

Remembered and Imagined Belongings: Stonehenge in its Traditions and Structures of Meaning

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Introduction

THIS PAPER ATTEMPTS to ascribe meanings to Stonehenge, especially in its main phase of lithic monumentality, by considering the monument in relation to: its contemporary setting; the tradition of sacred monuments, circular and other, to which it belonged; the layouts of successive phases; the materials from which it was formed; and the patterns of approach and experience which the monument may have engendered. The monument, like other major monuments of the Later Neolithic of the third millennium BC, belonged to a sacral landscape, not to a major settlement concentration. These required the contribution of people from wide areas around. Stonehenge expressed the power of the past in its continuing use of circular form, and sought to make eternal both an ancient tradition of reverence for spirits and ancestral beings and a contemporary social practice of intense ceremonialism. Properties or qualities must be envisaged for the constituent materials, from chalk and timber to stone; different treatments of significant stones are noted. Layouts may have symbolised inclusion and exclusion, unity and division; the three-dimensional nature of the monument is also emphasised, and considered as a possible cosmological model of a hierarchy of spirits. Stonehenge had to be approached and experienced in predetermined ways, both from the surrounding landscape and within the monument itself. Rearrangements of the stone phase indicate how crucial it was to builders and users to make the internal settings fully propitious, for in those details much of the power of the monument may have resided.

The contemporary setting

Now that every Stonehenge, to invert the famous dictum of Jacquetta Hawkes (Hawkes 1967, 174), is getting the age it deserves, it can be seen that the great stone phases of the monument belong not to the Early Bronze Age as previously supposed (e.g. Atkinson 1979; Pitts 1982; Chippindale 1993; Richards 1990), but to the Later Neolithic (Cleal *et al.* 1995). The recent programme of radiocarbon dating has been crucial. Four determinations are available, one for the sarsen circle and three for the sarsen trilithons, which together constitute the elements of the redefined site phase 3ii. Their overall span is long, from about 2800 to 1700 BC, but if the older determination BM-46 is set aside, a shorter range is indicated between 2800 and 2200 BC, with a date more or less in the middle of the third millennium BC likely for phase 3ii (Cleal *et al.* 1995).

Such a dating takes the great stone phases of Stonehenge back in time, thus removing them from a horizon—the Early Bronze Age—in which most other manifestations of monumental construction had ceased, and placing them in a horizon—the Later Neolithic—in which monuments of many kinds were still being built, both in the Stonehenge area and far beyond. Whatever the nuances of the local sequence, the great stone settings of Stonehenge now more obviously belong with Coneybury, Durrington Walls and Woodhenge, and possibly with the Stonehenge Cursus, if its radiocarbon dating is to be taken at face value, which is highly uncertain (Richards 1990; and see Wainwright and Longworth 1971). The great feats of Stonehenge also become contemporary or near-contemporary with other prodigies of collective labour, such as to the south the complex around Dorchester, Dorset, including Mount Pleasant, Maumbury Rings, and Greyhound Yard (Wainwright 1979; Bradley 1976; Woodward *et al.* 1993); or to the north Marden in the Vale of Pewsey (Wainwright 1971) or Avebury, Silbury Hill and the West Kennet palisade enclosures in the upper Kennet (Smith 1965; Pitts and Whittle 1992; Whittle 1997). To this short list of constructions of excessive zeal have to be added others, no less important locally and regionally, on lesser though often still impressive scales, such as to the south the Knowlton complex close to the older Dorset cursus (Barrett *et al.* 1991; Tilley 1994), or sites in the river valleys to the north, for example in the upper Thames (Case and Whittle 1982; Whittle *et al.* 1992; Barclay *et al.* 1995) or the Nene, Ouse and other valleys to the east (see Parker Pearson 1993). Nor are such groupings of monuments confined to the south of the country; they extend far north and west, to the Orkneys and to Ireland (e.g. Ritchie 1984; Parker Pearson and Richards 1994; Stout 1991).

The great stone settings of Stonehenge therefore find their place in a much wider sacred geography in the third millennium BC. In few areas has it proved possible to document an abundant settlement or occupation record. Around Stonehenge itself, the Environs Project was able to show a gradual opening of woodland through time, and scatters of worked flint. The latter can perhaps be categorised into 'industrial' and 'domestic' zones, but neither is accompanied by evidence for substantial subsoil structures (Richards 1990). Even where built structures can be documented in this horizon, as on the Orkneys, sites

like Skara Brae and Barnhouse may themselves be special locales, and not represent the occupations of everyday existence (Parker Pearson and Richards 1994). Two implications follow. First, the milieu to which Stonehenge belonged was still probably, many centuries after the inception of the Neolithic, one of relative mobility, of social flux in the sense of the coming and going of people. Stonehenge cannot be envisaged as lying at the heart of a local or regional concentration of population. Secondly, Later Neolithic monuments belonged to and reinforced a tradition begun earlier in the Neolithic in which built constructions anchored collective allegiance to place against the tide of individual or small-group settlement mobility. They rooted identities in chosen locales, often the scene for intense ceremonialism and social interaction, and provided also a fixed point for the residence of or access to spirits and ancestors, real and imagined. (In the discussions which follow, I refer to ancestors in a generalised way; the term can cover imagined or abstract ancestors, remembered people, or indeed shadowy figures from remote pasts, like the Silver Race of Hesiod, with whom little direct connection was sensed: Whittle 1996; Whitley 1995.) The land was framed by notions and zones of sanctity, with holy areas at its core.

