

ORIGINI

PREISTORIA E PROTOSTORIA
DELLE CIVILTÀ ANTICHE

Direttore:
SALVATORE M. PUGLISI



ROMA 1972

UNIVERSITÀ DEGLI STUDI DI ROMA
ISTITUTO DI PALETOLOGIA - MUSEO DELLE ORIGINI

Direzione e Amministrazione: Istituto di Paletnologia. Facoltà di Lettere, Città Universitaria, Roma. *Direttore Responsabile:* Salvatore M. Puglisi - *Redattori:* Barbara E. Barich, Editta Castaldi, Gianluigi Carancini, Selene Cassano, Luigi Causo, M. Susanna Curti, Mirella Cipolloni, Delia Lollini, Alessandra Manfredini, Fabrizio Mori, Renato Peroni, Flaminia Quojani, Adolfo Tamburello, Mariella Taschini, Antonio Torino. *Segretaria:* Alba Palmieri.

SOMMARIO

JEAN GAUSSEN ET JEAN-PIERRE TEXIER:

LE GISEMENT PALEOLITHIQUE MOYEN DE LA CROIX-
DU-BOST, COMMUNE DE DOUZILLAC (DORDOGNE):
ETUDE GEOLOGIQUE ET ARCHEOLOGIQUE 7

ALESSANDRA MANFREDINI:

IL VILLAGGIO TRINCERATO DI MONTE AQUILONE
NEL QUADRO DEL NEOLITICO DELL'ITALIA
MERIDIONALE 29

GIOVANNA ARIAS-RADI - GIULIO BIGAZZI -
FRANCESCO PAOLO BONADONNA:

LE TRACCE DI FISSIONE COME POSSIBILE METODO
PER LO STUDIO DELLE VIE DI COMMERCIO
DELL'OSSIDIANA 155

ALBERTO CAZZELLA:

CONSIDERAZIONI SU ALCUNI ASPETTI ENEOLITICI
DELL'ITALIA MERIDIONALE E DELLA SICILIA 171

ANDREW FLEMING:

RECENT ADVANCES IN MEGALITHIC STUDIES 301

RECENSIONI a cura di:

A. BIETTI SESTIERI, S. CASSANO, A. CAZZELLA, F. DELPINO,
M.A. FUGAZZOLA DELPINO, M. MOSCOLONI, M. MUSSI, A. TORINO 319

RECENT ADVANCES IN MEGALITHIC STUDIES

Andrew FLEMING - Sheffield

This paper is offered as a summary of some recent British views on the subject of British and European megalithic tombs. Inevitably it may suffer from a somewhat insular viewpoint; but it should be remembered that two of the most useful general accounts of the megalithic tombs and their art came from British writers in the late nineteen-fifties. I refer to Glyn Daniel's invaluable general survey, *The Megalith Builders of Western Europe* (1958) and O.G.S. Crawford's *The Eye Goddess* (1957).

Nearly fifteen years have elapsed since these two books were published. British scholars have continued to see British megaliths in their European context, but new dating methods, the pattern created by recent excavations, and changes in approach have radically altered our viewpoint. In what follows, most of the examples are taken from Britain or north-west Europe, but the approach suggested may have important applications for other regions of Europe.

A NEW CHRONOLOGY

Since 1958 the trickle of radiocarbon dates has become a flood, and distinct patterns have emerged for the neolithic period in several European regions. It is no longer possible to look for the prototypes of the west European tombs in the east Mediterranean region, since the dates obtained from Portugal, France and the British Isles all suggest that tomb-building there had started by at least 3000 B.C. in radiocarbon years. When some form of international agreement allows us to calibrate radiocarbon dates, thus obtaining dates in true calendar years (see Stuiver and Suess 1966), it may be apparent that the earliest European tombs were erected as early as 4500 B.C.

Taking dates in radiocarbon years, it is possible to discern different patterns for the 3 five-hundred year periods from 3500 B.C. The first bracket (3500-3000) includes so far 5 tombs from Brittany and one from Portugal. (Fragoas; GrN-4924: 3110 ± 50). There are three passage graves from the north coast of Brittany (Barnenez, Ile Carn, and Ile Bono) and two mounds covering cist graves from southern Brittany (Mont St. Michel, and Castelic) (Giot 1971). Brittany has also produced four tombs with dates of between 3500 and 4000 B.C. (Barnenez, chambers G and F, Ile de Gaignog III, Kercado, and Mont St. Michel).

During the period 3000-2500 B.C. the building of megalithic tombs in north-west Europe probably reached its peak. The date from Brittany are matched by one or two from Portugal (GrN-4925; Frágoas 2660 ± 50 ; GrN-5734: Seixas: 2950 ± 40 ; GrN-5110: Carapito I: 2900 ± 40). In eastern Ireland, the great tombs of Knowth (UB-337: 2795 ± 165) and New Grange (GrN-5462: 2550 ± 45 ; GrN-5463: 2465 ± 40 ; UB-361: 2585 ± 105) date from this period. A similar date may be tentatively suggested for the western English Severn-Cotswold group of tombs (Wayland's Smithy: I-2328; 2820 ± 130 ; Ascott-under-Wychwood: BM-492: 2785 ± 0). By 2500 tomb-building had started in the Low Countries and Denmark.

