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“UNCHAMBERED” LONG BARROWS IN NEOLITHIC BRITAIN

(Fig. 1)

The recognition of a form of Neolithic burial monument in Britain, characterised by collective burial under one end of an elongated mound of earth or rubble, but without stone-built chambers in the manner of the megalithic tombs, goes back to the last century. A distinction was formulated in the 1860's by John Thurnam between 'unchambered' and 'chambered' long barrows, and this classification has been part of British archaeological diction since his day (Thurnam, 1868). From an early date too it was recognised that the relationship between the two classes, though to a certain extent explicable in geographical and geological terms, was by no means simple, and might involve consideration not only of groups of monuments widely distributed in the British Isles, but on the European continent as well.

The distribution¹ of these 'unchambered' long barrows has a marked concentration in the counties of Wiltshire, Dorset, Hampshire and, to a less extent, Sussex in Southern England; a scatter northeastwards through Bedfordshire into East Anglia; a group in Lincolnshire and a concentration in the East and North Ridings of Yorkshire. Northwards again there are a few examples in Eastern Scotland between the River Tay and the Moray Firth.

For Crawford, writing in 1925 on the chambered long barrows of the Cotswolds, the 'unchambered' long barrow was misnamed: when the builders of megalithic tombs "could not get suitable stone, they made a wooden chamber and an earthen mound" (Crawford, 1925, p. 22). This position he re-affirmed three years later in the words "a long barrow is merely the reproduction in earth of a characteristic form of megalithic burial" (Crawford & Keiller, 1928, p. 11). This statement was perhaps over-confident at the time, as only one 'unchambered' long barrow had been adequately excavated, that of Wor Barrow in Dorset, dug by Pitt-Rivers in 1894, and the immediately demonstrable timber structure there was a large palisaded enclosure, certainly never a roofed building or chamber (Pitt-Rivers, 1898). But, as we shall see Crawford may not have been so far off the mark as some of us thought in his assumption of wooden mortuary houses in such barrows, even if his implied derivation of these from stone prototypes was more open to question. Childe in 1940

endorsed the Crawford thesis in both its aspects: “when the apostles of the megalithic faith reached regions where suitable stone was lacking, they translated into wood or turfs a characteristic form of megalithic burial” (Childe, 1940, p. 64). Others however had not been so happy about this derivation, and in 1934 I had queried its validity (admittedly on very slender and ambiguous evidence!) and claimed that the earthen or ‘unchambered’ barrows were a primary type to be associated with the earlier Neolithic cultures of Britain, and especially of Southern England (Piggott, 1934, p. 143; 1935).

At that time the most recent, and the only competent, excavation of an earthen long barrow was still that of Wor Barrow just mentioned. As the detection and interpretation of the archaeological evidence for vanished timber structures within such mounds depended on high standards of excavation technique, the question of possible wooden chambers could only be answered by additional excavations of a quality that would reveal and recognise the presence of such structures had they in fact existed.

By 1954, when I came to review the whole question anew, the additional results of five more or less complete earthen long barrow excavations were available, with some lesser new information on three more sites². There had come too the recognition of structures now designated as Long Mortuary Enclosures as a result of Atkinson’s work at Dorchester-on-Thames, one of which he acutely diagnosed as having existed at Wor Barrow at an early stage of the site’s ritual and funerary use³. The then available evidence suggested that the barrows were “without burial chambers only so far as these were of impermanent construction and were never intended to remain open and accessible after the mound was actually thrown up”: turf-built, rather than timber, structures were suggested by the evidence. The concept of the long mortuary enclosure, a bank-and-ditch earthwork or a palisaded open structure, enabled us to visualise such sacred funerary enclosures, with impermanent mortuary houses within, as a primary phase in the construction of such a long barrow, followed by the periodic deposition of bodies in the chamber, and concluded by the construction of an earthen mound engulfing enclosure and mortuary house, and precluding by its very presence further access to the latter.

By a curious accident, as we can now see, the earthen long barrow excavations of 1933–38 provided no examples of unambiguous timber chambers, but only the rather uncertain structures in turf or soil at Thickthorn and Giant’s Hills, and presumptively turf at Holdenhurst. But since the war, the virtually complete excavation of eight more barrows has produced a mass of new evidence, some of it resulting from excavations within the last couple of years and so unpublished or not yet published in full, and including several examples of complex timber structures. Side-by-side with this new work in the field we now have a clearer idea of the structure of the British Neolithic cultures in general than was possible ten years ago;

new evidence bearing on the problem has been published from the Continent, and above all we have radiocarbon dates to form the basis of a sound absolute chronology.

