INTRODUCTION

MONUMENTS AND THE NATURAL WORLD

Monuments are not found universally and are rare among European hunter-gatherers. Using the example of megalithic tombs, the first lecture considers the origins of monuments and the ways in which they contributed to a new sense of time and place. There seems no reason to suppose that monument building was linked directly to the adoption of agriculture, and in certain areas the use of monumental structures may actually have helped to create the conditions for economic change. The argument is illustrated by megalithic tombs in Portugal, France and Scandinavia, and by the archaeology of Australia and the eastern United States.

I shall approach my subject obliquely, through a novel and a painting. The novel provides the title for these lectures, and the painting supplies a metaphor for the archaeologist's understanding of monuments.

The novel is the last, unfinished work of the critic Raymond Williams (1989). He called it 'People of the Black Mountains'. Its opening volume is the history of one part of Wales told in a series of short stories, which start in the Ice Age and end with the Roman Conquest. In one of these stories, the inhabitants exchange red deer antlers with strangers who come from an area far away to the south east. Why do these people need so many antlers, they ask: 'Is it for the digging and shaping?' A visitor, who brings flints with him from the White Land, answers with the words 'We are altering the earth' (*ibid*, 149–50).

His reply gave me the title for these lectures, but I do not know whether Williams himself intended the words to have a double meaning. At one level, they seem to describe the process of monument building – the creation of mounds and ditches using antler picks – but they have a subtler resonance as well, for by building the earliest monuments people were indeed altering the earth, and in ways that meant that human experience would never be the same.

In writing the book, Williams was taking on a difficult task. He was trying to interpret the work of archaeologists, but he was also recreating prehistory in a particularly vivid way. We see this again in what he calls the White Land, the chalk of Neolithic Wessex, for this area provides some of the best known images of prehistoric monuments anywhere in Europe. Among them is an extraordinary depiction of the avenue at Avebury, painted by Paul Nash in the 1930s and later issued as a print (front cover illustration). In a sense this painting is more evocative than the

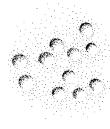


monument itself is now, and yet there is a different sense in which it is an act of the imagination, a recreation just as complicated as the scenes in Williams' novel. The picture has a strange history behind it, and this provides us with a metaphor for some of the things that we do when we study monuments. When Nash was working at Avebury the stones of the avenue had not been recrected. Some had fallen, others had been overthrown and buried, and they had to be found by painstaking excavation. His picture was based on the evidence of those excavations and not on the monument that we can see today (Stuart Piggott pers comm). Even before Keiller's repairs, the stones were raised from the ground through the power of the imagination. Yet there was nothing capricious about this, for the painting was based on sketches made during work in the field. This was a creative act, but of an archaeological kind.

The Avebury that we study today can only be reached by a rather similar process. It calls for an act of interpretation, and every generation makes its own. Behind that first attempt at re-creation, there extends an unbroken prospect of interpretation and reinterpretation. I want to suggest that this is a fundamental property of prehistoric monuments. It is at once an inescapable feature of their making, and a vital clue to their history. By building monuments prehistoric people were altering the earth. Not only were they creating an eye-catching spectacle that attracts the visitor to this day, they made their contribution to a new sense of time and place. And that was how these constructions played their part in the working of prehistoric society. Monuments are made to last, but their meanings are often elusive, and not just for archaeologists. The process of interpretation started as soon as they were built.

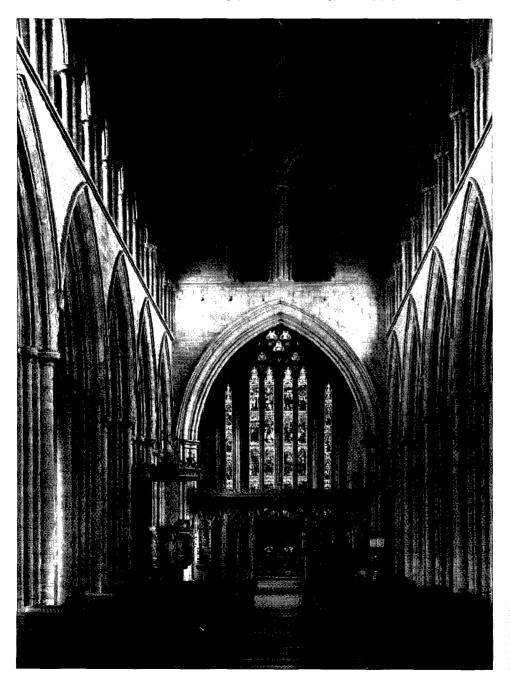
We have difficulty with this term 'monument', and our difficulties are worth some thought. The dictionary definition is rather neat: 'anything enduring that serves to commemorate'. Its root is even more revealing, for it comes from the Latin 'monere', to remind. Monuments are about memory: they join the past to the present. But that is not the way in which archaeologists have used the term. Monuments are also items of information. Thus we have Sites and Monuments Records, and, by extension, we have the prehistorian's idea of the monumental as something outrageous and massive which flouts the Principle of Least Effort (Trigger 1990).

So monuments evoke memory. Personal memories, no doubt, but to echo the title of Paul Connerton's book, how do societies remember (Connerton 1989; cf Melion and Küchler 1991)? One of the main ways in which they do so is through rituals. Among other things, ritual is a specialised kind of communication, and it is one that can embody a different sense of time from everyday affairs. In ritual the past reaches right into the present, and the two cannot be separated. It is a source of timeless propositions about the world, of eternal verities whose authority is guarded by specialised methods of communication. Rituals follow a set pattern and may communicate through unusual media such as song or dance. They can employ forms of language that are not in everyday use, and the texts can be performed using postures, gestures and movements which cannot easily be changed



(Bloch 1989). For Connerton, the physical element in such a performance is an important part of the way in which it is committed to memory.

