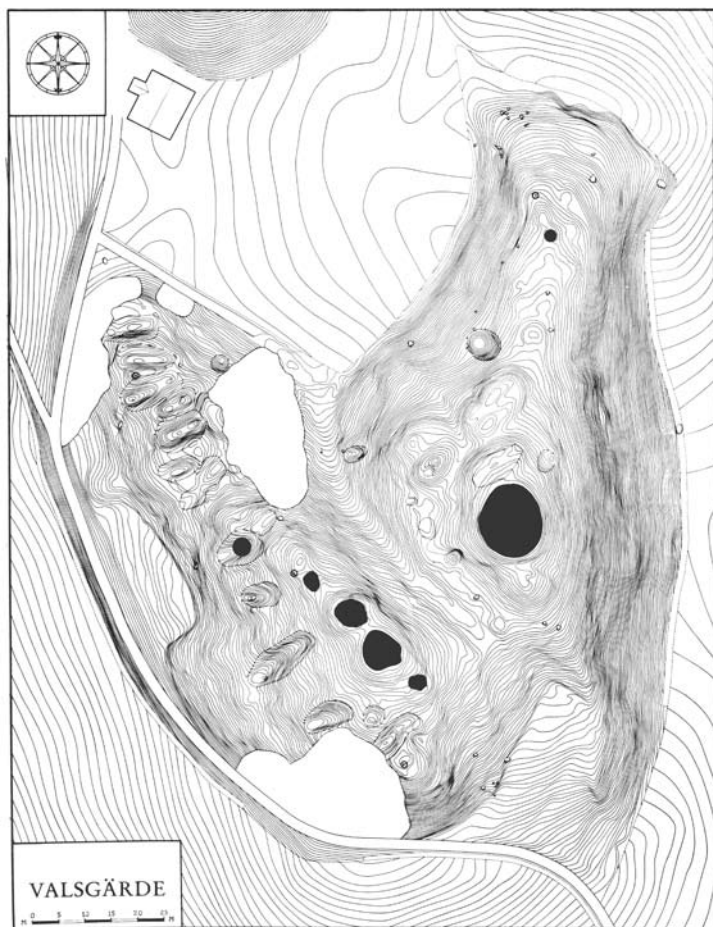
### *Event Phase 2 (fig. 11)*

With no evidence of burials for almost 400 years, chamber burials appear around the middle of or the Late Roman Iron Age (grave 27), and such graves are constructed until the Late Migration Period. No cremation burials are dated to the Late Roman Iron Age and only two to the Migration Period (grave 40).

The evidence for additional Migration Period cremations is meager. Thus, it seems as if the cemetery was primarily used by a relatively small group of people, buried in chamber



*Fig. 10. The main part of the Lilla Sylta cemetery, with positions of the graves.*