To summarise the position as I set it out ten years ago, the ‘unchambered’ or earthen long barrows could be seen to have a separate identity as a class, and could not be relegated to a position of being degenerate versions of megalithic tombs in country where building stone was not available. Relationships with the latter were however plainly apparent, especially in the use of the disproportionately long rectangular or trapezoid mound in the Severn-Cotswold, Clyde-Carlingford and Orkney-Cromarty groups of chambered tombs. Further relationships existed with the long mortuary enclosures, and mortuary houses of perishable materials were vaguely implied by the excavation evidence. Relationships in distribution and in material culture linked them to the Windmill Hill culture of Southern and Eastern England, and the whole situation was tied to a chronology which radiocarbon dates were soon to show as impossibly short. So far as Continental parallels were concerned, the unchambered trapezoid long mounds or cairns of Southern Brittany, of the Manio type, seemed the only claimants as prototypes, appropriate to the assumed position of the Windmill Hill Culture within the ‘Western Neolithic’ group as a whole.

Today we have in the first place, as we have seen, a most important new access of evidence from excavations of high quality in long barrows and in chambered tombs as a whole, and in the second, something of a re-orientation of ideas about the possible combination of eastern and western traditions in the British Neolithic cultures, notably that still surviving under the name of Windmill Hill, and involving the long barrows without megalithic stone burial chambers. The new excavation evidence comes more particularly from the Wessex earthen barrows of Nutbane (Hampshire), and Fussell’s Lodge, Horslip and Wilsford (Wiltshire), and those in the East Riding of Yorkshire on Seamer Moor, at Heselton, and at Willerby. The recent excavation of the well known chambered long barrow of Wayland’s Smithy, Berkshire, showed that within and overlaid by the visible Severn-Cotswold tomb, with megalithic transepted chambers and massive peristalith and façade, was a slightly earlier and much smaller long barrow without a stone chamber, but with evidence for one of wood⁴.

These new excavations, taken in conjunction with our previous knowledge, enable us to proceed further in the question of chambers or mortuary houses in perishable materials. At Nutbane, a small rectangular banked enclosure, in general a member of the long mortuary enclosure series, and about 4 × 3 m. within its ditches, was first constructed (exclusive of features referred to below), and may have been covered with a gabled roof without upright side walls supported on two posts, sockets for which were found: the Wayland’s Smithy evidence described below suggests such an interpretation. The whole was at a later stage enclosed in a rectangular fenced

