# Early Glazed Ware from Medieval Denmark

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# SUMMARY

A number of sherds of glazed pottery of late 10th- or early 11th-century date have been found at Lund, Sweden, and Lejre, on the island of Sealand, Denmark. Petrological analysis of a sample of these sherds shows that they are extremely similar in their petrological characteristics to locally-produced Baltic wares. However, the methods of manufacture and the range of forms found shows no local influence whatever. It is suggested that these vessels were the products of a short-lived pottery industry set up in the kingdom of Denmark in the later 10th or early 11th century by an immigrant potter. Comparison of the technical characteristics of the pottery with those of contemporaneous western European wares suggests that this immigrant potter came from England, and most probably from Stamford, Lincolnshire.

# INTRODUCTION

In 1961, during what can be classified as the first real excavation in the medieval city of Lund (Fig. 1), the presence of lead-glazed pottery in levels tied to the earliest phases was noticed (Lund is in southern Sweden, but was once part of the medieval kingdom of Denmark, in Skåne). Excavations during the sixties and early seventies revealed more sherds of this ware.

In 1974–75 a large site in the centre of the town was excavated. This was the first large-scale urban excavation in present day Sweden, and due to the developer-sponsored publication it has become known in Scandinavia as the PK-bank site; a larger number of Early Glazed sherds were found and published by Mårtensson (1976a, b). The sherds were recovered in levels sealed by a large land-slide layer, and were dated by dendrochronology to before 1050.

The ware is described as mainly oxidised, with a thin external lead glaze, ranging from yellowish brown to dark green in colour (Mårtensson 1976b). Enough sherds were available for reconstruction of vessel shape and Mårtensson identified two main types, a handled and spouted pitcher and a small bowl (these later became known as Kilmurry's vessel forms 5 and 12).

The relatively small quantities of Early Glazed wares, compared to the local reduced earthenwares, led to the assumption that it was an imported ware, most likely from England (Mårtensson 1976b, 267ff), which was considered by Kilmurry in her discussion of the distribution of Stamford ware (1980, 156).

A few sherds were identified in 1980, but no work was carried out on this material until 1992-3 when more sherds were found during an excavation in the western part of the city of Lund (the unpublished kv. Myntet site). These Early Glazed sherds were initially identified as Stamford ware, with forms corresponding to those of Kilmurry, but while using them to illustrate the high incidence of residuality within Lund deposits (Larsson 1993), it became obvious that there were problems when trying to fit them into Kilmurry's fabric types.

In autumn 1992 the very first finds of glazed pottery were uncovered at the Danish Viking Age site at Lejre, Sealand (Fig. 1). The sherds were found in two different pits, a sunken floored building (grubenhaus) and an occupation layer. All the structures were situated in a very limited area of 375 square metres  $(25m \times 15m)$ . The excavations at Lejre did not share the difficulties in the archaeological dating of glazed ware encountered in Lund. Even though the sherds were found in different types of archaeological features, they were all in well-stratified contexts associated with archaeological material from the beginning of the 11th century (these include Viking Age pottery and single-sided combs, a Kufic coin and a coin of Otto III from the end of 10th century or beginning of the 11th century). So far, about thirty sherds have been found and most of them came from one of the pits and from the grubenhaus (House XIV).

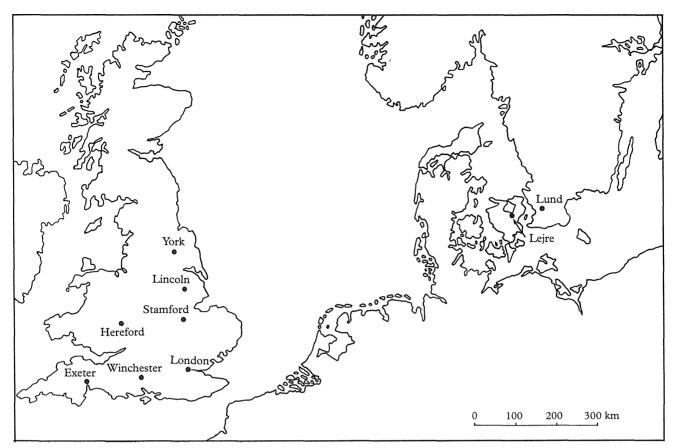


Fig. 1. Map of Western Europe and Scandinavia showing places mentioned in the text.

