

Lyminge Glass: Assessment Report

Rose Broadley, August 2011

The Lyminge assemblage of early and middle Anglo-Saxon glass is both large and diverse. The Anglo-Saxon group comprises 130 records, representing approximately 140 sherds and objects, and including approximately 95 vessel sherds, 25 sherds of window glass, 18 glass beads and 2 jewellery settings. Very few glass finds dating to any other period were found, which is consistent with other artefact types from the site and the overall excavation findings so far. It is likely that the majority of the glass was used and deposited on the site between the early 6th and mid 9th centuries AD.

Vessel glass

At present, the size of the vessel glass group compares favourably with other well known sites – it is larger than Monkwearmouth and Jarrow (57) and Flixborough (69), for example, and indeed is only exceeded by very few assemblages such as Barking Abbey (148) and Brandon, Suffolk (230). The initially estimated numbers of diagnostic rim and base sherds are 7 rims, and 4 bases, although the latter may be revised upwards upon closer examination. These numbers are low, which may prove to be interesting in itself. Furthermore, a number of the remaining body sherds feature colour and decoration that will help to characterise the assemblage and compare it to others, such as those listed above – for example, unusual amber and yellow sherds (e.g. SF3.47, SF20-2007), and typical Valsgårde bowl rims. An initial estimate of the vessel types represented includes cone beakers, ?claw beakers (although no claws), palm cups, later forms from the palm-funnel vessel series, and early and middle Anglo-Saxon bowl and globular beaker forms.

The 2007-9 seasons produced mainly middle Saxon material (8th and 9th centuries AD). The sherds with the most potential for future study include two small olive green vessel sherds (SF9) with uneven and wavy white trails from test pit 8, which are from the same vessel, probably a globular beaker. Another olive-green sherd with uneven white trails (SF161) from Trench 2, in the vicinity of TP8, could be from the same vessel as the two sherds from TP8 (SF9). All are possibly early in date and would benefit from a compositional analysis and sherd link check to test this. In contrast, two rim sherds of blue-green glass with opaque yellow applied trails folded into a cavity rim, a decorative scheme which is thought to be exclusive to Valsgårde bowls (SF371 and SF418), are probably not from the same vessel, although further inspection may be able to determine this.

Other interesting sherds include an unusual amber sherd with a linear ridge (SF5), although probably too small to firmly identify the original vessel form; a deep blue-green sherd containing a red streak, from a concave conical base, almost certainly from a globular beaker (SF42); a deep blue-green sherd with a fine self-coloured trail (SF450) and a blue-green sherd also with a self-coloured trail (SF597), both probably globular beaker fragments; a thick pale blue-green sherd with a conical profile, probably from near the base of a vessel from the

palm-funnel beaker series (SF440); an extremely thick sherd with a thick self-coloured trail, probably from a palm cup; and a blue-green sherd that is probably too small to positively identify, but has interesting ribbed decoration (SF504). It is interesting to note that no reticella decoration has been found on the site at all so far – a glaring absence in a significant middle Saxon assemblage. There is also less evidence than usual for bright and contrasting colours – only three deep blue-green sherds, one with a red swirl (SF42), and the two blue green bowl rims with the usual opaque yellow trailing.

The glass found during the 2010 excavation forms a distinct sub-group within the site assemblage, as the sherds are much earlier in date – 6th and early 7th century. The most significant are the group of colourless cone beaker sherds, some plain and some with rows of horizontal self-coloured trails. The group is large and the find spots well-concentrated in the fill of SFB2, and so offers excellent potential for taphonomic study and site interpretation. Other important sherds from 2010 include the three blue-green sherds with self-coloured abraded trails also from SFB2 (SF2.142, 2.193 and 2.385), which are probably from an early (6th – 7th century) bowl. Further study under magnification may help to explain the cause of the trail abrasion, which is probably wear and almost certainly not a deliberate decorative effect. Finally, SF3.26 from SFB 3 has been previously provisionally identified as being from a late globular beaker. However, this identification should be reviewed after a careful re-examination of the sherd, particularly as the existing theory helps to support the dating of the SFB to 8th-9th century and affects understanding of the taphonomics.

