

# PETROLOGY OF SOME PREHISTORIC POTTERY FROM MAM TOR

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## INTRODUCTION

The excavations conducted successively by Hugh Thompson and David Coombs inside the hillfort on Mam Tor in 1965-9 produced an assemblage of prehistoric pottery which is the most notable of its type from the Peak District. Its descriptive publication (Coombs and Thompson 1979, 30-42) coincided with the recognition by John Barrett (1980) of a distinctive suite of pottery-types relating to the later part of the Bronze Age in southern Britain, and his assessment of the pottery from Mam Tor (Barrett 1979) has attracted as much attention to the site subsequently as many of the other points of interest to arise out of those excavations (notable secondary comments upon this pottery are cited below). From the range of forms and techniques of manufacture displayed by the Mam Tor pottery, Barrett concluded that it should be ascribed to a period between 1000 and 800 BC, and this dating has held sway since then. It stands in stark contrast to the late pre-Roman Iron Age possibility entertained by the first of the 1960s excavators (Jones and Thompson 1965, 124-5), though it differs less profoundly from the 'first half of the first millennium BC' eventually ventured by the later excavator (Coombs 1967; 1976, 149-51), still less from the attributions already postulated by others (especially 'Late Bronze Age' in Challis and Harding 1975, i, 32-9; but also 'around the end of the 2nd millennium bc' in Hawke-Smith 1979, 118; and '7th or 6th century BC' in Elsdon 1979, 168). However, it should not be forgotten that a note of caution has been sounded by some, intimating yet earlier analogues (Burgess 1974, 219-21; less explicitly, Savory 1976, 243). Neither should it be ignored that, as Barrett acknowledged (1979, 46), a proportion of the shouldered jars among this predominantly 'plain-ware' assemblage bears finger-impressed decoration (Coombs and Thompson 1979, figs 18:1, 19:1/9, 27:4); for this could be taken to witness a continuation (or resumption?) of activity on Mam Tor into the 8th century BC or later (Barrett 1979, 47; 1980), or, as some might put it, into the earliest part of the Iron Age (Cunliffe 1991, 61-9; Morris 1994, 374-5). Similarly, it has been observed (Challis and Harding 1975, i, 37; Royle and Woodward 1993, 71) that a relatively sharply-shouldered and thin-walled 'situlate vessel' (Coombs and Thompson 1979, fig. 19:4) could also belong in the 8th century or later, particularly if the supposed derivation of such pots from bronze buckets is genuine (cf. Cunliffe 1991, 61-3). These caveats aside, it is arguable that the received view of the pottery has done more than anything else to establish the credentials of Mam Tor to its recurrent role in the flourishing, national debate about hilltop-usage in the Late Bronze Age (for example, to mention only a selection of general works, even though some make dubious use of some aspects of the Mam Tor evidence: Harding 1974, 76; Ashbee 1978, 42, 189; Cunliffe 1978, 25; Megaw 1979, 288; Champion 1979, 364-5; Burgess 1980, 148; Darvill 1987, 128; Dyer 1990, 108; Owen 1992, 66). It is as a small contribution to this debate that some minor additions to the collection of pottery from Mam Tor, resulting from recent fieldwork, and some

new information about the 1960s assemblage, resulting from petrological examination, are presented and discussed here.

#### FIELDWORK IN 1989 AND 1993

The 1960s pottery from Mam Tor is now housed in Sheffield City Museum, where, during a visit for other reasons in December 1993, a typical body-sherd of that hand-made pottery was shown by GG to AV, who noted that it contains fragments of a dark igneous rock, which he identified tentatively as being of volcanic origin. The sherd in question had been retrieved from Mam Tor in 1989, when GG and colleagues, working for the Trent & Peak Archaeological Trust (T&PAT) on behalf of the landowners, the National Trust (NT), were recording erosion along the much-used footpath which follows the ridge-top within the hillfort. The sherd is consistently 13-15mm thick and measures up to 165x83mm in surface-area, with little curvature on its longest (vertical) axis, implying that it derives from the straight-sided part of a large jar. It is orange-brown on the exterior, grey-black in the core, and mottled grey/brown on the interior. Some of the rock-fragments break the uneven surfaces, especially the exterior, though the sherd is unweathered apart from a small portion which projected from the path and drew attention to it in the ground. It was found together with several, much smaller, fragments of comparable fabric, probably from the same pot. All were lying at or near SK127837/836370, 28m north-north-east of the Ordnance Survey triangulation-pillar which occupies the summit of the hill (Fig. 1).