This was part of the means by which the Neolithic phenomenon was brought into being in the first place. Why it should have continued to develop on the scale witnessed in the Later Neolithic remains open to debate. Many models of varying theoretical background have sought to give essentially socio-political explanations, from chiefdoms through ritual authority structures to Eliadean prescriptive structures (e.g. Renfrew 1973; Thorpe and Richards 1984; Garwood 1991; Bender 1992). It has been suggested that the rituals managed through a site like Stonehenge could have maintained social divisions by making them part of a timeless social order (Bradley 1991). But since, setting aside minor assemblage variability, there is little evidence for social differentiation other than the monuments themselves (one of a series of issues raised in this paper which need fuller discussion elsewhere), an alternative is to envisage slower histories of change, dominated by reference to the ancestral past and cycles of ancestral time (Whittle 1996; Whittle 1997). Rather than a straightforward trajectory of social differentiation within each community through the Neolithic and into the Later Neolithic horizon, I envisage a milieu in which people in different areas were conscious of both the pasts and the achievements of their neighbours, and in which emulation took the form of rivalry for sanctity. There is individuality in the forms that monumentality took—thus in the Middle Neolithic, nothing quite like the Dorset cursus, and in the Later Neolithic nothing quite like either Stonehenge or Silbury Hill to its north—and that diversity and the scale of the enterprises can be sought in part in the nature of the wider context.

Traditions of sacred circularity

Neolithic monuments had many forms and many points of reference. In central southern England, the first constructions were long barrows and chambered tombs, predominantly

of rectangular or trapezoidal form, which were connected with the treatment of the ancestral spirits and the ancestral dead, and referred probably to the earlier great timber long-houses of the first generations of the Neolithic in central and western Europe. Elsewhere, in the north and west, more circular mounds are evident from early stages of the Neolithic, perhaps with reference points in forager shell middens or forager and Early Neolithic habitations. Circular ditched and banked enclosures appeared in southern Britain slightly later, in the mid to later fourth millennium BC, themselves again already with a past, rooted in ditched enclosures of central and western Europe, from the late sixth millennium BC onwards (Whittle 1996). Causewayed enclosures were complex arenas of social interaction, in which a great range of concerns was played out. As well as dealings with spirits, ancestors and the dead, as at long barrows and chambered tombs, there were also social concerns, for the businesses of production, consumption, and sharing, relations with neighbours, and attitudes to animals and nature (Edmonds 1993; Whittle and Pollard 1997). No one enclosure need be seen as exactly like any other, and the nature of deposition varied from individual episode to episode, over a span of generations, but all these locales shared, more or less, in the strong symbolism of circularity. Circular layout referred to past history (earlier continental enclosures) and perhaps contemporary social practice (structures and site layouts), served to both exclude and include, and worked to present space and time both as endless and finite.

The tradition established did not remain unaltered. Other monuments predicated on physical and conceptual progression and movement were added to the repertoire in the Middle Neolithic (Bradley 1993; Tilley 1994). But circular form remained important in the Later Neolithic. Stonehenge phase 1 and Flagstones, Dorchester (Cleal *et al.* 1995; Woodward and Smith 1987; cf. Bradley 1991) show the tradition in transmission to greater formality, which found its fullest expression in the layouts and elevations of monuments like Durrington Walls, Avebury and Mount Pleasant. The uses of Later Neolithic enclosures cannot be seen as the same as earlier ones, but it is likely that they too, just like their predecessors, carried a baggage of memory from a distant past. It is no accident, therefore, that Stonehenge phases 1 and 2 of the new chronology (leaving aside for these purposes whether they can be thus separated) should retain circular form, and refer to the past in the form of depositions of animal bone, some of it itself old, and cremated human remains. Whatever lay in the centre of Stonehenge phases 1 and 2, visitors had to pass a familiar external ditch, and move through a zone given to the dead and ancestral practice. We can think of such movement, perhaps, as serving to transcend time, even before the site had reached its greatest monumentality.

Contemporary circles

It is not a new idea that the stone phases of Stonehenge mimicked timber constructions (e.g. Atkinson 1979), but with the revised chronology, the relationship becomes closer.

