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Building for the Dead: Events, Processes and Changing Worldviews from the Thirty-eighth to the Thirty-fourth Centuries cal. bc in Southern Britain

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Our final paper in this series reasserts the importance of sequence. Stressing that long barrows, long cairns and associated structures do not appear to have begun before the thirty-eighth century cal. bc in southern Britain, we give estimates for the relative order of construction and use of the five monuments analysed in this programme. The active histories of monuments appear often to be short, and the numbers in use at any one time may have been relatively low; we discuss time in terms of generations and individual lifespans. The dominant mortuary rite may have been the deposition of articulated remains (though there is much diversity); older or ancestral remains are rarely documented, though reference may have been made to ancestors in other ways, not least through architectural style and notions of the past. We relate these results not only to trajectories of monument development, but also to two models of development in the first centuries of the southern British Neolithic as a whole. In the first, monuments emerge as symptomatic of preeminent groups; in the second model, monuments are put in a more gradualist and episodic timescale and related to changing kinds of self-consciousness (involving senses of self, relations with animals and nature, perceptions of the body, awareness of mortality and attitudes to the past). Both more distant and more recent and familiar possible sources of inspiration for monumentalization are considered, and the diversity of situations in which mounds were constructed is stressed. More detailed Neolithic histories can now begin to be written.

The papers in the rest of this volume have presented a robust methodology for constructing much more precise interpretive chronologies and an important set of new estimates for the dates of the development and use of long cairns and long barrows in central-southern Britain. The construction of such chronologies has required archaeological interpretation throughout, as the papers have sought to stress. The process of interpretation should not stop with the individual sites. Each has already been discussed, largely in terms of immediate consequences for the monument in question and its local setting. Although the dates from only five monuments have

been presented, we have the further timely opportunity here to reflect more widely on the implications of the dating programme as a whole. These results should contribute to changing many of our current approaches to a whole series of questions. When such monuments appeared in the context of the early development of the southern British Neolithic, who was involved in their building and use, and for how long, what worldviews and social interactions such monuments may have created and maintained, and where the ideas driving such agency came from, can all be reconsidered in the light of a better understanding of date and sequence.



Figure 1. Map of principal sites and monuments discussed from southern Britain.

A plea for time

Chronology is not an optional extra nor should it be seen as the preserve of myopic specialists in either scientific or material culture fields. It lies at the heart of better understanding of agency, of locating what people in the past did at particular times and places. 'Agency is the means by which things are achieved ... human agency operates knowledgeably and reflexively ... Agents do not appear upon the historical stage as a given, rather they make themselves within and through their own specific social and cultural conditions', as John Barrett has put it (2001, 141). Earlier generations of researchers in Britain perhaps intuitively understood this better than some of their more recent successors. While typology alone is not enough, since form or style may vary according to a complex of factors beyond the mere passage of time (Whittle, Bayliss & Wysocki this issue), at least the generation active from the 1930s to 1950s did the best it could to

set monuments in their chronological sequence. The scheme of Grimes for Cotswold monuments (1960, fig. 37; cf. Grimes 1939, fig. 8) stands as a perfect example of what some scholars were attempting up to the early years of the first radiocarbon revolution, even if the scheme could now be seen as back-to-front and wrong in some details. Up till now, most radiocarbon dating for monuments of the kinds discussed in this series of papers has been very imprecise, placing most sites, as Kinnes has accurately noted (1992, 120), little more precisely than in the fourth millennium cal. bc (compare Darvill 2004, figs. 32–3). Without needing to go into detail (and see Bayliss, Bronk Ramsey *et al.* this issue), it can be noted that many processual explanations have been temporally also very general, seeking to establish the character of monuments as involved with particular territories, for instance, or as reflecting particular social formations within very broadly defined periods (e.g. Renfrew 1976; 1979). In turn, many post-processual interpretations have

laid major emphasis on agency and especially experience, but have been largely content to let such monuments float free of the messy business of sequence, development, replacement and particular contexts, even when interpretation has been restricted to individual monuments rather than perceived groups or classes (e.g. Thomas 1991; Edmonds 1999).

Fortunately, there has also been an enduring strand in British Neolithic studies of continued thinking about sequence. We can see it in the work of such diverse authors as Corcoran (1969), Ashbee (1970), Kinnes (1979; 1992), Herne (1988), Cleal (2004), and A. Barclay (2000; 2006), right through to the recent suggestion of Darvill (2004, 11, 66–7, & fig. 33) that Cotswold monuments may have appeared rather abruptly around 3700 cal. BC, or at any rate after 3800 cal. BC. This can be set alongside the claim of Oswald *et al.* (2001, 3, fig. 1.2; cf. A. Barclay 2006; Russell 2002) that causewayed enclosures in southern Britain may have appeared from the thirty-seventh century cal. BC onwards. So we make no claim that we are the first in recent times to try to think about sequence in a more detailed fashion. We do claim, however, that the results presented here (and others to follow in due course on other barrows and cairns, on the one hand,¹ and on causewayed enclosures, on the other²) begin to offer the foundations for a credible timetable for one part of the southern British Neolithic.

Cast in order of appearance

Our preferred timetable for the major events in the histories of the five southern British monuments (Fig. 1) examined in detail in this series of papers is shown in Figure 2. The reader coming to this paper first is referred to our opening paper (Bayliss, Bronk Ramsey *et al.* this issue) for explanation of the Bayesian approach to chronological modelling used here, and to the individual papers for the individual site sequences and the notations employed. In referring to date estimates for the individual sites and for inter-site comparisons,

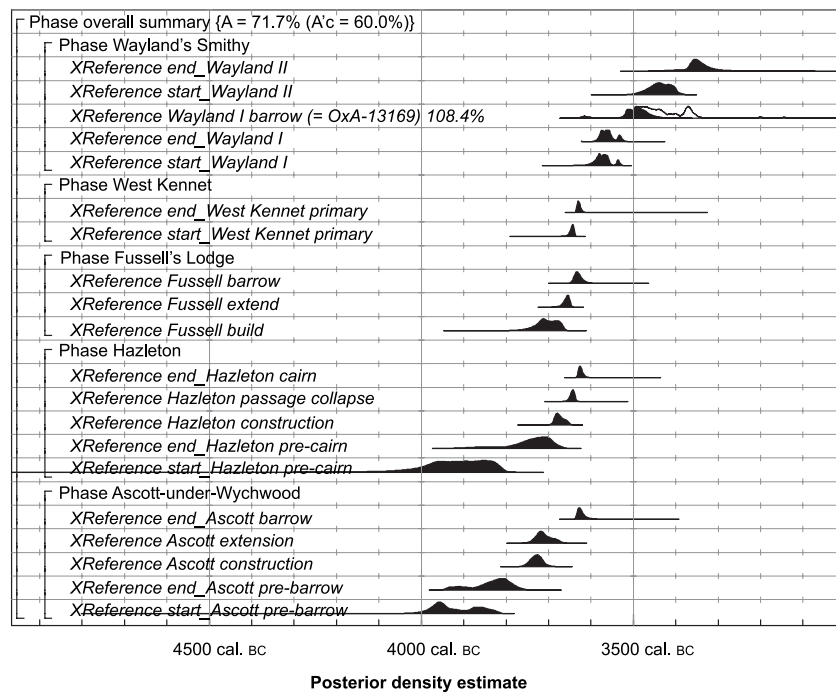


Figure 2. Probability distributions of dates of major archaeological events at the sites studied in detail in this series of papers (note that some of the tails of these distributions have been truncated to enable detailed examination of the highest areas of probability). The estimates are based on the preferred chronological models defined by Bayliss, Benson *et al.* (this issue, figs. 3, 5–7), Meadows *et al.* (this issue, figs. 5–9), Wysocki, Bayliss & Whittle (this issue, figs. 10–11), Bayliss, Whittle & Wysocki (this issue, figs. 4–7) and Whittle *et al.* (this issue, figs. 4–5).

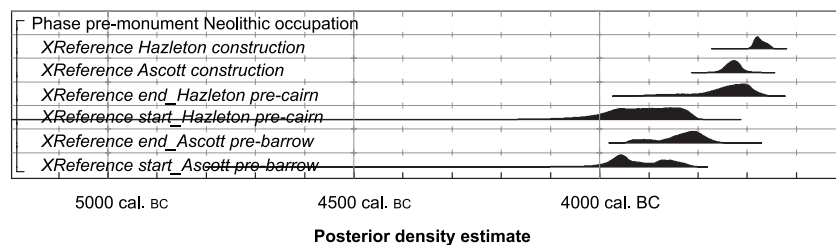


Figure 3. Probability distributions of dates for pre-monument Neolithic occupations at Ascott-under-Wychwood and Hazleton. The format is identical to that of Figure 2.

we are using the preferred model in each case, as set out in the five preceding papers of this issue. It can be seen that although pre-monument Neolithic activity is evidenced during the first quarter of the fourth millennium cal. BC (Fig. 3), none of the monuments was constructed before the second half of the thirty-eighth century cal. BC (Fig. 4).

Table 1 shows the percentage probabilities for the sequence of construction of these monuments (and see Table 2). It is very likely that Ascott-under-Wychwood

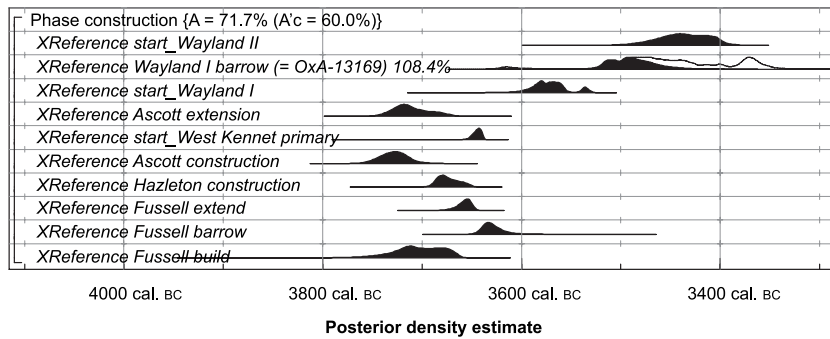


Figure 4. Probability distributions of dates for monument construction. The format is identical to that of Figure 2.

was the first to be built (80% *probable*), with only a small uncertainty (19.9%) as to whether the Fussell's Lodge mortuary structure was built slightly earlier. After the initiation of these two sites, Hazleton was constructed (85.7% *probable*). This occurred 20–95 years after the initial construction of the Ascott-under-Wychwood long barrow (95% *probability*; *Ascott/Haz*: Fig. 4), probably 35–75 years later (68% *probability*). Probably only a generation or two after the construction of Hazleton, West Kennet was built (although this estimate is based only on primary human remains in the chambers). This was 1–55 years later (91% *probability*) or 110–135 years later (4% *probability*); *const WK/Haz*: Fig. 4), or 15–45 years

later (68% *probability*). It is very likely (93.9% *probable*) that the first phase of Wayland's Smithy (the mortuary structure) was then constructed, and certain that Wayland's Smithy II was the last of these monuments to have been constructed (100% *probable*).