The period 2500-2000 is represented by a number of determinations from France, the British Isles, and the Iberian peninsula. Probably some tombs continued to be built after 2000 B.C., especially in parts of the British Isles; it was during this period that the tombs from the Balearic Islands, Sardinia, Malta and SE Italy were apparently built.

In most regions of Europe more radiocarbon dates are needed, but it is already evident that the earliest tombs so far known come from Brittany. It may be that earlier dates will come from Portugal, Spain or Ireland, but to precede the Breton examples they would have to be dates of about 4000 B.C. in radiocarbon years. It is clear that the custom of building megalithic monuments originated in western Europe, and any origin theory must take this into account.

In many ways a Breton origin would be quite acceptable; Brittany is near the centre of the west European distributional pattern, and it is also the region with the longest tomb-building tradition and the greatest variety of types. Probably the complex of ideas and customs which underlay the megalithic tradition was very deeply rooted in this part of France.

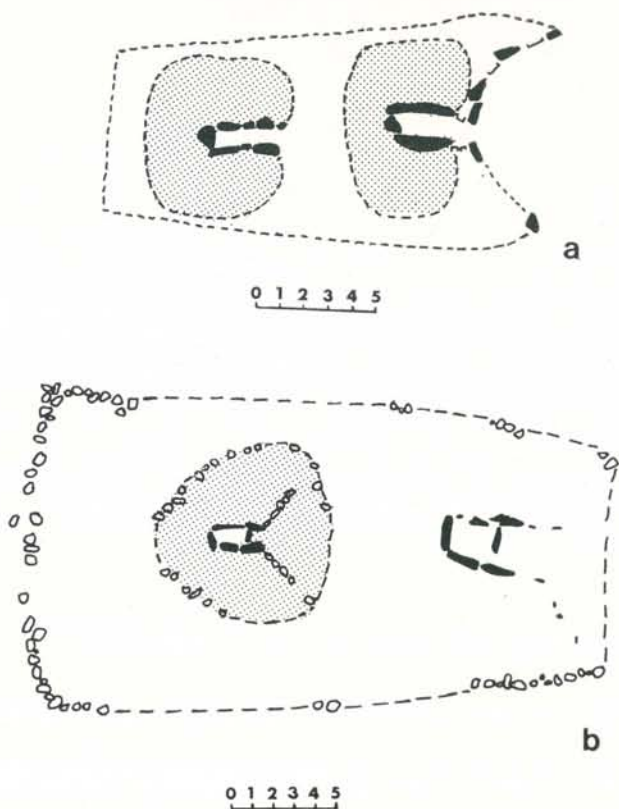


Figure 1 - Multi-period sites. *a*) Mid Gleniron I, south-west Scotland (after Corcoran).
b) Dyffryn Ardudwy, north Wales (after Powell). Scale in metres.

RESULTS OF NEW EXCAVATIONS

The past fifteen years have seen some important excavation campaigns in north-west Europe; perhaps the most notable have been those of L'Helgouach and others in Brittany, those of Corcoran in Scotland, and the spectacular results from the great mounds of Knowth and New Grange in Ireland. Several new patterns have emerged.

In Brittany it has been shown that many of the earliest tombs were passage graves in round, ovoid or long mounds with a variety of stepped profiles and façades. L'Helgouach has attempted isometric reconstructions of the sites at Er Mané de Quéric-la-Lande (Morbihan)

and at Kerléven (Finistère) (L'Helgouach 1965: fig. 6; 1967: fig. 5, 13-14). Other sites in this group are Barnenez (L'Helgouach 1965: fig. 10; *Gallia Préhistoire* 12 (1969): plates 9, 10, 13) (Finistère); Ile Gaignog (Finistère) (*Gallia Préhistoire* 12 (1969): plate 35); Ile Carn (Finistère) (*Gallia Préhistoire* 14 (1971): plate 17) and Colpo (Morbihan) (*Gallia Préhistoire* 12 (1969): plate 48). These sites appear to be very early in the Breton tradition, and their extraordinary stepped mounds and façades seem to have no precise parallels elsewhere in Europe. They must have great relevance to any theory about the west European origin of our chamber tombs.

Meanwhile, it has been shown that many of the British tombs may have been more complicated than previously suspected. Excavations such as those at Dyffryn Ardudwy (north Wales) (Powell 1963) Mid Gleniron (Corcoran 1969) and Tulach-an-t Siornaich (northern Scotland) (Corcoran 1966) have shown that the mounds now visible may represent only the final stage of construction. The earliest tombs in south-west Scotland, for instance, were very simple square or rectangular stone boxes in small round mounds (sometimes known as « proto-megaliths »). It was only later that the long mounds and multiple compartments of the Clyde cairns developed (Scott 1969; Henshall 1972). Such discoveries have prompted the re-examination of other Scottish tombs (Henshall 1972) and of the western English Severn-Cotswold group (Corcoran 1969 b); both of these authors have suggested plausibly that there are numerous cases where a simple constructional phase is succeeded by a long mound with a more complex chamber. The implications of this work for European megalithic studies in general are very important; it may no longer be possible, in cases where mounds still exist, to compare sites on the basis of their appearance at present.

