

Setting the Scene: Stonehenge in the Round

COLIN RENFREW

Introduction

THE SYMPOSIUM 'Science and Stonehenge', following fast upon the publication of the important volume *Stonehenge in its Landscape* (Cleal, Walker and Montague 1995) offered an unrivalled opportunity for a reassessment of our country's greatest monument. My introductory remarks will deal less with the natural sciences than with the broader field of knowledge and understanding: *scientia*. For the conference, organised jointly by the Royal Society and the British Academy (in conjunction with English Heritage) sought to bridge the gulf which sometimes separates the natural sciences and the humanities, and to take a broader view of Stonehenge, in the round as it were, in its national and international context. It aspired to the view that interpretation and understanding as well as detailed analysis is the proper work for rational scholars. I am asserting therefore that *Wissenschaft* goes beyond *Naturwissenschaft*, and that the historical sciences need not be inimical to the natural sciences.

What I am seeking to assert here is not merely a play upon words: some aspects of contemporary archaeology are, in a number of ways, seeking to diminish the chasm which often seems to yawn between 'The Two Cultures'. For while some segments of the archaeological community seem to reject the world of the hard sciences, in seeking to attain their aim of a more humanistic approach, others today are following a research strategy which deals in a systematic way with human cognition and the use of symbols within an integrated framework, where the sciences and imaginative interpretation are not necessarily set in opposition.

The uniqueness of Stonehenge

Stonehenge, as my teacher Glyn Daniel used to say, is *sui generis*: it stands in a class of its own. It is Britain's best known ancient monument (if we exclude those symbolic

of current government and kingship, such as Westminster Abbey): it is the most celebrated prehistoric monument in the world.

This justified celebrity rests upon a seeming paradox. For it comes as no surprise that the great and ancient civilisations known to history should have created monuments of sophistication—the pyramids of Egypt, or the acropolis of Athens. These are the products of literate communities, of state societies possessed of the competencies and skills of the urban world. Stonehenge stands for something else: it is the symbol of an era when humans did not yet live in cities, when life was simpler, when wisdom and learning did not yet depend upon the written word, when the religions of the book and the bureaucracies of the state had not yet laid their heavy hand upon society. So Stonehenge has become for some the symbol of a lost age, perhaps even a golden age, when we lived closer to nature and without the cares of a money economy or a welfare state. Seen in those terms the sophistication of its technology and the prodigious success of its engineering is astonishing, to some even miraculous.

This means that there is something a little puzzling here, something which demands explanation. How did they do it? Who were they, these precocious and accomplished builders? And why did they do it?

The changing image of Stonehenge

It was Jacquetta Hawkes, whose death came, sadly, just a couple of days before the Conference, who remarked that: ‘Every age has the Stonehenge it deserves—or desires’ (Hawkes 1967, 174). And certainly the image of Stonehenge, as it has been seen and interpreted through the ages, is a mirror of those doing the interpreting as much as of the monument itself. An early mention, in *The History of the Kings of Britain* by Geoffrey of Monmouth, had it as the construction of Merlin, official wizard at the Court of King Arthur, who transported it by his magic art from Ireland. The first serious study and the first known plan was undertaken by Inigo Jones (Jones 1655) who studied the monument at the behest of King James the First. He interpreted it, as an enlightened son of the Renaissance, as a classical work, following the Roman order of architecture, and reconstructed a monument of wonderful and polished symmetry, although rusticated now by the passage of the years.

The Romantic movement, inspired by that early and notable protagonist of the Druids William Stukeley, saw it sometimes as a centre of nameless Druidical rites (which have inspired modern sects, who have no links whatever with their supposed prehistoric precursors, to equally strange goings-on). With the emergence of an awareness of the English landscape it was (and has remained) a favourite subject for painters from John Constable to Paul Nash. Our own century has seen it as an astronomical observatory, and in the imaginings of our noted astronomer and cosmologist Sir Fred Hoyle, as an analogue computer. Others, perhaps a little ahead of the science and engineering

of our day, have viewed it as a space station for inter-planetary (or should it be inter-stellar?) travel.