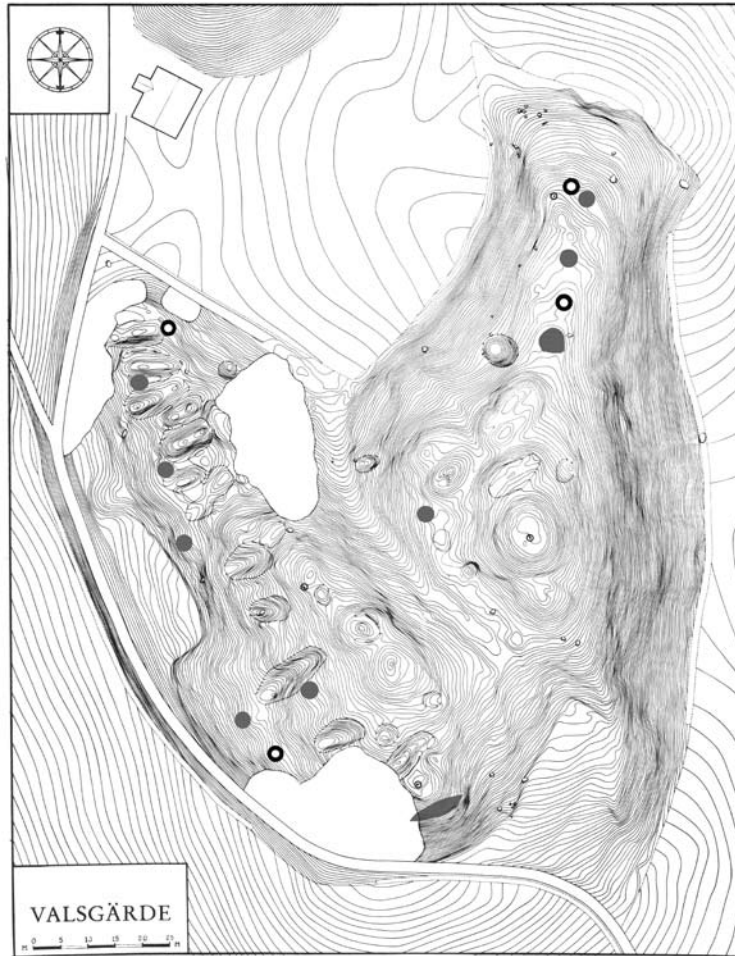


*Fig. 11. Event phase 1–2. The large Pre-Roman Iron Age grave 57 is located in the eastern part, while most Late Roman to Migration Period graves are found on the western ridge.*

graves. During this phase, the cemetery bears some resemblance to the Sylta cemetery from Fresta parish, Uppland (compare figs. 10 and 18). This was a short-lived, small cemetery on a hill, dominated by chamber graves in large stone-settings (Victor *et al.* 2005). It was also closely related to a settlement in the same way as may have been the case at Valsgärde.

### *Event Phase 3, Vet 1 (fig. 12)*

Compared to the previous period, the Early Vendel Period (Vet 1) cemetery had a completely different structure. One closely packed group of graves is found on the northern part of the eastern half of the cemetery. Prominent among these is grave 82, a male weapon burial with spear, sword, bear claws, horse etc. Grave 29, the male status burial in this part of the cemetery, is nevertheless placed in a solitary position.



**Fig. 12.** Event phase 3. Early Vendel Period (Vet 1 and Vet 1–2) graves in grey while Migration to Early Vendel Period graves are black circles.

In the western half, graves from Event Phase 3 are placed all along the ridge. The graves appear to be divided into two groups, but this could be an illusion caused by the high density of Viking Age graves in the middle of the cemetery. Given the Viking Age disrespect for earlier graves, these may well have destroyed a number of earlier burials.

The distribution of the elite burials is interesting because they are not as closely grouped as during the previous phase. The two male burials 8 and 29 are situated on either side of the gully. The only female grave belonging to this group (63) is situated on the NW part, far away from the other two. Neither of these have a clear, spatial relation to the Migration Period chamber graves.

