The fabric of a Collared Urn from Ferrybridge, West Yorkshire (FHM F-G 03)

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A small sample of a collared urn excavated by Oxford Archaeology was submitted for visual identification of the inclusions present by Carol Allen. The sherd was examined at x20 magnification but the inclusions could not be identified. It is recommended that a thin section be prepared, although this is a destructive technique.

Description

The sherd comes from a vessel with walls c.10mm thick. The fabric contains abundant angular fragments of an unknown material. The fragments range from c.0.3mm to 3.0mm across and show no signs of abrasion or weathering. The material is glassy in texture with subconchoidal fractures. The colour ranges from a light blue/grey to a light red and there is no internal structure visible. It is certainly either a glass or cryptocrystalline.

The groundmass consists of a fine-textured, black clay with some mica of fine silt to clay size visible.

The groundmass is very likely to be a Coal Measures Mudstone, since it is the only clay source available in the southern Vale of York with similar characteristics. The immediate source, however, might be a Quaternary deposit, such as boulder clay or, less likely, colluvium (since the parent clay seems to have been organic and a colluvial deposit would probably be oxidized, leading to the removal of any organic content).

The inclusions are clearly added and probably obtained by fire-cracking. The fact that all of the inclusions are of the same type makes it evident that they are not erratics from a boulder clay. The deliberate preparation (by whatever means) of rock temper is a noted feature of the later prehistoric pottery of northern Britain (see, for example, 1991 and Freestone and Humphrey 1992;Freestone and Middleton 1991) although it is common in those cases to find two or three distinct rock types present rather than the single one present here.

The identity of the rock cannot be determined visually since it is too fine-textured for any distinguishing features to be observed. Possibilities include: a glassy volcanic rock, flint or chert. Of these, flint can be discounted since the rock has not developed the distinctive fracture found on burnt flint. Chert is a distinct possibility, in which case Carboniferous chert is the most likely source, whilst volcanic rock cannot be discounted. Such rocks outcrop in the Lake District and southern Scotland in the form of altered rhyolite.

The fabric is different from that of the Middle Bronze Age vessel from Ferrybridge previously examined by the author, although that too contained glassy inclusions. Those, however,

were tentatively identified as being either of volcanic origin or, more likely, a fuel ash slag. In this case, however, there is no sign of vesicules in the rock, whereas in the other Ferrybridge vessel these were abundant in several of the glassy inclusions.

A thin section would probably enable the rock to be identified, considering that it is so common and includes fragments up to 3.0mm across. Should it be identified and found not to occur locally, either in the solid geology or in boulder clay, then this would be a valuable contribution to knowledge of early pottery production.

Bibliography

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