Recent work has also tended to disprove the idea that in any given area at any given time, one type of ground plan was in use. At Barnenez (Finistère) both dry-walling and megalithic techniques were used to build tombs covered by the same mound (L'Helgouach 1965: fig. 10). At Knowth (co. Meath) in eastern Ireland the great mound was found to cover two types of chamber (Eogan 1967: fig. 1; 1969: fig. 1). Here there were also satellite mounds covering chambers having two different ground plans, some apparently built before the great mound, some afterwards (Eogan 1968). At Tustrup in Denmark (Kjaerum 1967) there were three different types of tomb dating from the Middle Neolithic Ib period; a hexagonal burial chamber under

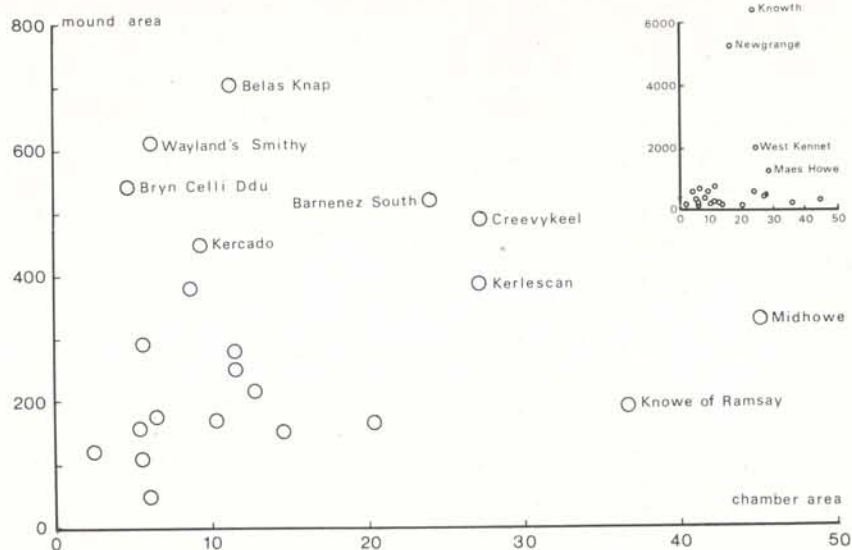


Figure 2 - On this graph, the areas covered by the mounds have been plotted against the areas enclosed by the chambers for 26 megalithic structures. It can be seen that most mounds in this sample cover less than 350 sq.m., and most chambers have less than 15 sq.m. of floor space. But there is a significant group with unusually large mounds, and another group with large chambers. The inset (top right) shows the same diagram at a reduced scale, to allow the inclusion of four very large mounds. Scale in square metres.

a round mound, a small passage grave with a short passage, and a passage grave with a long passage and a side-chamber. This kind of discovery deals a blow to unilinear typological schemes of the type popular in the 1950's (e.g. Piggott 1954: fig. 25).

THE MYTH OF THE MOTHER-GODDESS

Another idea popular fifteen years ago, and since discredited, was that the distribution and spread of megalithic tombs reflected some sort of universal cult, originating in the east Mediterranean and spreading to Iberia and ultimately the British Isles. This cult was that of a « mother-goddess »; Crawford and Daniel believed that this personage could be detected in the form of « idols » and pottery decoration in the Iberian peninsula. As her worship spread up the

Atlantic coasts of Europe, the « eye-goddess » of Spain became incorporated in the geometric art of the Irish passage graves and the strange figures engraved on the walls of the early Breton tombs. The fact that human faces were rare and female indications non-existent was not thought to be a serious obstacle to this view; the portrait of the goddess was supposed to become more schematic as her worship spread further north.

It can now be seen that Crawford's eastern prototypes for the goddess are all too late to have been ancestral to any such « goddess » in the west. It might nevertheless be suggested that the true ancestors of the goddess are to be found among the female figurines of neolithic Anatolia. However, in an important recent study Ucko (1968) it was shown that according to ethnographic and historical records there are a number of possible explanations for the making of female figurines; the portrayal of a divinity is only one of them.

In any case, it can be demonstrated (Fleming 1969) that there are no female figures on the early Breton passage grave art, nor in that of the Irish passage graves. In France the only clear female figures are those found on northern gallery graves and the rock-cut tombs of the Paris Basin, which date from the end of the collective burial tradition. The statue-menhirs of southern France are by no means always female, and their relationship with the tombs is still an open question. In Spain and Portugal the « idols » are almost certainly later in date than the early Breton tombs, and they are not necessarily female, nor deities. Thus the whole of the mother-goddess hypothesis collapses for lack of evidence to support it.

