

Landscape, settlement and visibility. Some thoughts on the location of an Iron-Age manor

Sven Isaksson & Anton Seiler

This paper deals with the inception of the settlement connected to the famous boat-graves at the Vendel church. Concepts notified are visibility, monumentality and routes. Hence, we stress the importance of being seen, and monumental location as a symbol of status, power and supremacy. The late Iron-Age settlement recently found at the Vendel church is situated on the hillside which would have made it most visible from the Vendel farmland. The monumental impact is strongly expressed in the location of both graves and buildings. Further stressed is the Vendel farmlands geographical position in a "blind alley" with its entrance facing towards the south. It is also emphasized that the geographical conditions and the economical potential of the area must be considered, accentuating local resources, when trying to explain the establishment of the settlement and the upturn manifested in the rich boat-graves.

Introduction

Thoughts emerging during the field works round the Vendel church in the north of Uppland (Isaksson 1997; Seiler 1997a; 1997b) form the basis of this article. It is an attempt to broaden the outlook on a field where old "truths" have been established without being closely scrutinized, viz. the complex of problems of location concerning the settlement round the Vendel church. To the north of Vendel lie the densely populated areas of southern Norrland and central Norrland, both extensively settled during the late Iron Age, e.g. that of the Tuna plain (Tunaslätten) in Dalarna. To the south the Uppsala plain and the Mälars valley stretch out; rich districts. Traditionally the numerous traces of iron production in the north have been related to the boat-graves and the so called "Fyrisleden" (latest Hyenstrand 1996:101f), the route which joined the Mälars valley to Norrland. If you study a key map the connection between Fyrisleden and the area round Vendel church seems to be unproblematic, as the locality appears to be situated along a central zone of transport and communication going from Lake Mälaren in the direction of Norrland, marked by great mounds and rich archaeological finds (Hyenstrand 1996:99). For many years there has been a tendency to explain the establishment and growth of the settlement at Vendel, reflected in the riches contained in the boat-graves, in terms of its position in this transport system; Vendel has been regarded as a place of transshipment whose wealth depended on the movement of people and goods. However, an alternative picture appears on a closer examination.

Regional approach

Prehistoric roads have traditionally been related to "handrails" in nature, such as ridges and streams which, in Uppland, run roughly north-south through the landscape. Fifteen kilometres north-west of Vendel there is a *Husby* (Husbyborg) in the valley of the small river Tämnaån, close by the spot where the river breaks through the Uppsala ridge (an esker) (fig. 1). In the north the river Tämnaån falls into the Bay of Lövsta in the southern part of the Gulf of Bothnia. Round this *Husby* there are several Iron-Age cemeteries and a number of great mounds, and along the whole valley northwards you find a well established ancient settled country. The northerly lie of the Uppsala ridge from this point has been called in question as travelling route, because of the lack of ancient remains there (Hyenstrand 1974:149). Be that as it may, but *Husbyborg* is situated at a junction and perhaps even at a crossroads. The spot has been characterized as a transshipment place. From here people have continued towards the south along the Uppsala ridge. A row of four rune stones along the ridge between *Husbyborg* and *Björklinge/Skuttunge* is taken as an evidence for this (Hyenstrand 1974:149). The Uppsala ridge passes through central Uppland and reaches Lake Mälaren at *Bålsta* and *Norra Björkfjärden*. The small river Vendel flows southwards from Lake Vendel and meets the small river Fyris at *Lena*. Along the Fyris there is a rich Iron-Age settlement, among others *Valsgårde* and *Gamla Uppsala*. Finally the river falls into the creek of *Ekoln* and Lake Mälaren.

Local approach

Coming to Vendel by land from the Mälars valley and the Uppsala plain, having Valsgårde and Gamla Uppsala at a distance of a day's hard ride (about 30 kilometres), people are likely to have followed the Uppsala ridge up to Älby where the Vendel ridge (also an esker) links in (fig. 2). On your way northwards along the Vendel ridge, at about three kilometres before the Vendel church, you arrive at Husby with the highly impressive Ottar mound and surrounding cemetery (Lindqvist 1917:127ff; 1936). It is striking that the Ottar mound is not at its most visible from the presumed road along the ridge. It is most conspicuous from a sector between north-east and south-east. Thus the great mound faces Lake Vendel and the small river Vendel.