An example may be helpful here (illus 2). Until the Reformation the Christian liturgy was conducted in a language that no one had used in ordinary conversation for centuries. Even now those taking part in the liturgy occupy prescribed places



2 Interior view of Dunblane Cathedral. Photograph: Historic Scotland.

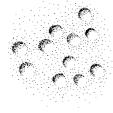
within an elaborate architectural setting and they move about that building according to an unvarying set of rules. Certain gestures are laid down – genuflection, the sign of the cross – and the service involves specialised forms of utterance, including prayer and plainchant. These fixed elements are at the heart of many public rituals, and they work in two ways at the same time. They make it more difficult for the participants to discuss what is going on, and in this sense they tend to protect certain ideas from dissent (Bloch 1989). They also contribute to the processes by which fundamental beliefs are memorised, so that they are transmitted from one generation to the next.

The form of the Christian church is inextricably bound up in that ritual (cf Graves 1989). It has a stereotyped ground-plan that helps to determine the pattern of movement during the ceremony. Different parts of the structure carry specific connotations and may be embellished by specialised images that uphold the tenets of the liturgy. Different groups of people can be divided from one another by screens, whilst the entire structure has a single alignment which it shares with the graves of the Christian dead. There are whole panels of stained glass telling sacred stories, and specialised fittings such as fonts or confessionals that are peculiar to this kind of building. At one level the whole structure is a mnemonic device, and strengthens the role of the ritual in presenting an interpretation of the world and the place of particular people within it (cf Kemp, W 1991).

In this sense rituals and monuments both have a similar effect. They are among the ways in which societies remember. It seems hardly surprising, then, that they should normally be studied together. But there is a danger in this approach, for the link is not inevitable. Rituals may be performed in many other settings, and they need not leave any trace behind them. Alternatively, societies may choose to forget their past and can build elaborate conventions around that process. The creation of the first monuments in fact presents a problem, and it is that problem that I want to consider here.



We must ask ourselves what archaeologists do when they study monuments. In fact they take them as given: as arbitrary cultural traits that assume a curious life of their own. Compared with Christian churches, such monuments appear oddly inert. They have their different uses, but they always seem to be passive reflections of something outside: religion, burial, exchange, food storage, warfare. They can be organised into classes as if they were portable artefacts, and at best they play a part in studies of specific cultural regimes. Thus we have monographs on different types of monument, but fight shy of asking why it is that all of them have a relatively short history. There were no major monuments in Britain or Continental Europe before the Neolithic period, but no one has ever suggested that ritual itself is a late development; it is convincingly documented as far back as the appearance of Homo Sapiens (Mellars 1989). And if we do ask why monument building commences in the Neolithic, our response is curiously oblique. In fact we talk about farming, as if monument building was only a side-effect of agriculture. We may have asked why monuments were built: we are told how their building was financed.



Again, it seems more important to ask what monuments do. The dictionary definition is straightforward. Monuments commemorate and they endure. These are the features that really need discussion. Their links with a particular subsistence economy are a secondary consideration.

In practice the building of monuments imposes itself on human consciousness in three different ways. First, it creates an entirely new sense of place. That is not to say that societies who lack monuments exist in an uncharted wilderness, for natural places can assume just as much significance (Wilson 1988); the difficulty is in recognising this process through field archaeology. What is really new is the decision to ground the experience of place in deliberate, human constructions, and this involves a different relationship with the natural world. Instead of creating an intellectual structure around the features of the natural topography, monument building is a way of establishing or enhancing the significance of particular locations. Once that has happened, those places enter the consciousness of the people who live and work around them until the landscape as a whole is changed. These new configurations enter their world through their everyday experiences and in turn those people provide a commentary on what they see (Barrett in press).

The second feature that characterises prehistoric monuments is that they last for a very long time. This is a statement of the obvious, but it is one that must be made. The calibration of radiocarbon dates only emphasises the point. The extraordinary longevity of monuments is just as apparent whether they are used over a continuous period or are rejected immediately. In either case they come to represent a highly visible past, and one which is manifestly of human origin. Their very survival across the generations demands a conception of time that goes well beyond the concerns of the everyday (Shennan 1983). By their very construction they are difficult to eliminate from human memory, but when that does happen it offers one of the most promising routes to the study of social change.

On the other hand, memory is unstable. Even if social traditions can be transmitted over long periods, studies of oral literature show how rapidly details are changed, even when this is not intended to happen (Finnegan 1977). Rituals and beliefs can also be manipulated more consciously to serve the changing needs of people in the present; to revert to an earlier example, despite the remarkable stability of the Christian liturgy, the same basic ideas are behind the Desert Fathers, the Renaissance papacy and modern Liberation Theology. Again the visible memorials of older generations cannot be excluded from account, and these have to be incorporated in any interpretation of the world. That is to say, a monument may change its meanings from one period to another without necessarily changing its form. It can be adapted, it can be left alone, but unless it is actually destroyed, it is almost impossible to eradicate from human experience.

Taking those points together, we can say that the building and operation of monuments bring with them a distinctive type of consciousness. This involves a subtle change in perceptions of place, and the creation and use of these structures necessarily inculcate a new sense of time as well (Criado 1989a; 1989b). This is a process that can never be reversed. In both cases it forged a new relationship between



people, landscape and history. That is why I have called the first lecture 'Monuments and the natural world'.



