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IMPORTED AMPHORAE SHERDS FROM TINTAGEL:

A PRELIMINARY REPORT

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Introduction

A number of imported Mediterranean amphorae sherds from Tintagel were submitted for thin section examination under the petrological microscope. The object of the analysis was twofold: (1) to characterize in detail the various different fabrics involved, and (2) if possible to suggest likely source areas for the pottery. Amphorae were an important form of container in the ancient world, normally carrying wine, olive oil and fish sauces, although on occasions other commodities were also transported. They were used primarily for seaborne travel, and so can provide valuable information about the economy and trading contacts. All the Tintagel sherds were firstly studied macroscopically with the aid of a binocular microscope. Munsell colour charts are referred to, together with free descriptive terms.

Petrology and Fabric

North African

Q05, Q09, Q11, Q12, Q15, Q19, Q20, Q21, Q22, Q26.

There is some variation of fabric here, although all the material is typical of a north African origin. Full details of the various fabrics and information on the types present will be presented at

a later stage. North African cylindrical amphorae probably started arriving in Britain during the third century A.D. and importation may have continued into the fifth century or later (Peacock, 1977). The principal content carried in these vessels is generally supposed to have been olive-oil, though fish-products may also have been carried to a lesser extent (Beltrán, 1978; Carandini and Panella, 1981).

Bi amphorae form (Thomas, 1981)

Two small sherds, one marked u/s.

Hard, fairly fine-grained fabric, with scattered white limestone fragments, outer surface light buff (10YR 8/4), core and inner surface light buff to light red (2.5YR 6/6). Thin sectioning shows a scatter of subangular quartz grains, fragments of cryptocrystalline limestone, flecks of mica and a small amount of chert and plagioclase feldspar. This assemblage clearly indicates a source area dominated by sedimentary rocks, and many areas would qualify on this basis. However, the concentration of this form in the Aegean and Black Sea region might suggest a source in this area (Riley, 1979). This type of ridged amphora dates from the fourth century A.D. at Athens (Robinson, 1959, type N272). At Carthage there is a marked increase in this form from about the mid sixth century, while production seems to have ended by the late sixth century - early seventh century (Fulford and Peacock, in press). It is not known what contents were carried.

Biv amphorae form (Thomas, 1981)

Q16.

Hard, smoothish highly micaceous fabric, deep reddish-brown (2.5YR 5/4). Thin sectioning shows little except a scatter of quartz grains and frequent flecks of mica. Heavy mineral separation on this type

of vessel has suggested an origin in an area of igneous and metamorphic rocks (Williams, 1983). This would support the idea of an origin in western Asia Minor (Hayes, 1976, 117) rather than Byzantium (Thomas, 1976, 246) or Egypt (Grace, 1961, fig. 67). The one-handled Biv type appears in the late first century A.D. (Lang, 1955, 277-278), while the earliest example of the two-handled variety occurs from a very late fourth century context at San Sisto Vecchio in Rome (Annis, 1975, 31, nos. 1 and 2). The evidence from Carthage suggests a marked peak in the Vandal period, c. A.D. 475, followed by a gradual decline until the later sixth century when there is a second peak (Fulford and Peacock, in press).

Undesignated

Q02.

Hard, sandy fabric, light red to reddish-brown (2.5YR 6/6 - 10R 6/6) throughout. This is a body-herd displaying close-lined horizontal grooving reminiscent of that found on Bi amphora but in a different fabric. Thin sectioning shows frequent grains of quartz and potash feldspar, together with flecks of mica and tourmaline. This suggests an origin near a tourmaline-granite outcrop. Tourmaline-granites occur in Devon and Cornwall, but there is no evidence for amphorae making in this part of Britain and so a local source for this herd seems unlikely. Outcrops of granite are to be found in various places around the Mediterranean and it is probably to one of these that we must look for the origin of this herd.

Q14.

Soft, fairly smooth fine-grained fabric, slightly micaceous, pinkish-white outer surface (5YR 8/2), buff (7.5YR 7/4) inner surface and core. Small twisted-shaped foot. This form of foot occurs in early

sixth century A.D. deposits at Carthage and may have an Aegean origin (information D.P.S. Peacock).

Q13. (part of a ribbed handle)

Hard, slightly rough sandy fabric, pinkish-white (5YR 8/4) surfaces, pinkish (5YR 7/3 - 7/4) core. Thin sectioning shows frequent subangular grains of quartz, average size up to 0.30mm across, with a scatter of slightly larger grains, flecks of mica and a little hornblende.

Q18. (plain body-herd)

Thick, hard, slightly rough sandy fabric, whitish-buff (10YR 8/2 - 8/4) throughout. Thin sectioning shows a groundmass of subangular quartz grains 0.10mm and under in size, together with a few larger grains up to 2.20mm across, flecks of mica and some phyllite.

Q24. (flat-grooved body-herd)

Thin, hard, slightly rough sandy, moderately micaceous fabric, red (between 2.5YR 5/6 - 5/8) throughout. Thin sectioning shows frequent ill-sorted subangular quartz grains ranging up to 1mm across, together with flecks of mica and some quartzite.

Q27. (ribbed body-herd)

Moderately thick, hard slightly sandy fabric with a scatter of golden mica, light buff (10YR 8/4) surfaces, reddish-buff core. Thin sectioning shows a fairly clean clay matrix containing grains of quartz and potash and plagioclase felspar, fine-grained volcanic rock and some volcanic glass. Superficially in the hand-specimen this sherd resembles the fabric of Bii amphorae (Williams, 1983), however the thin section shows that the fabric is quite different. The freshness of the volcanic glass points to an area of recent

vulcanism.

Q23. (part of a ribbed handle)

Soft, rough sandy fabric, with a scatter of reddish-brown inclusions, buff (7.5YR^{7/4} throughout). Thin sectioning shows a groundmass of frequent subangular quartz grains up to 0.10mm across, together with a few larger grains, flecks of mica, quartzite, phyllite and some felspar.

Q17. (body-herd with stubb of handle)

Soft, rough sandy fabric with a scatter of reddish-brown inclusions, reddish-buff (between 5YR 7/6 - 7/4) throughout. Thin sectioning shows a similar range of inclusions to Q23, though slightly finer-textured.

Q08. (plain bodyherd)

Thin, very hard, smooth fabric with frequent pieces of soft white inclusions scattered throughout, pinkish-grey (5YR 7/2) outer surface, greyish-brown (10YR 5/2) inner surface and reddish-grey core. Thin sectioning shows a scatter of quartz grains, flecks of mica, quartzite, chert, limestone and some argillaceous material.

Comments

This preliminary examination of some twenty-two amphorae sherds from Tintagel has identified or confirmed the origin of some of the material while establishing the range of fabrics for the other, as yet undesignated sherds. As well as amphorae from North Africa, some sherds of Bi and Biv amphora from (A?) the Black Sea region and Asia Minor are also present, with a possible type from the Aegean. The rest of the material is less easy to pin down, though

the petrology indicates a volcanic source for Q27, a granite area for Q02 and probably metamorphic for Q23, Q17 and Q18. Except possibly for Q23 and 17, the remaining undesignated Tintagel sherds display quite different fabrics, clearly indicating that they originated from a wide geological area - most probably the eastern Mediterranean. What is now needed is a programme of comparative analysis with eastern Mediterranean amphora from known or suspected origin. With this in mind a start has already been made with the study of a small group of comparative material from Crete.

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