The waterway is very interesting with regard to the boat-graves. Just the fact that the boat-graves exist seems to indicate that the boat occupied a place apart in the region, maybe from an economic as well as a cultural point of view (Greenhill 1993:12). Following the small river Vendel southwards from Lake Vendel about seven kilometres you come to the only rapids for a long stretch, close by Åbyggeby and Burunge. This "threshold" in an otherwise fairly open countryside constitutes the border between the hundred of Vendel and that of Norunda in the Middle Ages (Rahmqvist 1996:49). The importance of the area is further emphasized by the fact that two of the few rune stones in the Vendel parish have been recovered here, a type of ancient remains which, previously, has been related to roads, borders and "entrances", in the landscape as well as in a rather spiritual sense (Ekholm 1950; Arrhenius 1970; Larsson 1994; Zachrisson 1998). The stones are, of course, set up in a later epoch, many years after the establishment of the Iron-Age settlement, but the road, border and/or "entrance" they mark are certainly older. Burunge, the place-name with its sense of "carry" (Sw. *bära*, Stefan Brink, pers. comm.), fires your imagination in connection with the rapids. The place-name appears again in the wetlands upstream of the rapids, viz. Lake Burung. Only 500 metres to the west of Lake Burung the Vendel ridge runs due north towards Husby, a bottle-neck in the landscape, before you come into the Vendel farmlands "proper". Exactly to the north of Lake Burung the longish valley becomes narrower again and the river flows through a passage of low moraines, found on both sides, but principally on the western bank. Now, having got your boat past the rapids at Åbyggeby and Burunge this area seems to be a more convenient landing place than the plain in the north, whose clay soil makes the ground boggy adjacent to the river. Then if you continue further on foot towards the settlement on the Vendel ridge in the west, you have the pleasure to experience the sight of the Ottar mound from its most monumental side. The

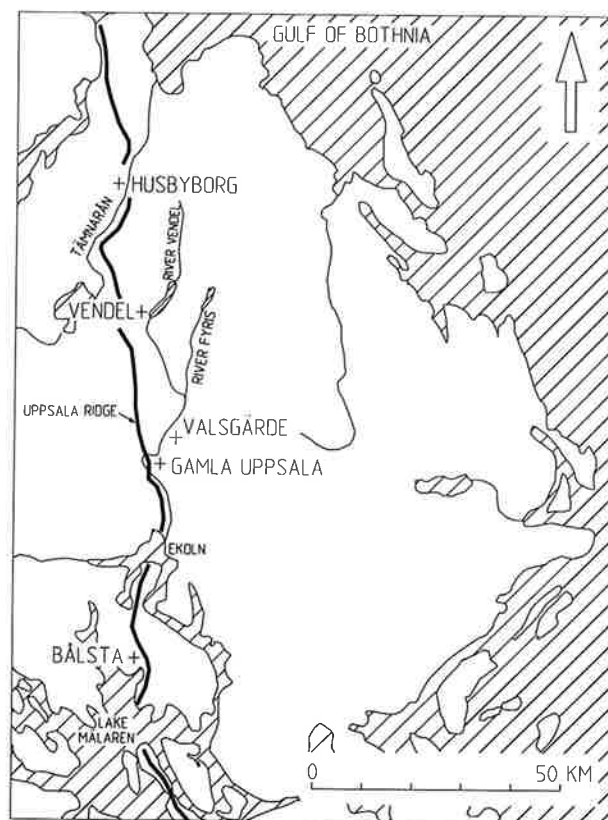
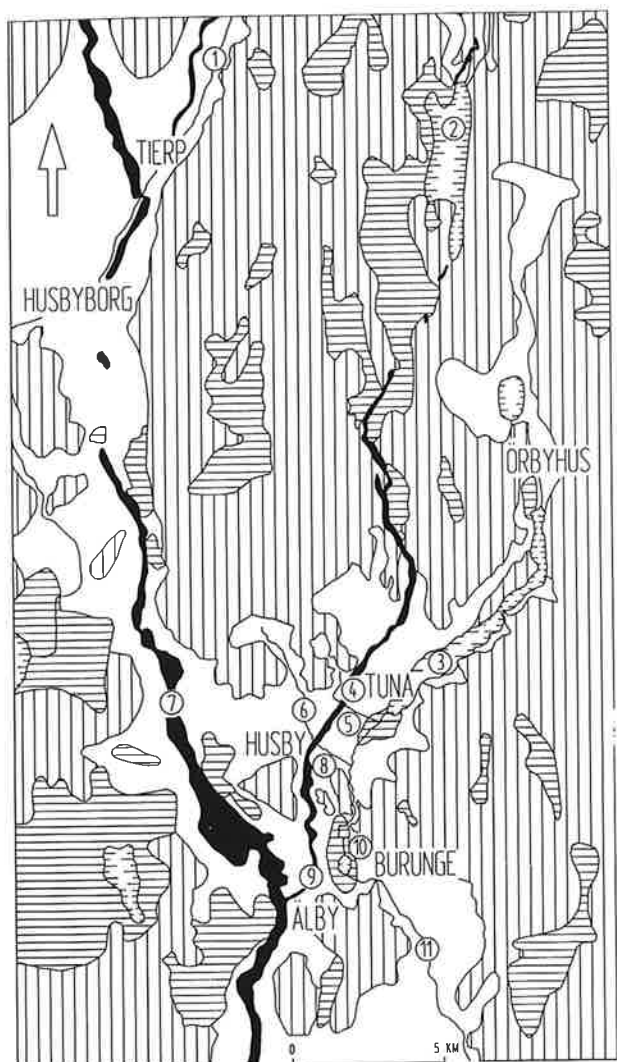