None of these observations is new, and all might seem easy to explain in purely practical terms. That sense of place could be explained by the requirements of an agricultural economy. By building long-lasting monuments in the working land-scape, people might have laid claim to scarce resources. They might even have lent legitimacy to those claims through the physical presence of the ancestors. The argument has been used in Old and New World archaeology and is a familiar explanation for the adoption and distribution of megaliths (Chapman 1981; illus 3).

Changing perceptions of time might also be linked with the adoption of agriculture, for the production of domesticated cereals and livestock involves careful planning, and decisions made by one generation may well influence the fortunes of their successors. Land is cleared and maintained over long periods of time; there is a sense in which it represents a substantial investment. Even on a shorter time scale, farming involves careful calculations as to the amount of seed corn to store for future use, or the right number of animals required to maintain a breeding population. In simple terms, farming instills a sense of the past at the same time as it necessitates judicious planning for the future (Meillassoux 1981).

Proponents of this interpretation contrast the sense of time found among farmers with that of hunter-gatherers. Hunter-gatherers, they say, operate across a far shorter time scale. Food is consumed as soon as it is obtained and there is no need to make a lasting investment in any particular area of land (*ibid*). Territorial boundaries are weakly defined, where they exist at all, and little attention is paid to ancestry and descent.

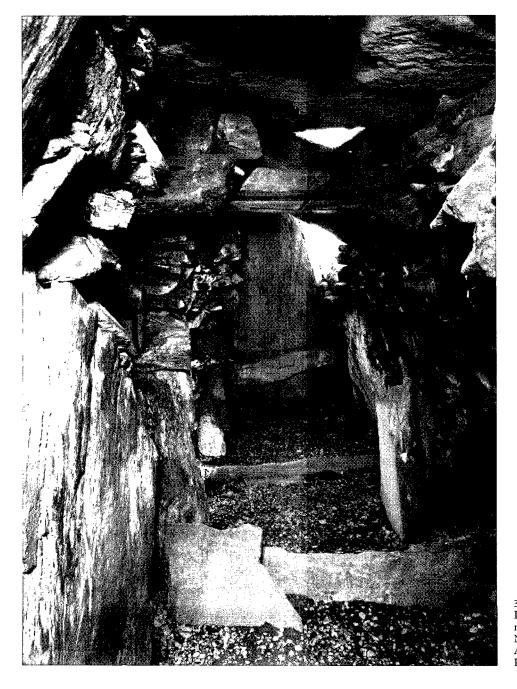
And that is the fatal flaw in the whole scheme. It places all the emphasis on one end of a continuum among hunter-gatherer societies. The groups who conform to this scheme are essentially those who practice what James Woodburn (1982) calls 'immediate return systems'. These are mobile peoples who do not store food and lack elaborate systems of ranking and descent. Genealogy is unimportant, and there is little concept of personal property.

On the other hand, Woodburn contrasts these groups with hunter-gatherers who practice 'delayed return systems', and here the easy contrast breaks down completely, for these include people who practice a far less mobile lifestyle and whose economy is much more specialised (*ibid*). Social institutions are important, and in this case there is some evidence for the storage of food. Unlike hunter-gatherers who practice immediate return systems, these groups have a stronger conception of territory and also possess a more elaborate social structure. In terms of what I said earlier, they have a more developed perception of place and time.



There is no doubt that the contrast is a real one, but there is considerable debate about the relationship between these ideal types (eg Woodburn 1988; Headland &

Reid 1989). The scheme is essentially an extrapolation from twentieth century ethnography, and it is on this point that opinion is divided. Until quite recently, immediate return systems were supposed to characterise most hunter-gatherers; so much so that those with delayed return systems were considered as a special case and were not studied systematically. At the same time, it has become quite clear



3 Interior view of the megalithic tomb at Nether Largie, Argyll. Photograph: Historic Scotland.

that some of the groups once thought to typify the hunter-gatherer way of life had a complicated history of their own. Among them were displaced agriculturalists, or groups whose relations with the outside world had been substantially altered during the colonial period. As a result, some authorities even suggest that immediate return systems are a modern phenomenon, brought about by the impoverishment of marginally located societies during recent years (Tilley 1989; cf Woodburn 1988).

This discussion is of great importance to any account of the origins of monuments, but is there any way of resolving the debate? Brian Hayden (1990) describes some of the hunter-gatherers with delayed return systems as 'accumulators'. By this he means that they are groups within which certain individuals tend to monopolise particular resources, often deploying them for social advantage by providing feasts. He makes the important point that accumulators have a specialised distribution in both archaeology and anthropology. They are found in those environments where people can live quite comfortably off a few almost infinitely renewable resources. They are able to do this because there is no danger of exceeding the limits of the food supply, and this is why the increasingly extravagant accumulation and dispersal of foodstuffs can take place. Similar social mechanisms cannot be sustained in every area, and in many regions ecological factors alone exclude any system of this kind. The distribution of modern hunter-gatherers is quite misleading, as they have often been forced to settle unproductive areas. Even so, there is enough archaeological evidence to show that over substantial parts of Europe Mesolithic people were living in regions which are never likely to have supported this kind of system.

The contrast between hunter-gatherers and farmers is equally confusing, but in a quite different way. We have seen that not all hunter-gatherers were alike. The same is true of those groups that we describe as Neolithic. There is another important distinction to be made, and this will appear again in some of the other lectures. Our conception of the Neolithic economy is severely biased by the evidence from a few well-researched areas where fieldwork gives us a picture of unusual clarity. These include the Balkans and the great loess corridors of Europe, where we find substantial domestic buildings, together with evidence of cereal growing. This is best exemplified by the Linearbandkeramik. All too often that model is extrapolated into other areas until it arouses quite unrealistic expectations, expectations that are immediately dashed by the results of fieldwork. An inevitable disappointment ensues, for beyond the limits of these areas, in Scandinavia, Britain and western France, the expected pattern fails to materialise (Whittle 1985, ch 6). Very few domestic structures are known, and the economic evidence, from pollen analysis as well as carbonised plants, is meagre in the extreme. With the exception of Scandinavia, we are no better served by finds of animal bones.