Childe had a variant of the above belief. He speculated that the tombs had probably been propagated by missionaries of some sort (1958: 129-30) and that the differences in ground plans could be explained in terms of the development of schisms or heresies. But it is actually most unlikely that the spread of megalithic architecture accompanied the spread of a religion. When Christianity spread, it helped to foster several different local styles of architecture, but there was no one type which was present in all regions. Christianity is unusual in that Christians are enjoined to convert others to their faith; in most religions the divinities are much more local in character. From what survives of the late Iron Age religion in Britain, for example, it is clear that many gods took their names from local tribes or natural features.

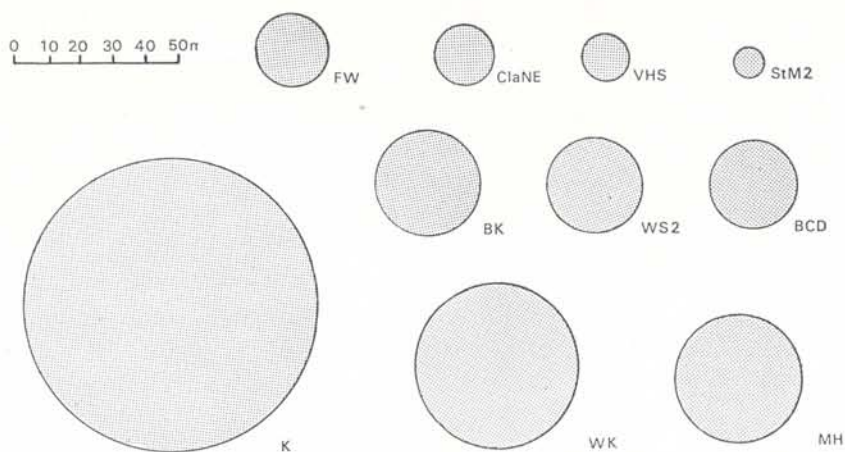


Figure 3 - Comparative sizes of mounds. Key — FW = Five Wells, Derbyshire, England; ClaNE = Balnuaran of Clava, north-east Scotland; VHS = Vord Hill South, Shetland Isles; StM2 = St. Mary's 2, Scilly Isles; BK = Belas Knap, Gloucestershire, England; WS2 = Wayland's Smithy II, Berkshire, England; BCD = Bryn Celli Ddu, Anglesey, Wales; K = Knowth site I, Meath, Ireland; WK = West Kennet, Wiltshire, England; MH = Maes Howe, Orkney Isles. Note the colossal size range.

DIFFUSION AND INDEPENDENT INVENTION

In the 1950s, the normal approach to tomb classification was as follows. Tombs were assigned to regional groups on the basis of their ground plans. Within each group the tomb types were arranged in a linear sequence, so that Almerian round graves were thought to precede « tholoi », and passage graves preceded gallery graves. Prehistorians tried to identify the oldest types in each region, and then they sought ancestors for these types in other areas. Scandinavian workers looked westwards, British and French prehistorians to the south, those working in Spain looked further east.

Now that radiocarbon dates have helped to discredit the idea of an origin in the East Mediterranean, some scholars have sought to replace « diffusionist » ideas with concepts of independent invention of megalithic tombs, either within western Europe as a whole or within individual sub-regions. But most prehistorians do not wish to see the subject discussed in terms of the opposition between these

two very simple ideas. Since we know that both diffusion and independent invention can occur and have occurred, our explanatory hypotheses should allow for the possibility of either or both.

When two tombs, each from a different region, resemble one another, some prehistorians prefer to believe that this is because an idea was invented in one area and diffused to the other, while others postulate independent invention in both cases. The critical factor is usually believed to be the degree of similarity concerned, which is always a matter for debate. In fact, we cannot prove which of the two possibilities is the simpler hypothesis, or even which is more likely, in any given case. So the real question to ask is not «diffusion or independent invention?» but «why was the idea developed, or adopted, by the local society concerned?»

THE QUESTION OF DESIGN

Ever since the eighteenth century it has been assumed that the megalithic chambers of western Europe were essentially tombs, not an unreasonable idea, since upon excavation they were usually found to contain human bones. The megalithic monuments have been assumed to be simply containers for a selection of the prehistoric dead. Thus they have been classified in the confident knowledge that their function is fully understood. They have been treated as collections of static ground plans, variants on a very simple idea of covering a chamber with a mound. In a recent article (Fleming 1972) I have pointed out that not enough attention has been paid to the question of design. The tombs which we see today represent the solutions discovered by prehistoric designers to the problems posed by the nature of their societies and the rituals which they conducted. It is obvious that the tomb designers were interested in other things beside the disposal of the dead in chambers made from large stones. I have considered these ideas as they apply to the British tombs, but they apply with equal force to other regions of Europe. I will now list a number of features which interested the designers.

1. *Mound size.* - Megalithic tombs and their enclosing mounds are best seen as lying on a continuum; at one end are small stone boxes in small mounds, at the other are chambers of varying sizes covered by mounds of grossly exaggerated size. Many sites, of course,

fall between these two extremes. By plotting the area covered by the chamber against the area covered by the mound on graph paper, it is possible to quantify these relationships. At one end of the scale are the simple dolmens found all over Europe; at other are sites where the mound covers an area 100 times that of the area covered by the tomb (Fleming: in preparation). We cannot use to the same explanation to cover the development of the mound both as an envelope for the chamber and as an exaggerated feature.