Figure 1. Map of Uppland. Scale as indicated. CAD-drawing by Anton Seiler.

same kind of experience could have been achieved if it had been possible to find one's way upstream the brook Tassbäcken which breaks through the Vendel ridge at about 700 metres to the north of the Ottar mound. From these areas, the moraine hills on the small river Vendel and the lower reaches of the brook Tassbäcken, you can also catch a glimpse of the ridge hill by the Vendel church in the distance.

To think that people would have travelled by boat all the way up to Lake Vendel is an attractive idea. If so, the most interesting direction of visibility of the settlement by the Vendel church would be the eastern direction. The western shore of Lake Vendel connects also to the clay soil plain with its marshy and shallow shores. Straight below the vicarage, by Lake Vendel, there is a registered settlement relic (Stora Enen, RAÄ 218) (fig. 3). It is situated on a moraine hill which provides the only well-drained landing spot by the shore of Lake Vendel near the church. From a paleo-hydrologic compilation concerning this spot it may be concluded that, on the whole, Lake Vendel seems to have had the same water level in the later Iron Age as it has today (Ekström 1994). At the highest high-water level the water, broadly speaking, reaches up to the moraine hill (Ekström 1994:9,11). But even at highest high-water the lake is very shallow here, and so, the expediency of the hill as a landing place for



- | | | |
|----------------------------|-------------------------|--------------------------|
| MORAINE | ④ BOAT-GRAVE CEMETERY | ⑨ THE VENDEL RIDGE |
| SWAMP | ⑤ THE BROOK ALLERBÄCKEN | ⑩ LAKE BURUNG |
| ① THE SMALL RIVER TÄMNAREN | ⑥ THE BROOK TASSBÄCKEN | ⑪ THE SMALL RIVER VENDEL |
| ② LAKE STRÖMMAREN | ⑦ THE UPSALA RIDGE | |
| ③ LAKE VENDEL | ⑧ THE OTTAR MOUND | |

Figure 2. Natural landscape map of Vendel and surrounding country. According to Jordartskartan SGU Ser. Ae nr 53, 61, 87 and 104. Scale as indicated. CAD-drawing by Anton Seiler.

boats may be questioned. The navigability of the brook Allerbäcken during the period is uncertain - it is now put into a culvert - but the location and the direction of the boat-graves are strong arguments in favour of the idea that it was navigable. In that case the most plausible landing place would have been to the south of the settlement, only a few hundred metres away.