Though the sample is very small, the estimated dates presented here therefore make it unlikely that long barrows and long cairns appeared in southern Britain before 3750 cal. BC (87.7% *probable*) (Figs. 1–3). Other related monuments could

of course have been constructed earlier than this, but we have no reliable evidence that they were. Within the Cotswolds, rotundae and portal dolmens have been suggested as earlier than Cotswold long cairns and barrows as a whole (most recently by Darvill 2004, ch. 2), but there is no certainty at present that this was so. Rotundae (in the case of Sale's Lot underlain by a timber structure: A. Barclay 2000) underlie transepted or other terminal chambered monuments which may themselves not be the earliest form of Cotswold monument (and see below), and they could be seen as some kind of monumentalization of those middens which underlie some lateral chambered Cotswold

Table 1. Percentage probabilities of the relative order of the initial constructions of each of the six monuments considered in detail in this series (counting Wayland's Smithy twice). The cells show the probability of the distribution in the left-hand column being earlier than the distribution in the top row. For example, the probability that Ascott construction is earlier than Fussell build is 80.1%. For the detail of the Bayesian parameters, see the individual papers in this series.

Bayesian parameter	Ascott construction	Fussell build	Hazleton construction	start_West Kennet primary	start_Wayland I	start_Wayland II
Ascott construction	-	80.1	99.9	100	100	100
Fussell build	19.9	-	87	99.8	100	100
Hazleton construction	0.1	13	-	98.7	100	100
start_West Kennet primary	0	0.2	1.3	-	93.9	100
start_Wayland I	0	0	0	6.1	-	100
start_Wayland II	0	0	0	0	0	-

Table 2. Percentage probabilities of the relative order of the endings of each of the six monuments considered in detail in this series (counting Wayland's Smithy twice). Note that the definition of endings varies (e.g. for Ascott-under-Wychwood this is the final mortuary deposit, whereas for Fussell's Lodge this is the building of the barrow). The cells show the probability of the distribution in the left-hand column being earlier than the distribution in the top row. For example, the probability that Fussell barrow is earlier than end Hazleton cairn is 73.7%. For the detail of the Bayesian parameters, see the individual papers in this series.

Bayesian parameter	Fussell barrow	end_Hazleton cairn	end_West Kennet primary	end_Ascott barrow	end_Wayland I	end_Wayland II
Fussell barrow	-	73.7	60.6	72	99.8	100
end_Hazleton cairn	26.3	-	26.9	49.6	99.1	100
end_West Kennet primary	39.4	73.1	-	68	98.2	100
end_Ascott barrow	28	50.4	32	-	98	100
end_Wayland I	0.2	0.9	1.8	2	-	100
end_Wayland II	0	0	0	0	0	-

monuments, including Ascott-under-Wychwood and Hazleton (Bayliss, Benson *et al.* this issue; Meadows *et al.* this issue). While it has been suggested that some portal dolmens in the west and in Ireland may be early (Cooney 2000; Cummings & Whittle 2004; cf. Sheridan 2004), it is far from clear that all or indeed any are very early; and while some of the west Welsh examples do have finds of Carinated Bowl pottery, we cannot yet say definitely in any one case whether the monument predates *c.* 3750 cal. BC. (Both Ascott-under-Wychwood and Hazleton have Carinated Bowl assemblages, now dated to the thirty-eighth to thirty-seventh centuries cal. BC.) So-called oval barrows (or shorter long barrows), such as the mound of Wayland's Smithy I has been classified, have also been seen as a potentially earlier form by Darvill (2004, 52–6), but as shown by Whittle, Bayliss & Wysocki (this issue), Wayland's Smithy I is probably no earlier than the earlier thirty-sixth century cal. BC.

We have made preliminary Bayesian assessments of the dates provided by Kinnes (1992) and Darvill (2004; cf. Scarre *et al.* 2003) for both megalithic and earthen monuments south of a line drawn westwards from the Wash; we leave earthen long barrows in Lincolnshire and Yorkshire out of the account here. We will discuss this further elsewhere, although few other sites in this southern area are well dated, and all are conformable with the pattern seen in the dates presented in this series of papers, with beginnings no earlier than *c.* 3750 cal. BC. Lambourn (Schulting 2000) probably belongs in the earlier part of the thirty-seventh century cal. BC. Other earthen long barrows belong in the thirty-seventh and thirty-sixth centuries cal. BC, including Nutbane. Beyond the data given by Kinnes and Darvill, modelling of results from the Long Mound at Raunds, Northamptonshire, using samples preceding and following its construction, estimates use in the period between 3940–3780 cal. BC, although this monument cannot be regarded as precisely dated (Harding & Healy forthcoming; Frances Healy pers. comm.). The Haddenham long barrow can be placed by wiggle matching in the second half of the thirty-seventh or the first half of the thirty-sixth centuries cal. BC (Morgan 2006). The more southerly of the two long barrows on Hambledon Hill probably dates to the earlier or middle parts of the thirty-seventh century cal. BC (Mercer 2004; Healy 2004, fig. 3). Coldrum in Kent (Bennett 1913; Jessup 1970) has radiocarbon dates on human bone samples going back to the fortieth or thirty-ninth centuries cal. BC but it is unclear whether these date the construction of the monument.³ Further afield, Whitwell long cairn in the Peak district of Derbyshire was first published with dates going as far

back as the late fifth or very early fourth millennium cal. BC (Schulting 2000, 30) but has now been dated on fresh samples to a rather later phase: probably starting in the first half of the thirty-eighth century cal. BC.⁴

The point need not be laboured over wider regions still, but over Britain and Ireland as a whole it would appear that there is still little convincing evidence for monumentality of this kind before *c.* 3750 cal. BC (cf. Scarre *et al.* 2003). Claimed earlier dates (such as for Carrowmore, Co. Sligo) are generally on wood charcoal and samples may be residual or subject to an old wood effect (cf. Scarre *et al.* 2003).

The consequences of a timetable

These patterns, if they can be further reinforced in the future, have immediate implications. They may suggest, on the one hand, that the initiation of an interest in the collective remains of the dead and in their monumental commemoration did not belong to the context of the Mesolithic–Neolithic transition itself, but could have been something that developed after the Neolithic had begun (perhaps around 3900 cal. BC, or possibly in some regions even earlier). That is not necessarily a pattern to be seen everywhere in northwest Europe. In Brittany for example, there may have been a more continuous development of graves, middens, cists, standing stones and cairns over the Mesolithic–Neolithic transition and into the very first centuries of the Neolithic (Scarre 2002), while something of the same may also be found in Denmark and south Sweden, though built monuments there may also not belong to the very first phases of the Early Neolithic (Madsen 1979; 1993; see Fischer & Kristiansen 2002; Larsson 2002; in press). These are complex issues, and need complex treatment elsewhere (Whittle & Cummings in press). On the other hand, it may yet be, given the poor dating generally available for the Mesolithic–Neolithic transition in Britain and Ireland, that in some areas at least, Neolithic occupation did not long precede the thirty-eighth century cal. BC. The dating established for Ascott-under-Wychwood and Hazleton, however, demonstrates (Figs. 2–3) the presence of diagnostically Neolithic activity certainly in the thirty-ninth century cal. BC and probably in the fortieth century cal. BC (see also Bayliss, Benson *et al.* this issue, p. 32, fig. 3; Benson & Whittle 2006; Meadows *et al.* this issue, p. 51, fig. 6), but the wider point perhaps remains open. Flint mines in southern Britain have also produced some early dates (Barber *et al.* 1999), though these often appear to be outliers and warrant further examination.

It also follows from the site chronologies offered here that construction of some monuments continued

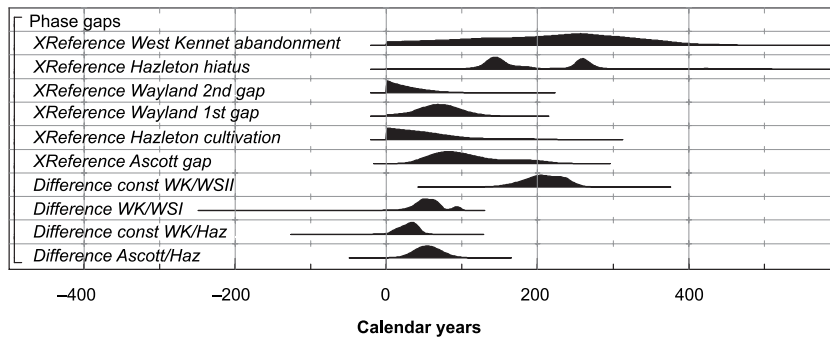


Figure 5. Probability distributions of the number of years between various activities on these sites. The format is identical to that of Figure 2.

till at least the thirty-fifth century cal. BC (Fig. 4); this is seen specifically in the building of Wayland's Smithy II, with its use coming to an end in the thirty-fourth century cal. BC (Whittle, Bayliss & Wysocki this issue). We can now offer much more reliable support for a variety of credible patterns in the development of barrows and cairns.

Occupations, including middens, preceded monuments at Ascott-under-Wychwood and Hazleton, and go back to certainly the thirty-ninth century cal. BC (Fig. 3), and in the case of Ascott-under-Wychwood, probably back to the fortieth century cal. BC. At Hazleton we have firm archaeological evidence for an episode of cultivation between the end of this pre-monument occupation and the construction of the cairn (Saville 1990, 240), and we estimate this activity to have endured for between 1–185 years (95% probability; Hazleton cultivation: Fig. 5), or 1–75 years (68% probability). Because of the limited number of measurements currently available from the pre-cairn occupation at Hazleton (Meadows *et al.* this issue), our estimate for the duration of this period of cultivation is imprecise. Figure 5, however, demonstrates that the period of cultivation is likely to have been fairly short. At Ascott-under-Wychwood, we have firm archaeological evidence for a hiatus at some point in the sequence in the form of a turfline which had formed by the time the long barrow was built (Bayliss, Benson *et al.* this issue). Precisely where in the sequence this came is a matter for archaeological interpretation. In our preferred interpretation, it followed occupation and midden formation, and lasted for 35–215 years (95% probability; Ascott gap: Fig. 5), or between 45–140 years (68% probability). Once again, this distribution is skewed towards a shorter period, although it is 93.6% probable that this gap lasted more than 50 years.⁵

There is no support yet for independent (free-standing and unmounted) mortuary structures before c. 3750 cal. BC (Fig. 4). Even in our slightly less

preferred second model, the mortuary structure at Fussell's Lodge is no earlier than the thirty-eighth century cal. BC (Wysocki *et al.* this issue, p. 79, fig. 12), while that of Wayland's Smithy I probably dates to the earlier thirty-sixth century cal. BC. We can also note here again the dating of the Hambledon Hill long barrow to the thirty-seventh century cal. BC (Mercer 2004; Healy 2004, fig. 3), even though we do not know anything of its contents, and the wiggle-matched date of the second half of the thirty-seventh century BC or the first half of the thirty-sixth century BC for the wooden mortuary structure within the Haddenham long barrow (Morgan 2006).

