

THE PREHISTORIC POTTERY FROM FISSURE CAVE AND NEW CAVE, HARTLE DALE, NEAR BRADWELL, DERBYSHIRE

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SUMMARY

The excavation of Fissure Cave and New Cave, Hartle Dale, was undertaken by Mr A. L. Pill of Bamford between 1961 and 1963. Fissure Cave had been inhabited in the earlier Neolithic, used for both burials and occupation in the later Neolithic and as a temporary shelter in the early Bronze Age. It produced an important assemblage of later neolithic Peterborough pottery, a fragment of an early bronze age beaker, sherds of two collared urns, a polished stone axe, and a small quantity of flint tools and flint debitage. Like many northern caves it had been inhabited in the Roman period. New Cave, which was first explored by Rooke Pennington in 1872, yielded many fragments of an early bronze age collared urn.

INTRODUCTION

Hartle Dale is located 1.3 kilometres south-west of the village of Bradwell and 3.0 kilometres south-east of Castleton (Fig. 1). Fissure Cave and New Cave are located on the south-west side of the dale (SK 165803), Fissure Cave at 296 metres O.D. and New Cave, which is situated immediately above it, at 304 metres. At this point the valley sides are, in contrast to the cover of coarse grass higher up the dale, heavily wooded and overgrown. Pill believes this change in surface vegetation to be partly due to the mixed terrain, but more probably to the fact that the area lies within the ancient hunting reserve of Peak Forest, where game was preserved by royal decree for some four hundred years prior to the seventeenth century, and where the felling of standing timber for building and fuel would not have been entertained (Pill, 1963a: 5). The higher moors to the west are dotted with glacial erratics, whilst head, a solifluxion drift, is conspicuous on the slopes; sphagnum peat is to be found above the 305 metre contour (Eden *et al.*, 1957: 152).

THE EXCAVATIONS

Fissure Cave

The cave was excavated over three seasons, between 1961 and 1963 (Pill, 1963a: 5-9; 1963b: 25-9). At the time of discovery the fissure, a solution widened joint (Ford *et al.*, 1977: 355), was 15.24 metres long, 0.46 metre wide and 1.22 metres high at the entrance, and could be penetrated with ease for 4.27 metres. The first season was devoted to excavating a small area outside the fissure, the second and third to taking this area down to bedrock (which was reached at 3.05 metres) and examining the fill of the fissure (Pill, 1963a: 5-6; *pers. comm.*). The stratigraphy, details of which were kindly supplied by Mr Pill, may be summarised as follows:

- Layer 1 In the entrance and extending to the centre of the fissure: black humus and angular limestone blocks with numerous voids, 1.07 metres thick.

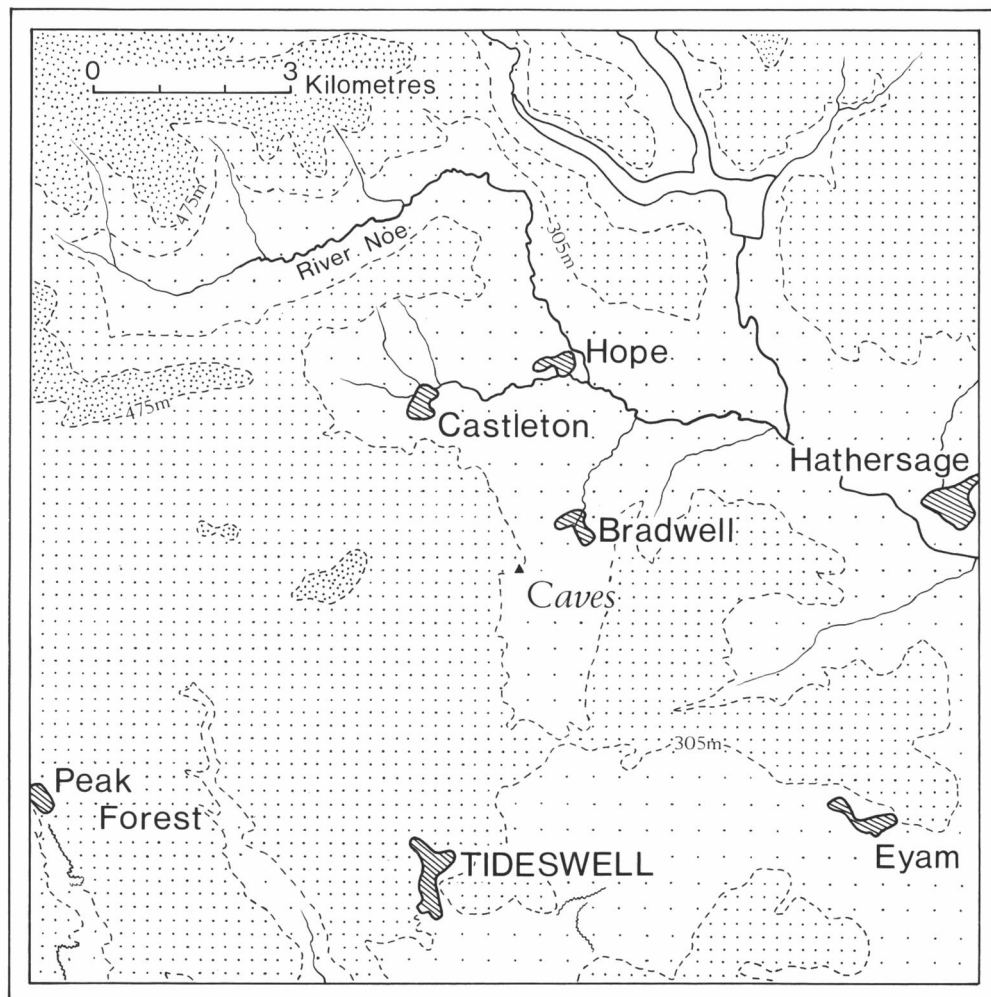


Fig. 1 Fissure Cave and New Cave: location (taken from the Ordnance Survey Map of 1922).

Finds: Victorian coin; Boer War period volunteer's button; pipe bowls; eighteenth- and nineteenth-century pottery.

Layer 2 In the entrance and below Layer 1: brown humus and angular limestone blocks, 0.84 metre thick.

Finds: three bronze coins (one of Valentinian I, AD 364-375, from the mint of Siscia; one of Valens, AD 364-378; and one of the house of Valentinian, with indecipherable emperor and mint marks; fragments of coarse ware representing at least one jar of the third century AD; sherds of colour-coated ware, probably fourth century; a lead object, possibly a weight; pieces of worked bone; and various imported stones and fragments of flint.