The connection of Vendel to the southern part of the fairway system is evident, but for Vendel to have functioned as a transshipment place there must have existed such a connection northwards, too. The landscape between the Vendel church and Husbyborg by the small river Tämna is dominated by swampy grounds and wetlands surrounded by moraines rich in boulders, rough ground in many respects (fig. 2). The Uppsala ridge seems to be a more attractive alternative. For those who came from the north Åke Hyenstrand (1974) conceives the connection to the Uppsala ridge to lie by the level ground to the west of Husby in Vendel. Husby has been described as “strategical as regards communication and transport”, then, related to the small river Vendel and the Uppsala ridge (Hyenstrand 1974:108). Today the level ground west of Husby consists mainly of ditched wetlands, although to the north of them there are some drier areas. It should be noted that if you crossed this land from the north-west towards Husby, the Ottar mound would not be visible until you had practically arrived at the settlement.

What other possibilities are there, then, for traveling routes north from Vendel? It seems very unlikely that such movement took place along the Vendel valley except, perhaps in the winter. Northwards the Vendel ridge keeps a course more to the east than does the Uppsala ridge and comes to an end in the north approximately on a level with Tegelsmora, scarcely one Swedish mile to the north of the Vendel church. Neither does the water system of the small river Vendel go much further to the north. The territories here of swamps and moraines form the watershed of northern Uppland. They coincide largely with the historical hundred boundaries (Rahmqvist 1996:47-48) and surround Vendel (fig. 2). It is of course possible that some kind of causeway or path could have been constructed through this terrain, perhaps along the course now taken by road 292 or the local railway, but there is no evidence of such a structure from prehistoric times. Without causeway constructions, the only other circumstance in which this route could have been valuable would have been during cold weather. In winter frozen swamps and lakes have been transformed from effective obstacles into good routes for horse and sledge, as an example. It is known that the winter fair at Uppsala, called the Disting, was regarded as one of the most important winter fairs in all Sweden right into the Middle Ages (Sawyer 1991:26). Exactly where the Vendel ridge comes to an end a relatively extended territory of swampy grounds begins which is connected with Lake Strömmaren in the north. From Lake Strömmaren the small river Strömmaren then flows north-eastwards and falls into the southern part of the Gulf of Bothnia. Thus, a possible winter road northwards from Vendel can be found here, but there are two arguments which reduce its conceivable importance in comparison with the Uppsala ridge and the valley of

the small river Tämna: on one hand the Uppsala ridge is usable all the year round and probably easier to make one's way through and on the other hand the picture of ancient remains in the valley of the small river Tämna is much richer than that in the small river Strömmaren.

Consequently, in terms of its physical geography, the area around the Vendel church seems to lie in a blind alley with its opening facing south. Lacking proof of the existence of causeway constructions as mentioned above, you may assume that people have approached the area around the Vendel church from the south even if coming from Norrland. It seems a lengthy detour for people travelling towards the Mälars valley to travel along the Uppsala ridge beyond Vendel, and then to double back on themselves and move back northwards to approach the settlement there, but such a route seems the only likely one. This fits ill with the traditional explanation to the establishment and growth of the settlement at the Vendel church as being foremost in terms of its position in the transport system.

Farm approach

If the complex of ancient remains which lie around the Vendel church is regarded as a whole they have a monumental grandeur matched by few other sites from the same period in Sweden. They comprise over 240 graves, including the boat-graves, and a number of terraces that form the probable site for buildings; these structures clearly have a monumental location in the landscape (see below). Examples of similar complexes are to be found at the king's demesne of Alsnu (Brunstedt 1996), at ancient Sigtuna (Allerstav et al. 1991) and at Valsgårde. In an article in TOR (1995) Svante Norr and Anneli Sundkvist have reflected upon the remains at Valsgårde and their location in the landscape. They think that the importance of being seen most probably was to be found in the consciousness of the inhabitants, and that a monumental location in itself might have been a symbol of status, power and supremacy. Among other things they discern mythological motives for this visibility and find parallels in places like Lejre in Denmark, Borg in northern Norway and Gamla Uppsala (Norr & Sundkvist 1995:404ff). An absolute crest location is not necessary to obtain monumental visibility (Norr & Sundkvist 1995:406), a fact noted by Stefan Bergh in his thesis on passage tombs in Ireland (Bergh 1995). In most cases it is difficult to create structures that are equally visible from all directions, although high visibility from selected viewpoints is usually achievable (Bergh 1995:130–135). This provides an interesting angle of approach. If you assume that Norr and Sundkvist are right that monumental visibility was a symbol of power for an Iron-Age population, the choice of

visibility direction ought to be regarded as important. The direction in which they wanted to call out their message of power, supremacy or status had to be decisive for the conscious choice.

