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The Moot Question of Urbanism: Recent Excavations at Birka

During the years 1990-1995 a research excavation was carried out on the Viking Age town of Birka, in Central Sweden, under the auspices of the Central Board of National Antiquities (Riksantikvarieämbetet), directed by Dr Björn Ambrosiani. As one of the supervisors on the site, I want to give a brief summary of the results of that excavation and to follow on by discussing some of the implications of the results for the wider field of Viking Studies and the old debate about the roots and development of post-Roman urbanism in Britain and Scandinavia.

The research questions posed at the beginning of the excavation were:

...to discover whether there was a coherent plot pattern in Viking-age Birka; the shapes of the plots; their permanency or otherwise, and the activities carried on within them. The ecological interaction between Birka and its hinterland during the two centuries of the town's existence, and the environmental changes in the town and beyond are also part of the strategy. [Ambrosiani, 1992, p. 83]

The wider academic implications of this rather specific agenda are substantial. A planned layout and permanency of plot boundaries clearly demonstrate control of the organisation and function of the settlement by a higher authority, while the activities carried on within the settlement provide evidence of the functional and ideological role of the site and its relationship to its hinterland. The interlinked ecologies of site and hinterland reflect the most basic roots of subsistence which allowed the creation of a

large, non-agricultural settlement, and reveal the patterns of culture and power which maintained it.

All these questions have had to be answered for a deeper understanding of the development of Birka as a site, and its role in relation to social changes in North-Western Europe during the Early Mediaeval period. As usual, however, the excavation has raised as many questions as it has answered.

Birka is situated on a small island in Lake Mälaren, west of Stockholm, and has attracted antiquarian interest since the 17th century. The island has been farmed throughout the second millennium, with particular concentration upon an area known as 'Svarta Jorden', i.e. the Black Earth, for arable cultivation. This area, in which the soil is black with a high concentration of charcoal, has always been productive of both good crops and archaeological artefacts. To the north lies a large hill fort, to the south a rampart and extensive barrow cemeteries.

During the 1870s, excavations in the area of the Black Earth were carried out by the entomologist and anthropologist Hjalmar Stolpe. After some five seasons of work, with a belated recognition that his technical ability was inadequate to interpret the structural record of this complex, dry stratigraphy, he turned his attention to the cemeteries and carried out several seasons of outstandingly competent excavation, which resulted in a large corpus of both finds and records later published by Holger Arbman (Arbman, 1943). As a result of Stolpe's and Arbman's work, the dates of the site were set at c. AD 800-970, based on typological dating of the grave finds, tied to the numismatic material.

Excavation at Birka during this century has been limited by the fact that the archaeological areas are owned and strictly protected by the government. There is no threat of development, and resources for research excavation have been scant, although an excavation between 1969 and 1971, carried out by Dr Björn Ambrosiani and Dr Birgit Arrhenius, discovered the foundations of a jetty (Ambrosiani & Arrhenius, 1973). During the late 1980s, however, a major grant from TetraPak AB allowed a larger project to be planned, which began in 1990.

A trial trench, 10 x 5 m, was opened in 1990, revealing an unexpected depth of complicated, dry stratigraphy, the edge of a large stone foundation and parts of at least three buildings. This trench was expanded in 1991, to cover the entire area of one plot, bounded to north and south by narrow lanes, and half of a further plot to the south (see Fig. 1). Half of the area was damaged by later disturbances, which when emptied proved to be parallel strip trenches, running north-south, varying between 1.2m and 2m in width and extending to the natural subsoil in some areas. In other areas the bottoms of the trenches were systematically pitted down to the subsoil. These were some of the trenches opened by Stolpe in the 1870s, and, when emptied, they gave a preview of the earlier deposits on the site.