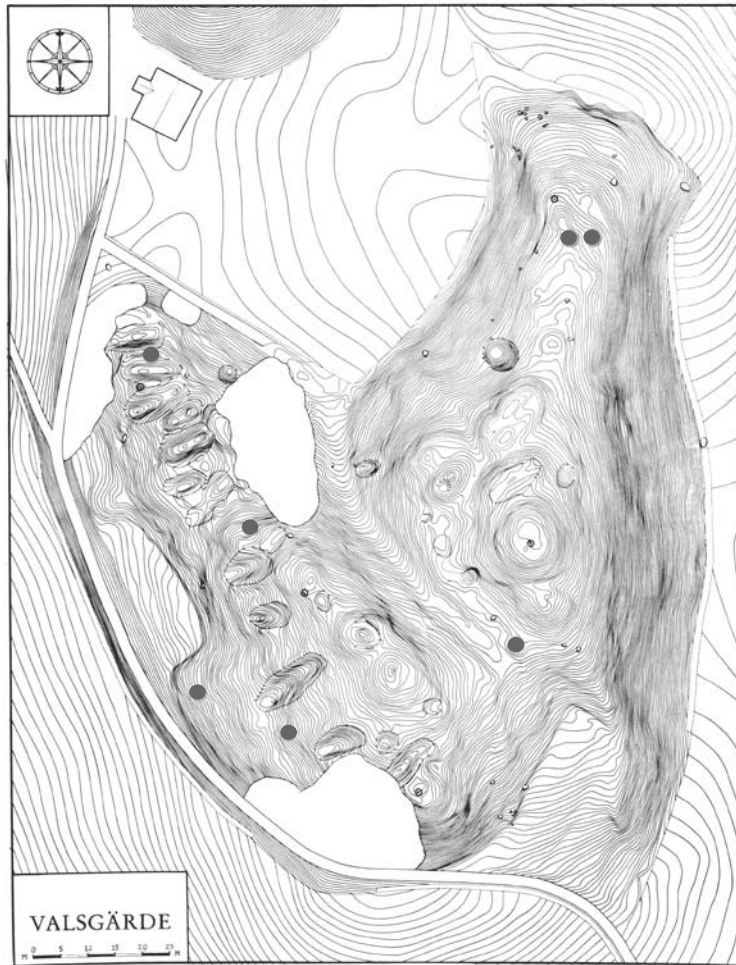


*Fig. 13. Event phase 4. Middle Vendel Period. Vet 2 and 2-3 in grey. Vet 3-4 in black with white filling.*

During the Vendel Period there seems to be at least two, perhaps three clusters of graves. It is tempting to interpret these as a similar number of family groups. There is, however, no tightly clustered elite group; they are mixed with regular burials.

#### *Event Phase 4, Vet 2-3 (fig. 13)*

In the middle of the Vendel Period (Vet 2-3), graves continue to be placed in the same parts as during the previous phase. The major difference compared to Vet 1 is the closely gathered group of status burials (boat-graves 5, 6, and

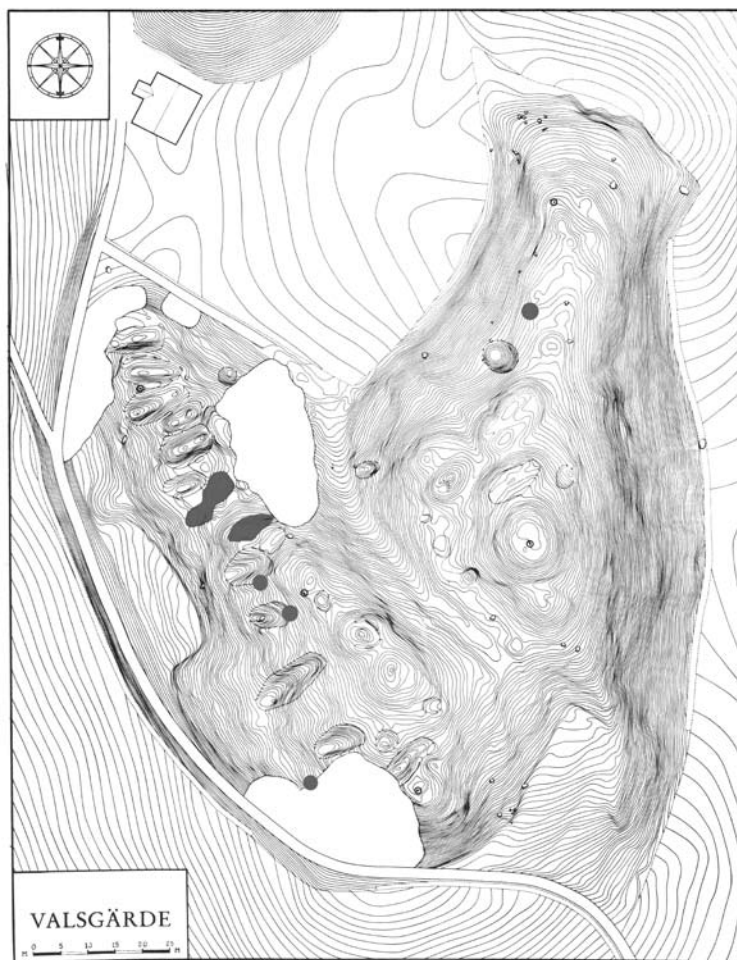


*Fig. 14. Event phase 3–5. Graves dated to the Vendel Period in general (Vet).*

7, and cremation 57) in the eastern part of the cemetery. All status burials from this period are gathered in this area.