Window glass

Sherds positively identified as window glass so far comprise the following. From 2007 test-pitting, two pale green sherds, one with a fire-rounded edge (SF8 from TP8, the other SF32 from TP10), both with numerous bubbles in the metal. Two more probable window sherds from TP 10, both pale blue, one heat-damaged (SF24), the other very small (SF30). Finally, one deep green sherd from TP 12 (SF26), probably window glass, but also heat-damaged. From the 2008 area, one streaky blue-green sherd (SF4) with fire-rounded edge and many bubbles. Three pale blue sherds (SF33, SF166, SF379), which may all reveal grozed edges upon further examination, with SF166 being a particularly good candidate. A very small pale blue sherd (SF65), and a blue-green sherd (SF278) with a fire-rounded edge, similar to SF4, above. From the 2009 excavation, two sherds, one pale green (SF20), one blue-green (SF21). The latter is particularly interesting because although it is small, but thick, and with one matt surface. Closer examination would hopefully reveal whether this is a result of weathering or due to the method of production. Finally, a possible blue-green window glass sherd with a fire-rounded edge (SF1.216) from SFB1 in the 2010 trench is contextually very interesting and would benefit from further inspection, because it is very unlikely to date to the 7th century along with the rest of the material culture within the fill. Therefore, the question to address is, is the sherd residual, intrusive, or contemporary with the filling of the pit, and in what way does this affect the interpretation of SFB1?

It is worth noting that almost all of the sherds initially identified as window glass are shades of 'natural' pale blue, blue-green and pale green, with the deep green heat-damaged sherd mentioned above being the sole exception to this. It is also of interest that a couple of sherds of window glass appear to be late Saxon potash glass (SF148 and 377), both intrinsically and in terms of the chronological evolution of activity on this site.

Finally, it is very likely that sherd 2.356 was a metalwork setting intended to imitate garnet inlay. The colour is very unusual for glass of the Middle Saxon period and it seems likely that imitation of garnet was the intended purpose. Although there is a small possibility that it could be window glass, the initial examinations have not revealed any other window glass sherds from this area of the site, and almost none from the site overall with any deliberate colouration at all. Further study of manufacturing marks, composition and typological parallels is recommended.

Distribution of glass

Provisional attempts to plot the distribution of both vessel and window glass across the site suggest that the two groups have different patterns and may have been subject to distinct taphonomic processes, which could be very interesting when subjected to further study. The window glass appears to be concentrated near the large building found in 2008 Trench 1, and in Test Pit 10, while the vessel glass appears to be concentrated to the north-west and south-east of the building area, and to the south-east of 2008 Trench 2, perhaps in more peripheral areas where rubbish deposition was taking place. These provisional observations would help to support trends amongst vessel glass identified at other sites (e.g. Dinas Powys, Campbell 2007). A full understanding would require more accurate pinpointing of find spots and their relationship with the rest of the archaeology on the site, especially buildings. Finally, it is noticeable from this initial investigation that most of the glass comes from surface deposits and the top layers of pit fill, so the sherds sealed within stratigraphy should be identified and highlighted during further study.

Research questions

It is intended that the Lyminge glass will form a key case study for my PhD thesis at UCL, which is provisionally entitled 'Anglo-Saxon vessel glass from settlement contexts: beyond the Emporia'. The assemblage has excellent potential for addressing questions about the Lyminge site itself, the nature of the community and activity here and the evolution of all of the above over several centuries. It is unusual for a site to have relatively large quantities of vessel glass from both the early and middle Saxon periods, presenting an interesting opportunity to explore how glass use and deposition changed in the area over time, and what this represents in terms of social change. Middle Saxon window glass assemblages of reasonable size and quality are rare, and of great interest due to the information they can reveal about building types on the site and the site nature and status (the majority is found on sites of an ecclesiastical nature). The beads will be able to contribute to the stratigraphic chronology and dating as they are by far the most closely datable of the glass find types, and may perhaps be able to indicate trade links, which are difficult to prove based on other glass categories.