In following seasons it became clear that the town had been founded during the third quarter of the eighth century. At that time, the area of our excavation lay immediately on the shore line, so the lowest deposits, which were contemporary with the stone foundation of a jetty, were laminated flood deposits of sand and organic material interspersed with finds from the upslope area of the site. The dating of this material derives from the presence of a type of bead produced in Ribe in Denmark, and also found at Birka. These 'wasp' beads are particularly fragile and were produced in Ribe during a limited period dated by dendrochronology to between c. AD 760-780 (Stig Jensen, pers. comm.) The earliest anthropomorphic deposits predate these beads, suggesting a foundation date for the site in the early third quarter of the eighth century. At the eastern edge of the site, boundary ditches extended in from the unexcavated area upslope. These related to the line of the stone foundation of a jetty and are together the earliest structures on the site.

In the fourth quarter of the eighth century, a bronze casting workshop was established on the site, contemporary with extensions of the plot boundary ditches with fences. After a short period, the building was renovated and extended, contemporary with the construction of another building on the same plot. This pattern of two parallel, related buildings (see Fig. 2) dedicated to bronze casting continued for a period dated

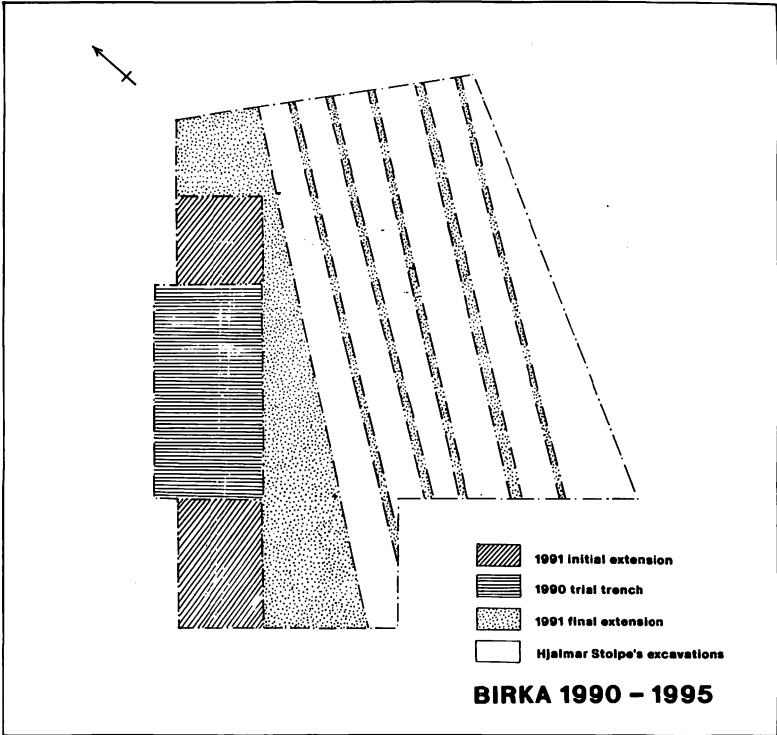


Fig. 1

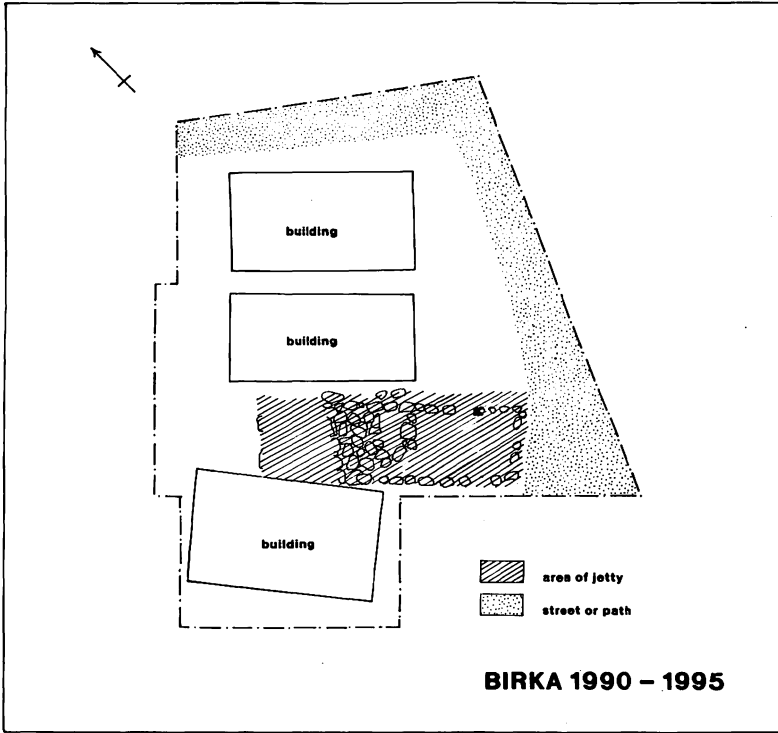


Fig. 2

by the finds to approximately a century, to be followed by a probably short period of abandonment, and the building of two parallel buildings whose function is unclear. Throughout the occupation of this plot, the evidence for a combination of industrial and domestic functions is substantial. Finds suggest that even in the later phases, the industry was probably metalworking of some type – lead and silver working has been suggested.

The plot in the southern half of the excavation was not completely dug, but the successive buildings in the excavated area seem to have been primarily domestic in function, though scattered cullet fragments in the earliest of the three phases of occupation suggest that there may, at some stage, have been small scale glass bead manufacture here. Finds of weapons, including a shield boss, scabbard chape and arrow heads, from the second of the three phases, which was destroyed by fire, suggest a relatively high status for this building.