Underlying much of this, as I noted earlier, has been the sheer wonderment that such a notable structure should date back to an early time, long ago recognised to go back way before the Romans reached Britain. Much of this thinking has been based upon the view that the local barbarians could scarcely have done such a thing alone. They needed help, some technological aid mission, whether from Rome (as Inigo Jones would have it), or from outer space (a view embraced by the followers of Erik von Daniken) or perhaps from the Bronze Age world of the Aegean.

The Aegean view arose from the diffusionist assumptions of Oscar Montelius and Gordon Childe, and when I was a student it was the standard, I think universal, position. It had been supported by Stuart Piggott (1938), who had drawn attention to similarities between finds from the Early Bronze Age 'Wessex culture', in whose time span the construction of the great sarsen structure at Stonehenge was (and still is) assigned, and objects from the celebrated Shaft Graves at Mycenae, dating from about 1600 BC. Similarities were adduced also between the Stonehenge trilithons and the massive architecture of the fortified citadels of the Mycenaean world. The principal figure in the major excavations at Stonehenge between 1950 and 1964 was Professor Richard Atkinson, and he gave vivid expression to what was then the prevailing view in his book *Stonehenge* (Atkinson 1960, 165–6):

And yet were these Wessex chieftains *alone* responsible for the design and construction of this last and greatest monument at Stonehenge? For all their evident power and wealth, and for all their widespread commercial contacts, these men were essentially barbarians. As such, can they have encompassed unaided a monument which uniquely transcends all other comparable prehistoric buildings in Britain, and indeed in all Europe north of the Alps, and exhibits so many refinements of conception and technique? I for one do not believe it. It seems to me that to account for these exotic and unparalleled features one *must* assume the existence of influence from the only contemporary European cultures in which *architecture*, as distinct from mere construction, was already a living tradition; that is from the Mycenaean and Minoan civilizations of the central Mediterranean. Admittedly not all the refinements of Stonehenge can be paralleled in detail in Mycenaean or Minoan architecture. . . . But . . . the architecture of the central Mediterranean provides the only outside source for the sophisticated approach to the architecture exhibited at Stonehenge. We have seen that through trade the necessary contacts with the Mediterranean had been established. The Stonehenge dagger too may be seen, if one wishes, to point more directly at Mycenae itself . . . Is it then any more incredible that the architect of Stonehenge should himself have been a Mycenaean, than that the monument should have been designed and erected, with all its unique and sophisticated detail, by mere barbarians?

The advent of radiocarbon dating (itself using samples deriving from the meticulous excavations of Piggott and Atkinson) allowed much of this to be doubted, and in 1968 I published an article, 'Wessex without Mycenae' (Renfrew 1968) which called these links and that diffusionist view into question, and suggested that Stonehenge was in fact far earlier than its supposed prototypes, and entirely independent of Aegean (or other outside) influence.

The dates now assigned to Stonehenge, as we shall see documented in this meeting, are:

Phase 1 (Bank and ditch enclosure)	c.2950 BC
Phase 2 (Wooden structures within)	c.2900 to 2400 BC
Phase 3 (Bluestone circles, then main sarsen structure, realignment of bluestones, construction of Avenue)	c.2500 to 1600 BC

So we may see that the stone structures at Stonehenge had been in use for more than a millennium before the great fortifications at the citadel at Mycenae were constructed. And we do indeed regard them today as the work of 'mere barbarians'.

Stonehenge in its landscape

In speaking of Stonehenge, we must recognise that one of the great strengths of British archaeology has always been the field approach: landscape archaeology. Already, more than two hundred years ago, William Stukeley was making important field observations and meticulous plans (even if these were embellished by his Druidical speculations). He was the first to record the important linear monument to the north of Stonehenge (which he termed the 'cursus'), and the first also to give detailed record of the Stonehenge Avenue. Sir Richard Colt Hoare himself, in his *Ancient Wiltshire* produced detailed field surveys of many of the monuments, including the Bronze Age barrows, surrounding Stonehenge. And in our own century that great pioneer of field archaeology and of aerial photography O.G.S. Crawford placed modern field archaeology on a sure footing: he was of course the first Archaeological Officer of the Ordnance Survey which, for so many years, made important contributions to archaeological survey.