The ridge hill on which the Vendel church is situated is about one kilometre in length and stretches from the north-east to the south-west (fig. 3). By studying the topography by means of maps, air photographs and field-surveys an attempt has been made to characterize different parts of the ridge hill in terms of their visibility. The highest part of the hill is situated in the north, but considering its extent, breadth and the surrounding topography, this site does not seem to offer maximum visibility (fig. 3, no. 1). Besides, the eastern and most northerly part is occupied by a rather large cemetery. Datings of finds show that the cemetery was used from the second half of the fifth century onwards (Seiler 1994). Perhaps these grounds were set aside for burials from the very beginning of the settlement period. The present buildings, belonging to the farm Hovgårdsberg, are situated in the north-west on a relatively sheltered site, exposed only to a narrow corridor northwards. If you walk about 300–400 metres to the south on the hill, you come to another crest (fig. 3, no. 2). This site seems to have good visibility from both a southern and east-south-eastern direction. However, a cemetery lies here, too. It has been excavated very incompletely, but was at least used during the Migration Period and the Viking Age. Immediately south of this cemetery, cultural layers with artefacts such as daub, bom-weights and slag indicate that settlement remains could be found there (Seiler 1994, 1998). The church and the vicarage are situated on the southernmost and lowest crest. The vicarage is very visible from the east and south-west, as well as from the west and north-west, but hardly visible from the points between. (fig. 3, no. 3). The area around the church itself is probably the most visible in Vendel, and can be seen from all sides except the north-east, from where it is screened by the ridge hill (fig. 3, no. 4). The site of the church is itself an argument for the high degree of visibility of the place and the edifice is visible far and wide in the central Vendel country.

By the early Middle Ages the territory around the Vendel church formed an estate with the manor-house located somewhere on the ridge hill by the church (Rahmqvist 1996). It is more than likely that this estate is the successor to the late Iron-Age settlement we are presently investigating. It is also very likely that this settlement is the very *Tuna*-unit in favour of which Manne Eriksson (1938) argues and which should have existed at Vendel. The establishment of the settlement which we have found at the field investigations in the southerly slope below the church can, through the finds, be dated back to sometime during the Migration Period (Isaksson 1997). This dating is supported by radiocarbon dates of carbonized cereals from a post-