In 1993, whilst on a study tour, one of the authors (AV) was shown the glazed sherds from Lejre and confirmed that on typological grounds they were likely to be of 11th-century date, but that a visual examination of the fabric using a ×20 binocular microscope suggested that the vessels were of Scandinavian rather than Western European origin. In Lund the similarity of the Lund glazed wares to those at Lejre was immediately noted. Funds were sought in order to carry out a petrological examination of their fabric and compare it with that of sherds of definite Baltic origin. It was also proposed to make a search of the Lund pottery archive in order to widen the range of forms known and to establish more clearly the chronological and social context of the pottery. Grants were obtained from the British Academy (AV) and Nordenstedtska Stiftelsen (SL) and the fieldwork took place in October 1994.

# FABRIC

Samples of 'standard' Early Glazed ware from Lund and Lejre were examined in thin-section. In addition, a sample from a glazed bowl with a similar fabric to the 'standard' but with a coarse sand temper was examined, as were sherds of Baltic ware from both Lund and Lejre (these are handmade, black-fired coarsewares). The thin-sections were prepared at the City of Lincoln Archaeology Unit and are retained at Lincoln as part of the reference collection (Reference Numbers: L690 to L706). Seventeen samples were examined (Table 1). These included a single sample of Early Glazed ware from Lund (L700), a sample from the sand-tempered Early Glazed bowl from Leire (L702) and a sample of a 'standard' Early Glazed ware sherd from Lejre (L701). The remaining samples came from a selection of Baltic ware cooking pots - ten from Lund and four from Lejre - which were included in order to explore the potential clay and mineral resources available to potters in the Baltic littoral. All seventeen samples contained angular fragments of acid igneous (granitic) rock up to 2.0 mm across and mineral fragments which probably derived from such a rock. Angular quartz grains were present in most samples in varying quantities. Some of these were probably of granitic origin, especially grains with few inclusions and showing no sign of strain in their extinction pattern. However, the remainder probably had a sedimentary origin and a few fragments of a sandstone were present, composed of interlocking quartz grains with no evidence of a cement. In addition, rounded quartz grains, ranging from 0.3 mm to 1.0 mm across, were present in a number of samples. A single fragment of flint was seen in one of the Baltic ware samples from Lejre.

Number	Site	Ware	Angular Quartz	Rounded Quartz	Acid Igneous Rock Fragments
L690	Lund	Baltic ware	М		S
L691	Lund	Baltic ware		S	S
L692	Lund	Baltic ware	М	S	S
L693	Lund	Baltic ware	М		А
L694	Lund	Baltic ware	М	S	М
L695	Lund	Baltic ware		S	
L696	Lund	Baltic ware	А	S	М
L697	Lund	Baltic ware	М	S	М
L698	Lund	Baltic ware	А	S	S
L699	Lund	Baltic ware	S		М
L700	Lund	Early Glazed ware		S	S
L701	Lejre	Early Glazed ware	S		S
L702	Lejre	Early Glazed ware	S	S	S
L703	Lejre	Early Glazed ware	S	S	S
L704	Lejre	Early Glazed ware			S
L705	Lejre	Early Glazed ware	S	S	М
L706	Lejre	Early Glazed ware	S	S	S

Table 1. Results of thin-section analysis of sherds from Lund and Lejre (A: abundant; M: moderate; S: sparse).

In contrast to the basic similarity in inclusion types, there are three quite distinct groups of textures present in the clay matrices of the samples. All the Early Glazed sherds have a clay matrix characterised by abundant angular fragments of quartz (and probably felspars) and sparse to moderate flakes of biotite. These biotite flakes are visible using a ×20 binocular microscope and provide a clear, simple means of distinguishing the ware from other similar glazed wares. A similar clay matrix is also present in three of the four Lejre Baltic ware samples. A second group is distinguished by similar quantities of quartz and mica but with a variegated colour, combined with rounded pellets of clay of differing colour and texture. This group is represented in the fourth Leire Baltic ware sample (L704) and two of the Lund Baltic ware sherds (L695 and L697). The third group has a clay matrix with few clastic inclusions and is represented by five samples of Baltic ware from Lund, but none from Leire.