Layer 3 Forming the floor of the fissure at the centre and dipping below Layer 2 towards the entrance: yellow clay and limestone gravel with some re-deposited calcium

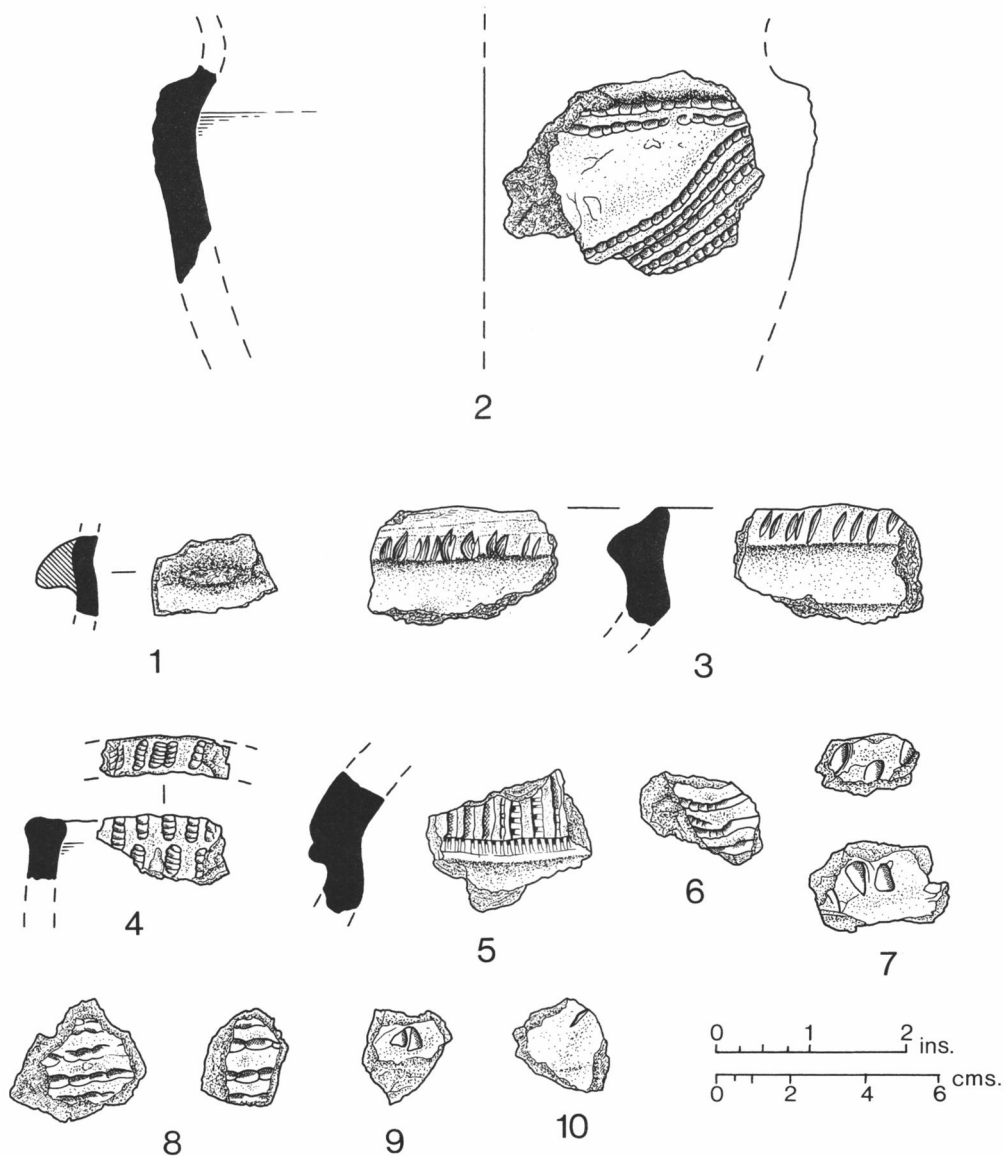


Fig. 2 Fissure Cave and New Cave: Fissure Cave, neolithic and early bronze age pottery. (1: Towthorpe ware; 4: Ebbsfleet style; 2, 3, 6 and 8: Mortlake style; 5: Fengate style; 7, 9 and 10: other later neolithic styles.)

carbonate, 0.23 metre thick. Human bones were found outside the cave and at the centre of the fissure whilst from the rear came the skull of an adult.

Finds: from outside the cave came two fragments of earlier neolithic pottery; sherds of later neolithic Peterborough ware; six fragments from at least two early bronze age collared urns (Fig. 2: 1, 2, 4, 6-10; Fig. 3: 12, 13); a flint knife; two

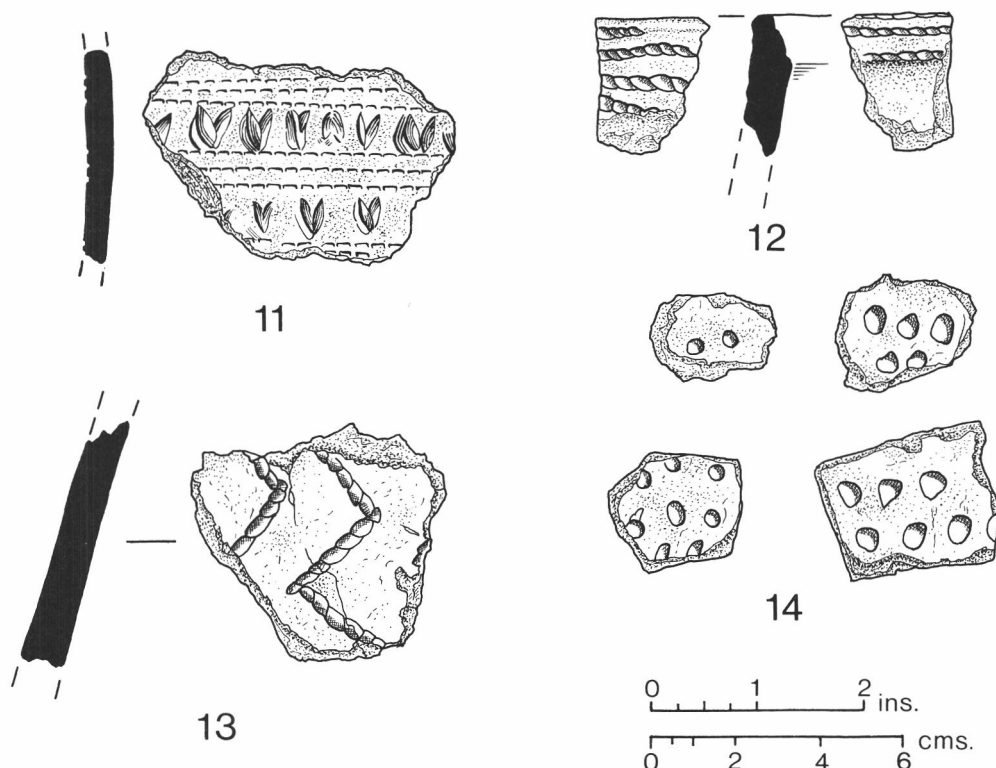


Fig. 3 Fissure Cave and New Cave: early bronze age pottery. (Fissure Cave — 11: beaker; 12 and 13: collared urns. New Cave — 14: collared urn.)