2. - *Mound profile*. Many mounds are designed very carefully, not simply to cover the chamber but to make a strong visual impact or to stress the position of an area which was ritually important. Thus the Breton mounds had elaborate stepped profiles (as mentioned above) and in Britain the trapezoidal mound was designed — a long mound which was made higher and wider at the end which was ritually important. A few recent authors have suggested that this trapezoidal shape must derive ultimately from the central European trapezoidal house of the fourth millenium. This is a typical example of how many prehistorians prefer a diffusionist hypothesis to one based on design and function.

In general the long mound appears to be later than the round mound (although both were present from the beginning in north-west France). This again is best explained in terms of an evolution towards a more efficient design, since the gallery grave combines the advantage of providing maximum space for the dead with an impressive profile requiring less labour than a round mound of comparable size.

3. - *Forecourts and façades*. The designers were often attempting to provide a clearly-defined ritual area. This is especially noticeable in the British Isles, where tombs in many different areas have elaborate forecourts and façades. Often the façade is curved to define the edge of the forecourt, so that a roughly semi-circular area is outlined by a revetment wall of upright stones separated by drystone walling. The different forecourt plans are not evidence for mindless local copying but suggest inventive designers, combining simple elements with others in order to solve local problems of ritual. In Britain, the preference for enclosed ritual areas may have led to the development of the stone circle series. In Brittany, the stepped façades described above may have been intended to provide different types of ritual

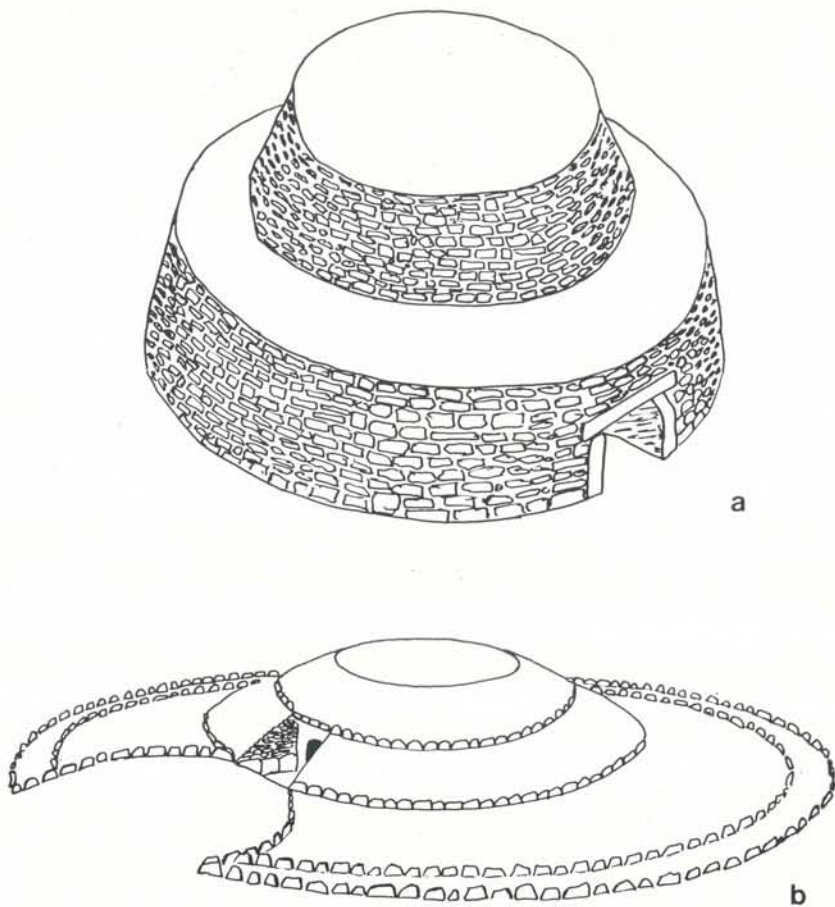


Figure 4 - The impressive visual appearance of round mounds. *a*) Er Mané le Quéric la Lande, Morbihan, France (after L'Helgouach); *b*) Los Millares, Almeria, Spain (after Leisner).

theatres, affording elevated positions for persons or objects involved in the ritual.

In north-west France, an antechamber may have fulfilled the function of the open forecourt in the British tombs. L'Helgouach has made the bold suggestion (1965: 89) that not all of the chambers may have been intended for funerary purposes. At Barnenez South, for instance (L'Helgouach 1965: fig 10) the central chamber in the eastern, primary mound was symmetrically-placed, double, of mega-

lithic, as opposed to dry-walled, construction, and carried art. At Goërem (Morbihan) the primary burial was in an end-chamber, extremely difficult of access; there was an antechamber with carving on the walls. Gavrinis, with its elaborate carvings, may also have had a non-funerary use. In northern France the gallery graves, with porticos carved with « mother-goddess » figures and providing little or no access to the tomb, may also embody the survival of the antechamber idea. (e.g. Essé, Tressé).