In the summer of 1993, the archaeological excavation of a small trench around this find-spot revealed a post-hole together with thin superficial deposits of silt containing fragments of burnt stone, flecks of charred organic material, and four small body-sherds of hand-made pottery, none more than 45mm across the surviving surfaces. All these sherds are little weathered and broadly comparable to that recovered in 1989, though they are thinner (8-10mm), while some colour-variation in the brown-grey range suggests that they could represent more than one vessel. (This trench, numbered 02 and measuring 2.0x2.5m, is one of eight excavated in 1993 by T&PAT at points along the footpath, during its repair by NT; further information will be published in due course; and see below, p. 57.)

The pottery found in 1989 and 1993 appeared to GG to be generally similar to examples of coarse, heavily-gritted ware among the 1960s finds from Mam Tor on display in the Museum; and it was in the expectation that AV would provide a confirmatory opinion that the 1989 sherd was placed before him. Brief perusal by AV of a small selection of the 1960s sherds showed that they too included igneous rock-fragments. Consequently, it was decided that a more thorough re-examination of the pottery from the 1960s excavations could be useful, primarily in order to determine whether igneous temper is common to much of it, notwithstanding a petrological study of the same material by Gerrish, who claimed to have identified a 'remarkable variety of fabric types' tempered with 'various combinations of iron-ore, limestone, feldspar, quartz, flint and grog', but no igneous rock (1983). It was anticipated that thin-section analysis of a selection of sherds might demonstrate something of the range of sources from which the included rock-fragments, or clasts, could have come.

#### SELECTION OF SHERDS FOR ANALYSIS

The Mam Tor sherds for thin-sectioning were chosen in 1994 by criteria nominated by GG. First, it was clearly desirable that all should be determinate in form, and that each should relate as far as possible to the characteristically later-Bronze-Age ceramic 'tradition' identified by Barrett (1979). The latter, however, is not as simple to achieve as it may sound, because Barrett's