scrapers (one of disc type); and five other worked pieces (Pill, *pers. comm.*). Mixed with the human remains in the fissure were two fragments of Peterborough ware (Fig. 2: 3, 5), a large sherd from the shoulder of a beaker (Fig. 3: 11) and a flint scraper.

Layer 4 Below Layer 3: yellow clay, re-deposited calcium carbonate and frost shattered limestone blocks, 0.46 metre thick.

Finds: (?)none.

Layer 5 Below Layer 4: cream coloured clay, re-deposited calcium carbonate and pebbles, 0.61 metre thick.

Finds: (?)none.

New Cave

The cave was first examined in 1872 by Rooke Pennington, who found two fragments of an early bronze age collared urn in a deposit of blackish mould (Pennington, 1875: 240-1; 1877: 57; Beswick, 1969: 37, fig. 8:69; Hart, 1981: 67). It was re-excavated by Pill between 1961 and 1963. It was an horizontal fissure, 18.29 metres long, 2.44 metres wide and 1.52 metres high at the mouth, showing some enlargement of the first 4.57 metres due to slab breakdown; the roof was almost flat and the walls nearly vertical (Pill, 1963a: 6). The stratigraphy was simple and may be summarised as follows:

- Layer 1 In the entrance and passage: black humus with angular limestone blocks (thickness not recorded).
Finds: fourteen sherds from a collared urn (Fig. 3:14); fragments of worked flint and animal bones, mixed with modern rubbish, in the first 3.97 metres of the passage.
- Layer 2 Below Layer 1: yellow clay and pebbles filling cavities in the limestone bedrock (thickness not recorded).
Finds: fossilized animal bones.

THE POTTERY

Fissure Cave

The prehistoric pottery found in, and immediately in front of, the fissure consists of 117 fragments (the largest measuring 85 x 50 mm) and crumbs (pieces less than 15 mm square). Apart from the smaller pieces, which lack one or both faces, the general state of preservation is good. A study of the fabrics, forms and surface decoration has enabled four groups to be isolated: i) earlier neolithic Towthorpe ware; ii) later neolithic Peterborough ware; iii) other later neolithic wares; and iv) early bronze age wares.

Towthorpe ware

Two fragments of pottery, one a plain wall sherd, the other bearing an applied, imperforate, horizontal peaked lug (Fig. 2:1), appear to be from a small closed bowl with a weak shoulder. It is of a type which, along with S-profiled and other bowls, formed Piggott's 'Heslerton ware', a ceramic style once thought to represent a degeneration from the Grimston ware carinated and related bowls of east Yorkshire (Piggott, 1954: 114-7; Newbigin, 1937: 189-99). However, Manby, reviewing the ceramic evidence obtained from both earthen long and round barrows in northern England, has suggested that the term Heslerton ware be abandoned and replaced by 'expanded Grimston style', that would embrace the fine carinated, S-profiled and simple bowls. The remaining plain, heavy, simple rimmed globular and hemispherical bowls, some with lugs, and cups, would now, according to Manby, form a new series called 'Towthorpe ware', a ceramic style well represented by finds from Yorkshire and, possibly, by pottery from Scotland and Wales (Manby, 1964: 200-1; 1970: 17; McInnes, 1963-4: 42-7; Smith, 1974: 111).

Newbigin, in her detailed study of the neolithic pottery of Yorkshire, cited vessels with lugs from three barrows (Greenwell's Rudston 61 and 66, and Mortimer's Wharram Percy 46: Newbigin, 1937: 211, 212, 214), whilst the style has also been recorded from Mortimer's Towthorpe barrow 18 (the type site: Mortimer, 1905: 9-11, figs 14-15; Newbigin, 1937: 212, fig. 2:7, 8), Aldro 94 and Duggleby Howe (Mortimer, 1905: 82, 23-42, fig. 65; Newbigin, 1937: 206; Kinnes *et al.*, 1983: 96-7), and Greenwell's Cowlam 57 and Sherburn 7 (Greenwell, 1877: 214-21, 146-7; Newbigin, 1937: 205, fig. 2:2, 207, fig. 3:2, 5). To this list we might add the two small bowls represented by lugs and body sherds from a hollow on Beacon Hill, Flamborough (Manby, 1964: 198, fig. 4:1, 2), the open bowls and globular vessels, all with incised lines on the rims, from Carnaby Top site 14 (Manby, 1975: 31-3, fig. 5:1-3), and the plain bowls from Grindale barrow 1 (Manby, 1980: 31, fig. 4:1), together with the pre-barrow occupation site at Rudston barrow 62 (Manby, 1972: 12-15, 19-21, fig. 8:1, 2). Scraps of Towthorpe ware have also been recorded from a number of other, predominantly barrow sites on the Wolds, and these have been the subject of a series of recent discussions by Manby (1964: 200-1; 1970: 17-18; 1972: 19-21). Its dating currently rests on two radiocarbon determinations, 2980 ± 65 bc (BM-1170) and 2850 ± 70 bc (BM-1167), for pottery from Callis Wold barrow 275 (Kinnes *et al.*, 1983: 97) and,

perhaps, on its repeated association on the Wolds with especially late third- and early second-millennia bc ceramics (Manby, 1974: 100).