The stone constructions at the heart of Stonehenge in phases 3ii-3v parallel more or less contemporary constructions in timber in two ways. First, there is the technical and laborious imitation in stone of woodworking techniques, such as mortice and tenon, tongue-and-groove jointing, and perhaps some effort at reproducing the texture of adzed surfaces, for example in the treatment of stone 16 in the sarsen circle (Fig. 1). Secondly, and in the light of the revised chronology perhaps even more striking, is the transmutation into stone of the idea of circular layout seen in so many timber structures of the contemporary Later Neolithic. The sarsen circle is just over 30 m in diameter; with the Y and Z Holes, the diameter of the central setting is over 50 m. These figures straddle the recurrent diameters of timber settings, such as locally the South and North Circles within Durrington Walls and Woodhenge, and further afield Site IV within Mount Pleasant

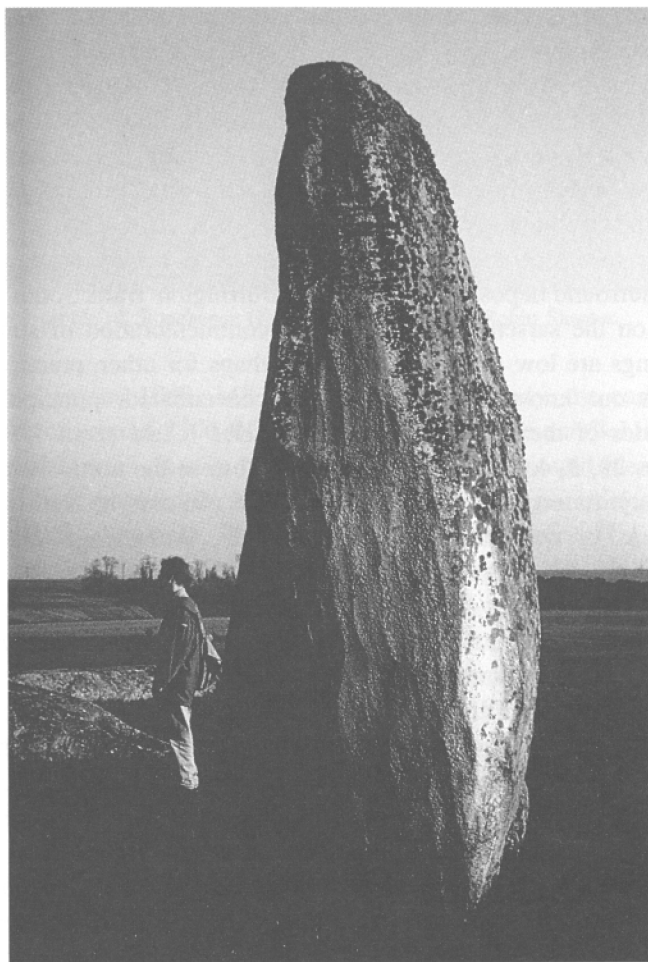


Figure 1. Dressing marks on the side of stone 16 in the sarsen circle. Photo: Robin Skeates.

(Wainwright and Longworth 1971; Wainwright 1979; for other figures, see Gibson 1994). Both Stonehenge 3ii-3v and more or less contemporary timber structures were three-dimensional structures. In the latter, the largest post-holes usually belong to the inner of several concentric rings (e.g. circle 2E in the second phase of the South Circle at Durrington, which is second to central: Wainwright and Longworth 1971); in Stonehenge, the sarsen trilithon rises highest, above more or fewer outer and inner rings depending on whether Y and Z Holes are counted or not. The three-dimensional timber structures had axis and directionality planned into them (Pollard 1992; Pollard 1995; Thomas 1993), just like the more famous alignment of Stonehenge. We do not know whether any of the complex timber structures were roofed; my own view is that the details of deposition suggest bare poles (cf. Richards and Thomas 1984). Plausible reconstructions can be offered for both possibilities (Musson 1971; Parker Pearson 1993, fig. 58). But in either case, the situation is that Stonehenge 3ii-3v transcribes the essence of contemporary timber forms, whether bare, lintelled poles, or roofed structures. It makes eternal, at the heart of a circular space sanctified by tradition, memory, the dead, ancestral practice and transcended time, a contemporary social practice which was also rooted in the use of circular space and circular structures. Part of the business of using timber structures involved directed movement, which I discuss further below, and deposition of food remains and artefacts. In this last point, there does seem to be difference. The excavations to date within Stonehenge have not shown anything comparable, for example, to the platform, midden and post-surround depositions seen in the Durrington Walls South Circle. Possibly the axe carvings on the sarsen circle could be a commemoration of something similar. Most of the carvings are low down (admittedly perhaps for other, practical reasons), and they appear from our knowledge so far to be concentrated, principally on the east and north-west sides of the sarsen and trilithon circles (Cleal *et al.* 1995, 30–2); those on the east (stones 29, 3, 4, 5 and 53) outnumber those to the north-west (stones 57 and 23). Uncannily, such a concentration on the east side can also be seen within the depositions and features of the Durrington South Circle, Woodhenge and the Sanctuary (Richards and Thomas 1984; Pollard 1992; Pollard 1995).