*Event Phase 5, Vet 4, Vit 1 (fig. 15)*

The late Vendel Period seems to be a transition phase in the eastern part of the cemetery. One grave only (cremation 99) belongs there. Cremation burials 59 and 67 from Vit 1 are situated in the western part. The boat-graves have now moved across the gully, to the western side. In addition, there are tendencies that a smaller population or group of individuals is using the

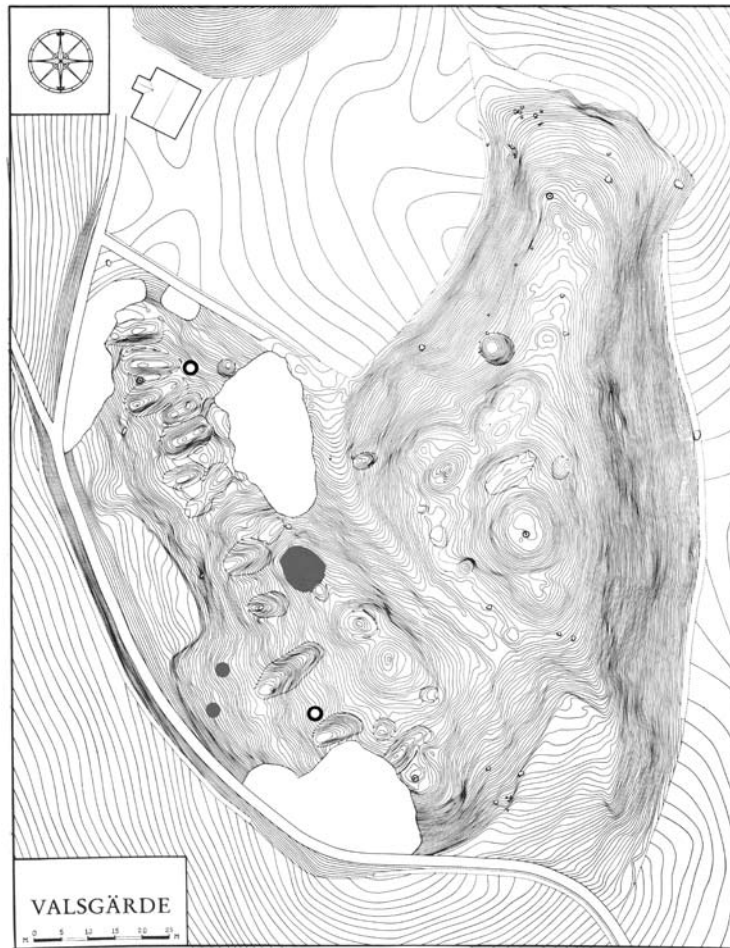


*Fig. 15. Event phase 5. Late Vendel Period to Earliest Viking Age  
(Vet 4 to Vit 1).*

cemetery from now on. Six graves are tied to this event phase compared to at least 10 during the previous and equally long phase (cf. table 6).

#### *Event Phase 6, Vit 2–3 (fig. 16)*

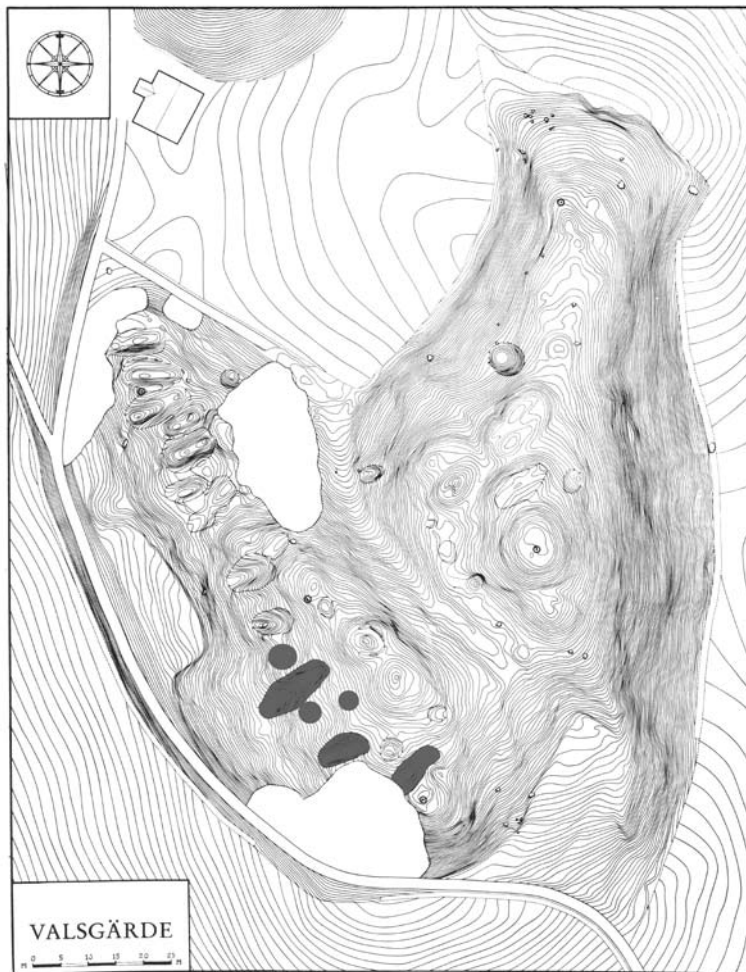
Regarding non-elite status cremation burials, this phase shows direct continuity with the structure developed during the previous phase. Graves are scattered almost over the entire western part. Most intriguing in this phase is the lack of real boat burials. The true elite burial is grave 66. This seems to be a male burial, and according to the grave goods it appears to have been arranged in