Finally, it is worth recording that one other cave in the north has produced a vessel with lugs. It was found by John Ward in Rains Cave, Derbyshire and, though lost, we know from the published description that it had a contracted neck, a number of imperforate peaked lugs on the shoulder and incised lattice on the body (Ward, 1889: 39). In both form and surface decoration this bowl is quite unlike any Towthorpe vessel found in northern England and parallels must therefore be sought elsewhere. Comparisons with southern and south-east English styles has shown that the Rains Cave bowl finds its closest match in the Mildenhall style; and a good parallel is perhaps provided by a sherd from the body of a bowl ornamented with incised lattice from the type site at Hurst Fen, Suffolk (Longworth, 1960: 238-9, pl. XXV). Dating for the style is available only for plain bowl pottery from Eaton Heath, Norfolk (Wainwright, 1973: 9), though it should be noted that the radiocarbon date of 3145 ± 49 bc (BM-770) was obtained from bulked samples and so may not be accurate.

Peterborough ware

Sherds of Peterborough ware in the Ebbsfleet, Mortlake and Fengate styles were found both inside and outside the fissure.

i) Ebbsfleet style

Ebbsfleet ware, which is typologically the earliest, is represented by a fragment of rim, decorated inside and on the top with cord maggot impressions (Fig. 2:4), from a bowl of probably closed or globular form. A close parallel is perhaps provided by a thickened, flat-topped rim, in a comparable fabric and similarly decorated, from Armstrong's excavations at the Whaley 2 rock shelter, Derbyshire (Radley, 1967: 7-9, fig. 5:5), whilst an everted rim, also decorated with cord maggots, occurred as a surface find on Calton Hill, Derbyshire (Radley and Plant, 1967: 149-52, fig. 1:1). Pottery in the Ebbsfleet style has been found on a further five sites in the Peak District. Fragments of small jars, one with incised vertical lines in the neck, from Astonhill (May, 1971: 34, fig. 2:2) and another decorated both inside and out and on the rim with cord maggot impressions, from Upper House Farm site 1 (Hart, 1981: 46; 1985: 56-61, 67, fig. 3.9:5), have many distant parallels, especially with vessels from the type site at Ebbsfleet and Windmill Hill (Burchell and Piggott, 1939: 417-20, fig. 5, fig. 7:5; Smith, 1965: 73-4, fig. 31:P237, P240). Two vessels, represented by individual rim sherds, both in a dark fabric, and with oblique fingernail impressions on the top, were found by Kelly during his excavations in Reynard's Cave (Kelly, 1960: 120-1, pl. XIII:1, 2), whilst a shouldered bowl (now lost) bearing similar decoration, was discovered by Ward in Rains Cave (Ward, 1889: 39, pl. II:3). The last site, Wigber Low, yielded sherds of several shouldered bowls, some ornamented with incised lattice, others with comb impressions (Manby, 1983: 53-7, fig. 29). South of the Peak, sherds of an Ebbsfleet bowl were found during excavations in Castle Street, Melbourne (Courtney, 1976: 62). This vessel is of some considerable interest as it is ornamented on the outside, below the rim and in the neck, with twisted cord filled triangles and filled lozenges, motifs not seen in such combination on any other Ebbsfleet style vessel (Longworth, 1976a: 67, fig. 5).

Yorkshire still represents the northern boundary for pottery of the Ebbsfleet style, and a useful summary of finds from barrows and domestic sites in the eastern part of the county has been published by Manby (1971a: 19-20). The largest assemblage available for study comes from Green Howe, an early bronze age barrow sited on the narrow belt of magnesian limestone that forms the western edge of the Vale of York; here large numbers of sherds, representing numerous vessels, were found beneath, and in the body of, the mound (Green, 1971: 10, fig. 4). The

majority of sherds appear to be from shouldered bowls and necked jars, the former often decorated on the body, in the neck and on the rim with cord maggot impressions (Green, 1971: 10, fig. 4:8, 9, 13, 16-20). Closed bowls with heavy rims of Fissure Cave and Whaley 2 type are not represented.

In the north the chronological position of Ebbsfleet ware is demonstrated only at Beacon Hill, Flamborough, where it was stratigraphically earlier than all-over-cord and early style comb decorated beakers (Manby, 1964: 200-2; 1971a: 20). A similar situation obtained at the Windmill Hill causewayed enclosure where, in outer ditch V, sherds of a bowl of Ebbsfleet ware were sealed by other layers containing sherds of grooved ware, beaker and collared urn. A radiocarbon date of 2570 ± 150 bc (BM-74) is claimed for this vessel, though its validity is open to question as it was obtained from charcoal which had been collected from different sections of ditch (Smith, 1965: 11; 1974: 112).

ii) Mortlake style

Two small, decorated, round-bottomed shouldered Mortlake style bowls are represented by a large shoulder/body sherd and a fragment of rim (Fig. 2:2, 3). In fabric and profile Fig. 2:2 has unambiguous affinities with the bird bone ornamented bowl from Calling Low Dale, Derbyshire, cist B (Piggott, 1953: 229-30, fig. 2:2; Gilks, 1971: 37-9, fig. 1, pl. 1), with a much larger example from Sewell's Cave, North Yorkshire (incorrectly illustrated in Raistrick, 1936: 201, fig. 5:1a-c) and, from the south of England, with two vessels from the West Kennet chambered tomb (Piggott, 1962: 40, fig. 12:P16, P17). Of the rim form we know nothing, but it was probably not unlike that of Fig. 2:3.

A highly atypical feature of Fig. 2:2 is the decoration: horizontal lines at the junction of the neck and shoulder with (?) concentric semicircles below, all executed in thick twisted cord. Extensive use of thick, linear, twisted cord as surface decoration is not a common feature of southern Mortlake ware (Smith, *pers. comm.*) or, for that matter, of much of the pottery found in northern England. It is, however, the hallmark of a variety of Mortlake ware found in north Northumberland and southern Scotland. The great majority of vessels from these regions have a trunco-conic body, a weak shoulder, a shallow cavetto neck and a highly evolved, angular, internally bevelled rim; unlike the bowls from Fissure Cave, they are flat based. Two vessels of this type, from Ford, Northumberland, have impressed cord semi-circles on the rim and diagonal lines on the body (Longworth, 1969: 258-61, fig. 1:3, 4), whilst a second pair, from Meldon Bridge, Peebles, are decorated with circumferential lines in thick twisted cord (Burgess, 1976: 173, 176, fig. 9.8; 1980: 37-9). Others, like those from Brackmont Mill, Fife, carry impressed stick, bird-bone, comb, stroke and stab-and-drag ornament (Longworth *et al.*, 1966-7: 67-75, fig. 4:4, 5, 8, fig. 5:7, 9, 14-16). Vessels with trunco-conic bodies and flat or gently sagging bases are also known from a number of domestic sites in east Yorkshire and these show a marked preference for incised and fingernail decoration; collectively they form Manby's 'Rudston style' (Manby, 1975: 54-9, fig. 13:4-10, fig. 15:1, 3).

