

Tile-stove production in the Baltic c.1400–1600: an index of Hanseatic cultural and technological exchange

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Hansa; Baltic Sea; earthenware stove-tile; cultural and technological exchange

Introduction

This paper extracts a key theme arising out of an archaeological survey of the Hanseatic ceramic market in the Baltic between c.1200–1600 (Gaimster 1998; 1999a; 1999b; 1999c; 2000a; 2001a; 20001b; in prep.). The project examines the distribution of ceramic wares as an index of trade, social contact and cultural exchange between western Europe and Scandinavia, Fennoscandia and the eastern Baltic region. In addition to its value as a guide to commercial networks, the ceramic evidence provides a physical measure of the spread and adoption of Hanseatic domestic practices (*habitus*), particularly in the spheres of dining ritual, heating technology and interior decoration, and of technological transfer in the sphere of ceramic manufacture. In view of their short life-span and survival in the ground, imported ceramics and their contexts have the potential to provide a new chronology, spatial dimension and quantifiable index of technological and cultural transfer across the region. In accepting that domestic objects have the power to reflect behavioural messages about past populations (i.e., that artefacts are *Kulturträger*: see Verhaeghe 1998) the project has focussed on the changing spectrum of form and design in domestic ceramics over the period of study as a measure of the degree to which Western technological innovation, social practice, political and religious loyalties as well as fashion trends penetrated the homes of the feudal elite and urban mercantile households across the Baltic littoral zone, many of them situated on the very edge of the European cultural orbit.

The Hansa in the Baltic: cultural and technological networks

The Hansa formed the principal agent of trade and exchange between Continental Europe and the Baltic Sea region during the medieval to early modern period. The origin of this confederation of German cities can be traced back to the foundation of Lübeck in 1158. In the wake of conquest by the Teutonic Order, German merchants rapidly colonised the lands to the east during the course of the following century and founded such towns as Rostock, Stralsund, Danzig and Riga. Hanseatic trade reached its zenith during the 14th to 15th centuries with the foundation of permanent trading posts or *Kontore* at Novgorod in the east, Bergen in the north, and at London and Bruges in the west. Together they formed a dynamic economic and cultural network which stretched the length and breadth of Europe and beyond (Schildhauer 1985; Bracker 1989).

The Hanseatic trading system which had emerged by the late 13th century drew the west, the east and the north of the Continent together by acting as a intermediary for the exchange of goods between two very different patterns of production: raw materials from the east and finished/semi-finished products from the west, and by stimulating the wider long-distance market. Hanseatic urban settlements in northern and western Europe shared many things in common, not only in their commercial function, but also in their language and in their cultural and ethnic identity. Recently art-historians have begun to talk in defining terms

of a Hanseatic cosmopolitanism which was articulated physically through a shared vocabulary of townscape, public building, church layout (designed as much for business meetings as for the veneration of the Saints), architectural style (*Backsteingotik*), and through common design in the visual arts, particularly in the ecclesiastical sphere (Zaske/Zaske 1986; Jaacks 1989). Here carved and painted altarpieces endowed by leading merchant families or guilds, carved bench- and pew-ends, monumental grave slabs and baptismal fonts and doors in cast bronze all allude to the shared religious and social values of the urban bourgeois elite.

The Baltic ceramic market

So little of the Hansa's traditional cultural historiography has been concerned with the routines of everyday life and material expression in the home. Where this question of domestic comfort in the Hanseatic household has been considered, the emphasis has inevitably been restricted to the probate record of and random museum survivals of precious and base-metalware, textiles or furniture (Hasse 1979). However, rescue excavation in advance of city-centre redevelopment – particularly in the Baltic Sea region in the aftermath of fall of the Iron Curtain – has provided the opportunity to adjust this essentially asymmetrical picture. While it is unrealistic to reconstruct the incomings and outgoings of the international trade on the basis of fragments of pottery, the short life-span, ubiquity on the ground and widespread social distribution, make traded ceramics a sensitive physical measure of cultural and technological contacts between regions (Stephan 1996). In contrast to the documentary record of international trade links in the Baltic and North Sea zones, it is through the excavated record that we are able to quantify more clearly the degree to which Hanseatic 'lifestyles' and technological practice were embraced by expatriate merchant communities across the region.