**Fig. 16.** Event phase 6. Early to Middle Viking Age (Vit 2–3) graves in grey, Graves dated to Vit 1–2 as black circles.

a cremated boat. It does not fit into an obvious pattern, since unlike all the Valsgärde boat-graves and a number of cremation burials in the Uppsala area (see Ljungkvist 2006, pp. 136 ff.) it does not contain any weapons. According to Gejvall, is it a double burial containing the remains of a male and a female. Its special character is also attested by the large amount of burnt bones, 31.2 liters. This strongly indicates that a larger number of animals than usual were heaped on this pyre. Finally, is it the only Viking Age grave on the site with a glass beaker, a quite rare funnel beaker with applied gold foil (Stjernqvist 1999).



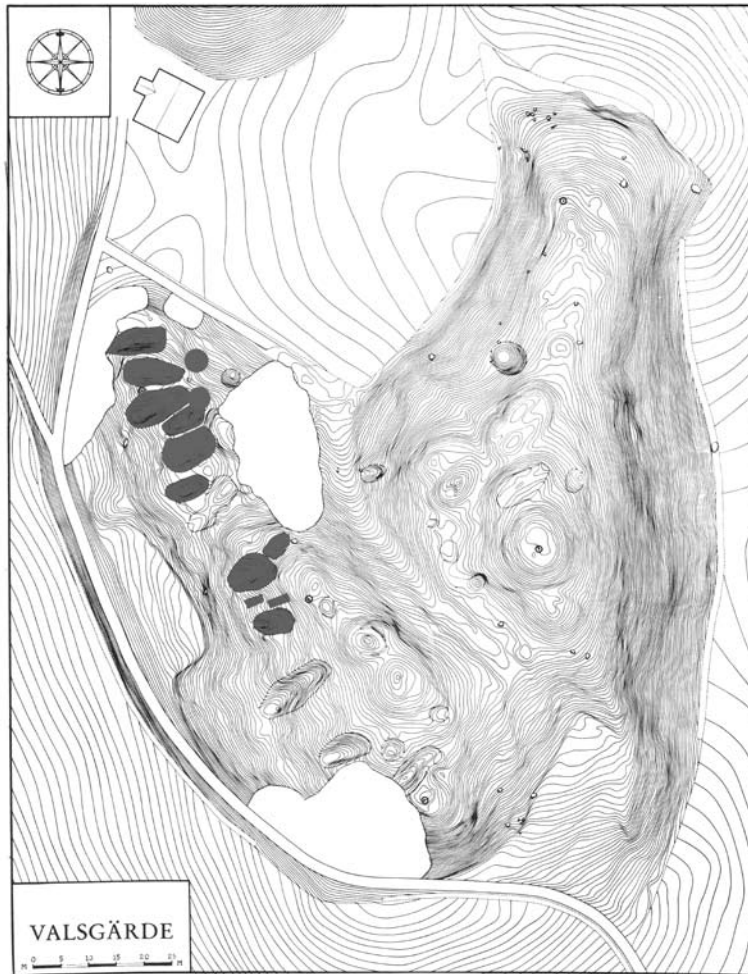


*Fig. 17. Event phase 7. Middle to late Viking Age (Vit 4).*

*Event Phase 7, Vit 4 (fig. 17)*

Also during the 10<sup>th</sup> century, cremation burials are few compared with the situation during the early Vendel Period (Vet 1). Three graves, 85, 86, and 94 are dated to Vit 4. They are all female burials, placed in the same area as the boat-graves (graves 2, 3, and 4). It seems obvious that only members of a single high-status group have been buried. Interestingly enough, two out of three cremations can be considered elite burials, probably partners or close relatives of the males (cf. Gräslund in this volume, pp. 75 ff.). A similar relation between male boat burials and female cremations can to a certain





*Fig. 18. Event phase 8. Late Viking Age to the Medieval period (Vit 5 to Met).*

degree be found in previous phases. For example, it is hardly a coincidence that grave 57 is placed right next to boat-graves 5 and 6 (cf. fig. 13).

*Event Phase 8, Vit 5, Met (fig. 18)*

In the latter half of the 10<sup>th</sup> century there is a shift in the location of the boat-graves as they are no longer placed in the southern part of the cemetery. The first graves in this sequence are graves 12 and 15. They have a very similar content and have most likely been constructed simultaneously or within but a few years. They are, however, the start of a new sequence of boat burials and eventually chamber graves (graves 10, 1, 9, 11, 23, 22, 28,

26, and 25), belonging to the very end of the Viking Age. The last graves in the row are probably graves 25, 28, and, perhaps, grave 26. They seem to belong to the late 11<sup>th</sup> or even early 12<sup>th</sup> century. Recent excavations of late Viking Age cemeteries have revealed that some are used well into the 12<sup>th</sup> and perhaps even the early 13<sup>th</sup> century (Engström & Wikborg 2006, pp. 96 f.). It is not impossible that people defined as Christians were buried on the cemetery for one hundred years after the large Christianization phase in the 11<sup>th</sup> century. Cremation burials from this phase, spanning at least 150 years, are few (graves 73a, b, and, perhaps, 77) and quite anonymous. They all seem to belong to the 11<sup>th</sup> century, when Christianization has definitely begun to have a major impact on the religion in Middle Sweden and Uppland (cf. Andersson 2005).

