Ancient Monuments Laboratory Report 78/91

A NOTE ON THE PETROLOGY OF SOME MEDIAEVAL POTTERY FROM EXCAVATIONS AT CARISBROOKE CASTLE, ISLE OF WIGHT.

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Summary

Twenty-one samples of Mediaeval pottery from recent excavations at Carisbrooke Castle were thin sectioned to see if they might have been made on the IOW. The majority of the fabric groups contained inclusions which might have been obtained locally; flint and quartz; flint, limestone and shell; glauconite; quartz. Two samples of pottery from the only known Mediaeval kiln on the IOW, at Knighton, were analysed and found to contain little else but quartz grains. It was difficult to match texturally any of the Carisbrooke pottery with that from Knighton. Two of the Carisbrooke sherds contained igneous derived inclusions, suggesting a non-IOW source.

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A NOTE ON THE PETROLOGY OF SOME MEDIAEVAL POTTERY FROM EXCAVATIONS AT CARISBROOKE CASTLE, ISLE OF WIGHT

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INTRODUCTION

Twenty-one small samples of Mediaeval pottery from excavations at Carisbrooke Castle were submitted for thin sectioning and study under the petrological microscope. The main object of the analysis was to characterize the various fabrics involved and see if it is possible that they could have been made locally on the island. To help in this aim, three sherds from the only late Mediaeval kiln known on the Isle of Wight, at Knighton, were also submitted for comparative purposes. The Isle of Wight is composed in the main of a central Chalk ridge with Tertiary lowlands to the north and Greensand lowlands to the south, with an additional Chalk area in the very south of the island [Geological Survey 1" Map of England Sheet nos. 330, 331, 344 and 345].

PETROLOGY

On the basis of the range and texture of the nonplastic inclusions present in the pottery samples, a
number of broad fabric divisions have tentatively been
made.

Flint and Quartz

- [1] Car. 78 V Unstatified Q416.
- [2] Car. 76 18 Q417.
- [3] Car. V 269 0412.
- [4] Car. 78 V 269 0400.
- [5] Car. 8 VII 1425 Q419.
- All six sherds contain irregular-shaped pieces of flint of variable size and frequency, ranging up to a maximum of 1.50mm across, though the majority of pieces are much smaller than this, especially in no. [3].
- No. [1] also contains frequent well-sorted subangular grains of quartz, generally under 0.30mm in size, with some flecks of mica, black iron oxide and a little argillaceous material.
- No. [2] also contains grains of quartz, though these are less frequent and a slightly larger size-range than is the case for no. [1], averaging 0.30mm 0.80mm across, together with some flecks of mica and black iron oxide.

No. [3] contains a groundmass of quartz grains generally under 0.10mm in size, with a scatter of slightly larger grains ranging up to about 0.40/.50mm across, together with some flecks of mica and black iron oxide.

Nos. [4] and [5] are particularly distinctive in thin section, having a very clean fine-textured clay matrix, in which, apart from flint, are a scatter of grains of quartz and quartzite ranging up to 1.20mm in size.

Flint, Limestone and Shell

- [6] Car. 78 V 509 5401.
- [7] Car. 80 VII 457 0402.
- [8] Car. 77 V 329 9403.

Apart from containing angular pieces of flint similar to those in nos. [1] - [5], also present in these three sherds are a few large, fairly well-rounded pieces of cryptocrystalline limestone and some discrete curved pieces of shell. It is possible to see some recrystallization of calcite in the shell, suggesting that it is fossiliferous.

Limestone and Shell

[9] Car. 78 V 269 5400.

[10] Car. 77 V 200 S402.

Limestone and shell are more frequent in these two sherds, while the flint noted in nos. [6] - [8] appears to be lacking. A little calcite is present in no. [9], while quartz grains are more common in no. [10].

Glauconite

[11] Car. 76 II 61 Q414.

