
ANNUAL GENERAL MEETING

The Ceramic Petrology Group held their Annual Meeting at the University of Nottingham on the 17th of May 2010. Six papers were submitted for the day conference; unfortunately Daniel Sahlén could not make a presentation, but his abstract is below.

Expedient Pots: Petrographic Evidence from Late Neolithic Wadi Ziqlab, Jordan

Kevin Gibbs, The University of Manchester

In the southern Levant (including modern Jordan, Israel and Palestine) pottery appeared for the first time around 6500 cal BC. The earliest pottery is attributed to the Yarmoukian culture and is characterized by a calcareous paste and diagnostic incised herringbone decoration. This pottery was likely produced by non-specialists and may have had a predominantly symbolic

or non-utilitarian role. It has been suggested that during the subsequent 6th millennium BC, pottery became more standardized and perhaps more utilitarian. Attributed to the Wadi Rabah culture, the pottery of this period includes well-made black burnished pots that may have been produced in kilns by specialist potters. However, alongside this new tradition there was a continuation of pottery production by non-specialists at the household level. Petrographic analysis of 6th millennium BC pottery from the site of al-Basatîn in Wadi Ziqlab, northern Jordan, suggests that some of this material may be viewed as an expedient technology, produced quickly with easily available raw materials. Pottery from the site includes simple vessels that were made with little preparation of the clay. In this paper I will discuss the pottery from the recent excavations at al-Basatîn in the context of the ceramic petrography of the region and in the context of other Late Neolithic expedient technologies. I will also offer some preliminary thoughts on the significance of expedient pottery. In particular, the evidence from al-Basatîn contradicts the unilineal model of the development of pottery technology that has prevailed in the region.

Pots and crucibles in the microscope: Investigation of technology and traditions in prehistoric Scotland

Daniel Sablén, University of Glasgow/National Museums Scotland

Research on prehistoric pottery has in the last years looked at the technological process as a social mechanism, exploring issues of individual choices and social practice. Ceramic petrography is an indispensable method for the study of ceramic technology and has successfully been used in theoretical studies of pottery. The study of metalworking ceramics, such as moulds and crucibles used in the casting of copper alloys can have extensive use of methods and theories developed in pottery studies, but there are few studies which combine method and theory.

I will in this presentation look at how we can use ceramic petrography to investigate ceramic technology and manufacture of crucibles and pottery in late prehistoric Scotland. I want to investigate the technological and material relation between crucibles and pots. This work is based on my PhD research at University of Glasgow and National Museums Scotland, where I have combined the theoretical notion of technology with microscopic analyses of metalworking ceramics and pottery.

The Anglo-Saxon Cremation Cemeteries of North Lincolnshire

Gareth Perry, University of Sheffield

The dispersed and prominent locations of early Anglo-Saxon cremation cemeteries has led scholars to suggest that they acted as centralised burial sites for discreet

tribal territories. It is becoming apparent, however, that this interpretation masks the full complexity of the burial pattern; indeed, the discovery of many smaller inhumation and mixed rite cemeteries in the putative territories of these large cremation cemeteries suggests that people would not, by default, bury their dead in a centralised burial ground. A new way of assessing the 'catchment areas' of particular cremation cemeteries is through comparison of the one form of material culture common to both cremation cemeteries and settlements – ceramic vessels. At cemeteries these are the urns, whilst at settlements they are the domestic cooking and storage pots. Comparative analysis of this common material culture forms the basis of my PhD research.

The project compares pottery recovered from two cremation cemeteries in North Lincolnshire, Elsham and Cleatham, with that retrieved by field walking and excavation of settlement sites. Initially cemetery and settlement fabric-types will be identified within the framework of macroscopic typologies developed by Jane Young and Alan Vince in the East Midlands Anglo-Saxon Pottery Project; subsequently a select programme of thin section petrographic analysis will compare settlement and cemetery material. It is hoped that through the analysis of these two types of assemblage the relationship between settlement sites and choice of burial ground and the production of both domestic and funerary pottery will be better understood.