A detailed comparison of the igneous rock fragments and minerals in these samples is instructive. Quartz is present as a major constituent, but felspars appear to be more common. These include: orthoclase felspar with signs of alteration to sericite; perthite; graphic intergrowth of quartz and felspar; microcline felspar and plagioclase felspar. In addition, biotite is common and tourmaline is rare. There is no obvious difference in the occurrence or frequency of these minerals between the Early Glazed ware samples and the Baltic ware samples, nor within the samples in the Baltic ware group.

By contrast, Western European glazed wares of 10th- or 11th-century date are easily distinguished from the Lund/Lejre examples. Stamford ware has

an off-white fabric with abundant silt-sized quartz inclusions, but no biotite (Kilmurry 1980). Winchester-type ware has a similar iron content to the Lund/Lejre sherds, but is tempered with a rounded quartz sand containing no acid igneous rock inclusions (Biddle and Barclay 1974). Hereford's early glazed ware (Hereford Fabric A7a; Vince 1985) has a similar iron content and contains similar quantities of quartz silt, but the moderate to abundant mica flakes found in that ware are of muscovite rather than biotite. The Bedford Garage kiln at Exeter produced glazed wares with a similar iron content to the Lund/Lejre vessels, but the inclusions in this ware included weathered volcanic rock fragments and iron-rich sedimentary rocks (Vince 1984). Finally, Andenne ware has a lower iron content than the Lund/Lejre finds and has a coarser, ill-sorted quartz silt content (as can be seen in the photomicrograph of a London find in Vince and Jenner 1991, Fig. 2. 111, 104).

The following conclusions can therefore be drawn. The Early Glazed ware sherds from Lund and Lejre are of similar character in thin-section. They can be distinguished from the majority of samples of Baltic ware both in terms of the frequency of inclusions and in the nature of the clay matrix. There are, however, Baltic ware samples which share both the low frequency of inclusions and a similar clay matrix. Whether there is any connection between the manufacture of these two groups of pottery, despite the many differences in technology employed, is unproven, nor can it be said that the data supports either Skåne or Sjelland as their potential source. It is nevertheless quite clear that the Early Glazed sherds have an origin in the Baltic littoral rather than in Western Europe.

# EARLY GLAZED WARE FROM MEDIEVAL DENMARK

Form-Name	Kilmurry Number	No. of sherds	Vessel Nos. (Fig. 2)
Small bowl	5/8	5	Nos.23?, 24?
Spouted pitcher/pot	12	69	Nos.1-16
Lid	20/33	11	Nos.20-22, 23?, 24?, 25-26
"Crucibles"/lamp	16	4	Nos.27-28
Ovoid vessel	19	1	No.29
Large straight-sided bowl	1	5	-
Cooking pot	3/11	35	Nos.17-19

Table 2. Forms represented in the Lund material (following Kilmurry's classification).

In 1976, when Mårtensson first published the ware, 41 sherds had been identified. Another four sherds were picked out in 1980, and another 23 were identified in 1992–93. For this project, the search in the archive was concentrated in excavations that took place between 1976 and 1986, and the total number of identified sherds is now 130. A renewed search through previous excavations is likely to raise the figure further, but there is now sufficient material to describe its technical characteristics.

The description of the fabric is based on visual examination, following the guidelines presented in Orton *et al.* (1993, 135–6), and in Erdman *et al.* (1984), using a pro-forma sheet developed for Kulturen (by SL).

The fabric is hard, Mohs 5-6 (129 out of 130 sherds), with slightly irregular breaks. The size of inclusion is between 0.2-0.5 mm (115 out of 130; five sherds are slightly coarser, and ten seem to be somewhat finer). As far as can be judged macroscopically, the inclusions are well sorted. The ware has a smooth feel, and a slightly smoothed surface with a streaky, glossy glaze. The colour of the ware differs widely, ranging from light yellowish-red to deep grey, due presumably to differences in firing conditions (no comparison against Munsell charts was made).