The principal national agency charged with this responsibility is, however, the Royal Commission on Historical Monuments for England, and their *Stonehenge and its Environs*, published in 1979 (RCHME 1979) is an indispensable source.

The Wessex Archaeological Unit initiated a detailed field-walking survey of the area around Stonehenge (Richards 1990), and this provided a thorough and systematic basis for the understanding of the site in its immediate local context. These resources will prove indispensable to any interpretation of Stonehenge in its landscape, an approach which is currently gaining momentum in archaeology under the influence of currents of thought in contemporary geography, where the subjective, hermeneutic approach has been advocated for some years (e.g. Duncan and Ley 1993) with its keen awareness of a 'sense of place'.

Modern approaches towards interpretation

Stonehenge must first be situated within the long tradition of monumental architecture of great stones ('megaliths') in Britain and north-western Europe. As a monument it may be '*sui generis*', but it is nonetheless the inheritor of at least two architectural traditions.

For the first, let us turn to Newgrange in Ireland, built around 3400 BC. It was Sir Richard Colt Hoare, writing in 1806 (Hoare 1807, 257) who gave the clearest expression to the interpretive dilemma then surrounding such prehistoric monuments:

I shall not unnecessarily trespass upon the time and patience of my readers in endeavouring to ascertain what tribes first peopled this country; nor to what nation the construction of this singular monument may reasonably be attributed for, I fear, both its authors and its original destination will ever remain unknown. Conjecture may wander over its wild and spacious domains but will never bring home with it either truth or conviction. Alike will the histories of those stupendous temples at AVEBURY and STONEHENGE which grace my native county, remain involved in obscurity and oblivion.

But archaeological advances, so well reviewed in the major new English Heritage publication on Stonehenge (Cleal *et al.* 1995), have given a factual response to many of the implied questions. We now know, with good reliability, when Stonehenge was built and for how long it was used. And we can situate it within the trajectories of change in British prehistory, and to some extent within a social context in a developing landscape.

The first architectural tradition, then, of which Stonehenge is an inheritor, involves the use of large stones for major monuments, initially funerary monuments, which are found widely in the Neolithic of north-western Europe, and of which Newgrange is a splendid example. One feature of this tradition is a preoccupation with the movements of the sun and moon, as documented monumentally at Stonehenge itself, where the principal axis of the sarsen structure is aligned upon the midsummer solstitial sunrise. Already a millennium earlier the great passage grave at Newgrange was given an analogous alignment, this time upon the midwinter sunrise, and there are numerous other megalithic constructions which show the persistence of these concerns.

The second tradition in monumental architecture is that of circular structures, indeed structures with circular symmetry. They are seen first in Britain in the so-called 'causewayed camps' of the earlier Neolithic. Robin Hood's Ball is one such site, in the vicinity of Stonehenge. Their successors in chronological terms are certainly the 'henge' monuments, among which Stonehenge I can perhaps be situated. But it is still far from clear that the henges are the successors of the causewayed camps in any continuous or genetic sense: there are arguments for setting their origin much further north, perhaps even in Orkney, and beyond the spatial distribution of the causewayed camps.

A component of both traditions, less obvious today in the archaeological record, is in what Glyn Daniel termed 'megalylic' architecture: the construction of great monuments in wood. It is now known that some of the earliest burial monuments in England, the 'unchambered long barrows', often housed mortuary chambers constructed of wood.

And with the discovery through aerial photography of the site near Durrington Walls, subsequently termed 'Woodhenge', it was realised that the uprights and lintels which are so conspicuous at Stonehenge are in fact part of a tradition of carpentry. This was underlined, again at Durrington Walls, by the subsequent excavations of Geoffrey Wainwright, which revealed complex and large-scale timber structures. It is not the form of the Stonehenge lintels which is exceptional but the specific circumstance that they have been accomplished in stone.

Trajectories of change, and narratives in history: the social dimension

What we may see today in the archaeological record are patterns or trends, which we may term 'trajectories' of change. But we should not forget that the underlying experienced reality was one of individual experience and collective history. The story, the narrative, is in part lost, but that was how the actors at the time experienced these things.

