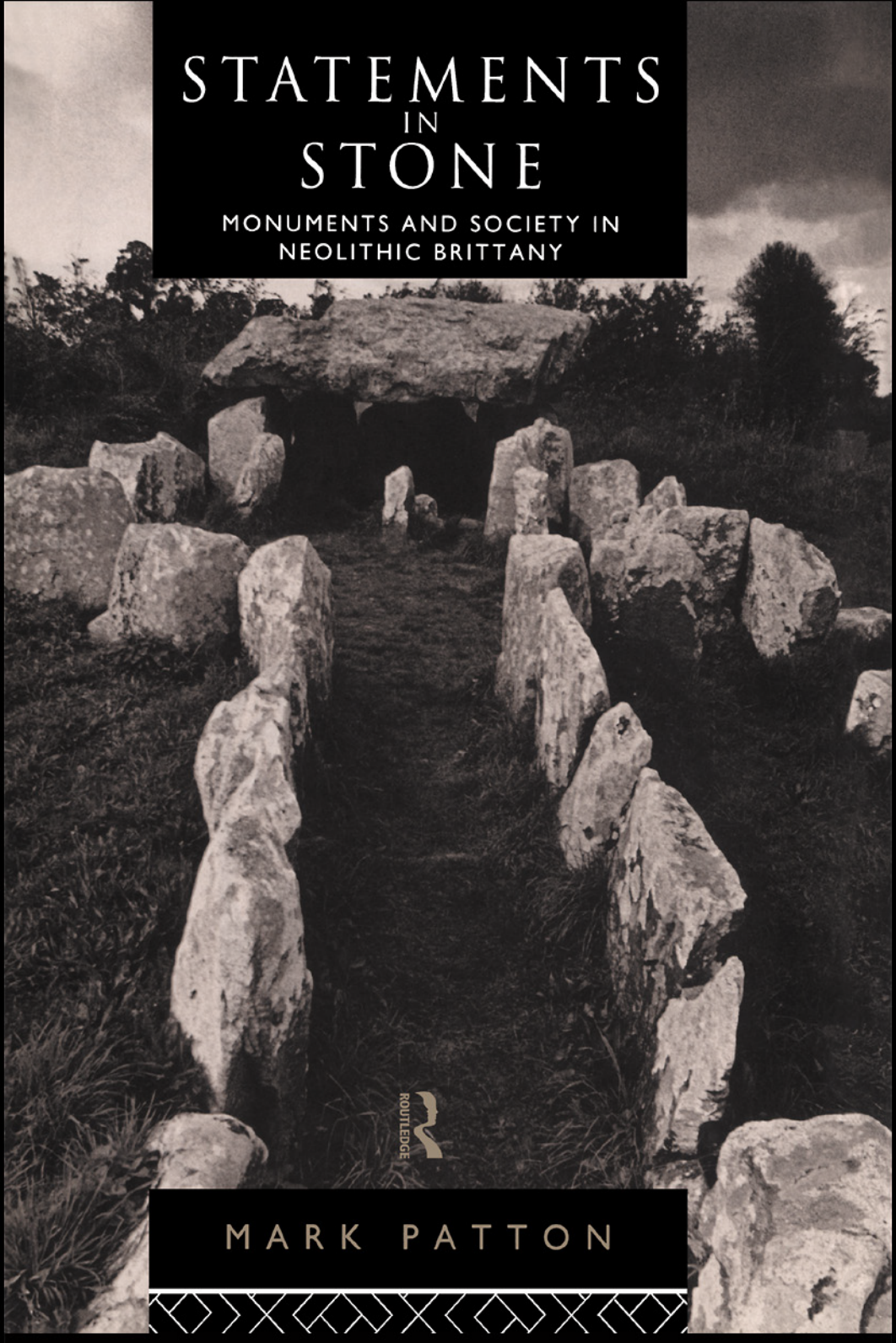
STATEMENTS IN STONE

MONUMENTS AND SOCIETY IN NEOLITHIC BRITTANY



MARK PATTON

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Monuments and Society in Neolithic Brittany

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To the memory of Zacharie Le Rouzic

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All radiocarbon dates in this book are quoted in uncalibrated radiocarbon years before present (BP). Where calibrated dates are given, these are quoted as cal. BC. All calibrations have been based on the curves published by G.Pearson, J.R.Pilcher, M.G.L.Baillie, D.M.Corbett and F.Qua (1986), 'High precision measurement of Irish oaks to show the natural C14 variation from AD 1840 to 5210 BC', *Radiocarbon* 28 (2B), pp. 911–34, and by B.Kromer, H.Schock-Fisher and K.O.Munnich (1986), 'Radiocarbon calibration for the 6th to 8th Millennia BC', *Radiocarbon* 28 (2B), pp. 954–60.

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1

MEGALITHS AND SOCIETY: AN INTRODUCTION

The great stone monuments or 'megaliths' of Western Europe have for centuries excited the popular imagination, and, not surprisingly, they attracted the interest of the earliest antiquarians and archaeologists. Each subsequent generation of archaeologists has made its own discoveries and comments, and offered interpretations of these impressive but enigmatic monuments. Recent years have seen a renewed interest in megalithic studies, involving a shift away from traditional concerns with typology, chronology and megalithic 'origins', towards attempts to understand the social significance of the monuments. Recent contributions to megalithic studies have drawn on a wide variety of theoretical approaches, ranging from Processual (cf. Renfrew 1973, 1976) to Post-structuralist (cf. Shanks and Tilley 1982, Tilley 1984) and Neo-Marxist (cf. Bender 1985), all focusing on the social dimensions of monument construction and megalithic ritual.

In any consideration of European megaliths, Brittany must be seen as a core area, standing out from most other regions by virtue of the density of monuments and the diversity of monument types. The megaliths of Brittany cover a period of almost 3,000 years, from the earliest Neolithic (*c.* 4800 cal. BC) to the beginning of the Bronze Age (*c.* 2250 cal. BC) and the chronology of these monuments is relatively well understood, thanks to the work of French archaeologists (cf. L'Helgouach 1965, Giot *et al.* 1979). Despite the great wealth of material, however, megalithic studies in Brittany have been relatively isolated from recent theoretical developments, and the prevailing emphasis continues to be on chronology and typology. The aim of this book is to set the various megalithic traditions of the Armorican region in social context. It is not intended as a comprehensive account of the Armorican Neolithic (for which the reader will be referred to the relevant French publications), but rather as a series of essays, focusing on particular aspects of the data and developing interpretations on the basis of these. The final chapter will present a diachronic overview of the period covered by the book, and will attempt

torelate changing monumental traditions to changing structures of social organisation.

The modern province of Brittany (the *Départements* of Ille-et-Vilaine, Côtes d'Armor, Finistère, Morbihan, and Loire-Atlantique) is an artificial construction, defined on the basis of recent historical and cultural considerations. For the purposes of this book, it seems more useful to consider the geologically defined area of the Armorican Massif (figure 1.1) which includes the Norman *département* of Manche and the Channel Islands as well as the five *départements* of modern Brittany. The Armorican Massif is an area of predominantly hard igneous and metamorphic rocks forming the north-west corner of France, sandwiched between the limestone basins of Aquitaine and the Parisian region. Armorica consists largely of ancient rocks, which have been subjected to continual erosion for over 600 million years, so that the land today does not rise to a great altitude (384 metres at its highest point—Tuchenn Godor in the Arrée Mountains). The interior of the massif consists of a series of undulating plateaux which slope away towards the sea. There are two dominant ridges, the Montagnes d'Arrée and the Montagnes Noires, which run from east to west down the centre of Brittany. The coastal landscapes of Armorica have been extensively shaped by rises in sea level over the last 10,000 years, which have drowned low-lying basins and river valleys, forming the Golfe du Morbihan and the rias ('Abers' in Breton) which give the Breton coastline its characteristic jagged or indented character. The off-shore islands of Armorica (the Channel Islands, the Ouessant Islands, the Glenan Islands, Groix and Belle Ile) are all products of these recent sea level rises. The effect of changing sea levels must always be borne in mind in considering the environmental context of Neolithic settlement in the Armorican region. The tides are exceptional, especially in the North-east of Brittany: in the Bay of Saint-Malo the tide sweeps in to a height of 13.5 metres and in the Bay of Mont-St-Michel it reaches a height of 15 metres. The estuaries of some of the major rivers are tidal up to 30 km inland. Armorica is one of France's primary agricultural areas: most arable farming takes place in the so-called 'golden belt', the alluvial soils of the coastal plain which extends from St-Malo around to the mouth of the Loire. This zone seems to have been a particularly important area for prehistoric settlement: the combination of rich marine resources and fertile soils would have made this area especially attractive, and the presence of extensive coastal salt and freshwater marshes would have given an added element of ecological diversity. The soils of the interior are poorer in quality, and often relatively thin, and are in many cases better suited to grazing than cultivation: these areas, not surprisingly, seem to have been less attractive to Neolithic settlers.

Before looking in detail at the megalithic monuments of the Armorican

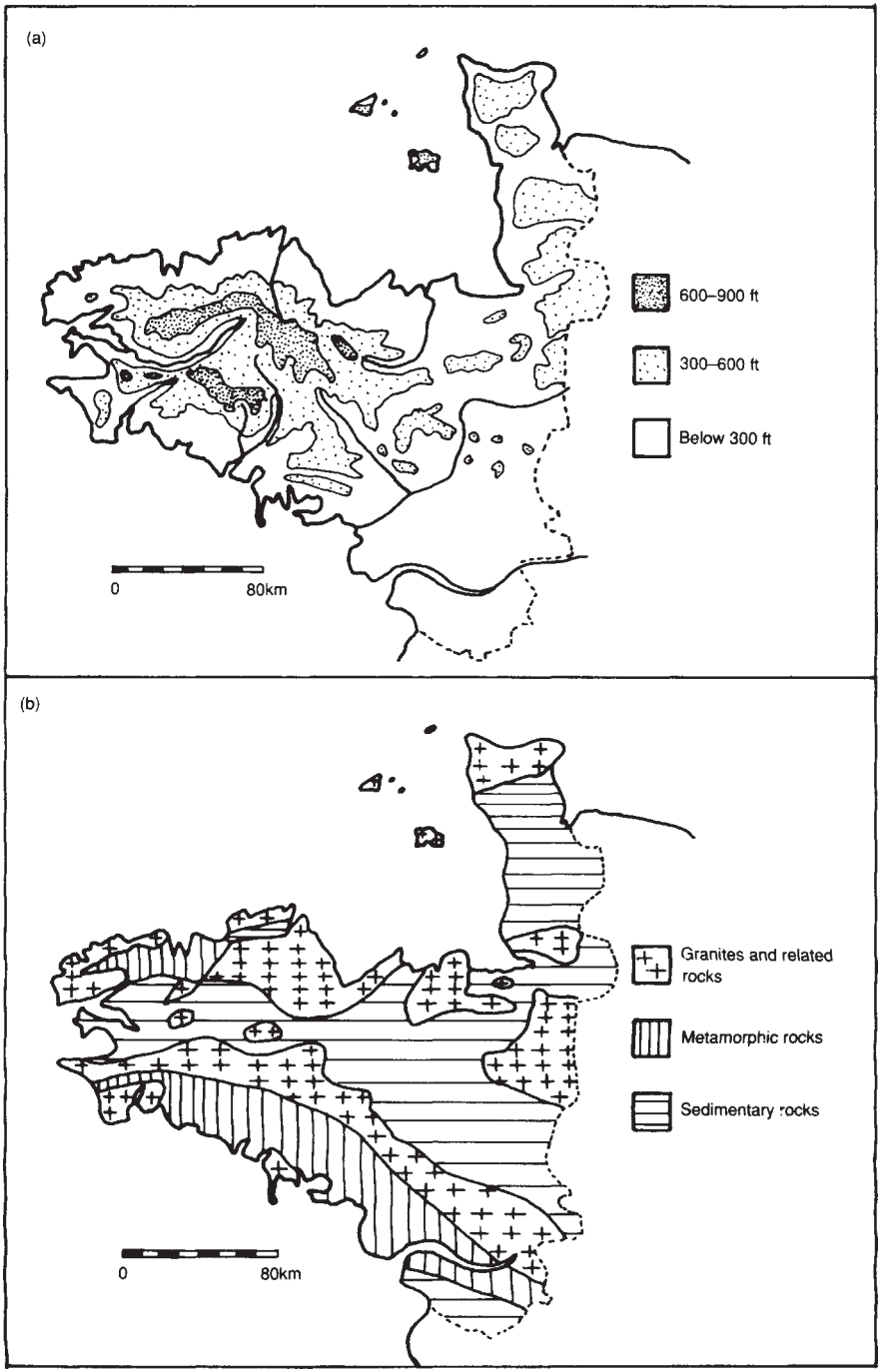


Figure 1.1 (a) Physical map of the Armorican Massif; (b) Simplified geological map of the Armorican Massif.

region, it is necessary to look briefly at the historical and theoretical background to megalithic studies in more general terms.

HISTORICAL BACKGROUND

The appearance of megalithic monuments along the Atlantic façade of Europe has provoked more debate than almost any other question in European prehistory. To different people at different times, these great stone monuments have been seen variously as Druid altars for human sacrifice, as devolved copies of Egyptian tombs, as evidence for the spread of a Mediterranean religion, as territorial markers and as elements in a complex ideological system. With each generation of archaeologists the picture changes, both because of new discoveries and because theoretical developments within the discipline lead us to ask new and different questions.

For the prehistoric past to be made comprehensible, it is necessary to have some fixed chronological reference point to which discoveries can be related. For eighteenth-century antiquarians such as William Stukely, the only available reference point was provided by Classical literature. Megalithic monuments were clearly not Roman or Medieval, and therefore must be pre-Roman: Roman writers such as Caesar and Tacitus had given accounts of the 'Barbarian' peoples of North-western Europe at the time of the conquest, and the megalithic monuments were related to these accounts. Megaliths thus became the temples and altars of the bloodthirsty Druids. Phillip Falle, writing in 1734, describes one monument (in Jersey) as follows:

> Now this also I take for a temple, one I mean of those barbarous altars which have so often been besmeared and seen smoking with human blood, and should remind us and others of God's infinite grace and mercy in extinguishing so hellish a superstition by the gospel of his son…. It stands…on a cliff or hill called Le Couperon, and into the side of the same hill are caverns wrought …for what use intended I am not able to say, unless that the miserable victims were there shut up and secured till they were brought to the altar on the solemn days appointed for sacrifice.
>
> (Falle 1734, cited in Patton 1987a)

With the development of the three-age system in the mid-nineteenth century (Daniel 1975), it became clear that the megaliths were built many centuries before the Druids. The first half of the nineteenth century had also been marked by important discoveries in Egypt and the Near East (including Champollion's decypherment of Egyptian hieroglyphs in 1822) which permitted the development of a fairly detailed chronology

for the Eastern Mediterranean. This Egyptian/Near Eastern chronologyprovided a new reference point for European prehistorians: if links could be shown between the prehistoric societies of Western Europe and the civilisations of the Eastern Mediterranean, then this could be used to develop a chronology for prehistoric cultures in Europe. This chronology, however, required an assumption that cultures in the two areas were linked: if this assumption was questioned, the whole of European prehistory would stop making sense. This assumption went hand in hand with a second, the idea that similarities between cultures in different areas are a direct index of contact between those cultures: these two assumptions together form the basis of culture-historical and diffusionist approaches in archaeology. Cultural developments in North-western Europe were considered as the results of influences from the Mediterranean world.

Childe (1958) summed up this view when he stated that The sole unifying theme of European prehistory is the irradiation of European Barbarism by Oriental Civilisation.' In its most extreme form, this approach gave rise to the Egyptocentric fallacies of Elliot-Smith (1929), who believed that the megaliths of Western Europe were devolved copies of Egyptian *mastaba* tombs, built by the 'Children of the Sun' when they left Egypt to travel the world in search of the 'Elixir of Life'. In its more reasonable forms, the diffusionist approach gave rise to the suggestion (cf. Daniel 1960) that the earliest European megaliths were built by Iberian colonists who travelled by sea, settling on the coasts of Western France, Britain, Ireland and Scandinavia. The Iberian monuments, in turn, were loosely related to supposed prototypes in the Aegean.

The distribution of early megaliths in Western Europe (figure 1.2) is essentially coastal, and lent some support to this suggestion. There was some debate concerning whether the megaliths reflected the movement of settlers from south to north, or simply the spread of religious ideas: Childe (1940) postulated 'Megalithic missionaries', and compared the spread of megalithic religion to the spread of Islam. There was general agreement, however, that the megaliths did represent the spread either of a people or of a religion, originating in the Mediterranean.

The development of radiocarbon dating and, most importantly, of tree-ring calibration, forced the collapse of this entire framework (Renfrew 1973). It became apparent that megaliths in Ireland were built at around the same time as the Iberian monuments from which they were supposedly derived, and that megaliths in Brittany were significantly earlier than any in the Mediterranean. Radiocarbon dating itself provided a new chronological framework, but a new explanatory framework was also needed. For archaeologists working within the framework of the culture-historical approach, cultural changes (including the appearance of megaliths) were to be explained by reference to historical events, such as

Figure 1.2 The distribution of European megaliths at c. 3500 cal. BC.

migrations or invasions: similar developments in different areas were taken as evidence that the two areas were affected by a single event. With the development of the calibrated radiocarbon chronology, it became necessary to explain the independent appearance of similar monuments in different areas.

The development of radiocarbon dating and tree-ring calibration coincided chronologically with a series of important developments in theoretical archaeology. American archaeologists in particular (cf. Binford 1962) were questioning the validity of the culture-historical approach on fundamental philosophical grounds. For Binford, and other advocates of the 'New Archaeology', the culture-historical approach had no explanatory value: it was not sufficient, they argued, todescribe the past in

terms of historical events, rather it was necessary to explain the cultural processes behind these events. Similar developments in different areas, therefore, need not indicate a connection between the two areas: it might simply be that similar cultural processes gave rise to parallel developments.

A Processual' approach was employed by Renfrew (1976) in attempting to explain the appearance of megaliths along the Atlantic façade of Europe. Renfrew argues that the Atlantic coastline was already an area of relatively high population density before the introduction of agriculture, the resources of the land and sea combining to provide a rich resource base for Mesolithic communities. With the spread of farming, the ocean constituted a barrier to the expansion of Neolithic communities, leading to a further build-up of population in coastal areas. This in turn resulted in pressure on land and, in Renfrew's model, the megaliths were built in response to this. Megaliths were territorial markers, built by Neolithic communities to stake a claim to a particular piece of land, and to legitimise this claim by reference to the ancestors. Similar monuments appeared in Iberia, Armorica, Britain, Ireland and Scandinavia, not because of the diffusion of people or ideas, but because similar social processes were operating in these areas, and because the monuments served a similar social function.

RECENT APPROACHES TO MEGALITHIC STUDIES

Early processual models relied heavily on functionalist interpretations: monuments were interpreted in terms of their social 'function' (e.g. as territorial markers) in relation to factors such as demography, land use, human ecology and social structure. The shift away from concerns with chronology and culture history towards concerns with social function and culture process required a new package of analytical methods. If monuments were to be seen as territorial markers, it was necessary to develop some means of establishing the size and boundaries of prehistoric territories. Techniques of spatial analysis, including the use of Thiessen polygons, were borrowed from Social Geography. In its simplest form this involves the construction of a hypothetical polygonal territory around a monument by drawing lines at the midway points between the site in question and other contemporary monuments. In more sophisticated models, the polygons are 'weighted' to take account of factors such as access to the coast and the distribution of resources and natural features. Renfrew's (1973) reconstruction of territories around megalithic tombs on the island of Rousay (Orkney) is an example of the application of Thiessen polygons (figure 1.3). This approach depends upon certain important assumptions: firstly it is necessary to assume that the monuments in question are indeedcontemporary with one another and, secondly, we

must assume that we have a relatively complete distribution pattern with no significant number of destroyed or undiscovered monuments. The use of Thiessen polygons also assumes that all monuments on a distribution map have similar importance: thus if we were attempting to plot 'territories' around Christian places of worship, for example, no distinction would be made between a cathedral and a chapel. Renfrew and Level (1979) have attempted to address this problem by developing a mathematical model (the XTENT model) to plot territories, taking account of possible hierarchies between sites by considering the relative sizes of monuments as well as the distances between them.