The potters probably intended an oxidised appearance, since only 30% of the sherds (39 out of 130) had a reduced core, 45% had a more or less reduced exterior surface, and only 12% had a more or less reduced interior surface. This probably results from a reduction phase late in the firing in order to achieve a greener glaze.

# METHODS OF MANUFACTURE

Mårtensson (1976b) did not mention that all the Early Glazed wares, with the exception of one "crucible" and one ovoid vessel, are wheel-thrown. The introduction of the potter's wheel in Scandinavia is generally thought to date to the 13th century, and is associated with the production of domestic glazed jugs (see, for instance, Selling 1976). Even though the dating of the south Scandinavian-type red earthenwares (e.g. Farum) is now being put back earlier (see, for instance, Reed 1990), Early Glazed ware is the earliest example of wheel-thrown pottery in Scandinavia.

The vessels are well made, and thin-walled, ranging from 4.4 mm to a maximum of 8.5 mm in thickness depending on form and part of vessel. Traces of the process of removal from the wheel are only visible on the flat-based cooking pots, and the drag marks imply that the pots were removed with a wire from a stationary wheel. Fragments of larger bases show marks typical of "knife-trimming", giving, as Kilmurry pointed out (1980, 79), a "sagging" base. The "sagging" on the Early Glazed pitchers seems to be less noticeable than in the examples illustrated by Kilmurry (1980, Fig. 67:2).

These serving or table wares are externally glazed, while the cooking pots have glaze inside the rims. The glaze is rather thin and glossy, and seems to have been applied in brush strokes. Patches are left bare and the glaze varies slightly in thickness, often being thickest on the uppermost part of the vessel. Together with the fact that the exterior of the larger bases is glazed, this implies that the vessels were glazed upside down.

Three body sherds are decorated with horizontal grooves, c.1 mm wide; at present, only one sherd with applied decoration has been identified, bearing a thin applied strip with shallow thumbing. One of the cooking pots from the kv. Myntet site is 'decorated' with external diagonal glaze streaks (although this may be an accident resulting from the method of glaze application).

# FORM SERIES

The forms of the Early Glazed ware are so closely comparable to Stamford ware that the adoption of Kilmurry's classification is possible (Kilmurry 1980). No complete vessel has been found, and the degree of fragmentation is rather high. It is not possible, therefore, to match every featured sherd with a Kilmurry vessel type. Nevertheless, the forms

#### EARLY GLAZED WARE FROM MEDIEVAL DENMARK

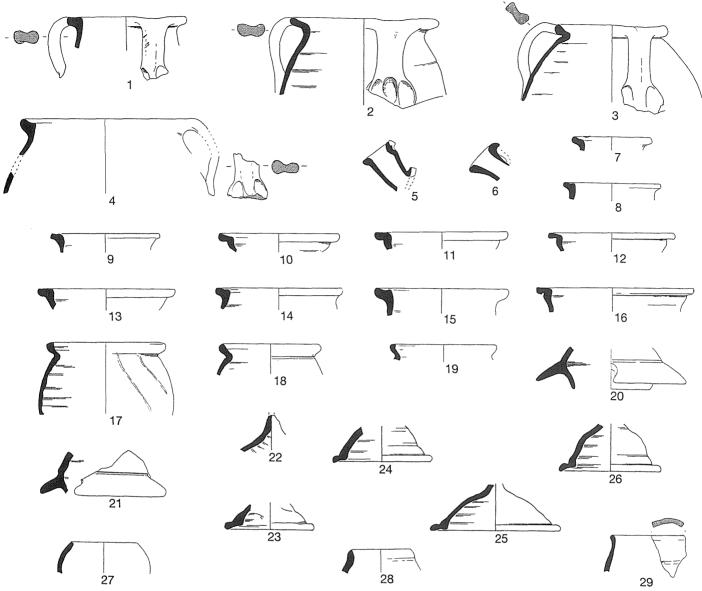


Fig. 2. Corpus - pitchers (Nos. 1–16), cooking pots (Nos. 17–19), lids (Nos. 20–26), "lamps"/crucibles (Nos. 27-29) Scale 1:4

represented in the Lund material (following Kilmurry's classification) are shown in Table 2. The majority of the forms were vessels used for serving at table and within this group, "*pitchers*" (Fig. 2, Nos. 1–16) seem to be most common as suggested by the large number of body sherds. A source-critical problem may be involved here with the Lund material, since such fragments were easier to identify in trays with mixed (residual) pottery in the Kulturen store-house.