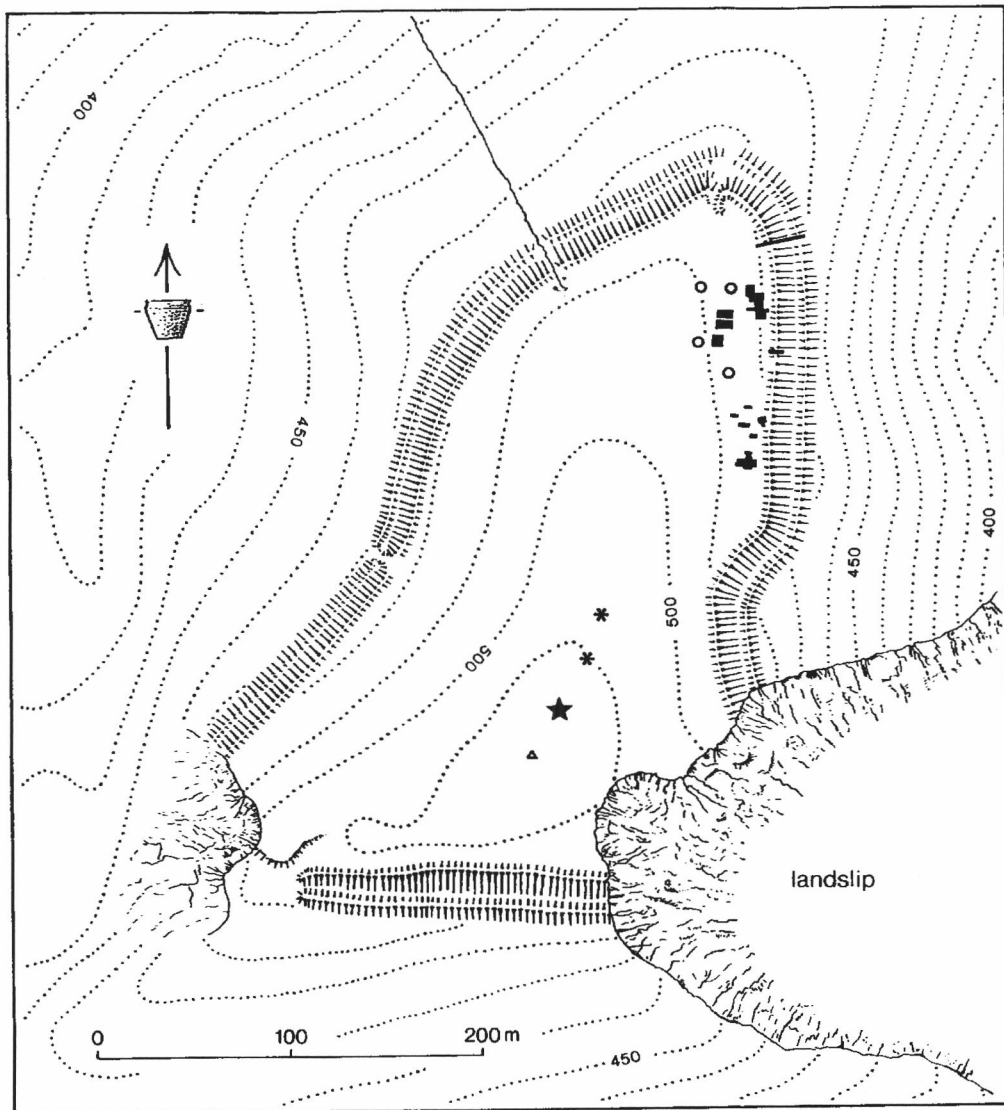


Fig. 1 Mam Tor: plan of the hillfort-earthworks (to ease comparison with the earlier report, these are after Coombs and Thompson 1979, fig. 2); with the 1965-9 excavations shown solid; other 1960s find-spots of prehistoric pottery marked by circles (in so far as these can be deduced from *ibid.*); the location of the 1989 sherd, and hence the 1993 trench 02, by a star; those of two other sherds found in 1993, and hence trenches 03 and 04, by asterisks; the Ordnance Survey triangulation-pillar by a triangle; and simplified contours at 10m vertical interval, numbered above Ordnance Datum. Scale 1:4000.

discussion of this pottery does not cite specific examples and is not always easy to inter-relate with the individual sherd-descriptions given in the preceding pages of the report (Coombs and Thompson 1979, 30-41). Secondly, it seemed best to pick pieces derived from one or other of

the platforms excavated most fully in 1965-9, namely Platforms 1-4 (*ibid.*, 17-24). For the sake of simplicity, it was also deemed preferable for each sherd to be among those illustrated in the excavation-report (*ibid.*, figs. 16-27). Thus, the first task was to isolate the illustrated sherds from among the collections in Sheffield City Museum; the lack of correlative labelling of the sherds themselves made this a laborious piece of detective work, and, wherever possible, such labels have now been inserted in the bags in which the sherds are stored. These criteria produced a list of 32 sherds as being potentially suitable for the proposed analysis, and it was next necessary for these to be examined by AV with a view to selecting five examples (the number for which funding was available) on petrological grounds.

All of the illustrated sherds which could be re-located and which were not on display in the Museum at that time (*viz.*, 66 out of 81) were examined by AV at the Lincoln Ceramic Petrology Laboratory (LCPL) using a binocular microscope. Among these sherds, a fabric containing angular, basic-igneous clasts, like that already noted, was seen to predominate, and a large sherd was singled out as being typical. This sherd includes much of the profile of a shouldered 'bucket-shaped vessel' that has been 'finger smeared on the outside' (Coombs and Thompson 1979, 36, fig. 25:1; though the surface-treatment has been termed 'vertical brushings' in Challis and Harding 1975, ii, 1, fig. 1:3). Contrary to Gerrish's account (1983), and indeed to comments offered by the excavator (Coombs 1976, 149; while Challis and Harding are largely non-committal about the petrology of the 'grits' — 1975, ii, 1), little evidence could be seen of iron-ore, limestone, flint, grog or sandstone (which is repeatedly identified in the published catalogue, not least in the pot illustrated as fig. 25:1 — Coombs and Thompson 1979, 30-41).