Compared to the previous period, female burials are very few compared to the eight, probably male chamber graves and boat burials. Actually, according to the present evidence, there are no female graves in Valsgärde during this phase at all.

### *Event Phase 9, Met–today*

The last phase is long and anonymous. After the cessation of burials we know little about the activities on the hill and its immediate surroundings. The small, nearby village of Ensta was owned by taxated farmers, but Valsgärde appears not to have been occupied. The land was probably occasionally cultivated and used for grazing, perhaps by the Ensta farmers (DMS 1:2, p. 203).

## **Continuity of status burials**

Some years ago, I discussed the continuity of boat and chamber graves on the cemetery. A major result of this work was the conclusion that these graves could be divided into different groups concentrated in different parts of the cemetery. Four phases were recognized, and the beginning of a new phase was to some degree related to a chronological lack of status burials. The work with the cremation burials has complemented, but partly also complicated the earlier synthesis (cf. Ljungkvist 2006, pp. 150 ff.).

It has been a primary goal to determine which cremation graves are to be interpreted as elite burials (table 8–9). In defining status for all different

VENDEL PERIOD	VIKING PERIOD
<b>Male burials</b>	<b>Male burials</b>
Helmets	Complete set of weapons consisting of sword, spear, shield, arrows, (fighting knife after the earliest parts)
High quality weapons	Riding gear
Richly decorated riding gear	Glass and metal vessels,
Glass vessels, metal vessels,	Metal decorated wooden vessel
Metal decorated wooden vessel	Silk fabric, evidence of gold and silver inlaid textiles
Birds of prey	Birds of prey
Large amount of sacrificed animals	Large amount of sacrificed animals
<b>Female burials</b>	Objects of high quality, for example, with silver details.
Exclusive jewellery	<b>Female burials</b>
Silver spiralled beads (6 <sup>th</sup> to 7 <sup>th</sup> century AD)	Exclusive bronze jewellery.
Amethyst beads (7 <sup>th</sup> to 8 <sup>th</sup> century AD)	Glass and metal vessels,
Glass vessel	Metal decorated wooden vessel
Wooden box with metal parts	Silk fabric, evidence of gold and silver inlaid textiles
Large amount of sacrificed animals	Large amount of sacrificed animals
	Objects of high quality, for example with silver details