We can situate the first phase at Stonehenge, a simple circular structure around 2900 BC, in the Neolithic landscape, where burial mounds (long barrows) were the local centres for scattered communities, for which the so-called 'causewayed camps' were the regional centres for meeting and for rituals associated with burial.

Stonehenge II, with its indications of wooden pillars or structures is contemporary with some of the great 'henge' monuments such as Durrington Walls, in the mid third millennium BC. These represented a prodigious investment of labour, and we can situate them in the Late Neolithic landscape, eclipsing in scale the earlier local centres.

Stonehenge III, with bluestones and then the great sarsen structure, from around 2500 BC, was an order of magnitude larger, representing millions of work-hours. Along with the other great monument of its time, Silbury Hill, it was of a scale dwarfing even the large henges, like Avebury or Durrington.

Both the spatial patterning, and the labour investment, allow us to put Stonehenge (and Silbury) at the top of a spatial and constructional hierarchy (Renfrew 1973).

I would venture to say that we have not yet explored fully the implications of all this in terms of power and of identity. In spatial terms—horizontal power, if you like—when we consider neighbouring groups and communities, competing and perhaps even dominating: Stonehenge emerged, with its local group of people around 2500 BC as something special. We can glimpse here the scale of neighbouring groups or 'tribes', and the emergence of new collective or social realities. The story that goes with the monument is now lost, but there were great deeds, alliances and perhaps conflicts. Stonehenge must have been the emblem of the population of its enlarged region, and in this sense a symbol of ethnicity or collective identity.

In terms of personal power—vertical power—Stonehenge must also imply some relations of dominance. Its construction was a formidable organisational feat. It does not need

to have been achieved by slave labour or conscription: the labour and services may have been willingly offered. But they were offered to some central authority, and that authority will not have emerged without some internal conflicts within society, and without the aggrandisement of some human lineages at the expense of others. Here too there were stories and tales and songs of leadership and achievement which are lost to us.

Stonehenge as theatre: *Chorea Giganteum*

The Oxford English Dictionary defines a *monument* as: 'Anything that by its survival commemorates a person, action, period or event'. I do not believe that we have yet learnt to think with sufficient coherence about the nature of monuments. Let us note that commemoration implies the exercise of memory—of the mind in the temporal dimension. Monuments are, amongst other things, mnemonics, aids to memory. And what is remembered is the story: the people, the events, the places whose detail are now lost to us. But if the detail is lost, there may still be implications in the form and structure of the construct for the society which built it and which used it. By experiencing the monument in space and in its physical reality we can, I believe, begin to approach the quality of some of these things, although this is a task upon which archaeologists are only now beginning to embark in a systematic and explicit way.

Let us remember that Stonehenge in its landscape was not only a place where things *had* happened, it was undoubtedly a place where things *did* happen. It had a continuing function, which went beyond its role as adducing a remembrance of things past. It was a meeting place, a locus for ritual and pageantry, a stage set. It was a place where the individual participated, through movement, through word, and probably through song and through dance. Not for nothing was it known in the Middle Ages as *Chorea Giganteum*—the Giants' Dance.

Movement is an important feature of all monuments: the movements of those participating fully in the local rituals of place, but also the movements of those who may be little more than spectators. In approaching the monument in the first place they experience a series of successive vistas. No-one who has visited Stonehenge and has had the experience of standing inside the great sarsen circle, can doubt that the impressions offered by the monument are different on the inside. A significant part of the experience is one's own locomotion and the transition from external spectator to internal participant.

Let me remind you of that linear monument, the *cursus*, which lies to the north and which was constructed at the same time as the simple circular enclosure of Stonehenge I. Our great contemporary sculptor Richard Long has shown us through much of his life's work (Fuchs 1986; Renfrew 1990) that one of the most significant of human actions is to walk, and to walk sometimes in a deliberate and organised way. His 'Line Made by Walking (1967)' (Fig. 1; Long 1991, 26) is exactly that: the pattern made on the grass by repeatedly walking up and down, recorded photographically. The very simplicity of



Figure 1. Monument as recorded movement: Richard Long's 'A Line Made by Walking' (1967).