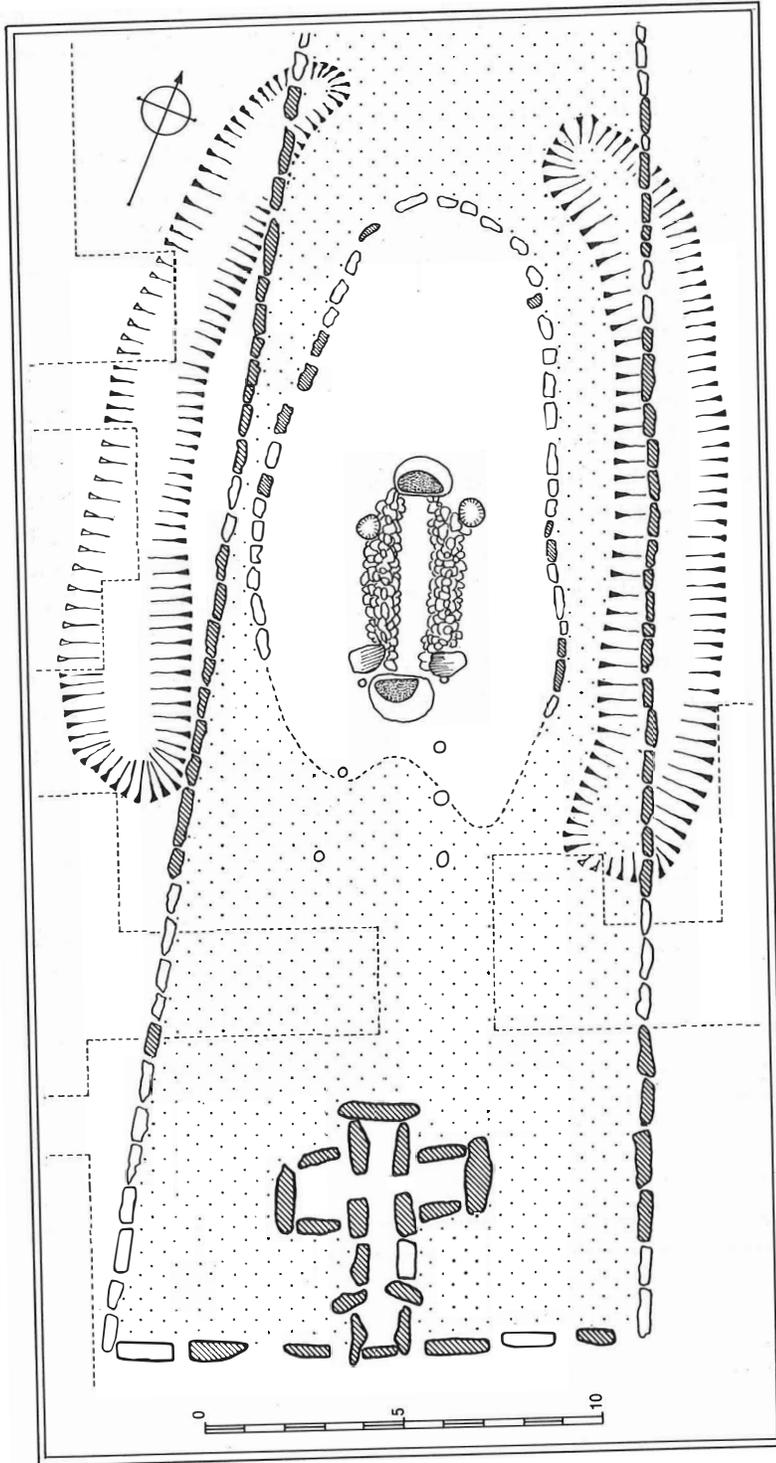


Fig. 1. Wayland's Smithy, Berkshire, England. Wooden-chambered long barrow beneath later megalithic chambered tomb (after Atkinson).

mortuary enclosure 6×5.5 m.; a total of four burials had been made within the inner enclosure (or gabled mortuary house). Most elaborate and massive timber structures were also made in the forecourt area eastward of this, explicable as roofed buildings with upright timber-framed walls, of two periods in the later of which the building had been deliberately burnt down. I have chosen to describe Nutbane first because of the complexity and completeness of the evidence on this site: we have three main structural elements represented, (1) a *mortuary enclosure* and probably *roofed area* for successive burials, (2) a *fenced enclosure* around this, and (3) what we may call a *fore-building* beyond this at the eastward outer limit of the monument.

The excavator of Nutbane had not herself considered the possibility of the ditched burial enclosure being roofed in the manner described, and the suggestion here made follows from the interpretation of the features of the first phase monument at Wayland's Smithy, excavated in 1962–1963. Here an oblong paved burial area (with at least 15 inhumations) had two massive post-holes one at each end of the paving, with evidence that they had originally held split tree-trunks. There was evidence for a tent-like gabled roof of wood, its ridge pole held by the two massive upright posts, the whole about 4×2.5 m. overall; a form of construction leaving no trace of lateral supports in the form of post-holes for vertical wall-timbers, since none were employed. In general terms, the structures would have resembled the Early Bronze Age mortuary houses beneath the barrows of Leubingen and Helmsdorf in the Saale valley. This structure would equate with the first feature at Nutbane; there was no fenced enclosure equivalent to (2), but six post-holes in front of and structurally earlier than the burial pavement can be construed as those of a fore-building, here bluntly trapezoid on plan.

If with these features in mind we look at the Fussell's Lodge barrow, a preliminary report on which is published, we could again suggest a mortuary ridge-roofed structure over the burials supported on central posts and 7 m. long, as feature (1), with the massive trapezoid post setting round the whole barrow, $40 \times 10 \times 6$ m. as feature (2), and a small fore-building carried on four posts set in a slightly trapezoid plan as feature (3) in front of the burials. Re-examining Wor Barrow, Professor Atkinson, who first suggested to me the existence of feature (1) at Fussell's Lodge, points out that there were two "holes" obscurely recorded by Pitt-Rivers, one at each end of the burial area, about 3 m. apart, which could again have held a ridge-roof over the burials as feature (1), with the well-known rectangular palisaded enclosure, 25×10 m., representing feature (2)⁵.