Given that such other inclusions could be more common than it appeared superficially, the four other sherds for thin-sectioning were chosen to explore any hint that other rock-types had been used, in tandem with the igneous, to temper particular pots, as follows:

A sherd from the rim and shoulder of a 'large situlate vessel', also with 'finger smearing on the outside' (*ibid.*, 30, fig. 17:1); this appeared to have possible traces of limestone surviving in occasional vesicles.

A base-herd (*ibid.*, 30, fig. 18:4), which looked the most likely among those examined to have more substantial remains of limestone clasts, together with chert, but with no igneous material visible at the surfaces.

A sherd from a vessel with flaring neck below flattened rim, again with 'finger smearing on the outside' (*ibid.*, 33, fig. 21:2); this appeared to have reddish clasts of some sort, evidently identified as 'sandstone' by the excavator, and possibly some iron-ore.

A sherd 'decorated with a raised circle or semi-circle', from a 'large globular pot' with everted rim (*ibid.*, 33-6, fig. 23:4 — see below, p.56); this is representative of pottery that is smoother than much from Mam Tor, without clasts breaking the surfaces, perhaps due to a 'slip or slurry...oxidised in firing' ('deliberately reddened' according to Challis and Harding 1975, ii, 1, fig. 1:4; a 'red coating', perhaps 'iron-rich', say Royle and Woodward 1993, 77) and/or to a 'burnished' finish; the surfaces display vesicles, suggestive of former calcareous inclusions, perhaps weathered out in the acidic soil of this site (though regarded as 'probably straw' by Challis and Harding 1975, ii, 1, fig. 1:4).

The illustrations of these five sherds are reproduced in Fig. 2, where their numbering is derived from that of the appropriate figures in Coombs and Thompson 1979. For simplicity, it is by these three-digit numbers that they are identified below.

#### PETROLOGICAL THIN-SECTIONS

A sample was cut from each of the five sherds, as indicated in Fig. 2, and these were prepared for analysis using the LCPL standard procedures, which include staining by Dickson's method