A moderate groundmass of subangular quartz grains under 0.10mm in size, with a few larger grains, some flecks of mica, a little flint and a scatter of fairly well-rounded reddish-brown and opaque grains of glauconite. The glauconite pellets are disaggregated and uniformly dispursed throughout the clay matrix, suggesting that this was a natural component of the clay.

? Igneous

[12] Car. V 403 Q410.

[13] Car. 77 263 0411 Rec. no. 8570 .

Frequent subangular quartz grains, average size 0.10-.50mm, with moderately large flakes of muscovite and biotite mica, discrete grains of plagioclase and potash felspar and a little argillaceous material, set in a clean, fairly fine-textured clay matrix.

Quartz

[14] Car. 77 V 159 0404.

A sparse groundmass of silt-sized quartz grains, with a scatter of larger grains of quartz and some quartzite, average size 0.30-.60mm, together with a few shreds of mica and a little argillaceous material.

[15] Car. 77 V 351 0415.

A fairly clean clay matrix containing frequent subangular quartz grains, average size 0.20-0.50mm, some quartzite and one or two small pieces of flint.

[16] Car. 77 V 181 Q404.

Moderately frequent subangular grains of quartz, ranging in size up to 0.80mm, together with some shreds of mica and black iron oxide.

[17] Car. 79 VII 1019 0413 Rec. no. 6958.

Frequent well-sorted quartz grains generally under O.20mm in size, with flecks of mica and some black iron oxide.

[18] Car. V 327 0408.

[19] Car. V 77 158 Q406.

Moderately frequent subangular quartz grains, average size 0.10-20mm, with flecks of mica and plentiful black iron oxide.

[20] Car. V 158 0407.

A groundmass of quartz grains under 0.10mm in size, with a scatter of larger grains ranging up to 0.80mm across, together with moderately frequent flecks of mica and some small dark red or opaque grains that are probably a form of iron oxide.

[21] Car. 78 V 407 Q401.

Frequent large subangular quartz grains, some over 1mm in size, together with some quartzite and a few shreds of mica.

Pottery samples from the late Mediaeval kiln at Knighton

[22]

[23]

Both samples contain a moderately frequent groundmass of silt-sized quartz grains, with larger subangular grains ranging up to about 0.60mm across scattered throughout. Also present are some flecks of mica, some black iron oxide and a little argillaceous material.

[24]

Slightly finer-textured than [22] and [23]. Two small pieces of cryptocrystalline limestone were also noted.

<u>COMMENTS</u>

Apart from samples [12] and [13], the remainder of the material from Carisbrooke Castle contains a fairly common range of non-plastic inclusions in the fabric, and a local origin for this pottery would certainly be in keeping with the different clay resources of the island. Carisbrooke Castle lies on the central Chalk ridge of the island, and it is perhaps to be expected that pottery made fairly locally to the site would be likely to include pieces of flint, limestone or shell in the fabric, as is the case with roughly half of the sherds examined (nos. [1] - [10]).

Glauconite can be found in some of the Greensand

deposits on the island, which for sample [11] may again point to local island origin.

The remaining sherds contain little else but quartz (nos. [14] - [21]), which gives little indication by itself of specific origins. Moreover, it is difficult to closely parallel any of the Carisbrooke Castle sherds texturally with the predominantly quartz-tempered kiln wasters from Knighton, which is situated on the Lower Greensand. This is not to say, of course, that the quartz fabrics from Carisbrooke Castle could not have originated from somewhere else on the island, though given the obiquity of quartz-tempered pottery in the Mediaeval period, it is difficult to say whether this is likely or if it is more probable that some were imported from the mainland.

The range and texture of inclusions noted in samples [12] and [13] suggest an origin derived from igneous rocks, possibly granite. This would rule out a local Isle of Wight origin, with perhaps a source as far away as Devon and Cornwall, or alternatively on the other side of the Channel in Brittany, Normandy or the Channel Islands.