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Summary

Thirty-four nearly complete vessels and fifteen fragmentary ones were examined in thin section for an analysis of the fabric. On the basis of the range of non-plastic inclusions present in the sherds a number of fabric divisions were made: (1) granitic, (2) oolitic, (3) quartz/ flint-chert, (4) quartz/ shelly limestone and (5) sandstone/ metaquartzite. Although a variety of inclusions appear in this pottery, the probability is that most, if not all, was produced fairly locally, the majority of the raw material deriving from the local drift deposits.

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A NOTE ON THE PETROLOGY OF SOME POTTERY FROM THE SAXON CEMETERY AT GREAT CHESTERFORD, ESSEX

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Introduction

Almost all of the pottery from the Saxon cemetery at Great Chesterford, Essex, held at Birkbeck College, was sampled for a small programme of petrological examination. Tiny pieces of sherds were detached from 34 nearly complete vessels and 15 fragmentary pots to enable thin sectioning and study under the polarizing microscope. The main objectives of the analysis were twofold: (1) to characterize in detail the fabrics represented in this group of pottery, and (2) if possible to suggest where these pots might have been made.

Petrology

On the basis of the range and texture of the non-plastic inclusions present in the Great Chesterford pottery sampled, a number of broad fabric divisions have been made.

(1) ?Granite

75/255

Unass 528

Crem 30/480

Crem 23/442

The most prominent inclusions in these four samples are large discrete grains of potash and plagiaclase felspar, together with some fragments of granite or granodiorite. Also present are quartz grains, some of them polycrystalline, flecks of biotite mica and the odd piece of sandstone, metaquartzite and limestone.

(2) Oolitic

142/462

136/443

Crem 27/451

Scattered throughout the fabric are fragments of limestone and fossil shell, amongst which distinct ooliths can be made out where it is possible to see the concentric structure within the limestone body. Also present are grains of quartz and the odd piece of sandstone and metaquartzite.

(3) Quartz/Flint-Chert

Unass 281

149/491

Crem 16/337

6/57

All four samples contain frequent grains of quartz up to 0.80mm across, although the majority are of a lower size-range than this, together with a sparse scatter of angular pieces of flint-chert, metaquartzite, flecks of mica, iron ore and a few small grains of felspar.

(4) Quartz/Shelly Limestone

Crem 32/494

80/265

Crem 24/447

Crem 10/280

Crem 28/452

A scatter of quartz grains up to 1.30mm across in size and some small fragments of shelly limestone, together with flecks of mica and iron ore, all set in a fairly clean clay matrix.

(5) Sandstone/Metaquartzite

Unass 446

Crem 33/495

Unass 251

Crem 18/359

Crem 8/249

&2 Fill

13/15

Crem 2/56

Crem 25/448

Crem 26/450

Crem 13/301

Crem 20/362

2A(3)

Crem 4/180

43/166

Crem 31/481

Crem 9/278

Unass 508

Unass 279

Crem 22/430

118/376

69/235

Crem 2/55

Unass 252

Unass 529

Crem 14/302

Crem 18/359

10/20

Crem 29/470

Unass 161

Unass 162

Crem 25/448

Crem 9/278

Thin sectioning shows inclusions of quartz-sandstone and metaquartzite, in all probability deriving from the same rock, with grains of quartz, and the odd piece of flint-chert, felspar and limestone. There is some variation of texture within this large group, Crem 13/301, 2A(3) and 43/166 for example appearing quite coarse, while Crem 4/180 and 118/376 are fairly fine in texture.

Comments

The cemetery at Great Chesterford is situated on Middle Chalk, closeby to Chalky Boulder Clay deposits and Valley Gravels (Geological Survey 1" Map of England Sheet no. 205). At first sight, fabric groups 1 and 2, containing inclusions of granite and ooliths respectively, would appear to represent imported pottery brought to site from some distance away. In respect of fabric 1, the nearest appropriate igneous formations to Great Chesterford lie in the Charnwood Forest area (including the Mountsorrel grano-diorite) to the south-west of Leicester and the post-Tremadoc 'diorites' around Nuneaton. While the ooliths in fabric 2 suggest the Jurassic ridge, situated some distance to the east of Great Chesterford. However, both far-travelled granite erratics and ooliths have previously been noted in the local Chalky Boulder Clay deposits and Valley Gravels (White and Edmunds, 1932). It is possible, therefore, that these particular inclusions in fabric groups 1 and 2 may merely indicate the use of nearby drift deposits by the Saxon potters in obtaining raw materials for the production of local pottery.

It is interesting to note though, that similar granitic inclusions have also been found in early - middle Saxon pottery from a growing number of sites in the east of the country (Walker, 1978; Williams, 1979; plus some unpublished material). Perhaps slightly more than could satisfactorily be accounted for by accidental inclusion in the drift clays. Furthemore, if we also discount a single production centre for this granitic pottery (whether in the Charnwood Forest area or indeed the north German plain), and there seems to be no clear evidence of close similarity in vessel form or decoration to support this, we appear to be left with the possibility of the deliberate searching out of granite erratics in the drift for use as temper. The deliberate choice and preparation of particular materials for pottery is nothing new (Rye, 1976; Peacock, 1970; Williams, 1982), and is suggested here in only a tentative way until further work has been done on this material.

The flint/chert inclusions present in fabric group 3 are typical of pottery from sites situated on the Chalk and probably indicates local production in this case. The largest group of pottery, fabric 5, is characterized by inclusions of sandstone and metaquartzite, both of which are commonly found in the drift deposits which occupy large areas of the country around Great Chesterford and almost certainly point again to local production (White and Edmunds, 1932). The same may also be true of the sherds making up fabric 4, characterized by shelly limestone, which is found in the local drift deposits (ibid.).

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