Ontology for Archaeologists

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This research project concerns the conceptual, logical and technological infrastructure integrating and supporting all sub-projects. Two more ambitious goals besides the physical infrastructure needed for storing and sharing data are: 1) to provide a logical infrastructure to support classification and analysis/interpretation of data. Precisely, an ontology of concepts will be defined for use in repositories of data/elements together with meta-models for tools used by sub-projects to interact. The ontology will offer a uniform representation of data and findings of the other sub-projects together with versatile tools through which unforeseen relationships among heterogeneous datasets may emerge semi-automatically: 2) to support technically the different teams in using the tools and interacting through them. This environment should ensure the future collaboration of teams and enable future research by others.

Mix & Match: Combining Analysis for Ceramics

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The Colonial Traditions project investigates the production of ceramic coarse wares for domestic and productive purposes in the Phoenician-Punic world of the western Mediterranean between the Iron Age and classical period (9th to 4th c. B.C.), with a particular focus on the island of Sardnia.

Ceramic traditions are embedded in social practices and their technological study provides powerful insights into the ways in which Nuragic and Phoenician people interacted and negotiated their daily practices and identities. The research is focused on defining local ceramic fabrics and the study of manufacturing techniques, with macro level studies carried out in Sardinia and micro level analyses in the laboratories at Glasgow and Leicester.

Metalworking Ceramics in the Microscope: a Petrographic Study of Moulds and Crucibles from Late Prehistoric Scotland

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Studies of metalworking ceramics, ceramic materials used in the processing of metals have only occasionally used petrographic analysis as a major technique. The main reason is that research on moulds and crucibles have often focused on issues of metallurgy and high temperature processes and used other more appropriate techniques to answer these questions. My recently completed PhD research at University of Glasgow instead looked at the

ANNUAL GENERAL MEETING

The Ceramic Petrology Group held their Annual Meeting at the University of Leicester on the 26th of May 2011. It was well attended and seven papers were presented. It was also agreed that the next AGM will be held at UCL in London in May 2012.

ceramic technology of metalworking ceramics and highlighted how these materials were manufactured and used in the late prehistoric period, from the Late Bronze Age (ca. 1000-700 B.C.) to the Early Historic period (ca. A.D. 400-800). Petrographic analyses were in this work central for my approach and conclusions.

This presentation will discuss my methods and some of the results from my petrographic analysis of moulds and crucibles. I will in particular focus on two key questions, fundamental for my analytical approach:

- Is there evidence of specialised selection of resources (clays and additives) in the preparation of different ceramic materials?
- What is the material and technological relation between metalworking ceramics and pottery?

A Preliminary Examination of Roman Wall Plasters from South West England

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A series of painted wall plasters were collected during rescue excavations from a 3rd-4th Century Roman Villa in Exeter. Initial examination of thin sections of the plasters, using polarising light microscopy shows them to have a simple 2-3 layer construction, with a coarse waterproofed base layer and then surface layers designed to take the paint. Although technologies are similar to those encountered elsewhere in the Roman Empire, the recipes and compositions have been adapted to suit local materials, sourcing the Cretaceous Chalk and river sediments derived from the basement rocks of South West England (granites and low-grade metasediments).

The microfossil memory of ancient artefacts, structures and features

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Reconstructing ancient trade routes and cultural connections is a mainstay of archaeology. High value items, such as amber in Europe or jade in pre-Columbian America, defined major and early long-distance trade routes. More enigmatic are the sources of items used in the daily lives of ancient peoples, the tesserae of mosaics, the bricks and stones of walls, or the earthworks surrounding homesteads, towns or forts. Using examples from Iron Age forts, Roman towns and medieval ramparts microfossil provenance provides unique insights into the geological, engineering, manufacturing and trading knowledge of ancient peoples and of the extent of their cultural contacts.

Provenance of Mid-late Iron Age Querns, Charnwood Area

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Geological provenance analysis was carried out on nine mid-late Iron Age saddle quern samples found at Beaumont Leys, Birstall and Humberstone Iron Age settlements, Leicester. Provenance analysis involved geochemical and petrological analysis to find out whether the quarry source of the quern stones could be located. Major element data for the saddle quern lithologies classify them as a collection of andesite and dacite samples when plotted on a total alkalis versus silica diagram. Major and trace element data was used in comparison with major and trace geochemical data analysed for a representative selection of volcaniclastic rocks of England and Wales, including rocks from English Lake District, north and south Wales, the Welsh borderlands, Nuneaton and Charnwood Forest in order to eliminate the possibility of a quarry source outside of the Charnwood Forest district. Macroscopic and microscopic analysis was undertaken using thin sections of each sample. Geochemical and petrological evidence indicates that the saddle quern samples were probably quarried from the Caldecote Volcanic Formation (CVF), Nuneaton, belonging of the Charnian Supergroup. The conclusion is tentative as a paucity of geochemical data is available for the Charnwood Forest district; however, that which does exist does not correlate with the saddle quern samples as accurately as the crystal-lapilli tuff facies of the CVF.

Kouphorouno, Greece – Riddle of the Sands

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The site of Kouphovouno, Sparta, Greece, has been excavated by a joint Anglo-French team with the aim of better understanding the Neolithic period in southern Greece. This open site was occupied in the Middle and Late Neolithic, and in the Early Bronze Age. Ceramic studies constitute a significant component of this investigation. Almost all of the pottery is considered to be local. Preliminary petrographic analysis reveals a range of local materials probably gathered from streams in the vicinity of the site. Despite clear indications that similar sources were used throughout the occupation of the site, some trends are evident in the choices potters made.