Another dimension of the elevation of Stonehenge can be considered. The stone settings are markedly stepped (Fig. 2), a visual aspect which if anything becomes more dominant at a distance from the monument, certainly including the approach from the north-east along the line of the Avenue. Could this too have meaning, and if so, how could we begin to engage with such a possibility? One starting point might be that many belief systems in non-western society involve a hierarchy of spirits and beings. The most powerful spirits and beings are often conceptualised as belonging in the air, above the moral as well as physical domain of humans. The corollary is that they are often taken for granted in daily life, much of day-to-day concern being with lesser spirits, clan ancestors, ghosts, witches, fetishes, spells and the like (Sahlins 1968). Another starting point might be the hieroglyph of stepped form shown in the Pyramid Texts of third millennium BC Egypt, which represents a primeval mound as earth symbol arising from the watery



Figure 2. The stepped profile of Stonehenge (from the south). Photo: Robin Skeates.

chaos of creation (Jenkins 1980, 148 and fig. 116). Strikingly, the earliest pyramid, of Dhosier at Saqqara, of around 2700 BC, has stepped form. The parallel is distant in space but not far removed in time. It may be more relevant to the mound idea so elaborated at Silbury Hill, and I have pursued its interpretations and yet other starting points for insight into earth symbolism elsewhere (Whittle 1997); but if Silbury Hill and Stonehenge 3ii-3v have become closer in time, it is worth considering the possible connections. Different parts of connected ritual practice may be played out over time and space (Leach 1976, 27). I suggest therefore that we could think of the three-dimensionality of Stonehenge as both symbolising a hierarchy of spirits and celestial beings and drawing on a set of ideas current in the third millennium BC to do with the earth and creation.

Materials: the language of stones

While the transport of materials to Stonehenge, bluestones from further away to the west and sarsen from within Wessex, has long attracted attention (Atkinson 1979; Thorpe *et al.* 1991), rather less thought has been given to Neolithic materials and their meanings. With reference to Stonehenge, this has been taken up only by Bender (1992). Her treatment

is brief (Bender 1992, 744–6), but in emphasising what she calls the indivisibility of nature and culture, she notes the possible connotations of stone, earth and chalk. This paper attempts to expand her initial suggestions.

In the Neolithic people placed their dead at the feet of large timbers and stones, and conducted an intense ceremonialism in spaces defined by digging into the earth. It is barely conceivable that chalk, earth, timber and stone did not have ascribed meaning as metaphoric or metonymic symbols (cf. Leach 1976). Two examples from the ethnographic record illustrate some of the possibilities. For the Zafimaniry, shifting cultivators in Madagascar, especial importance was attached to the properties of wood, which was used for fires and houses, and associated metaphorically with the development of people, the bones of ancestors and other symbolic transformations (Bloch 1992; Bloch 1993). For Aborigines in western Arnhem Land in northern Australia, stone tools have had aesthetic and symbolic value (Taçon 1991). Hardness, durability, and colour have been valued. Stone tools have been associated with particular social roles, for example those of initiated males, and with the beginnings and final resting places of Ancestral Beings, who in other guises framed the whole landscape. The symbolism of the Neolithic axe may draw on similar values and a connection with its source within the earth itself (Whittle 1995). The very earliest stones set up in western Europe, the *menhirs* of Brittany, may have mirrored axe form (Thomas and Tilley 1993).

While there is much to say about timber, and the transmutation from timber to stone that Stonehenge pre-eminently presents needs to be kept in mind (perhaps in some way linked to the long history of the site prior to the erection of stones: Joshua Pollard, pers. comm.), it is sensible to concentrate here on stone. Stone has obvious properties of hardness and durability, and its texture and colour normally give it a distinctive character. Sarsen in Wessex would presumably have been derived from deposits where it lay partially buried, as in modern-day locations in the dry valleys of north Wiltshire; bluestones may have been quarried. Sarsen and other stones elsewhere in the country were used to frame houses of the dead and the ancestors (though interestingly the nearest stone chambered tombs to the Stonehenge area itself are those of the Avebury area: Grinsell 1957, map II). Stone may have stood metonymically for the earth (a point also emphasised by Colin Richards, pers. comm.) and metaphorically in part for the ancestors. By the middle and late phases of the Neolithic in both Britain and Ireland and Brittany, when rows of standing stones come to prominence (Burl 1993), it seems implausible to regard them purely literally as inanimate settings; these were powerful symbols, steeped in basic notions of the past and the earth.