The early phases of the emerging international pottery market in the Baltic during the 13th to 14th centuries are dominated by the migration of red earthenware production from western Europe to the southern Baltic zone and by the increasing competition between the highly

decorated redwares and the technologically superior highly-fired stonewares from western and northern Germany. The development of towns along the Baltic littoral during the course of the 13th century stimulated a demand for high quality ceramic tableware suited to the needs of urban living and social competition. Initially imports of highly decorated lead-glazed redwares from the North Sea coast of Flanders and the Netherlands satisfied the demand at the expense of imports from England or western France, the Bruges kilns of c. 1200–1350 probably being the epicentre of the industry (Verhaeghe 1989; Schäfer 1997). But the discovery of a series of Low Countries-type redware production centres along the Öresund spanning the Danish islands of Funen and Zealand and the coastline of western Scania, at Lübeck and at sites on the Mecklenburg coast, producing typologically and technologically indistinguishable wares, suggests the migration of western European workshops into the southern Baltic region. The distribution of western European and regionally-produced redwares stretches from the mouth of the Baltic in the south to Finland and Novgorod in Russia to the north. Their relatively low proportional representation in towns along the Mecklenburg and Pomeranian coast suggest that these wares enjoyed a certain social premium which made them only accessible to the Hanseatic mercantile and rural feudal elite (Rębkowski 1997; Schäfer 1997, 306–307).

In terms of numbers, however, the 13th to 15th century international ceramic trade in the Baltic is dominated by the competition between stoneware producers in the Rhineland, Lower Saxony and Saxony (Gaimster 1997, Chap. 3; 1999a; 1999b; 1999c). The robust body enabled stoneware to be transported in bulk and over long distances. Intensive workshop production, stimulated directly by growing demand on the urban markets of northern Europe, resulted in a relatively low cost to the consumer and the ability to reach a wide spectrum of the population. The rapid development of the fully fused stoneware body fired to between 1200 and 1400 °C (with a porosity value of 0.4%) in the Rhineland and Lower Saxony at the beginning of the 14th century coincides with and may even be consequential on the growth of urban populations in northern Europe. With its technological superior body, which is impervious to liquids, stainless

and odour free, stoneware revolutionised so many domestic activities from washing up to preserving food. In addition, its increasingly varied repertoire of forms over the 14th to 15th centuries reflects a market response to the multiple drinking, decanting, transport, storage and sanitary needs of town dwellers across the Continent. Despite the plain, utilitarian body, stoneware captured a niche in the popular tableware market of northern Europe, enabling the aspiring middle classes to imitate aristocratic drinking and dining practices in a less expensive medium than metalware and drinking glass. In view of its wide penetration of the international pottery market, German stoneware may be regarded as a type-fossil of mercantile 'Hanseatic' urban culture, a dual utilitarian and symbolic medium which linked consumers irrespective of means from the English Channel to the Gulf of Finland (Gaimster 1993; 1999c).

The smokeless ceramic tile-stove: Hanseatic technological and cultural transfer

The archaeological evidence for the spread of the smokeless ceramic tile-stove into the Baltic forms a further quantitative and qualitative measure of long-distance cultural and technological transfer from Continental Europe, both in the promotion of Hanseatic lifestyle traits among the region's urban communities and in the export of mould technology in ceramic production and the possible migration of specialist workshops (Gaimster 1998; 1999a; 1999c; 2001a). As in the case of stoneware, lead-glazed earthenware stoves contributed not only to a technological transformation of the domestic environment but also, with the development from the mid-15th century onwards of coloured glazes and moulded relief, introduced a new visual and iconographic element into the home. Scenes from the lives of the Holy Family and the Saints based directly on the carved wooden altar shrines of churches were replaced during the Reformation by the secular iconography of coats-of-arms and portrait busts of the region's temporal rulers and religious leaders. As with relief-decorated stoneware, the ceramic stove formed a symbolic medium for the introduction of new beliefs and affiliations into the domestic sphere.

Once again long-distance cultural and social networks appear to lie behind the archaeological distributions in town and country.

