

A Late Medieval Whiteware from Clarence Street, York

Alan Vince

Excavations at 44 Clarence Street, York, by Antony Dickson in 2006 produced an unusual late medieval vessel which could not be precisely paralleled in form or fabric. It was recommended that analysis of this vessel was undertaken and the present paper is a result of that analysis.

The vessel is identified here as a product of the North Yorkshire whiteware potteries located on the western foothills of the Hambleton Hills and appears to have been a copy of late medieval Low Countries types.

Description

Form and manufacture

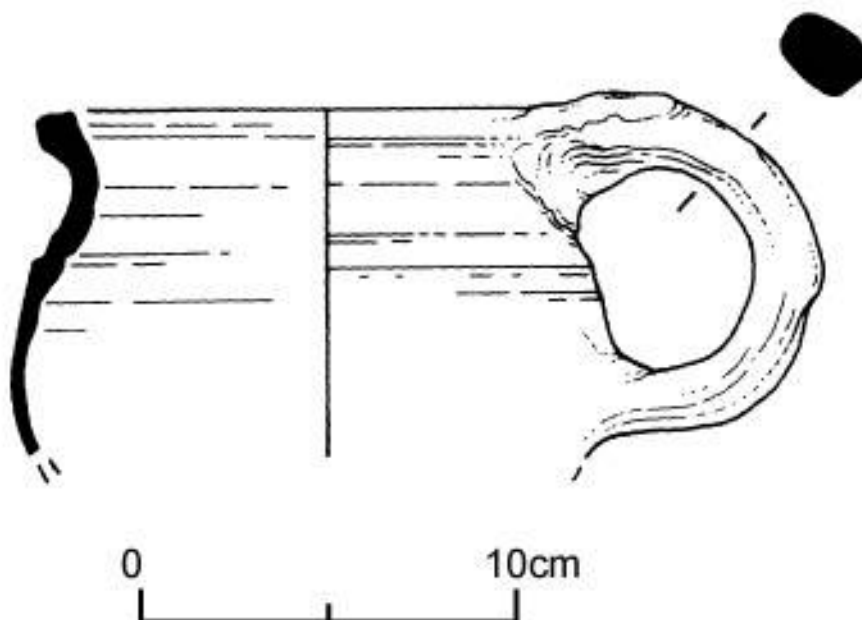


Figure 1

The vessel is wheelthrown and globular-bodied with a squared rim, diameter c.140mm, and has a rod-sectioned handle luted to the girth and outer edge of the rim. The body handle join is strengthened by thumbing on the interior. The exterior has a glossy pale olive (5Y 7/4) to olive (5Y 5/4) glaze, which does not extend over the handle (which suggests that the vessel was dipped in glaze, holding onto the handle). The glaze colour suggests local reduction and is probably an indication that the vessel was fired one rather than given a biscuit firing and then a second glaze firing.

A deliberate ridge or cordon is present on the shoulder but otherwise the vessel is plain.

At x20 magnification the fabric is seen to be tempered with moderate quartzose sand grains, well-sorted and between c.0.5mm and 0.8mm across. The groundmass is fine-textured, pink (7.5YR 7/4), and sparse fine mica is visible.

Thin Section Analysis

The following inclusions were noted in thin section:

- Quartz. Moderate subangular and rounded grains ranging from c.0.1mm to 0.8mm. The smaller grains tend to be more angular and the grains appear to be bimodal, with peaks at c.0.2mm and c.0.5mm. Some of the grains have a thin brown coating but since these grains are closest to the original surface of the sherd they are probably a post-burial infill of the shrinkage gap between the quartz and groundmass. Some of the grains have one or more straight edge, indicative of overgrowth with no trace of the original grain boundary. Most grains are monocrystalline and unstrained but monocrystalline strained grains and polycrystalline grains occur. The latter include strained crystals with sutured boundaries and unstrained mosaic quartz. These features indicate that some of the grains come from metamorphic rocks.
- Clay pellets. Sparse inclusionless pellets up to 0.5mm across, slightly lighter in colour than the groundmass.
- Muscovite. Rare sheaves up to 0.2mm long.

The groundmass is light brown, optically anisotropic and contains sparse angular quartz and muscovite.

Chemical Analysis

Chemical analysis was undertaken at Royal Holloway College, London, under the supervision of Dr J N Walsh using Inductively-Coupled Plasma Spectroscopy. A range of major elements were measured as percent oxides (App 1) and a range of minor and trace elements was measured in parts per million (App 2). Silica was not measured but was estimated by subtraction of the total measured oxides from 100%. The data were then normalised to aluminium.