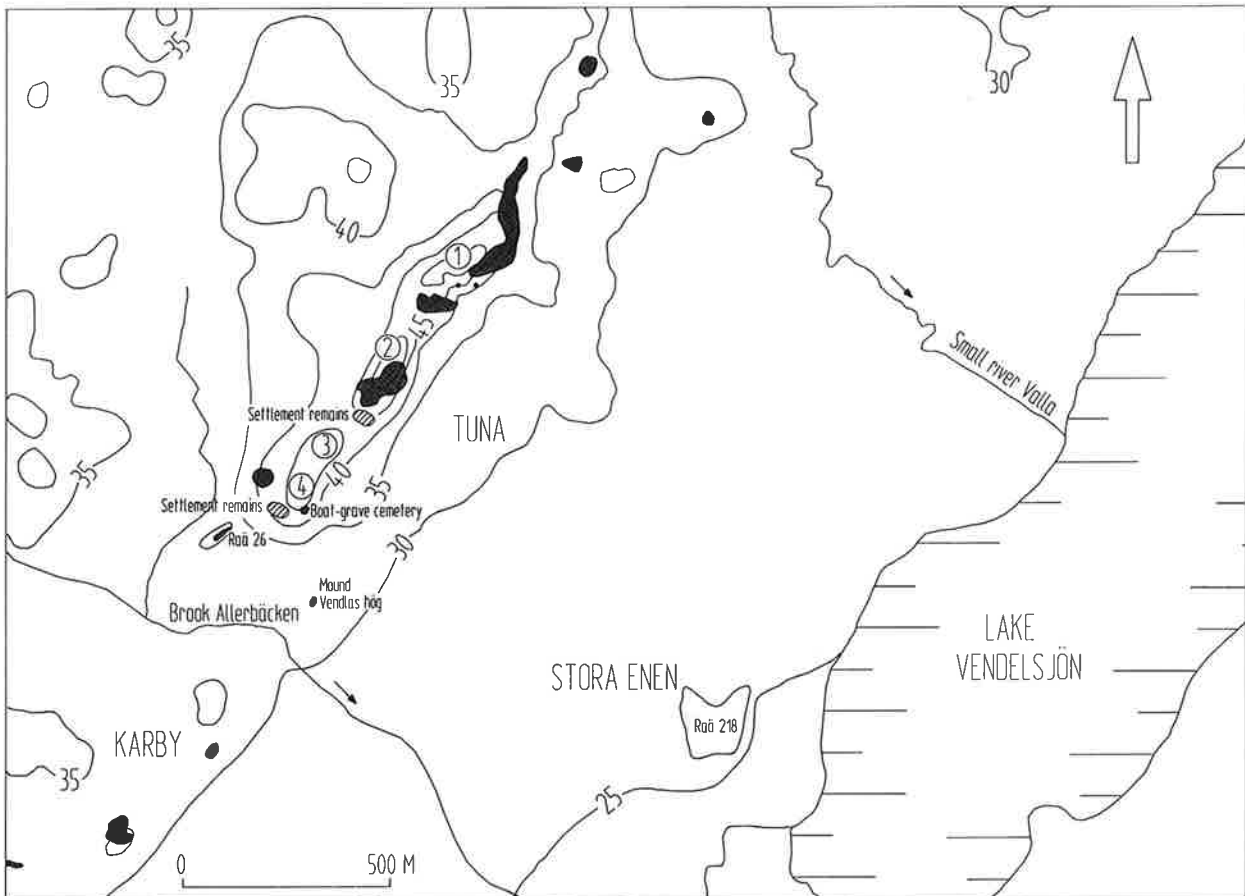


Figure 3. The ridge hill at the Vendel church and its near neighbourhood. Point 1–4, see text. Scale as indicated. CAD-drawing by Anton Seiler.

hole and a wall trench (Isaksson, manuscript) and it agrees well so far with the dating of the oldest excavated graves in the area (Seiler 1994, 1998). It is also contemporary with the cultural indications in the paleoecological source material (Atkinson 1994). At least two buildings have been identified, one a residential building, the other of a more economic nature. The residential house is built on a terrace with one gable at the lower edge, strengthened by relatively heavy stones. It is a tree-aisled house, with pairs of posts, 1.8–2.1 metres apart, every 5.4–6.2 metres. The gable is of the “Hörn 2” type (Göthberg 1995:73), with two sizeable gable posts. The maximum width of the house can be estimated to about 8 metres and the length to about 30 metres. The construction details of the economic building are not yet made out. The residential building is orientated very close to a north-eastly south-westly direction, and therefore the eastern long side of the house faced the Vendel river (Isaksson, manuscript). Generally, the settlement must have been very visible from east-south-east and south-westerly directions. Field surveys and prospections have revealed a number of possible terraces and settlement locations which together suggests that there were buildings standing where the church stands today. Here, then,

the settlement itself, rather than the cremation graves and the boat-graves which relate to it, was placed on the crest of the ridge.

Beside the major cemeteries people seem to have laid out small one’s at chosen spots just with a view to their being visible. The newly excavated RAÄ 26 (Seiler 1997b) and the larger mound, “Vendla’s mound”, are examples of this. Because of damage (gravel digging, dumping of refuse), existing vegetation and buildings these burial-grounds do not stand out in a prominent way in the landscape today. It seems very likely, however, that the graves in question were easily visible in the country originally, especially from the east and the south where Karby and Husby were situated.

Judging from its grave material Husby seems to be as old as Tuna, i.e. founded in the Migration period, while Karby is apparently more recent and was established at the beginning of the Vendel period. That the inhabitants of the Tuna estate laid out graves on isolated spots and on the crests of the ridge sections to the south of the settlement may reflect a need to mark their territory. In other words, besides being last resting-places, the role of the graves may have been to mark a boundary line and, above all, to point out the right of possession of the surrounding ground (cf. Petré 1981).



Figure 4. The Vendel church and environs seen from the north. 1) major cemeteries, 2) vicarage, 3) church, 4) investigated settlement, 5) boat-grave field, 6) small grave-field RAA 26, 7) Vendla's mound, 8) brook Allerbäcken, 9) small cemetery within Karby, 10) in the distance Ottar mound. Air photograph by Jan Norrman.