4. - *Segmentation*. Many tomb-builders provided several chambers within one mound, or several sub-divisions within each chamber. This is especially noticeable in Britain, where many tombs have side-chambers or sub-divided galleries, but it is also a feature of the Breton tombs; L'Helgouach has suggested that it is evidence for some degree of advance planning and social stability. Although in some cases the sub-divisions may be a function of the use of this particular type of architecture, this is by no means always the case. It seems probable that many of the tombs were intended for societies characterised by segmentation of some sort; perhaps those buried were leading members of related clans or lineages. Many peoples living at an economic level corresponding to that of the European neolithic are organised in this way (Service 1962: 110-42). More sophisticated techniques of physical anthropology may soon make it possible to test the idea of the relatedness between those buried in individual sub-divisions of chamber tombs. In the meantime, it should be noted that any consideration of the design factors influencing the development of these tombs should take social divisions into account.

5. - *Multi-period sites*. When an elaborate tomb succeeds an earlier, simpler tomb, it may be that a long time interval separates the two construction phases. But possibly the designers were simply solving their problems by developing a two-stage ritual. In societies where ceremonial burial is important, it is not always possible to raise the necessary resources of food or labour at short notice, and the dead must wait in a mortuary house, or undergo preliminary burial, before being laid to rest in a more grandiose setting at a later opportunity. Evidence from the English long barrows of the late fourth millenium, which cover wooden chambers and enclosures, suggests that the mortuary house or enclosure may have been an important element in burial ritual here. It may be that some of the

simple, box-like chambers underlying British long mounds may relate to two-stage burial practices.

6. - *Siting of tombs.* A number of tombs are sited along ridges or on the skyline, or as at Barnenez across the neck of a peninsula; the object seems to be to create a maximum visual impact.

7. *Other design features.* The above is by no means an exhaustive catalogue; other facts suggest that much thought went into the design of chambers and their mounds. It has recently been discovered, for instance, that on midwinter day the rising sun shines through the « roof-box » at New Grange and illuminates the chamber (O'Kelly 1971: 94); this cannot conceivably be a coincidence. It may be suggested that the south-easterly orientation of the Breton passage graves could relate to a similar function. Piggot (1962: 15) suggested that the West Kennet chambers were laid out on the basis of an isosceles triangle. A number of suggestions have been made about the sensitive use of different types of stone with differing properties.

From all the considerations detailed above, it may be clearly seen that these structures are not simply containers for a selection of the dead. They are monuments whose main preoccupation is with visual impact and the provision of carefully-designed theatres for ritual; they may also have been concerned with symbolising contemporary social divisions. We are dealing, in other words, with ceremonial monuments, and any explanation for the origin of megalithic structures in western Europe should include recognition of this fact: we are dealing with the rise of ceremonialism. These tombs were built to house the dead; but their main impact was upon the living.

THE ORIGINS OF CEREMONIALISM

It cannot be an adequate explanation for the elaboration of the megalithic complex, to suggest, as Daniel does (1958: 74) that the builders were inspired by a religious faith. Many of the great religious enthusiasts of history have failed to leave great monuments behind them. A number of great buildings were built by forced labour of various kinds, and the enthusiasm of their builders should not be over-estimated. What other explanations may be considered? The diffusion of technical and spiritual ideas, the availability of sui-

table building stone, the custom of successive, collective burial — all these factors must contribute to the network of explanatory statements made about these monuments — but none of these explanations is adequate by itself; nor does this type of explanation explore more fundamental issues. They all deal with manifest, rather than latent, patterning.

A more basic explanation for the development of these structures is suggested by the character of the sites themselves. As explained

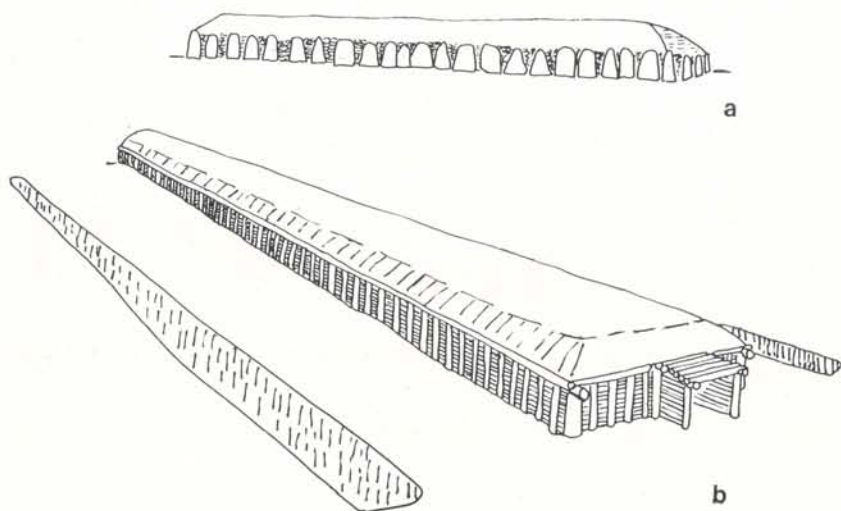


Figure 5 - The impressive visual appearance of long mounds. *a*) north German long barrow, (after Sprockhoff); *b*) Fussell's Lodge, England (after Ashbee).

above, they were designed to make a great visual impact. The bold inference must be that they formed part of a system of communication. In the earliest human societies, long before this period, leadership would have been exercised by one or more dominant individuals, whose control did not extend beyond the small social group. Within this group, communication was easy, as it is generally among groups of higher primates. However, after the neolithic revolution, population groups became in general larger, and leadership could not be exercised so directly. If neolithic societies were organised on the basis of clans and lineages, as seems likely on the basis of modern parallels, the distribution of clan and lineage members may not have corresponded very closely with that of residence groups.