The division into either *small bowls* or "cresset lamps" is also problematical. There are no fragments which include a spike base, nor any with a lip. Since no sherds show any trace of sooting, it is more likely that we are dealing in each case with a type of *lid* (Fig. 2, Nos. 20–26). In a few cases it can be seen that these lids had small two-pronged knobs, moulded by hand.

The two fragments of lids with flanges (Kilmurry form 22) both have holes through the collar for attachment to the pitcher. One of the examples (KM 70.361:1047) has two holes.

Straight-sided bowls are represented by only three base fragments (KM 18.835; KM 49.326:85; KM 71.570:265). (Not illustrated).

The two examples of "crucible"shape (Fig. 2, Nos.27–29; Kilmurry form 16) are intentionally glazed all over and one example is slightly sooted (KM 70.361:1253, 1259, 1260). Clearly, these vessels cannot have been used nor intended for use as crucibles and it seems more likely that they are cups. A similar function is likely for a small ovoid vessel (KM 71.075:74). (Not illustrated).

The cooking pots (Fig. 2, Nos.17–19; Kilmurry forms 3 and 11) represent just over a quarter of the material under discussion. Since they are glazed only

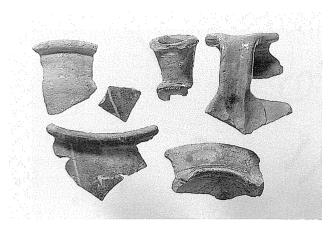


Fig. 3. Typical sherds of Early Glazed ware from Lund

on the inside of the rim, leaving the body unglazed, they may have been harder to identify, especially if the residual marks from wheel-throwing were not taken into account. It is therefore possible that cooking pots may be under-represented in the identified material from Lund.

Data on rim and base diameters has been collected, but there are too few measurable sherds to determine whether or not there is any standardisation of size within each vessel form. This data is deposited in the Kulturen archive.

All of these forms can be paralleled in the Stamford industry, although their relative frequencies are different in that cooking pots/jars form a higher proportion of the Stamford ware used in the East Midlands of England, whilst lids, which are unusual finds in Stamford ware, form a higher proportion of the material in Lund and Lejre.

# DATING AND SOCIAL CONTEXT

The city of Lund is situated on an offset of the NW-SE Romele ridge, rising in the surrounding plain of south-west Scania (Fig. 1). Its position on a slope gives a variation in ground level of over 25 m within the boundaries of the medieval town, sloping from north to south. The ground level appears to have been very uneven originally, with several stream-valleys and pools, probably flooding during the rainy seasons (Andrén 1980, 30ff). These conditions, combined with the underlying quaternary clay, have produced very good, almost water-logged, survival conditions for the deposits, which are now probably deteriorating due to the intense redevelopment of the town during the last 20–25 years.

The question of the age and origin of the town has been widely discussed during the last century and the arguments will not be presented in detail here. The location of the town is in itself unusual. In contrast to the other Scandinavian early medieval towns of the late 10th to early 12th centuries, Lund has never been directly accessible by any maritime route. Instead, its position at a cross-roads has been pointed out by Blomqvist (1941) and Andrén (1985a).

Today it is believed that the town was founded c. 990 on the initiative of King Svein Forkbeard; a church and burials of this period have been found (Nilsson 1989). We will not here discuss the criteria for a (medieval) town, a topic that has been widely and wildly discussed. Andrén (1985b, 36ff; 1989, 588ff) has, however, suggested the term "congested countryside" for these early towns closely connected with the political power, but lacking the urban structure and independence of the late medieval towns to delineate themselves from the countryside. The archaeological evidence from Lund shows quite clearly that from the earliest phases it exhibited several of the criteria most often under discussion: churches, administrative and legal functions, minting, market place, economic diversification, specialisation in crafts and a dense population.