In fact there are perfectly good reasons for this contrast. The Atlantic coastline had strong links with the West Mediterranean, where the adoption of farming was slow, and in any case Scandinavia, western France and the British Isles were not included in the first expansion of agriculture (Zvelebil & Rowley-Conwy 1986). When elements of Neolithic material culture did make a showing, the

Linearbandkeramik pattern was virtually extinct. By this time there may be signs of a more extensive system of land use which is hard to trace in the same detail as its predecessor. For our purposes, the important point is that it leaves us not with one major contrast but two. There is the distinction between what Hayden calls accumulators and more mobile hunter-gatherers, and there is is also the distinction between the core areas of Neolithic farming, like the Rhineland, and more marginal regions of Europe where elements of Neolithic material culture made their appearance without much sign of large-scale economic change. The importance of those areas is very simple, for it is here that some of the first monuments were built.

At this point Neolithic specialists are trapped in a circular argument. They have no problems where traces of farming survive, but in the margin, where these are often very limited indeed, they substitute the evidence of monuments. Humphrey Case (1969) treats these monuments as an indication of what he calls a 'stable adjustment', contending that they could only have been built on the basis of an agricultural surplus. Proponents of this approach then try to strengthen their argument by explaining why farmers **need** megaliths.

We have to ask ourselves two questions. Is monument building necessarily linked to the adoption of an agricultural economy? And even if a connection can be found, how do we account for the paradoxical situation that mortuary monuments - particularly megalithic tombs - tend to be distributed in the agricultural margin and not where we find the most convincing evidence of farmers?

To address the first question, we need to leave Europe altogether. I want to discuss the relationship between monument building and food production in two other parts of the world, and in doing so I shall suggest some ways in which the argument can be widened. After that, I shall return to the European evidence and offer a rather different perspective on the origins of stone-built tombs.

My examples are from two very different peoples, both of them hunter-gatherers. Among the Australian Aborigines the evidence for economic intensification comes late and is not very widely distributed (Lourandos 1988). For the most part the pattern of settlement was a mobile one and yet it included monuments. I shall discuss the relationship between food production and the organisation of Aboriginal ceremonies. My other example is the eastern United States, where the monuments have sometimes been compared with those in Britain and France (Bender 1985). In this case, my reason for discussing this evidence is that American archaeologists also have problems in reconciling the evidence of monument building with their information about the subsistence economy. Those problems are nearer to resolution than our own, and we can learn from that experience.

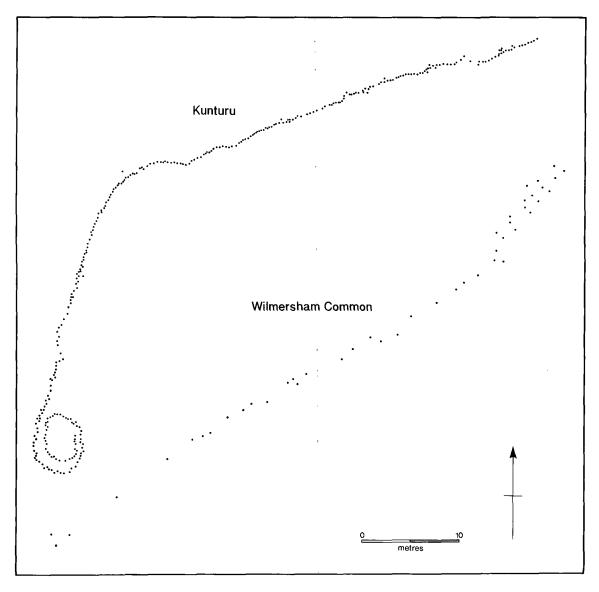
In each example I am using archaeological and ethnographic evidence as a platform from which to question our stereotypes. I am not suggesting that the material from either area can be used as a direct analogy. The Australian evidence is still



Comparative plans of the stone alignments at Kunturu, Western Australia (after Gould & Gould 1968) and Wilmersham Common, Exmoor (after Grinsell 1977).

rather patchy and has not been investigated on a large scale, but it is highly revealing. It is commonly supposed that Aboriginal culture involved a very close integration with the natural world and that the features of the landscape itself were charged with supernatural power (Layton 1986; Wilson 1988; Morphy 1991). In fact it would not be too much to say that this was an area in which natural places seem to have played some of the roles that were taken by monuments in Europe.

Now, we realise that this portrayal is too simple. It is certainly true that the major Aboriginal ceremonies did not leave much trace behind, but monuments were constructed on a limited scale. These include the low earthwork enclosures known as bora rings, standing stones, arrangements of cairns, and stone alignments, occasionally of some complexity (Flood 1989, 251–5; illus 4). In addition, natural



features of the landscape were embellished. Aboriginal rock painting is already well known, but another example is the practice of carving living trees.

The scale of these monuments is limited. The materials were readily available, and little effort was needed to build them. Their setting only emphasises the natural features of the landscape that play such an important role in Aboriginal belief. Those locations were modified to a very limited extent: this is particularly true of the carved trees. Instead of 'altering the earth', these structures still conform to its features. Even so, this example provides one important lesson. The building of small scale monuments need not necessarily be confined to sedentary peoples.