Only the minimum of comment is needed on vessel Fig. 2:3. The fabric and rim form are typical of shouldered bowls found in the south of England (Smith, 1965: 74, 78, fig. 33:P258), in Derbyshire (Ward, 1893: 170-2, pl. IX:1, 3) and Cheshire (Rowley, 1977: 22-7, fig. 15:BR, BQ, fig. 17:IY), in Lancashire (Penney, 1978: 5-8, fig. 1) and Lincolnshire (Riley, 1957: 40-4, 46, fig. 3:4) and east Yorkshire. This last region has produced an exceptionally large body of Mortlake bowl pottery, the bulk of it deriving from domestic contexts on the Wolds. Vessels akin to the Fissure Cave bowl have been recognised amongst the sherd material from Rudston Wold site 5, Carnaby Top site 19, North Carnaby Temple site 6 (Manby, 1975: 37, 41, 44, 45, fig. 10:7,

fig. 14:10, 11, fig. 15:2) and Craike Hill (Manby, 1958: 227, 229, fig. 4:3, 9).

Of the remaining fragments, three wall sherds, one bearing three (?) wavy lines in thick twisted cord (Fig. 2:6), the other two exhibiting regularly spaced twisted cord lines (Fig. 2:8), appear to be from one (just possibly Fig. 2:2) or more shouldered bowls. There are also twelve sherds in an identical fabric to Fig. 2:6 and sixty-two which, owing to their small size cannot be separated, in fabrics similar to sherds Fig. 2:2, 8.

Unfortunately there are no radiocarbon dates for Mortlake ware or for the regional styles from Brackmont Mill, Ford or east Yorkshire. However, some of the Mortlake pottery found on the Wolds can, from its repeated association with grooved ware, all-over-cord and/or early style comb decorated beakers, be dated to the late-third/early-second millennia bc. There are also five radiocarbon dates for the pottery from Meldon Bridge (Burgess, 1976: 173; 1980: 392), and these bracket the period 2336 ± 50 bc - 2132 ± 80 bc (SRR-646, SRR-645). Clearly there seems no reason why the almost identical vessels from Ford, which were tentatively dated by Longworth to the seventeenth century bc (Longworth, 1969: 260), Brackmont Mill or east Yorkshire should not also date from the centuries around 2000 bc. Closer dating, which is clearly desirable, might well be achieved through a programme of thermoluminescence dating.

iii) Fengate style

Fengate ware is the youngest of the three varieties of Peterborough ware and it is represented at Fissure Cave by a fragment (Fig. 2:5) which comes, in all probability, from the junction of the collar and body of a fairly common type of flat based bipartite bowl. Such bowls have long been known from sites in the south of England, like Fengate outside Peterborough (Leeds, 1922: 227-31, figs 8-10), the West Kennet chambered tomb (Piggott, 1962: 38-40, fig. 12:P12-14) and the Windmill causewayed enclosure and West Kennet avenue occupation site (Smith, 1965: 78, fig. 34, and 233, fig. 78:P353). By comparison only a small number of sites in northern England have produced pottery in the Fengate style. In Yorkshire some important discoveries have been made and include: i) the recognition and subsequent publication of a small group of sherds representing flat based vessels, some clearly with trunco-conic bodies and the majority with collars, from a possible open settlement at Driffield, east Yorkshire; ii) sherds of similar vessels from Mortimer's Acklam Wold barrow 211 (Manby, 1957: 169-78, figs 3, 5); and iii) a fragment from the collar of what is probably a vessel of Fissure Cave type, recently recognised amongst the late neolithic pottery found by the Rev. Jones during his excavations in the 1890s of Elbolton Cave, North Yorkshire (Gilks, 1973: 45, fig. 3:4). Much larger assemblages of Fengate style pottery are represented by recent discoveries on the Wolds, notably by finds from a hollow at Carnaby Top site 19 (Manby, 1975: 41, 44, 51-9, fig. 13:1-3) and Heselton site 1 (Manby, 1986: 73-5, figs 11, 12). The style is also known from Derbyshire where it has been recognised amongst the pottery from the Whaley 2 rock shelter (Radley, 1967: 9, fig. 5:7), Astonhill (May, 1971: 34, fig. 2:4) and the recent excavation of an open settlement at Mount Pleasant, Kenslow (Garton and Beswick, 1983: 19-21, 24, fig. 16:14). Outside the region, Fengate ware has been found in domestic contexts at Aldwinckle site 1 in Northamptonshire (Manby, 1976: 57, fig. 9:10) and at Thirlings in Northumberland (Miket, 1976: 119, fig. 7.10:57.6, fig. 7.11:57.9, fig. 7.12:60). To date the style has not been recognised in Cheshire or Lancashire.

The dating of the Fengate style presently rests on three radiocarbon determinations of which, as Garton and Beswick note in their report on the excavation of the open settlement at Kenslow (Garton and Beswick, 1983: 20), the earliest (2130 ± 130 bc: HAR-466) is for a pit (feature 466) containing Fengate style pottery at Thirlings (Miket, 1976: 119). The second (1640 ± 130 bc: BM-284) was also obtained from a pit, a feature which also produced fragments of beaker, at

Letchworth in Hertfordshire (Smith, 1974: 112), whilst the last (1540 ± 150 bc: BM-75), which is the latest date so far obtained, is from layer 2 in the outer ditch of the Windmill Hill causewayed enclosure, a context which also yielded sherds of grooved ware and early bronze age collared urn (Smith, 1965: 11). Overall these dates, and to some extent the ceramic associations, would seem to argue for a late-third to early-second millennia bc date for the Fengate style. However, it should be stressed that the radiocarbon dates provide no more than a rough chronology for Fengate ware, and certainly the date from Windmill Hill, where the pottery was associated with sherds of collared urn, should be treated with caution. Be this as it may, there seems little doubt that the style was at some point contemporary with developed Mortlake ware, grooved ware and the earliest beakers.