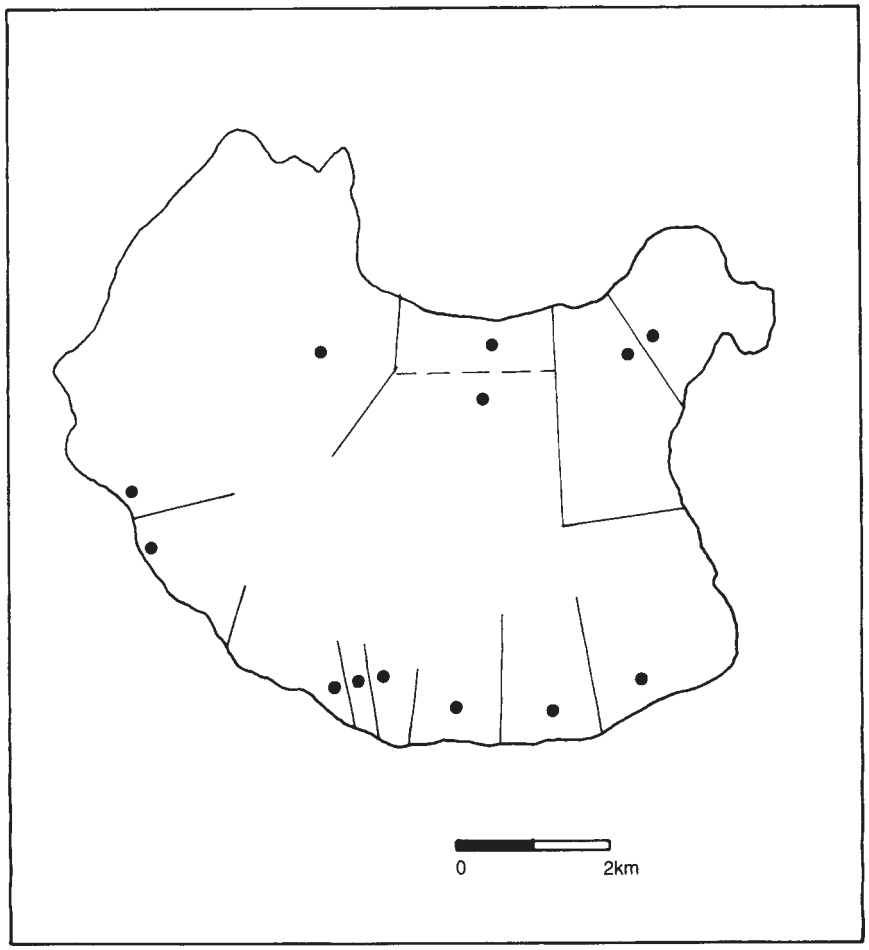


Figure 1.3 Distribution of megaliths on Rousay (Orkney) with suggested tribal territories (after Renfrew 1979).

Many processual models have attempted to relate the appearance of megalithic monuments to demographic factors, and this requires some means of estimating population size ranges for prehistoric societies. This is notoriously difficult, but it is possible on the basis of experimental research to estimate the minimum number of people that would be required to build a particular monument, and this can give some clues as to the *minimum* size of the community concerned. The maximum size of a population can be estimated in relation to the carrying capacity of the land itself. Both estimates presuppose an understanding of the level of technology available to prehistoric communities. Calculating the minimum number of individuals and the total number of man-hours required to build a monument can also give an indication of the relative importance of particular monuments in a given landscape. Experimental research has been used to estimate the minimum number of people (figure 1.4) required to move stones of a given size over a given distance (Atkinson 1961, Erasmus 1965) and to calculate the number of man-hours (figure 1.5) required to build rubble mounds (Renfrew 1979). Where large stones are involved, it is relatively easy to calculate the minimum size of the working team required to move and erect them. With rubble structures, such as Cairns, it is much more difficult: we may calculate that the construction of a particular mound required 1000 man-days of work, but we have no means of knowing whether it was built by 100 people in 10 days or by 500 people in 2 days.

Having estimated the size of a working team, we may want to go on to estimate the total size of the community: this will always be larger than the team size, since certain groups of people (infants, pregnant women, the elderly and infirm) are unlikely to have contributed much physical work in the construction of stone monuments. If a large monument was built over an extended time period, the majority of the population would need to be engaged in food production to support themselves and the working team. It is difficult to establish, however, whether the working team corresponds to 5 per cent, 20 per cent or 50 per cent of the population. It is often assumed (though perhaps not always on good grounds) that most of the work was done by adult men, and that most adult men contributed: skeletal studies (cf. Hedges 1983) suggest that adult men constituted 20–25 per cent of a Neolithic population, and this figure fits well with ethnographic evidence.

The attempt to identify cultural process necessarily involves a consideration of change through time, and a diachronic approach is central to many Processual models. In looking at megalithic monuments in Orkney, for example, Renfrew (1979) identifies two main phases: the first phase is characterised by the construction of relatively small monuments, each representing an individual community of early farmers, whilst the second phase is marked by the appearance of much larger

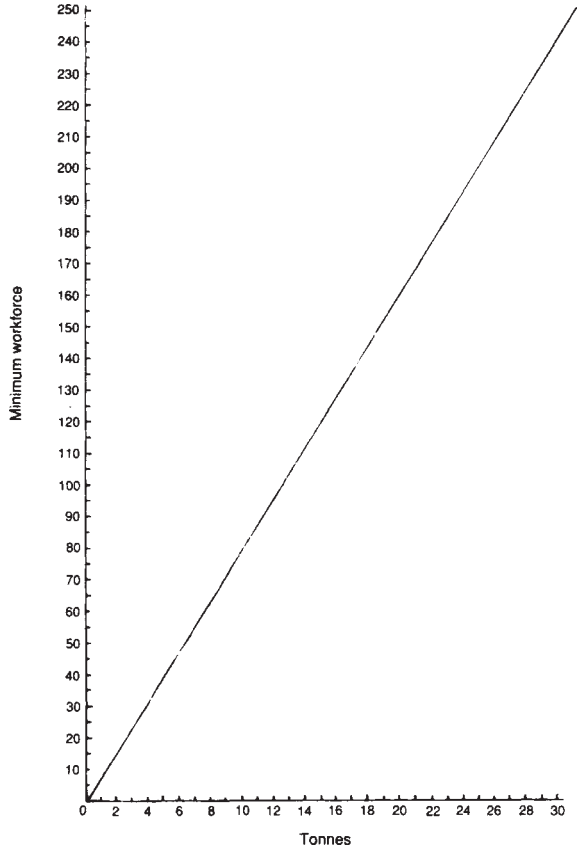


Figure 1.4 Minimum numbers of people required to move a stone of a given weight (based on Mohen's 1980 experiment).

monuments, serving wider territories. This is interpreted by Renfrew as evidence for increasing centralisation of power.

During the early 1980s, many of the tenets of Processual Archaeology came under attack. Members of the Cambridge Poststructuralist group (cf. Hodder ed. 1982, Miller and Tilley eds 1984) in particular criticised the 'New Archaeology' for what they saw as its functionalism and materialist reductionism. Processual approaches, it was argued, had stressed the 'function' of monuments, rituals and social institutions, and ignored their *meaning*. For archaeologists working within the Post-structuralist tradition, structural analysis is seen as the key to understanding cultural meaning in the archaeological record. Culture, it is argued, is essentially communicative, and is constructed in a

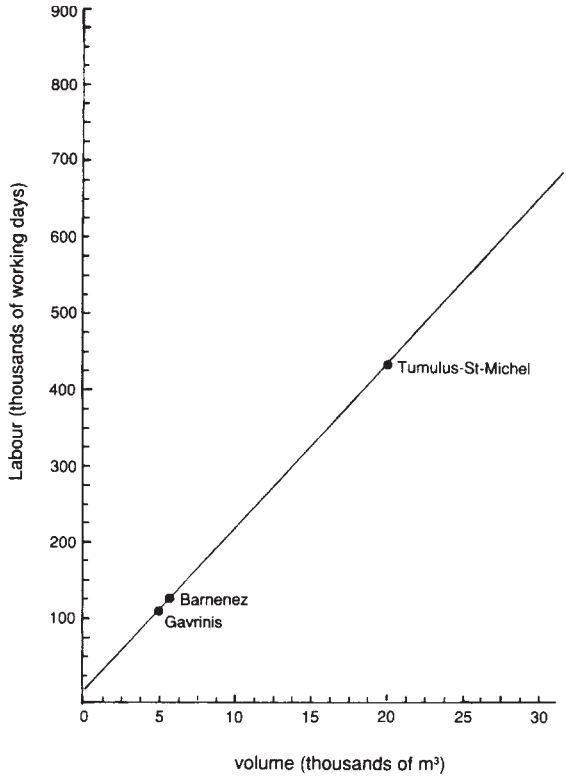


Figure 1.5 Labour estimates for the construction of rubble cairns (based on Renfrew's 1979 estimate that a man takes 11.25 hours to excavate a cubic yard of hard rock, and on Mohen's 1980 estimate that a man can transport 100 kg of rubble per day: a weight of 2 tonnes per cubic metre and an 8-hour working day are assumed).

meaningful way: material culture could thus be compared to a text, with symbols and a coherent structure.

The inspiration for this approach comes from the *Structuraliste* anthropology of Lévi-Strauss (cf. 1955). In Lévi-Strauss' work, culture is considered to be organised in terms of binary oppositions, such as male/female, life/death and culture/nature. These oppositions may have a conceptual equivalence (e.g. female is to male as culture is to nature) which is expressed in the juxtaposition of symbols in material culture. These rules constitute the 'grammar' in relation to which symbols are structured and organised. The symbols themselves are culture-specific, but for Lévi-Strauss the 'grammar' is universal and derives from the structure of the human brain. The *Structuraliste* paradigm is essentially

ahistorical: the 'grammar' is considered to be fixed and unchanging, and Lévi-Strauss offers no framework for the explanation of historical change (indeed he argues that many societies are static and have no history). The long-term perspective of the archaeologist almost invariably places emphasis on change through time, and for this reason *Structuralisme per se* has had a limited influence. More influential have been Poststructuralist approaches, often based on Giddens' (1979) theory of 'Structuration'. Unlike Lévi-Strauss, Giddens is concerned with change through time, and his approach places greater emphasis on *praxis* (the conscious actions of individuals in a society). According to Giddens, communication implies a deliberate act, and symbols are intentionally structured to communicate something. Communicative acts are not only culturally specific but are also situated in a given social and historical context: they are not passive reflections of a universal structure but active interventions which can contribute to socio-historical change.

The methodological basis of Poststructuralist approaches in archaeology is structural analysis. All aspects of human culture, from religion and burial practices to material culture, settlement structure and rubbish disposal, are considered to have a symbolic, communicative dimension. The principle of structural analysis is to look for patterning in the way in which symbols are structured and combined with one another, in an attempt to 'decode' the meaning of the communicative act. Some Poststructuralist work on megaliths focuses on the morphology and setting of monuments (Fleming 1973, Hodder 1984, Thomas and Whittle 1986), whilst other works emphasise depositional practice and the organisation of human remains (Shanks and Tilley 1982, Tilley 1984). Hodder (1984), for example, identifies eight structural similarities between the design of European Early Neolithic long mounds and that of contemporary houses, and argues from this that the tombs represent symbolic transformations of houses. Both houses and long mounds are trapezoidal in shape, and Hodder notes that artefacts associated with domestic life and with women are concentrated at the narrow end, arguing that the structure of both tombs and houses relates to a sexual division of space, labour and status. Shanks and Tilley (1982) focus on the structured deposition of human remains within the chambers of Scandinavian megaliths, noting that the remains are disarticulated, and that bones from the right and left sides and from the upper and lower parts of the body are stacked separately from one another. This is seen by Shanks and Tilley as a deliberate deconstruction of the individual in burial and the symbolic construction of an artificial social whole.

Although all aspects of human behaviour can be considered to have a symbolic dimension, some categories of evidence are particularly well suited to structural analysis. This is certainly the case with prehistoric art,

as Leroi-Gourhan (1968) demonstrated in his classic study of Upper Palaeolithic cave art in Western Europe. Leroi-Gourhan noted regular patterns of association between depictions of particular animal species (for example, ibex, horse and deer are often depicted together, as are bison and oxen). Certain animals are most frequently depicted near the cave entrance (notably horse, ibex and deer), whilst others (bison and oxen) are absent from these areas. In the large, central galleries of the caves, animals of both groups are found, often opposing one another (particularly horse and bison), and Leroi-Gourhan argues that one group of animals (ibex, horse and deer) represent a 'male' principle whilst the other group is 'female'. This approach of analysing the juxtaposition and spatial organisation of symbols may have a role to play in the study of megalithic art.

Recent work on symbolism (Lewis-Williams and Dowson 1988) has led to the identification of 'entoptic' motifs: these are argued to be universal abstract patterns, produced by the human brain in states of altered consciousness such as trances and narcosis. Bradley (1989) has identified such patterns in Breton and Irish megalithic art, and this may provide important clues to the contexts in which this art was conceived and produced.

A third approach, which combines elements of both Processual and Poststructuralist interpretations, draws its inspiration from French Neo-Marxist anthropology (cf. Meillassoux 1964, Godelier 1973). Neo-Marxist approaches are 'Processual' in that they are concerned with processes of cultural change, but they differ from the approach of orthodox 'Processual Archaeology' in their conceptualisation of these processes. The 'New Archaeology' was concerned (particularly in its early stages) with the processes by which human communities adapted themselves to their environment, whereas Neo-Marxist approaches are more concerned with the internal dynamics of human societies. Whilst 'Processual' archaeologists are often concerned with the social function of monuments (e.g. as territorial markers) in relation to the community as a whole, Neo-Marxist approaches emphasise the possible significance of the monuments in relation to sectional interests within a community. Symbolism and meaning (often ignored in more conventional Processual approaches) are central to many Neo-Marxist interpretations, and structural analysis is often employed. In Neo-Marxist approaches, however, it is not symbolism itself that is emphasised, but its social and ideological significance: symbolism is an active force which may be used to legitimise the authority of a ruling elite or, conversely, to undermine that authority. Shanks and Tilley (1982), for example, note that in Scandinavian megaliths, individual skeletons are deliberately deconstructed in favour of an arrangement whereby bones from the right and left sides and from the upper and lower parts of the body are stacked

in separate parts of the chamber: this is interpreted as an ideological strategy to mask and disguise social inequality by de-emphasising the privileged status of some individuals and creating an illusion of equality. In all Neo-Marxist approaches, the emphasis is on social relations, and on the processes by which unequal relations are established, maintained and transformed. Religion is considered to play a key role in these processes, so that megalithic monuments may be of particular interest. Bender (1985) compares prehistoric developments in Brittany and the American Mid-Continent, focusing in particular on the evidence for monumental ritual, and in both areas she identifies a sequence of changes which are interpreted in terms of changing social relations and ideology. Bender argues that the passage graves of Brittany (see chapter 4) are structured in such a way as to restrict access, and this she interprets as evidence for the control of ritual practice by an elite group (perhaps elders, or a dominant lineage). The *Grand Tumulus* monuments of Southern Brittany (see chapter 5), which overlap in date with the passage graves, are characterised by lavish depositions of rare items, suggesting a marked degree of social differentiation. In the second half of the fourth millennium BC, the construction of passage graves and *Grand Tumulus* monuments ceased, and new types of monument appeared in Brittany. Foremost amongst these new monuments are the gallery graves (see chapter 7): these have a more open structure than the earlier tombs, and the depositions found within them show little evidence for social differentiation. Bender argues, therefore, that the changes in monumental ritual in Brittany during the fourth millennium BC relate to more fundamental social transformations: specifically the collapse of a pre-existing power structure based on control of ritual practice.

The above discussion offers only the most cursory introduction to the theoretical approaches that have influenced recent work on megalithic monuments. In theoretical terms Processual, Poststructuralist and Neo-Marxist approaches are relatively easy to define, but in practice there is considerable overlap between them.

These theoretical developments have been most influential among archaeologists working in the United States, the British Isles and Scandinavia and, until recently, 'social archaeology' has had little impact on archaeologists working in France, Germany or Southern Europe. The difference between these two traditions is largely an epistemological one, and central to this discussion is the question of the empirical basis of archaeological interpretations. Archaeologists are not in the business of writing historical novels, and some empirical basis is necessary if archaeological interpretations are to be distinguished from fantasy or pure speculation. The prevailing trend among archaeologists in France, Germany and Southern Europe has been to adopt a fairly strict empirical view which discourages any theoretical extensions beyond observed data.

Christopher Hawkes (1954) argued for a 'Ladder of Inference': at the bottom of the 'ladder' are questions of typology, chronology and technology, which are relatively easy to infer from the observed data, and at the top of the ladder are questions relating to the beliefs and thought systems of ancient peoples, whilst questions of economy and social structure lay between the two. As with any ladder, the lower rungs are the safest, and the inference is that we can say a great deal about chronology and typology, rather less about economy and social structure and very little about the religious beliefs of past societies. We can characterise this as a pessimistic view of archaeological knowledge. The recent theoretical developments briefly outlined above have been characterised by increasingly optimistic perceptions of the boundaries of archaeological knowledge: archaeologists working within the Processual, Poststructuralist and Neo-Marxist traditions have focused on precisely those aspects of prehistoric societies which cannot be directly 'observed' (e.g. demography, social structure, religious beliefs and ideology). This optimism has required the adoption of a new epistemology (a general theory of knowledge) which has been characterised as 'Realist' (cf. Wylie 1982). The basis of a Realist approach is the assertion that all scientific knowledge involves theoretical extensions beyond the observed data: the data can only be explained in the context of theoretical models, which give order to the data by accounting for factors assumed to have been instrumental in generating them. The procedure to be followed, then, is one of:

> Trying out different explanatory ways of conceptualising the data …to see if, when the data are conceived as the outcome of one type of mechanism rather than another, they are better integrated or take on more intelligible form.
>
> (Wylie 1982, p. 42)

A strict empirical approach would deny the value of such models, on the grounds that the material evidence is insufficient to justify this level of speculation. Wylie insists, however, that a rigid empirical approach such as this would, if consistently held, rule out physics as a scientific enterprise, and call most established scientific theory into question. Realism does not give a licence for unlimited speculation, since models are developed to explain real patterns identified in the observed data. The general scientific principle of Occam's Razor, *'entia non sunt multiplicanda praeter necessitatem'* (neither more, nor more complex, causes are to be assumed than are necessary to account for the phenomena), also applies, so that the preferred model will always be the simplest model which explains all the relevant facts in a coherent way. This Realist epistemology is, explicitly or implicitly, the theoretical starting point for most

Processual, Poststructuralist and Neo-Marxist interpretations of megalithic monuments, and it is the starting point for the discussion in this book.