To return in summary to the initial research questions posed of the excavation, the site was planned from its inception, and the plot boundaries were controlled and monitored over a period of up to two and a half centuries. As the waterline receded due to isostatic readjustment (Ambrosiani, 1985), new plots were laid out, and these were also monitored and controlled. This suggests some organising power – borne out by frequent documentary references to a royal steward in charge of the town in Rimbert's *Vita Ansgarii* (Rimbert, 1986, pp. 28, 35-41). The site was densely occupied and multifunctional, heavily dependant upon imported produce from the surrounding farmland to support a population of between 700 and 1000 per generation (Ambrosiani, 1985, p. 107). The lack of English coinage of the third quarter of the tenth century (Zachrisson, 1992, p. 61), which is commonly found in the Mälär Valley, suggest that the site was abruptly abandoned in the early third quarter of the tenth century.

These results, showing an unexpectedly early and complex settlement of urban type, lead to further questions and research problems. The importance of the recent excavation lies in its illumination of two areas of particularly radical departure from the local tradition of trade and manufacturing

sites: firstly, the physical size and complexity of the settlement show a staggering break when compared to earlier Swedish sites such as Helgö. Helgö is estimated to have had a population of c. 17 per generation, compared to Birka's 700-1000 (Ambrosiani, 1985, p. 107). The architecture of the earliest buildings in the centre of the urban area is unlike that of contemporary rural sites, where the post-built halls and longhouses were prevalent, and seems to consist exclusively of structures built on a ratio of 1.5-2 : 1 (length : width), with a width of 4-5 m, and varying widely in their construction methods depending on their function.

The repertoire of building techniques ranges from substantial post and sill-stone walls with internal panelling to flimsy wattle screens. In contrast to rural buildings, room divisions are common, and aisled constructions rare. The scant evidence for longhouse or hall building in Birka all comes from the edge of the town, adjacent to the rampart (Holmquist Olausson, 1993).

The second major difference between Birka and earlier sites lies in its function in relation to its hinterland. The volume of manufacturing, as measured by quantity of industrial debris, is greater than on earlier sites, probably because evidence suggests that Birka was from the beginning a permanent rather than seasonal manufacturing centre. The size and permanence of the site also have as their prerequisite a substantial subsistence trade based upon agricultural surplus from the hinterland, and the animal bone types from Birka are closely related to those from contemporary rural sites both in distribution of species and cut (Bengt Wigh and Kenneth Svensson, pers. comm.) Birka could never have been self-sufficient. There is no evidence for large scale subsistence trade in Sweden earlier than this site.