Particular stones may have been ascribed special meaning. There have been tentative suggestions that variation in height and shape among the sarsen stones at Avebury may have been to do with representation of gender difference (Smith 1965; Burl 1979; cf. Bender 1992, 745). These stones, like most in other sites of both the Earlier and Later Neolithic, were not shaped or dressed. There is, however, one candidate for deliberate selection: stones with a bevelled top. There are examples of this kind of form in earlier



Figure 3. The Cove, North Inner Circle, Avebury. Photo: Richard Atkinson.



Figure 4. The Stones of Stenness, Orkney. Photo: author.

monuments, such as at Cairnholy I in south-west Scotland. There the stone facade of a Clyde cairn rose symmetrically to its highest on either side of the entrance; one of the left side stones had a bevelled top (Piggott and Powell 1949). Perhaps the pronounced tilt of roofstones in portal dolmens and some court graves around the Irish Sea is something to do with the same idea, whatever it may have meant. The bevelled top recurs in the Later Neolithic, for example in the Cove of the North Inner Circle at Avebury and the Stones of Stenness in Orkney (Smith 1965; Ritchie 1976; Figs 3–4). In the Orkneys at least, this is the result of natural cleavage, though the base of such stones appears to be roughly dressed (information from Colin Richards and Niall Sharples). Such stones are often oriented to the east; a natural form is given meaning by selection and placement. A similar pattern might be seen in the more irregular tops of stones of the outer circle inside Avebury, though the pattern there is not wholly regular. Behind this might lie either a specific meaning or a general sense of propitiousness based on body side (left:right) or horizon orientation (west:east).

What of the language of stones at Stonehenge itself? The stone settings juxtapose and alternate the exotic or distant but smaller (bluestones, however derived from south-west Wales) and the more local but larger (sarsens). Both elements are used to inscribe, in the end, a complete and a broken circle. The sarsen circle is not only linked by its continuous lintel, both uprights and lintels being shaped, but presents strong visual unifor-



Figure 5. The sarsen circle. Photo: Wessex Archaeology.



Figure 6. Lintels of the sarsen circle. Photo: Richard Atkinson.

mity (Figs 5–6). The view down the line of the Avenue from the centre of the monument would originally have been past both Slaughter Stone and Heelstone (and others), both pointed-top stones and the latter perhaps with some resemblance to a bevelled-top stone.

Within the central setting, there is not quite the same unity in the trilithons, but rather an internal or alternating rhythm (Figs 7–18). The initial observation (the germ of which I owe to our former undergraduate Gwyn Maurice) is that the surfaces and dressing of the trilithon uprights are not identical. Proceeding clockwise, of the pair 51 and 52 (Figs 7–10), the inner face of 52 is rather pocked by natural unevennesses (noticeable in profile as well as face-on: Cleal *et al.* 1995, figs 294 and 297), while the inner face of 51 is smooth; 52 is also slightly more bulky, which the ground plans more or less faithfully reflect (e.g. Cleal *et al.* 1995, fig. 97), though the pair are otherwise well matched in a front-on view (Cleal *et al.* 1995, pl. 2.4). Of pair 53 and 54 (Figs 11–14), 53 is noticeably smoother on its inner face, which bears some of the best known axe carvings, while 54 has a series of natural pockmarks down its inner edge adjacent to 53; both outer faces are dressed to some extent, but the rear of 54 is far less symmetrical and much more bulbous (Cleal *et al.* 1995, pls 4.3 and 6.3). As far as we can tell, both 55 and 56, the central and highest pair, were more or less equally well dressed, though 55 is noticeably broader, and perhaps also thicker, than stone 56 (Fig. 15).