The material evidence also indicates that crafts and commercial activities were concentrated along the main street (Stora Södergatan) (Fig. 4). This has been further supported by the absence of "commercial artefacts" from two recent excavations situated further away from the main street.

Differences in burial customs, as well as in spatial distribution within early graveyards, could imply that early Lund society was stratified into socio-economic groups as well as by ethnic origin (M. Cinthio pers. comm.). An explanation for this could be that different foreign artisans and craftsmen were present from the beginning of the town. The goldsmiths/ monevers, for example, were largely of English origin (Cinthio 1990). The fact that cooking pots of the local reduced earthenware appear in different forms: Baltic (i.e. Slavonic) and western European (i.e. kugeltöpfe) could further strengthen this hypothesis, especially since customs connected with food are highly culture-specific. It might be fruitful to look at the Early Glazed ware in this context (among others).

The fact that Early Glazed ware is distributed throughout the area considered to belong to the earliest phase of the town, contradicts the assumption that the ware was solely associated with the upper classes of early medieval society (Fig. 4). The absence of published excavation reports, the method of excavation by spits, and failure to take full account of residuality, make it very difficult to distinguish different contexts, or to date them more closely than pre-1050. Work on these questions is in progress.

The other major find spot, Lejre, is centrally situated in Sealand. For centuries it has been known as the site where the earliest Danish royal dynasty,

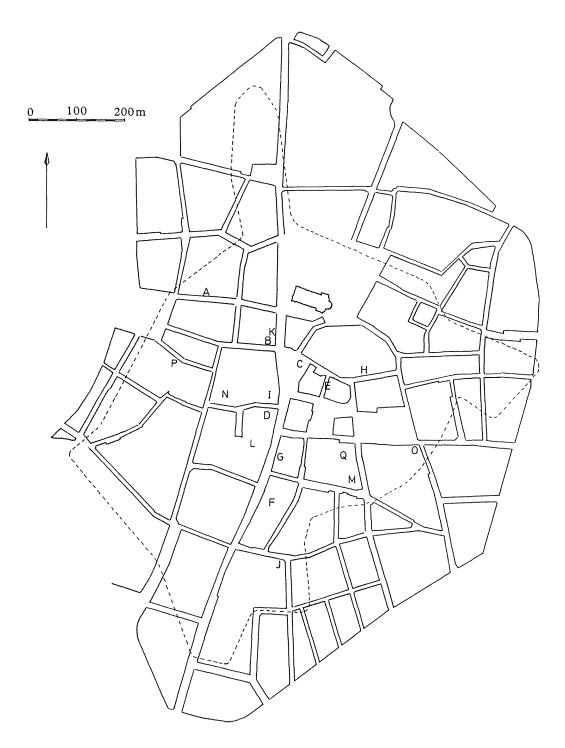


Fig. 4. Map of Lund showing findspots of Early Glazed ware.

Let	ter .	Site	Site Name	Year of Excavation	Leti	ter	Site	Site Name	Year	• of Excavation
Α	KM	18.835	Gråbröder, 17,	1908	I	KM	66.166	S:t Clemens 8		1974-5
В	KM	20.346	Apotekaren 5	1910	J	KМ	69.879	Repslagaren 1-7		1978
С	KM	49.326	Stortorget	1954	K	KM	70.361	Apotekaren 4		1979-80
			Färgaren 22	1961	L	KM	71.075	Färgaren 28		1981
E	KM	57.135	S:t Boltulf Ö	1964–5	Μ	KМ	71.570	S:t Mårten 28		1981
F	KM	58.220	Murgrönan 4	1965	Ν	KM	71.839	S:t Clemens 9 mt	fl	1982–4
G	KМ	59.126	Glambeck 4	1966	0	КM	72.562	Galten 26		1984
Н	ΚM	62.892	Svartbröder 23	1971	Р	KM	77.714	Myntet 3, 4, 5		1992
					Q	КM	78.362	S:t Mårten		1993

the Scyldings, had their residence. The fame of the site derived from written sources, mainly the Norse sagas and poems. In the 1980s large-scale excavations were begun, and so far about 150,000 square metres have been uncovered, throwing new light on the setting for legendary tradition and partly confirming the substance of the written sources (Christensen 1993).

