CUPS FOR GENTLEMEN

H.E.M. COOL AND M.J. BAXTER

INTRODUCTION

It is becoming apparent that social custom, rather than mere availability, probably governed the use of many glass vessels in Roman Britain. Study of site assemblages has shown a recurrent difference between urban and rural patterns of use, as well as differences between those used by civilians and the military (Cool and Baxter 1999; Cool 2003). Site assemblages, though, are coarse tools to work with, as they relate to groups rather than individuals. More detailed insights can be gathered by studying what items were thought appropriate to place in the graves of people of known age and sex. Developments in the study of human bone mean that increasingly there is very detailed information about the person buried. Our work in this area is at an early stage; but we feel that the methodology we have developed may be of use to others working with cemetery assemblages, and those who wish to explore what vessels were thought appropriate for different parts of the community.

The paper outlines the methodology with special reference to a cremation cemetery excavated outside the fort and vicus at Brougham, Cumbria. The site was excavated in 1966 and 1967 in very difficult circumstances as it was being destroyed by the building of a new road. The archive from the excavations has recently been re-assessed and all the material, including the cremated human bone, re-analysed. This has shown a very complex pattern of behaviour surrounding the funerals of the dead, and the way in which glass vessels were used is just one part of these (Cool 2004).

THE CEMETERY

Brougham is located in the military northern zone of Roman Britain. There has been very little excavation in the fort and the vicus, and so the history of occupation is unknown. The cemetery being considered was in use for a relatively short period of time. The widest date range possible is AD 200–310, but the most likely period is AD 220–300. Many of the formal urned burials were accompanied by jars made in Black Burnished Ware (BB1). The 3rd century was a period when the types of decoration on these changed (Bidwell 1985, 175; Holbrook and Bidwell 1991, 95), and this can be used to assign many of the burials to one of three separate phases. Phase 1 is AD 220–240, Phase 2 is AD 240–270, and Phase 3 is AD 270–300/10.

All ages were buried in the cemetery. In the formal urned burials it has been possible to identify 13 infants (0–5 years), 20 immature individuals (6–18 years), 14 adult males, 17 adult females and 32 adults which it has not been possible to sex. There are also eight double burials, generally of an adult and small child. During the 3rd century a cavalry unit, the Numerus Equitum Stratonicianorum, was in garrison in the fort (RIB 1, no. 780; Jarrett 1994, 69, no. 10). It is likely that this cemetery was the burial place of the soldiers and their families. This supposition is strengthened by the remains of horses and military equipment in the pyre goods.

It is clear that the majority of the wealth expended on the funerals was consumed on the pyre. Adults were taken to their pyres on biers decorated by elaborate bone veneers which were burnt with them, together with many other items including metal vessels, gold jewellery and objects of ivory. After the body had been burnt, the cremated bone was normally placed in a pottery urn. The urn was then placed in a grave, and was frequently accompanied by other pottery vessels. In some graves the urn was also accompanied by a glass vessel but this was far less common.

Melted glass is a regular feature of the pyre debris, indicating that glass vessels were placed on the pyre. All the melted glass was blue green and, where the vessel type could be identified, it was either a flask or a bottle. The vessels were clearly there as containers for liquids. In one case the vessel could be recognized as a bath-flask, suggesting perfumed oil may have been poured on the pyre. There were also the remains of square bottles of Isings (1957) form 50. This is of particular interest as it shows these were still being used in the mid 3rd century. The vessels placed entire in the graves were predominantly colourless drinking cups (fig. 1). Closed forms were rare. The cups have been the subject of a previous paper in the Annales (Cool 1990). The recent analysis has allowed more precise dating to be assigned to them than was possible in that paper, and the results of this are noted in the caption to the figure.

THE DISTRIBUTION OF THE VESSELS

The associations of the glass vessels where the age and sex of the person in the grave is known are shown in Table 1. Glass flasks and their contents were clearly used on the pyres of people of all ages and sexes. Drinking vessels, though, appear to have only been placed in the graves of
adults, and apparently only in those of men. It was of some interest to establish whether glass cups were the preserve of grown men only.

This was explored by looking not only at the graves that did have glass vessels; but also those that did not. **Table 2** shows the occurrence of glass drinking vessels in adult graves from Brougham where a determination of sex has been possible. Inspection suggests an association between the presence of a glass drinking vessel and sex, with male graves more likely to contain such vessels.

Statistical tests can be used to address the question of whether the apparent association came about by chance. The chi-squared test is that which archaeologists are most likely to be familiar with (Shennan 1997, 104). Application here suggests a significant association between sex and vessel presence at about the 1% level or better (the precise value depending on which version of the test is used). Unfortunately the validity of the test is questionable because of the low values of some of the row and column totals, leading to low expected values (less than 5) in the chi-squared test.