Giants' Hills in Lincolnshire has again a paved burial area as at Wayland's Smithy (though laterally placed), within an area about 5×2 m. where the surrounding mound seems to have been held back or revetted in some way, and could have been roofed, and so a type(1) feature with the huge slightly tapering oblong post-setting with curved façade, some 55×12 m., as one of type (2). At neither Wor Barrow

nor at Giants' Hills can a fore-building of type (3) be identified, but the turf stacks with vertical inner faces at Thickthorn could be interpreted as a transverse 'trench-chamber' as at Giants' Hills, though in this instance never used for burials. In the recent (autumn 1963) excavations of a long barrow at Woodford in Wilts. complex timber structures of several phases were found which may resolve themselves into a sequence and arrangement comparable to the sites just described.

Giants' Hills is in Eastern England, and not far to the north are the long barrows on the chalk and limestone hills of Yorkshire. In the Seamer Moor barrow, dug by the excavator of Nutbane, a mortuary enclosure (feature 2) and a fore-building (3) could be recognised in the much-wrecked site, the latter ritually burnt, but in her subsequent excavations at Heslerton only a very large post enclosure and façade forming a type (2) feature could be recovered from the partly destroyed site.

A feature of the Yorkshire 'unchambered' long barrows, much discussed since its initial recognition in the last century, is the presence in many instances not of inhumation burials, but of cremations apparently the result of burning *in situ* in an axial trench at the end of the mound. Most of these barrows were badly excavated and worse published in the nineteenth century, but one on Willerby Wold has recently been re-excavated with illuminating results: a trapezoid post-setting with curved façade $37 \times 11 \times 6$ m. is a type (2) feature closely comparable in its size and proportions to Fussell's Lodge. The axial cremation trench cut into the subsoil incorporates two holes, 4 m. apart, and it seems possible that these, and their counterparts recorded from other Yorkshire barrows of the same type, could have held the posts supporting a ridge-roofed wooden structure of type (1) in the Wayland's Smithy manner, covering burials which were incompletely cremated as a result of the ritual ignition of the timber-work, as indeed Childe (1940, p. 63) suggested.

It looks then as if the internal arrangements of the British 'unchambered' long barrows, for long seemingly chaotic, and with no common denominators to unite one tomb with another, could now be considered as belonging to a fairly regular scheme involving a timber or turf mortuary house, of its nature impermanent and rendered inaccessible by the subsequent building of the mound; post enclosures, frequently trapezoid in plan and within or at the edge of the barrow; and occasionally structures in timber which we have here called fore-buildings without prejudice to the question to their being roofed or not. All the trend of the new evidence is in favour of at least temporary mortuary houses or burial chambers, so the term 'unchambered' becomes less and less easy to champion.

Now we have a clearer understanding of what we are dealing with, we may turn to consider the position of these monuments in the general framework of the British Neolithic cultures. Their connection with the Windmill Hill culture still seems substantiated, even if we are perhaps less clear than we were ten years ago about the homogeneity of the culture itself. Radiocarbon dates (Fox, 1963) now show us that

elements of the culture are present in Southern England before 3000 B.C. – dates from Hembury in Devon give a range of 3480–3000 B.C. (BM-130, 136, 138); the pre-earthwork phase at Windmill Hill is 3100–2800 B.C. (BM-73), and 2720–2420 B.C. (BM-74) is a date early in the use of the camp (Smith, 1960). In Eastern England the nearest dates that might be relevant are those of the Neolithic occupation at Shippea Hill in the Cambridgeshire Fens (Clark & Godwin, 1962), with pottery related to the Lincolnshire-Yorkshire series: 3110–2870 B.C. (Q-525/6) and 3030–2790 B.C. (Q-527/8). We have six dates from our ‘unchambered’ long barrows for comparisons – Horslip 3240 ± 150 B.C. (BM-180), Fussell’s Lodge⁶ 3230 ± 150 B.C. (BM-134), Seamer 3080 ± 90 B.C. (NPL-73), Willerby 3010 ± 150 B.C. (BM-189), Wayland’s Smithy 2880 ± 130 B.C. (I-2328) and Nutbane (Vatcher, 1959) 2720 ± 150 (BM-49). These would agree with a position in our earlier Neolithic, but we must be on our guard against assigning all such barrows to such early dates, remembering that the Giants’ Hills barrow incorporated sherds of Bell Beaker in its mound, which, using radiocarbon dates for such pots in the Netherlands and Britain, should be no earlier than c. 1900–2000 B.C.