The excavations have produced evidence for an extensive settlement area. More than thirty houses have been located, dating from the 7th to the middle of the 11th century. The site can be divided into two separate settlement areas: a workshop area with mainly grubenhäuser and a residence area with large three-aisled buildings. The largest building is a hall c.50 m long and 11 m wide, and known as "The Lejre Hall". Glazed pottery was found in only a small area north-east of the hall. The archaeological evidence is in agreement with documentary and saga evidence that Lejre was a large estate, possibly owned by the king, and it would seem that the glazed pottery was used in the latest phases of the settlement. The archaeological context of both the Lund and Lejre finds suggests that they were in use in or before the early 11th century.

With the exception of the Lund Early Glazed ware, the earliest glazed vessels produced in Scandinavia appear to be of late 12th-century date and are clearly modelled on Low Countries prototypes, which occur in some numbers in medieval Danish urban assemblages. No sherds of Scandinavian Early Glazed ware were found with typological traits which could be related to these later glazed wares and a petrological study of this later glazed pottery by Lindhal clearly shows that the two groups were using different sources of clay and temper. There is therefore no evidence for the continuation of the Scandinavian Early Glazed ware industry into the second half of the 12th century. This leaves open the question of the end date of the industry. Assuming that there was a demand for glazed pottery in the late 11th and early 12th centuries, then there ought to be evidence for such vessels amongst the excavated pottery from Lund. The only approach possible at present is to look for glazed wares which on external evidence can be dated to this period. With the exception of the Scandinavian Early Glazed ware, the only other candidates are Stamford ware and Andenne ware. The former is extremely rare in Lund, only one or two sherds having been identified. Andenne ware, on the other hand, is relatively common. However, there are no examples of rollerstamped sherds, nor any vessels with applied strips or triangular-sectioned rims. All of these features are characteristic of the earliest Andenne ware from London from deposits dated dendrochronologically to the late 11th and early 12th centuries (Vince and Jenner 1991, 104-6). It is likely that the majority of

the Andenne ware from Lund is of late 12th-century date or later. At present, therefore, there is no evidence either for or against the continuation of production and use of Scandinavian Early Glazed ware from Lund. Two other lines of argument do, however, suggest that the ware had a limited period of production. Firstly, there is no sign of any typological development which might be expected if the ware was produced by several generations of potters. Secondly, its absence from excavations in Roskilde, Denmark, known to have been in existence as a town by the early 11th century (Birkebaek 1992, 77-84), may have a social explanation, but may alternatively be because, by the time the town was flourishing, Early Glazed ware was no longer in production.

# CONCLUSIONS

The use of lead-based glaze on pottery vessels in western and central Europe seems to have ceased in the 4th century, to be re-introduced from the Byzantine or Mediterranean worlds or re-invented during the late 9th century. The earliest post-Roman glazed wares, typified by the first products of the Stamford kilns (Kilmurry 1980), seem not to have been used across a wide area. At the Flaxengate site in Lincoln, for example, late 9th- to 10thcentury glazed wares were present from the earliest Anglo-Scandinavian levels onwards, but as a very small proportion of the total assemblage (Adams Gilmour 1988). Glazed wares were equally scarce in the earliest Anglo-Scandinavian levels of the Coppergate excavation in York (Mainman 1990) and almost absent from 10th-century levels in London (Vince and Jenner 1991). These early glazed wares were certainly being produced at Stamford and at Lincoln, whilst there is doubt over the origin of the York and London pieces. Towards the end of the 10th century, a change can be seen in the production and use of glazed wares in England. Stamford glazed wares become more frequent over a wide area of eastern England, while glazed wares were also produced at other sites, such as those supplying Hereford and elsewhere in western England (Vince 1983, Fabric A7a), Winchester and south central England (Biddle and Barclay 1974) and that made at the Bedford Garage kiln in Exeter (Allan 1984). It is in the context of this second phase of English glazed ware production that the Lund and Lejre finds should probably be viewed. There are general similarities of manufacture (for example dribbles of glaze on the inside of the pitchers and the two large thumb impressions on the body-handle join) and a similar range of forms, in which pitchers overwhelmingly predominate. Unfortunately, too little is known of the social status of the potters responsible for making these wares for them to form a guide