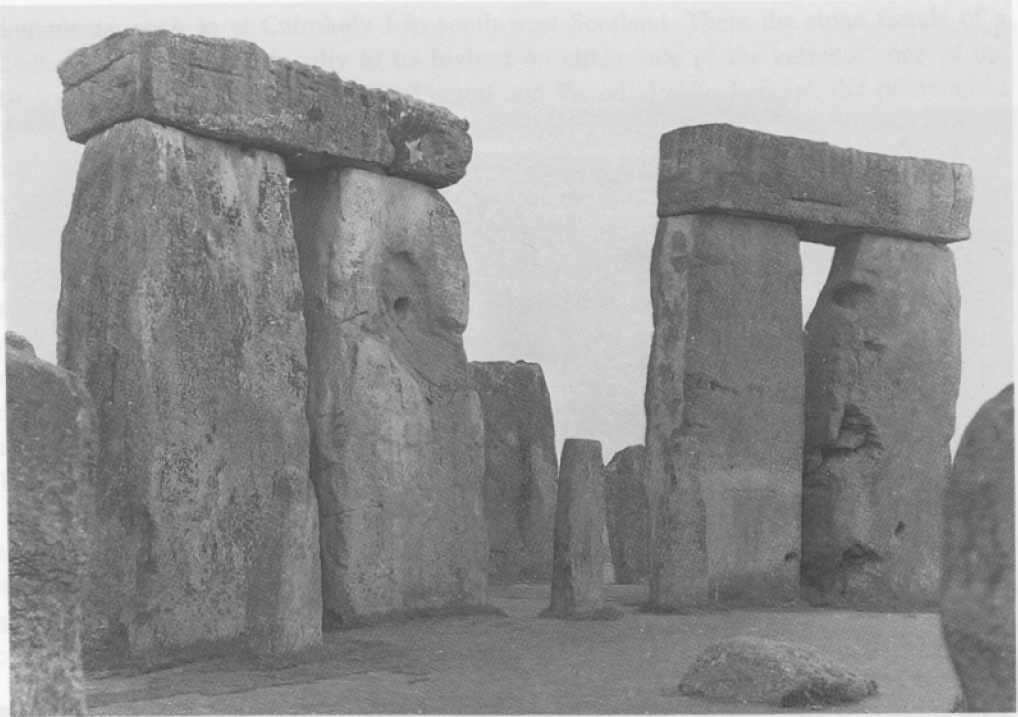


Figure 7. The inner faces of trilithon pairs 51 and 52 (left) and 53 and 54 (right), from the north-east, inside the monument. Photo: Wessex Archaeology.



Figure 8. The inner faces of trilithon pairs 51 and 52 (left) and 53 and 54 (right), from the west. Photo: Robin Skeates.



Figure 9. Detail of the inner faces of stones 51 (left) and 52 (right). Photo: Richard Atkinson.



Figure 10. The outer faces of trilithon pairs 51 and 52 (right) and 53 and 54 (left), from the south-east. Photo: Wessex Archaeology.



Figure 11. The inner faces of stones 53 (left) and 54 (right). Photo: Wessex Archaeology.



Figure 12. The outer faces of stones 53 (right) and 54 (left), from the east. Photo: Richard Atkinson.



Figure 13. The outer faces of stones 53 (right) and 54 (left), from the south. Photo: Richard Atkinson.

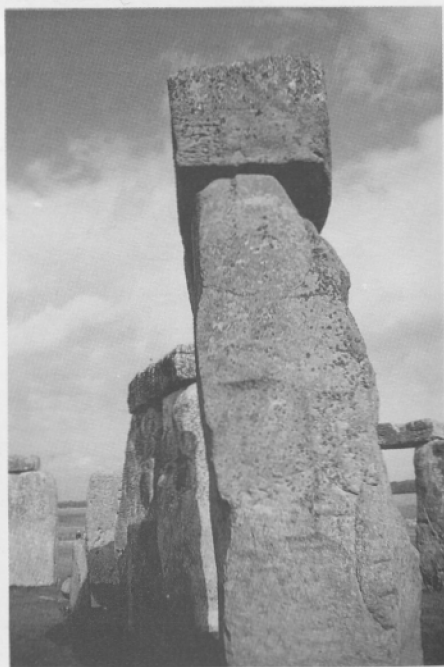


Figure 14. Side view of stone 54. Photo: Richard Atkinson.



Figure 15. The sarsen trilithons, from the west, with stone 56 in the centre, in front of the fallen stone 55. Photo: Robin Skeates.

In the next pair, 57 and 58, there is also a lack of matching; relative to the north-easterly axis of the monument or to the plan seen from above as a whole, the placement is reversed compared to the other side of the trilithon horseshoe, but seen from the inside on the ground the same sidedness is maintained (Figs 16–18). Stone 57 is the smoother on both inner and outer faces, in addition having a very pronounced bevelling down its innermost front edge, while both the front and back of 58 have natural fissures and irregularities (Cleal *et al.* 1995, fig. 103 and pl. 2.2, inner faces, and fig. 101, outer faces). It is difficult to bring the last pair, 59 and 60, into the picture, since 59 is both fallen and broken, though it might be hazarded that stone 60 (Fig. 18) was the bulkier of the pair (Cleal *et al.* 1995, pl. 6.2).



Figure 16. The inner faces of stones 57 (left) and 58 (right). Photo: Wessex Archaeology.



Figure 17. The outer faces of stones 57 (right) and 58 (left). Photo: Wessex Archaeology.

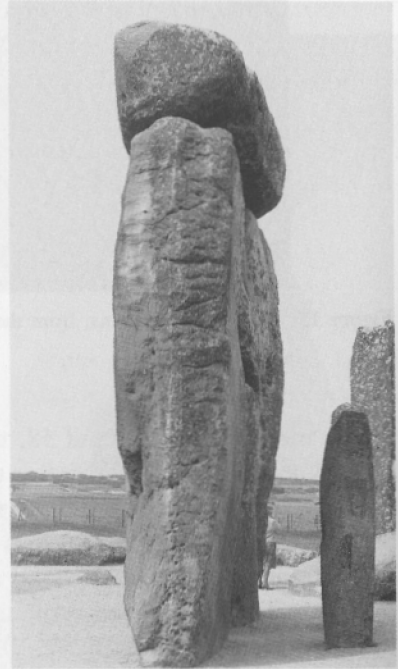


Figure 18. Side view of stone 57; stone 60 to the extreme right in the background. Photo: Wessex Archaeology.