As suggested by others (including Darvill 1982; 2004; Thomas 1988; Saville 1990), it seems very likely that lateral chambered Cotswold monuments precede transepted chambered ones, reversing the much older ideas of Daniel (1937) and others (e.g. Grimes 1939; 1960). The evidence offered here for this is admittedly a little scanty, boiling down to a comparison of Ascott-under-Wychwood and Hazleton with West Kennet and Wayland's Smithy II, but we could add the dates from two other transepted monuments in further support: from Millbarrow (in the second half of the fourth millennium cal. BC: Whittle 1994) and perhaps also those from Parc le Breos Cwm (in primary use probably in the thirty-seventh to thirty-sixth centuries cal. BC: Whittle & Wysocki 1998). Within the transepted style, could there be a case for seeing the provision of more chambers as an earlier feature, as at West Kennet, and fewer chambers, as at Wayland's Smithy II, as a later feature? The sample of well-dated sites remains small.

There could be overlap between these two styles of Cotswold monument, since there were perhaps only a couple of generations between the construction of Hazleton on the one hand and West Kennet on the other (*const WK/Haz*: Fig. 5). Within the lateral style, Ascott-under-Wychwood appears now a little earlier — by two or three generations — than its near neighbour Hazleton (*Ascott/Haz*: Fig. 5). There are significant details at each site which in retrospect could have acted as clues to this close chronological relationship, even if the relative order of the two sites would not have been apparent from them. There are many very detailed similarities between the two monuments; the layout of each is a mirror image of the other, including the position of the middens in relation to cists and chambers, and to barrow and cairn.⁶

But there are also subtle differences, including the more angled chambers and zoned passages at Hazleton (and note subtle differences within Hazleton, between the contemporary chambers and passages on each side of the monument).

Within these continuities and overlaps, there were also punctuated histories. The Ascott-under-Wychwood long barrow was extended probably within a generation of its initial construction (Bayliss, Benson *et al.* this issue, p. 39, fig. 13; *extend*).

The mortuary structure at Fussell's Lodge may have been extended between one and three generations after its initial construction (Wysocki *et al.* this issue, p. 78, fig. 11; *first_box*). At Wayland's Smithy, there was a gap of probably 40–100 years between the construction of the mortuary structure and its covering by the first mound (*Wayland 1st gap*: Fig. 5). After this at Wayland's Smithy, a second, probably shorter, period of disuse followed, before Wayland's Smithy II was constructed (*Wayland 2nd gap*: Fig. 5). Hazleton looks different, being built (following the excavator) more or less in one go. There has not been enough excavation at West Kennet for us to have caught this kind of detail. From these figures, our monuments often emerge as the scenes of intense but finite building activity. These bouts of construction were interrupted by episodes when the focus shifted elsewhere, but over spans of time that would have seen the continued presence of living witnesses and participants. This view of the monuments in many ways makes more sense in terms of human agency than the alternative of long, drawn-out building projects (though of course some monuments were subject to modification or major rebuilding, seen most clearly at Wayland's Smithy). In this sense, the construction of mortuary monuments was possibly a much more immediate, goal-oriented project than has been suggested for causewayed enclosures (discussed further below).

Much of the same kind of temporality can be seen in the duration of human bone depositions (Fig. 6). All the mortuary structures, chambers and cists in question seem to have been used for the deposition of human remains for a century or less. The earlier monuments (Ascott-under-Wychwood and Fussell's Lodge mortuary structure) seem to have been in use for slightly longer than the others, perhaps for around a century or a span of three to five generations. Our knowledge of the use of the transepted chambers at Wayland's Smithy is severely restricted by the limited

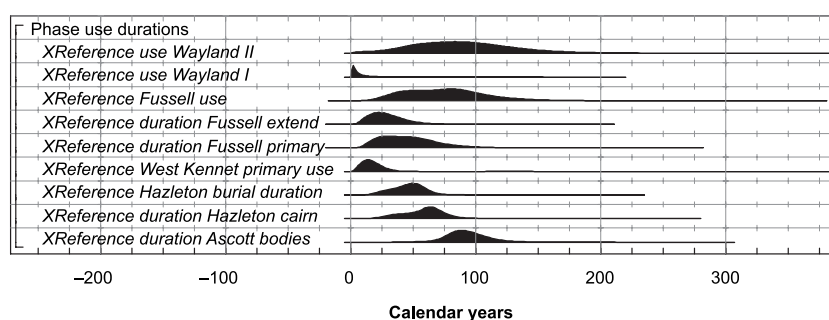


Figure 6. Probability distributions of the number of years during which various activities occurred on these sites. The format is identical to that of Figure 2.

material available, although this too may have been in use for a similar period of time. By contrast, the chambers and passages at Hazleton appear to have been used for deposition over two to three generations, and the chambers at West Kennet were used for little more than a single generation. The period of burial at Wayland's Smithy I was even briefer: quite probably less than a generation and not inconceivably relating to a single event. Such brevity in the mortuary rites at these monuments has been revealed and quantified by the dating programmes reported here, confirming a suggestion first made by Saville (1990) with reference to Hazleton. We return to its significance below.

The dominant rites at these monuments seem to have involved successive depositions of whole bodies. The probability distributions relating to the durations of the use of these mortuary areas clearly peak after a decade or more of use; they do not decline from a most probable value of a year or less as would be the case if they were used for only one depositional event (Fig. 6). This indicates a period (short or shorter) of successive depositions, rather than a single event when the remains were deposited in the tomb (the exception is Wayland's Smithy I: see Whittle *et al.* this issue). Articulated or articulating remains are evidenced at all our sites except Fussell's Lodge (and see note 2 in Wysocki *et al.* this issue, p. 82). Whether there are further temporal patterns within this trend is hard to say, given the size of our sample. There are probably some ancestral remains within the first phase of the mortuary structure at Fussell's Lodge, in the thirty-eighth century cal. bc, but the one or two remains subjected to carnivore scavenging in Wayland's Smithy I, which may well also be remains not deposited directly into the mortuary structure, belong to the earlier part of the thirty-sixth century cal. bc. Probably the latest depositions of human remains at Ascott-under-Wychwood are in the southern outer passage area, dating to the 3640s and 3630s cal. bc. These show a perhaps greater

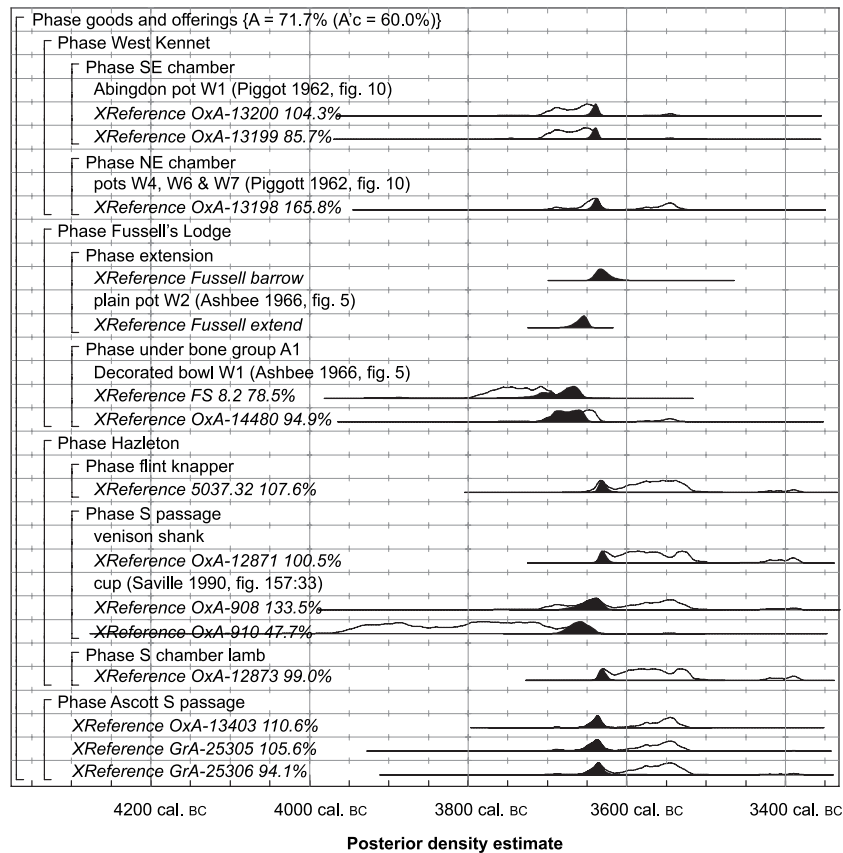


Figure 7. Probability distributions of dates associated with the deposition of various goods and offerings in these monuments. The format is identical to that of Figure 2.

degree of incompleteness and disarticulation than others in that monument. It may be no coincidence that in the slightly later monument of Hazleton as a whole there were more remains which also ended up in a disarticulated state, even though bodies continued to be interred initially complete, certainly on its north side (Saville 1990) and probably on its south side too (Darvill 2004, 149–50). But whether there is a trend towards more intensive treatment of the dead after deposition as time goes on, and if so, whether this is any more than a merely local trend, is hard to say. Cremations have been documented at Ascott-under-Wychwood and West Kennet, both in later rather than earlier stratigraphic contexts, whereas cremated bone was found in the top of Pit B at Fussell's Lodge, in an early context in the monument. Among our sites, only Fussell's Lodge shows remains rearranged to produce an appearance of completeness.

So there is diversity within the dominant rites, and this may be connected to the particular moments and events surrounding the deposition of human remains through the relatively brief lives of these

monuments. In two cases, though other factors such as architectural compartmentalization must come into consideration, we can begin to think about a possible relationship between numbers interred and the spans of time across which they were deposited. Forty or so people were put into Hazleton over two to three generations, and their remains ended up in considerable disarray; 20 people were deposited in Ascott-under-Wychwood over three to five generations, and while there is diversity of treatments, their remains retained more articulation than at Hazleton. Is intensity of treatment therefore related in some way to brevity of history and numbers involved? The more interments there were, the less space would have been available for manoeuvre and deposition, and the more frequent the potential for disturbance from people moving in and out of chambers.