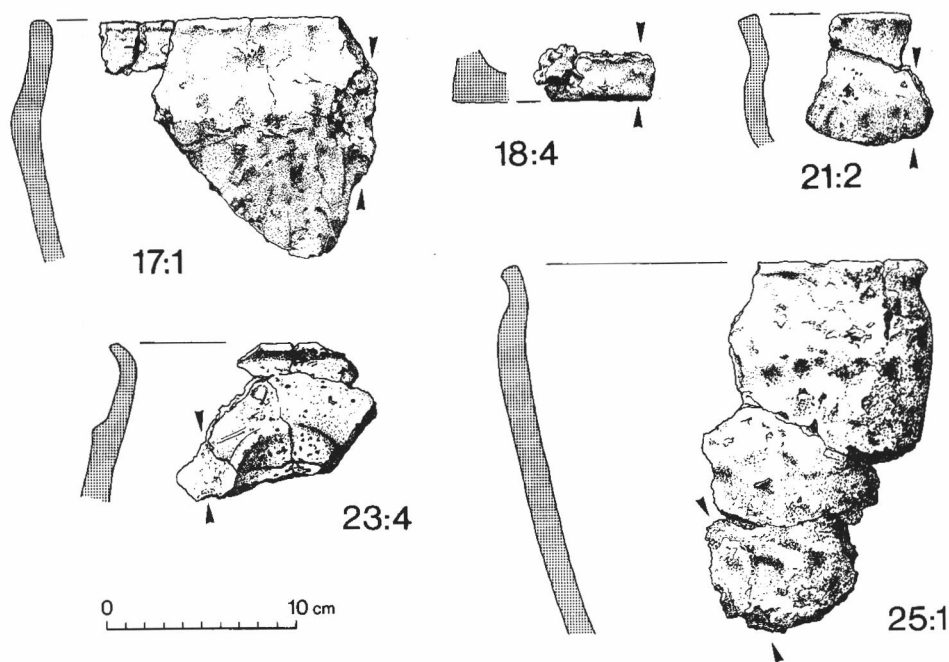


Fig. 2 Mam Tor: the sherds subjected to thin-section analysis, adapted from Coombs and Thompson 1979, figs 17, 18, 21, 23 and 25, and here suffixed 1, 4, 2, 4 and 1 respectively, as numbered in those figures; the positions of the samples taken for analysis are arrowed. Scale 1:4.

(1965). The resulting thin-sections have been added to the LCPL Reference Collection, in which they are identified by the codes listed in the second column of Table 1. Subsequently, for comparative purposes, samples of rock were obtained by GG from the two igneous outcrops nearest to Mam Tor (as mapped by the Geological Survey of Great Britain): namely, basaltic lava

Sherd	T-S	RQRF	RQMS	AQRF	AQMS	SEDRF	SEDMS	IGNRF	IGNMS	MATQ	MATM
17:1	L866	M	0.4	M	0.2	—	—	M	3.0	M	S
18:4	L867	A	0.4	S	0.2	S	1.0	S	2.0	M	S
21:2	L863	S	0.5	A	0.4	S	0.6	S	0.6	M	S
23:4	L864	—	—	—	—	S	0.4	A	1.0	—	—
25:1	L865	—	—	—	—	—	—	A	4.0	S	—

Table 1 Mam Tor: composition of five sherds of prehistoric pottery, as recorded in thin-section in 1994. In the column-headings, 'Sherd' means the figure number in Coombs and Thompson 1979, 'T-S' is the code allocated at LCPL, 'RQRF' is rounded quartz relative frequency, 'RQMS' is rounded quartz maximum size in mm, 'AQRF' is angular quartz relative frequency, 'AQMS' is angular quartz maximum size in mm, 'SEDRF' is sedimentary rock relative frequency, 'SEDMS' is sedimentary rock maximum size in mm, 'IGNRF' is basic-igneous rock relative frequency, 'IGNMS' is basic-igneous rock maximum size in mm, 'MATQ' is quartz grains under 0.1mm in the matrix, and 'MATM' is mica grains under 0.1mm in the matrix. Relative frequencies are expressed as 'S' for sparse, 'M' for medium, and 'A' for abundant.

from Cave Dale, at SK148822, some 2.4km from the summit of Mam Tor; and lapilli tuff from the Speedwell Vent, at SK144825, 1.9km from Mam Tor. These both lie within the area of the Carboniferous Limestone of the White Peak, the northern scarp of which reaches to the southern foot of Mam Tor. The rock-samples have also been sectioned, and have entered the LCPL Reference Collection as L1391-2 and L1393 respectively. The petrological identifications of the sections were undertaken by AV, as summarized in Table 1.

Each of the five sherd-samples was found to include angular fragments of basic-igneous rock, and most of the coarse aggregate present in the sections is of this type. Where the rock-texture is finest, the fractured edges are conchoidal, and even the coarser-textured pieces have an elongated cross-section. Although all these clasts show signs of weathering or chemical alteration, there is no evidence for the formation of a weathering-crust. They range from c.0.3mm to several millimetres across, with no suggestion of sorting. It is therefore probable that the rocks were freshly broken before incorporation into the pottery-fabric. If this was carried out by nature, then a talus or hillwash is the most likely source. If deliberately fractured by human agency, as may seem more likely, it may have been necessary to subject the rocks to rapid cooling by immersion in water after heating; though straightforward crushing would perhaps have been possible if the chosen pieces were already weathered.

