

PETROLOGICAL EXAMINATION OF MIDDLE SAXON IPSWICH-TYPE WARE

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Introduction

A number of sherds of Middle Saxon Ipswich-type ware from various find-sites were submitted for fabric examination in thin section under the petrological microscope. In the hand-specimen the majority of the samples show little variation in basic colour, and are usually a darkish grey throughout (between Munsell 5YR 5/1 - 2.5Y N4/). However, one of the Treasury sherds has a reddish tinge to it (IX-205) and another has a black surface (205.5). Macroscopic examination under the binocular microscope (x20) showed that all the sherds are in a hard sandy fabric containing frequent inclusions of quartz grains. In the case of the samples from Castor, Cox Lane (AM Lab. no. 755627) and Vernon Street, Ipswich, and those from Kickinghall and Treasury (78.1), the quartz grains noticeably protrude through the surfaces of the sherds, giving rise to the term 'pimply' Ipswich ware (Hurst, 1959, 14).

Petrology

On the basis of the range and texture of the non-plastic inclusions in the sherds examined, three fabric divisions have been made.

Group One

Ipswich : Carr Street (IBM 1935-74A : AM Lab. no. 755626)

Ipswich ware waster (complete vessel) from the kilns discovered on the site of the Co-op extension on the south side of Carr Street in 1935 (Hurst, 1957, fig. 1, no. 5).

Ipswich : St. Helen's Street (IAS 36010003 : AM Lab. no. 755628).

Complete Ipswich ware cooking-pot, unstratified.

Ipswich : Lower Brook Street (IAS 45020001 : AM Lab. no. 755629).

Ipswich ware sherd, unstratified.

Ipswich : Cox Lane (AM Lab. no. 744190A).

Ipswich ware sherd from a ninth century A.D. pit.

Ipswich : Cox Lane (AM Lab. no. 744190B).

Ipswich ware sherd from a ninth century A.D. pit.

Ipswich : Cox Lane (Pit 16, Layer 9).

Ipswich ware cooking-pot rim.

Ipswich : Cox Lane (AM Lab. no. 744190C).

Ipswich ware sherd from a ninth century A.D. pit.

Ipswich : precise provenance unknown (IBM 1920-53-13).

Ipswich ware cooking-pot rim.

Ipswich : precise provenance unknown (IBM 1920-53-12).

Ipswich ware cooking-pot rim.

London : Treasury, Whitehall (78-50 : AM Lab. no. 755922).

Ipswich ware sherd from floor of Saxon Hall dated c. A.D. 800-1000.

London : Treasury, Whitehall (IX-205).

Ipswich-type sherd.

London : Treasury, Whitehall (78.4).

Ipswich-type rim sherd from floor of Saxon Hall dated c. A.D. 800-1000-

London : Treasury, Whitehall (205.5).

Ipswich-type base.

London : Althorpe Grove, Battersea (AG77 T12E53).

Stamped Ipswich-type sherd.

The predominant inclusion type is fairly well-sorted frequent subangular grains of quartz, the majority of which have an average size of 0.10mm - 0.30mm, but with a few slightly larger grains, set in an optically anisotropic clay matrix. Also present are small fragments of flint and chert, flecks of mica (mostly muscovite) and some quartzite, plagioclase and microcline feldspar, iron ore and the odd grain of ?pyroxene. The range and texture of inclusions described here is very similar in thin section to samples of Thetford ware from Kilns I, III and IV at Cox Lane, Ipswich (Smedley and Owles, 1963).

Group Two

Castor, Northants (73 L(101) : AM Lab. 756472).

Ipswich-type sherd.

Castor, Northants (73 L(21) : AM Lab. 756461).

Ipswich-type sherd.

Castor, Northants (71 XLV(9) : AM Lab. no. 756474).

Ipswich-type sherd.

Ipswich : Cox Lane (IBM 961.5.D : AM Lab. no. 755627).

Large Ipswich ware waster sherd.

Ipswich : Vernon Street (IAS 74020090 : AM Lab. no. 755630).

Ipswich ware sherd from Middle Saxon ditch.

Ipswich : Vernon Street (IAS 74020090 : AM Lab. no. 755631).

Ipswich ware sherd from Middle Saxon ditch.

Rickingham, Suffolk (AM Lab. no. 755619).

Ipswich ware sherd.

Rickingham, Suffolk (AM Lab. no. 755620).

Ipswich ware sherd.

Treasury, Whitehall (78.1).

Ipswich-type rim from floor of Saxon Hall dated c. A.D. 800-1000.

A groundmass of frequent quartz grains, the majority below 0.05mm in size, with a scatter of larger grains, fairly well rounded and ranging in size up to 1.30mm, set in an optically anisotropic clay matrix. The larger quartz grains would appear to represent an admixture of coarser material to the matrix. Also present are plentiful flecks of mica (mostly muscovite), and small fragments of flint and chert, with a little quartzite, iron ore, plagioclase feldspar and the odd grain of ?pyroxene.

Group Three

Waltham Abbey, Essex (B.28.16 : AM Lab. no. 756261).

Ipswich ware sherd from a wall foundation dated c. A.D. 800-1000.

Blythburgh, Suffolk (1965-28 TN/451756 : AM Lab. no. 755612).

Ipswich ware sherd.

Tattingstone, Suffolk (1970-26 TN/146377 : AM Lab. no. 755621).

Ipswich ware sherd.

Like the other two groups, quartz is the dominant inclusion type, set in an optically anisotropic clay matrix. However, the average grain size at about 0.10mm tends to be larger than those in Group Two, excluding the large coarse additions, while at the same time small and more angular than those in Group One, indicating a finer-grained texture. Also present are plentiful flecks of mica (mostly muscovite), and some flint, quartzite, plagioclase feldspar and iron ore.

Comments

At the present time two kiln sites are known in Ipswich associated with the production of Ipswich ware: Carr Street (Hurst and West, 1957) and Cox Lane (Smedley and Owles, 1963). Thetford-type ware is also known to have been made at the Cox Lane kilns (*ibid.*). Group One, the largest petrological group, contains Ipswich ware material from both of these sites, and additionally there are similarities in thin section to samples of Thetford-type ware from the Cox Lane kilns. Neutron activation analysis of a similar range of material from Ipswich also confirms the similarity of fabric between Ipswich

ware and Thetford-type ware (Hawkin, 1978). It seems likely, therefore, that the same, or very similar, raw materials were used at both sites for the production of Ipswich ware, and at Cox Lane for Thetford-type ware also. Significantly, Group Two is made up of those Ipswich ware sherds that can be described macroscopically as having a 'pimply' fabric. In this case the petrological division is merely reflecting the observable visual differences of size-grades of quartz sand used. It is not clear if 'pimply' Ipswich ware is also a product of the Carr Street kilns (Hurst and West, 1957). It is worth noting that a limited programme of neutron activation analysis has also produced a division of Ipswich ware material from Ipswich into two groupings (Hawkin, 1979; Hunter, 1980).

Although Group Three does not include any vessel from Ipswich, it is not possible at this stage to rule out an origin there given the common nature of the inclusions involved, particularly as comparatively little kiln material has been sampled from Carr Street and Cox Lane to test the possible range of fabrics present.

References

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