A final feature of interest is that we have generated specific estimated dates for the deposition of a range of material items other than human bone (Fig. 7), within the context of the deposition of modest numbers of

artefacts in chambers, cists and mortuary structures as a whole (Darvill 2004, 165–72). The dating of the pre-barrow and pre-cairn assemblages of Carinated Bowl pottery at Ascott-under-Wychwood and Hazleton is important in a national context, since there have been few other opportunities to obtain precise dating from closed contexts. The comparable pottery from the Sweet Track, whose construction was tree-ring dated to 3807/6 BC (Coles & Coles 1986) is the only other southern assemblage securely dated so far. A plain, heavy-rimmed vessel (very different from the pre-barrow Carinated Bowl assemblage) placed at the back of the southern outer passage at Ascott-under-Wychwood (Barclay & Case 2006) probably dates to or just before the 3640s or 3630s cal. BC. At Hazleton, deposition of the hammerstone in the hand of skeleton 1 in the north passage (Saville 1990, 103), the roe shank from the south passage (Saville 1990, 105) and the lamb from the south chamber (Saville 1990, 105), dates to the 3630s or 3620s cal. BC; since the latter two are perhaps a decade or two later than the human remains in these areas, perhaps they can best

be regarded as offerings rather than grave goods (Meadows *et al.* this issue). The shouldered, decorated bowl of Mildenhall style (Ashbee 1966, 17, fig. 5, W1)⁷ found with other vessels under Bone Group A1 at Fussell's Lodge should date probably before 3650 cal. BC, while the plain cup with Bone Group D (Ashbee 1966, fig. 5, W2) in the secondary phase of the mortuary structure in our preferred model for Fussell's Lodge now dates to before the 3640s or 3630s cal. BC.

The decorated 'Abingdon-style' bowl from the area of skeletons IX and X in the SE chamber at West Kennet (Piggott 1962, fig. 10, w1) dates to the 3640s–3630s cal. BC, and the rimsherds from a concentration nearest to skeleton I in the NE chamber (Piggott 1962, fig. 10, w4, w6 & w7) date to the same time. The sample is again very small, and it remains to be seen whether there is wider significance in the possibility indicated for a shift in interest in material depositions in the later thirty-seventh century cal. BC; on one hypothesis noted above, this would be parallel to the early decades of the phenomenon of causewayed enclosures, where material depositions were such a marked feature.

Dramatis personae: the quick dead

The dates presented here thus contribute to a significant improvement in the reliability of our understanding of the development of monuments in the first centuries of the southern British Neolithic. We can begin to think in terms of writing much more detailed Neolithic histories, and should look ahead to achieving this for a series of regions, both within central-southern England (it should be possible in due course to compare developments in the Cotswolds with, say, those in the upper Thames valley and the chalk downland) and beyond central-southern England. Even at the present time, however, we can surely go further. The timescales for the use of individual monuments within the chronological framework sketched above have changed with these results. Instead of monuments floating timelessly and seemingly enduring for very long periods of time, we are faced with constructions which were built quickly and were then in use as foci for deposition (and they may have been used of course in many other ways; mere knowledge of their presence in the landscape could have been an important factor influencing local and regional identities and practices) usually for no more than 75 years: three generations or so (Fig. 6). The longest

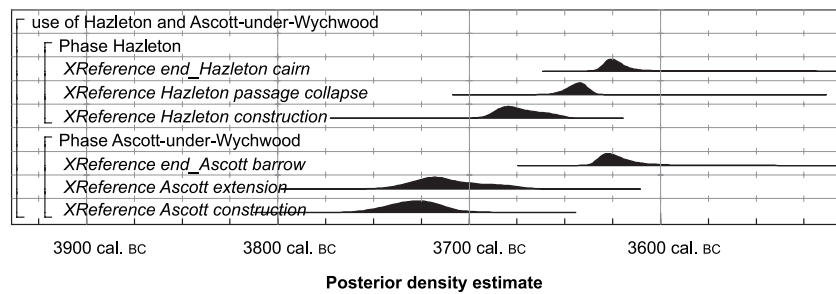


Figure 8. Probability distributions of dates relating to the construction and use of Ascott-under-Wychwood and Hazleton. The format is identical to that of Figure 2.

suggested span of use is four to six generations for the first phase of the primary mortuary structure at Fussell's Lodge in our second, though not preferred, model of its sequence (Wysocki *et al.* this issue). In our preferred model the first phase of the mortuary structure lasts one to three generations and the second phase one to two generations. The duration of Ascott-under-Wychwood is three to five generations, and Wayland's Smithy II may have been comparable. Some monument lives may have been even shorter. The duration of Hazleton was probably only two to three generations. Our preferred models for West Kennet and Wayland's Smithy I suggest that the span of their use may be only one to two generations, and perhaps even within one generation.

In confronting these much more finite initial phases of use, we have chosen to talk elsewhere in terms of the human generation and the human lifespan (Bayliss *et al.* 2006) since these may better convey a sense of limited duration, an accessible and human timescale, and a sense of regular succession. These also help to give specific shape to discussion of the transmission of ideas and to reflection on the nature of personal memory in relation to collective or social memory. The notion of a generation is, however, far from fixed, depending on whether one goes by the earliest possible or likely moment for biological reproduction or by the accepted social norm in given cases for social reproduction and succession. Generations could be measured biologically by the age of female puberty, the span of female fertility and the average age of motherhood, and socially by the transition to full adulthood. Estimates of the span of a generation could therefore be as low as say 15 years, or as high as 25 years or more, taking social considerations into account (Chris Knüsel pers. comm.; see Helgason *et al.* 2003; Slatkin 2004; and references therein). Self-evidently, both average and maximal lifespans must also have varied. We have assumed, perhaps conservatively, that a generation represents 25 years, and

that maximal lifespans in the early Neolithic could have been as much as 75 years, though the average was presumably much shorter.

Even on the conservative estimate adopted here, the generations succeed each other quickly, compared to the overall timespan of the British Neolithic. Four generations per century or two maximal lifespans every century and a half give us measures with which to break down any sense of timeless existence. It is also evident from these timescales that personal memory could be transmitted easily between generations and lifespans. A grandmother 70 years old remembering things told to her when young, as a girl of say ten, by her grandmother, herself then 70, can reach back on the simple time estimates used here up to some 120 years or more. Was the building of Ascott-under-Wychwood witnessed by a child or juvenile who then in old age was able to direct the construction of Hazleton, forgetting only (or perhaps deliberately reversing) the overall orientation? Did a young witness then become responsible for the funeral and mortuary rites of parents or grandparents? In the cases of Ascott-under-Wychwood and Hazleton, both succession and overlap can be documented (Fig. 8). Deposition began in the cists on both the north and south sides of Ascott-under-Wychwood in the second half of the thirty-eighth century cal. BC, and continued into the middle of the thirty-seventh century cal. BC, ending latest perhaps on the south side in the 3640s or 3630s cal. BC. At Hazleton, deposition in the chambers on both sides of the monument dates to between c. 3680 and 3640 cal. BC, whereas in the passages it dates to between c. 3640 and 3620 cal. BC. This recalls the similar span, in a different context, of Aboriginal grandparents pointing out in detail to their grandchildren the material traces of the settlements of their own childhoods (Harrison 2004; cf. Morphy 1995). These measures of time may also serve to increase the reach of collective or social memory, which we discuss further below in relation to the source of the ideas driving the emergence of this phenomenon as a whole.

The kind of Neolithic histories we can now begin to write involve not faceless and timeless agents, but particular people in specific times and places. Who were these people? Were these normally collective deposits a commemoration of anonymous ancestors by their descendants, as often supposed in studies of the British Neolithic (cf. Whitley 2002)? If nothing else, the dates presented here would shorten the timescales in such a scenario, on the one hand hastening the processes of transformation from fleshed corpse to dry and disarticulated bone, and on the other putting commemoration firmly in the hands of immedi-

ate descendants. We can expect decomposition and decay processes, whether in the tomb or at outdoor sites, to result in partial or full disarticulation (loss of connective tissues and cartilage) in as little as a few months and usually within 18 months to two years depending on variables, somewhat longer if burial in the ground is involved (Bass 1997; Clark *et al.* 1997; Galloway 1997; Rodriguez 1997; Roksandić 2002; Simmons 2002; Simmons pers. comm.). The combination of much shorter timescales for the use of these monuments and the frequent signs of articulated or articulating remains strongly suggest that we are often dealing with the successive deposition of more or less intact or not long dead corpses. That is certainly the case (though this is not an argument for complete uniformity of process or rite) at Ascott-under-Wychwood and Wayland's Smithy I, and may be so to some extent at West Kennet (Bayliss, Benson, *et al.* this issue; Bayliss, Whittle & Wysocki this issue; Whittle *et al.* this issue). Remains that ended up being disarticulated were much more in evidence at Hazleton, though we know from the depositions in the outer part of the blocked north passage that intact bodies were being interred in the later stages at least of the life of that monument (Saville 1990; Meadows *et al.* this issue) and were probably also predominant from its start, on both sides of the monument. At Fussell's Lodge, there was certainly re-ordering of disarticulated remains in the suggested first phase of the mortuary structure, with low associated counts of hand and foot bones suggesting that material was already disarticulated and brought in from elsewhere, while in the suggested second phase there was an emphasis on the appearance of completeness of the human remains (Wysocki *et al.* this issue).

So throughout there is a varying combination of remains and likely processes, from fleshed or articulating corpses, to remains that become disarticulated *in situ*, to remains that may have been deposited already incomplete and disarticulated; we do not exclude processes of circulation and removal. As seen in the papers above, we have modelled the possibility that some at least of the incomplete remains (and even complete remains, in the form of mummies or otherwise preserved corpses) were already old at the time of deposition, as would be implied by the long-discussed notion of ossuaries (e.g. Daniel 1950, 106–15). But our results are strongly at odds with the interpretation that old or ancestral remains were frequent inclusions in these deposits. This is definitely so at Wayland's Smithy I, and very probably also at Ascott-under-Wychwood (where an alternative model for this possibility suggested remains only a decade

or two older than cist and barrow construction). It is probably the case at West Kennet. At Fussell's Lodge, our preferred model does include the deposition of some slightly older ancestral remains. At Hazleton, model 3, incorporating ancestral remains, was not preferred, since model 1 has very good agreement and because there is convincing evidence in the human bone assemblage for mainly originally articulated, articulating or paired remains. At best, any candidates for the status of ancestral remains would be hardly older than that of the previous generation (Meadows *et al.* this issue, p. 59, fig. 17). To summarize, even where incomplete and disarticulated remains are in evidence in the deposits of these five monuments, there is little to support their being significantly older than the structures and contexts in which they were placed.

This does not mean that we need to let go of the idea of ancestors altogether (*contra* Whitley 2002), but we can now refine the notion in several ways. First, we can suggest in the light of the chronologies presented here that these monuments were normally left alone, following bouts of intense activity and interest, after quite short periods. It is unlikely that they were instantly forgotten, but the times came when particular monuments were seen as complete or when circumstances were no longer appropriate for continued building, alteration or deposition by the particular people concerned. At this point, both completed monuments and the remains they contained could have been regarded as ancestral, when their active histories had largely been played out. We have identified some slightly later episodes of deposition, which may reinforce this point: the rib 3705 at Hazleton and the depositions at the start of the secondary fill at West Kennet, from the last part of the fourth millennium cal. bc, and the rather later single deposition in the southern passage area at Ascott-under-Wychwood (BM-1975R).