The features observed in thin section are similar to those of some Surrey Whiteware vessels (e.g. Kingston-type ware Pearce and Vince 1988) as well as to late 12th to 13th-century York Glazed ware (Jennings 1992). Neither type was in production in the late medieval period, when this vessel is likely to have been made and the contemporary late medieval wares are Coarse Border Ware and Brandsby-type ware.

ICPS data is available for all these wares and a dataset consisting of production waste from sites in Surrey and North Yorkshire, and finds from YAT excavations in York was compared with the Clarence Street find.

The Surrey data consists of samples from Farnborough Hill, Kingston-upon-Thames and Southwark and the Yorkshire data consists of samples from the Brandsby kiln excavated by J Le Patourel; a sample from the Stearsby kiln; possible wasters of York Glazed ware from Byland Abbey and sherds of a 12th-century gritty ware recently identified as a North Yorkshire product contemporary with York Gritty ware, from a site at Easingwold.

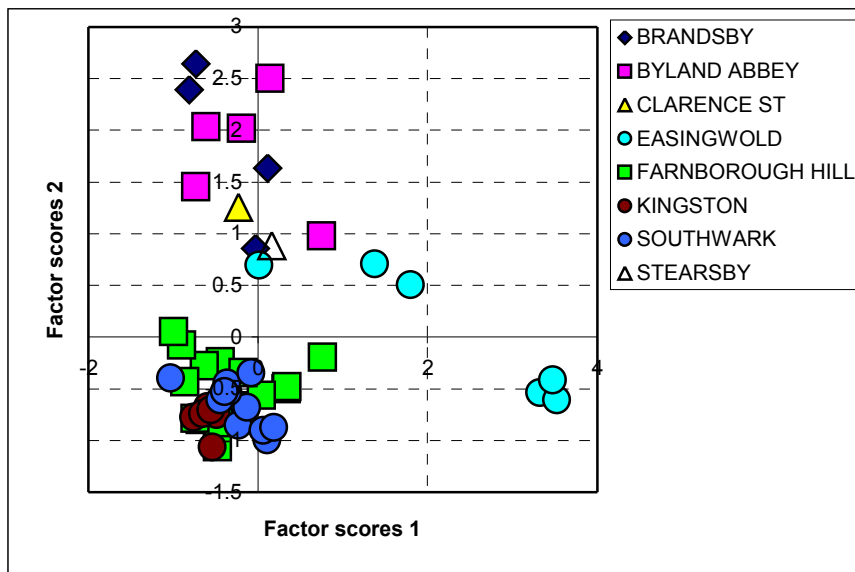


Figure 2

Factor analysis of this data (omitting mobile elements – calcium, phosphorus, strontium and the rare earth elements) indicates four main factors and a plot of the factor scores for the two main factors clearly indicates two clusters, one consisting of Surrey products and the other North Yorkshire products which can be subdivided on the basis of the F1 and F2 scores into an Easingwold group and the rest. The Clarence Street vessel falls into the Bransby/Byland/Stearsby group.

