## APPENDIX 5: ASSESSMENT OF GLASS

Lyn Blackmore

Conservation by Liz Barham

## 1. Introduction

A total of 45 objects from ARC CXT 98 are of glass; almost all are beads and typical of the $7^{\text {th }}$ century. The artefacts were recovered by hand excavation and sieving.

The study of the material should assist the following fieldwork aims:

- To establish a chronology for the cemetery and a sequence of development within it.
- To help determine burial practices.


## Methodology

All the finds were examined. Each find was given an individual accession number and their basic shape was determined using the Buckland typology (Evison 1979).

The data was recorded on accession cards and onto the MoLAS Oracle database, and subsequently converted to RLE Datasets.

## Quantification

This relatively small assemblage of 42 glass beads was recovered from eight different graves; all but one bead is complete.

In addition there are three mounts, two of which are set in metal frames as pendants ( $<39>$ and $\langle 41>$ ); of these, $\langle 41\rangle$ was possibly made from part of a bead). The third find is a counter or loose mount of blue and yellow marbled glass ( $<33>$ ).

Most beads are small and of cylindrical form, but a few are barrel-shaped, with convex sides; some of these are very small. Other forms comprise annular (two examples), polygonal, coiled cylinder and small melon beads (one of each).

Most beads are monochrome; red is the most common colour, but others are of blue, green, yellow and white. Polychrome beads are rare, but one large red bead had a chevron inlay (now missing). The possible bead fragment in a pendant ( $\langle 41\rangle$ ) has reticella decoration. The other pendant mount is of dark green glass, while the mount or counter is of blue and yellow marbled glass.

## Provenance

The source of the beads cannot be determined with certainty, but it is generally accepted that beads of this the type found at Cuxton were probably imported from the Continent, possibly from or via the Low Countries.

Beads were found in eight graves; two graves also contained glass mounts, some in pendants. The best groups are from graves [214] (Plate 2) and [305], both identifiable by their finds assemblages as rich female burials.

Grave [214] contained 29 beads, probably from a necklace, found on the area of the right shoulder with a silver ring. The pendant containing a glass mount ( $<41>$ ) was found by the left hip with the two amethyst beads and a bone and iron pendant.

Grave [305] contained one melon bead, a mount/counter and a gold pendant with glass mount; other significant finds from this grave include a bulla and a workbox.

All the other graves had three beads of less, and several have only one.

## Conservation

This assessment considers requirements for finds analysis, illustration and investigative conservation of the glass accessioned finds from ARC CXT 98. It also includes work necessary to produce a stable archive in accordance with MAP2 (English Heritage 1992), and to the standard required by the Museum of London's standards for archive preparation (Museum of London 1999).

Treatments are carried out under the guiding principles of minimum intervention and reversibility. Whenever possible preventative rather than interventive conservation strategies are implemented. Procedures aim to obtain and retain the maximum archaeological potential of each object.

All conserved objects are packed in archive quality materials and stored in suitable environmental conditions. Records of all conservation work are prepared on paper and on the Museum of London collections management system (Multi MIMSY) and are temporarily stored at the Museum of London.

The accessioned glass finds were assessed by visual examination of the objects using a binocular microscope where necessary.

Illustration.
One item $[214.10]<41>$, composite copper and glass was identified for surface cleaning prior to photography. The copper element should be lacquered, post-cleaning.

Preparation for archive deposition.
All the glass finds are stable and packed appropriately for archive.

## Comparative material

## General.

Beads are found on most Saxon cemetery sites, but many assemblages are slightly earlier in date. In the local context, plain glass beads and a few polychrome beads were reported in graves at Watts Hill, Rochester (Payne 1895; 1897), but the date of these finds is unclear. One of the closest contemporary groups is that from the Polhill cemetery, in the Darenth valley. Numerous beads have been found at Saltwood (including more polychrome beads), and these should certainly be compared with the Cuxton finds. Other sites include Buckland, where monochrome red beads were among the most common; these were dated to after 575 (Evison 1987b, 61). Coiled cylinder beads occur at Buckland and at Finglesham (Hawkes), while small melon beads are found at Buckland and at Leighton Buzzard (Hyslop 1963) amongst other sites (Geake 1997). There is also relevant material on the Continent, notably from Dorestad, and Maastricht, and research into beads from Birka and Ribe which may contribute to the study of the Cuxton finds

## Reticella beads.

Two beads with reticella decoration from Buckland were dated to 525-600 (ibid, 65). The mount for the pendant with containing part of reticella bead $(<41>)$ is unusual, but the piece is similar in concept to a silver pendant from Horton Kirby (Cumberland 1940, 142, pl.1) and another from Sibertswold (Hawkes 1990, Pl.4). Other Kentish sites with possible comparative material include Broadstairs, and Bekesbourne.

Melon beads.
The melon bead from [305] was found in association with a workbox and a bulla. At the Garton cemetery II (Geake 1997, 48) similar associations were recorded.

## Potential for further work

The study of the material should assist the following Fieldwork Event Aims:

- To establish a chronology and a sequence of development for the cemetery:
1.1 The absence of large strings of glass and amber beads typical of the 6th century and the small size and monochrome colouring of most of the Cuxton beads places them in the $7^{\text {th }}$ century. Reticella beads are generally dated to the second half of the $6^{\text {th }}$ century, and so the pendant $<41>$ could either be an heirloom or a contemporary piece made with part of an old bead. Melon beads have Roman origins, but are a long-lived tradition. The distribution of the beads and mount/counter suggests that graves [168], [193], [302] and [305] could be earlier than [214], but the full range of evidence must be analysed to verify this (grave [214] also contained pendant $<41\rangle$, which could be older than the beads).
- To help determine burial practices. Beads are usually associated with women and children;
1.2 The presence of beads in the male grave [193] could be accidental, but it is of interest that these are the only annular beads from the site, and they could have some special significance. It is usual to find only one or two beads in child graves, but the number and nature of the beads in select adult female graves may be indicative of status. Small monochrome beads often occur in conjunction with workboxes (Geake 1997, 45), melon beads less frequently so (ibid, 48). The choice of beads may have some significance in the Cuxton grave [305]. Melon beads tend to occur with other Roman objects, although nothing obviously older was noted in grave [305]. Consideration of the beads in conjunction with
associated items such as silver rings or pendants may give a better picture of the original necklaces, although it is recognised that much will have been lost.