The fact that prehistoric roads are likely to have gone past both RAA 26 and Vendla's mound (Lundberg 1997) strengthens this statement, since the sight of visible burial-mounds must have reminded travellers that they come into somebody else's estate. A partial excavation of RAA 26 has shown that at least this group of territory-marking graves was set up about AD 550, that is to say several decades after the establishment of the Tuna estate. Thus it seems as if people did not feel the need of marking their ground from the beginning; that need arose later, possibly when the pressure of settlement increased in the immediate surroundings, related to the establishment of Karby. Worth noticing in this connection is the northernmost cemetery within Karby, which consists of a few visible graves high on the ridge (fig. 3–4). Territory-marking graves need not be seen as any sign of antagonism between the units of settlement, but a fixing of a boundary between good neighbours.

The aspiration for monumental grandeur which we have assumed that the inhabitants had manifests itself strongly in the location of graves and buildings. All the ridge area at the Vendel church and above all to the south of that site strengthen the impression of a manor, the boat-graves not included. In comparison to Husby and the grandeur of the Ottar mound the

people of Tuna reached the same effect by a subtle design of the cultural landscape. This shows that it is not sufficient to look for king's burial-mounds or other large mounds in order to locate the seats of the ancient aristocracy, but that it at least takes a close analysis of the cultural landscape. Otherwise the picture you receive runs the risk of being false.

Conclusion

In this paper we have stressed the importance of being seen for the Iron-Age aristocracy. The settlement we have found at the Vendel church is situated within the area on the ridge hill which seems to be most visible from the central part of the Vendel country as well as from the "main entrance" to those lands. The cultural landscape of this "main entrance", whose center may be Husby, seems, in turn, to be organized so that its monuments are most visible from the south, particularly from the waterways that link Vendel to the Mälars provinces. The whole Vendel country is situated in a geographical "blind alley", which makes it a lengthy detour for people travelling from Norrland towards the Mälars valley to travel by the settlement at the Vendel church. This location as well as the economical potentials of the Vendel country (see Isaksson

1997; Seiler 1997a) indicate that the reasons for establishment and increased status of the site are to be sought locally. This is in opposition with the traditional explanation which advocates the settlement's position in the transport system as the reason for establishment.

Acknowledgment

We would like to thank the participants of the SIV-conference held at Älby 7–8th June 1997 for discussions and the sharing of opinions on our work. We are also indebted to Olle Isaksson for helping us with linguistic considerations.