Secondly, the very form in which building took place may have been regarded as a form of contact with or re-enactment of some dimension of the past. Wherever the idea or ideas driving this phenomenon came from, as we will also discuss further below, the monumentalization of these sites by the construction of mounds and cairns seems to look back. That is not to underplay the significance of the construction process itself, as we also discuss further below (and see McFadyen 2006), but it is to claim that a dimension of these sites is to be found in a sense of layered time: partly experienced in the immediate, visceral present of acts of assembly and construction, of the laying to rest of the still fleshed corpses of intimately known people (and see also Wysocki & Whittle 2000, 599),

but partly played out with reference to other notions and conceptions of the past.

Thirdly, as we suggested in relation to Wayland's Smithy II (Whittle *et al.* this issue), once the tradition of these monuments had got underway from the thirty-eighth century cal. bc onwards, architectural style or form may itself have become a potent means of playing on other ideas of the past. We have argued that since Wayland's Smithy II, dating probably to the middle of the thirty-fifth century cal. bc, was built in a style already old when compared to the date for the construction of West Kennet in the thirty-seventh century cal. bc (an interval of some 200 years or more: Fig. 4), it could have been set up to look ancient, to claim an alignment with the deeds of earlier generations, when so much else was changing rapidly in many parts of central-southern England and beyond. (In making this claim, we are conscious of course that West Kennet and Wayland's Smithy II are not the only two transepted monuments, and that others may well have been built in the interval between them.)

Finally, it is very possible that the situation was far from static over the course of time from the thirty-eighth to the thirty-fourth century cal. bc. We have noted the differences in the treatment of the deposited remains of the dead between the neighbouring sites of Ascott-under-Wychwood and Hazleton, from a greater emphasis on articulated remains to a final appearance of more disarticulated remains. At Fussell's Lodge the sequence is reversed, while both Wayland's Smithy I and West Kennet, later than Hazleton, appear to have had a principal emphasis on complete bodies. Of other sites, the evidence from the transepted monument of Parc le Breos Cwm for primary exposure is also relevant. This lack of clear pattern serves perhaps to complicate the earlier suggestion of Thorpe (1984, 54) that there was a trend to fewer and more complete remains with the passage of time. Unfortunately, circumstances have conspired to rob us of any detailed knowledge of rites in the late situation of Wayland's Smithy II (and also of Millbarrow).

In these various definable senses we have had not too many ancestors but too few. While the more or less distant past or pasts can thus be retained as one dimension of these monuments, we need to return to the suggested intimacy of the histories in question, to the treatment and remembrance of immediate forebears. The re-assessment of numbers of people in these deposits is directly relevant here, which has produced estimates approximately half those previously made (Wysocki & Whittle in prep.; Galer 2006; *contra* Darvill 2004, 144, table 1). While we do not exclude the possibility in the case of Wayland's Smithy I of an unusual,

perhaps even instantaneous situation caused by illness, injury or inter-personal violence (Whittle *et al.* this issue), it looks as though we are dealing with the successive deposition of relatively small numbers of people, in total from around 15 to 40, over a maximum of five generations and probably normally fewer (Fig. 4). What was the social unit concerned, and indeed was there a recurrent form of sociality being expressed?

Wayland's Smithy I stands out for its predominance of adults and males, though even here adult females and one child are represented, and very similar circumstances are evident to the west of the Severn, in chamber NE II, Penywyrlod (Talgarth) and at Pipton (Wysocki & Whittle 2000), while the West chamber at West Kennet also contained predominantly adult males⁸ (Thurnam 1860; Wysocki & Whittle *in prep.*). Elsewhere, conforming with the patterns long observed, we have to do with varying combinations of men, women and children. Much still eludes us about the rules of selection and representation. We cannot exclude the often and variously considered possibility that these collective deposits are the expression of some kind of social elite (cf. Childe 1940, 40; Atkinson 1968; Shanks & Tilley 1982), now made even more exclusive by the timescales presented here, but equally we cannot argue for this hypothesis alone. Even on the shorter timescales given here, it is clear that we are not dealing with complete social units or all the members of even some nuclear family unit over two to five generations (*contra* Darvill 2004, 164–5, fig. 67). It is also unclear whether we are dealing with incomplete representation of one defined social unit such as a family (however that might be defined), or of several, or whether kinship, residence or some notion of status, rank or descent was the ordering principle at work. We especially do not understand the difference between the chambers or cists of laterally chambered Cotswold monuments (cf. A. Barclay 2000). What is the significance of opposed chambers and cists, as at Hazleton and Ascott-under-Wychwood? Are these part of an architectural symmetry only, or do they project divisions or categorizations (such as families, lineages, clans, moieties, or simply residence groups) within whatever social units are involved? We also understand poorly the distinctions within transepted chambers. Though their proximity, and in the case of West Kennet their belonging to the same generation (Bayliss, Whittle & Wysocki this issue), encourage us to think of them as some kind of unity, subdivided for example along lines of age and gender (as suggested for West Kennet by Thomas & Whittle (1986; cf. Thomas 1988)), even this could be called into question. And, if the dating results obtained here are

applicable to other sites, it brings into even sharper focus the question of why some chambers are full of human remains, while others in the same monument are empty, or nearly so.

In this impasse, which may be resolved only when and if reliable analysis of genetic relationships becomes possible, we perhaps have to fall back on the range of ages and the presence of both sexes, and above all on the presumed concern for categorization that these deposits seem to represent. The best clues may rest in the details. One of the first people deposited in Ascott-under-Wychwood, in the southern inner cist, was a juvenile (Individual A1) who had suffered problems with an abscess on one side of the face (Galer 2006; Bayliss, Benson *et al.* this issue, p. 36, fig. 7). One of the last people deposited there was an older woman, interred alone in the northern outer passage. The last people on the north side of Hazleton, outside the blockage in the north passage were three adult males (Saville 1990, 103–4). At both these sites, adult and younger people were deposited together, while at Fussell's Lodge and West Kennet there may be more signs of a conscious categorization, at the former perhaps tentatively seen in an evidently separate linear scatter of immature cranial fragments between deposits A2 and B, and at the latter in some degree of separation of child and juvenile remains into the SE chamber and adult males into the W chamber.

Healing and dealing

We cannot claim that the dating programme has of itself produced new insights into the representation of the sociality involved. The rites in question appear to be inclusive in one dimension, drawing in all ages and both sexes (and perhaps not just two genders), though they appear exclusive in other dimensions, since the mortuary populations are so small that some kind of social or ritual principle of selection or separation seems to be in operation. On the other hand, this view needs to be tempered with the results of the dating programme which clearly suggest that in many cases monuments may have been used for only a generation or two of burials, making the selection potentially not nearly as exclusive as usually thought. What the dating programme does underline in a new way is the broader historical context of this phenomenon. Why does it begin only after about 3750 cal. BC, and why were these practices maintained to around the thirty-fourth century cal. BC? We want here to examine again the possibility that we have to do with self-selecting prominent or preeminent groups of some kind, perhaps under particular pressures from competition

for resources or climate change. Against, or perhaps better, alongside such conventional models, based in the end on ideas of response to external stimuli, we can consider also both more gradualist and internalized models, in which change was generated through growing internal consciousness of self and surroundings, over a much more episodic timescale for the kind of events in question.

For the sake of the present argument, let us suppose that the southern British Neolithic began around 3900 cal. bc. This could have been through a combination of small-scale, filtered movement of people from the adjacent continent, and of indigenous people, alert to changes and new resources: takers of opportunities, in Bird-David's term (1990). Although it is often claimed that change, from whatever source, was rather rapid, including the adoption of new material culture, this cannot yet be reliably determined from the available dating. Not least also because of poor chronology, we understand rather little of subsistence and settlement practices in these putative first 150 years.⁹ But we can say from the specific evidence of situations like the pre-barrow and pre-cairn phases of Ascott-under-Wychwood and Hazleton that occupation practices included middening, the construction of small timber structures, the use and deposition of Carinated Bowl pottery, the use (including folding) and consumption of domesticated animals, the use of wild animals, cultivation of cereals, and the acquisition of pottery and lithic material from non-local sources (Benson & Whittle 2006; Saville 1990). At Ascott-under-Wychwood such occupation goes back certainly to the thirty-ninth century cal. bc, and at Hazleton certainly to the thirty-eighth century cal. bc and perhaps to the thirty-ninth. It is worth noting that virtually all the isotopic dietary information presently available from human bone on other sites comes either from the fifth millennium cal. bc (for which very few samples are available) and earlier or from situations dating from the thirty-eighth century cal. bc onwards. But the technique at present only works well in coastal contexts, and many, though not all, of the Neolithic samples are either from inland contexts or from non-monumental coastal contexts. Nevertheless, at present a sharp dietary shift in coastal areas is indicated, and may refer to rapid changes in the lifeways of many communities (M. Richards *et al.* 2003; Schulting & Richards 2002a).

We can suppose that this situation was fluid and dynamic. Identities were far from fixed, and interaction between populations or fractured communities was intense, mediated not least through material culture interchanges. For some people, tenure of land and knowledge of resources were uncertain, for others the

presence of newcomers and new ways of doing things unsettling. The basic environmental setting might also have been unstable, at a scale of centuries. It has been suggested that warming (with higher summer temperatures in a more continental climate) beginning around 4100 cal. bc initially encouraged the spread of agriculture into northwest Europe as a whole (Bonsall *et al.* 2002), while there are clear signs by the thirty-seventh to thirty-sixth centuries bc of a much colder spell in the Alps (Schibler *et al.* 1997).

In this kind of scenario, it would be understandable if more successful, more ruthless or otherwise more preeminent groups established themselves, and sought to display and legitimate their prominence through elaborate mortuary rituals and then even more eye-catching monumental constructions. It would have been hard to ignore a long cairn newly built of limestone: 'brutal and hard', as Darvill has recently put it (2004, 13), though others might have been regarded as beautiful or enchanted. The main beginnings of the phenomenon can now be dated to the thirty-eighth century cal. bc, but if there prove to be other, slightly earlier sites, that would not nullify the model. Thereafter, such preeminent groups continued to construct such monuments, even when causewayed enclosures came in as another form of sociality, putatively in the thirty-seventh century cal. bc, right down to the thirty-fifth century cal. bc or even later. In our preferred dating model, the end of the use of Wayland's Smithy II is set in the thirty-fourth century cal. bc.