The igneous clasts vary somewhat in texture, both within and between samples. Those in 17:1, for example, are extremely fine-grained or glassy in texture, and should probably be classed as an altered lava. With grains of 0.2-0.3mm across, those in 23:4 are much coarser, and would be classified as a basalt. Examination under the binocular microscope suggests that there is considerable regularity in the colour and texture of these clasts within some vessels, whereas others (including 23:4 and 25:1) exhibit sufficient variation to imply that the clasts did not come from a single block of rock (though we have no evidence to demonstrate the degree of variability across the exposures in the field). Given the small number of clasts in any one thin-section, it would be dangerous to assume that the five samples are entirely representative of the fabric of even the pots from which they are derived, but it can be noted that the samples of volcanic rock from Cave Dale and Speedwell Vent are comparable, especially to the coarser-textured material in the pottery, though without a precise match.

In anticipation of the discussion below, it should be stated that, while most of the igneous clasts have a dark appearance in the hand-specimen, none actually glistens; and it does not seem likely that the parent outcrop would have been particularly eye-catching. In one case (23:4), these clasts are actually light in colour, because of a high feldspar content.

Rounded grains of monocrystalline and polycrystalline quartz occur in three of the sections, but are common only in 17:1 and 18:4. Angular quartz grains are recorded in the same three sherds, being common in 17:1 and 21:2. Sparse fragments of angular and rounded chert and sandstone, in an iron-rich cement, may have been introduced together with the quartz-sand, at least in 18:4 and 21:2. One section (21:2) contains sparse, rounded fragments of what may be mudstone, but could be relict clay.

The clay-matrix is reasonably free from inclusions in all five cases, and is very clean in two (23:4 and 25:1). Sparse flecks of muscovite and quartz, up to 0.1mm across, are present in each. The clay is optically anisotropic in every case, and highly birefringent in one (25:1).

## DISCUSSION

This new information upon the composition of the lithic inclusions of the Mam Tor pottery contrasts with the identifications presented by others, most notably by Gerrish (1983), whose



results may now appear less 'impressive' than has hitherto seemed to some (Thomas 1991, 39). What it does not alter, however, is the observation that the rock-fragments in these vessels *could* all have been obtained locally, and this applies equally to the finer, decorated pot (23:4) as to the coarser ones. This conclusion fits the pattern of production that is steadily emerging for this period, with locally-manufactured pots common among those assemblages which have been analysed petrographically; it leaves Morris's list of 'Late Bronze Age pottery apparently made from local resources' unblemished (1994, 374, table 1). Although it is true that no exact match has been achieved in the thin-sections, volcanic rocks which *could* have been the source of the basic-igneous temper, apparently the dominant ingredient of the Mam Tor pots, do crop out at locations close enough to be overlooked by the hill.

It may be pertinent to note that early inquiry into the sources of prehistoric pottery in the Peak District led to similar conclusions by a different route. Unspecified 'experiments' upon the 'paste' of coarse pottery from Harborough Rocks, near the southern edge of the White Peak, led Ward (1890, 110-11) to deduce that it 'derived from the puzzling deposits of sand and sandy clay found in lake-like hollows of the Mountain limestone in the vicinity', a geological phenomenon which is better understood today than it was in the 19th century (i.e. Tertiary, Brassington-Formation 'pocket-deposits' occupying solution-holes in the earlier limestone in the south-western part of the White Peak — Walsh *et al.* 1972). It has been supposed that the pottery from Harborough Rocks is a little later than that from Mam Tor (Challis and Harding 1975, i, 46-54), though there seems to be no marked difference in form between some examples from these two sites: for instance, various shouldered sherds from Mam Tor, including those displaying 'finger-tip impressions' or 'finger-pinched decoration' placed 'on the belly' or 'on the shoulder' of the pot (Coombs and Thompson 1979, figs. 18:1, 19:1/9, 27:4; and see contrasting illustration of 19:1 in Challis and Harding 1975, ii, fig. 2:3), may be compared to those from Harborough Rocks, some also having 'finger-tipping' on rim and/or shoulder (Ward 1890, 113-14; Challis and Harding 1975, ii, fig. 4), or even to some of those from Castle Hill, Scarborough, sometimes regarded as an exemplar for such decorated wares and for 'Hallstatt influences' of the 7th to 5th centuries BC in central and northern England (*ibid.*, i, 46; ii, figs. 42 and 43; cf. Barrett 1979, 47, dating 'these decorated wares typified by Scarborough' from c.800 BC; and Cunliffe 1991, 67-8, placing Scarborough in the late-7th or early-6th century). Be that as it may, it could now be of considerable interest to apply 20th-century techniques to the examination of any clasts in the collection of material upon which Ward conducted tests over a century ago. In this context, however, it must be recognized that volcanic rocks are widely distributed, though highly localized, across the White Peak, where they are known locally as 'toadstones'; and a variety of such rocks crop out as near to Harborough Rocks as they do to Mam Tor. Consequently, it would be no surprise to find that toadstone-tempered pottery occurs at Harborough Rocks and various other sites in the area. Ultimately, it may be the composition of the paste, or matrix, that will prove to characterize the prehistoric pottery most closely in this region.

