

Birka: Regional and Local Topography

By Björn Ambrosiani

1. Introduction

In the 8th century a number of small specialized settlements grew up around the shores of the Baltic Sea. They acted as focal points for regional and local trade, and as manufacturing centres for the specialized crafts which were becoming ever more important with the expansion of the rural population. It cannot have been easy to select the sites for these markets and harbours, places where foreign merchants and craftsmen could settle and meet the native inhabitants. Along the southern coasts they were usually founded on estuaries, either beside lagoons sheltered from the sea by sand spits or on the sand spits themselves, as at Wolin and Ralswiek. In the exceptional cases where they stood on the open coastline the preferred sites were at the mouths of streams where there were suitable conditions for drawing boats up out of the water. Trelleborg in Scania is a good example of this.

2. Birka: Regional topography

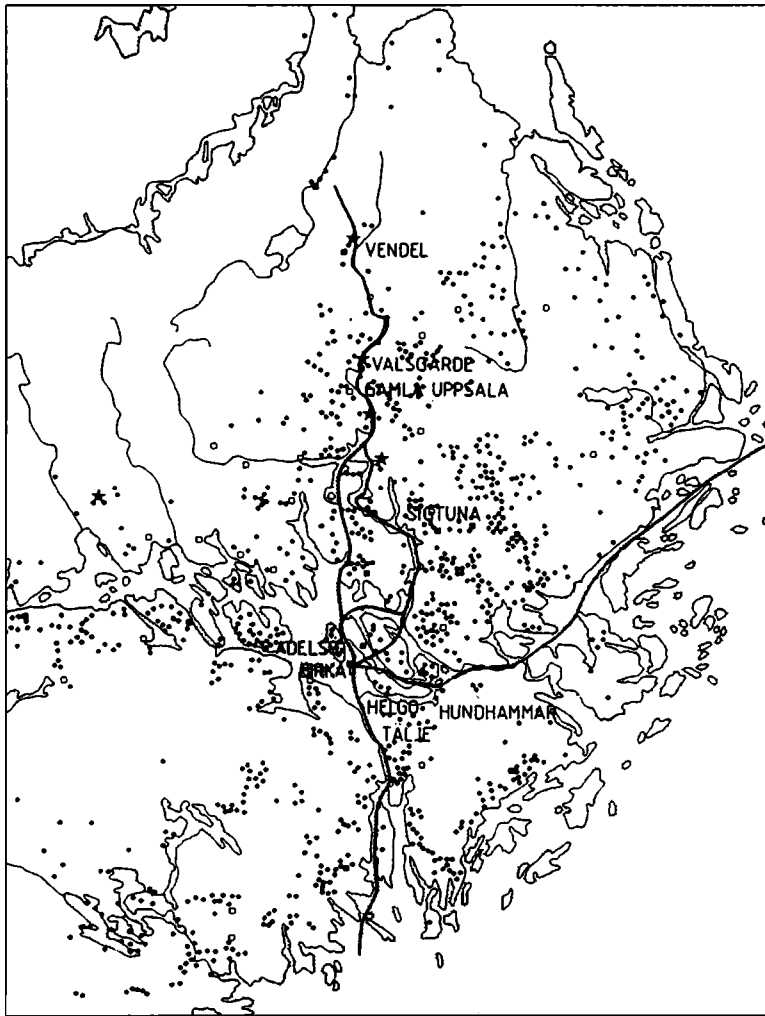
In the Mälaren region, where by this time there already was an extensive agrarian population and incipient state-formation (Sveariket), there was also the need for an economic focal point of this type. The area was affected by land elevation which is still proceeding at a rate of *c.* 50cm per century. But shore displacement is also dependent on sea levels which

are affected by climatic changes. These are cyclical, at intervals of *c.* 300 years. The water level in the Mälaren region rises at about the same rate as does the land, thus the shore line remains the same or rises slightly during warm periods and sinks twice as fast in cold phases. In the south Baltic where land elevation is minimal, this leads to a transgression of 1m in the warm periods.

