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A NOTE ON THE PETROLOGY OF SOME LATE IRON AGE SHERDS FROM GAMSTON, NOTTINGHAMSHIRE

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Summary

Seven sherds of late Iron Age pottery were thin sectioned. Three of them contained fossiliferous shell or voids where shell had once been. A source in the Lower Jurassic of Lincolnshire is perhaps likely. One contained sandy limestone and another grog and shell, possibly from the same general area as mentioned above. The last two sherds were the most distinctive, for they both contained inclusions of a granite or grano-diorite nature. These igneous inclusions do not fit in with the geology of the Gamston region, and they must be regarded as imports to the site. Interestingly enough, this fabric resembles certain granitic tempered Anglo-Saxon pottery of the west Midlands, thought possibly to derive from the Charnwood Forest area to the north-west of Leicester.

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A NOTE ON THE PETROLOGY OF SOME LATE IRON AGE SHERDS FROM GAMSTON, NOTTINGHAMSHIRE

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[HBMC Ceramic Petrology Project]

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Introduction

Seven sherds of late Iron Age pottery from the 1988/1989 excavations at Gamston in the Trent Valley, just south of Nottingham, were submitted for a detailed fabric examination in thin section under the petrological microscope. The purpose of the analysis was to confirm the validity of a provisional fabric identification in the hand-specimen by the excavator. All of the sherds were initially studied macroscopically with the aid of a binocular microscope [x 20]. Munsell colour charts are referred to together with free descriptive terms. The site at Gamston lies on River Gravel next to Keuper Marl [Geological Survey 1" Map of England Sheet no. 126].

Petrology and Fabric

On the basis of the range of non-plastic inclusions present in the seven sherds, four broad fabric divisions are tentatively suggested here.

Fabric 1: Shell

[1]. *GAM 0024/12 Spit 1 (0-50mm) 45 ENC Fabric S1*

[2]. *GAM 0070/1 Spit 1 (0-50mm) 46 EE1 Fabric S1*

[3]. *GAM 0024 69 CDK Fabric 1*

Soft, vesicular fabric, somewhat "corky" to the touch, mostly shades of dark grey [10YR 4/1 - 3/1] in colour. Some white shell can be seen in fresh fracture, while the many voids which are scattered throughout the fabric indicate that at one time shell was present here also, but has since been burnt or dissolved away. In thin section these sherds can be seen to contain sparse fragments of fossiliferous shell and abundant plate-like voids of varying size which once contained shell. Also present are small flecks of mica, some quartz grains and iron oxide, set in a fairly fine-grained matrix. Sherd no. [2] is somewhat sandier than the other two samples.

Due to the comparatively poor state of preservation of the surviving shell when viewed under the microscope, following consolidation treatment of these friable sherds, it is difficult to identify specific shell forms

and tie them down to a particular formation. However, a source in the Lower Jurassic of Lincolnshire would appear to be a distinct possibility for this material.

Fabric 2: Sandy Limestone

[4]. *GAM 0070/1 48 CSD Fabric S1*

Soft, somewhat sandy vesicular fabric, with sandy limestone inclusions visible in fresh fracture, darkish grey [10YR 4/1 - 3/1] in colour. Thin sectioning shows that appart from fossil shell and shell-voids, there are also inclusions of sandy limestone present, a feature not noted in sherds [1] - [3].

This might suggest a different source to the latter sherds, though quite possibly in the same general area.

Fabric 3: Grog and Shell

[5]. *GAM 0021a Spit 2 (50-100mm) 47 DBF Fabric S1*

Soft, vesicular fabric, with small plates of shell visible in fresh fracture together with some argillaceous material, dark grey [5YR 4/1 - 3/1] in colour. Under the petrological microscope this sherd bears a resemblance to nos. [1] - [3], in that shell-voids are scattered throughout the fabric. However, also prominent are

frequent angular pieces of grog [i.e. crushed-up pottery deliberately introduced to the clay as a tempering agent]. Some of these pieces of grog also appear to contain small shell voids. The writer is not sufficiently familiar with the Iron Age pottery of the Gamston region, and surrounding area, to know to what extent, if at all, grog-tempering was employed in pottery making at this time, or whether in fact this sherd might possibly be of an earlier date.

Fabric 4: Igneous

[6]. *GAM 0044 44 Fabric Q1A*

[7]. *GAM 0036/5 Spit 2 (50-100mm) 68 DYY Fabric Q1A*

Hard, well-fired roughish fabric, with visible fragments of rock and discrete grains of quartz, felspar and some mica, dark grey [7.5YR N3/ - N4/] in colour. Thin sectioning shows that scattered throughout the fabric are large discrete grains of potash and plagioclase felspar, together with small fragments of a granite or grano-diorite rock. Also present are grains of quartz, some of them polycrystalline, and flakes of biotite mica.

These sherds are obviously not local products. In fact, the petrology is reminiscent of a group of early - middle Saxon pottery vessels from a number of sites situated in the midlands and eastern counties, which have

been found to contain similar granitic inclusions [Walker, 1978; Williams, 1979; together with much unpublished material seen by the writer]. The actual source for this granitic-tempered pottery has yet to be definately tied down, although it is increasingly looking as if the origin lies in the Charnwood Forest area to the south-west of Leicester [including the Mount Sorrel grano-diorite].

To the best of the writer's knowledge, all previous examples of this distinctively tempered pottery have been Anglo-Saxon in date. If the two sherds from Gameston are indeed from the late Iron Age period, it would make them the earliest known examples of this type of granitic tempered pottery by some 6/7 hundred years. Bearing this in mind, it would be worthwhile checking to make sure that an Iron Age date is in fact secure for these sherds.

Bibliography

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