Although the theoretical approaches outlined in this chapter have emerged primarily from literature published in English, it would be entirely misleading to present a picture of a 'forward looking' socially-orientated archaeology in Britain and the United States, and a backward looking archaeology in France, Germany and elsewhere, focusing exclusively on questions of typology and chronology. The reality is that only a minority of archaeologists in Britain, America, France, Germany or elsewhere have been concerned with such theoretical questions. There is a significant body of theoretical literature published in French (cf. Gallay 1989) and the approaches represented in the literature are distinctly different from those published in English, tending to focus less on social questions and more on the structure of archaeological explanations. There is often little communication between the theoreticians and the practitioners of archaeology, so that published accounts of sites and material are often not informed by current theoretical approaches, and this gulf is particularly marked in Francophone archaeology (Gallay *op. cit.*). The most noticeable exception to this is in the work of André Leroi-Gourhan (1968) and his associates (cf. Leroi-Gourhan and Brezillon 1972), which has focused on the Upper Palaeolithic. It remains true, therefore, that the French literature on the Armorican Neolithic has not addressed the theoretical questions outlined above, and it is in an attempt to address these questions that this book has been written.

MONUMENTS AND SOCIETY IN NEOLITHIC BRITTANY

In most general discussion of European megaliths (cf. Daniel 1958), Brittany has been seen as one of the core areas: the number of individual monuments and the diversity of monument types set Brittany apart from most other regions, and radiocarbon dates suggest that Brittany has some of the earliest stone monuments in Europe (Giot *et al.* 1979). The megaliths of Brittany also cover a considerable period of time: the earliest monuments date to the first quarter of the fifth millennium cal. BC, whilst the most recent date to the second half of the third millennium cal. BC. It is possible to trace a continuous development of megalithic traditions in the Armorican region over a period of almost 3000 years, something which is possible in very few regions. Because of this, the megaliths of Armorica are particularly well suited to the theoretical approaches discussed above.

The aim of this book is to place the various megalithic traditions of the Armorican region in social context, and to develop a diachronic overview of changing monumental traditions during the Neolithic period. It is not

written from the exclusive perspective of any one 'school' (e.g. Processual, Poststructuralist or Neo-Marxist): these approaches focus on different aspects of past societies (e.g. demography, cultural meaning and social relations) which are closely related to one another and which cannot therefore be considered in isolation.

Chapter 2 deals with stone axe exchange which, as we will see, is so closely linked to megalithic ritual that it must be considered as part of the background to this book. Chapters 3–7 deal in turn with particular groups of monuments in broadly chronological order, whilst chapter 8 presents a diachronic overview, relating the changing megalithic traditions of the Armorican region to the social dynamics of the communities which built the monuments.

2

CENTRES OF PRODUCTION AND SPHERES OF INTERACTION

Stone axe exchange in the Armorican Neolithic

It may seem strange to begin a book on megalithic monuments with a chapter on stone axe exchange, but the archaeological evidence suggests a close link between axe exchange and megalithic ritual throughout the Armorican Neolithic. Stone axes are frequently found in the chambers of megalithic monuments and carved representations of axes are among the most common motifs in Armorican megalithic art. The megalithic stone circle of Er Lannic is an important ceremonial site, which seems also to have served as a production and distribution centre for fibrolite axes. In attempting to understand the social significance of Armorican megaliths, this link between ritual practice and exchange may prove particularly important. In order to understand this link, however, it is necessary first to consider the social organisation of axe production and exchange, and the relationship between the axe as tool and the axe as symbol in Armorican Neolithic society.

Since the development of petrological characterisation techniques, stone axe exchange has been recognised as an important feature of the European Neolithic. Production centres or 'axe factories' have been identified in Northern France (Le Roux 1970, 1979a), Britain (Clough and Cummins eds 1979, 1988), Ireland (Jope 1952, Sheridan 1986) and the Channel Islands (Patton 1991a and in press), and axes produced at these centres have been found many miles away from the factories themselves, showing that the axes circulated within extensive networks of interaction and exchange. In some cases this exchange can be understood in relatively simple economic terms: axes were produced in areas with high quality stone, and 'exported' to areas lacking in such resources. In other cases, however, there is no obvious economic reason for exchange: virtually all Neolithic communities in the Armorican region would have had easy access to rock suitable for axe production, and in the Channel Islands, for example (Patton 1991a), where around 32 per cent of stone axes are of rock

types foreign to the islands themselves, the imported axes are in no way functionally superior to those produced locally. In such cases, it is tempting to suggest a more complex social reason for stone axe exchange. In the New Guinea highlands, where stone axe exchange is recorded in an ethnographic context (Chappell 1966, Strathern 1969), axes from particular sources played an important role in socially significant transactions such as bridewealth payments and gifts associated with initiation ceremonies. The objects exchanged in transactions such as this may be working tools, and may in fact be used, but functional criteria may nonetheless be of secondary importance in defining their value and 'appropriateness' for a given transaction. Aesthetic criteria, the origin and individual history of an object may all be significant, often in the context of mythico-religious associations.

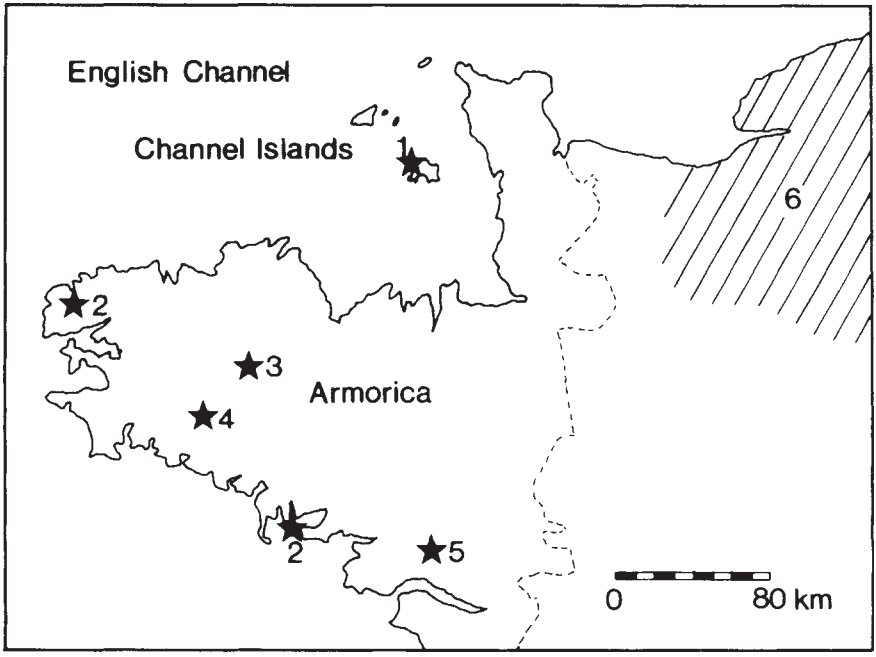
AXE PRODUCTION AND EXCHANGE IN THE ARMORICAN NEOLITHIC

The evidence for axe production and exchange in North-western France has been extensively discussed by Cogné and Giot (1952) and Le Roux (1979a), and only a brief summary will be given here. Throughout the Neolithic period, Armorican communities made and used axes of locally available rock. In addition to this local procurement, axes from certain sources circulated within a wider regional exchange network (figure 2.1). These sources seem not to be equal in their importance: axes from some sources are found in considerable numbers over a very wide area, whilst axes from other sources have more restricted distributions. Other sources produced axes which are found over a wide area, but never in large quantities.

In numerical terms, axes of Type A dolerite from the factory of Plussulien (Côtes d'Armor) are by far the most important (Le Roux 1970, 1979a), accounting for over 40 per cent of axes found in Brittany and 30–40 per cent of axes from the Cotentin peninsula of Normandy. Axes of Type A dolerite have been found as far away as the Pyrenees, the Rhône valley and Alsace, and four examples are known from England.

The precise source of fibrolite axes is unknown, but fibrolite occurs around the entrance to the Golfe du Morbihan in Southern Brittany, and at the north-western tip of the Armorican peninsula (Cogné and Giot, *op. cit.*). Particularly high concentrations of fibrolite axes have been recorded in these areas (25–30 per cent of the total assemblage): elsewhere in Brittany the numbers are smaller, but still significant (10–20 per cent).

Around 5 per cent of the axes recorded in the Armorican region are of pyroxeneite rocks: these are difficult to distinguish from one another without petrological analysis, but axes of both jadeite and eclogite have been identified (Cogné and Giot, *op. cit.*). Eclogite axes almost certainly



1 Type P dolerite
2 Fibrolite
3 Type A dolerite
4 Type C hornblendite
5 Eclogite
6 Flint

Figure 2.1 Stone axe production centres in Armorica (after Patton 1991b).

come from a source in the *département* of Loire-Atlantique, possibly from an outcrop which lies to the North of Nantes (Le Roux 1979a). The source of jadeite is unknown, but an Alpine origin seems likely on geological grounds (Bishop *et al.* 1978). Jadeite axes have a pan-European distribution pattern (Campbell-Smith 1965) but unlike, for example, axes of Type A dolerite, they do not occur in very large numbers in any area. This suggests that jadeite axes were relatively valuable items, which were exchanged over long distances, but which were used and deposited only in special contexts.

Cogné and Giot (1952) estimate that flint axes account for around 3 per cent of the total axe assemblage in Brittany, and although precise figures are not available for the Cotentin peninsula (the Norman *département* of Manche), it is clear that flint axes account for a much higher proportion of the Cotentin assemblage. In the Channel Islands, flint axes make up around 10 per cent of the total assemblage (Patton 1991a). The majority of flint axes found in the Armorican area were undoubtedly made at

production centres around the Plain of Caen (Edeine 1961, Desloges 1986) and in the Paris Basin (Bailloud 1964, Bulard *et al.* 1986, Watte 1986). In the Paris Basin, flint axes are by far the most common, and the Armorican region lies on the periphery of this distribution pattern.

Axes of Type B epidiorite, from the southern edge of the Montagnes Noires (Cogné and Giot 1952), have a much more restricted distribution, and probably had a purely local significance. These axes are concentrated in Southern Brittany, where they form 5–12 per cent of the total axe assemblage: in the North of Brittany they account for less than 3 per cent of the sample.

Recent research has demonstrated the existence of an axe production centre at Le Pinacle, Jersey (Renouf and Urry 1986, Patton 1987a and in press), and 'Type P' dolerite axes produced at Le Pinacle have been identified in assemblages from Guernsey, Sark and Alderney as well as Jersey. Axes of Type P dolerite, however, seem not to be found on the Armorican mainland.

The chronology of axe production poses its own problems: some sources seem to have produced axes throughout the Neolithic whilst others may have functioned for a much shorter period of time. The production of fibrolite and pyroxeneite axes seems to cover the entire Neolithic period, from the mid-fifth millennium down to the late third millennium cal. BC (Le Roux 1979a): these axes are found in the earliest dated megaliths, but also in monuments of Final Neolithic date. Flint, likewise, was probably used throughout the Neolithic period: an early origin is suggested by the radiocarbon date (5660 ± 190 BP=4770–4340 cal. BC: Ly-3680) from the flint mine of Bretteville-le-Rabet, Calvados (Desloges 1986), but flint axes are also found in the Late Neolithic (*c.* 3250–2850 cal. BC) gallery graves of the Paris Basin (Bailloud 1964). Axes of Type A dolerite are not found in the earliest passage graves (Le Roux 1979a) and the radiocarbon dates from the 'factory' of Plussulien itself suggests that axe production did not begin there until the end of the fifth millennium cal. BC. There is evidence for increasingly specialised and intensive exploitation of this site through time: the earliest extraction seems to have involved digging pits to recover blocks of stone already detached and embedded in clay, whereas subsequent exploitation involved quarrying of massive outcrops and ultimately the use of fire to detach blocks (Le Roux 1970). The production centre of Le Pinacle, Jersey (Patton 1987a and in press) seems to have functioned for a relatively short period of time during the Early Neolithic (*c.* 4800–4250 cal. BC), though it is possible that the production centre moved and that axes of 'Type P' dolerite continued to be made at a nearby (and as yet unknown) location.

THE SOCIAL ORGANISATION OF AXE PRODUCTION

We can distinguish between two basic categories of stone axe in the Armorican Neolithic: axes produced locally by communities for their own use, and axes produced at particular centres for wider distribution. Since axes in the latter category were produced only at a small number of centres, this must correspond to a distinction between Neolithic communities: communities which produced axes only for their own use, and those which also produced axes for exchange. In some areas, particularly those lacking in suitable raw materials, there may be a third category of communities which did not produce axes at all.

The evidence for axe production is more limited than the evidence for exchange. Most of the rock types mentioned above can be traced to source areas or even outcrops, but only three of these rock types (Type A and Type P dolerite and fibrolite) can be traced to actual production sites (several production sites for flint axes have been identified, but all of these lie outside the Armorican region). Of the known production centres in North-western France, that at Plussulien (the source of Type A dolerite) is by far the most important: this was undoubtedly the largest production centre in the region, and detailed excavation by Le Roux (1970) provided much important information. The sites of Er Lannic and Le Pinacle (production centres for fibrolite and Type P dolerite respectively) have both suffered at the hands of early excavators (Le Rouzic 1930a, Godfray and Burdo 1949). The excavators of Le Pinacle (Godfray and Burdo *op. cit.)* did not recognise the site as an axe production centre, and discarded dolerite waste without recording it in any detail.

Le Roux (1979a) has made a series of calculations based on the evidence from Plussulien. He estimates the total volume of dolerite waste on the site to be around 60,000 m^3. Assuming (on the basis of experimental research) that axe production corresponds to around 1 per cent of the rock quarried, and assuming an average axe size of 100 cm^3, this corresponds to the manufacture of around six million axes during the lifetime of the 'factory'. The radiocarbon dates from Plussulien (Le Roux 1970) suggest a period of full activity of around 1200 years, and this allows us to calculate an average annual output of 5000 axes. Production on this scale is likely to have been undertaken by people who were at least part-time specialists, and this is to some extent reflected in the quality of the finished products, particularly the fine 'button axes' (figure 2.2) which were produced at Plussulien during the second half of the fourth millennium cal. BC. Experimental research suggests that axes could be made at an approximate rate of one per person per day, thus an annual output of 5000 axes would require 5000 person-days of work. Le Roux (1979a) suggests that this could correspond to a team of twenty people working 250 days per year,

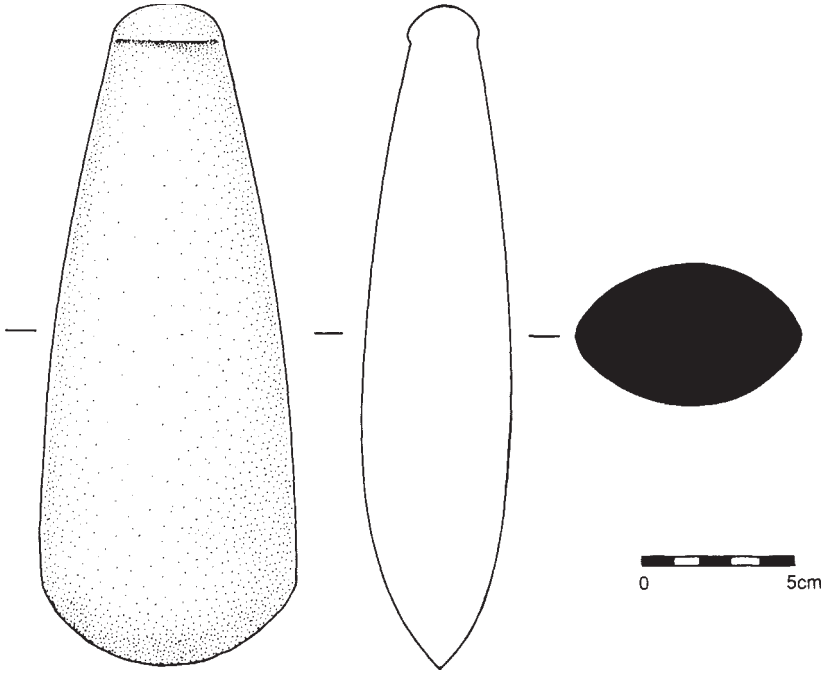


Figure 2.2 'Button axe' from the Plussulien factory, found in Jersey (drawing by Gillian Kay).

though it may of course represent a larger team working for a more restricted period. Figure 2.3 shows possible team sizes and working periods. The size of the working community would, of course, be larger than the actual team size, since there would be dependent relatives: Le Roux (1979a) suggests a coefficient of 3–4 (based on demographic data cited by Young 1971), which would give a community of 60–80 people. This community of specialists would obviously need to be fed. Le Roux (1979a) estimates that the proportion of such specialised work possible in a Neolithic community would be around 5 per cent, roughly the equivalent of one day's work per month or two weeks per year. Assuming that annual production at Plussulien required 5000 person-days of work and that this corresponds to 5 per cent of the total working time in the supporting population, we arrive at a figure of 100,000 person-days as the total annual working time of this population. Assuming a working year of 250 days, and based on the coefficient of 3–4, this gives us a minimum size for the supporting population of 1200–1600 people.

The site of Er Lannic is particularly important because the evidence suggests that axes were made (or at least finished) on a major ceremonial

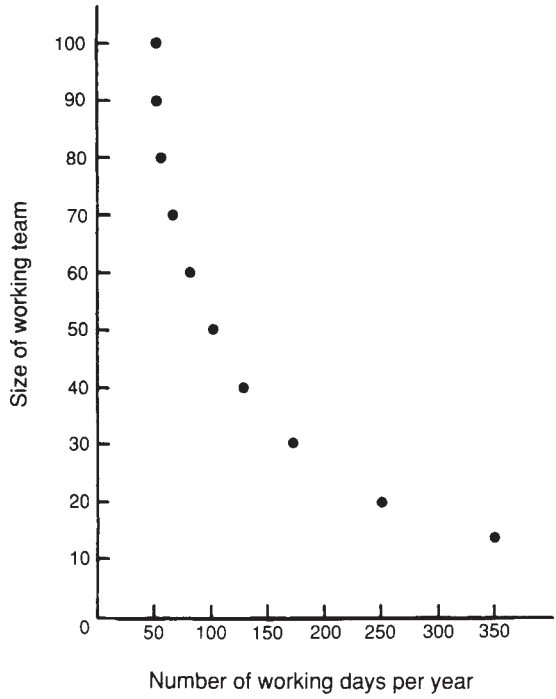


Figure 2.3 Estimates for team size and annual working times for the Plussulien axe factory (based on Le Roux 1979a).

site. The site itself is a double stone circle (figure 2.4). Le Rouzic's (1930a) excavations revealed a series of hearths, which were interpreted as ritual features, associated with large quantities of pottery (including fragments of at least 162 *vase-supports*). The assemblage from the site also includes 27 fibrolite axes and 47 fragments, as well as 11 other polished axes and 152 fragments. This is by any standards an exceptionally large assemblage of axes and axe fragments. Unfinished axes of both fibrolite and Type A dolerite are present, along with polishing tools, suggesting that the site was involved in the production of stone axes.

Fibrolite does not occur naturally on Er Lannic itself, but it does occur in the area of Port-Navalo, only 2 km away. It seems likely that fibrolite rough-outs were brought to Er Lannic from Port-Navalo, and that the site served as a production and distribution centre for fibrolite axes. This suggests an important link between axe production and megalithic ritual, which is reinforced by the presence of carved representations of axes on two of the stones which make up the Er Lannic monument (Shee-Twohig 1981, figure 181).