References

- Allerstav, A., Damell, D., Gustafsson, J.-H., Hammar, T., Hedman, A., Königsson, L.-K., Sandén, B. Sjösvärd, L., Stenström, G. & Strid, J. P. 1991. *Fornsigtuna. En kungsgårds historia*. Upplands-Bro.
- Arrhenius, B. 1970. Tür der Toten, Sach- und Wortzeugnisse zu einer frühmittelalterlichen Gräbersitte in Schweden. *Frühmittelalterliche Studien* 4, pp. 384–394.
- Atkinson, H. 1994. Land-use and natural environment during the Late Iron Age in Vendel, Eastern Svealand, Sweden. Unpublished manuscript.
- Bergh, S. 1995. Landscape of the monuments. A study of the passage tombs in the Cúil Irra region, Co. Sligo, Ireland. *Studier från UV Stockholm. Arkeologiska undersökningar. Skrifter nr 6*. Stockholm.
- Brunstedt, S. 1996. Alnu Kungsgård. Forskningsprojekt Hovgården. *UV Stockholm. Rapport 1996:71/1 (2)*. Stockholm.
- Eckholm, G. 1950. Var restes runstenarna? *Fornvännen* 45, pp. 137–147.
- Ekström, P. 1994. *Study of a moraine mound at lake Vendel*. Archaeological Research Laboratory, Stockholm university. MA thesis.
- Eriksson, M. 1938. Byar och hamnor i forna tiders Vendel. En studie i uppländsk bebyggelsehistoria. Vendel i fynd och forskning. *Upplands Fornminnesförenings Tidskrift* 46 (1), pp. 47–66.
- Göthberg, H. 1995. Huskronologi i Mälardalen, på Gotland och Öland under sten-, brons-, och järnålder. In H. Göthberg, O. Kyhlberg & A. Vinberg (eds.): *Hus och gård i det förurbana samhället: Rapport från ett sektorforskningsprojekt*, pp. 65–110. Stockholm.
- Greenhill, B. 1993. The discovery of the Årby boat and its background. *The Årby boat*. The Museum of National Antiquities. Monographs 2, pp. 11–14. Stockholm.
- Hyenstrand, Å. 1974. *Central – Randbygd. Strukturella, ekonomiska och administrativa huvudlinjer i mellansvensk yngre järnålder*. Acta Universitatis Stockholmiensis. Studies in North-European Archaeology. Series A5. Stockholm.
- Hyenstrand, Å. 1996. *Lejonet, draken och korset. Sverige 500–1000*. Lund.
- Isaksson, S. 1997. Arkeologiska boplatundersökningar vid Vendel kyrka 1996. In B. Arrhenius & G. Eriksson. (eds.): *SIV Svealand i vendel- och vikingatid: Rapport från utgrävningarna i Vendel*. Archaeological Research Laboratory, Stockholm University.
- Isaksson, S. Arkeologiska boplatundersökningar vid Vendel kyrka 1997. Manuscript.
- Larsson, K. 1994. *Södertörns vikingatida runstenar. En kronologisk och rumslig analys*. The Archaeological Department, Stockholm university. BA thesis.
- Lindqvist, S. 1917. Ottarshögen i Vendel. *Fornvännen* 12, pp. 127–143.
- Lindqvist, S. 1936. *Uppsala högar och Ottarshögen*. KVHAA. Stockholm.
- Lundberg, L. 1997. Vägen till Vendel: Analys och prospektering. In: *CD-uppsatser i laborativ arkeologi 96/97, Del 2*. the Archaeological Research Laboratory, Stockholm university. MA thesis.
- Norr, S. & Sundkvist, A. 1995. Valsgårde revisited. Fieldwork resumed after 40 years. *TOR* 12(2), pp. 395–417.
- Petré, B. 1981. Relationen mellan grav, gård och omland – exponering och kommunikation som funktion i förhistoriska gravar med exempel från Lovö. *Bebyggelsehistorisk tidskrift* 2, pp. 11–16.
- Rahmqvist, S. 1996. Sätergård och gård. De medeltida frälsegodsens framväxt mot bakgrund av Upplands bebyggelsehistoria. *Upplands fornminnesförenings tidskrift* 53. Uppsala.
- Sawyer, P. 1991. *När Sverige blev Sverige*. Occasional papers on Medieval topics 5. Alingsås.
- Seiler, A. 1994. *Vendel före båtgravarnas tid: En analys av de äldsta brandgravarna och den äldsta bebyggelsen på en utvald del av Vendelåsen*. Archaeological Research Laboratory, Stockholm university. MA thesis.
- Seiler, A. 1997a. Bebyggelsearkeologiska studier kring Vendels sockens förhistoria: En första redogörelse. In B. Arrhenius & G. Eriksson (eds.): *SIV Svealand i vendel- och vikingatid: Studier från delprojektet vid Stockholms Universitet*, pp. 61–68. Archaeological Research Laboratory, Stockholm University.
- Seiler, A. 1997b. Ett litet brandgravfält i närheten av båtgravarna. Arkeologisk delundersökning. RAÄ 26, Vendel, Vendel sn, Uppland. In B. Arrhenius & G. Eriksson (eds.): *SIV Svealand i vendel- och vikingatid: Rapport från utgrävningarna i Vendel*. Archaeological Research Laboratory, Stockholm University.
- Seiler, A. 1998. Griffterna norr om körkian. Arkeologiska delundersökningar, RAÄ 28 och 216, Vendel, Vendels sn, Uppland. Unpublished report.
- Zachrisson, T. 1998. *Gård, gräns, gravfält. Sammanhang kring ädelmetalldepåer och runstenar från vikingatid och tidig medeltid i Uppland och Gästrikland*. Stockholm Studies in Archaeology 15. Stockholm.

Maps

Sveriges Geologiska Undersökning, Jordartskartan, Serie Ae, number 53, 61, 87 and 104.