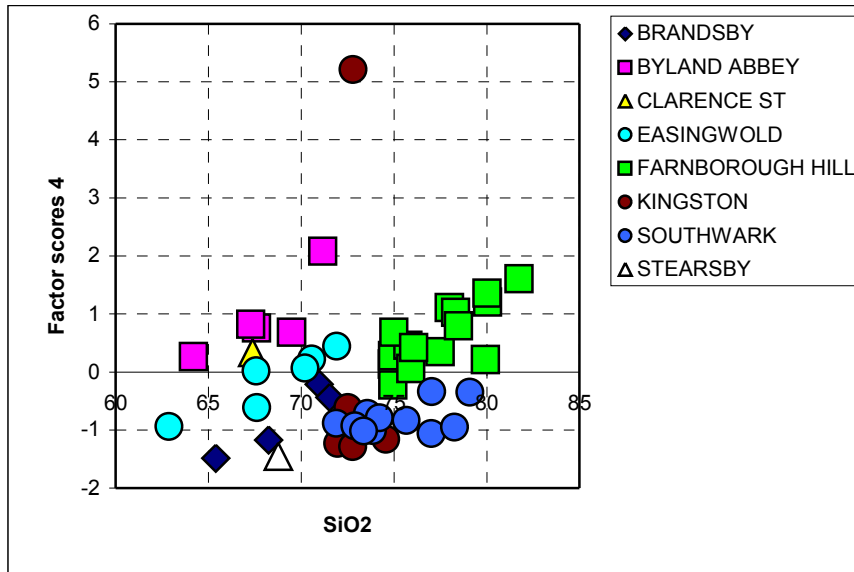


Figure 3

The Factor 3 scores do not separate any of the groups but the Factor 4 scores (essentially a reflection of zirconium and cobalt values) separate individual groups within the two main clusters. This is made clear by including the estimated silica values, which distinguish the Surrey and North Yorkshire groups. Fig 3 shows a plot of estimated silica scores against F4 scores and in this plot the Clarence Street vessel plots between the Byland and Easingwold groups.

Discussion

The Clarence Street vessel is identified here as a North Yorkshire, Hambleton Hills, product. However, its form is clearly late medieval in date and imitative of Low Countries redware vessels (such as the two-handled, footed cooking pots (Hurst, Neal, and van Beuningen 1986, Fig .59) or single handled tripod pipkins, Hurst et al 1986, Fig 60). These Low Countries vessels not only have the large rod handles found on the Clarence Street vessel but also the cordon on the shoulder. This feature is probably itself a skeuomorph of cast copper-alloy vessels which are also mostly of late medieval date.

The chemical similarity of the Clarence Street vessel to York Glazed ware and North Yorkshire gritty ware vessels from Easingwold is probably due to the fact that all three groups are deliberately tempered with quartzose sand and that the main discriminating element is zirconium, which is present mainly in zircon grains. The sand used to temper these vessels therefore has a higher zirconium content than the Brandsby and Stearsby vessels which contain similar quantities of silica, but from a different source, the parent clay.

The discovery of this vessel requires a reconsideration of the classification of North Yorkshire medieval whitewares. On the one hand, the visual similarity of this vessel's fabric to York Glazed ware is confirmed and this means that undecorated body sherds cannot be dated

more closely that late 12th to late 14th/15th centuries. On the other hand, York Glazed ware is actually defined mainly on style and decoration and it would clearer if fabric and form/style were treated separately.

Table 1 is an attempt to clarify the products of the Hambleton Hills Whiteware Industry and includes waste from Castle Howard, which was recovered from excavations undertaken by Time Team in 2002 (Vince 2002). Confusingly, the products of the latter industry are classified as Hambleton ware, but Castle Howard is actually in the Howardian Hills. It is proposed that the Clarence Street vessel and similar vessels containing quartzose sand temper not paralleled at the Brandsby kiln are classified as Gritty Brandsby-type ware.

Table 1

Fabric	12 th century	Late 12 th to 13 th century	Later 13 th to 15 th centuries
Gritty	NYGW (Easingwold)	None	None
Sandy		York Glazed(Byland)	Gritty Brandsby-type (Clarence Street)
Untempered			Brandsby-type (Brandsby, Stearsby)
Fine white			Hambleton (Castle Howard)

Bibliography

Hurst, John G, Neal, David S, and van Beuningen, H J E (1986) *Pottery Produced and Traded in North-West Europe 1350-1650*. Rotterdam Papers VI Rotterdam, Museum Boymans-van Beuningen

Jennings, Sarah (1992) *Medieval Pottery in the Yorkshire Museum*. York, The Yorkshire Museum

Pearce, J E and Vince, A G (1988) *A Dated Type-series of London Medieval Pottery: Part 4, Surrey Whitewares*. London Middlesex Archaeol Soc Spec Pap 10 London, London Middlesex Archaeol Soc

Vince, Alan (2002) *Assessment of the medieval and later pottery from Castle Howard, North Yorkshire (CASH02)*. AVAC Reports 2002/81 Lincoln,

Appendix 1

TSNO	Al₂O₃	Fe₂O₃	MgO	CaO	Na₂O	K₂O	TiO₂	P₂O₅	MnO
V4510	23.51	3.42	1.04	0.52	0.25	2.35	1.25	0.26	0.015

Appendix 2

TSNO	Ba	Cr	Cu	Li	Ni	Sc	Sr	V	Y	Zr*	La	Ce	Nd	Sm	Eu	Dy	Yb	Pb	Zn	Co
V4510	398	107	44	115	54	23	95	189	45	102	72	119	75	16	4	8	4	6,184	83	22