So leaders and led had a communication problem because of increased group size and the conflict between the links established by co-residence and those of kinship. If the leadership itself had an hereditary basis, there would have been further problems, since perceptible characteristics like strength, personality, appearance and intelligence were no longer necessarily the attributes of leaders. Thus there are three reasons why leadership might be expected to need reinforcement.

There are a number of possible solutions to this problem. One is for the important members of society to acquire visible status symbols. If this happened in neolithic times, few traces would survive, since most of these « status symbols » would have been made of perishable materials. But there is another solution, one which is especially appropriate for a hereditary system in which leaders derive their authority from a long line of dead ancestors. This is to develop ceremonial monuments which incorporate the tombs of these ancestors. Seen from this point of view, the tombs are a spectacular success. Not only do they provide superb theatres for ritual (visible symbols are very important for primates) but they remain as prominent landscape features, reminders of the concepts which they enshrine. Ritual at the tomb can also be perpetuated, either by use of the forecourt area or by successive acts of reburial in the same tomb. Thus the tombs may be usefully seen as part of a communication system, and it is not surprising to find that they were elaborated in many ways.

FUTURE DEVELOPMENTS

The above is essentially a structural analysis of the megalithic monuments, with the emphasis on latent patterns in the tomb architecture, rather than on manifest features and individual traits. The explanation given is also concerned with the latent, rather than with the manifest. Most of the evidence has been taken from Britain and north-west France, but a similar type of analysis could be applied to other regions. But the most interesting future development may be the attempt to isolate the phenomenon which may be crudely described as ceremonialism in its aspect of monument construction. Where does it occur? Is there anything which the areas of occurrence have in common? Is there a time-lag between the introduction of farming and the building of the more ceremonial tombs, and what is the length of the time-lag? Is there a correlation between ceremonialism and a very dispersed residence pattern (or between densely-settled sites and ceremonialism?) The responses to these questions, and others, will have wide implications. Man is the only species which builds ceremo-

nial monuments; if there is an extensive literature on the subject, I am not aware of it. Man also belongs to a species where the *loyalties of kinship and those encouraged by co-residence do not necessarily coincide, but must nevertheless coexist*. Probably the design and location of the megalithic tombs have some bearing on the resolution of this conflict. Thus this enquiry is not merely an attempt to take a fresh look at a subject which has become the prisoner of its own methodology. It is concerned with a question of some importance for our own understanding of ourselves as a species.

Department of Ancient History, University of Sheffield

REFERENCES

- CHILDE, V.G. (1958), *The prehistory of European society*. London.
- CORCORAN, J.X.W.P. (1966), The excavations of 3 chambered cairns at Loch Calder, Caithness. *Proceedings of the Society of Antiquaries of Scotland* 98: 1-75.
- CORCORAN, J.X.W.P. (1969 a), The excavation of 2 chambered cairns at Mid Gleniron Farm, Glencuce Wigtownshire. *Transactions of the Dumfriesshire and Galloway Natural History and Antiquarian Society* 46: 29-98.
- CORCORAN, J.X.W.P. (1969b), The Cotswold-Severn group. In Powell, T.G.E. (ed.) *Megalithic Enquiries in the West of Britain*. Liverpool.
- CRAWFORD, O.G.S. (1957), *The Eye Goddess*. London.
- DANIEL, G.E. (1958), *The megalith builders of western Europe*. London.
- EOGAN, G. (1967), The Knowth (co. Meath) excavations. *Antiquity*.
- EOGAN, G. (1968), Excavations at Knowth, co. Meath. 1962-65, *Proceedings of the Royal Irish Academy* 66 (section C) 299-400.
- EOGAN, G. (1969), Excavations at Knowth (co. Meath) 1968. *Antiquity* 43: 8-14.
- FLEMING, A. (1969), The myth of the mother-goddess. *World Archaeology* 1: 247-59.
- FLEMING, A. (1972), Vision and design: approaches to ceremonial monument typology. *Man N.S.* 7: 57-72.
- GIOT, P.-R. (1971) The impact of radiocarbon dating on the establishment of the prehistoric chronology of Brittany. *Proceedings of the Prehistoric Society* 37: 208-16.
- HENSHALL, A.S. (1972), *The chambered tombs of Scotland*, vol. 2. Edinburgh.
- KJAERUM, P. (1967), Mortuary houses and funerary rites in Denmark. *Antiquity* 41: 190-6.
- L'HELGOUACH, J. (1965), *Les sépultures mégalithiques en Armorique*. Rennes.
- L'HELGOUACH, J. (1967), Le cairn mégalithique avec sépultures à chambres compartimentées de Kerléven, commune de La Forêt-Fouesnant (Finistère). *Annales de Bretagne* 74: 7-51.
- L'HELGOUACH, J. (1970), Le monument mégalithique du Goërem à Gávres (Morbihan). *Gallia Préhistoire* 13: 217-61.
- O'KELLY, C. (1971), *Guide to New Grange*. (2nd edition). Wexford.
- PIGGOTT, S. (1954), *Neolithic cultures of the British Isles*. Cambridge.
- PIGGOTT, S. (1962), *The West Kennet long barrow*. London.
- POWELL, T.G.E. (1963), The chambered cairn at Dyffryn Ardudwy. *Antiquity* 37: 19-24.
- SCOTT, J.G. (1969), The Clyde cairns of Scotland. In Powell, T.G.E. (ed.) *Megalithic Enquiries in the West of Britain*. Liverpool.
- SERVICE, E.R. (1962), *Primitive social organisation*. New York.
- STUIVER, M. and SUESS, H.E. (1966), On the relationship between radiocarbon dates and true sample ages. *Radiocarbon* 8: 534-40.
- UCKO, P.J. (1968), *Anthropomorphic figurines of predynastic Egypt and neolithic Crete*. London.

