

Chemical Analysis of a possible Malling Jug from the A1 widening, Wetherby, West Yorkshire

A sherd of tin-glazed ware from Wetherby was identified by eye as a possible example of a Malling Jug. These vessels have the same form as Rhenish stoneware drinking jugs of the mid to late 16th century and are named after an example found at West Malling, Kent. For many years the origin of the vessels has been disputed. No examples were found at Holy Trinity Priory, City of London, in a group of biscuit wasters attributed to the workshop of Jasper Andries, an Antwerp potter of Italian descent, who started the tin-glazed pottery industry in London in the late 16th century although a sherd was seen by the author amongst waste from Norwich, a slightly earlier, and probably unsuccessful operation dated to the 1570s. However, for a long time no examples were known from Antwerp, or from consumer sites in the low countries, and it was therefore assumed that these vessels were an early product of the fledgling English tin-glaze industry (1986).

Subsequently, a major study of Malling Jugs from sites in London, and of production waste from various sites in England and the Low Countries has indicated that an Antwerp origin is more likely than a London one, whilst excluding Norwich completely as a possible source. This study was carried out using Neutron Activation Analysis (Hughes and Gaimster 1999). More recently, an attempt has been made to use the Hughes/Gaimster dataset to identify samples analysed using Inductively Coupled Plasma Spectroscopy (Vince and Brown 2002). The Wetherby vessel was therefore included both as a further test of this method.

Analysis

An offcut of the sherd was taken and all the external surfaces mechanically removed, so as to remove external contamination. The resulting lump was then crushed to a fine powder, which was submitted to Royal Holloway College, London, for analysis, under the supervision of Dr J N Walsh.

The analysis determined the frequency of a range of major elements as percent oxides (Appendix 1) and of the remaining minor and trace elements as parts per million (Appendix 2).

An estimate of the silica content of the sample was obtained by subtracting the sum of the major elements from 100%. This indicates that the vessel has a similar silica content to that of other Anglo-Netherlandish vessels, which is higher than that of central Italian tin-glazed wares.

A subset of the chemical data was then analysed using factor analysis alongside data from other Malling Jugs, from findspots in England (London, Southampton and Shapwick), and from tin-glazed wasters from sites in Norwich, London, Antwerp, Amsterdam and Haarlem

(Fig 1). The Wetherby sample forms an outlier but is clearly closer in composition to the various Netherlands samples than to those from Norwich or London.

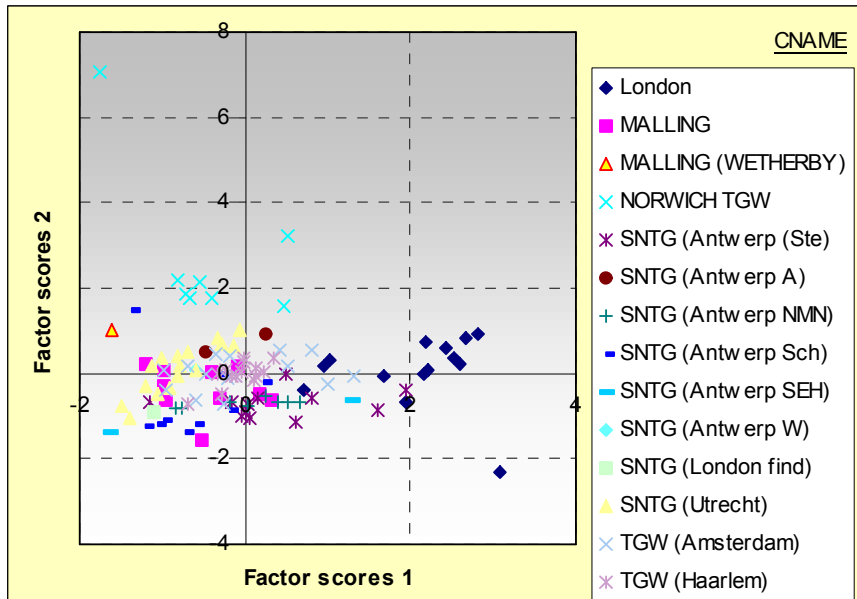


Figure 1

A re-running of this analysis excluding the Norwich and London data places the Wetherby sample in the same group as the Malling Jug samples found on English consumer sites, which overlaps with that of data from the waste dump at Schoytestraat, Antwerp (Fig 2).

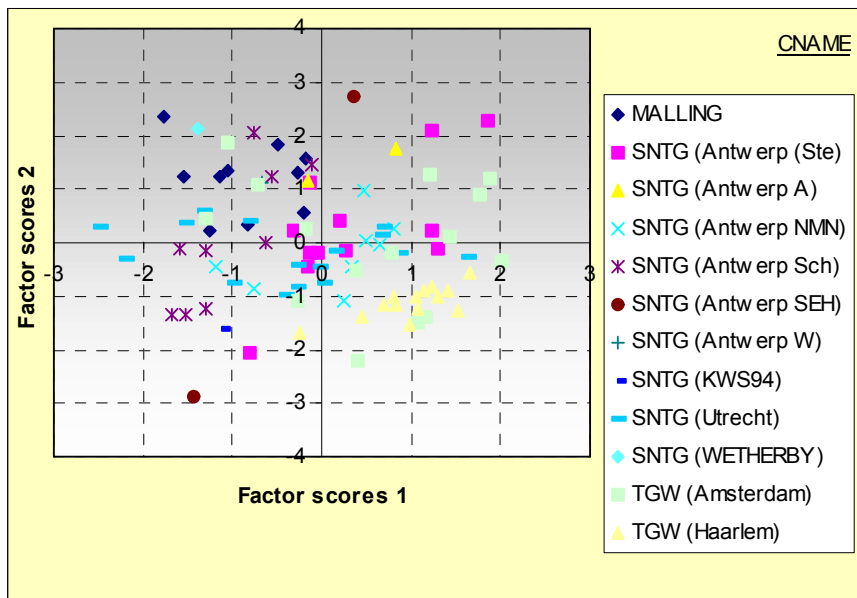


Figure 2

Conclusion

The Wetherby sherd does indeed come from a Malling Jug and has a similar composition to that of other English Malling Jug finds and to the waste from Schoytestraat, Antwerp. This

suggests that the vessel is an Antwerp product and therefore probably pre-dates the inception of the English tin glazed industries at Norwich and London in the last quarter of the 16th century.

Bibliography

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