The site of Le Pinacle is situated at the foot of a massive natural outcrop

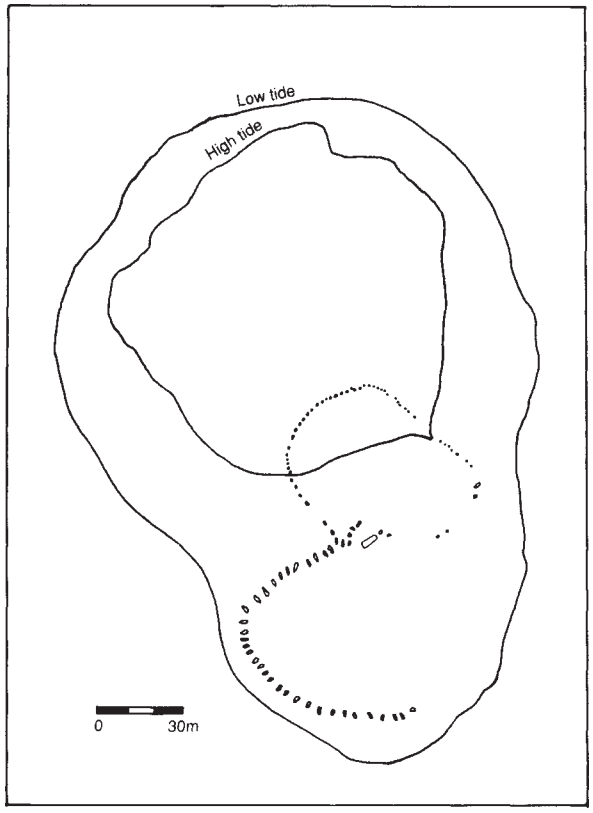


Figure 2.4 The site of Er Lannic (Morbihan).

of granite (pl. 2.1). Dolerite was apparently quarried from one or more of the sills which outcrop in the immediate vicinity of the site, and axes were produced on the narrow strip of land which connects the granite outcrop to the headland forming the north-western corner of Jersey (Godfray and Burdo 1949, Patton 1987a and in press). The granite outcrop which gives the site its name is one of the most prominent landmarks on the north coast of Jersey, and the location of the 'factory' site in relation to this feature may be significant. Bradley and Ford (1986), in discussing the axe production centre of Langdale, Cumbria, have stressed that the outcrops chosen as the sources of raw material are generally in spectacular and often inaccessible locations, and we can perhaps see Le Pinacle as a comparable example: given the evidence for later (Chalcolithic, Bronze Age, Iron Age and Gallo-Roman) ritual activity on the site (Patton 1987a) it seems likely that the massive granite outcrop was a significant feature of the sacred geography of the Channel Islands.

Plate 2.1 The Early Neolithic axe factory site of Le Pinacle, Jersey

The evidence from Er Lannic and Le Pinacle suggests that religious factors may have influenced the location of axe production centres. A further factor was undoubtedly the physical properties of the available stone: axes of Type A dolerite, Type B epidiorite, jadeite, fibrolite, eclogite and flint may not be functionally superior to locally made diorite and dolerite axes, but they are visually distinctive and can be recognised quite easily. In looking at the production and exchange of stone axes in the New Guinea highlands, Chappell (1966) and Strathern (1969) have both drawn attention to informants' abilities to distinguish by eye between axes from different sources, stating that the exchange value of an axe depends in many cases upon its origin: in experiments, Chappell (1966) found that informants' classification of stone axes corresponded to petrological identifications in 65–70 per cent of cases.

To summarise the above discussion, it seems reasonable to distinguish between axes made locally by individual communities, and axes which circulated in extensive regional exchange systems. These two categories of axes must in some way have had different values. The production of axes in the latter category took place only at a few centres and was presumably

controlled by the social groups which occupied that land. The axes produced at these centres are easily recognisable. The location of axe production centres was partly determined by the nature of the available stone, but religious considerations seem also to be significant, and there appears to be an important link between axe production and megalithic ritual. The production of axes at these centres was probably in the hands of full- or part-time specialists.

THE SOCIAL ORGANISATION OF AXE EXCHANGE

In looking at the evidence for Neolithic Europe as a whole, it is clear that some areas have abundant resources of rock suitable for the manufacture of stone axes, whilst other areas are entirely lacking in such resources: under these circumstances it is hardly surprising that axes were exchanged. The evidence for the Armorican area, however, is more problematic: the Armorican massif consists largely of hard igneous and metamorphic rocks, and almost every community would have had access to rock suitable for the manufacture of stone axes. The axes that were exchanged are not superior in any functional sense to those produced locally by individual communities, yet even in the Channel Islands, where there is certainly no shortage of suitable stone, and where the acquisition of mainland axes involved a potentially hazardous sea journey, Neolithic communities obtained a significant proportion of their axes by exchange. We have also seen that there is some evidence for a link between axe production and exchange and megalithic ritual: at Er Lannic, fibrolite axes were apparently made or finished at an important megalithic site, and religious factors may also have influenced the location of the Pinacle 'factory' in Jersey. More generally, stone axes are frequently found in the chambers of megalithic monuments, and carvings of axes are found on the walls of passage graves and gallery graves (chapters 4–6).

We may get some clues to the significance of stone axe exchange in the Armorican Neolithic by looking at ethnographic evidence. Phillips (1979) discusses stone axe exchange in New Guinea and the Solomon Islands, and lists bridewealth presentations, funeral payments and ceremonial exchange as important contexts in which axes are exchanged. Chappell (1966) states that only axes from certain sources were considered appropriate for transactions of this nature, where the origin, individual 'history' and mythico-religious associations of an object are often more important than functional criteria.

Transactions of this nature may have considerable importance in the mediation of social relations within and between communities. Meillassoux (1967) has argued that time delays between labour investment and return are intrinsic to agricultural production, and that the

labour involved in clearance and cultivation creates inter-generational bonds of dependence, favouring the development of a hierarchy between 'those who come before' (the ancestors and elders) and 'those who come after' (cf. Kahn 1981). These inter-generational bonds involve asymmetrical relations, which may be mediated and institutionalised through the control of ritual practice and of access to socially valued material items. According to Meillassoux the power of elders within a community is often based on their ability to control the access of younger men to potential wives ('control of the means of reproduction'). Through this control, elders are able to make demands on the labour and allegiance of younger men. In many societies, men are only allowed to marry after they have undergone some form of initiation ceremony, marking their transition from boyhood to manhood. This initiation typically involves the passing on of sacred knowledge, controlled by the elders, and may also involve payment by the initiate to ritual specialists or particular relatives: the form of such payments is in most cases strictly determined by convention, and access to the appropriate valuables is controlled by the elders. Marriage itself may involve further payments, notably 'bridewealth' (payment by the groom to the bride's relatives): valuables involved in a bridewealth system are acquired by elders (on the marriage of their daughters, or the girls of their lineage), who are then able to control the access of young men to potential brides through their possession of these objects, thus reinforcing the asymmetrical nature of inter-generational bonds. The objects which circulate in exchange systems such as this often have symbolic or mythico-religious significance, though they may also be functional tools.

Exchange systems of this nature may have considerable significance in terms of social dynamics. Under certain circumstances, a successful or dominant lineage may demand higher bride-prices than other groups: this may enable such a group to accumulate bridewealth valuables, and thus to acquire more women in the context of polygynous marriages. This increases the labour-pool in the dominant lineage, allowing it to produce a greater surplus, thus accelerating the development of social differentiation (cf. Friedman and Rowlands 1977). We can perhaps see evidence for this process in the *Grand Tumulus* monuments of Southern Brittany (chapter 5). This small group of particularly large and impressive mounds, occurring only in a limited area around the Golfe du Morbihan, is characterised by lavish depositions of stone axes and variscite necklaces. The axes are predominantly of rare materials, such as jadeite, chloromelanite and fibrolite, and they include types of ceremonial axe not found in other monuments. It seems clear that these monuments relate to a high-status social group, and that the particular forms of axe and necklace associated with these monuments were significant as symbols of this group's status and power. The monuments appear to represent a localised development

of marked social differentiation, which can perhaps be understood in relation to the model outlined above.

In some special circumstances, certain communities may have been able to control the access of other groups to the regional interaction network, leading to the development of inter-communal and inter-regional asymmetry. This seems to have been the case in the Channel Islands (Patton 1991b). There is a marked fall-off between Jersey and Guernsey in terms of the proportion of imported axes, and a further fall-off between Guernsey and Sark (axes of mainland origin make up 44 per cent of the stone axe assemblage from Jersey, 27 per cent of the assemblage from Guernsey and 13 per cent of the assemblage from Sark). This fall-off can probably be understood in relation to the geography of the islands (figure 2.5). Jersey is much closer to the mainland than Guernsey (24 km compared with 48 km), while the distance between the two islands is relatively small (28 km). The main tidal flow in the area runs alternately from north to south and from south to north, depending on the state of the tide, and this tidal stream is particularly fast (up to 7 knots). Sailing between the Channel Islands and the Cotentin can pose particular problems, since it involves crossing the tidal stream, and accurate navigation would probably only be possible if a journey could be completed within a single tide. For this reason, it is likely that communities in Guernsey acquired mainland axes via Jersey rather than directly from Cotentin communities, and this could explain the observed fall-off pattern. If communities in Guernsey were dependent on Jersey communities for access to socially valued objects, then Jersey communities may have conducted transactions on terms beneficial to themselves, and we might expect to see some evidence for inter-island asymmetry associated with this. We can in fact identify such evidence in the archaeological record, both in terms of the size and location of megalithic monuments and in the distribution of particular artefact types (chapter 4).

AXE SYMBOLISM AND MEGALITHIC RITUAL

As we have already seen, the stone axe seems to have had a symbolic significance as well as a practical importance for Armorican Neolithic communities. Stone axes are frequently found in the chambers of megalithic monuments, and carved representations of axes are among the most common motifs in Armorican megalithic art, being found on menhirs (chapter 3) and on the walls of passage graves (chapter 4) and gallery graves (chapter 6). The evidence from Er Lannic suggests that religious factors may have been significant in the production of stone axes.

The fact that stone axes and carved representations of axes are

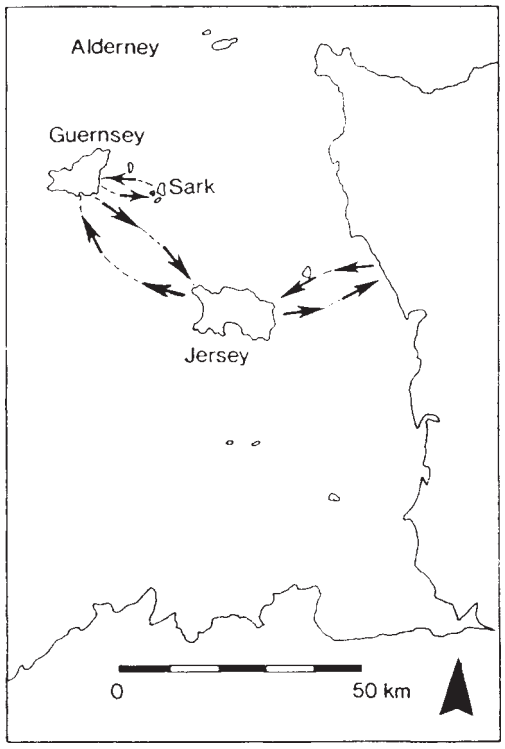


Figure 2.5 Stone axe exchange networks in the Channel Islands (after Patton 1991b).

frequently found in funerary contexts suggests that axe symbolism had meaning in relation to the ancestors, death and the past. Following Meillassoux's (1967) argument, it is not difficult to see how the stone axe, the main instrument of clearance and cultivation in Neolithic society, could become a key symbol in an ideology concerned to stress inter-generational bonds and obligations in relation to ritual practice and the ancestors.

Contextual analysis may provide further clues to the significance of axe symbolism in the Neolithic of North-western France. Kinnes (1980) has drawn attention to the spatial separation of carved representations of axes and female figures in the rock-cut tombs of the Late Neolithic period in the Paris Basin, and he tentatively suggests that axes are in some sense a 'male' attribute. This same separation can be noted in Armorican gallery graves such as Mogau-Bihan (see chapter 6) where female figures are found in the antechamber and an axe motif in the main chamber.

A deposition found in the chamber of the *Grand Tumulus* monument of

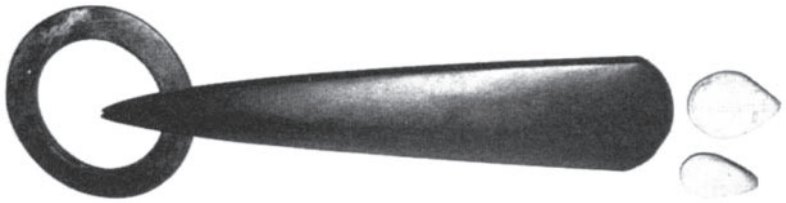


Plate 2.2 Ritual deposition of an axe, polished stone ring and variscite pendants from Mané-er-Hroëk

Figure 2.6 'Hafted axe' carving at Gavrinis (after Le Roux 1982).

Mané-er-Hroëk (see chapter 5) suggests a more explicit axe/phallus association: a large chloromelanite axe was placed on the floor of the chamber, with its pointed butt-end resting on a polished stone ring and two spherical pendants placed at the blade end, one on either side of the axe (pl. 2.2). An essentially similar symbolism is suggested by the recently discovered carving of a 'hafted axe' (Le Roux 1982) in the passage grave of Gavrinis (figure 2.6). In a general sense, this symbolism can be considered to express an ideological link between production and reproduction: the

axe as the means of agricultural production is linked to the phallus, the means of biological reproduction, and the fertility of the land (harnessed to human use through clearance with stone axes) is linked to human virility (Patton 1991b). Meillassoux (1967) argues that the power of tribal elders is often based upon control of ritual practice and control over the circulation of socially valued material items. In the case of the Armorican Neolithic, we could suggest that the axe functioned as a symbol linking these two aspects of power. The axe seems to have been both a religious symbol and an item of exchange as well as a functional tool. Axe symbolism in Armorican megaliths seems to have a sexual dimension, perhaps linked to the role of exchange in the control of reproduction, and to an ideological emphasis on inter-generational bonds and obligations. The social formation was thus constituted and rationalised in symbolic terms.

DISCUSSION

The aim of this chapter has been to develop an outline for a model of stone axe exchange in the Armorican Neolithic, relating the evidence for axe production and exchange to the evidence for axe symbolism in megalithic ritual. As we have seen ritual and exchange in the Armorican Neolithic are closely linked, and can only be understood in relation to one another. It makes sense to consider the evidence for stone axe exchange first, because this evidence relates to the entire Neolithic period: megalithic architecture and ritual practice changed considerably during the period covered by this book, but stone axe exchange remained important throughout. The evidence for stone axe exchange in the Armorican Neolithic complements the evidence for megalithic ritual: the model outlined in this chapter has much broader social implications, and will serve as the basis for much of the discussion in subsequent chapters.

3

LONG MOUNDS AND GIANT MENHIRS

Ritual landscapes of the first farmers

Recent excavations in Brittany have radically altered our vision of the earliest Neolithic in the Armorican area, and have shed important new light on the origins of the megalithic traditions of North-western France. Until recently, it had been thought (cf. Giot *et al.* 1979) that the earliest megaliths in the region were simple passage graves, such as those found at Barnenez and Ile Guennoc (Finistère) and at Kercado (Morbihan). Then, in an important paper, L'Helgouach (1983) presented evidence to suggest that some of these simple passage graves (notably Mané-Rutual and La Table des Marchand at Locmariaquer, Morbihan) incorporated broken fragments of earlier decorated menhirs. Positive proof for this suggestion was provided only a year later, when Le Roux (1984) discovered carvings on the upper face of one of the capstones of the passage grave of Gavrinis (Larmor-Baden, Morbihan). The carvings on the Gavrinis capstone fit with those on the Table des Marchand capstone, previously discussed by L'Helgouach: these two capstones are fragments of a single carved menhir.

Most recently, excavations at La Table des Marchand (L'Helgouach and Cassen in press) have revealed evidence for activity on the site prior to the construction of the passage grave itself. Excavation of the precairn horizon revealed postholes and hearths and, most importantly, construction pits for menhirs, apparently removed before the construction of the passage grave. One menhir alone seems to have remained in position, and this was incorporated as the end-stone of the passage grave. The pottery found in this pre-cairn horizon is quite different to that found in the passage graves themselves, and the decoration includes motifs (notably the 'crook' motif) which are also found as carvings on the re-used menhir fragments in the passage graves of La Table des Marchand and Gavrinis.

These discoveries have prompted a more general reconsideration of Armorican megalithic chronology. One problem in Breton prehistory has always been the dating of the *tertres tumulaires*, long mounds such as Le

Manio and Kerlescan (Carnac, Morbihan). These long mounds are poorly understood, both because of the inadequacy of early excavations and because they have produced very little archaeological material. The small amount of material that has been found, however, suggests that these monuments, like the decorated menhirs of Locmariaquer, may belong to a very early phase (Boujot and Cassen in press). Some confirmation of this comes from the recently excavated passage grave complex at Le Petit Mont (Arzon, Morbihan), where the primary cairn was apparently built over an earlier long mound (Lecornec in press).

In the light of these recent developments, it seems necessary to revise our whole conception of megalithic origins in the Armorican region. This question of megalithic origins, however, is so closely linked to more general considerations of 'Neolithisation' that it is necessary first to consider the processes by which the Neolithic way of life became established in the Armorican region.

THE ORIGINS OF THE NEOLITHIC IN ATLANTIC EUROPE

Following Thomsen's introduction of the three-age system (Stone, Bronze and Iron Ages) in the mid-nineteenth century (Daniel 1975), the 'Stone Age' was subdivided into an 'Age of Chipped Stone' and an 'Age of Polished Stone'. The distinction between Palaeolithic and Neolithic, therefore, was initially conceived as a technological one. Childe (1925), in discussing the 'Neolithic Revolution', shifted the focus from technology to economy, emphasising the importance of food production (agriculture and animal husbandry) to human social and cultural evolution. The current definition of the 'Neolithic' incorporates both dimensions: the beginning of the Neolithic (at least in North-western Europe) is marked both by economic changes (the adoption of cereal cultivation and stock-raising) and by technological ones (the appearance of pottery and polished stone tools). In Atlantic Europe (though not in the Western Mediterranean) these developments seem to form part of a distinct 'package', which is also marked by the appearance of megalithic monuments.

According to Childe (1925), the economic and technological developments which make up the 'Neolithic Revolution' first occurred in the Near East. From the 'fertile crescent', it was argued, the Neolithic way of life spread through Anatolia to the Balkans and on into Europe. In explaining the spread of the Neolithic from the Balkans into Europe, two separate routes were identified (figure 3.1): a land route up the valleys of the Danube and Rhine (giving rise to the 'Linear Pottery Cultures') and a sea route to the Mediterranean coasts of Italy, France and Spain (giving rise to the Impressed Pottery Cultures'). The earliest Neolithic of the Atlantic zone was considered to represent a later expansion of the Linear

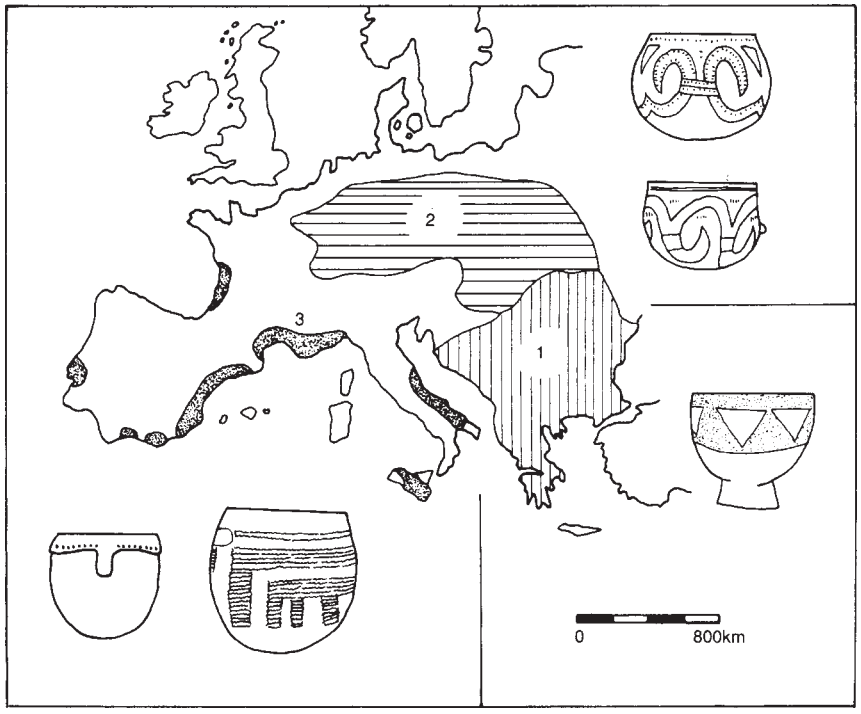


Figure 3.1 Early Neolithic traditions in Europe:
1 Balkan Neolithic (painted pottery); 2 Linear pottery; 3 Impressed wares.