The local, regional and national significance

The presence of securely contextualised window glass on an early Medieval site of documented ecclesiastical status is rare and of national importance. The vessel glass is equally important in this context, as other contemporary sites of proven ecclesiastical nature were excavated decades ago and have not been characterised typologically for comparison to others. Also, they have not been specifically studied in terms of distribution and taphonomy, and in the case of Barking, Essex, remain unpublished. Both Lyminge assemblages have great value as established 'ecclesiastical' groups for comparison with glass assemblages from other sites where the nature of the occupation is unproven and fiercely debated (e.g. Flixborough, Lincolnshire, and Brandon, Suffolk).

The Lyminge glass also represents a rare, if not unique opportunity to study the evolution of glass consumption within a community of this period in England – particularly the transition from early to middle Saxon glass use and deposition, although hopefully also the obscure transition from middle Saxon soda glass to late period potash glass, particularly if more of the latter is found in future excavation seasons.

Regionally, the vessel glass assemblage is important to Kent because despite the large volumes of glass found in the county from early Anglo-Saxon burial contexts, comparatively little evidence of middle Saxon glass from occupation contexts has been excavated in the county so far. For example, to date only approximately 15 sherds are known from the key city of Canterbury. The assemblage is equally important nationally for the same reason, because it seems unlikely that the importance of Kent in terms of glass consumption ceased with the transition from the early to the middle Saxon period. Overall, it is very helpful that in this case there is little later occupation to disrupt or destroy the Anglo-Saxon archaeology.

Recommendations for future work

Firstly, a full typological report and characterisation of the assemblage is essential for such a high-profile site and assemblage. The window glass and possible window sherds in particular would benefit from closer study to confirm the identification in as many cases as possible, and also to fully observe manufacturing evidence such as grozing and possible in situ weathering. Both window and vessel assemblages can then be compared with others of ecclesiastical, secular and unknown status, and form a key case study in wider research into the consumption and significance of glass in Anglo-Saxon society.

There is huge potential for separate studies of the distribution and taphonomy for both vessel and window glass, and especially for a comparison of the two, as early indications suggest different depositional processes at work. This would be a first in Britain, as most previous work of this type has been done on vessel glass from sites in Western Britain where no window glass is found. A study of 'vertical' stratigraphic distribution would also be useful to highlight the most securely contextualised sherds, and in a few cases a focus on individual sherd context would assist significantly with site interpretation (e.g. Funnel beaker

sherd SF60, which may help to assign a relatively late date to a post hole and a structure in the 2010 excavation area).

The colourless cone beaker sherds from the 2010 excavation area present an unusually good opportunity for a sherd-link study to be conducted and used for studying the depositional processes underway in the early Saxon settlement area. It would also be worthwhile to factor the group of three globular beaker sherds with abraded trails into this analysis.

Compositional analysis of some of the glass would be very useful in addressing questions such as how the glass was made (using recycled Roman glass?) and approximately when, based on chemical profile. Key sherds would also benefit from analysis of elemental composition and possible colourants used (e.g. red 'setting' sherd). The potash window glass would benefit with comparison with contemporary equivalents from England and the continent to help confirm identification and perhaps to act as a point of comparison for future work (not much glass of this type has been studied in this way). Finally, a typological and compositional assessment of the potash vessel glass would be worthwhile in order to confirm whether any late Saxon material is present – if so, this would enable a valuable intra-site study of the mid-to-late Saxon glass transition.

Regarding retrieval methods, all Anglo-Saxon features were fully excavated, and all firmly stratified Anglo-Saxon deposits were passed through 10mm dry sieves and sampled for flotation (usually 40 litres of soil for each discrete context, e.g. pit fills). A number of glass fragments were retrieved from the environmental samples, and a study of the impact this method had on average glass sherd length in comparison to dry-sieved contexts would enable estimation of the total amount of glass actually present on the site and the percentage of it that was found. This would also make a useful contribution to the field of glass studies and potentially to future excavation practise.

Conservation Statement

The majority of the glass consists of small fragments, including some tiny sherds from environmental samples. However, most is also made from high-quality soda glass and is very stable. A small number of potash-based sherds may need careful handling as they are already highly laminated, but most of the assemblage will not require anything further than storage in appropriate (not too dry) conditions.

Bibliography

Campbell, E. (2007) *Continental and Mediterranean Imports to Atlantic Britain and Ireland, AD 400-800*. York: Council for British Archaeology Research Report 157.