Let us try another archaeological model (which can, to repeat, sit alongside as much as against the previous one). Instead of a response to external stimuli, such as competition for resources or climate change, something more subtle, initially internalized, could have been at work, and a different kind of history emerges. We could here suppose that beginnings of change are to be set around 4000 cal. bc, though we could allow them to go even earlier. Again a combination of processes and populations may have been involved, though we could perhaps give greater emphasis to indigenous people. Both Ascott-under-Wychwood and Hazleton were places known to and used by (even if only on a small scale and episodically) indigenous people, and the early Neolithic middening seen at both of them can be traced as a practice back into the Mesolithic as a whole (Pollard 2004b; 2005). In neither case does the scale of activity seem massive, and this can be supported by the nature of early activity at Yarnton and elsewhere in the upper Thames valley (A. Barclay 2006; Hey *et al.* in prep.) and elsewhere in southern Britain. New resources were certainly in

use, but old ways had not been entirely abandoned, as witnessed perhaps by the wild animals present in the midden at Ascott-under-Wychwood (Mulville & Grigson 2006).

We can suppose again that the situation was fluid and dynamic, that identities were still to be fixed, that interaction between groups or communities was unfinished business. But in this model, the scales are different. The numbers of people involved are fewer, neighbours not so close, and empty patches more frequent. The evidence of situations like Ascott-under-Wychwood, Hazleton or Yarnton does not speak for crowded or populous landscapes, and neither Ascott-under-Wychwood in the R. Evenlode valley nor Hazleton on the high Cotswold plateau between the R. Windrush and R. Coln suggest the kind of prime niche that land-hungry pioneers might have fought over. The same might be said of the low-lying location of Yarnton. And we can certainly extend this kind of characterization to the high downland around Wayland's Smithy, and probably also to both the upper Kennet valley and the fringes of Salisbury Plain. The timescale is different too in this model, with things happening rather more slowly, over at least two and a half centuries if not longer (with Ascott-under-Wychwood probably starting not before 3750 cal. BC, and the beginning of the Neolithic possibly preceding 4000 cal. BC).

So in this model a rather different kind of process is at work. New practices may have come in quite quickly — a claim still to be substantiated — but it took much longer for them to be absorbed by a population itself undergoing transformation, of mixed and changing descent and identity (also suggested by Darvill 2004, 70–71). There was much with which to come to terms: new ways of doing things, new socialities, new relationships with animals and nature. If, for the sake of argument (and we are aware that this is an overly simple and homogenizing characterization of the great range of variability that exists in hunter-gatherer societies: see among others, Hayden 1994), sociality was previously based around an ethic of sharing and generosity and relationships with animals and nature were previously based around notions of dependence and trust (Ingold 2000, chs. 3–5), much would have changed after or by 4000 cal. BC to present alternatives: to produce for oneself, to accumulate, to begin to dominate. And with such changes, in this model, could have come guilt (Whittle & Pollard 1999; Whittle 2003, ch. 4; cf. Eliade 1960), but also a new kind of self-consciousness of a world with more sharply defined past and future, in part conditioned by the planning and investment inherent in cereal cultivation

and animal tending, and with gradually more defined boundaries, in the form of more neighbours, allies and perhaps enemies. This could also be seen as a world with more uncertainty: about the failure of crops, the susceptibility of stock to disease, increased opportunity for social inequalities, or envy and theft.

In this model, the stimuli for change are still partly external, but are in large part also internalized, as people sought to come to terms with the changed circumstances of existence. The new mortuary and monumentalizing practices of the thirty-eighth century cal. BC onwards can be seen as a sort of psychological healing, a transference of worry and doubt (Whittle 2006; drawing on Evans 2005). The chosen media were treatment of the dead and monumental relations with the past. The difference with what lay under the monuments at Ascott-under-Wychwood and Hazleton may be particularly instructive. There in the middens, there is clear evidence for activity and interaction among the living: the keeping and consumption of animals, trampling, digging and disturbance, burning of fires, and the use and deposition of pottery. On the old land surface at Hazleton there were also a few scattered human remains, including a fragment of human skull from the hearth by the timber structure (Saville 1990, 16, and Hazleton North archive). In the construction of these two monuments, there is an ongoing process of assembly of a kind directly reminiscent of the middens themselves, which appear to have been very carefully and deliberately incorporated into specific spatial relationships under barrow and cairn (Benson & Whittle 2006; McFadyen 2006), but other things change: hard stone instead of organic midden components, and the human dead now presented on their own.

That the dead should now be the focus for treatment should not be taken for granted, as it so often is. We do not need to set aside entirely the comparative evidence for some link between formal disposal areas, corporate descent groups and scarce resources (Morris 1991, discussing the Saxe-Goldstein hypothesis 8), but the exceptions have been well demonstrated (Morris 1991). In this case of central-southern England neither corporate descent groups nor scarce resources as such may be the key issues. A subtler view of competition is certainly permissible, in which factors such as patches of good pasture in a still forested landscape, or access to cattle when probably not every community would have large, stable herds free from periodic disease, predators or unseasonable weather, could have been important. And competition for preeminence may have been occurring largely within the local area, so that a filled landscape is not necessarily required. In

that case monuments would act not as territorial markers, but as some kind of advertisement for the ability of a sub-group within the local community or area to organize and sponsor the construction of a monument. But these qualifications accepted, focus on the dead seems to point us in this case in another direction, of consciousness of self and of time.

This kind of internalized and gradualist model may be much better at explaining what comes after the thirty-eighth century cal. bc than the first model given above. The chronologies presented here underline three important factors. First, in at least some cases, here in the shape of Fussell's Lodge and Wayland's Smithy I, mortuary rites were initially focused upon quite modest structures. These seem far less convincing as instruments of social display and legitimation than monumental mounds.

Secondly, as we have stressed, construction and use were relatively short-lived. At Ascott-under-Wychwood the secondary extension to the primary barrow followed the initial construction quite quickly, in a generation or so (Bayliss, Benson *et al.* this issue, p. 37, fig. 9), while at Wayland's Smithy I there may have been an interval between the primary mortuary structure and the first barrow to be estimated as several decades at least (25–95 years at 68% probability: Whittle *et al.* this issue, p. 115, fig. 5). Wayland's Smithy has the longest history overall, perhaps no accident since it appears to be the latest of the sites under consideration here. But set against the span of time from the thirty-eighth to the thirty-fourth centuries cal. bc, these monuments now emerge as quite rare events in any one locality. In some regions there were greater concentrations of monuments, and we can suppose that the frequency of construction was there more intense, around Stonehenge and Avebury as obvious examples, but also at various locations within the Cotswolds. But in other parts, the monuments are locally more dispersed (e.g. Saville 1990, fig. 1). Darvill (2004, 9) has given a figure of some 140 monuments for the Cotswold region as a whole and his map (2004, fig. 78) certainly looks busy, but the local distributions are thinner, for example in the Evenlode valley and the high plateau around Hazleton, and construction and use could now be spread across several centuries.

Our estimates make it possible now to suggest some specific if very preliminary and heuristic figures that take account of both time and space. Let us take Darvill's figure quoted directly above of 140 monuments and estimate the area of the Cotswold as approximately 7000 km² (roughly 100 by 70 km); the duration of the Cotswold tradition may run between 3750 and 3350 cal. bc: a span of 400 years. If each

monument had a use of 100 years, there would be 35 monuments in use at any one time, with a notional territory of 200 km² each (assigning 'territory' for these purposes only to monuments actively in use); if the individual use were 50 years, which conforms better with the dates given in this series of papers, the figures would be 17.5 in use at any one time, with notional territories of 400 km² each. However, most of the monuments dated in this programme fall in the period 3750–3550 cal. bc (five out of six, counting Wayland's Smithy twice). We could therefore estimate 116.6 monuments between 3750–3550 cal. bc. With 100-year use-lives, there would have been 58 in use at any one time, with notional individual territories of 120 km² each; with 50-year use lives, 29 in use at any one time, with notional territories of 240 km² each. Between 3550–3350 cal. bc, we could estimate 23 monuments: 11.5 in use at any one time with 600 km² each, on 100-year use-lives, and six monuments only at any one time, with 1160 km² each, on 50-year use-lives. We do not need to take these figures literally, since there will have been many variations in frequency and density of construction. But the figures are useful since they model both time and space. They suggest on the one hand that not many years would elapse between great building events somewhere along the length and breadth of the Cotswolds, but on the other that at any one time such an event could have been quite distant from most places. Though we recognize that the situation could have been complicated, with social rules and norms still effective at a distance in some scenarios, and the reputation of particular monuments being enhanced by the mystique of distance, nonetheless even at a local scale, and without taking the notion of territories too literally, these monuments may appear less convincing as instruments of social control, simply because people at a distance of one or two days' walking would not necessarily have been thus easily coerced.

The third and final consideration is that if causewayed enclosures date to the thirty-seventh century cal. bc onwards, another kind of sociality has to be brought into the scheme of development. Since causewayed enclosures seem to be concerned with a larger scale of social interaction, with gathering, consumption and exchange, involving the dead certainly in many instances but not giving them particular prominence overall, it is harder to argue that those long barrows and long cairns, which precede them, are necessarily or primarily to do with the establishment of social preeminence, though this may admittedly be a matter of scale. At most, the scale of the long cairns and long barrows was probably much more local

than that of causewayed enclosures. At the latter, we have the sense of wider communities being engaged, and of an intense dialogue going on about the right way to live, involving prominently the use of cattle. In our particular sites, we see cattle — in the form of cattle skulls — marking the layout of the cairn at Ascott-under-Wychwood in the thirty-eighth century cal. bc (Benson & Whittle 2006; Bayliss, Benson *et al.* this issue), and again in the second suggested phase of the primary structure at Fussell's Lodge, at a date estimated in the 3650s to 3640s cal. bc in our preferred model (Wysocki *et al.* this issue, p. 78, fig. 10), which could prove to be significant in relation to the emergence of causewayed enclosures.

Nonetheless, the continuation of the monumental tradition has to be explained, and the internalized model of coming to terms with things does not really adequately deal with this. What may be plausible for the context of the thirty-eighth century cal. bc is probably much less so for the thirty-seventh and thirty-sixth centuries cal. bc and later. We will be able in due course to compare the dating models for the West Kennet long barrow with those for the immediately neighbouring Windmill Hill,¹⁰ and that may cause this view to be revised. But for the time being, another sort of interpretation may be a better way of getting to grips with the short duration of these mortuary rites and monumental practices. This is the notion of a ritual cycle (cf. Whittle 1997, 166; Whittle & Pollard 1999, 384). These practices involved ideas, about the self, the body, about the corporateness of the dead, about place, about the past and time. Whatever the social groups involved, the decision to assemble the dead and to build must have been a collective affair, since many people were involved. There could have been innumerable reasons not to go ahead with such projects, and much discussion must have taken place beforehand (C. Richards 2004). Given the timescales we have begun to establish, could these have been undertakings not just for once in the lifetime of given individuals, but for once in the lifetime of particular social groups, when the time was right, when conditions were good, when things looked appropriate? We can return to the earlier discussion of ancestors. Later activity may in part have been guided by a strong sense of what went before, of what forebears had achieved in earlier generations, over spans of time that could have been held either at individual lifespan scales, or in longer-lasting social or collective memory. Bradley (2002, 8; and see further discussion below) has suggested a limit of 200 years for the normal transmission of oral memories, which could just about cover the gap between say the initiation of the transepted

chambered West Kennet long barrow probably in the thirty-seventh century cal. bc and the start of Wayland's Smithy II probably in the thirty-fifth century cal. bc. We note again that other transepted monuments may have fallen between West Kennet and Wayland's Smithy II, and the physicality of monuments as a mnemonic should not be overlooked either. The normal scale of transmission may have been that of lifespan, but we could seek to locate particular enactments in the juncture between immediate circumstance and the realms of ideas and memory.