Pottery and Impressed Pottery traditions, with some degree of fusion between them (Piggott 1965).

Despite the 'processual' reaction against diffusionist approaches in general (cf. Renfrew 1973), this model is, in many respects, still applicable. Radiocarbon dates show that cereal cultivation, stock raising and ceramic technology appeared earlier in the Near East than in Europe and, since the wild progenitors of domesticated cereals did not exist naturally in Europe, an entirely local development of the 'Neolithic package' can be ruled out. Whilst there is a broad consensus that the Neolithic package was in some sense 'diffused' from the Near East into Europe via Anatolia and the Balkans, the processes by which this diffusion happened remain the subject of debate: some argue for a movement of people, others for a transmission of ideas with exchange of animals and seeds between groups. Closely linked to this debate is the question of the role played by indigenous Mesolithic communities in the spread of the Neolithic way of life. The most coherent argument in favour of population movement has been made by Ammerman and Cavalli-Sforza (1971), who plotted the

radiocarbon dates for the earliest Neolithic on a map of Europe, and identified a 'wave of advance' from the Near East through Anatolia into Europe. Ammerman and Cavalli-Sforza then produced a mathematical model to show that the observed pattern and rate of spread could be understood as the cumulative effect of relatively small population movements with each generation. Assuming that the spread of the Neolithic package into Europe did involve a movement of people, these settlers would obviously have come into contact with indigenous Mesolithic communities, and the relationship between settlers and natives would have been an important factor in determining the cultural trajectory of a given area.

Recent work on economy and social structure (cf. Bender 1985) has stressed that food production is not a prerequisite for the development of social complexity and that, under certain circumstances, hunter-gatherers may develop large settled communities and complex social institutions. Renfrew (1976) argues for the emergence of such groups along the Atlantic façade of Europe at the end of the Mesolithic period, based on the exploitation of abundant (and seasonally stable) marine resources. In Renfrew's model, the Atlantic constituted a barrier to the geographical expansion of Neolithic communities, and the merging of groups of Neolithic settlers with the already large Mesolithic populations resulted in demographic pressure, in response to which the megaliths were built as 'territorial markers'. Kinnes (1982) develops an essentially similar model, placing the megalithic traditions of the Atlantic façade in an 'impact zone' between intrusive Neolithic groups and coastal Mesolithic communities (figure 3.2).

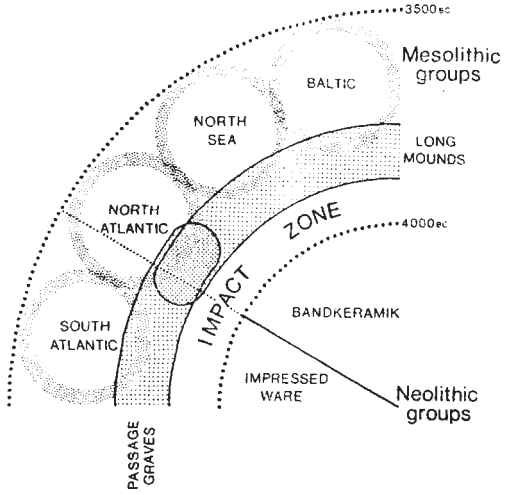


Figure 3.2 The 'Impact Zone' and tomb origins (after Kinnes 1982).

Renfrew's model is essentially a functionalist one: megaliths are to be understood in terms of their social 'function' as regulators of demographic stress. Population pressure, caused by geographical factors, is elevated to the status of 'prime mover'.

A functionalist model such as this can neither explain the genesis of a phenomenon (it seems difficult to imagine a group of Neolithic people sitting round and deciding 'we have a population problem, and if we build a stone monument that will solve it'), nor the specific form it takes (why megaliths and why a particular type of megalith?). This does not mean that the model itself is invalid, but it does mean that it can only provide a partial explanation of the phenomenon in question.

Megaliths may well have functioned in some sense as 'territorial markers', but they cannot be reduced to that function. They are, first and foremost, a product of relations between people, built and used in the context of particular social institutions. In attempting to understand the appearance of megaliths along the Atlantic façade of Europe, it will certainly be necessary to consider relations between intrusive and indigenous groups, but demography will only be one factor in this consideration. Inter-group relations will depend, to a very large extent, on the internal social structure of the groups concerned.

THE EARLIEST NEOLITHIC IN NORTH-WESTERN FRANCE

As far as the Early Neolithic sequence is concerned, North-western France can in most respects be seen as a microcosm of the Atlantic façade more generally. In terms of Kinnes' (1982) model, the area lies directly on the 'impact zone'.

The 'intrusive' Neolithic element is provided by the Epi-Bandkeramik sequence of the Paris Basin (Constantin 1985). Constantin identifies a series of ceramic groups (figure 3.3) within this sequence, and the distribution maps (figure 3.4) combine with the radiocarbon dates (figure 3.5) to present a picture of a westward moving 'wave of advance'. According to Constantin (*op. cit.*) and Kinnes (1986), the Channel Islands mark the westernmost extension of this tradition.

The 'indigenous' element is provided by the coastal Mesolithic communities of Brittany (Kayser 1984). In Southern Brittany, where the evidence for the Final Mesolithic is best preserved and best understood, it is clear that large, settled coastal communities were in existence by the second half of the sixth millennium cal. BC. Coastal settlements have been excavated at Téviec (Péquart *et al.* 1937) and Hoëdic (Péquart and Péquart 1954), Morbihan, and at La Torche (Kayser 1984), Finistère. At Téviec and Hoëdic, the settlements were associated with cemeteries, which provide evidence for complex mortuary practices involving a degree of social differentiation. At Téviec, ten graves were found, containing the remains

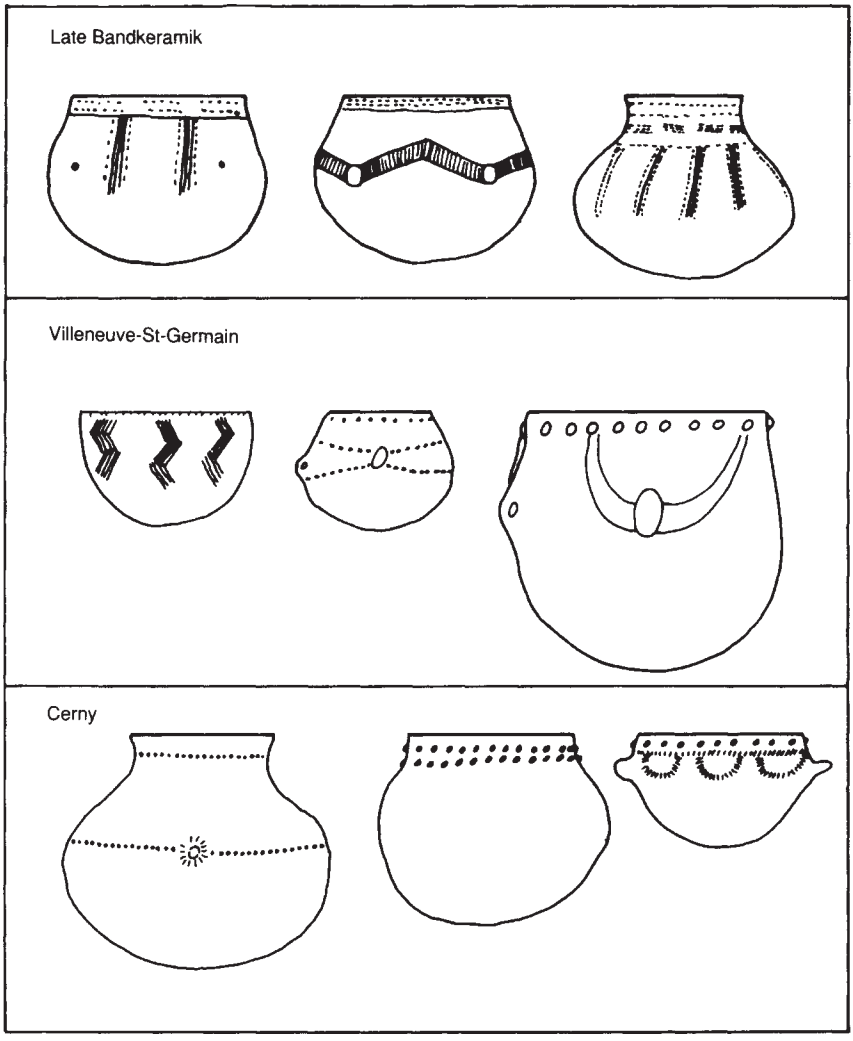


Figure 3.3 Epi-Bandkeramik pottery traditions in the Paris Basin (after Constantin 1985).

of twenty-three skeletons: the bodies themselves had been placed in pits (one to six individuals per pit), which are in some cases lined and covered with stone slabs. Fires were apparently lit on the capstones, which were later covered by small cairns. The cemetery at Hoëdic is essentially similar, with nine graves containing the remains of fourteen individuals. Grave goods at Téviec and Hoëdic include fine flint blades, bone pins, shell beads, ochre and antler. At Téviec, two burials were distinguished by the presence of a 'beehive' of antlers placed over the body, whilst at Hoëdic,

one grave was singled out by a deposition of worked antler pieces around the head of the individual. The radiocarbon dates from Hoëdic (6575 ± 350 BP=5500–5110 cal. BC: GSY-227) and La Torche (5970±80BP=5060–4770 cal. BC: Grn-2001) place these sites at the very end of the Mesolithic period.

In most of the published literature (cf. Giot *et al.* 1979), the Carn group of Brittany is cited as the earliest Neolithic of the Armorican region. This group is characterised by simple passage graves, and the associated ceramic assemblages (figure 3.6) are dominated by globular and hemispherical vessels, mostly undecorated but occasionally with applied 'moustaches'. The radiocarbon dates from chamber G at Barnenez (5750 ±150 BP=4790–4460 cal. BC: Gif-310) and chamber IIIc at Ile Guennoc (5800±300 BP=5010–4360 cal. BC: Gif-165) suggest a date for this group in the mid-fifth millennium cal. BC. Since neither the monument forms nor the ceramic assemblages can be paralleled in the 'intrusive' Neolithic of the Paris Basin (i.e. the Epi-Bandkeramik sequence, cf. figures 3.3, 3.4), the Carn group has been seen as an essentially local development, an adaptation of the Neolithic package by indigenous populations which remained culturally distinct.

The most recent archaeological discoveries have changed this picture somewhat. In both the Channel Islands and Southern Brittany, recent excavations have provided evidence for a Neolithic horizon which predates the passage graves of those areas. In both cases, the pottery

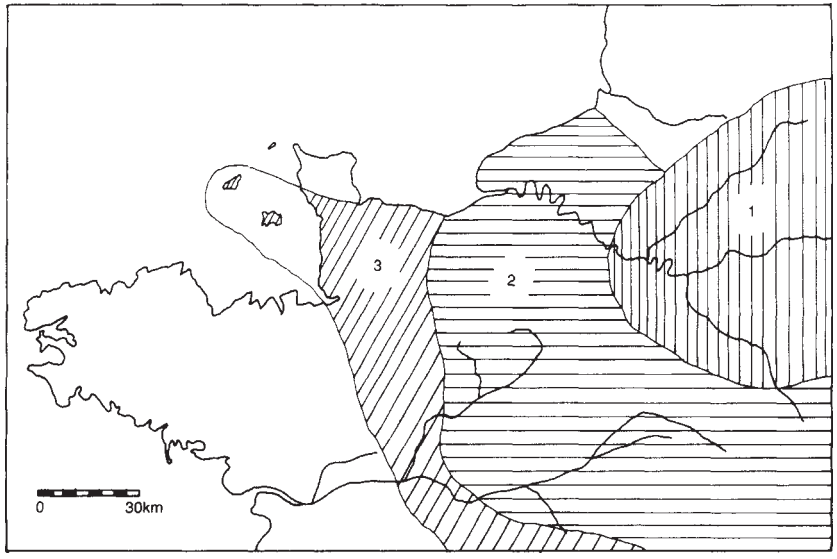


Figure 3.4 The Epi-Bandkeramik expansion in Northern France: 1 Late Bandkeramik; 2 Villeneuve-St-Germain; 3 Cerny (based on Constantin 1985).

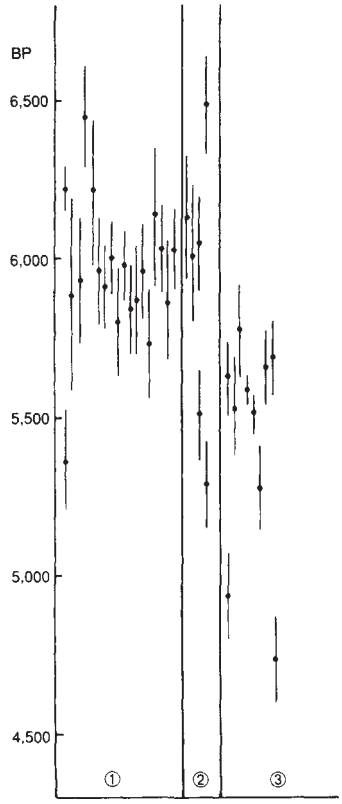


Figure 3.5 Radiocarbon dates from Epi-Bandkeramik contexts in Northern France: 1 Late Bandkeramik; 2 Villeneuve-St-Germain; 3 Cerny.

associated with these early horizons is quite different to that found in the passage graves. At Les Fouaillages, Guernsey (Kinnes 1982), a megalithic long barrow was found to be associated with pottery of what has come to be known as the Pinacle/Fouaillages group (Patton 1987a and in press): this pottery (figure 3.7) has clear affinities in the Epi-Bandkeramik sequence of the Paris Basin, specifically in the Cerny group. The radiocarbon dates from Les Fouaillages (5850±100 BP= 4880–4600 cal. BC; BM-1892R/5900±110 BP=4930–4700 cal. BC; BM-1893/5670±170 BP=4760–3930 cal. BC; BM-1894R) place the site at the very beginning of the Neolithic sequence. The pre-cairn horizon at La Table des Marchand, Locmariaquer (L'Helgouach and Cassen in press) produced pottery of the Castellic group (cf. Bailloud 1975). The dating of this group (which is specific to Southern Brittany) has always been problematic, but the stratigraphic evidence from La Table des Marchand permits us to assign it

to a relatively early stage. The pre-cairn horizon at La Table des Marchand has produced two radiocarbon dates (5040 ± 70 BP=3960–3730 cal. BC; Gif-7555/5170±70 BP=4020–3820 cal. BC; Gif-7554).

There are certain points of similarity between the ceramic assemblage from the pre-cairn horizon at La Table des Marchand and the Channel Island assemblages of the Pinacle/Fouaillages group, notably the presence of grooved decoration in the form of garlands (figure 3.7 a-b), and the presence of carinated vessels with simple impressed decoration around the shoulder (figure 3.7 c-d). The importance of the ceramic assemblage from La Table des Marchand is that it is the first assemblage of the Castellic group to be recovered from a sealed, stratified context, and this discovery has prompted a more general reconsideration of the relationships between the Castellic group of Southern Brittany, the Pinacle/Fouaillages group of the Channel Islands and the Epi-Bandkeramik traditions of the Paris Basin (Patton in press). The relationships between these three ceramic traditions are summarised by figure 3.8. The number of typological elements shared by all three groups (cf. figures 3.3, 3.7, 3.9) suggests that the Pinacle/Fouaillages and Castellic groups should both be seen as belonging to the Epi-Bandkeramik complex. There is a chronological problem here, since the only dated

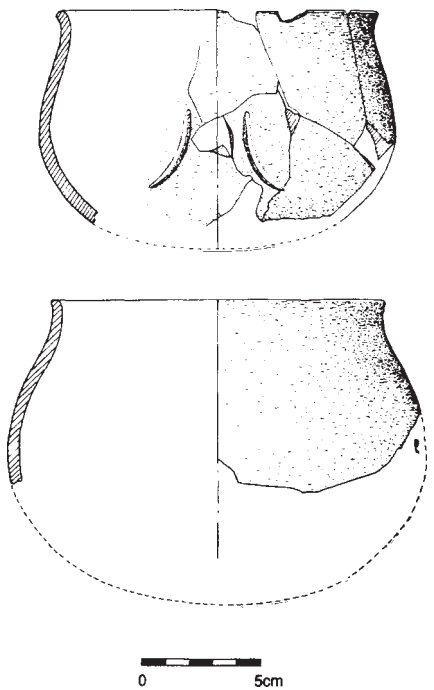


Figure 3.6 Pottery from Ile Carn (after Giot 1987).