What can this lack of matching imply? It may be argued that it has no significance at all, given the uneven surfaces of sarsen in its natural state and the presumed rarity of the very largest stones available. On the other hand, the sarsens of the sarsen circle are more even, and there too the more fissured faces appear to be on the outside. The pattern in the trilithon horseshoe just described is striking. It suggests that some kind of principle of opposition or combination was being expressed, between smooth and rough, shaped and natural, and slim and bulky. There are rhythms to the placings. Looking from the inside (turning always to face the stones), smooth, shaped and slim are on the left, rough, natural and bulky are on the right. Standing outside the trilithon horseshoe, say a little to the north-east with one's back to the sarsen circle, there is reversal, since smooth, shaped and slim are the closer in the pairs on the left-hand or south-east side, while on the right-hand or north-west side, those stones are the further away in the pairs. The central pair, 55 and 56, which may not fit the pattern of the other four trilithons, could have acted as a pivot in this alternation.

Approaching and seeing: orientation and the body

The layout of the trilithon horseshoe could be taken to show two dimensions of meaning. First, the individual stones incorporated into the overall structure could speak for and stand for different values, conceived as either opposed or complementary. The practice of smoothing stones, and hence an interest in textures and finishes (a reminder I owe to Ian Kinnes), had existed since at least the beginning of the Neolithic in the form of polished stone and flint axes (well illustrated in Clarke *et al.* 1985). At Stonehenge, we can hardly recover the meanings of such textures, though I have hinted at interest in the relationship between nature and culture.

It is hard to resist bringing in another cross-cultural analogy, that left and right, defined by the human body, could be the focus for a sense of orientation and especially propitiousness. There is no cross-cultural regularity, however, in which side is chosen to stand for the propitious. In the context of Neolithic Brittany, it has been suggested that the left side and movement to the left were propitious (Thomas and Tilley 1993), while the Mapuche Indians of Chile, to take a recent example more or less at random, associate the right with among other things good, life, day, health, ancestral spirits and abundance, and the left with evil, death, night, sickness, evil spirits and poverty (Faron 1976). The repositioning of the bluestones in phases 3ii-iv (Cleal *et al.* 1995) may indicate how important it was to get the appropriate sense of propitiousness right, down to the last details such as whether particular bluestones should be jointed or not.

Secondly, the mirror-like placements and the reversals obtainable by shifting from inside to outside or *vice versa* strongly imply physical movement around and within the monument. I set aside for the purposes of this discussion (because they are such wide issues) whether this was restricted to a group of people or available to all who chose to participate, and the

question of whether detailed knowledge accompanied every such presumed movement. Movement is significant in two ways. It further serves to unite the stone setting of Stonehenge with the interiors of timber structures in other Later Neolithic monuments, in which it has been suggested there was also directed movement (Thomas 1991; Thomas 1993; Pollard 1992; Pollard 1995). It also serves to reveal a more extensive human involvement in the experience of the monument, and to link the monument to its wider setting.

There has been much discussion of orientation of another kind, the relationship of the monument to horizons and the rising and settings of the moon and sun (summarised best in Chippindale 1993; Burl 1987). Such discussions have centred on a static view outwards from the stone setting, with little allowance for movement within and around it, or for approaches to and departures from it, thus denying the sense of progression, physical and symbolic, which some other Neolithic monuments may imply (e.g. Tilley 1994, on the Dorset cursus). To be understood, Stonehenge had to be experienced by movement. The layout of the stone setting, like that of timber structures, perhaps required circlings and recirclings by people, as suggested by the use of the circle shape itself, by the ambiguity of personal orientation in terms of left and right and front and back, and by the evident reference of the monument to the movement of moon and sun around the circles of the horizons and heavens.

The general orientation of Stonehenge phase 3ii-v, including the existence of the Avenue, also implies directionality. Experience within and experience outside need not be separated, movement linking both, with ambiguity or reversal always present. In approaching the monument along the course of the Avenue from the Avon, most of the major older monuments lay to the right (roughly speaking the north). The three-dimensionality of the stone setting is thus given a further point of reference as the observer approached. Could this sidedness have been carried into the experience of the monument itself, following the details set out above? One possibility is that the sarsen trilithon horse-shoe could have provided a calendar of significant moonsets and sunsets through the year (Burl 1987, fig. 12). This involves principally the pairs of stones 59 and 60 and stones 55 and 56. To a centrally placed observer the major northern moonset is visible between stones 59 and 60, while the midsummer sunset is obscured by stone 59; the midwinter sunset is visible between stones 55 and 56, but the major southern moonset is obscured by stone 55. It is possible that this further reinforces the significance of the left-hand stones when seen from within the circle, though admittedly those on the south-east side are not brought into this picture.