In the Viking Age, Lake Mälaren was a marine inlet *c.* 150km long and up to *c.* 70km wide, with its shores about 5m higher than today. At that time its only connection with the Baltic Sea was through some sounds passing through present-day Stockholm. Gradually, the rising land surface cut off the inlet to form a great lake. Islands and headlands split the inlet up into innumerable larger and smaller straits which formed important routes of communication between the different regions of settlement.

The southern side of the inlet, now a lake, follows several long fault lines forming cliffs some 10m high. A few fissure valleys cross this main topographical picture, providing north-south connections.

One such north-south fissure valley extends from the Baltic Sea towards Södertälje, but in the Viking Age its narrow passage was obstructed for a few hundred metres by a gravel ridge. This isthmus joined the headland of Södertörn, 40x60km in area, to the



Map of East Sweden, with settlements of the Early Viking Age, and the main water-routes.

* Manor site with boatgrave cometary.

• Ordinary tamsted with more than 60 registesed burials (cremations) from the late son Age.

mainland of Södermanland, but even so this route could easily be traversed by the fairly small vessels of the Viking Age, probably by a portage over the isthmus. Other portages are known elsewhere in the Mälaren provinces, one of the most important being

that at Kalmarsand 25km north of Birka which allowed access to Ullvifjärden and Ekoln, the most northerly part of Mälaren. At Ekoln the Fyris river, the main artery through the Svears' central domain around Uppsala, flows out into Lake Mälaren. High

status sites such as Vendel and Valsgärde lie beside the Fyris and its tributaries.

The navigable channel over Tälje and Kalmarsand to Uppsala and the catchment area of the Fyris was one of the most important Early Medieval fairways in the Baltic area, and it would not have been difficult to find a safe harbour for a market centre along its length. Near to the royal manor of Adelsö, already in existence before the Viking Age, were a number of small islands, the most northerly of which, Björkö, had suitable land and shores. Björkö also lay centrally to the best waterway from the Stockholm sound to the inner Mälaren.

In a region where waterways had long been the dominant lines of communication, Björkö was certainly the best site for a harbour and market centre as long as the transports were the fairly small vessels which could be dragged through the portages. Conditions changed in the 10th century with the introduction of much bigger freight-carrying ships which could not reach Lake Mälaren by way of the Södertälje portage but had to sail around Södertörn. Björkö then became a backwater and a new site was chosen at Sigtuna on an easterly water route towards Uppsala.

Birka's situation in relation to the early boundaries of provinces and folklands is very interesting. It has often been suggested that Björkö was chosen as the site for a market centre because the island lay on the boundary between Södermanland and Uppland, between Attundaland and Fjärdhundraland. Thus it would have been a »no man's land« where specific laws would apply. However, it could be that this suggestion should be turned on its head.

Birka actually lay in the centre of the lands around the Mälaren, at the crossing of the main water routes through the area. Thus, Birka is mentioned as being

»in the middle of the land of the Svear« (Adam of Bremen I:60). Some evidence from settlement history indicates that in this area the division into folklands took place comparatively late, perhaps not until the 11th century. By then, Birka had been abandoned but its presence must still have lived on in folk memory so it may be that the folkland boundaries were set along the lines of the old waterways. In the Middle Ages the original boundaries were modified, with Adelsö being taken out of Fjärdhundra, Ekerö removed from Södermanland, and Färentuna from Attundaland. They then formed their own hundred in Uppland which was first united at the end of the 13th century.

It can be seen that, on the whole, the more important administrative boundaries were drawn along navigable channels and roads and were modified when the routes were changed for some reason.

Birka's focal position in the Mälaren provinces is underlined by the fact that its neighbouring royal manor of Adelsö was regarded as being so central that towards the end of the 13th century it was chosen as the venue for numerous important meetings between the king and his subjects. A royal palace, the first secular brick building in the Mälaren valley, was erected there; it is contemporary with the great churches at Uppsala, Västerås, Strängnäs and Stockholm, only the monasteries of Sko and Sigtuna being earlier. The centrality of Birka and Adelsö disappeared when land routes replaced waterways as the most important means of communication.