Other later neolithic styles

Four wall sherds, two decorated with fingernail rustication, the third with paired triangular jabs and the last with a diagonal fingernail impression (Fig. 2:7, 9, 10), appear to represent a maximum of three large vessels. All are probably related to the thick-walled, flat-based, triangular-jab decorated pots from Elbolton Cave (Gilks, 1973: 45, fig. 3:1) and Lesser Kelcoe Cave, North Yorkshire and with two vessels ornamented with roughly horizontal, as opposed to the usual scattered vertical, fingernail impressions, from Attermire Cave, North Yorkshire (unpublished: all in the Pigyard Museum, Settle). Of the form of the Fissure Cave vessel, all that can be said is that it probably had, on the weight of the evidence from Elbolton Cave and Attermire Cave, a bowl or barrel shaped body, a flat or gently sagging base and a thick, flat-topped rim. Confirmation is probably provided by a trunco-conic bodied vessel with fingernail and bird bone decoration from Carnaby Top site 19 (Manby, 1975: 54-5, fig. 13:12).

Today fingernail and finger tip decorated pottery is generally referred to in the literature as 'domestic beaker', and any assemblage in which sherds so ornamented attain undue prominence is automatically labelled a 'beaker domestic assemblage'. There is little doubt that some vessels, like three found in a pit at the Roman fort at Castleshaw, Greater Manchester (Longworth and Clarke, 1967: 13-17, fig. 23:2, 4, 5) or fragments carrying rusticated ornamentation from barrow 4 at Swarkeston, Derbyshire (ApSimon, 1960: 37, fig. 10:36-9), may legitimately be described as domestic beakers (see below under beaker). They generally occur, as at Castleshaw, with Step 5 to 7 (Case's 'Late Style') beakers of the eighteenth-sixteenth centuries bc (Lanting and Van der Waals, 1972: 39-45; Case, 1977: 82-4; Harrison, 1980: 98-108) and, occasionally, as at Durrington Walls, with the highly distinctive grooved ware of the late-third and early-second millennia bc (Wainwright and Longworth, 1971: 72-3, fig. 64:P598-P600).

On available evidence, however, it can probably be said that the vessels from Fissure Cave, Elbolton Cave, Attermire Cave and Carnaby Top site 19, are of pre-beaker date. Moreover, though they were all probably flat-based, it is by no means safe to conclude that the Peterborough ware potters of northern England were being inspired by the newly introduced flat-based beakers. Though it has long been axiomatic that beaker immigrants introduced flat-based pottery into these islands, there is a growing body of evidence to support the claim that the flat base was, in all probability, an insular development: vessels with flat bases are known from the middle ditches of the Windmill Hill causewayed enclosure and from beneath the bank of the Avebury henge monument (Smith, 1965: 57, 69, 224, fig. 29:P234-P236, fig. 76:P342); and at the Dyffryn Ardudwy, Anglesey, chambered tomb, fragments of small flat-based buckets were associated with Grimston style carinated open bowls (Lynch, 1969: 153-5, fig. 55:4-5). Of course the flat base is a feature of later neolithic grooved ware, a series of regional styles dominated by tub, bucket and barrel forms, most carrying grooved, applied, incised and/or twisted cord decoration

— decorative techniques which, with the possible exception of twisted cord, owe nothing to the methods used to ornament the earliest beakers (Burleigh *et al.*, 1972: 400-4). This view is supported by available radiocarbon determinations which clearly demonstrate that grooved ware, or at least the Durrington Walls style, was well established by c. 2000 bc (Burleigh *et al.*, 1972: 400-4; Manby, 1979: 146-8). However, it remains to be established just how early the flat base was developed in Britain.

Beaker

A large fragment of beaker pottery (Fig. 3:11) was, along with two sherds of Peterborough ware (Fig. 2:3, 5), a flint scraper and a small quantity of human bones, recovered from the centre of the fissure (Pill, *pers. comm.*). It is ornamented with rows of V-shaped impressions (not finger-pinching) set between horizontal lines of rectangular tooth-comb impressions and is almost certainly from a Step 4-5 (Case's 'Middle Style', Clarke's 'Developed Northern British (N2)') beaker (Lanting and Van der Waals, 1972: 27-30, 39-45; Case, 1977: 71-3, 75-9; Clarke, 1970: 162-75). A good parallel is perhaps provided by a beaker from Ely, Cambridgeshire, on which the V-shaped impressions have been produced with a narrow ended flat instrument (Clarke, 1970: corpus no. 69, fig. 564), and possibly by a sherd from the Durrington Walls henge monument which carries finger-pinched impressions between horizontal lines executed with a rectangular toothed implement (Wainwright and Longworth, 1971: 151, fig. 63:P576). Stylistically all can, with reasonable confidence, be ascribed to the eighteenth/seventeenth centuries bc.

The Fissure Cave beaker is a welcome addition to the steadily growing list of fine ware beaker pottery from northern caves. The earliest vessels are attributable to Steps 1-2 (Case's 'Early/Middle Styles', Clarke's 'All-Over-Cord/European' groups; Lanting and Van der Waals, 1972: 24-5, 27, 32, 39, 41-5; Case, 1977: 71-9; Clarke, 1970: 38, 52-83), and include fragments of an all-over-cord beaker from Raven Scar Cave, North Yorkshire (Gilks, 1976: 96) and a series, comprising all-over-cord, a plain beaker, a small bowl and just possibly a European beaker, from Antofts, Ashberry 1 and Buckland's Windypits — a series of deep fissures in Duncombe Park to the west of Helmsley, North Yorkshire (Hayes, 1963: 16-27, 355-6, fig. 4:1-4, 6; Clarke, 1970: 54, 58, 63-4, 66, 505-6, 529, 551, corpus nos 1222F-1234F, 1251F; Gibson, 1982: 98, 102-3, 118, fig. WIN.1:1-5, fig. WIN.2:1-4, 7-8, 11, fig. WIN.3:3; Pierpoint, 1984: 23-6). Antofts Windypit has also provided us with, what is considered by the majority to be, a highly contentious radiocarbon date of 1800 ± 150 bc (BM-62) (Hayes, 1963: 20). Further finds of all-over-cord beaker pottery have been recorded from the Wetton Mill rock shelter in Staffordshire (Longworth, 1976b: 62, fig. 1r:1) and Sewell's Cave (Raistrick, 1936: 195, 201, fig. 5:4; Clarke, 1970: 509, corpus no. 1383F), and also, according to the late David Clarke (1970: 485, corpus no. 418F), from Dog Holes Cave in north Lancashire (the sherd cannot at present be traced).