Earthenware stove-tiles, in contrast to stoneware, were a fragile product and risky to transport over long distances. Although it is possible to identify examples of North or Central German imports into southern Scandinavia, it is clear from the number and distribution of production sites and from analysis of the fabrics that most stoves made in the Baltic region were manufactured locally, often with the use of moulds imported from northern and central Germany. However, it is difficult in view of the substantial quantities of production debris, to interpret local manufacture solely in terms of the opportunistic use of traded moulds. More realistically, and following the model for 13th-century redware, production on this scale may be explained by the movement of specialist craftsmen or even workshops around and across the Baltic rim. The documentary evidence for German tile-makers (*pot-tomakare*) settling in Lund, Malmö, Kalmar in Sweden and Turku (Åbo) in Finland from the mid-16th century illustrates the extent to which Continental craftsmen were attracted by the prospect of new markets opening up in the North (Gaimster 1999c, 58; 2001a, 168).

This network of demand and the migration of production is most evident in the series of rectangular pre-Reformation niche-tiles moulded in relief with biblical figures and scenes surrounded by architectural and botanical ornament derived from church altarpiece carving. A workshop assemblage of 26+ moulds was found in the centre of Lübeck in 1939 (Hasse 1969, cat. 339; Strauss 1972, pls. 72–79; Gaimster 2001a). Recent excavations in the cellar of a late 15th-century house on the Pläterstrasse in Rostock produced around 100 fragments of 23 individual moulds along with kiln wasters contemporary with the Lübeck Fischergrube site (Burrows/Gaimster 2000). Both the Rostock and Lübeck assemblages contained matrix-identical moulds of the *Charity of St Martin* which suggests that the workshops were themselves linked (*Ibid.* fig. 9). A further find of matrix-identical mould among pottery waste in the centre of Greifswald suggests the development of satellite workshops along the coast of Mecklenburg, their advantageous location facilitating local trade and overseas export to southern Scandinavia as finds of matrix-identical stove-tiles in

Lübeck, Wismar and Malmö indicate (Ibid. fig.7; Gaimster 2001a, 166). The identification of matrix links and possible prototypes for the Rostock Pläterstrasse tile moulds in Hungary, Switzerland and the Upper Rhineland hints at the extent of Hanseatic commercial and cultural networks which were instrumental in the origin of this Baltic craft industry. The design of several of the main Rostock moulds corresponds to tiles which form the ornate tower-stoves of the royal palace of Buda, Budapest, commissioned by the Habsburg Kings Ladislas V and Martinus Corvinus of Hungary between the 1450s and 1480s (Burrows/Gaimster 2000, 86; Gaimster 2001a, 166) (fig.1). The format of the moulds, their border ornament and their design repertoire of scenes drawn from the Life of Christ and the lives of the Saints compare closely also to the moulds found alongside production waste in the Norrmalm district on the outskirts of medieval Stockholm (Ambrosiani 1910, pls. 55–57; Strauss 1972, pl. 96, 1–2; Gaimster forthcoming).

Long-distance technological and cultural influences may also be behind a group of 15th-century stove-tiles with low-relief moulded ornament found excavated in the cellars of the Stockholm castle. The group consists of a series of square panel tiles, moulded in low relief with figurative, animal and mythological subjects, including St Olaf, a stag, a unicorn, a further fabulous beast, a pair of lovers in a garden, St George and the Dragon, an Imperial (double-headed) eagle (Olsson/Nordberg 1940, pl. 11a; Gaimster forthcoming). A recent find of a waster moulded with the same full-length portrait of St Olaf from a redware production site in Pasewalk, Lower Pomerania, suggests that this tile product was being introduced into the southern Baltic region during the second half of the 15th century (Schäfer 1999, fig. 26). The finds at Stockholm Castle suggest that the royal Swedish court was participating in the latest trends in interior design and heating technology being introduced from Central Europe. To find the closest parallels in terms of form and moulded iconography one must look to the rich late medieval urban material culture of Bohemia and its castles, particularly in and around Prague (Richterová 1982, pls. 12–17), a centre of artistic culture linked to the Baltic through the Hansa.