3. Birka: Local topography

Let us now move on to more local topography: the potential of Björkö itself for the growth of a market centre and harbour. In the Viking Age the island was

only 2x1.5km in area and consisted of many parallel rock and moraine ridges separated by valleys whose heights above sea level show that they must still have been submerged at the beginning of the 1st millennium A.D. When the valley between the rock on which the fort now stands and Hemlanden began to emerge from the water, it provided a smooth clay shore covered with gravel where people began to lay out building plots and to construct jetties. The rock in the south is provided with strong ramparts to form a fort. Obviously, this fort is built during the tenth century and contemporaneous with the rampart laid out along the crest of the ridge to the east of the town area (see Ambrosiani 1998). The stretch of town rampart across the valley which would have joined the fort is no longer visible. This line of defence, however, seems not to have been constructed until a late stage in Birka's existence. There may have been an earlier rampart closer to the shore, within what is now known as the Black Earth. In 1872 Hj. Stolpe mentioned a possible rampart, and some traces of an earlier rampart along the edge of the lake are still visible in the Black Earth.

Piles were driven down into the shallow water in front of the Black Earth to form a palisade to protect the harbour from unauthorized landings. Then barrow cemeteries grew up outside the defences, first south of the fort and later in Hemlanden.

The graves in these cemeteries conform to the local burial custom of the Mälaren district: cremation layers, stone pavings and earth fill. They must be the graves of an immigrant local population which maintained its traditional burial rites.

But there are some groups of graves which differ from the traditional central-Swedish type. Inhumations in chambers and coffins, unmarked by superstructures such as mounds, are concentrated

in the areas closest to the settlement and within and around the defences. Conditions of preservation mean that their grave-goods are much richer than those from the cremations, and they contain many imports. Some also contain the earliest Christian symbols – small silver crosses.

These graves could represent Svear who had changed their burial customs because of a religious conversion, but many of them include features totally incompatible with both Christianity and the local east-Swedish burial rituals. Furthermore, these graves contain evidence for eastern dress-fashions in the Viking Age. Taking all these indications together, we may presume that these groups of graves are of people who came to Birka from abroad, from both east and west, not through local migration.

It is more difficult to estimate the numbers of this foreign group than for the clearly indigenous group. There are more than 2000 barrow burials but only 500 excavated coffin and chamber graves without mounds. It is not easy to know how many of them remain undiscovered and thus unexcavated. There must be some beside the town rampart where Lena Holmquist-Olausson has recently excavated a coffin grave (1990, 175ff.) Hjalmar Stolpe excavated *c.* 300 graves of this type to the north and east of the fort, and there are some other areas where similar features are suspected. Some vegetation marks which may indicate graves have been seen in the parts of the fields (cultivated until recently) closest to the east and north sides of the fort.

The cremations and the inhumations span the same chronological period, i.e. the whole of the Viking Age from its beginning in the second half of the 8th century until the end of the 10th century. So it is not a case of there having been a complete change-

over from one burial custom to another, but rather of both rites being used in parallel. This phenomenon is largely absent in Birka's hinterland where cremation under mounds was more or less the sole rite throughout the same period.

Another topographical level is represented by the form of the settlement itself, with which the current excavations at Birka are primarily concerned. Was there a deliberate structure to the town plan and the shapes of the building plots, and if there were, was it fixed throughout the whole or a large part of Birka's period of occupation?

At this midway point in the excavations we can establish that there was a division into building plots in the original occupation zone along the shore, and also that the settlement seems to have been permanent. The houses stood on the same places throughout all rebuildings, and there were passages or lanes leading down to the water where they ended in stone foundations for jetties which were built out into the water on piles. Land elevation and infill beside the shore necessitated the extension of the jetties further and further into the water, and the plots were extended towards the new shoreline.

The houses seem to have been c. 5x8-10m in size, the walls usually of timber-framing with wattle-and-daub infill and integral roof-supporting posts. At least some of the houses had raised benches along the walls around a hearth, but there were obviously other hearths elsewhere. It is too early to say whether those hearths represent some form of working-area within each house. The floors were often covered with uneven layers of ash and there is some recently recovered evidence suggesting that there were also wooden floors. In the sections these »house pack-

ages« appear as predominantly dark-edged white blocks between more humus-mixed and bone-filled passages; thus, the »Black Earth« should really be called the »White Earth«.