These early style beakers are augmented by stylistically later vessels found in the above and other northern caves. Of these probably the most important are two beakers attributable to Step 7 (Case's 'Late Style', Clarke's 'Developed Southern British (S4)'; Lanting and Van der Waals, 1972: 27, 39-40, 43; Case, 1977: 71-2, 82-3; Clarke, 1970: 20-1, 42-3, 234-44) from Pin Hole Cave in Creswell Crags, one of which almost certainly accompanied at least one inhumation burial, whilst the other was probably associated with domestic refuse, including flints, animal bones and charcoal (Gilks, 1974: 8-15, fig. 3:1-2). Two radiocarbon dates (2170 ± 140 bc: BM-437; 1960 ± 120 bc: BM-438) are claimed for these beakers, but as they were obtained from bulked charcoal samples they are probably of limited value (Gilks, 1974: 10-11). A third beaker which appears to belong to this stage has been recorded from Fox Hole Cave in Derbyshire (Manby, 1971b: 13-16, fig. 6), whilst sherds of indeterminate beaker pottery are known from

Harborough Cave (Armstrong, 1923: 407-9, 413, pl. XXII (3); Clarke, 1970: 478, corpus no. 131F) and the Whaley 2 rock shelter (Radley, 1967: 7, 9-11, fig. 5:10-13) in Derbyshire, Elder Bush Cave (Bramwell, 1964: 56-7, fig. 8:b; Clarke, 1970: 496, corpus no. 836F), Thor's Fissure Cave (Wilson, 1934: 21-3, 41; 1937: 62, 64, fig. 3) and the Wetton Mill rock shelter (Longworth, 1976b: 62, 64, fig. 1r:4) in Staffordshire, and Dog Holes Cave (Jackson, 1912 (1913): 102-3; Clarke, 1970: 485, corpus no. 419F) in Lancashire. Other finds yet to be examined in detail include two beakers from Harborough Cave, found during illicit excavations (May, 1964: 2-3, fig. 1:13-14), and a sherd from Attermire Cave (unpublished: Pigyard Museum, Settle). These finds are complemented by sherds of coarse beaker pottery, presumably from large storage vessels and most decorated with finger-pinched rustication, from Ravencliffe Cave (Clarke, 1970: 478, corpus no. 144F) and Attermire Cave (unpublished: Pigyard Museum, Settle), whilst a most unusual beaker, decorated with zones of vertical furrows, has recently been published from Mill Pot Cave in Staffordshire (Ryder *et al.*, 1971: 39-40, fig. 1).

The picture painted by these finds of beaker pottery is one of the continued use of caves for economic purposes throughout the beginning of the early Bronze Age. That they also served a funerary role, albeit on a much reduced scale, is borne out by the discovery of at least one inhumation burial in Pin Hole Cave and of many in the Yorkshire Windypits. These last, which are predominantly collective burials, demonstrate the persistence of an indigenous neolithic funerary tradition into a period which was dominated by a preference for individual burials under earthen round barrows or cairns.

Collared urns

Six fragments of collared urn pottery were also found outside the fissure. Five, including a fragment of collar decorated on the outside in a herring bone pattern executed in twisted cord (Fig. 3:13), are from the same vessel, whilst the last, which is a fragment of rim decorated on the outside and on the internal rim bevel with circumferential twisted cord lines (Fig. 3:12), is almost certainly from a second urn. These vessels, like the beaker pottery from the fissure described above, appear to have served a domestic, rather than a funerary role.

Only a small number of caves has produced comparable pottery, and includes: Etches Cave (Pernetta, 1966: 11-16, 35; Longworth, 1984: 77, 173), Fox Hole Cave (Bramwell, 1971: 13, fig. 5:3), Bunker's Hill Wood Cave (Radley and Cooper, 1966: 93-8, fig. 20:a-c; Longworth, 1984: 77, 172), and Pin Hole Cave (Gilks, 1974: 12-14, fig. 3:3-4; Longworth, 1984: 77, 180), in Derbyshire; the Wetton Mill rock shelter (Longworth, 1976b: 62-4, fig. 1r:5; 1984: 77, 267) in Staffordshire; Fairy Holes Cave (Musson, 1947: 161-70, fig. 12; Gilks, 1985a: 188-93, fig. 1; Longworth, 1984: 77, 220) in Lancashire; Elbolton Cave (Gilks, 1973: 41-54, fig. 4:7-8; Longworth, 1984: 77, 256) and Raven Scar Cave (Gilks, 1976: 95-9; Longworth, 1984: 77, 247) in North Yorkshire; and Heaning Wood Cave (Barnes, 1970: 4-5, fig. 1:4; Longworth, 1984: 77, 170) in Cumbria. With the exception of the sherds found in Elbolton Cave, which represent two vessels, one of which accompanied or contained a cremation, the urns can be classed as domestic and were presumably used for storage and/or cooking.

Stylistically these, and probably the Fissure Cave, urns are attributable to Longworth's 'Primary/Secondary Series North Western Style' (Longworth, 1984: 19-35), a style well represented by finds from burial contexts in northern England. Unfortunately, however, there are still insufficient radiocarbon dates to provide a firm chronology for the collared urn tradition, but of those produced almost all fall between 1800 and 1100 bc.

New Cave

Collared urn

The pottery found in New Cave in 1872 and between 1961 and 1963 comprises fifteen sherds from the body of a small collared urn (Fig. 3:14). All are decorated on the outer surface with roughly horizontal rows of circular impressions, probably produced by a stick or blunt instrument. The urn possibly belongs to Longworth's 'Primary Series' in the collared urn tradition (Longworth, 1984: 19-28), and parallels are perhaps provided by urns from the Royston Grange, Derbyshire, round cairn (Marsden, 1982: 29, fig. 2) and Milton in Northamptonshire (Hawkes, 1967: 198-208, fig. 1, pl. XXXIX:a). As to dating, all that can be said is that it also probably belongs to the period 1800 - 1100 bc.

CATALOGUE

Fissure Cave

Towthorpe ware

- Fig. 2:1 Wall sherd with an applied, imperforate, horizontal peaked lug, in a soft blackish-brown fabric, tempered with a little crushed limestone. (FC/B1/3)