Although an industry with an urban base during the late medieval period, it is significant

that castles and monastic houses are responsible for the greatest concentrations of finds of this type on Baltic consumer sites. Of these the Danish royal castle of Falsterbohus (built in its first phases during the 13th century and deserted by the middle of the 16th century) on the southern tip of the Falsterbo peninsula overlooking the Öresund, has generated the largest and most varied single assemblage of late Gothic-style architectural, botanical and geometric tiles of pre-Reformation date in the southern Baltic. Among the c. 175 fragments of excavated niche and half-cylinder tiles it has been possible to identify around ten or more individual figurative schemes, including a 'lovers' garden', full-length portraits of male and female rulers and saints, such as St John, Peter and St Barbara flanked by towers, a representation of Lazarus at the Rich Man's Table and a youth in the court dress of the late 15th century (Gaimster 2001b, figs. 12–17). Recent finds of late Gothic-style polychrome tin-glazed stove-tiles, including figurative finials, from the bailey ward just outside the refectory of the Order's castle at Viljandi (Fellinn), south Estonia, reinforce an impression of interior opulence in the castles of the Teutonic Knights during their final pre-Dissolution phase (Ibid., fig.18). Finds of polychrome tin-glazed stove-tiles of the late 15th to early 16th-century are virtually exclusive to royal, aristocratic and monastic residences in northern European countries as finds from the site of the Cister-

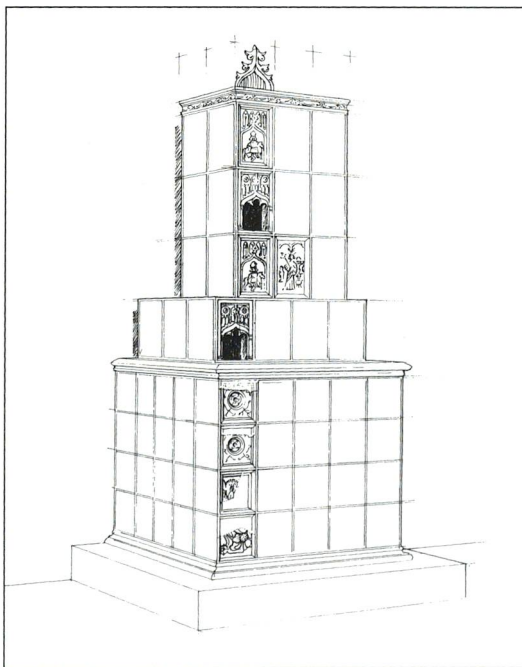


Fig. 1: Reconstruction of a late medieval gothic tower-stove with tiles from the Rostock Pläterstrasse workshop, c. 1450–1500. Burrows/Gaimster 2000, fig. 8; Gaimster 2001a, fig. 6. Drawing by Jim Farrant, British Museum.

cian abbey of St Mary Graces, London, illustrate (Gaimster et al. 1990).

The strengthening of German cultural and political connections with the Baltic is also evident in the series of quadrangular panel-tiles inset with full-length portraits and portrait roundels which were produced and traded across the region during the second and third quarters of the 16th century. The trend towards the secularisation of design begins with a series of full figure portraits of male rulers of northern and central Germany, excavated tile waste and moulds for which suggest a migration of production from the North German Baltic coast to southern Scandinavia (eg. Liebgott 1972, fig. p. 24–25; Gaimster 2001a, fig. 8). Tiles moulded with woodcut-based representations of the leading protagonists of the Lutheran Reformation have a particularly wide archaeological distribution, the secular personality cults suiting the new religious and political affiliations of the Baltic mercantile communities (Blomqvist 1936; Gaimster 1999a; 1999c, 59; 2001a; Ose 1992). The production of portrait medallion tiles of Johann Friedrich, Elector of Saxony, and the Landgrave Philip I of Hesse and their respective consorts, Sybille of Cleves and Christine of Saxony, coincide with the life-span of the Schmalkaldic League of Protestant princes (c. 1530–47). Moulds of portrait tiles with Johann Friedrich and Sybille found among wasters on the Marlesgrube, Lübeck, are matrix-identical to tiles found as far north as Stockholm, Riga and Turku (Åbo) (Metzger 1900; Gaimster 1999c, 59; 2001a, 168). As in the case of stoneware, the fusion of technological

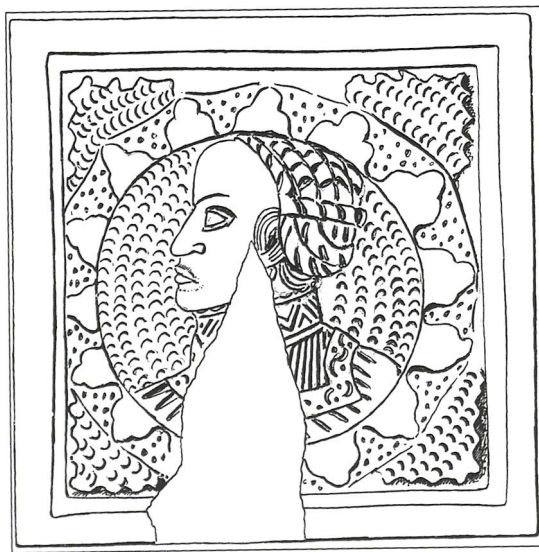
revolution in the domestic ceramic medium and the explosion of the printed design sources at the beginning of the sixteenth century, which percolated down to the very lowest level of craft production, enabled the latest religious, polemical, homiletic, even satirical images, to penetrate the domestic sphere.