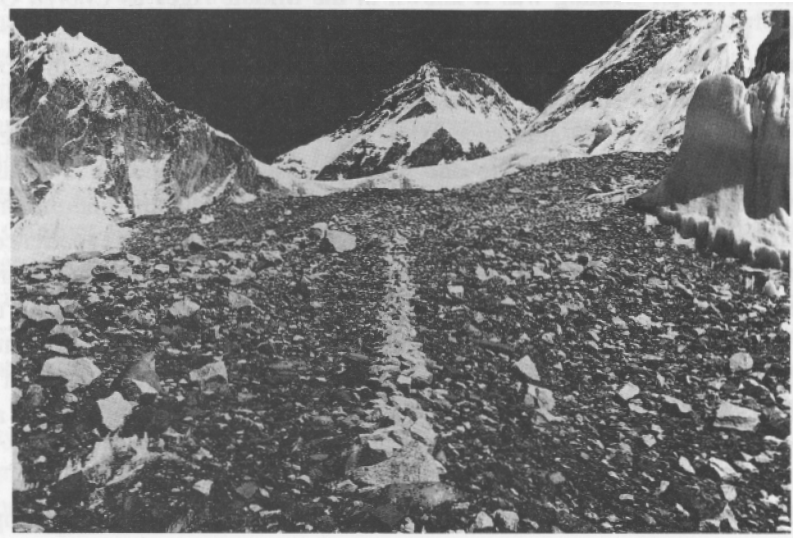


Figure 2. Monument as permanent record: Richard Long's 'A Line in the Himalayas' (1975).

the action (or 'statement') makes it easy to overlook its power. These very simple and direct traces of human activity take a specific form which is, essentially, the simplest mark which a human can make within the landscape: a straight line. There is something which is basic here to many structured activities, not least to ritual.

Richard Long's 'A Line in the Himalayas (1975)' (Fig. 2; Long 1991, 62), like other lines which he has made in the landscape from locally available materials, is one of the most basic of monuments, which 'by its survival commemorates a person, action, period or event'. It commemorates, at the least, that Richard Long was there, and that he set up this line for the sake of remembrance. That is roughly what the *cursus* likewise is, although we may hypothesise that it is more besides. It is of such a scale that it must have been a significant collective work, and as such it may have been designed for repeated uses, presumably repeated perambulations along its length. Stukeley may not have been so far off in calling it a '*cursus*' (i.e. race track), although it is unlikely to have been used for horse or chariot races, since chariots and horse riding were a feature of the later Bronze and Iron Ages respectively.

Long's 'Turf Circles (1988)' (Fig. 3; Long 1991, 161) at Jesus College, Cambridge, or his other and more permanent circular works in the landscape, remind us of that other basic form which along with the straight line (and generating the concept of enclosure) is at the root of all architecture. By their simplicity they remind us of the very considerable power of these elemental ingredients: circularity, enclosure (inside and outside: participation and exclusion), rotation, repetition, endlessness, perfect circular symmetry. All of these are embodied at Stonehenge, not only by the enclosing bank and ditch but by the great circular barrier of the *sarsen* circle.



Figure 3. Fundamental forms: Richard Long's 'Turf Circles' (1988).

Stonehenge is above all miraculous for its verticality. It can be argued that the single upright stone is the most effective assertion of life and of deliberate action: its unstable equilibrium defies the entropy of the universe. It holds the potential for commemoration more effectively than anything else. This was something well understood by the Ancient Egyptians, when they erected those great obelisks at Karnak and at other significant temples (Fig. 4). A single vertical stone establishes an axis—whether an *axis mundi* or a mark of virility. Perhaps the only rival for Stonehenge in this sense among the prehistoric monuments of the world is the great series of stone features in the Carnac region of Brittany: the notable alignments, and above all perhaps the remains of the Grand Menhir Brisé at Locmariquer. One of the menhirs currently standing is at Kergadiou (Fig. 5). Yet many other cultures and traditions have produced monuments of comparable simplicity. In Tonga, for instance, there is a single trilithon, the Ha'amonga a Maui on the island of Tongatapu (Renfrew 1984, 221) which is a wonder to modern visitors in Tonga just as is Stonehenge to those in Wessex.