Peterborough ware

Illustrated

- Fig. 2:2 Large wall sherd from a round-based bowl with a cavetto neck, in a hard blackish-brown fabric with lighter buff-orange patches outside, tempered with a little crushed limestone and angular shale fragments. Decorated on the shoulder with two circumferential twisted cord lines bordered below by concentric semi-circles in twisted cord. (FC/B1/3)
- Fig. 2:3 Rim sherd of coarse fabric, brown both faces, dark grey core, tempered with large angular grits. Decorated on the internal edge of the rim with diagonal slashes with a row of blurred impressions at the base of an internal moulding; outside, on the lower edge of the rim, a row of diagonal impressions crossed above by lightly impressed fingernail impressions. (FC/F/3/8/6; British Mus. acc. no.: 1961 10-8 2)
- Fig. 2:4 Rim sherd, hard black fabric, decorated inside and on the rim with cord maggot impressions. (FC/B1/3)
- Fig. 2:5 Fragment from the base of the collar of a bipartite bowl, of fairly soft fabric, brown to grey both faces, dark grey core, tempered with some grit. Decorated on the collar with blurred vertical whipped cord lines above a single line of whipped cord. (FC/F/3/2; British Mus. acc. no.: 1961 10-8 2)
- Fig. 2:6 Wall sherd, probably from a round-based bowl, dark black-brown fabric, light buff outside. Decorated with (?) wavy lines in twisted cord. (FC/B1/3)
- Fig. 2:7 Two sherds from a rusticated vessel, in a soft dirty-orange to dark-brown fabric, black core, inner face eroded. Decorated on the outside with vertical fingernail rustication. (FC/B1/3)
- Fig. 2:8 Two small wall sherds in a hard black-brown fabric, orange outside, tempered with fragments of shale. Both decorated with horizontal lines in heavy twisted cord. (FC/B1/3)
- Fig. 2:9 Wall sherd in a hard black fabric, decorated with triangular jabs. (FC/B1/3)
- Fig. 2:10 Wall sherd in a soft buff-brown fabric, black core, inner face eroded, tempered with limestone fragments. Decorated on the outside with diagonal fingernail impressions. (FC/B1/3)

Not illustrated

- i Small wall sherd in same fabric as 2:1. (FC/B1/3)
- ii 62 sherds, the majority lacking both faces, in a hard black to blackish-brown fabric; all are probably from vessels 2:2 and 2:8. (FC/B1/3)
- iii 12 small wall sherds in same fabric as 2:6. (FC/B1/3)
- iv 16 sherds in same fabric as 2:7; all are probably from this vessel. (FC/B1/3)
- v 7 wall sherds in a soft grey fabric, dirty orange-brown outside, tempered with finely crushed limestone. (FC/B1/3)

Beaker

- Fig. 3:11 Wall sherd from a beaker of well fired fabric with no obvious inclusions, brown outside, dark brown to grey inside. Decorated with rows of V-shaped impressions (not finger-pinching) set between horizontal lines of rectangular tooth-comb impressions. (FC/F/3/8/6; British Mus. acc. no.: 1961 10-8 1)

Early bronze age collared urns

Illustrated

- Fig. 3:12 Rim sherd in an exceptionally hard black fabric, tempered with angular limestone particles. Decorated on the outside and on the internal rim bevel, with circumferential lines in heavy twisted cord. (FC/B1/3)
- Fig. 3:13 Sherd from the collar of a collared urn in a hard, dirty dark-brown fabric, dark grey inside and core, some carbonization outside, tempered with a little crushed limestone. Decorated in a herring-bone pattern executed in heavy twisted cord. (FC/B1/3)

Not illustrated

- i 4 body sherds in a similar fabric to 3:13, but outside of some sherds buff-brown. (FC/B1/3)

New Cave*Early bronze age collared urn*

- Fig. 3:14 Fourteen sherds (four illustrated) from a collared urn, in a medium-hard fabric, dark buff outside, mid-brown inside, grey core; sherds from towards the base of the vessel light to dark brown outside, tempered with limestone particles. Decorated on the outside with shallow, closely spaced, circular impressions. (NC/I/A; NC/I/C; NC/D; NC/I/b/13)

NB: Also from this vessel is a sherd found by Rooke Pennington in 1872, and preserved in the Bolton Museum.

DISCUSSION

Fissure Cave

The stratigraphical position of some of the human remains and their relationship to certain finds of sherds of earlier and later neolithic bowl pottery and fragments of early bronze age vessels (Pill, *pers. comm.*), suggest that the cave had served as a shelter in the earlier Neolithic, for both burials and occupation in the later Neolithic, and again as a temporary habitation in the early Bronze Age.

The human remains comprise a skull, found at the rear of the fissure, and a number of major and minor bones from the centre of the passage and an area immediately in front of the entrance. Three individuals are represented: 1) a newly born child; 2) a child of about six months; and 3) an adult of about thirty years of age (Pill, *pers. comm.*). The finding in the fissure of not only

major bones but also those of the hands and feet would seem to point towards complete bodies having been interred and not, as was sometimes the case, partially skeletonized interments or individual or groups of bones (Gilks, 1988a: 6-7; Renfrew, 1979: 166-8). Subsequent activity by a predominantly Peterborough ware-using group resulted in the exhumation of the burials and the removal of many of the major bones; some, but by no means all, were found outside the fissure, irrevocably mixed with sherds of later neolithic Peterborough ware and early bronze age pottery, flints, and the bones of cattle, sheep, goat and dog.

This secondary activity might well have been directed towards rendering the fissure habitable, though its size would have precluded its use as a dwelling by all but the smallest group. From outside the fissure came, as noted above, almost all of the evidence for human activity on the site, sufficient to suggest that the people who settled here lived not in the fissure but close to its mouth. It does not necessarily follow that they would have been exposed to the elements, for on this type of site, where the natural entrance is low, a simple lean-to or wind-break, like that identified at Goatscrag (Site A) in Northumberland (Burgess, 1972: 19-31, fig. 2), might well have extended beyond the rock face. Needless to say this type of structure would leave little or no trace in the archaeological record.

The discovery of a little early bronze age pottery, representing a beaker and two collared urns, points towards some continuity in occupation, whilst third/fourth century AD activity is attested by the scatter of coarse pottery, fragments of worked bone, flints (?residual) and two legible coins in the mouth of the fissure. There is also tangible evidence from this period for the re-working of earlier levels, though this does not appear to have affected the deposit (Layer 3) which yielded the later neolithic and early bronze age pottery and human remains.

New Cave

The discovery of many fragments of a collared urn, a few flint tools, flint debitage and the bones of goat, sheep, cattle and pig in the mouth of the fissure, attests to the site's having been inhabited in the early Bronze Age, and quite possibly at the same time as Fissure Cave, which was located a few metres below it.

CONCLUSION

The finds from these two caves have contributed much to our understanding of the use of caves for both occupation and burials during the Neolithic and early Bronze Age. They join a list of more than seventy caves and rock shelters in northern England which have produced evidence of one or both forms of usage, and there seems little doubt that others await discovery (Gilks, 1984: 44-5; 1985b: 41-2; 1986: 39; 1987: 45; 1988a: 6-7; 1988b: 52-3; 1989: 11-15; in prep. a; in prep. b).

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