There is a similar dearth of comparable earlier and contemporary sites from the second half of the eighth century in the rest of mainland Scandinavia. The closest parallel structurally, and in volume of trade and manufacture, is the eastern Jutland site of Hedeby, now in northern Germany. Extensive excavations here under the direction of H. Jankuhn (Jankuhn, 1986) and latterly Professor K. Schietzel (Schietzel,

1981) have revealed a site with architecture and urban organisation which are to all intents and purposes identical to those of Birka, though the settlement itself is very much larger in area. However, the earliest dendrochronological dating of the urban-type settlement at Hedeby is the early ninth century (Clarke & Ambrosiani, 1991, p. 63), although there is substantial evidence for earlier, probably rural, trading settlements in the immediate area.

Ribe, on the western coast of Denmark, is earlier, with a good dendrochronological date to the first decade of the eighth century. The excavator, however, is convinced that this site started as a seasonal market, and was not permanently occupied until later in the century (Jensen 1991, p. 7 & Feveile 1994, pp. 91-2). This would fit Ribe into the pattern of seasonal trade and manufacturing sites, effectively market places, which are beginning to emerge as a class of site from the eighth century, all over Sweden and Denmark (Ambrosiani, 1992, p. 152), and include sites such as Sebbersund, on the Limfjord in northern Denmark, Åhus in Scania (Callmer, 1994, p. 56) and, later, Paviken on Gotland (Lundström, 1981). Some of these sites, including Ribe, do become permanent settlements during the early ninth century, others continue as seasonal markets. Their permanent populations in the eighth century seem to be small to non-existent.

In Central Sweden itself there are no similar contemporary sites; centres of political power such as Gamla Uppsala, Alsnöhus and Forn Sigtuna show no signs of the kind of intensive occupation which characterises Hedeby and Birka, despite their concentrations of rich burials and imported goods. It has been suggested that the proximity of Alsnöhus and Birka is significant, and reflects a royal control of the trading settlement itself; this remains to be proved, but given the later documented royal status of Alsnöhus, and the suggestions in Rimbert that Birka was under the direct control of the king (Rimbert, 1986, pp. 27-8), it is a strong possibility. Some sort of centralised control of the settlement is certainly indicated by the rigidity of the plot boundaries, which varied only c. +/- 0.2m over two centuries.

Later settlements throughout the Scandinavian world show remarkable similarities to the plan of Birka. Identical architectural forms and urban organisation have been recorded in Hedeby, as mentioned, but also in the earliest deposits in Birka's successor settlement, Sigtuna (Bäck and Carlsson, 1994, pp. 113-4), and in York (Hall, 1990, p. 382) and Dublin (Wallace, 1992).

The functions of the settlement at Birka quite clearly included both trade and manufacturing. Imports in the lowest, i.e. earliest, deposits included material from both the Slavic and more westerly areas. The geographical trends in the imported ceramics have been quantified by Mathias Bäck in an article published in 1995, which demonstrates that the proportion of western ceramics, the majority of which are from Germany and the Low Countries, decreases steadily from the eighth century contexts, to virtually nothing in the tenth century contexts (Bäck, 1995). This decreasing western influence is also visible in the bone and antler, with so-called 'Frisian' combs only present in the eighth century levels (Michél Carlsson, pers. comm.) It is intriguing to speculate that this change is the result of the progressive expansion of the Russian colonies from the end of the eighth century¹, whose positions on the trade routes up the Russian river systems of the Dnepr and Volkhov indicate links into the Baltic trade network with which Birka was also closely connected.