The Avenue need not be claimed as the only way to approach or depart from Stonehenge, nor need patterns have been static through time (Darvill, this volume). It has been suggested that by the Early Bronze Age round barrow groups were placed around more or less fixed radii centred on the monument, which may imply a strong sense of circularity and perhaps circular movement in the landscape around (Woodward and Woodward 1996). It is possible that Early Bronze Age practice merely fixes what was an earlier tradition of paths (cf. Bender 1992).

Summary and conclusion

The symbolic power of Stonehenge was manifold. The monument belonged to an ancient tradition of circular sites, which had long been peopled by spirits, ancestors and the dead as well as by the living, and commemorated by intense participatory ceremonialism involving amongst other things feasting and deposition. It drew on a basic symbolism of the circle, which served both to include and exclude, to separate and unite. It made permanent in stone a more or less contemporary form of structure normally built in timber, itself associated with great circular earthworks and other contexts. The contemporary was made timeless, in what may have been a tradition conceived as timeless. The form of the stone settings might also have stood as some kind of earth metaphor, seen in different form to the north in Silbury Hill, and the stepped elevation of the stone setting, as well as mimicking the great timber structures of the Later Neolithic, might also have symbolised a hierarchy of spirits or gods in the heavens above mortal life.

The stones themselves may have carried meaning. Stones themselves had long been used, especially in connection with the dead and the ancestors. Stones were treated at Stonehenge in part as though they were timbers, the axe carvings picking out zones which were probably also significant in timber structures for deposition. At Stonehenge, a distinction is possible between not only local and exotic materials, but also textures, surfaces and treatment or dressing. This in its turn may suggest movement within and around the monument, bringing direct experience to the fore as opposed to static or passive observation, and serving to link experience within the stones to the experience of approaching, leaving or circling. Movement into the monument was past ditch, bank and Aubrey Holes, which also made reference to the past, through an ancient kind of layout, remains of the dead and an old style of deposition.

Stonehenge drew on the past, while its central form echoed something from the present. It united people, directly through bodily movement, with their ancestors, spirits and the earth, made present in the stones and speaking through the stones, in a timeless frame of reference. It made the future possible by suspending the past.

If this is anywhere near the remembered and imagined belongings of Stonehenge in the Later Neolithic, we should celebrate its difference from our own world, while reflecting that central ideas of the kind explored above are not in themselves more strange or less powerful than the beliefs in parthenogenesis and resurrection at the heart of Christianity. Our view of Stonehenge has been too scientific and too socio-political (cf. Kehoe 1974; Wrigley 1989). The contemporary social context of the Later Neolithic should not be excluded, but it needs further discussion elsewhere. My belief is that the sacred settings of Stonehenge cannot easily or plausibly be reduced to ideological device serving sectional interest. The last dimension of the power of Stonehenge was that it was believed in—even if not fully understood—by all.

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MICHAEL J. ALLEN

Environment and land-use; the economic development of the communities who built Stonehenge (an economy to support the stones)

Quaternary scientists and archaeologists employ palaeo-ecological evidence to investigate the development of past landscapes. Unlike their earth science colleagues, however, archaeologists use the interpretation of these data to illustrate and explain *human* action.

Stonehenge was constructed and reconstructed over a period of 1500 years. The communities providing work-forces for this enormous labour must have been large, structured and have operated under strong political control. Most importantly they had to be locally resident and capable of sustaining both the labour-force and residential population. But how was this possible for simple prehistoric farming communities 5000 years ago?

The secure economic base underpinning these communities required long-term investment. By employing palaeo-environmental analyses to examine the development of the prehistoric landscape and land-use in the Stonehenge region, we can provide an explanation of how that landscape was used to support a highly organised society and enabled the diversion of human resources for the construction of Stonehenge.

ALASDAIR WHITTLE

Remembered and imagined belongings: Stonehenge in its traditions and structures of meaning

Meanings can be ascribed to Stonehenge, especially in its main phase of lithic monumentality in the Later Neolithic, by considering: its contemporary setting; the tradition of sacred monuments, circular and other, to which it belonged; the layouts of successive phases; the materials from which it was formed; and the patterns of approach and experience which the monument may have engendered.

TIMOTHY DARVILL

Ever increasing circles: the sacred geographies of Stonehenge and its landscape

Using perspectives from sociology and social archaeology, this paper explores the changing meaning and use of Stonehenge and its immediate environment from c.4000–1000 BC. Distinctions are drawn between 'space' and 'place' to understand the development of certain sites, while the principle of structuration is used to show how ideas find expression in material culture, monuments, and landscape organization. Although Stonehenge had special significance for more than 2000 years, the successive structures reflect ever-changing relationships between people, their beliefs, and the cosmological systems of