to interpreting the Danish finds. The Exeter and Stamford wares were both made in towns and are probably the products of an urban artisan working for the market. Excavated high-status settlements of the 10th and 11th centuries are rare in England. Two such settlements, Cheddar and Goltho, have been published and neither produced pottery assemblages markedly different from those found in urban excavations (Rahtz 1979; Coppack 1987). It does not seem, therefore, that glazed wares were being used significantly more by the Anglo-Scandinavian élite in England than by their low to middle status urban contemporaries. The Danish evidence, however, is ambiguous. On the one hand, the Lund finds seem to have a wide distribution similar to that of their English counterparts, while on the other hand the Lejre finds suggest an élite context for the use of these wares.

Comparison of the technical characteristics of the Scandinavian Early Glazed pottery with those of contemporaneous western European wares suggests that the Early Glazed ware was made by an immigrant potter from England, most probably from Stamford, Lincolnshire. The historical context for the Danish pottery production and for the transmission from England of the techniques involved would seem most likely to be the reign of Cnut the Great, a period when English influence can also be seen in the minting of coins and in the church. Of particular interest, given the likely transmission route, is a pen case from Lund, which from its inscription appears to have been the personal belonging of a Lincoln moneyer (Blomquist and Mårtensson 1961, 213ff).

Since, on the basis of petrological analysis, it seems probable that the Lund and Leire sherds were made by the same potters, further study of the distribution of this ware could significantly aid our understanding of the patterns of trade in early 11thcentury Denmark. At present, however, the finds have to be viewed in a vacuum. A brief search of collections of comparable date revealed a possible sherd from the site of the 11th-century and later Archbishop's palace at Dalby, near Lund and another possible sherd from the mid 11th-century and later town at Schleswig (Site 1, xiv.x6/11.y 15/20). No comparable sherds were found amongst the small collection of excavated glazed ware from the late 8th- to 11th-century trading settlement at Hedeby and, as noted above, no sherds have been found in extensive excavations in the 11th-century and later town at Roskilde.

#### Acknowledgements

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#### Résumé

Un nombre de fragments de poterie vernissée datant de la fin du Xième, début du XIième siècle a été trouvé à Lund en Suède et à Lejre, sur l'ile de Sealand au Danemark. L'analyse pétrologique d'un énchantillon pris de ces fragments, montre que ceux ci sont très semblables quant à leurs caracteristiques pétrologiques aux ceramiques Baltiques fabriquées dans la region. Toutefois les méthodes de fabrication et la variété des formes trouvées ne présentent aucunes influence locale. Il est suggéré que ces poteries furent la production d'une industrie céramique éphémère installée au royaume du Danemark à la fin du Xième ou au début du XIième siècle par un potier immigrant. La comparison entre caractéristiques de technique de cette poterie avec celles des vaisselles contemporaines de l'Europe de l'Ouest suggère que ce potier immigrant venait d'Angleterre, et très probablement de Stamford dans le Lincolnshire.

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#### Zusammenfasung

Eine Anzahl glasierter Tonscherben aus dem späten 10. oder frühen 11. Jahrhundert wurden in Lund, Schweden und Lejre, auf der Insel Seeland, Dänemark, gefunden. Die petrologische Analyse einer Probe dieser Scherben ergab, daß sie in ihren Gesteinsmerkmalen der heimischen Ostseeware extrem ähneln. Die Herstellungsweise und die Auswahl der Formen dagegen weisen überhaupt keinen lokalen Einfluß auf. Das könnte heißen, daß diese Gefäße aus einer Töpfereiindustrie stammen, die ein Töpfer, der am Ende des 10. oder zu Beginn des 11. Jahrhunderts ins Königreich Dänemark einwanderte, ins Leben rief, die aber nur für kurze Zeit Bestand hatte. Ein Vergleich der technischen Besonderheiten dieser Keramik mit zeitgenössischen, westeuropäischen Tonwaren legt es nahe, daß der Töpfer aus England und sehr wahrscheinlich aus Stamford, Lincolnshire, einwanderte.