**Table 8.** Definition of elite indicating material during the Vendel and the Viking periods (from Ljungkvist 2006, fig. 11 and 12)

Phase	Grave
Vet 1	63 (F)
Vet 3-4	57 (F)
Vit 2-3	66 (M)
Vit 4	85 (F), 94 (F)

**Table 9.** Cremation graves with elite status on the Valsgärde cemetery. Archaeological sex determinations are in parenthesis. (M) Male, (F) Female.

kinds of graves in Valsgärde, criteria presented in Ljungkvist 2006 (pp. 43 ff.) have been used. Accordingly, five cremation burials, four female and one double burial (grave 66) are defined as elite burials. We can compare this with the 15 high-status boat-graves from these periods, as well as the early Vendel Period chamber grave 29.

This comparison allows us to conclude that the female cremation burials with status related materials are far fewer than their male counterparts in boats. This might have a number of explanations and has raised the following questions:

1. Is a lesser number of females buried?
2. Have we not found all female burials because not all of the cemetery is excavated or because they are destroyed to a much higher degree?
3. Is less capital invested in female burials or is there a methodological problem in defining high-status female burials?

The answer to the first question is both yes and no. Until the Late Viking Age, female burials are constantly present although not always as common as male burials. Especially during the Vendel Period, a large proportion of the graves are not sex determined (see table 6). In the Late Viking Age, however, female burials are clearly fewer than the male burials. The lack of female status burials can to some degree be explained by destruction or a lack of excavations. However, it is hardly the only explanation, since the male status burials are overwhelming in numbers.

The last question is the most complicated. To compare the value of objects normally related to males and females is beyond the scope of this contribution. However, if we consider non-sex related objects such as imported glass vessels and the number of animals in the graves, it is possible to make some kind of comparison. During the Vendel Period, glass vessels are present in four male burials, but only in one female. On the number of deposited animals, no certain answer can be presented as only a few of the cremation burials are analysed. However, the tendency is very clear. Female burials generally contain less animal remains. Again, this is especially true of the Vendel Period.

To determine the status of female burials is it necessary to revise or test the criteria presented in table 8 by comparing female burials with each other.

Nevertheless, the overall picture is straightforward: the larger the economic investment, the more obvious the male burial. Generally speaking, male graves have more prominent grave constructions and are placed on more elevated terrain. There are, however, some deviations from this picture. Most important is grave 57, which not only contains many animals but also is the largest grave monument in Valsgärde. To further investigate this is a task for the future.

## 6. THE POPULATION AND THE SETTLEMENT

As mentioned above, the composition of the population on the cemetery varies markedly. In the Late Viking Age, it does not even seem to consist of a single family but only of males of elite status. In this phase, it completely loses the resemblance it had with ‘ordinary’ cemeteries that contain individuals of varying age, gender and status. The character of these late graves also seem to differ quite distinctly from other late Viking Age burials in Årsta, Danmark parish, Ultuna, Sävja and Kyrsta (Ljungkvist ms. A; Egström & Wikborg 2006).

The discovery that a very varying number of individuals has been buried on the site during the late Iron Age raises a number of questions regarding the size and nature of the settlement. The evidence from the settlement excavation suggest that we are dealing with parts of a large magnate’s estate (Norr & Sundkvist 1997). Evidence for more than one family on the cemetery raises the question whether there for some periods has existed a central estate with one or two adjacent smaller farms/households in the area or if all people have lived in one big manor that was a single economic unit (see Ljungkvist 2006, pp. 49 ff.).

The varying number of burials also tells us something about the value of the site as a burial ground. In my opinion, during at least the early and middle part of the Vendel Period, this was clearly a place where others than the actual aristocrats could be given a final resting place. Graves from the Migration Period and especially the Viking Age are on average more exclusively related to an aristocracy.