On the other hand, if we are right in thinking that the building of the mound of an ‘unchambered’ long barrow was the final act after a period of successive burials on its site (or elsewhere in a separate mortuary house or enclosure), we should have to regard it in the same light as the final forecourt blocking in a megalithic chambered tomb, perhaps removed by some centuries from the construction the initial features and the deposition of the first burials. At the West Kennet chambered tomb in Wiltshire (Piggott, 1962), the sherds contained in the secondary filling of the chambers and forecourt blocking suggested an interval that might have been up to a millennium, and certainly of the order of 500 years or so, between the building and first use of the tomb, and its final closure. With this estimate we may compare two radiocarbon dates recently obtained from the Monamore chambered tomb in Arran, of the Clyde-Carlingford group, and coming respectively from the middle point in the use of the tomb (3160 ± 110 B.C. : Q-675) and the final blocking (2240 ± 110 B.C. : Q-676) – an interval of 920 ± 110 years⁷. If burials in either a chambered or an ‘unchambered’ Neolithic tomb can span such a long period of time, we must obviously take great care in precisely assigning any radiocarbon dates obtained to the appropriate phase of its use or constructional history. The Fussell’s Lodge sample giving the date 3230 ± 150 B.C. came from the final phase, after the total deposition of burials; that from Nutbane (2720 ± 150 B.C.) from the burning of the second fore-building, one of the sixth and final group of performances on the site. In each instance the initial constructions and first burials must have been earlier – we cannot say how much earlier – than these dates.

At Wayland’s Smithy, however, the disposition of the bones, representing at least 15 individuals, showed that all but one burial lying articulated *in situ* had been trans-

ported from some other place of storage when they were in a state of considerable disarticulation, so that here no long interval need have elapsed between the making of the mortuary house on the site, and its concealment under the barrow. But however short the interval here or elsewhere, the digging of the mound from its flanking quarry-ditches must have been the final constructional act, so that finds even from the primary silt of such ditches will belong to this phase, and not be in a primary relationship to the whole monument as we have sometimes tended to think.

The British 'unchambered' long barrows, as has already been mentioned, have certain obvious structural analogies with more than one group of the chambered tomb series. The general planning, with collective and successive burials deposited in a restricted space at one end of a disproportionately long mound, and frequently at the broader end of one which is trapezoid in plan, offers comparison with the stone-built chambered tombs of the Severn-Cotswold group, geographically immediately adjacent to, and indeed overlapping the distribution of, the 'unchambered' type in Wessex. Here, at Wayland's Smithy, a transepted chambered tomb of Severn-Cotswold type has been found to cover and incapsulate a small long barrow with a wooden mortuary house as described above: the evidence showed that no long interval intervened between the completion of the first barrow and the construction of the second. Architecturally, the Severn-Cotswold tombs have affinities with those of the Clyde-Carlingford group in South-west Scotland and Northern Ireland; further afield again with the Yarrows type within the Orkney-Cromarty group in Northern Scotland. But on present showing we cannot assign chronological priority to either the stone chambered or the 'unchambered' barrows (except in the particular instance of Wayland's Smithy), and here we want more radiocarbon dates such as those from Monamore.

Efforts to detect prototypes on the Continent for the Severn-Cotswold or Clyde-Carlingford chambered tomb groups have failed, largely in respect of the absence of the trapezoid mound outside Britain. The architectural agreements between the transepted burial chambers in what I have called the Pornic-Notgrove tombs link the Severn Estuary with the mouth of the Loire (Piggott, 1962); the segmented galleries of Clyde-Carlingford may fairly be related to those of the Pyrenees. But a search for formally planned trapezoid mounds leads us only to the Manio group of tombs in Southern Brittany, which in 1937 I tried to bring into a position ancestral to our 'unchambered' long barrows but which today I, with the Breton archaeologists, would prefer to see as something perhaps sharing common origins with the British monuments, but not their progenitors. But another European area now demands our attention.