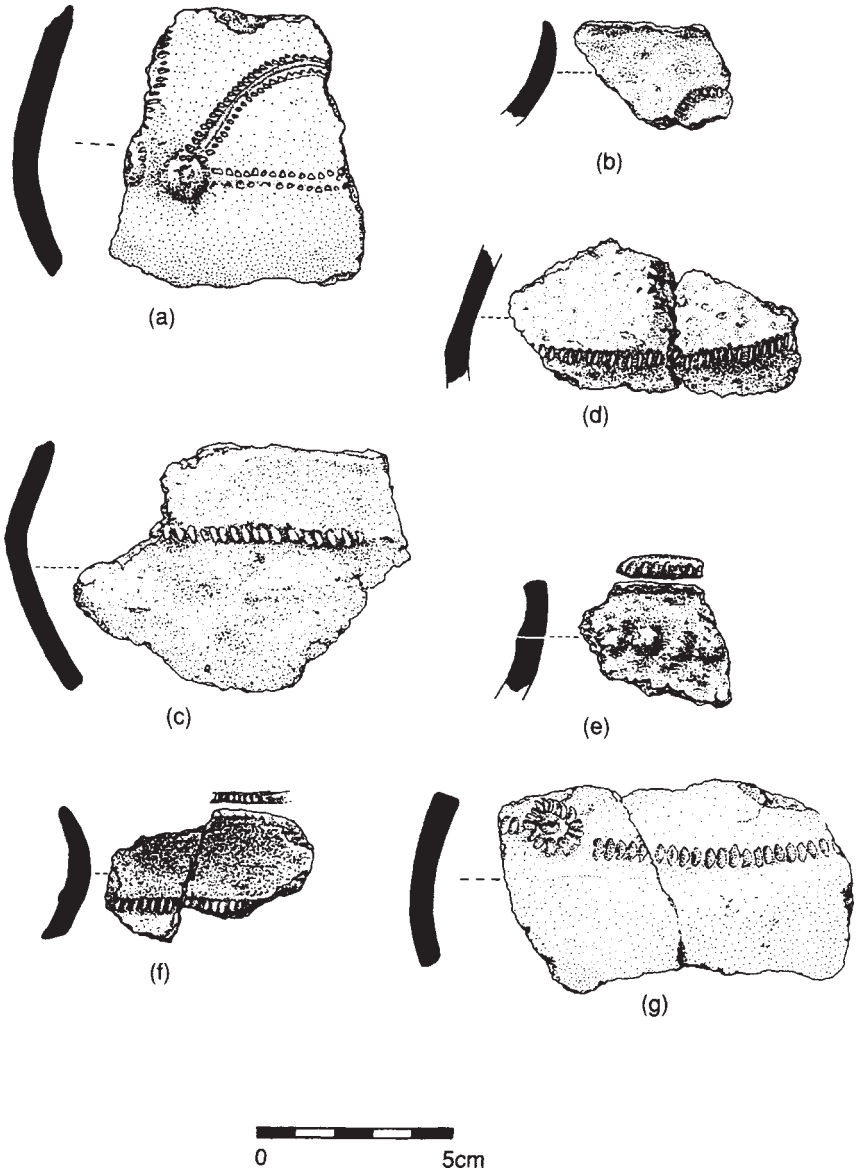
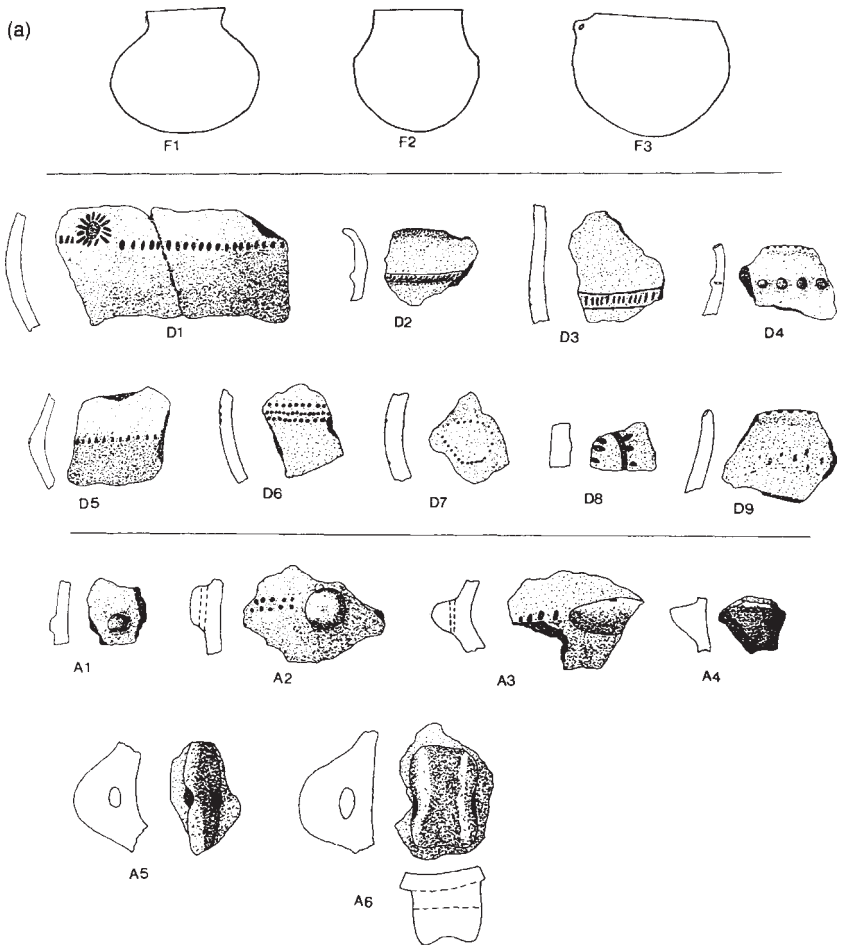


Figure 3.7 Pottery from Le Pinacle, Jersey (drawings by Gillian Kay).



(b)

	A			B											C		D	
	D1	D3	A2	F1	F3	D4	D6	D8	D9	A1	A3	A4	A5	A6	F2	D5	D2	D7
Cerny	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
Mont Orgueil				X	X	X	X		X				X	X				
Le Pinacle	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X
Fouaillages	X		X	X		X	X	X	X	X		X	X		X	X	X	
Castellic				X	X	X	X	X	X	X	X	X	X	X	X	X		

Figure 3.8 (a) Typological elements of Pinacle/Fouaillages assemblages (Patton in press); F1–3 Forms, D1–9 Decoration, A1–6 Handles and Lugs, (b) Occurrence of these motifs in Cerny, Pinacle/Fouaillages and Castellic assemblages; A Elements shared by Cerny and Pinacle/Fouaillages, B Elements shared by all three groups, C Elements shared by Pinacle/Fouaillages and Castellic

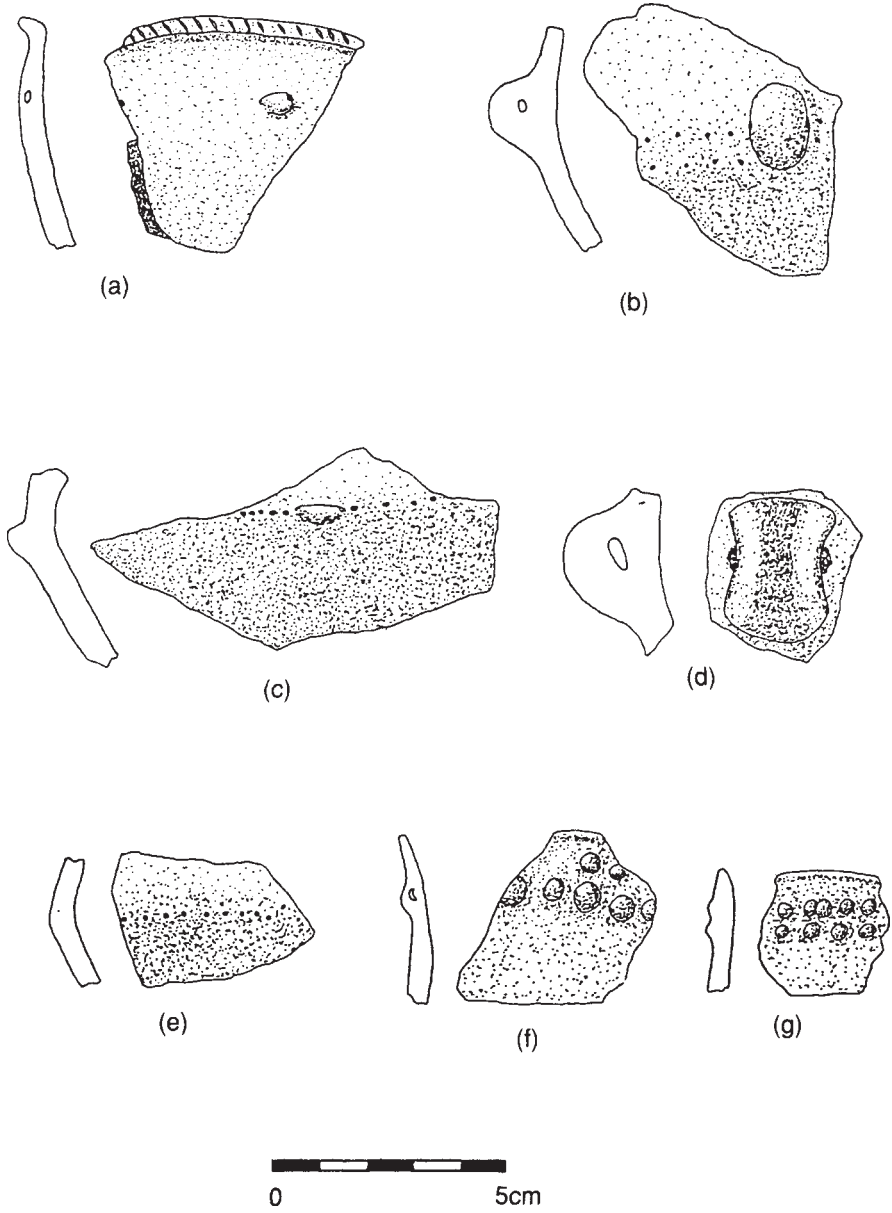


Figure 3.9 Castellic pottery from Le Lizo (a) and Er Lannic (b-g)

assemblage of the Castellic group seems, on the evidence of the radiocarbon dates, to be somewhat later in date than assemblages of the Pinacle/Fouaillages and Cerny groups. The Table des Marchand assemblage, however, is not altogether typical of the Castellic group (it lacks, for example, the incised rims, the repoussé buttons and the grooved handles which link other Castellic assemblages to the Epi-Bandkeramik complex), and it is possible that it belongs to a relatively late stage in the Castellic sequence.

This digression into the field of ceramic typology suggests that the influence of the Epi-Bandkeramik tradition in the Armorican region may have been greater than has previously been thought, and this must be borne in mind in considering the processes by which the Neolithic way of life (and with it, megalithic ritual) became established in this region. There does appear to be a degree of regional differentiation: the Castellic group is almost exclusively confined to the *département* of Morbihan in Southern Brittany, and there is very little evidence for Epi-Bandkeramik influence elsewhere in Brittany. In Western Brittany in particular, the picture has changed little, and the Carn group still seems to represent the earliest Neolithic. Recent discoveries (e.g. at Plouer-sur-Rance in the Côtes d'Armor and at St-Just in Ille-et-Vilaine) show a sparse scatter of material of possible Epi-Bandkeramik affinities (Tinevez in press, Briard in press) in North-eastern and East-Central Brittany. In discussing the Neolithisation of Armorica, therefore, it may be possible to adapt Kinnes' (1982) model (figure 3.2) to distinguish between a 'core' zone, extending from the Channel Islands southwards to the Morbihan, marked by a significant 'intrusive' element, and a peripheral zone, extending around the western coast of Brittany from Southern Finistère to the Côtes d'Armor. The social and cultural significance of this regional distinction is a more complex question, to which we will return. It may reflect an intrusive population in the 'core' area, but equally it could relate to differential acculturation in two indigenous populations.

The most recent research suggests that this regional distinction is reflected in the distribution of particular monument forms. Recent excavations in Southern Brittany and the Channel Islands suggest the existence of a pre-passage grave ritual landscape, dominated by long mounds and (at least in Southern Brittany) by massive decorated menhirs.

RITUAL LANDSCAPES OF THE FIRST FARMERS

The evidence for a pre-passage grave ritual landscape in some areas of the Armorican massif relates essentially to two classes of monument, the long mounds *(tertres tumulaires allongées)* and decorated menhirs.

The existence of the long mounds was recognised in the nineteenth

century (cf. Luco 1883), and many of the monuments in this group were excavated in the early twentieth century (cf. Le Rouzic *et al.* 1923). These monuments, however, are poorly understood, partly because of the inadequacies of early excavation techniques, but also because most of the excavated sites have produced only a very small quantity of material. Their chronology has always been problematic, and they have generally been assigned to the fourth millennium cal. BC (Giot *et al.* 1979), though on very limited evidence. Recent excavations at Les Fouaillages, Guernsey (Kinnes 1982) revealed a megalithic long mound, the first such monument to be excavated in the Armorican region in recent years. The ceramic assemblage from this site clearly belongs to the Epi-Bandkeramik complex, and the radiocarbon dates place the site in the early to mid-fifth millennium cal. BC. Reconsideration of the ceramic sequences from Southern Brittany (Patton in press) permits us to revise the dating of the long mounds in this area also: the ceramic assemblages from the long mounds of Mané-Pochat, Mané-Ty-Ec, Le Manio, Kerlescan and Le Castellic all belong to the Castellic group, and include typological elements which link them to the Epi-Bandkeramik complex. Finally, at Le Petit Mont (Arzon, Morbihan), a long mound was found sealed beneath the primary cairn of a passage grave complex (Lecornec in press), confirming the early date of these monuments.

The decorated menhirs are known principally as fragments re-used in the construction of passage graves, and this re-use demonstrates that the menhirs themselves must have been standing before the passage graves were built. These fragments are decorated in a characteristic style, which can be distinguished from later traditions of megalithic art. There are a number of decorated menhirs still standing in the Armorican region, and these are extremely difficult to date: some are decorated in the style of the early menhirs, whilst others carry motifs which are probably later. At Locmariaquer (L'Helgouach and Cassen in press), the evidence suggests a complex of decorated menhirs, most of which appear to have been deliberately destroyed during the Neolithic, and the fragments re-used in the construction of later monuments. One of the Locmariaquer menhirs, however, is still standing and has been re-used in place as the end-stone of the Table des Marchand passage grave. The largest of the Locmariaquer menhirs, the *Grand Menhir Brisé,* though no longer standing, is still visible on the site, and was probably too large to re-use in the construction of a later monument.

The long mounds and decorated menhirs exist only in a restricted area (figure 3.10) and are most densely concentrated in Southern Brittany, at the western end of the Golfe du Morbihan.

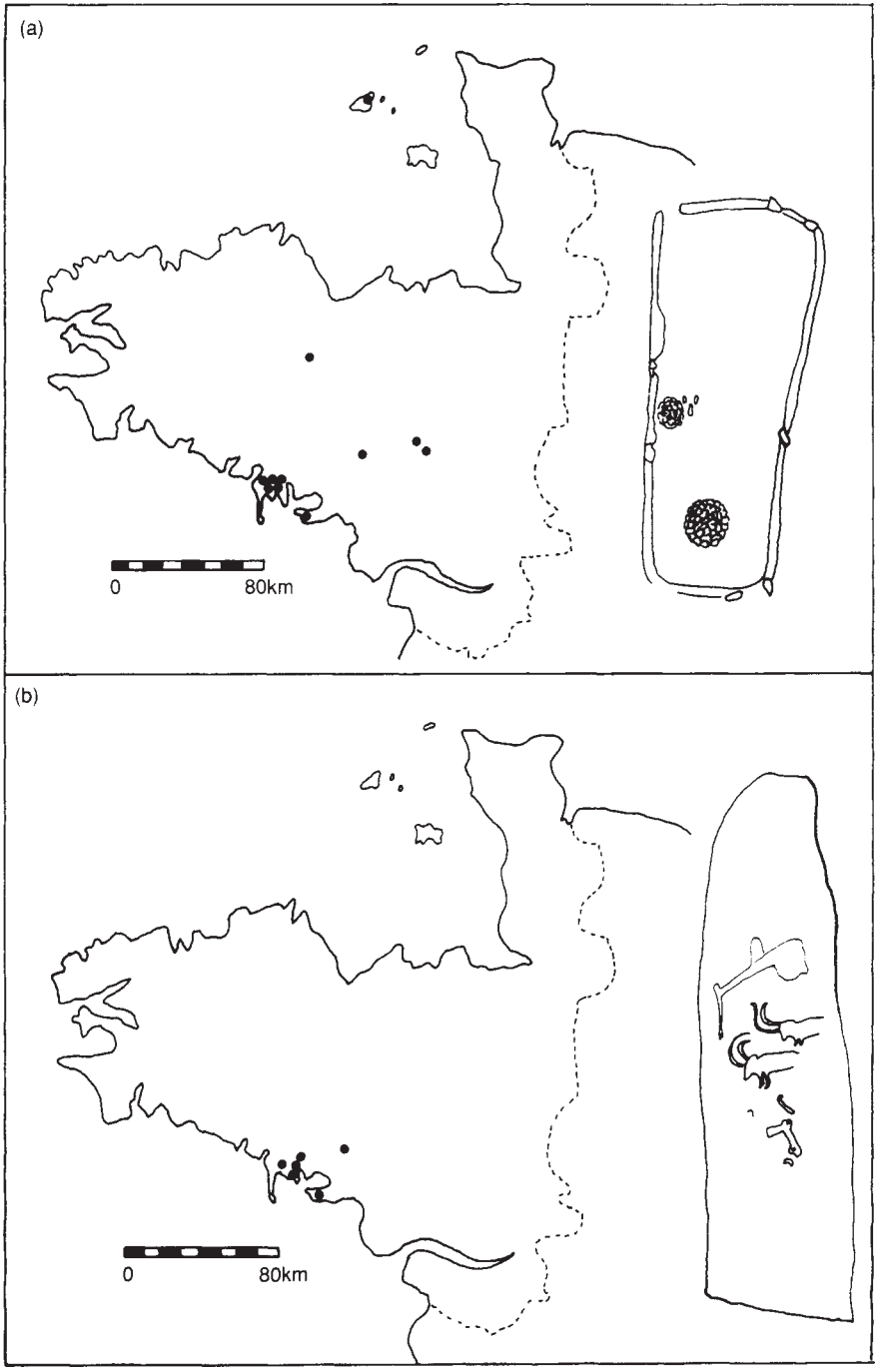


Figure 3.10 Distribution of Early Neolithic long mounds (a) and decorated menhirs (b)

THE LONG MOUNDS

The long mounds of the Armorican area fall into several distinct regional groups (Briard in press). The best-known group is concentrated around Carnac in Southern Brittany, and includes the monuments of Mané-Pochat, Mané-Ty-Ec, Le Manio, Kerlescan and Le Castellic (Piggott 1937). These monuments all suffered at the hands of early excavators (Luco 1883, Le Rouzic *et al.* 1923). Two monuments are known from the commune of Arzon, a few kilometres to the south-west of Carnac on the other side of the Golfe du Morbihan: the long mound of Le Petit Mont (Lecornec in press) and the monument of Bilgroix (Le Roux 1979b). A third group is concentrated in the interior of Eastern Brittany, and includes the monuments of La Croix St-Pierre (Milon and Giot 1954) and La Croix-Madame (Briard in press) at St-Just, Ille-et-Vilaine, and Le Jardin-aux-Moines at Néant-sur-Yvel, Morbihan (Briard 1989). A number of monuments have been identified in the area of Coëby, on the Landes de Lanvaux (Gouezin in press), but none of these has been excavated. There is a single monument in Northern Brittany, Notre Dame de Lorette at Quillio, Côtes d'Armor (Giot 1956), and another in Guernsey, the site of Les Fouaillages (Kinnes 1982).

These monuments must be distinguished from long mounds of the *Grand Tumulus* series (see chapter 5), such as Le Tumulus-St-Michel and Mané-Lud, which are very much larger, and which are distinguished by lavish depositions of variscite beads and jadeite and fibrolite axes.

The *tertres tumulaires* are typically rectangular or trapezoidal (Les Fouaillages is axe-shaped), defined by a setting of relatively small stone slabs. The mounds themselves are low (1–3 metres in height), and where internal structures are found, these generally take the form of small cairns and cists. Most of these features would not have been accessible after the construction of the mounds themselves, so in their initial phase the monuments must have been open ceremonial enclosures, though whether this phase lasted for a few days, a few years or several centuries is difficult to establish on the present evidence. Whilst the long mounds certainly appear to have been ceremonial structures, there is no clear evidence for a specifically funerary function, and none of the sites has produced human remains.