All too little is known of the circumstances in which these monuments were created, but again there is enough information to reject certain stereotypes. Although we might consider the Australian hinterland as one of the least hospitable areas imaginable, it was quite possible for substantial groups of people to assemble for ceremonies that extended over a considerable period of time. The slight monuments that now survive seem to have been built on such occasions, but their small scale gives no indication of the sheer number of participants. Two ceremonies recorded in Arnhem Land involved gatherings of two or three hundred people and lasted for more than ten weeks (Jones 1977). Things might have been very different. Had the participants devoted ten hours a day to monument building, their efforts would have totalled more than 25,000 worker hours. That is equivalent to the construction of three long barrows, a small causewayed enclosure or one of the lesser hillforts. The point is that they could have built large monuments, but they did not do so.

We must also ask how the participants were sustained over such long periods. Again the answer is revealing. They depended on what have been described as 'communion foods': large quantities of one resource amassed specifically to support a large gathering (Flood 1980). These included a number of resources that were harvested on a very large scale, and sometimes this process involved hard work and forward planning. Such foods included nuts, whose numbers could be manipulated by firing the vegetation; moths, which hibernated together in enormous numbers in certain caves; and eels, whose population was controlled by a system of artificial channels. In some cases these practices were part of a process of intensification that characterises the late prehistory of Australia (Lourandos 1988), but in these particular instances this investment of energy was simply to support the large numbers of people congregating for important ceremonies. In short, it would not be correct to assume that those ceremonies were the **outcome** of a buoyant economy; particularly in remote areas of the uplands, food production intensified to meet the needs of ritual life.

In the eastern United States the basic issues are simple. At first it seemed as if monuments originated at the same time as farming, but that argument has been largely discredited. First of all, there were cases in which the chronology of monument building raised problems because certain sites seemed too early to have been financed by large scale cultivation. This argument focused on the massive enclosure at Poverty Point and it resulted in the careful collection of food remains. The

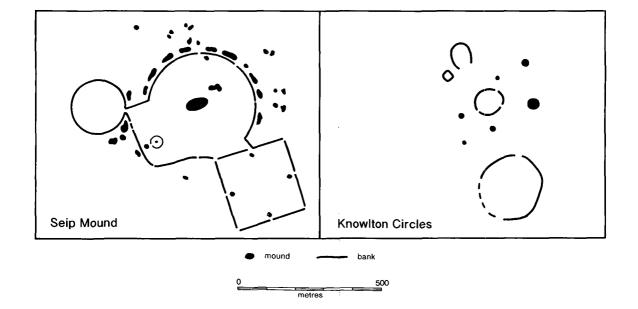


results of this work upset many preconceptions. This was among the oldest ceremonial centres in the United States, and yet domesticated plants were never a major part of the contemporary economy (Ford & Webb 1956). Again it seemed likely that the earthworks of the Hopewell and Adena Cultures belonged to the first period of field agriculture in the eastern United States, and their appearance seemed to be linked with the general adoption of maize. This suggestion led to a massive increase in environmental archaeology, but its results are unequivocal. These great ceremonial centres were constructed **before** maize was in general use (Fritz 1990). In fact it was not cultivated on a significant scale until these sites were well established and some had been abandoned. What appeared to be the obvious relationship between resources and monument building was actually the wrong way round. With a growing commitment to field agriculture comes evidence of dietary stress (Perzigian *et al* 1984), and this may even have contributed to the demise of the ceremonial centres.

In fact it was only later, in the Mississippian period, that large monuments were erected by communities who were dependent on maize. The history of these monuments is a particularly revealing one, for the increasing dependence on a single resource, and on the fixed plots where it was grown, led to the spread of infectious disease (Rose *et al* 1984). There are signs of violence, and some of the ceremonial centres were provided with defences. One feature of those sites was the large scale storage of foodstuffs (Muller 1987).

Comparative plans of the earthwork ceremonial centres at Seip, United States (after Greber 1979) and Knowlton, England (after RCHME 1975).

It would be wrong to take this sequence, interesting as it is, as a direct analogy for what happened in Europe, but two comparisons may help us to put our house in order. In earlier periods we find that monuments were built on the basis mainly of wild resources; it is a moot point whether we call the population complex huntergatherers, or whether we think of them as incipient farmers because of the small



contribution made by domesticated plants. It may be better to refer to them as 'accumulators'. The monuments built in the Hopewell and Adena phases include mounds, enclosures and alignments of much the same size as those in Neolithic Europe (illus 5), and again they were among the nodes of an important exchange network. The later ceremonial centres were those built after the general adoption of maize. There might seem to be a link between the productivity of field agriculture and the construction of such enormous mounds, but in fact the relationship is problematical. The population was now more vulnerable to fluctuations in the food supply, and there are signs of warfare. The presence of massive foodstores inside these fortifications recalls the evidence of hillforts rather than henges.

So in neither case do we find what seemed to be the obvious relationship between monument building and the subsistence economy. In some parts of Australia, intensification was specifically intended to allow large ceremonies to take place, and these could happen in otherwise lightly populated areas far from the home territories of the participants. In the eastern United States, monument building preceded the general adoption of field agriculture, and when food production intensified it brought problems in its wake. So severe were these problems that they may have ended in disaster. If this really was the case, it might be wise to reconsider the links between farming and the emergence of monuments in Europe.

That is an almost impossible task for a single lecture, but the one basic point can be made really quite simply. I am concerned with the **origins** of the earliest long mounds and megalithic tombs, and not with their successors. Once the principle of building mortuary mounds had been established, the same architectural ideas could be interpreted across the generations. It is quite enough to consider how that process began.