Without a more detailed knowledge of clay-sources in the Peak District, it is not yet possible to say more about the origin of the matrix, as opposed to the tempering, of the Mam Tor pottery. The quartz/chert/sandstone sand incorporated in several of the analysed sherds could either have been added deliberately or have occurred naturally in the clay used in manufacturing the pots; in any case, this is unlikely to prove sufficiently distinctive to be of great help in the present context (it is typical also of material found, for example, in the Trent Valley). At first sight, the absence of *rounded* fragments of igneous rock in all five sections might be taken to suggest that not all of the constituents were garnered locally, since it might be supposed that many deposits

of clay hereabouts would contain such material; but it bears repeating that igneous outcrops are very localized within the Peak District, and many locally-derived deposits will lack an igneous component.

The interest of these results from Mam Tor does not lie solely in the provenance of the pottery-components, but also in the method of preparing the pots. Late-Bronze-Age and Iron-Age vessels tempered with angular fragments of igneous rock have also been identified elsewhere, as, for example, on sites in eastern Yorkshire (Freestone and Middleton 1991; Wardle 1992, 131-2). Unlike Mam Tor, however, there are no outcrops of suitable igneous rock in close proximity to these Yorkshire sites, and igneous material is there available locally only as isolated erratics in glacial tills and gravels. This has led to speculation that particular erratics were consciously sought out by prehistoric potters, to be fragmented as tempering-material; and it may well be that a similar cultural practice is witnessed by the Mam Tor pottery, for it has already been emphasized that sources of igneous rock are localized in this area and, nowadays anyway, are not strikingly obvious in the field. Why these particular rock-types were selected for this purpose remains unclear, but it may at least be observed that the Mam Tor evidence offers no support for one of the possible reasons to which allusion has been made in respect of the Yorkshire pots — as remarked above, not all of the rocks chosen for inclusion in the Derbyshire vessels would seem likely to have attracted attention by their appearance alone.

The indications of variety in fabric observed superficially among the sherds chosen for analysis have not been confirmed by the less subjective evidence of the thin-sections. Most remarkable, perhaps, is the general similarity of composition, at least in terms of clasts, of the more finely-finished and superficially-vesicular sherd 23:4 to the other, evidently coarser, examples. However, it has been possible to note slight differences in both texture and colour between the clasts in this and in the other sectioned sherds, so it may not be merely the surface-treatment which distinguishes 23:4 and the rest of this smoother, decorated ware (Barrett's 'service vessels' — 1979, 47) from the remainder of the Mam Tor pottery. This is an aspect of these artefacts which might repay more attention. As one of the 1960s excavators acknowledged (Coombs 1976, 152), many of the problems of Mam Tor will remain unsolved without further excavation; in the context of the present discussion, it could well be considered that the partially excavated Platform 4 (Coombs and Thompson 1979, 22-4) presents a tempting candidate. Platform 4 is one of the artificially-terraced areas on the eastern flank of the ridge which has already proved to be prolific in pottery, including all of the recognised sherds of the seemingly singular and 'tantalisingly incomplete' decorated vessel, or vessels, represented in the present study by 23:4. This finer ware, embellished in relief with what have been variously termed 'roundels', 'rings', 'circles', 'semi-circles', 'arcs', and 'penannular' or 'horse-shoe' motifs, is said to have taken the form of a 'jar', variously called 'barrel-shaped', 'globular', or 'shouldered'; and it has been discussed at some length in the literature since it was first published a quarter-century ago (Coombs 1971, 101; Burgess 1974, 219-20; Challis and Harding 1975, i, 34-5; ii, 1; Coombs 1976, 149; Coombs and Thompson 1979, 33-6; Barrett 1979, 47; Gerrish 1983, 45-6; Royle and Woodward 1993, 77). The sherds of this type, including 23:4, seem to have been found largely in 'pit f' on Platform 4, and this pit was 'not fully excavated' in 1969 (Coombs and Thompson 1979, 24, fig. 10). Re-location and completion of the excavation of this feature, be it really 'pit' or 'post-hole', might yet yield the additional sherds required to eliminate speculation over the shape and decoration of this pottery. It might even produce better evidence of its date, for this too is open to debate (Burgess 1974, 219-20; Challis and Harding 1975, i, 34-5; Coombs 1976, 149).