It is difficult to know what term to use to describe the volume of craft production demonstrated at Birka. 'Industrial' implies mass production as characteristic of the post-mediaeval development of Western Europe, but though lesser in volume than this, Birka's craft production was certainly very much more intensive and well organised than that on any other earlier or contemporary site in Sweden. The metal workshops excavated during the recent excavations provided evidence of year-round production through a period of at least one century, possibly more, using a variety of metals (bronze, lead and the precious metals) and manufacturing a variety of objects. This is certainly an organised, industrial-type craft as characteristic of the later mediaeval

towns.

Excavations in the area of the southern rampart by Lena Holmquist Olausson (Holmquist Olausson, 1993) have revealed the remains of a hall, built on one of several terraces, all of which were probably building foundations. This suggests that at least one part of the settlement was occupied by a high-status group, or group with a different role in the society, and this is supported by the wide variety of grave furnishings from the cemetery excavations (Arbman, 1943).

Birka, then, appears to have been an organised, densely occupied, multi-functional settlement, from its foundation in the mid-eighth century. While this is an exciting result in itself, its wider implications in terms of the study of the development of urbanism in Scandinavia are profoundly stimulating. It has been suggested that the impulse for the creation of towns in Scandinavia came from the exposure of the Vikings to Western European urbanism during the ninth century. This, however, must now be abandoned as a serious thesis for two important reasons: the first is the early date of the Scandinavian settlements, particularly Birka, which demonstrates fully fledged urbanism nearly fifty years before the first documented raid on Western Europe. The second reason is the physical contrast between the Scandinavian early towns and contemporary settlements in Western Europe, which demonstrate much less strict topographical organisation, and different architectural forms.

Birka was abandoned at the beginning of the fourth quarter of the tenth century. A number of factors must have been behind this (apparently complete) clearance of the site. Physically, the continuing relative fall of the water line must have caused problems in handling ships of increasingly deep draught, both at the harbours of Birka itself, and at the important southern access to the Mälarsjön, the Södertälje portage. Politically, the scant documentary sources for the period suggest a shift in the focus of power to a branch of the royal kinship whose base was on the northern side of the Mälarsjön, in Götaland (Tesch, 1990, p. 23). Ideologically, the official conversion of Sweden, after a long period of mission from the diocese of Hamburg-Bremen, also occurred at this

time. It is very probable that a combination of these factors was behind the abandonment of the site, and the completeness of that abandonment reinforces the impression of a strong link between centralised political power and control of the town. Controversially, it has been suggested that the population of Birka was moved directly to the town of Sigtuna, on the northern edge of the Mälarsjön (Bäck and Carlsson, 1994, p. 118). The archaeological evidence in no way contradicts this idea, and the earliest material from Sigtuna, both structures and finds, shows very marked similarities to that from Birka (op. cit.)

It seems possible that in the planning and establishment of the earliest towns in mainland Scandinavia, elements of design and function were derived from many sources. The architectural forms characteristic of these settlements do not derive from the rural architecture of Scandinavia, though the fixed, narrow plots relating to a water line and parallel road may have their roots in the earlier seasonal market places typified by Ribe. The density of occupation and controlled trading/manufacturing functions may show influences from contemporary Low Countries sites such as Dorestad, while the relationship between enclosed settlement and hill fort has similarities to smaller, earlier and contemporary settlements in the Slavonic area such as Starigard (Clarke and Ambrosiani 1991, pp. 108-9). The appearance of such a fixed pattern of settlement type in an extremely short period of time and its success as a form over succeeding centuries lead one to speculate on the possibility that this may be one of the rare occasions in the archaeological record where the influence of one individual as planner/executor can be identified.

Note

1. The northernmost of these settlements, Staraja Ladoga on the Volkhov, has a foundation date of c. 760 from dendrochronological material; Ryurikovo Gorodishche, a little further south, has a finds based date of the second half of the ninth century or earlier; Gnezdovo, on the

Dnepr, is dated to the mid-late ninth century, or the first half of the tenth century, again based on the finds (Clarke and Ambrosiani, 1991, pp. 120-123).

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