It is also too early to say anything about the building plots. It is clear that the passages lie 12m apart and that between them there are two parallel houses with their gables facing the lake and separated by a narrow eavesdrip. The area between the passages also includes other smaller buildings. The question is whether the plot boundaries ran between the buildings or along the passages. Either is possible, but the answer will not be found until the basal clay is reached where a possible boundary ditch may be situated.

When settlement at Birka was abandoned in the 10th century the houses seem to have stood on platforms or terraces at least a half metre high between the then drain-shaped passages down towards the lake. The ploughing which took place almost immediately afterwards smoothed out the ground and filled the passages with earth from the uppermost parts of the platforms. Thus, the latest houses are missing and Birka's final phase is represented only by the topmost infill layers in the passages. So excavation must pay great attention to stratigraphy in order to establish the chronological development.

One significant factor is that Birka, situated on a small island in a marine inlet with brackish water, must have had an organized form of water supply. No direct traces of this have so far been found but the watershed in the valley lies more or less in the middle of the Black Earth. The earliest maps of the island from the 1740s show a main ditch running from this point at an angle down to the village in the

south-east. This ditch may have had its source in a spring or well immediately behind the early settlement. This problem demands further fieldwork and analysis.

Thus, Birka provides some examples from both regional and local topography of significance for the understanding of the growth of the earliest towns. In Scandinavia, these seem primarily to have been economic centres associated with a royal manor. They had no administrative role other than for their own organization. The surrounding countryside was controlled by the royal manors, a role which in the High Middle Ages was adopted by the great royal castles then built in towns, but not by the towns themselves.

Local topography and an understanding of a town's relationship with its hinterland are important factors when analysing the growth of early towns in Northern Europe. Birka is a good example of this and comparable studies are being carried out in other places such as Ribe, Hedeby and Wolin.

A particularly significant topographical factor seems to be that the specialized settlements were situated right on the shore, often in sites which were affected by the climatically associated transgressions. Flooding and the destruction of jetties and quays and of other means whereby the place in question was reached often seem to have influenced the settlements and have led to their removal to better and more protected sites. Thus, the marine transgression of the Viking Age may be one of the main reasons why so many towns moved site at the end of the period.

At Birka, marine transgression and land elevation

did not play such an important part. Instead, it seems that the development of bigger and bulkier cargo vessels was most influential. As the vessels could no longer be dragged over the Södertälje isthmus into the Mälaren Bay the water route was displaced further east, and Sigtuna took over from Birka.

References

This paper summarizes the topographical parts of many years of research in the Mälaren area and Birka and adds some new facts and opinions. For more specific details see:

- Adam of Bremen: *History of the Archbishops of Hamburg-Bremen*. Translation with an introduction and notes by Francis J. Tschan. Records of Civilization Sources and Studies LIII. New York 1959.
- Ambrosiani, B.: Mälärstäderna och landhöjningen.: *Bebyggelsehistorisk Tidskrift* 3, Stockholm 1982. P. 71-81.
- Ambrosiani, B.: Aristocratic graves and manors in early medieval Sweden.: *In Honorem Evert Baudou*. (Archaeology and Environment 4): Umeå 1985. P. 109-118.
- Ambrosiani, B.: Royal manors and towns in central Sweden.: *Proceedings of the Tenth Viking Congress, Larkollen, Norway, 1985*. (Universitetets Oldsaksamlings Skrifter), Ny rekke 9: Oslo 1987. P. 247-253.
- Ambrosiani, B.: *Birka. Svenska Kulturminnen 2*. Riksantikvarieämbetet. Stockholm 1988.
- Ambrosiani, B.: Birkas första vall. *Populär Arkeologi*, 16:2, P. 19-23. Hellvi. 1998.
- Ambrosiani, B. & B.G. Erikson: *Birka Vikingastaden 1-2*. Helsingborg 1991-1992.
- Ambrosiani, B. & H. Clarke (eds.): *Investigations in the Black Earth, Birka Studies 1*. Stockholm 1992.
- Clarke, H. & B. Ambrosiani: *Towns in the Viking Age*. Leicester 1991.
- Holmquist-Olausson, L.: »Älgmannen« från Birka. Presentation av en nyligen undersökt krigargrav med människooffer. *Fornvännen* 1990. P. 175-82.