There is a significant degree of regional variation in the morphology of these monuments. The Carnac monuments form the most coherent group (figures 3.11–3.12), consisting of trapezoidal settings of small slabs or drystone walling, in most cases enclosing multiple features such as cists, cairns and hearths. The monument of Les Fouaillages, Guernsey (figure 3.14a) is in some respects similar, though it is axe-shaped rather than trapezoidal, and is small in comparison with the Carnac monuments. In

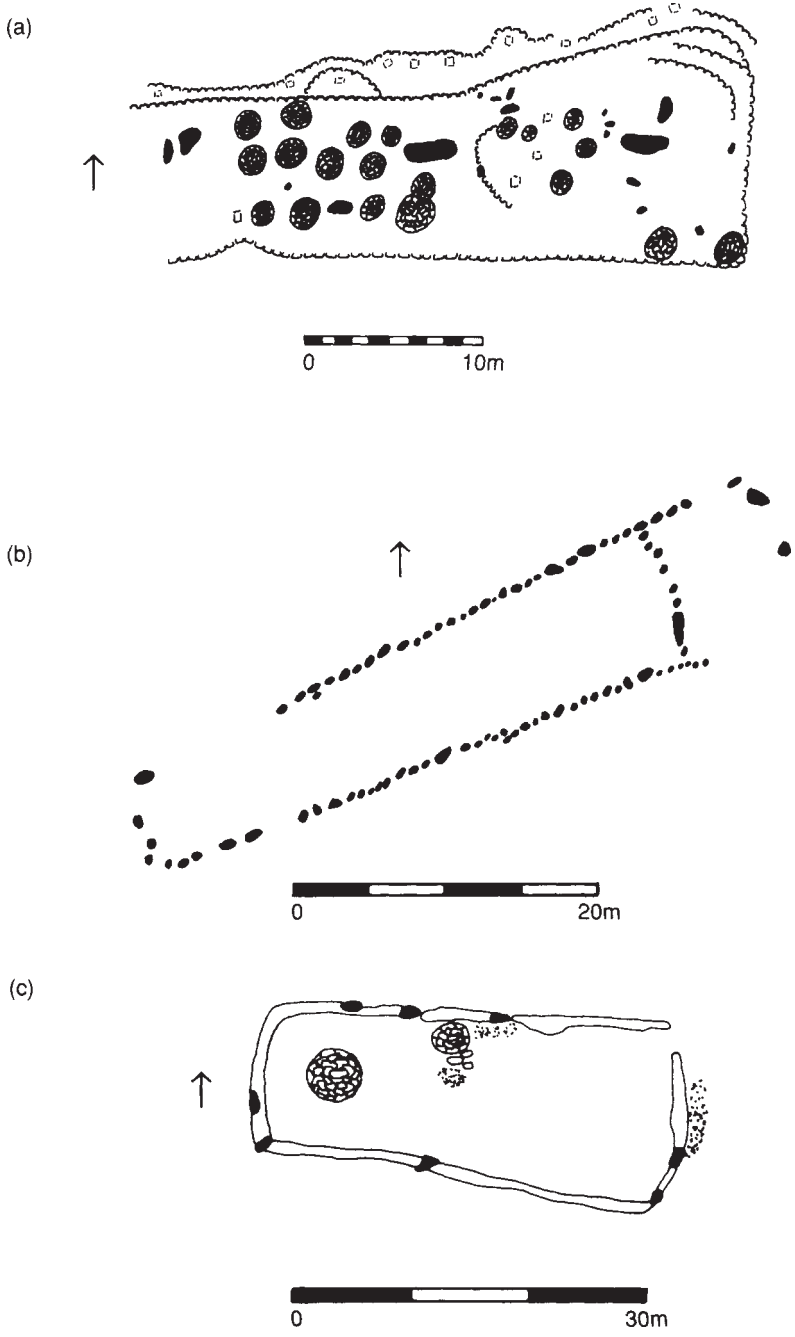


Figure 3.11 (a) Le Manio 1; (b) Le Manio 3; (c) Mané-Ty-Ec

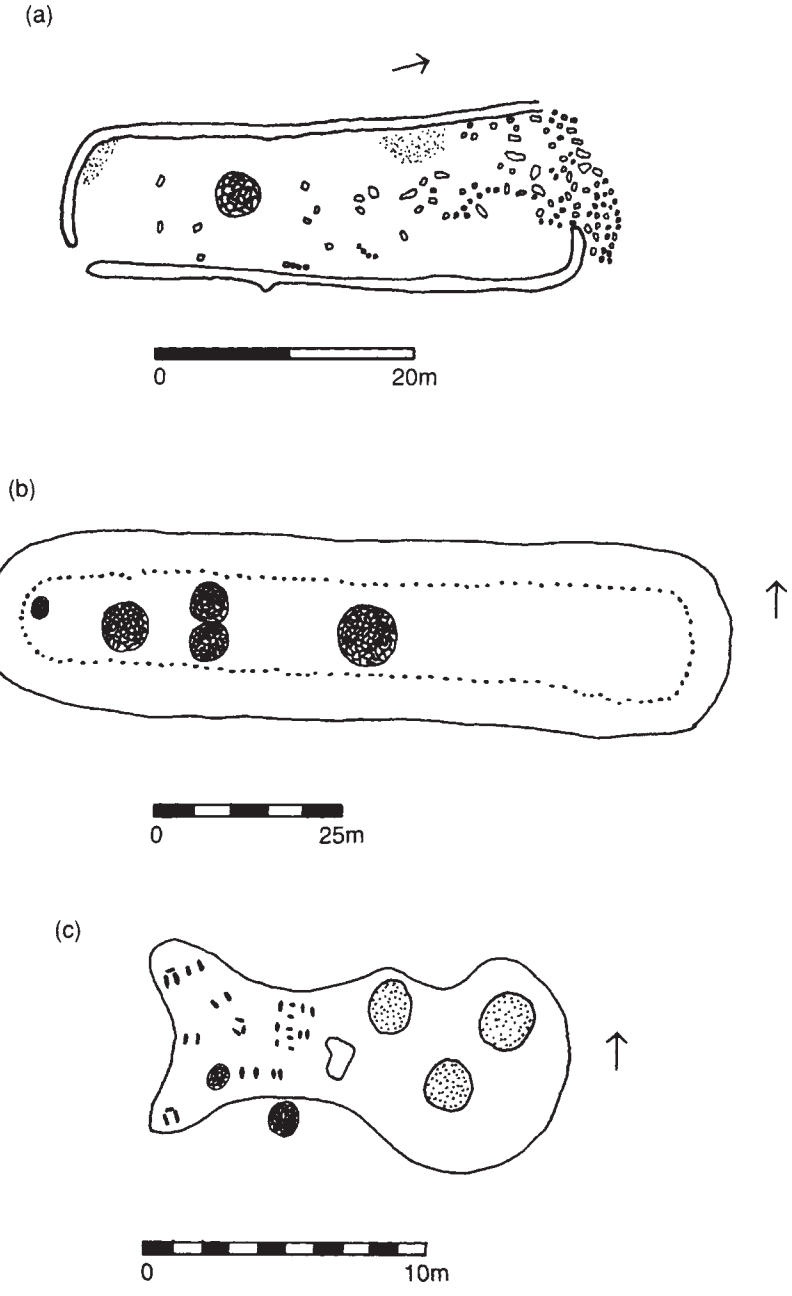


Figure 3.12 (a) Mané-Pochat; (b) Kerlescan; (c) Castellic

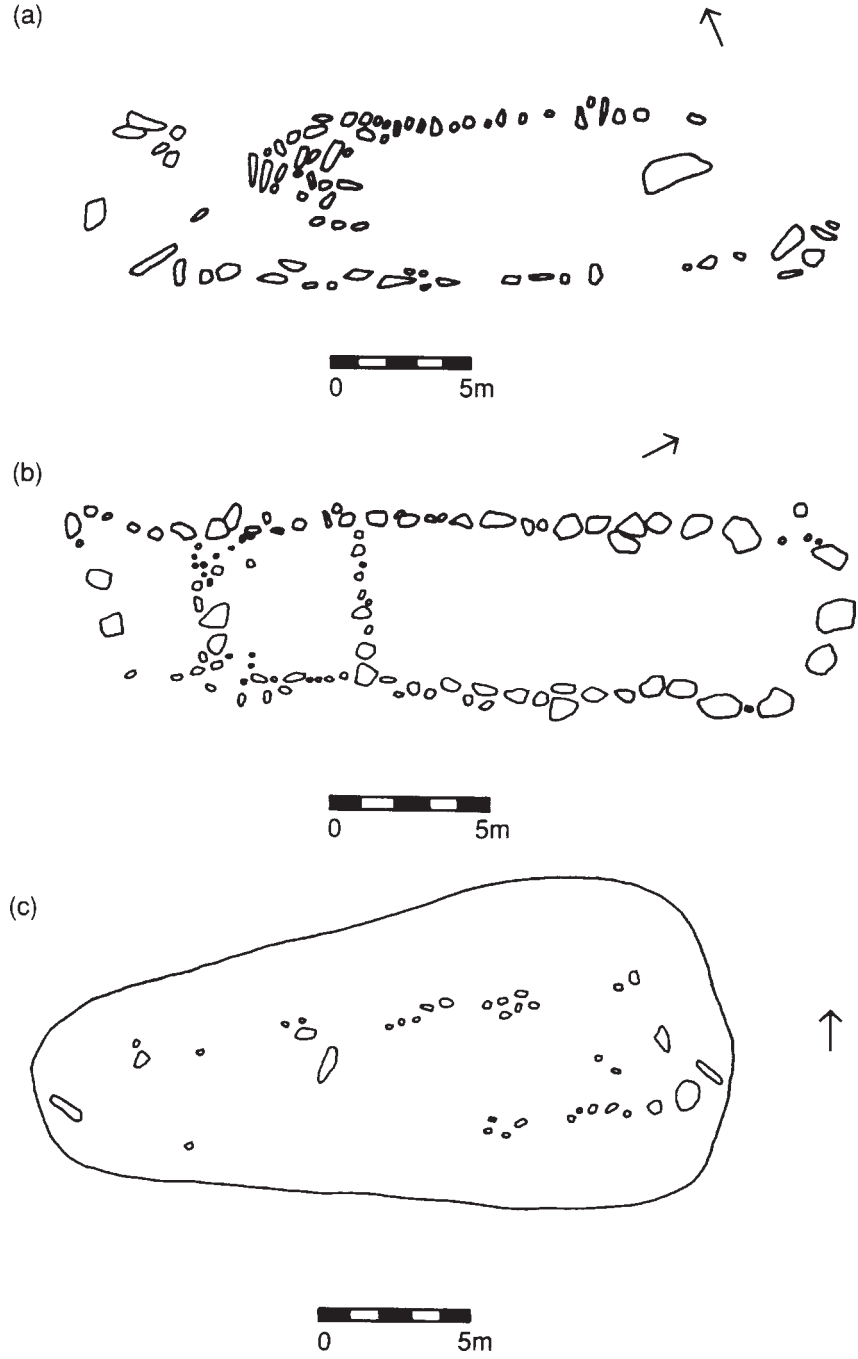


Figure 3.13 (a) La Croix-St-Pierre (after Milon and Giot 1954); (b) Le Jardin-aux-Moines (after Briard 1989); (c) La Croix-Madame

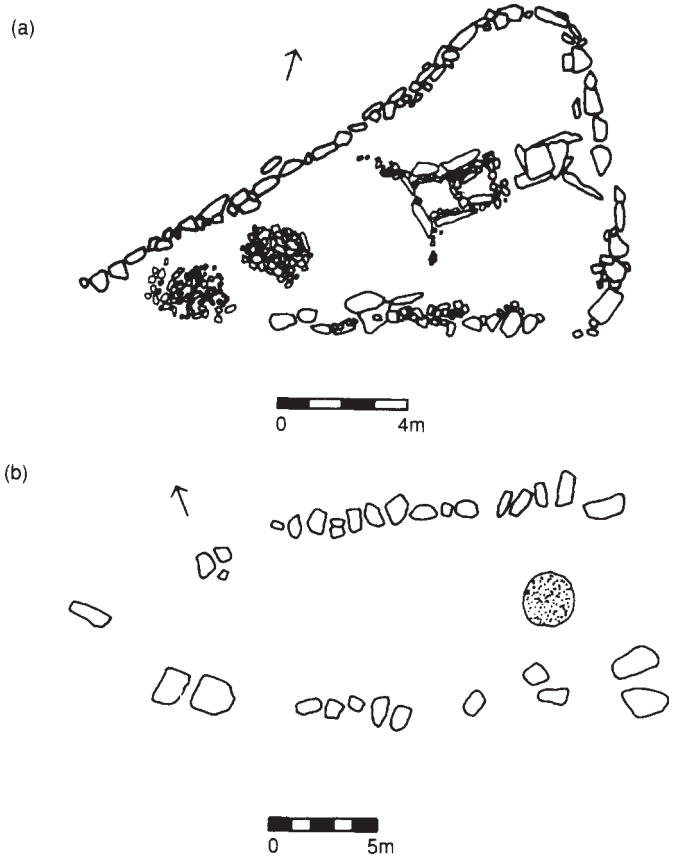


Figure 3.14 (a) Les Fouaillages (after Kinnes 1982); (b) Notre Dame de Lorette (after Giot 1956)

the Arzon group, the Petit Mont long mound appears to be a simple earth mound with neither a stone setting nor internal structures, whilst the Bilgroix monument seems to have enclosed at least three irregular cairns and two small rectangular cists (Le Roux 1979b). The monuments of the Breton interior (figure 3.13) seem to have few internal structures: a single quartz block at La Croix-St-Pierre and, at Le Jardin-aux-Moines, two dividing walls, a hearth and a small stone setting. The monument of La Croix-St-Pierre has a recumbent slab at the foot of each upright of the peristalith (figure 3.13a). The long mound of Le Quillio was found to be extensively damaged, but the stones of the peristalith are much larger than those of the other monuments (figure 3.14b).

Despite these regional variations, there are important similarities. Most

of the monuments have a broadly east-west orientation, and the trapezoidal monuments are generally wider at their Eastern end (figures 3.11–3.14). In terms of chronology, where positive dating evidence has been found, this almost invariably points to a date within the fifth millennium cal. BC: the ceramic assemblages from Le Manio 1, Mané-Ty-Ec, Mané-Pochat, Kerlescan, Le Castellic, La Croix-St-Pierre and Les Fouaillages include typological elements which link them to the Epi-Bandkeramik tradition, and this link is reinforced by the radiocarbon dates (figure 3.18) from Les Fouaillages (see above) and Le Petit Mont (5650±70 BP=4685–4405 cal. BC; Gy-6844).

The internal structures found within the Breton long mounds can be categorised as follows:

A Small cairns (up to 2 metres in diameter), usually covering a simple cist. These often contain flints and small pottery fragments (as at Le Manio 1), but rarely anything more. Charcoal is frequently a component of the fill of these structures (this is recorded at Le Manio 1, Mané-Ty-Ec and Le Castellic) and in some cases the cists themselves appear to have been damaged by fire, suggesting that material was burnt in these structures.
B Drystone or megalithic chambers, generally small (3–6 m^2) and in some cases covered by a capstone. One of the (unroofed) megalithic chambers at Les Fouaillages contained pottery, whilst the chamber at Le Manio 1 (covered by a slab decorated with a carving of a hafted axe) contained charcoal and small quantities of pottery and flint.
C Simple rectangular cists, sometimes containing charcoal, pottery and flints.
D Pits: at Le Manio 1, a pit was found to be filled with stones and black earth, mixed with charcoal.
E Recumbent stones, as at La Croix-St-Pierre. At Le Manio 1, a low wall formed a semi-circular setting around a centrally placed recumbent slab.
F Menhirs, as at Le Manio 1, where a deposition of five polished axes and a quartz pendant was found at the foot of a menhir decorated with carved serpentine motifs. At Les Fouaillages, two menhirs were incorporated in the construction of one of the megalithic chambers.
G Circular platforms of flat stones.
H Hearths.
I Internal divisions, in the form of low walls (figures 3.11b and 3.13b).

Table 3.1 shows the occurrence of these features in the long mounds of the Armorican region.

In comparison with other categories of monument, the long mounds are relatively modest monumental constructions. With the exceptions of Le Quillio and the single Menhir at Le Manio 1, these mounds do not

incorporate massive stones, and the stones that were used for the construction of the peristalith and internal features could in most cases have been moved and erected by a team of twenty people or less. In their initial phase (i.e. prior to the construction of the mounds themselves), these monuments must have been open arenas, enclosing multiple and diverse foci of ritual activity. It would have been possible for relatively large numbers of people to stand around the enclosure witnessing, if not participating in, whatever ceremonies were conducted within.

In terms of the organisation of space within the enclosures, there seems in many cases to be a distinction between the western end and the (normally wider) eastern end. At Le Manio 1 (figure 3.11a) and Les Fouaillages (figure 3.14a), the largest and most complex features are concentrated at the eastern end. At La Croix-St-Pierre (figure 3.13a), the recumbent quartz block, which seems to have been the main ritual focus, is situated at the eastern end, as is the hearth at Le Jardin-aux-Moines (figure 3.13b). At Le Castellic (figure 3.12c), there is a marked distinction between the two ends, with a series of large hearths at the eastern end and a series of small cairns to the west.

One of the problems with identifying evidence for 'ritual' or 'ceremonial' activities in the archaeological record is the fact that many such activities, well attested in ethnographic contexts (e.g. dances, chants, 'prayer', processions, etc.), have no depositional component and thus would leave little archaeological trace. For this reason, funerary ritual (which necessarily involves the disposal of a corpse) is often overemphasised. The absence of human remains in the Armorican long mounds may simply reflect the predominance of acidic soils in this area,

Table 3.1 Structural features in Early Neolithic long mounds

Site	*Structural features*								
	A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*
Mané-Pochat	X							X	
Mané-Ty-Ec	X							X	
Le Manio 1	X	X	X	X	X	X		X	
Le Manio 3									X
Kerlescan	X							X	
Castellic	X		X					X	
Bilgroix	X		X						
Croix-St-Pierre					X				
N.D. de Lorette								X	
Fouaillages	X	X				X	X		

but there is no clear evidence for any funerary function. Whatever rituals were enacted in these monuments seem to have been largely non-depositional in character, since the quantity of artefacts found is in most cases very small. At Le Castellic and Le Manio 1, most of the small cists and cairns contained only charcoal, with small quantities of pottery and flint (though it is recorded that nineteenth-century quarrymen recovered large quantities of pottery from the site of Le Castellic). One of the cists at Le Manio 1 (no. 52) contained two complete pots, and at Les Fouaillages, pottery vessels were found on the stone platform and in one of the megalithic chambers. Stone axes are rarely found in the long mounds: apart from the deposition of fibrolite axes at the foot of the menhir at Le Manio 1, a fibrolite axe was found in one of the cists at Kerlescan, and two axe fragments were found at Bilgroix, though in an uncertain context. A single fragment of a stone ring was found at La Croix-St-Pierre, and a deposition of stone ring fragments was found at the western end of the mound of Les Fouaillages. It is difficult to identify any consistent pattern in these depositions.

The Armorican *tertres* belong to a broader tradition of North European long mounds, which includes monuments in Northern Germany, Czechoslovakia, Poland, Denmark and Southern England (Hodder 1984). These monuments share a common trapezoidal or rectangular form and a predominant east-west orientation, with the widest end (in trapezoidal monuments) facing east in most cases. Unlike the Armorican long mounds, most of the British and North European monuments are explicitly funerary in function, incorporating graves or burial chambers. A related group of monuments has come to light as a result of recent research in the Paris Basin, Burgundy and Normandy. These monuments, as at Passy-sur-Yonne (Thévenot 1985, Duhamel and Presteau 1987) are not mounds but trapezoidal ditched enclosures, with simple pit graves at the eastern end: the burials are associated with artefacts typical of the Epi-Bandkeramik tradition.

Hodder (1984), discussing the North European long mounds in general terms, has identified a series of eight structural similarities between these monuments and Early Neolithic long houses. This suggestion has been reviewed and modified in a more recent work (Hodder 1990). Several of Hodder's general points apply to the Armorican long mounds, notably the trapezoidal form, and the broadly east-west orientation with the wider end facing east. Hodder also stresses the linear division of space (which is found in some of the Breton monuments, as at Le Jardin-aux-Moines and Le Manio 3) and the position and elaboration of the entrance (most of the Armorican monuments have no clear entrance). In his 1984 paper, Hodder argues that the long mounds are symbolic transformations of houses, and that the structure of both houses and tombs relates to a sexual division of

space, labour and status. In his more recent book, however, he abandons the hypothesis that the mounds are 'transformations' of houses, and suggests instead a continuity of general cultural principles, in relation to which both houses and tombs were constructed.