Fisher's exact test avoids such problems, and was used to confirm our intuition that apparent associations were indeed statistically significant. The idea behind the test is to construct all possible tables that have the same row and column totals; determine the probability of getting each table by chance; and calculate the probability of getting a table at least as 'extreme' (or unusual) as the one observed. For example, **Table 3** preserves the row and column totals of Table 2 but is less 'extreme' than that actually observed. Applying the test to the data in Table 2 gave a p-value of 0.004, significant at better than the 1% level and confirming that the association suggested is unlikely to have arisen by chance.

Fisher's test is a useful alternative to the chi-squared test when sample sizes are small. We have illustrated it for a $2 \times 2$ table, but a generalization to $r \times c$ tables, sometimes called the Fisher-Freeman-Halton test, exists that we have also used. These tests have had limited use in archaeology, possibly because of their past lack of availability in commonly used software. On a technical note, we used

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**Table 1** **The associations of the glass vessels placed unburnt in graves and on the pyre**

<table>
<thead>
<tr>
<th>Age Band</th>
<th>Cup/ beaker</th>
<th>Grave-flask</th>
<th>Jar</th>
<th>Pyre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult</td>
<td>4</td>
<td>1</td>
<td>–</td>
<td>5</td>
</tr>
<tr>
<td>Female</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Male</td>
<td>6</td>
<td>–</td>
<td>–</td>
<td>3</td>
</tr>
<tr>
<td>Double</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1</td>
</tr>
<tr>
<td>Infant</td>
<td>–</td>
<td>1</td>
<td>–</td>
<td>3</td>
</tr>
<tr>
<td>Immature</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1</td>
</tr>
</tbody>
</table>
The Imperial Roman World – Vessels and their Patterns of Use

**Table 2** The occurrence of glass drinking cups in the graves of men and women

<table>
<thead>
<tr>
<th>Sex</th>
<th>With</th>
<th>Without</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>6</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Female</td>
<td>0</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>25</td>
<td>31</td>
</tr>
</tbody>
</table>

**Table 3** A less ‘extreme’ version of Table 2 retaining row and column totals

<table>
<thead>
<tr>
<th>Sex</th>
<th>With</th>
<th>Without</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>5</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>25</td>
<td>31</td>
</tr>
</tbody>
</table>

the R package (Dalgaard 2002), which is free, S-Plus (Venables and Ripley 2002), and two-sided alternative hypotheses.

**Cups as a mark of status?**

With results such as these it seems very reasonable to conclude that, in the community that was burying its dead in the cemetery at Brougham, glass cups were seen as the exclusive preserve of adult males. This fits a pattern where the types of things used in the funerary ritual varied according to the age and sex of the deceased. It is likely, for example, that only adult females had large copper-alloy vessels like Hennethor buckets placed on their pyres; while small samian cups of Dr. 33 were only placed in the graves of babies and very young children.

In the case of the males buried with glasses it is possible to suggest that they were part of the upper echelons of society. In the cemetery the number of vessels deposited with the deceased ranged from one to eight, with just under 80% of the graves having between one and three vessels. The burials with four or more vessels tended either to be double burials of two individuals; or to have indications in the pyre goods that this may have been the burial of a person of high status. It is noticeable that glass vessels were only being deposited in the graves which contained four or more vessels.

At present we do not know whether glass cups were held in a similarly special regard elsewhere in Roman Britain. There are grounds for thinking that the unit stationed at Brougham during the 3rd century, and which buried its dead in the cemetery, had originated in the Danubian area, possibly from Pannonia. This is suggested by finds in the cemetery that find their best parallels there, and in the lands of the *Barbaricum*; by epigraphic evidence on a gravestone and in the form of a graffiti; and by some of the burial rituals. It is possible that the unit had spent time in the Rhineland before coming to Britain, as the site has an unusually high proportion of East Gaulish items at a time when the surrounding sites were more likely to have Central Gaulish material. At Brougham there are, for example, many colour-coated beakers from Trier, a vessel type thought particularly appropriate for children and young people.

This way of using glass vessels may, therefore, have been more typical of continental Europe than of Britain. Currently we are starting to look at other Romano-British cemeteries where there is good human bone evidence to see if similar patterns start to emerge.

**Conclusions**

Whilst it has long been accepted that items such as jewellery and weapons might be gender-specific, other types of material culture such as vessels have traditionally been regarded as gender-neutral. The work at Brougham indicates that this may be far from the case.

The approach we have outlined here of tabulating the occurrence of a type of grave or pyre good according to the age and sex of the individual, and then using a statistical significance test to explore whether the observed patterns could have come about by chance, is a simple one to implement. We feel that the analysis of many other cemeteries could benefit from adopting it.

**Acknowledgements**

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**References**

**Abbreviation**


**References**


**H.E.M. COOL**
Barbican Research Associates
16 Lady Bay Rd,
Nottingham NG2 5BJ,
UK
hilary.cool@btinternet.com

**M.J. BAXTER**
School of Science, Nottingham Trent University,
Clifton Campus,
Nottingham NG11 8NS,
UK