I am fortunate that Andrew Sherratt has been over much of the same ground in a recent article (Sherratt 1990). There he identifies most of the key issues. He has also made a number of points with which I would disagree.

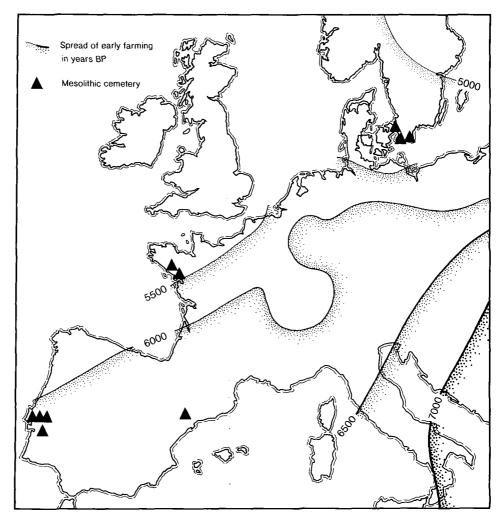
Let us start with the areas of common ground. Sherratt's paper begins with two observations, both of which I share. The first megalithic tombs and their equivalents are a feature of the marginal areas of the European Neolithic: the North Sea and the Atlantic in particular. They are found beyond the limits of initial agricultural colonisation: that broad zone of settlement that focuses on the loess. At the same time, Sherratt follows the argument that the layout of some of these monuments made an explicit reference to the ground-plan of the long houses in that region (Hodder 1984). This is particularly important since these monuments lay outside their distribution. But we can also note that circular passage tombs, with no counterparts further to the east, are found along the Atlantic coastline.

Another feature links many of the places in which those developments took place. All are areas in which hunter-gatherers could sustain themselves without any pressure on local resources. In some cases their settlement sites have been investigated



in detail and provide evidence for a number of common features. There are signs that greater use was made of coastal resources (Zvelebil & Rowley-Conwy 1986). Some of the occupation sites seem to have been occupied for longer periods than their predecessors, and at different points along the coastline of western and northern Europe we also find the earliest cemeteries in those areas (illus 6). At sites like Hoedic, Teviec, Vedbaek and Skateholm there are patterns of association between particular burials and specific types of artefact, suggesting that we are dealing with the cemeteries of communities with well-established social conventions (Clark & Neely 1987). At a broader level still, we find evidence for increasingly sharp divisions between artefact styles in different regions, suggesting the emergence of groups who distinguished themselves from their neighbours through their self-conscious use of material culture (Gendel 1984; Larsson 1990a, 287–90).

It may be no accident that every one of these features is shared by the archaeological and ethnographic groups considered by Hayden in his description of 'accumul-



The distribution of Mesolithic cemeteries in northern and western Europe (after Zvelebil & Rowley-Conwy 1986) in relation to the spread of agriculture in radiocarbon years before present (after Ammerman & Cavalli-Sforza 1984).

ators'. They occupy environments that allow the accumulation of foodstuffs, together with their deployment in social transactions. Often they make use of marine resources, and again they are among the first groups to bury their dead with grave goods. One interesting feature which he also identifies is the domestication of the dog. This happens very widely in the ethnographic record, although the reasons for this practice vary. For our purposes this observation is striking as dogs are the only domesticated animals at late Mesolithic sites in Scandinavia and Portugal. At Skateholm they received formal burial in the same cemetery as their owners (Larsson 1990b).

Hayden suggests two other characteristics of accumulators. Members of these societies seek to raise their status by giving, by providing feasts and also by distributing exotic artefacts. In each case their aim is the same: to improve their standing by creating a network of debtors. Hayden argues that this practice may explain why they place such a premium on obtaining artefacts and foodstuffs that are not available locally. As he points out, there are many cases in which those foods are selected, not for their contribution to the subsistence economy, but because they are unusual or exotic.

Sherratt's paper shows that many of these conditions are satisfied by hunter-gatherer societies in the areas that saw the first megalithic monuments. Those in Western France seem to have been linked to the exchange network represented archaeologically by the distribution of Impressed Ware. In the same way, but at a later date, existing groups in southern Scandinavia were receiving axes from agricultural communities to the south. There is no doubt that domesticates were also adopted in these more marginal areas, although we know very little about the scale on which they were used. That is where the relationship between farming and megalithic tombs becomes so important, and it is where I part company from Sherratt's interpretation.

Let me quote his argument:

'The adoption of monumental tombs . . . seems to be characteristic of areas already fairly densely occupied by Mesolithic groups, who adopted Neolithic horticulture on the central European model. These tombs . . . were as basic a feature of early cereal cultivation as the hoe and the axe; the material infrastructure of the organisation of labour was as crucial in the establishment of horticulture as the more obvious elements of technology . . . The advantages of this form of organisation were not limited to the cultivation of cereals; and once established, could be applied to other modes of subsistence . . . where the recruitment of a more extensive labour force gave a competitive advantage' (1990, 149-50).

And again, perhaps more explicitly:

'In a society where labour was the most important commodity, moving large stones symbolised the workforce which could be assembled at any one time' (*ibid*, 150).



So the construction of megalithic monuments is a form of conspicuous display, but one which celebrates the cohesion of the agricultural workforce. Ultimately, as in so many explanations, megaliths play a useful role in farming. The sowing and harvesting of crops provide the motive force for everything else.