The history and performance of an idea

Where do the ideas behind all this come from? Can we meaningfully trace their descent? The chronologies presented here once more allow some important fresh considerations. There are several strands to this phenomenon, including attitudes towards the body, the assembly of the dead in numbers, the choice of place, and the monumentalization of locales of the dead by the construction of long barrows and long cairns, either as events integral to the initiation of mortuary ritual or as acts of closure. It is monumentalization especially that can be viewed in fresh perspective here.

The marking of place can hardly be seen as a new phenomenon at the start of the southern British Neolithic and with reference to Ascott-under-Wychwood and Hazleton we have already referred to continuities of practice in the assembly of materials that constitute both Mesolithic and Neolithic middens. But the marking of new places from the beginning of the Neolithic may also be important to consider. It is equally significant perhaps that there is no sign of Mesolithic occupation under Wayland's Smithy, Fussell's Lodge or West Kennet (though at the latter, excavation under the barrow has of course been very limited), and that there are differences among these three situations; at Wayland's Smithy there was Neolithic occupation before the construction of the primary mortuary structure, whereas there is no sign of this from what we know of Fussell's Lodge and West Kennet (Whittle 1991; Ashbee 1966; Piggott 1962; for further detail of Cotswold-Severn sites, see Darvill 2004, 93–6). The marking of place need not be seen as symptomatic of sedentary settlement (Pollard 2004a) but any increase in the frequency with which it took place would be a significant development. We can certainly point to a relative absence or scarcity of later Mesolithic sites in the regions under consideration (Cotswolds, upper Thames valley, the north scarp of the downland, the upper Kennet, and the southern part of Salisbury Plain) and it is not fanciful to suppose that the fresh

marking of place was a notable feature of the first centuries of the southern British Neolithic.

In themselves, acts of assembly and the burial of the dead can hardly be claimed as complete novelties in the early part of the southern British Neolithic. Middens go back into the Mesolithic (Pollard 2004b; 2005). Both Ascott-under-Wychwood and Hazleton provide vivid examples of the bringing together of different materials and activities in very tightly defined and limited concentrations. We know painfully little about indigenous Mesolithic burial practice, particularly for the later Mesolithic: witness the gap in human bone deposition in caves between *c.* 5870–4350 cal. BC (excluding a single exception) first identified by Chamberlain (1996; see also Blockley 2005; Schulting & Richards 2002b). But enough has perhaps been recorded at sites like Aveline's Hole or much further afield on Oronsay to suggest that indigenous people would not have been wholly unfamiliar with either successive acts of interment or treatment, or with the dead in numbers (Meiklejohn *et al.* 2005; Schulting & Wysocki 2002; Schulting *in press*); and those features can be seen more widely in Mesolithic northwest Europe as a whole (e.g. Cauwe 2001). But equally we can hardly argue for strong continuity specifically within southern Britain in this domain, particularly in light of the absence of evidence for Mesolithic treatment of the dead in southern Britain for two millennia or more prior to the appearance of the Neolithic.

So just as with the marking of place, our emergent new chronology may reinforce the significance that now begins to be given to both the individual body and bodies as a collective. That significance could have rested in several dimensions of the body, self and identity. It could mark again the emergence of new forms of consciousness or, at the least, new expressions of this. Both the individual body and collected bodies become a focus for attention, to be seen through the processes of mortuary rituals and to be treated and transformed later. Part of new kinds of personhood (cf. Whittle 2003, ch. 3; Fowler 2004) may have been a greater metaphoric charge, with the body acting among other things as a metaphor for central ideas such as that of transience, transition and transformation (Whittle & Pollard 1999; Wysocki & Whittle 2000; Fowler 2002). Among the other putative changes in the first centuries of the southern British Neolithic mooted in this paper may have come a new awareness of human mortality itself.

Perhaps these varied ideas could in part be traced to the continental background — of whatever kind — of the southern British Neolithic, since from the start of the LBK in the second half of the sixth

millennium cal. BC there had been varied practices of inhumation and cremation,¹¹ with detailed attention given to individual funerals and interments, and burial grounds or cemeteries consisting of individual graves were frequent (e.g. Jeunesse 1997). But whether such traditions are quite so much in evidence in the middle and later parts of the fifth millennium cal. BC, for example in the Paris Basin, in Cerny and then Chasseen-Michelsberg contexts, is an open question in the present state of research (Jeunesse *et al.* 2004). We cannot therefore necessarily ascribe the style of treatments of the dead after *c.* 3750 cal. BC in southern Britain to an inevitable and all-encompassing continental Neolithic ancestry, and the alternative is again rather to think of the conditions of existence in the first centuries of the southern British Neolithic itself.

The dates presented in the papers above raise again questions of monumental construction. Where did the idea of long barrows come from, and can it meaningfully be traced? Under what conditions and how quickly were barrows and cairns raised? If some were integral to the initiation of sites as a whole, while others were closing acts, are they to be seen as a single phenomenon?

It has become a commonplace, going back to Childe, to link long mounds back to the longhouses of the LBK and its tradition (Childe 1949; Ashbee 1966; Hodder 1984; 1998; Bradley 1993; and see discussion in Darvill 2004, 73–80). Linear form, access from one preferred end, flanking ditches and internal compartmentalization are among features specifically compared by Hodder (1984, 59), while the natural tendency of abandoned and collapsed longhouses to form mounds has also been added to the equation (Bradley 1996). The chronologies presented in the papers above put this link into the sharpest possible relief. The key further observation is that longhouses were not used past the middle of the fifth millennium cal. BC, thus after the Cerny culture in northern France (Jeunesse *et al.* 2004) or the late Lengyel culture in central Poland (Midgley 1992). The evidence given here shows that long barrows and long cairns were not built in southern Britain before *c.* 3750 cal. BC, and so we have opened up a gap of seven centuries between two phenomena previously confidently linked.

Two responses are possible. Either this dating programme has reinforced the importance of long-term social memory over unexpectedly long timescales or the often cited link may be becoming far less plausible than other alternatives closer in both time and space. We should perhaps not rush immediately to abandon the possibility of long-term memory. Things from a distance and from the past are powerful. We know in

fact of oral traditions that operated well beyond the suggested 200-year limit noted above, such as practised by the nineteenth- and twentieth-century *senachies* or reciters of the Scottish Gaelic world who could take their listeners back in detail to the circumstances of battles and encounters in at least the fifteenth century (Maclean 1985). Social memory in the form of myth might well have been enough to keep some sense of the great early longhouses alive. On the other hand, we can start to question the detailed comparisons made by Hodder (1984). In what specific ways do Ascott-under-Wychwood and Hazleton, for example, with their compartmented constructions, horned forecourts, irregular quarries and brilliant stonework, resemble timber longhouses? Does any part of Wayland's Smithy I, from its monumental split trees to its oval barrow, resemble a timber longhouse of the LBK? Need the timber palisade enclosure at Fussell's Lodge recall continental LBK longhouses, other than in its outline? The conventional linkage also privileges the long mound/cairn form, and passes by circular mounds and cairns, rotundae, and forms such as portal dolmens which may or may not have had much by way of surrounding cairns beyond low platforms (Whittle 2004).

Other possibilities for the derivation of the long mound idea are quite varied. A tradition of long enclosures and long mounds — rather than longhouses — can be traced back into the middle part of the fifth millennium cal. bc to the Passy monuments of the Cerny culture of the Paris Basin and perhaps very slightly later in the Sarnowo long mounds of Kujavia in central Poland (Boujot & Cassen 1992; Midgley 1992; 2005; we can note that in neither case is the dating necessarily precise). Both those traditions may themselves evoke the LBK longhouse, but stand closer in time to the British monuments in question. Both stand at the head of a long and complicated series of other long cairns and barrows to be found from at least western France to southern Scandinavia, and it is quite possible that southern British long cairns and long mounds from the thirty-eighth century cal. bc onwards could owe their inspiration to constructions either little older or more or less directly contemporary in regions such as Brittany, Normandy or Denmark (Scarre 2002; Kirk 2000; Madsen 1993).

Another possibility altogether has to be considered (discussed also by Darvill 2004, 76–9). A striking feature of recent research in England, Scotland and Ireland has been the discovery of substantial timber structures belonging to the early Neolithic (Hey *et al.* in prep.; Oxford Archaeology 2000; G. Barclay 2003, fig. 8.3; Armit *et al.* 2003; Cooney 2000). While the Irish examples are so far much more frequent, the largest

examples appear to come from southern England and eastern Scotland, reaching up to 20–25 m in length.¹² We do not understand the roles and meanings of these structures, though their probable importance may be marked in their frequent destruction by fire after relatively short lives, and they may have been the setting for important social gatherings (Cross 2003). So a more or less local source of inspiration could now be at hand for the idea of long cairns and long barrows. Their scales are consistent. The primary phase of the barrow at Ascott-under-Wychwood was some 30 m long (Benson & Whittle 2006), which could be seen as a plausible monumentalization or exaggeration of the possible source. The structures at Yarnton and White Horse Stone may belong to the thirty-eighth century cal. bc and the thirty-ninth to thirty-eighth century cal. bc respectively; neither is precisely dated, but they could be at least as old as the first long cairns and long barrows and possibly older.¹³ Middens might also be seen as part of the inspiration for some mounds. That at Ascott-under-Wychwood was slightly elongated, some 14 by 11 m, that at Hazleton more sub-circular, some 10 by 9 m (Benson & Whittle 2006; Saville 1990).

To build a longhouse takes effort and coordination but to assemble a mound demands more (cf. Startin 1978; Startin & Bradley 1981). It is a visceral effort of assembly, recalling but going far beyond the creation of middens (McFadyen 2006). The construction process has been underplayed in most previous accounts, the final form of cairns and barrows being seen as the principal object of attention (McFadyen 2006; C. Richards 2004). During construction, people were engaged, with one another, with materials, with an ongoing process. Cairns and mounds did not come instantly into being, and in the cases of Ascott-under-Wychwood and Hazleton the first dead may have been assembled in the midst of a continuing site of construction (McFadyen 2006). There is a tension here, between the importance of the building process on the one hand and the outcome of form achieved on the other, which was probably never quite final.