An On-Line Database for Archaeological Petrography

Patrick Quinn, University of Sheffield

Petrographic data on artefacts is normally under-represented in the archaeological literature, with published analyses generally supported by a few black-and-white micrographs at the most, and fabric descriptions rarely included. This situation severely hinders the comparison of petrographic data between different studies, sites, analysts and laboratories.

In response to this problem, a project is in progress at the University of Sheffield Departments of Archaeology and Computer Science to design and build the first on-line petrographic database. This tool will provide an efficient means of storing, accessing and disseminating archaeological petrographic data, including colour micrographs, petrographic descriptions and associated information about artefacts.

The prototype database, expected in summer 2010, will be populated initially with data from ceramic analyses at University of Sheffield, Department of Archaeology, but will be made available to other analysts thereafter. Users will be able to browse and search petrographic data on ceramics and other artefacts using a user-friendly web interface, as well as uploading their own projects. Central to the system will be large, high-resolution polarizing light micrographs of individual

thin sections for direct comparison during microscope work.

The inevitable transfer of petrographic information into databases such as that being developed here will greatly assist the curation of extensive thin section collections that exist in the UK and elsewhere, ensuring their survival for future generations. Given that most petrographers are never very far from a computer, the presentation and manipulation of extremely large amounts of data and reference material through this medium also has obvious benefits for research productivity.

Eastern Mediterranean connections: mortaria production in the Archaic and Classical period

Michela Spataro and Alexandra Villing, The British Museum

In the Archaic and Classical period, mortaria (grinding bowls) were common and widespread in the eastern Mediterranean world. In the last decade, neutron activation analyses showed that these vessels were traded over long distances and seemed to have specialised production centres (Mommsen et al. 2006).

Optical microscopy was carried out on 52 samples from Naukratis, Al Mina, Lachish, Miletos and Xanthos, in order to identify manufacturing processes and provenance of the artefacts. Thin section analysis shows that in many cases very fine clays, possibly levigated, were selected to produce the mortaria, which were then fired at high temperatures. However, the fabrics of these vessels do not contain rare minerals that are diagnostic of provenance, only common minerals, found in most geological settings.

Representative samples from the main fabric groups identified in thin section were studied by scanning electron microscopy in combination with energy dispersive spectrometry (SEM-EDX), in order to analyse the elemental composition of the ceramic bodies. SEM-EDX results suggest an interesting pattern of trade, where mortaria, despite their everyday and coarse aspect, were traded from Cyprus throughout the Eastern Mediterranean.

Mommsen, H., Fletcher, P., Hook, D., Schlotzhauer, U., Villing, A., Weber, S. and Williams, D., 2006. Neutron activation analysis of pottery from Naukratis and other related vessels'. In A. Villing and U. Schlotzhauer (ed.) *Naukratis: Greek diversity in Egypt*: 69-76. British Museum Press, London.

Investigating 'Torpedo jars' – their composition and source

Roberta Tomber, Rob Carter and Seth Priestman, The British Museum

Torpedo jars comprise a category of transport amphorae produced between the late Parthian and

Early Islamic periods, characterised by a torpedo-shaped body, bead rim and short, solid spike. Lined with a black layer of bitumen, the jars are thought to have been used to transport liquid foodstuffs. Although a source in southern Mesopotamia has long been assumed, no kilns are known. Given the extensive timeframe of their production, and typological variants seen within the group, production can be seen to be the result of more than one workshop. Their distribution is wide, stretching beyond Mesopotamia to the Persian Gulf, where they are well represented, to South Arabia and India. This talk will describe work that has formed a pilot study of the ware. It has included mainly torpedo samples from Iran (particularly along the coast between Jask and Bushire), Sir Bani Yas (U.A.E.) and India, and was funded by the Society for Arabian Studies, the British Institute of Persian Studies and the Emirates Natural History Group. Thus far it has been possible to divide the samples into two main "fabric families" suggestive of two separate sources. The raw materials for both fabrics would be available within Mesopotamia, although further work is needed to rule out additional source regions for this widely distributed type, particularly in southwest Iran.

WEBSITES

Ceramic Petrology Group

<http://www.ceramicpetrology.uklinux.net/>

Prehistoric Ceramics Research Group

<http://www.prehistoric-ceramics.org.uk>