Following on Becker's work on Funnel Beakers (Becker, 1947) and Vogt's interpretation of the nature of the Michelsberg culture (Vogt, 1953), our attention in Britain was re-directed, in the early 1950's, to an area of Northern Europe where

Jażdżewski (1936) and others had long before drawn attention to ‘unchambered’ long barrows, and to megalithic tombs, of triangular or trapezoid plan. The publication in 1952 of the excavation of 14 new barrows in Polish Kujavia, between the Oder and the Vistula, gave Chmielewski (1952) the opportunity of reviewing the evidence from all the Kujavian long barrows (some 76 in all, with excavation evidence from 47). Becker and Hinsch (1951–53) had, in varying degrees, looked to ‘Western’ Neolithic contacts in the B phase of the Funnel Beakers, and in 1955 and again in 1961 (Piggott, 1955; 1961) I suggested that the British Windmill Hill culture had an eastern as well as a western component, represented by certain pottery types and the ‘unchambered’ long barrows, which I compared with such Kujavian tombs as those of Gaj or Sarnowo.

The trapezoid plan can be given a respectable ancestry in Central and Northern Europe, deriving from the rectangular long-house characteristic of the Danubian cultures but unknown in Britain or the west of Europe. The development of these into trapezoid plans can be seen in several late Neolithic contexts such as those of later Linear Pottery or of the Rössen culture, as at Bylany (Soudsky, 1962), Postoloprty (Neustupný, 1961, p. 47), St. Pallaye (Carré *et al.*, 1958), Deiringsen-Ruploh (Buttler, 1938, p. 17; Stieren, 1943–50), Zwenkau-Harth (Quitta, 1958), Inden, ^eLamärsdorf (unpublished), or again at Brześć-Kujawski (Jażdżewski, 1938). A site of the Rössen culture at Wahlitz (Behrens, 1962, p. 42) has a radiocarbon date of 3350 ± 220 (GRO-433 corrected). The trapezoid houses at Inden have a radiocarbon date of 3990 ± 200 B.C. (Kn-330) and those at Zwenkau (Behrens, 1962, p. 42; Tauber, 1960, p. 22) belong to a phase later than one dated 3890 ± 120 (K-555). The Brześć-Kujawski houses antedate graves of TRB ‘C’ and the Kujavian barrows belong roughly to this phase, as does the small long barrow at Salten in Denmark containing the well-known bossed copper disc comparable with other ornaments (Becker, 1947; Driehaus, 1960, p. 163; Lomborg, 1962)⁸ from the Brześć-Kujawski cemetery, and from Eastern European contexts such as Hăbășești (Vogel & Waterbolk, 1963, p. 185), with a radiocarbon date of 3380 ± 80 B.C. (GrN-1985). Further west than Kujavia, on the Dölauer Heide near Halle, a trapezoid mortuary enclosure antedated the well-known decorated stone cist of Schnurkeramik date, and is assigned by Behrens (1958) to a late Salzmünde context, dated from a nearby site by several radiocarbon readings: 3011 ± 90 , 2948 ± 90 and 2827 ± 80 B.C. (Becker, 1947; Driehaus, 1960, p. 163; Lomborg, 1962)⁹.

The existence of trapezoid houses and mortuary structures around 3,000 B.C., between the Vistula and the Saale, would provide approximate contemporaneity between these and the British sites, but not demonstrable priority. Even for those who may not accept radiocarbon dates as wholly valid for an absolute chronology, their relative values in this particular enquiry still hold good.

In points of detail there are both divergences and similarities between the Kujavia-