Finally, to bring the story full circle, it can be reported that, when viewed under a binocular microscope, the fabric of the 1989 sherd from Mam Tor has been pronounced by AV to be indistinguishable from many of the determinate sherds excavated there in the 1960s. More specifically, the 1989 sherd appears comparable to the exemplar of the overtly igneous-tempered fabric used for thin-section analysis (25:1). Although it is accepted that a similar suite of materials could have been used in manufacturing pottery at other times, it does not seem unreasonable to regard that found in 1989 as being of similar type and date to those found on this site previously. The sizable and unabraded character of this sherd suggests not only that it lay in 1989 where it was deposited in prehistory but also that the pot had not long been broken before this fragment became buried at the find-spot (see Bradley and Fulford 1980 for a discussion of such issues, with references; and note that the weathering of the small part of our sherd that had not long protruded from the path demonstrates how this material would fare if it were exposed for long to the rigours of Mam Tor's punishing climate). It should be recalled, too, that this sherd did not lie alone, and that its companions were probably not all pieces of the same vessel. Furthermore, the deposits sampled by trench 02 in 1993, from which some of these sherds came (see above, p. 50), suggest that wider excavation hereabouts could uncover stratification of this period, just as did some of the excavations on platforms in the north-east sector of the hilltop.

The significance of all this is encapsulated by Fig. 1, with the star marking the weather-beaten spot where these recent finds were made. For this spot sits high on the ridge at 514m OD, fully 160-250m south-west from, and 24-35m higher than, all previous finds of prehistoric pottery from within the hillfort. (It should be further explained at this point that Fig. 1 includes two other small sherds found in 1993 in other small trenches, 03 and 04, positioned at SK127976/836630 and 510m OD and at 128047/836875 and 507m, respectively 58m and 83m north-north-east along the footpath from the triangulation-pillar; the 04 sherd is of similar fabric to the 1989 sherd, but abraded over the exterior; the 03 sherd is of a thinner (7-9mm), denser, greyer fabric without obvious clasts, and unabraded.) Accordingly, the sherd found in 1989, together with the other information recorded since then, can be regarded as reasonable evidence that the prehistoric use of Mam Tor was not confined to the north-eastern end of the hilltop, which is arguably the most sheltered part. Rather, this occupation is now surely shown to have extended almost to the 517m summit, and may well have spread beyond, reinforcing the impression that activity contemporary with the pottery was of an extraordinary scale on this lofty and dominating place. This is much as Barnatt (1995, 15) has lately mused, and was the very point that GG was seeking to establish when he first showed the 1989 sherd to AV. It tells us nothing of what was going on at Mam Tor then, but it does take us one small step nearer to inferring that much of the hilltop, perhaps the whole of it, was in use before the Iron Age was in full swing — that is to say, the larger part of the area circumscribed by the earthworks of the great hillfort. There has been much speculation in the archaeological literature about the date of origin of those earthworks, but that is a different story altogether.

The sherds found in 1989 and 1993 have been added to the collections in the Sheffield City Museum, by kind permission of the National Trust.

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