Is that necessarily the case? If we have followed Hayden's argument so far, why not go one stage further and see the creation of monuments as one more element in the playing-out of social relations? Long mounds may well reflect the characteristic ground-plan of long houses, and it is no longer so clear that they originated in the agricultural margin. They may have had a source further to the east, during the final phases of the Linearbandkeramik. Passage graves, on the other hand, should have a different origin. The chronological relationship between the two groups remains a matter for discussion (Kinnes 1992, 133–5), although Scarre (1992) suggests that beyond an area of overlap in north-west France, passage graves may have developed first, for in this case it is difficult to find any prototypes outside the local region.



I must make it quite clear what I am and am not saying. I am suggesting that the creation of monuments could be another way in which local communities sought to gain prestige. The idea of building such structures could have developed locally, but it is just as likely to have been influenced from outside. The acquisition of more tangible assets from other areas might be part of the same process. But I am not arguing that this was independent of the adoption of domesticated resources; nor is there any reason to suppose that the agricultural margins were immune from colonisation. Neither proposition can be supported by the available evidence. My basic point is a far simpler one: the evidence for the intensive exploitation of new resources, or even for agricultural tasks requiring a significant workforce, simply has not been found – it has merely been postulated – and it is postulated as part of a legacy that we take for granted when we talk about the Neolithic period. Domesticated plants and animals are a feature of the 'Neolithic' economy; megalithic tombs, we say, are 'Neolithic' monuments. If we have one, we must have the other. In this case it amounts to saying that the presence of megalithic tombs is prima facie evidence of cultivation on a significant scale.

For people who could maintain a satisfactory lifestyle on the basis of wild resources, the large scale use of domesticates would have been problematical. I do not mean to suggest that agricultural techniques were difficult to grasp or even to apply, but to do so on any scale would have involved a quite different understanding of the world, and of the relationship between nature and human culture. This is a theme that Ian Hodder has discussed in a recent book (1990). I have said that in Europe, monuments are not found before the early Neolithic period. That cannot be because people lacked the infrastructure needed to build them, since we have a growing body of evidence for relatively settled communities in the Mesolithic, some of them with complex social institutions. Perhaps the Australian example might be relevant again here, for in this case we considered groups of hunter-gatherers who congregated in great numbers to perform collective rituals, but left only the slightest monuments behind them. Like the sand



paintings and earth sculptures created on those occasions, their impact on the terrain was very limited indeed. This may be because the major factor determining the location of these ceremonies was the sacred character of the landscape as a whole, and the particular potency of certain natural places. To engage in major modification of those places would have involved an entirely different attitude to nature. As Bird-David has argued recently, mobile hunter-gatherers may not distinguish between their own fortunes and the constitution of the world around them. They operate on the basis of trust: trust between one another on a day to day basis, and, just as important, trust between people and nature (Bird-David 1990; 1992).

I suggest that a similar reticence may explain the late date at which monuments were created in prehistoric Europe. The apparent synchronism with the adoption of agriculture need not be explained in functional terms at all: megaliths were not necessarily a way of making people good farmers. The common element is that in both cases the population was making a radical break with what they had known before. They were changing their attitudes to nature and the wild by domesticating plants and animals, and they were changing their whole conception of place by building megalithic tombs. Both attest a similar change of attitude, but the link was in the mind, not in the ploughsoil.

I quoted two case studies from outside Europe. Does the American experience shed any light on these problems? I believe that it may suggest a further possibility, for there monument building seems to have led up to the widespread cultivation of maize. I have already expressed my doubts about the directness of the links between monuments and agricultural production in Neolithic Europe. One reason for doing so was precisely because there is actually so little evidence for economic changes before those monuments were built; after all, some of them were constructed over settlements of entirely Mesolithic character. And unless that sequence can be shown unequivocally it seems implausible that they were made to celebrate the agricultural work force.

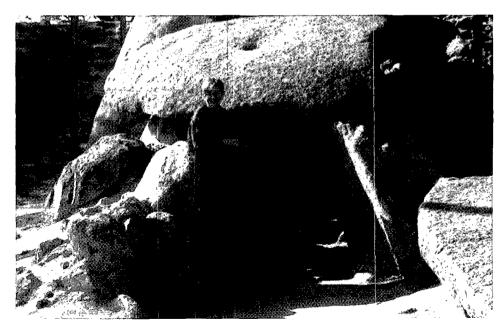
There is a wild teleology behind such ideas, and it should be resisted. It would only make sense if Neolithic people had formulated a strategy for economic renewal in which the best way to make agriculture work was to invent an ideology. It would be far simpler to see the creation of monuments as part of the logic by which accumulators pursue their social ends. In that case, is there any link at all between megaliths and farming? I suggest that one does exist.

In the agricultural margins, as I call them – those areas which were already occupied by stable hunter-gatherers – monuments and domesticates may appear at much the same time, but the first real signs of expansion, in the economy and in the pattern of settlement, come some time **after** the creation of monuments. If farming did not provide a surplus for building tombs could the sequence of events have been been the other way round?



Earlier in this lecture I mentioned the idea that agriculture requires a different sense of time and place from hunting and gathering. That observation deserves our attention now. No doubt some hunter-gatherers opted not to move about the landscape, but at least they had the freedom of action to change their minds. That is not so easy for communities with a full commitment to agriculture. I also suggested – and this is the important point – that agriculture requires a quite different conception of time from the annual cycles on which so many hunter-gatherers operate. That change is not an option but a necessity, and again it requires a different kind of consciousness. That cannot have developed spontaneously. I argued that the sheer persistence of monuments would tend to inculcate a distinctive sense of place and time. This was not their intention, but it would have been one of their effects. Monuments, like so much of material culture, played an active role in the past. Could it be that the creation and operation of the first megalithic tombs was not in fact a consequence of economic change? In time it may have led to some of the changes of human perception that made agriculture both thinkable and possible.