In a long-time perspective, the signals from the burials on the hill vary dramatically during its more than 1300 years of history. As suggested by Herschend (this volume), the first graves, from the Pre-Roman Iron Age into the Migration Period, are probably intimately related to the road running between the hills as well as the adjacent river Fyris. They are signaling the presence and dominance of a certain family in the area. During the Vendel Period, the graves of the aristocracy are certainly the most conspicuous, but the cemetery as a whole is used for people of varying age, gender, and social status. Both the heights (see figs. 12–15) are now used for burials. In the Viking Age, the cemetery gets the character of an *open space mausoleum*. Primarily male but also female high-status burials are placed close to each other in chronologically tight groups. Graves with non-elite goods become much rarer. Older graves, especially non-elite ones, are unsentimentally destroyed when new boat and chamber graves are constructed. The late

Viking Age grave group almost reminds us of the aristocratic grave chapels in 17<sup>th</sup> to 18<sup>th</sup> century churches, where local leaders bought their own space in the public sacral community, i.e the church. In Valsgärde, it seems that all members of the estate except for the most prominent ones were buried elsewhere. Their burial ground remains to be found.

## **The relation to the settlement**

The next interesting question regards the continuity of the excavated settlement and the relation to the number of graves. According primarily to metal detector finds, there is no definite evidence of a settlement after c. 900 AD (Lindbom 1997). To some degree, this coincides with the decreasing number of burials. It might be, as suggested by the members of the SIV project, that the settlement was abandoned or moved to another location in the 10<sup>th</sup> century. Future investigations of non-surveyed or excavated areas are certain to give new interesting results since the parts of the settlement area so far excavated are quite small.

## **SUMMARY AND SOME FUTURE AIMS**

The Valsgärde cemetery contains 15 boat-graves, at least 62 cremation burials, and 15 inhumations and chamber graves. Most of the cemetery was intact on its discovery in 1929, and it is almost completely excavated. On basis of present-day evidence, there are reasons to divide the cemetery into two main phases. The early phase can be traced back until the time when the Valsgärde hills rose from the sea, and stretches into the Migration Period. The later phase begins with its expansion in the early Vendel Period and ends with its cessation as a burial ground during the transition between the Viking and Middle Ages.

The earliest burials are relatively few. They are accompanied by features and culture layers from different, perhaps settlement related activities. The earliest grave on the cemetery is one of the inhumations found below the early stone-setting in grave 57, <sup>14</sup>C-dated to the Pre-Roman Iron Age.

The continuity of graves is very uncertain after the above-mentioned date. According to <sup>14</sup>C dates, one chamber grave (27) belongs to the Roman Iron

Age, and one (24) to the Migration Period. Finds date chamber grave 20 and cremation grave 49 to the Migration Period.

From an early, yet undetermined phase, a dark layer underneath the outer construction of grave 20 and 21 originates. This dark horizon probably represents the original ground level. However, it also contained some pottery and fire-cracked stones. These objects could be remains either of funerals or of more profane, early activities.

The ship-setting made of wooden posts, construction A, is not a certain grave; however, it is important in the discussion about the Migration Period burials since it is stratigraphically earlier than grave 82. Unfortunately, it is uncertain whether this construction should be dated to the Migration Period, the Roman Iron Age, or even the Pre-Roman Iron Age.

The late phase is completely dominated by graves from the Vendel Period and the Viking Age. During Vet 1 the number of graves increases markedly. By this time, probably at least two social groups/families were buried at the site. Leading men in Valsgärde are beginning to be buried in boat-graves, but all others persons are cremated, regardless of their gender, status or age.

In the transition between the Vendel Period and the Viking Age, the eastern part of the cemetery is abandoned. The boat-graves are placed on the ridge, often destroying older graves from the Migration and Vendel Periods. The number of graves is from now on lower and can in most cases be defined as those of an elite. The latest graves from the 11<sup>th</sup> century or thereafter seem to be only male.

A study of this kind not only generates results on which to build future research; it also suggests priorities for the next step ahead. In spite of being costly, osteological analyses should have high priority. Contrary to common belief, there are human remains in many boat-graves, but it would also be important to study animal and human remains from inhumations and cremations. This would increase our knowledge on status, age and gender distribution among the buried over time.

Also, radiocarbon-dating cremation burials with no datable finds would be valuable. For example, we would want to know how many burials existed on the site before the early Vendel Period and how long it was used as a cemetery in the Pre-Roman Iron Age.

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