Sharing an urban distribution in the Baltic and south-east England is a further distinctive group of panel-tiles which are moulded with portraits of the Twelve Victorious Heroes of the Old Testament after contemporary printed designs. The series is represented by portrait-tiles of Josaphat, King of Juda, son and successor of Assa, who fought against the Syrians and Moabites (2 Samuel 20), found at Canterbury (Cotter 1993) and of Jephthah, the Gileadite warrior (Judges 11), found in Tabard Street, the City of London (Gaimster 2000b, fig. 4b). These strong moralistic icons of warrior kings, military leaders and prophets taken from engravings by Georg Pencz published in Nuremberg in 1531 and Hans Sachs' illustrations of the same period, formed part of the Protestant visual polemic circulating in England and northern Europe during the second half of the 16th century. The *vanitas* allegory of the Ages of Man and the parable of the Prodigal Son are examples of further popular humanist and evangelical themes to be reproduced on a series of panel tiles which have an archaeological distribution stretching from the South Baltic to the English Channel (Arnold et al. 1990, fig. 42; Blomqvist 1936, figs. 41–42; Gaimster 1989, pls. XLIX(b) and L(a); 2001a, fig. 11; Ring 1996, fig. 5). The distribution of stove-tiles – along with moulds and kiln wasters – with this distinctive repertoire of post-Reformation humanism and homiletic iconography on sites stretching from Lübeck to Lund and London reflects the direction and extent of cultural, religious and technological exchange across western and northern Europe during the mid- to late 16th century, facilitated largely by embedded commercial and social networks.

Stove-tiles in the Baltic: between artefact and text

The closed ceramic stove represents a key feature of the urban scene in the Baltic zone from c. 1400 onwards. The mapping of archaeological finds of tiles, moulds and kiln waste forms a

Fig. 2: Portrait medallion tile with the bust of a female ruler after a contemporary printed source, possibly Anne of Hungary and Bohemia (consort of King Ferdinand I), c. 1530–50. Excavated in Lund, Sweden, and probably made locally from moulds made from imported from North Germany. Kulturn, Lund (KM 25551;37.270:11). Blomqvist 1936, fig. 14 (1:1).



measure of the spread of Hanseatic domestic *habitus*, particularly in the spheres of heating technology and interior decoration. In contrast to stoneware vessels, earthenware stove-tiles were a fragile product and risky to transport over long distances. As in the case of Low Countries-style highly decorated red earthenwares of the 13th to early 14th centuries, it was necessary to move tile-stove production closer to the marketplace. Despite an iconographic repertoire dominated by German visual sources (many of which are derived from long-distance commercial and cultural links with central Europe), fabric analysis indicates that most stove-tile finds from Scandinavia and Fennoscandia were manufactured locally. Makers either employed moulds brought from Germany or improvised by taking moulds from imported tiles. Preliminary analysis indicates that the archaeological distribution of moulds and kiln-waste corresponds geographically to the known documentary evidence for the migration of tile workshops from northern Germany during the

16th century. Indeed, the archaeological evidence is beginning to refine the chronology for this process of technological transfer. The corpus of production evidence from Copenhagen, Lund, Malmö, Stockholm and Turku (Åbo) reveals that this transfer of technical know-how, if not entire workshops, began in the mid-15th century at least and continued well into the 17th century.

Acknowledgement

The project *Baltic ceramic market c. 1200–1600: Hanseatic Trade and Cultural Exchange* has received generous support from the Swedish Institute, the Nordenstedt Foundation, the Krapperup Foundation, the British Academy, The Society of Antiquaries of London and the Arts and Humanities Research Board (in the form of a Research Exchange Fellowship 2002). All the data will be available as a website hosted by the Archaeology Data Service, University of York.

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