The following Landscape Zone aims (Towns and their rural landscapes $100 \mathrm{BC}-\mathrm{AD} 1700$ ) may be addressed when the finds are considered together with the other accessions:

- The economy of human populations using the landscape, including trade and contact with other populations:
1.3 The collection of beads and pendants from Cuxton is typical of the period, and no richer or poorer than most other contemporary Kentish assemblages. The beads were probably imported from the Continent, possibly from or via the Low Countries. Although the means by which they reached the site must remain uncertain, they reflect the highly developed trade links between Kent and the continent in the $7^{\text {th }}$ century, and demonstrate that Cuxton was party to some exchange mechanisms, whether internal or external. Consideration of the beads and pendants in the light of the wider distribution of these types can be also used to develop an understanding of trade patterns and affinities within the region, including the relationship of quantity of imported goods to distance from the coast. The possible reuse of an old reticella bead (a type generally dated to the second half of the $6^{\text {th }}$ century) to imitate the more upmarket type of pendant found at Horton Kirby gives an insight into the economy.

New research aims.
Study of the beads per se will inform on technology and their use as items of fashion jewellery. The original colours of the reticella mount should be tested, and ideally the composition of all the beads should be studied by X-Ray flourescence (XRF; Bayley 1987,187 ) to group like beads and separate those that are superficially similar but technically different. This information will help to identify the range of sources represented in the assemblage, and, by comparison with other sites, to inform on trade and distribution patterns.

## Further Work

In order to address the above research questions, it is recommended that the beads should be studied as part of the grave groups and as items of jewellery and symbolism, with reference to the comparative material and the research by Brugmann, Evison, Guido, Hirst, Koch, and others. This work should include

- Analysis of reticella and other beads
- Integration of the finds with the stratigraphic information
- Comparison with material from relevant sites
- Compilation of finds catalogue for inclusion in publication
- Writing of finds report
- Illustration or photography of a representative selection of the finds Editorial/liaison
- Conservation


## Bibliography

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Table 1: Assessment of the glass

| Context | Material | Count | Type | Period | Date | Comments (description) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 214 | Glass and copper alloy | 1 | Mount | EM | Late $6^{\text {th }}$ or $7^{\text {th }}$ century | Pendant. Copper mount with glass mount with reticella decoration (reused bead?) |
| 305 | Glass and gold | 1 | Mount | EM | $7{ }^{\text {th }}$ century | Pendant. Gold with green glass mount ; complete |
| 168 | Glass | 1 | Bead | EM | $7^{\text {th }}$ century | Red bead; complete |
| 168 | Glass | 1 | Bead | EM | Late $6^{\text {th }}$ or $7^{\text {th }}$ century | Turquoise coiled cylinder bead; complete |
| 193 | Glass | 1 | Bead | EM | Later $6^{\text {th }}$ or $7^{\text {th }}$ century | Pale green annular bead |
| 193 | Glass | 1 | Bead | EM | Later $6^{\text {th }}$ or $7^{\text {th }}$ century | Burnt ?green annular bead; complete |
| 210 | Glass | 1 | Bead | EM | $7{ }^{\text {th }}$ century | Blue bead; complete |
| 210 | Glass | 1 | Bead | EM | $7{ }^{\text {th }}$ century | Yellow bead; complete |
| 210 | Glass | 1 | Bead | EM | $7{ }^{\text {th }}$ century | White bead; complete |
| 214 | Glass | 10 | Bead | EM | $7^{\text {th }}$ century | Red beads; complete |
| 214 | Glass | 1 | Bead | EM | $7{ }^{\text {th }}$ century | White bead; complete |
| 214 | Glass | 6 | Bead | EM | $7^{\text {th }}$ century | Green bead, one small wound; complete |
| 214 | Glass | 8 | Bead | EM | $7{ }^{\text {th }}$ century | Blue beads, 4 very small; complete |
| 214 | Glass | 3 | Bead | EM | $7{ }^{\text {th }}$ century | Yellow beads, 2 very small; complete |
| 214 | Glass | 1 | Bead | EM | $7^{\text {th }}$ century | Yellow-green bead; complete |
| 296 | Glass | 1 | Bead | EM | $7{ }^{\text {th }}$ century | Green bead; complete |
| 302 | Glass | 1 | Bead | EM | Late $6^{\text {th }}$ or $7^{\text {th }}$ century | Large polychrome bead, red with impressed chevron decoration (inlay missing) |
| 305 | Glass | 1 | Bead | EM | $\begin{aligned} & 6^{\text {th }} \text { or } 7^{\text {th }} \\ & \text { century } \end{aligned}$ | Small green melon bead |
| 305 | Glass | 1 | Mount | EM | $\begin{aligned} & \text { Late } 6^{\text {th }} \text { or } \\ & 7^{\text {th }} \text { century } \end{aligned}$ | Mount or counter, blue and yellow marbled glass |
| 357 | Glass | 3 | Bead | EM | $7{ }^{\text {th }}$ century | Very small yellow beads |