RIASSUNTO

Negli ultimi quindici anni si sono determinati molti cambiamenti nelle vedute di studiosi britannici relativamente al problema delle tombe megalitiche. Le datazioni al radiocarbonio hanno mostrato che le tombe della Bretagna e forse quelle del Portogallo risalgono ad oltre il 3000 a.C. (età carbonio 14) e le tombe più antiche possono essere state costruite fin dal 4500 (« età vera »). Probabilmente queste tombe sono originarie dell'Europa occidentale, forse del nord-ovest della Francia. Nuovi scavi hanno rivelato l'esistenza di tumuli con profilo a gradini in Bretagna, di tombe che rivelano molte fasi costruttive nelle Isole Britanniche e casi in cui un ugual tipo di tumulo copre tombe a pianta diversa. Si può anche dimostrare come il presumere la costruzione delle tombe ispirata dal culto di una « dea-madre » non sia forse corretto. Gli studiosi di Preistoria spesso discutono se certi tipi di tombe si siano diffusi da un'area all'altra o se siano stati inventati localmente ed indipendentemente. L'A. indica come questa problematica sia irrilevante: le tombe dovrebbero essere considerate come soluzione rispondente a diversi problemi disegnativi. Le tombe erano disegnate per suscitare una forte impressione visiva, con larghi tumuli e profili imponenti; era normalmente prevista un'area per lo svolgimento di pratiche rituali; una tomba era spesso suddivisa in parti forse corrispondenti alle articolazioni tipiche di una società di clan. I siti riferibili a più periodi possono porsi in relazione con un rituale destinato ad effettuarsi in più momenti di un certo arco di tempo. Infine si suggerisce l'ipotesi che queste tombe fossero disegnate come parte di un sistema di comunicazione. Con lo sviluppo di società basate sull'agricoltura il potere non poteva essere ulteriormente esercitato sulla semplice base di rapporti personali diretti; i gruppi sociali erano spesso più numerosi di una unità residenziale individuale, ed il potere era forse basato su fattori ereditari piuttosto che su meriti personali. Perciò la struttura di autorità del gruppo doveva essere rinforzata da un rituale imponente connesso con la deposizione del morto; le tombe fornivano sia l'ambiente sia il ricordo visivo dei concetti che tenevano unito il gruppo.

SUMMARY

The past fifteen years have seen many changes in the way British scholars have regarded the development of megalithic tombs. Radiocarbon dates have shown that the tombs from Brittany and perhaps Portugal date from over 3000 B.C. (in radiocarbon years) and the earliest tombs may have been erected as early as 4500 B.C. (in calendar years). Probably these tombs originated in western Europe, perhaps

in north-west France. New excavations have revealed mounds with stepped profiles in Brittany, tombs with several constructional phases in the British Isles, and cases where the same mound covers tombs having different ground plans. It can also be shown that the idea that the tomb-building was inspired by the worship of a « mother-goddess » is not likely to be correct. Prehistorians often argue about the question of whether certain tomb types were diffused from place to place or invented locally and independently. The author argues that this approach is irrelevant; the tombs should be considered as the solutions to different design problems. The tombs were designed to make a great visual impact, with large mounds and impressive profiles; an area for the performance of ritual was usually provided; a tomb was often subdivided, the divisions perhaps corresponding to those typical for a clan society. Multiperiod sites may relate to ritual designed to take place in several stages over a period of time. Finally, it is suggested that these tombs were designed as part of a system of communication. With the growth of agriculturally-based societies, leadership could no longer be exercised on a simple, face-to-face basis; social groups were often larger than individual residence units, and leadership may have been based on hereditary factors rather than on personal merit. Thus the authority structure of the group had to be reinforced by impressive ritual connected with the disposal of the dead; the tombs provided both theatres for ritual and visual reminders of the concepts which held the group together.