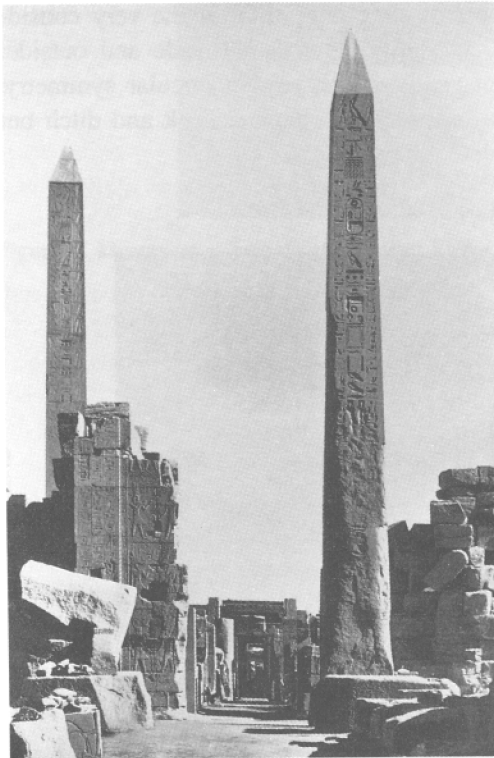


Figure 4. The power of the vertical: Egyptian obelisks at Karnak c.1500 BC.



Figure 5. 'We shall remember them': Breton menhir at Kergadiou.

The conference which formed the basis for the present volume offered the opportunity of defining some of these themes more clearly. We want to know where the stones came from and how they were transported—glacial action or human endeavour. That is still one of the great controversies. We want to know whether Stonehenge was used to observe other astronomical events beyond the midsummer and midwinter solstices. But above all we have to order our own thinking so as to perceive more clearly the principles by which the monument was conceived, and hence to grasp more securely the general intentions of its builders.

When we do so we shall see more clearly that the squalour in which we have allowed Stonehenge to be enmired in our own time, and the petty dealings and rivalries between government departments, betray the brilliant originality of our greatest relic of antiquity. We must see to it that by the Millennium, our Millennium, our collective response is a fitting one in the face of the five millennia to which this extraordinary monument can already lay claim.

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Abstracts

COLIN RENFREW

Setting the Scene: Stonehenge in the round

The special nature of Stonehenge as a complex monument constructed by mere barbarians is stressed, and long-standing traditions of diffusionist explanation reviewed. The alternative is to situate Stonehenge in the local constructional traditions of Neolithic stone monuments, of circular public enclosures, and of complex wooden ('megalylic') structures. The role of such a monument as the focus for memory—for shared oral traditions of narrative—is emphasised.

Monuments orchestrate human movement, including dance. Drawing on the work of the contemporary sculptor Richard Long, linear and circular actions and physical markers are seen as indicators of human presence and activity, while Egyptian obelisks and Breton menhirs, through their striking verticality, are assertive of life and again of human action.

Stonehenge, the Avenue and the Stonehenge Cursus utilise all these general principles and derive much of their power from the masterly simplicity of their use.

ANDREW J. LAWSON

The structural history of Stonehenge

A review of all available evidence from the twentieth-century excavations at Stonehenge, linked to a new suite of radiocarbon dates, has enabled the publication of a revised phasing of the monument. By placing the results of this research alongside the evidence from monuments and open areas in the surrounding landscape which have been examined previously, an understanding can be created of how Stonehenge articulated with its various neighbours through time. It is now certain that throughout its history, Stonehenge was only one element of a well-used landscape, the early use of which can be glimpsed from rare Mesolithic features or Early Neolithic monuments. Three phases in the structural history of Stonehenge can be discerned, each successive phase being more complex than its predecessor. During the Middle Neolithic, the major feature of the Phase 1 monument was earthen. In Phase 2, during the Late Neolithic, timber structures were set up, while Phase 3 encompassed a series of stone settings which have stood from the Early Bronze Age to the present day.