An imported Breton jar from Chepstow

Alan Vince

A sherd of a wheelthrown, unglazed jar in a highly micaceous fabric was recovered from the Wine Warehouse site in Chepstow by Monmouth Archaeology and submitted to the author for identification and study.

A sample of the sherd was removed for thin section analysis as a result of which a source in southeastern Brittany is postulated.

Petrological Analysis

The thin section was prepared at the Department of Earth Sciences, University of Manchester. The section was stained using Dickson's method (Dickson 1965) and added to the AVAC reference collection under the code V2333.

The following characteristics were noted:

- Angular quartz with straight extinction and needle-like inclusions, up to 1.0mm across.
- Laths of muscovite, up to 1.0mm long.
- Angular rock fragments composed of muscovite and minor biotite up to 1.0mm across.
- Angular rock composed of quartz with strained extinction and biotite, up to 1.0mm long.
- Angular perthite up to 1.0mm long.
- Rounded chert up to 0.5mm across.
- Rounded microcline feldspar up to 0.5mm across.
- Angular fragments of quartz-mica schist up to 1.0mm long.
- Well-rounded quartz up to 0.5mm across.
- Rounded sandstone (well-sorted grains of quartz and muscovite c.0.2mm across), up to 0.5mm across.
- Moderate silicious sponge spicules, c.0.1mm diameter and up to 0.5mm long.
- A groundmass of isotropic baked clay minerals and abundant fragments of muscovite and quartz.

Discussion

The inclusions in this sample indicate two sources of detrital grains: a ill-sorted angular sand composed of coarse-grained low-grade acid igneous and metamorphic rock fragments, the latter probably classifiable as schists, and a well-sorted sand composed of rounded grains of quartz, microcline feldspar, chert and fine-grained sandstone, c.0.5mm diameter. The sponge spicules could be naturally present in the clay.

The distinctive characteristic of the fabric is the sponge spicules. Such spicules occur in Jurassic deposits in Oxfordshire and in Cretaceous deposits in the Weald, but are absent in places where they might occur alongside igneous and metamorphic rocks, such as Cornwall, Devon or southeastern Ireland. Such spicules are, however, a noted feature of the Pliocene clays of Brittany and Normandy and pottery containing these spicules has been studied by Giot and Querre. (Giot 1986). Their study indicates that the spicule-bearing Pliocene clays occur in two areas where igneous and metamorphic rocks also outcrop: in the Contentin peninsula at its southern end and to the southwest of Brittany, in the area bounded by Rennes, Nantes and Angers (Giot & Querre 1986, Fig 2). Of these two, the first is an area of granitic rocks whereas the second includes areas of metamorphic rocks. Within this area, a medieval pottery, just west of Redon, is known to have been producing micaceous, spicule-bearing fabrics, St Jean-Ia-Poterie. Petrological descriptions and photomicrographs of products of this kiln are very similar to those of the Chepstow vessel, although rounded quartzose sand is not mentioned.

Provisionally, therefore, a southeastern Breton source is suggested for the Chepstow vessel, quite possibly St Jean-la-Poterie, near Redon at the junction of the Vilaine and the Oust. The main port on the Vilaine is La Roche Bernard.

Bibliography

Dickson, J. A. D. (1965) "A modified staining technique for carbonates in thin section." *Nature*, 205, 587.

Giot, P.-R. & Querre, G. (1986) "Les Poteries Armoricaines a Spicules." Les Dossiers du Ce.R.A.A, 14, 1-11.