The dates presented in the papers above offer different timescales for this process. Overall it looks as though mound construction was quite rapid (Fig. 4): 'quick architecture' as Lesley McFadyen (2006) has called it. So the dating programme helps to define mound construction as neither timeless nor instantaneous. But there were variations. Mounds may have belonged to different points of individual sequences. At Ascott-under-Wychwood, while our preferred model is of cists and barrow being started together, another possibility is for the cists to have

been free-standing for a while, linked closely to the underlying midden and timber structures, before the barrow was initiated in the second half of the thirty-eighth century cal. bc (Bayliss, Benson *et al.*, this issue, p. 33, fig. 6). But the same possibility does not seem to have applied at Hazleton, a unitary construction about half a century younger (*Ascott/Haz*: Fig. 5) (Meadows *et al.* this issue). At Wayland's Smithy I we suggest that the mound followed the primary mortuary structure after an interval of two or three generations, in the decades around 3500 cal. bc (*Wayland 1st gap*: Fig. 5; *Wayland I barrow* (= *OxA-13169*): Fig. 4), while at Fussell's Lodge the primary mortuary structure and timber palisade enclosure were probably also free-standing for a while, before the mound was raised in the third quarter of the thirty-sixth century cal. bc (*Fussell barrow*: Fig. 8) (Whittle *et al.* this issue; Wysocki *et al.* this issue). Wayland's Smithy II was probably built in the second half of the thirty-fifth century cal. bc (*start Wayland II*: Fig. 4). At both Wayland's I and II and at Fussell's Lodge, the mounds are best regarded as closing acts, while the completion of the building of Ascott-under-Wychwood took the form of the secondary extension of the barrow, probably without building any further cists, and the creation of unified stone walling around the monument (Benson & Whittle 2006). The lack of samples for the mound at West Kennet makes it difficult to bring this site into detailed consideration here, though the results from the secondary fill of the chambers remind us of the reality of continuing accessibility (Bayliss, Whittle & Wysocki this issue).

These varying possible timescales help to highlight a neglected dimension of long barrows and long cairns. It is hard perhaps to escape the notion that somehow all long cairns and long barrows meant the same thing, an evocation of something else alongside their own monumental physicality and beauty, a series of references to other times and places, to more or less distant pasts, a suitable receptacle for the placing of the human dead. But these differing individual site sequences perhaps can help to alert us to a rather more diverse notion of what it is that long mounds evoked, that could be used as circumstances dictated or enabled. Did mounds as acts of closure belong more often to the later monuments than the first ones, a consciously delayed and final evocation of the importance of ancestors and their deeds over the remains of the precious and remembered human dead?

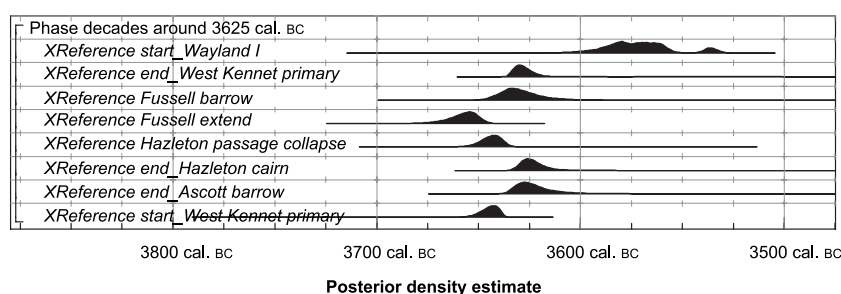


Figure 9. Probability distributions of dates relating to constructions, events, and endings in the decades around 3525 cal. bc. The format is identical to that of Figure 2.

Once again, no single or simple trend is likely. The secondary, quite rapid, extension of the barrow at Ascott-under-Wychwood is not paralleled at Hazleton. If we can clearly contrast the general circumstances of the barrow and cairn constructions at Ascott-under-Wychwood and Hazleton with that of Wayland's Smithy II, the situation in the latter part of the thirty-seventh century cal. bc was much more complicated. This is emphasized by consideration of the four monuments whose endings fell within a decade of 3625 cal. bc (Fig. 9, and see Table 2). After a comparatively long history (a century or so of use; *Fussell use*: Fig. 6), the mortuary deposition at Fussell's Lodge was ended by a closing process which included fire, cattle and the final raising of the barrow mound. In contrast, at Ascott-under-Wychwood, after a similarly long history (*duration Ascott bodies*: Fig. 6), people seem simply to have stopped placing corpses in the chambers: a quiet ending perhaps compared with the drama of Fussell's Lodge. The ending of Hazleton seems to have been similarly low-key, after a shorter history (*Hazleton burial duration*: Fig. 6). Again, the latest activity is the deposition of whole fleshed corpses in the passages, although perhaps the late offering of a roe deer foreleg and whole lamb in the southern passage and chamber hint at significant ceremony at this late stage of use. The latest depositions of human remains at West Kennet came at this time, after a short history of only a few decades (*West Kennet primary use*: Fig. 6). We know that the transepted chambers were accessible for a very long time after this, but we have no idea whether the primary phase of West Kennet ended in subdued fashion or with conspicuous events as at Fussell's Lodge. Possibly the stones blocking the SW and NW chambers (Piggott 1962, 16) might belong to such rites of closure¹⁴ but we have no specific dating evidence for this, other than that these acts preceded the sequence of secondary filling.

Endings no less than beginnings were therefore very diverse. This diversity is emphasized by the

contemporaneity of these varied closure events and processes, just described. It was the same generation of people who chose to close Fussell's Lodge in monumental style, who decided to place offerings in the passages at Hazleton, who walled in their forebears at Ascott-under-Wychwood and walked away. They shifted their attention away from West Kennet, allowing the remains already there to rest on their own for a while; but we have no specific evidence for the ceremonies attendant on this moment.

Why was so much happening in these ways at *this* particular time? Were circumstances surrounding these endings all similar? Should we in fact regard these events as endings, rather than moments of transformation to different significance and meanings? In due course, we should be able to unite these narratives with the events unfolding in the different social arenas of causewayed enclosures. Did numbers of long barrows and long cairns go out of active use because of the emergence of new forms of sociality at enclosures, the urgency of the living temporarily supplanting the significance of the dead and the past? We must wait and see how much further we can take this kind of account of changing worldviews in the thirty-seventh century cal. BC.

Neolithic histories

The chronologies presented in these papers allow us to begin to write more precise and detailed Neolithic histories. We can start to assign, going on from archaeological interpretation and Bayesian modelling, particular events to specific centuries and even to spans of specific decades. We can think further in terms of generations and individual lifespans, and we have a more sensitive means with which to explore the range of social memory.

We have dealt here with long cairns and long barrows, with the assembly and treatment of the dead, and the monumentalization of chosen places. It looks as though these phenomena did not start before the thirty-eighth century cal. BC, and continued through to at least the thirty-fourth century cal. BC. The dating results underline the importance of the present body and the absent past. As the body is transformed away from the form of its living state, so the monumental mounds make present something that had passed. There is a mixing of times and memories, as people performed the past to enable the present and future. We cannot say with certainty how distant a past is evoked, but we can choose now between either a very distant one (back over seven centuries to the tradition of continental longhouses) or a range of sources of

potential inspiration closer in time and space, some of them perhaps very familiar indeed. We have found little specific support for the disposal of ancestral human remains, but there is every reason to suppose that the past, including notions of ancestors in general, was a central concept in these times.

The importance given to the dead and monumental containers and covers for them must require us to consider the conditions of existence in the centuries preceding their appearance. This sequence demands that we re-examine the circumstances in which the southern British Neolithic began, and its first centuries are as important as those covered in detail here, from the thirty-eighth to the thirty-fourth centuries cal. BC. That is for future research. Other ongoing research, into causewayed enclosures, as a working hypothesis dating from the thirty-seventh century cal. BC onwards, will enable us to refine our Neolithic histories further, and to compare in detail the times in which both barrows and enclosures were being built and used together. We have been able to suggest that cairn and barrow constructions were relatively rare events at the local scale, and the later ones will have to be fitted into yet more varied histories of sociality and worldview.

A recent review of agency made reference to how 'practice draws upon memory, past experience, expectations and desires, and a communicative engagement with other co-inhabitants' (Barrett 2001, 152). These results hold the promise of our being able to begin to write Neolithic histories in this fashion. *Those* people, in *those* times, must now be our subjects.

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Notes

1. These include Coldrum in Kent, Belas Knap in Gloucestershire (to be published by Rick Schulting and colleagues), and Penywyrld-Talgarth, Ty Isaf, Pipton and Tinskinswood in southeast Wales, though in these instances either the number of dates will be smaller or the stratigraphic framework will be less comprehensive than for the sites reported in this series.
2. A major project funded jointly by English Heritage and AHRC is currently being carried out by Alex Bayliss,

- Frances Healy and Alasdair Whittle, in cooperation with excavators and other colleagues.
 3. To be published by Alasdair Whittle, Mick Wysocki, Tom Higham, Seren Griffiths and Robert Hedges.
 4. We are very grateful to Ian Wall of the Creswell Crags Museum and Education Centre for permission to refer to this re-dating, and to Peter Marshall of Arcus, Sheffield University, for advice on these new estimates.
 5. Even in the alternative model (see Bayliss, Benson *et al.*, this issue, p. 39, fig. 13), a short gap of a decade or two is still indicated.
 6. While Hazleton has chambers and a cairn, the terminology adopted for Ascott-under-Wychwood is of cists and barrow (Benson & Whittle 2006).
 7. Although attributed to the Mildenhall style this type of decorated pottery has been found elsewhere in Wessex, e.g. Windmill Hill (I. Smith 1965, 69 & fig. 26) and the distribution is now recognized as more widespread; the use of regional style names such as Mildenhall or Abingdon should be used with caution (see Cleal 2004).
 8. M. Smith (2005) claims that the crania from this chamber are female. In the light of repeated examination of this material (most recently in October 2005) it is difficult, if not impossible, to see how such claims can be sustained.
 9. The suggested timespan in this model fits well with the chronological evidence of the Sweet Track, with its dendrochronological date of 3807/6 BC, and tree ring and pollen evidence for woodland and clearance activity preceding its construction by at least a century (Coles & Coles 1986).
 10. See note 2. Results are also expected from Knap Hill, also in the Avebury area, and from Robin Hood's Ball, which is not far from Fussell's Lodge though not immediately neighbouring.
 11. Cremations are present at both Ascott-under-Wychwood and Fussell's Lodge, as well as other chambered tombs not dealt with here. They were not dated in our programme because at the time of sample submission, reliable methods were still unproven (see Bayliss, Bronk Ramsey *et al.*, this issue).
 12. 20 m at Yarnton, 18 m at White Horse Stone, and some 25 m at Balbridie and Claish. Grateful thanks to Hilary and Charlie Murray for showing the new house site at Crathes to Alasdair Whittle.
 13. Grateful thanks to Gill Hey of Oxford Archaeology and Mike Allen of Wessex Archaeology for permission to quote these outline ranges in advance of their forthcoming publications. For White Horse Stone, radiocarbon data and information were kindly provided by Oxford-Wessex Archaeology Joint Venture, and made available by CTRL UK Limited.
 14. An idea we owe to Joshua Pollard.
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