vian barrows and the British 'unchambered' long barrows. The Kujavian plan is normally triangular rather than truncated to form a trapezoid: the latter plan seems more characteristic of the north-westerly Funnel Beaker tombs with massive boulder peristaliths such as Dwasieden on Rügen, Lupow, Pastitz, or Kâköhl in Schleswig-Holstein, or, as we saw, the Döläuer Heide mortuary enclosure on the Saale (Behrens, 1958; Sprockhoff, 1938). In this same region there are analogous stone settings at Burgörner and in the Pohlsberg (Latdorf) barrow, of the Baalberg culture, which can be placed in relationship to radiocarbon dates of other late Neolithic cultures to the early third millennium B.C. (Behrens, 1958; 1963*a*; Ebert, 1926). The 'unchambered' long barrow of the first phase at Wayland's Smithy had a peristalith of small boulders, and this feature may well have existed elsewhere in the 'unchambered' group. Connexions between the Saale valley and Britain certainly existed in the early and middle second millennium B.C., and perhaps the resemblances between the Wayland's Smithy type of mortuary house and those of Leubingen and Helmsdorf might be thought not wholly fortuitous, but explicable in terms of long persisting funerary modes in the Halle region. Several Kujavian barrows have been found to contain rectangular burnt areas at or towards their eastern, broader, ends, which in some instances, notably at Gaj no. 1, could be seen to be the remains of timber-built fore-buildings of stubby trapezoid plan comparable with the post-settings at Wayland's Smithy or Fussell's Lodge and, so far as their position and ritual destruction by fire is concerned, the fore-buildings at Nutbane or Seamer. If these similarities are given weight, the possibility of a connection between the two cultural areas would be strengthened.

But an important distinction between the British and the North European sites under discussion is that of the burial rite itself – individual extended inhumations in Funnel Beaker and allied contexts on the North European plain, but collective burials (normally individually in a crouched position where not disturbed) in the 'unchambered' long barrows. The rite is of course also that of the megalithic tombs, and its presence in the 'unchambered' barrows might be thought to be the result of derivation or adoption from that source, therefore supporting the thesis of Crawford that the 'unchambered' long barrows were megaliths *manqués*. But there is another possibility, namely that the practice of collective successive burials in ossuaries need not be regarded as a rite peculiar and exclusive to the builders of megalithic tombs in Neolithic Europe, but as one which could also appear in the 'Western' cultures independently, if from ultimately related origins. Collective burial in various forms was practiced by more than one final Mesolithic community, as in Natufian contexts at Eynan (Anati, 1963, p. 170) or in the Tardenoisian at Tévéc nearer home (Péquart, 1937). Collective burial in natural caves goes back at least to Early Minoan contexts in the Eastern Mediterranean, and to that of the Impressed Ware and Almerian cultures in the Western, in the latter not only in caves but in

circular ossuaries reminiscent of Eynan, and collective cave burial was for long a dominant rite in southern France¹⁰. A case could therefore be made for regarding the burial rite in the British ‘unchambered’ long barrows as representing a tradition essentially Mediterranean and ‘Western’ Neolithic (as against the single-grave rite of crouched or extended burial in Central and Northern Europe), but not necessarily in all instances attributable only to an origin among the builders of megalithic chambered tombs.

The British ‘unchambered’ long barrows continue therefore to present many unsolved problems. Within the British Isles themselves, they are linked with certain chambered tomb groups by such features as their trapezoid plan, occasional curved façades and terminal burial areas; with all chambered tombs by the shared rite of collective and successive burial. Chronological separation cannot at present be made, but presumptive evidence (and direct stratigraphy at Wayland’s Smithy) would place them earlier than the British tombs of for instance the Severn-Cotswold group, to which they would have contributed the trapezoid mound element to be combined with the West French traditions implicit in the transepted burial chambers.

The trapezoid house and mortuary enclosure can be shown to have a long history on the North European plain, but in its funeral expression the tradition cannot be shown to antedate British examples such as Fussell’s Lodge. Its presence as far west as the Saale brings it within reasonable geographical proximity to Britain, but the divergent burial rites in the two areas remain obstacles to direct relationship, even if details such as fore-buildings, burnt or unburnt, appear on the other hand to offer more specific links. More excavations and more radiocarbon dates in Britain and on the European continent are obviously necessary, either to clarify the issues or to render them even more obscure.

[As presented in January, 1964. Recent C-14 datings added September, 1966.]

NOTES

¹ For distributions *cf.* Piggott (1954, Fig. 1, Map II; Fig. 15, Map IV) and Atkinson (1962, Fig. 1).

² For reference to all sites up to 1951 *cf.* Piggott (1954).

³ The Dorchester evidence is not yet fully published, but *cf.* Atkinson (1951) and the excavation of and comment on the Normanton Down enclosure *cf.* Vatcher (1961).

⁴ The long barrow excavations additional to those commented on in Piggott (1954) are those of: Nutbane (Morgan, 1958; 1959*a* and *b*); Fussell’s Lodge (Ashbee, 1958); Horslip (Windmill Hill) (Ashbee & Smith, 1960); Willerby (Manby, 1963); Heslerton (Vatcher, 1965); Wayland’s Smithy (Atkinson, 1965).