Some years ago Colin Renfrew isolated five areas in which, he claimed, megalithic tombs might have developed independently (1973, ch 7). I am not persuaded by this argument, but it is certainly significant that in no fewer than three of these regions, Portugal, Brittany and southern Scandinavia, mortuary monuments develop in parts of Europe where Mesolithic cemeteries are found. In each case these are on the coast. The striking feature is that in all three areas the archaeological sequence is similar. The Mesolithic cemeteries provide evidence of social differentiation and are closely linked to settlement sites that could have been occupied over lengthy periods. In Scandinavia there is even some evidence for the circulation of



The entrance to the megalithic tomb of Anta Grande do Zambujeiro, Portugal. Photograph: Mike Fulford.

unfleshed human bones (Larsson 1990a, 285). This is also found at the late Mesolithic occupation sites on Oronsay (Mellars 1987, 297–9), and it is a feature that is more commonly recognised at mortuary monuments of Neolithic date. Yet in each of these areas the first evidence for agriculture on any scale is found in a later phase than the first of these monuments. In Portugal the oldest megalithic tombs belong to a period in which some sites provide evidence of domesticated resources whilst others are associated with wild plants and animals (Kalb 1989; illus 7). As Strauss (1991) recently pointed out, the most convincing signs of economic growth are found some centuries later, and only then can we show that domesticated plants made much contribution to the food supply.

In north-west France the situation is rather similar. A few of the first stone tombs may be associated with Mesolithic artefacts, even when there is pollen evidence for the presence of cereals (L'Helgouac'h 1976; illus 8). Our information is limited but whilst there are a few signs of land clearance at the beginning of the Neolithic period, the best evidence for a sustained human impact on the land-scape comes at a later stage (Hibbs 1984, 275–6). Exactly the same sequence is found in the Breton uplands, and here the first pollen evidence for cereal farming appears some time after the construction of the earliest mortuary monuments (Briard 1989, pt 2).

In Scandinavia the evidence is of much better quality, but it shows exactly the same pattern. Cereals seem to have been available in small numbers during the late Mesolithic, and long barrows and possibly dolmens were built during the period in which material culture changed (Fischer 1982; Jennbert 1985; illus 9). But the major transformation of the landscape did not take place for several hundred years. When it did so, its effects were obvious. Large settlements appear for the first time and there are more indications of sedentary occupation (Madsen 1982). Cattle increased in importance over pigs, and, as Thrane (1989) has

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The megalithic tomb at Dissignac,
Brittany.
Photograph: Aubrey
Burl.



recently suggested, this is the first period in which we can recognise traces of plough agriculture. There may have been a similar sequence in Britain where our evidence is much more limited. Here again we find a major expansion in the number and size of settlement areas several centuries after the first construction of long mounds (Bradley 1987a).

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Perhaps I have raised more questions than I can reasonably hope to answer, but some are more important than others and I need to summarise the points that I have made so far. The creation of monuments involved a subtle change in the relationship between people and the natural world. That change was just as fundamental as the adoption of domesticated resources, but whilst the two developments may have run in parallel, neither was simply a function of the other. Some monuments could have been built – and possibly were built – without the adoption of an agricultural economy. Some societies may have found it easier to make a significant commitment to farming because of a new sense of time and place imparted by the existence of monuments. Agricultural expansion did not precede the first construction of mounds or tombs as the model of 'stable adjustment' would suggest; if anything, the archaeological sequence is the other way round. Both farming and

Toftum long barrow, Funen, Denmark.



monument building involved new relationships between culture and nature, and together they amount to a process of 'altering the earth', but for that transformation to be thinkable at all required a quite different attitude of mind. That is really what constitutes the 'Neolithic'.

Now these ideas are simply the preamble to a much broader case which I shall be arguing in the remaining lectures: that monuments must be studied in their own right and not as occasional indulgences made possible by growing prosperity. In the next two lectures I shall talk in much greater detail about the ways in which monuments came into being. I shall say more about the significance of natural places in the lives of mobile people, and the ways in which some of those places were transformed into monuments. I shall also say something about how the presence and operation of monuments affected human experience, and the intricate connections that we can trace between the manner in which these sites were used and broader patterns in the evolution of society.

That is my task in the next two lectures, and in them I hope to justify my claim that the presence of monuments contributed to a new sense of time and place in prehistoric Europe. In the second half of this series I shall show how that was adapted and modified. I shall describe the way in which one distinctive form of monument – the causewayed enclosure – was used in different cultural settings across much of Neolithic Europe: how it was treated as an idea. I shall describe the processes that took place during the development of monument complexes, and then I shall take the same ideas to their logical limits. I shall end by describing how monuments from a very remote past were brought back into commission in the early historical period as part of the process by which rising elites established their claims to political power. As so often, they did so by manipulating history.

I began with two works of art, a novel and a painting. Both offer an imaginative reconstruction of the past, and each in its own way provides a point of departure for this book. Raymond Williams described 'People of the Black Mountains' as a work of 'sourced imagination' (Evans 1987, 187). The term is very apt, and it suggests something of what I am attempting here. The strength of Williams' writing comes from the breadth of his interests: his lifelong involvement with questions of social theory; his reading in the archaeological literature; and his sensitivity to the qualities of particular places in the landscape. The last he shares with Paul Nash. I have described how Nash re-created the Avebury avenue in a painting before its investigators could reconstruct it on the ground, but his imagination was quickened by the precise observations that he made during Keiller's field work. His interpretation grew out of a respect for minute particulars. That seems a good programme for archaeological research, and I shall try to follow it in these lectures.