Seamer and Wilsford have been excavated by Major and Mrs. Vatcher in 1960-3, and I am most grateful to them for information in advance of publication.

⁵ I am deeply grateful to Professor Atkinson for the initial suggestion that interpretation could be made along these lines. Much of what I have put forward here results from conversations with him – long and close collaboration may lead to unconscious plagiarism of one's colleague's ideas, and I trust he will forgive me where this has occurred.

⁶ Unpublished: referred to by the excavator's permission.

⁷ Unpublished: referred to by the permission of the excavator, Mr. Euan Mackie.

⁸ Salten and other bossed copper ornaments: Becker (1947); Driehaus (1960); Lomborg (1962); Vogel & Waterbolk (1963).

⁹ The radiocarbon measurements are from the Cologne Laboratory, but no numbers are given (Behrens, 1963a, pl20).

¹⁰ For references *cf.* Childe (1957).

LITERATURE

- Anati, E., 1963. *Palestine before the Hebrews*. London.
- Ashbee, P., 1958. The Fussell's Lodge Long Barrow. *Antiquity* 32, p. 106-111.
- Ashbee, P. & I. F. Smith, 1960. The Windmill Hill Long Barrow. *Antiquity* 32, p. 297-299.
- Atkinson, R. J. C., 1951. The Excavations at Dorchester, Oxfordshire 1946-1951. *Archaeological News Letter* (Nov.-Dec.), p. 56-59.
- Atkinson, R. J. C., 1962. *Prehistoric Peoples of Scotland* (Ed. S. Piggott), p. 1-38.
- Atkinson, R. J. C., 1965. Wayland's Smithy. *Antiquity* 39, p. 126-133.
- Becker, C. J., 1947. Mosefundne Lerker fra yngre Stenalder. Studier over Tragtbægerkulturen i Danmark (Neolithic pottery in Danish bogs). *Aarbøger for Nordisk Oldkyndighed og Historie*, p. 1-318.
- Behrens, H., 1958. Ein jungsteinzeitlicher Grabhügel von mehrschichtigem Aufbau in der Dörlauer Heide bei Halle (Saale). *Jahresschrift für mitteldeutsche Vorgeschichte* 41/42, p. 213-242.
- Behrens, H., 1962. C 14 Daten für das mitteldeutsche Neolithikum. *Jahresschr. mitteldeutsch. Vorgesch.* 46, p. 41-45.
- Behrens, H., 1963a. Die Funde aus dem grossen Grabhügel "spitzes Hoch" bei Latdorf, Kr. Bernburg. *Inventaria Archaeologica – Deutschland*, 12.
- Behrens, H., 1963b. Mehrgliedrige Grabenanlage um Siedlung der Salzmünder Kultur bei Halle (Saale). *Ausgrabungen und Funde* 8, p. 18-21.
- Bremer, W., 1926. Der Pohlsberg bei Latdorf. *Reallexikon der Vorgeschichte* (Hrsg. von M. Ebert) 7, p. 236-238.
- Buttler, W., 1938. *Der donauländische und der westische Kulturkreis der jüngeren Steinzeit*. Berlin-Leipzig.
- Carré, H., J. Dousson & P. Poulain, 1958. Habitat néolithique dans les alluvions Yonne et Cure de la plaine de Sainte-Pallaye. *Bulletin de la Société Préhistorique Française* 55, p. 133-34.
- Childe, V. G., 1940. *Prehistoric Communities of the British Isles*. London.
- Childe, V. G., 1957. *The Dawn of European Civilisation*. London.
- Chmielewski, W., 1952. *Zagadnienie Grobowców Kujawskich w świetle ostatnich badań*. Łódź.
- Clark, J. G. D. & H. Godwin, 1962. The Neolithic in the Cambridgeshire Fens. *Antiquity* 36, p. 10-23.
- Crawford, O. G. S., 1925. *The Long Barrows of the Cotswolds*. Gloucester.
- Crawford, O. G. S. & A. Keiller, 1928. *Wessex from the Air*. Oxford.
- Driehaus, J., 1960. *Die Altheimer Gruppe und das Jungneolithikum in Mitteleuropa*. Mainz.