THE DECORATED MENHIRS

The decorated menhirs, which form the second element of this early ritual landscape, are even more restricted in their distribution than the long mounds (figure 3.10b), occurring only in the South Breton *département* of Morbihan. This class of monuments is known primarily from fragments re-used in the construction of later monuments, and was first identified in papers by L'Helgouach (1983) and Le Roux (1984). L'Helgouach's original argument was based on the size and shape of the decorated capstones on the passage graves of Mané-Rutual (figure 3.16) and La Table des Marchand, and his 'broken idol' hypothesis was confirmed by Le Roux's (1984) discovery that capstones on the monuments of Gavrinis and La Table des Marchand were in fact fragments of a single decorated stone.

Since the publication of the initial papers by L'Helgouach and Le Roux, several more 'broken idols' have been recognised, and a total of eight definite examples can now be identified.

1 The *Grand Menhir Brisé* at Locmariaquer (pl. 3.1). At 20.5 metres in length, this is the largest menhir in Europe. It has fallen and is now in four pieces.
2–4 Three capstones of the Mané-Rutual passage grave at Locmariaquer (figure 3.15).
5 The menhir constituted by the two fragments now incorporated as capstones at La Table des Marchand and Gavrinis. The capstone at Er Grah is probably a third fragment of the same menhir (figure 3.16).
6 The stone which forms the end of the chamber in the passage grave of La Table des Marchand (L'Helgouach and Cassen in press).
7 The stone which forms the floor of the chamber in the passage grave of the phase 2 cairn at Le Petit Mont (Lecornec in press).
8 The broken stele incorporated in the blockage of the chamber in the *Grand Tumulus* monument of Mané-er-Hroëk at Locmariaquer (L'Helgouach 1983).

There are, additionally, a number of possible examples, including several of the uprights at Le Petit Mont (Lecornec pers. comm.) and the floor slab and capstone of the Mané-Lud passage grave (L'Helgouach pers. comm.).

Most of these menhirs seem to have been deliberately pulled down in Neolithic times, and the fact that the fragments have been incorporated in

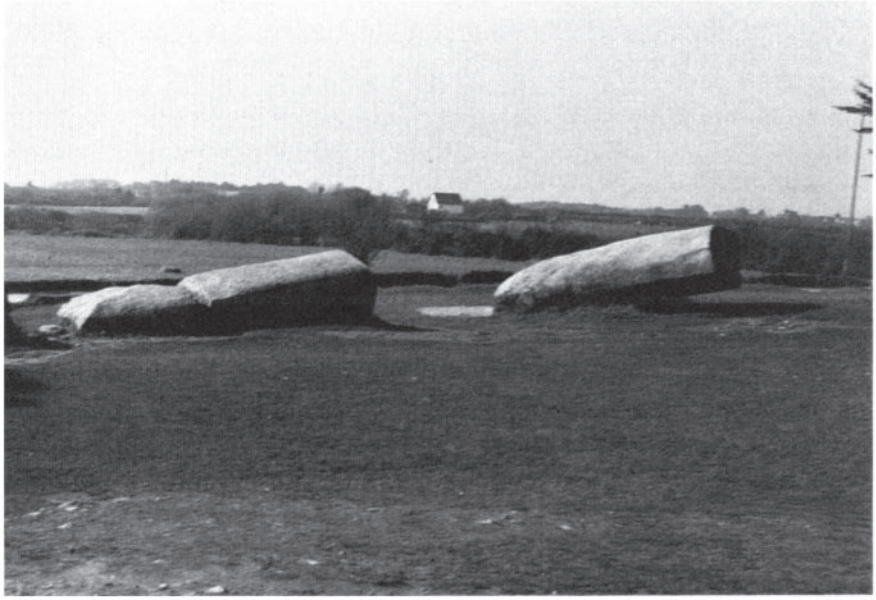


Plate 3.1 Le Grand Menhir Brisé at Locmariaquer (Morbihan)

the construction of passage graves (La Table des Marchand, Gavrinis, Mané-Rutual, Le Petit Mont) and *Grand Tumulus* monuments (Mané-er-Hroëk, and probably Er Grah) testifies to the early date of these menhirs. Of the eight menhirs listed above, only one (no. 6) is still standing: this has been incorporated *in situ* as an upright in the Table des Marchand passage grave. It has been suggested (Hornsey 1987) that the *Grand Menhir Brisé* broke under its own weight whilst it was being erected. Assuming that this was the case, however, the present arrangement of the four fragments suggests (Hornsey *op. cit.*) that the lower portion was then re-erected, falling at a later date and in a different direction (probably at the same time as the other menhirs were pulled down). This is the only stone which has not been incorporated in the construction of a later monument.

Most of the monuments listed above are decorated with carvings, drawn from a restricted range of motifs. This repertoire (figure 3.17) includes representations of hafted axes (figure 3.17c), as well as motifs of less certain significance, such as the so-called 'axe-ploughs' (figure 3.17b) and the 'écusson' (figure 3.17g), usually interpreted as a stylised anthropomorph (Shee-Twohig 1981). These motifs make up a definite 'style', which can be distinguished from later traditions of megalithic art: the range of motifs on the decorated menhirs is more restricted, and the motifs themselves are in many cases more naturalistic than, for example, the carved motifs found in passage graves (see chapter 4). Many of the

carved motifs on the decorated menhirs are also very large: the 'bovids' on the Gavrinis fragment (figure 3.17d-e) are both around 2 metres in length, whilst the 'axe-plough' on the same fragment is almost 3 metres long. Bradley (1989) has pointed out that the motifs represented on the menhirs are 'peculiarly appropriate to the new [agricultural] mode of production', and the representations of cattle and hafted axes in particular certainly suggest a concern with contemporary subsistence developments. Table 3.2 shows the occurrence of carved motifs on the menhirs already listed. To this list we must add the standing menhir of Kermarquer at Moustoirac, Morbihan (L'Helgouach and Lecornec 1969), which is decorated with 'crook' motifs similar to those on menhirs 5 and 6 in the above list and the

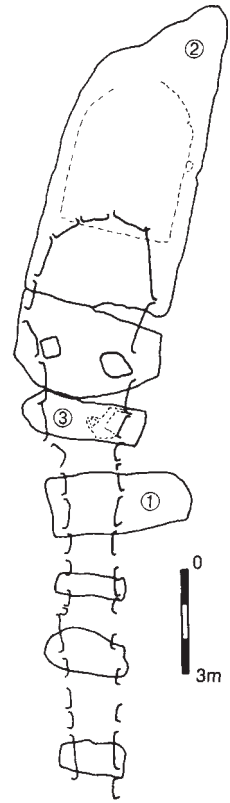


Figure 3.15 Menhirs re-used as capstones on the passage grave of Mané-Rutual (after

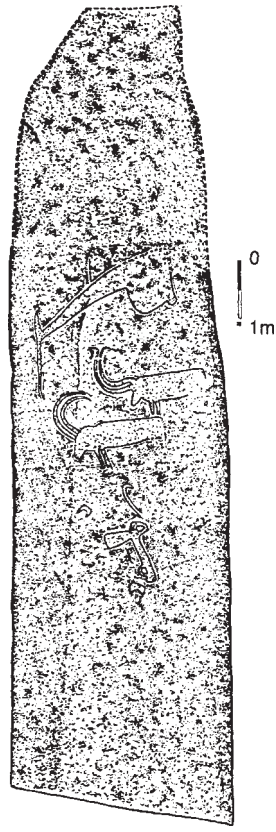


Figure 3.16 Decorated menhir reconstructed from fragments at La Table des Marchand, Er-Vinglé and Gavrinis (after Le Roux 1984)

menhir which stands at the eastern end of the Le Manio 1 long mound, which is decorated with wavy-line or 'serpentine' motifs near its base.

There are many standing menhirs in Brittany, and it is possible that some of these belong to the same complex, but in the absence of the characteristic carved motifs or convincing dating evidence, it is impossible to suggest this with any conviction. Most of the standing menhirs are not decorated, and the motifs on the menhir of St-Sampson-sur-Rance (Bender 1986) belong to a later tradition of megalithic art (see chapter 6). Kinnes and Hibbs (1989) have suggested that one of the capstones of the Déhus passage grave in Guernsey (decorated with an anthropomorphic motif) may be a re-used menhir, but this claim is not entirely convincing, and the anthropomorph certainly has no Breton parallels.

Of the ten menhirs listed above, six are represented by fragments incorporated in later monuments on the commune of Locmariaquer, the peninsula which forms the western end of the Golfe du Morbihan. Recent excavations at Locmariaquer itself suggest that most, if not all, of these stones may originally have formed part of a single complex of decorated menhirs (L'Helgouach and Cassen in press). Excavation of the passage grave of La Table des Marchand revealed a land surface sealed beneath

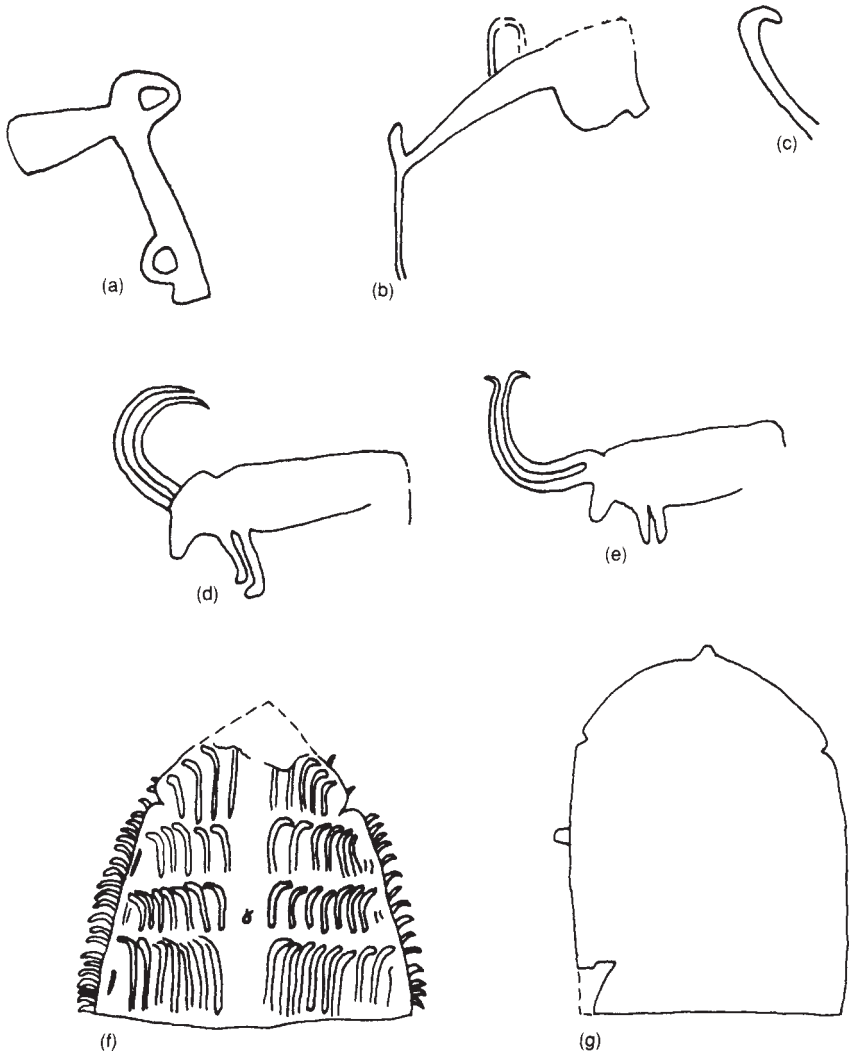


Figure 3.17 Motifs from decorated menhirs (after Patton 1991d)

Table 3.2 Carved motifs on Early Neolithic decorated menhirs

Menhir	*Artistic motifs*					
	A	*B*	*C*	*D*	*E*	*F*
1		X				
2			X			
3		X				
4						
5	X	X		X	X	
6			X		X	
7			X			
8	X		X			
Kermarquer					X	
Le Manio 1						X

Key to artistic motifs: A Hafted axe; B 'Axe-Plough'; C 'Ecusson'; D Horned animal; E 'Crook'; F Wavy line.

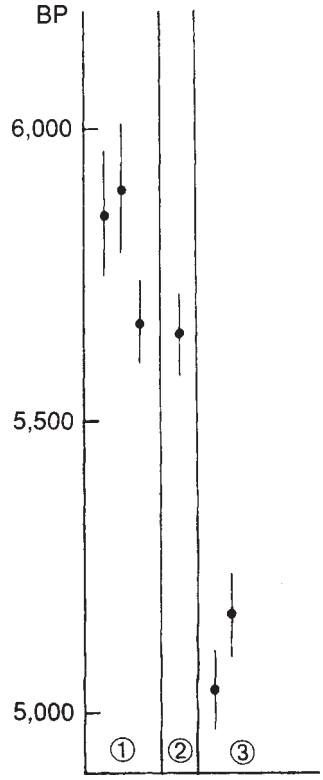


Figure 3.18 Radiocarbon dates from Les Fouaillages (1), Petit Mont (2) and Locmariaquer (3)

Table 3.3 Heights and estimated weights of Early Neolithic decorated menhirs

Menhir	*Height (metres)*	*Est. weight (tonnes)*
1	20.5	348
2	11.9	60
3	3.6	7.6
4	4.2	8.9
5	14	110
6	3.4	17
8	3.5	4.5
Kermarquer	6.7	48
Le Manio 1	4.5	14

the cairn of this monument, and the decorated stone which now forms the end of the chamber of this passage grave has been identified as a standing menhir, associated with this pre-cairn horizon: the passage grave seems, therefore, to have been built around the earlier standing stone. Finds from the pre-cairn horizon include pottery of the Castellic group, and one pottery vessel is decorated with 'crook' motifs identical to those carved on the menhir (figure 3.17f). Also associated with this horizon were hearths, postholes and, most significantly, the construction pits for a series of menhirs in line with the *Grand Menhir Brisé,* which lies only a few metres away from the passage grave of La Table des Marchand, and from the *Grand Tumulus* monument of Er Grah, both of which incorporate re-used menhir fragments. It seems clear, therefore, that the passage grave of La Table des Marchand was built on the site of an earlier ritual complex, consisting of several decorated menhirs, and including the largest menhir in Europe. Charcoal from the hearths associated with this complex has given two radiocarbon dates (L'Helgouach and Cassen in press): 5040±70 BP= 3960–3730 cal. BC; Gif-7555/5170±70 BP=4020–3820 cal. BC; Gif-7554. These dates place the complex slightly later than the earliest long mounds (figure 3.18). The relatively early date of the Locmariaquer complex may lead us to revise the chronology of megalithic monuments in the Armorican region more generally, particularly as regards the complexes of standing stones, alignments and 'cromlechs' (stone circles), and this is a question to which we shall return in chapter 5.

Table 3.3 shows the heights and estimated weights of the menhirs listed above. Three of these menhirs, the *Grand Menhir,* the Gavrinis/ Table des Marchand/Er Grah menhir and the largest of the Mané-Rutual capstones, are particularly large. The transport and erection of such massive stones must represent a considerable communal effort. The *Grand Menhir* weighs

an estimated 348 tonnes (Hornsey 1987), and on the basis of the calculations summarised on figure 1.4, it would require a minimum workforce of around 2100 people to move such a stone along level ground, using rollers and a wooden sledge. The stone itself is of granite which is not local to the Locmariaquer area, and which possibly comes from the area of Kerdaniel, 4 km to the north of Locmariaquer. Hornsey (*op. cit.*) estimates that a team of 3800 people would have been required, pulling on ropes, actually to erect the stone.

SOCIAL DIMENSIONS OF A RITUAL LANDSCAPE

Although in most of the published literature (cf. Giot *et al.* 1979), the passage graves are represented as the earliest megaliths of the Armorican region, recent research has demonstrated the existence of a pre-passage grave ritual landscape in Southern and Eastern Brittany, characterised by long mounds and large decorated menhirs. These two groups of monuments overlap with one another both geographically and chronologically, but the menhirs are more restricted in distribution than the long mounds (figure 3.10) and possibly appeared at a slightly later date (figure 3.18). These monuments relate to a period of significant socio-economic change, marked by the development of a new (agricultural) mode of production, and it is appropriate at this stage to explore the relationships between the appearance of monumental ritual, the development of an agricultural economy and changing social relations.

One factor that will certainly be relevant to this discussion is the nature of relationships between agricultural and hunter-gatherer groups. If we accept the empirical evidence (Ammerman and Cavalli-Sforza 1971) for a 'wave of advance' (whether this is interpreted as evidence for a population movement or simply as a diffusion of techniques, crops and livestock through interaction between groups), then we would expect to see evidence for a 'moving frontier' (cf. Alexander 1980) between 'Neolithic' and 'Mesolithic' communities. The nature of the interaction between these communities will depend on the social structure of the groups concerned.

As we have already seen, the influence of the 'intrusive' (Epi-Bandkeramik) element in the earliest Neolithic of Southern and Eastern Brittany and the Channel Islands now appears more significant than was previously thought. This Epi-Bandkeramik influence is reflected both in the pottery styles of this area and in the structure of the long mounds discussed in this chapter, and forms the basis of a regional distinction between this 'core' area and a 'peripheral' zone (Northern and Western Brittany), where the earliest Neolithic is quite different in character, with few recognisably 'intrusive' elements. This regional dichotomy could be

interpreted in two ways: it could reflect the presence of an intrusive population in the 'core' zone or, alternatively, a differential process of acculturation in two indigenous populations.

The evidence from Téviec (Péquart *et al.* 1937) and Hoëdic (Péquart and Péquart 1954) suggests that the Mesolithic of Southern Brittany may have been different in character to that of other regions, with larger, more permanent settlements and a greater degree of social differentiation. These communities may have been more 'receptive' to acculturation, since competitive social relations within the indigenous population may have been articulated through interaction with and emulation of neighbouring Neolithic groups. Young men from Neolithic groups may have favoured marriage with indigenous women since, as Dennell (1984) suggests: This would…have allowed sub-adult and young males of farming communities a more rapid route to economic autonomy than had they obtained mates solely through endogamous means.'

Whatever processes were involved in the spread of the 'Neolithic package', the adoption of an agricultural mode of production is likely to have been associated with profound social change. Meillassoux (1967) contrasts hunting and gathering societies, in which land is a 'subject' of labour, with agricultural societies in which land is an 'instrument' of labour, implying a time lapse between labour investment and return. The labour involved in clearance and cultivation creates inter-generational bonds of dependence, favouring the establishment of a hierarchy between 'those who come before' (the ancestors and elders) and 'those who come after'. Social structure, however, is not simply determined by the mode of subsistence. Bender (1985) argues that hunter-gatherers, like farmers, may have built-in delays, and goes on to demonstrate the existence of marked social differentiation in hunter-gatherer communities of the American Mid-Continent. Changes in the mode of subsistence may be as much an outcome as a cause of changes in social structure (cf. Bender 1978). Whilst the precise relationships between subsistence changes and social transformations at the beginning of the Armorican Neolithic remain unclear, what is certain is that the fifth millennium cal. BC was marked by profound changes both in terms of subsistence and in terms of social organisation, and the development of monumental ritual must be understood in the context of these developments.

Meillassoux's (1964, 1967) conceptualisation of social organisation in tribal groups may be particularly helpful in understanding the social structure of Armorican Neolithic communities. According to Meillassoux, inter-generational asymmetries are often mediated through elders' control of ritual practice (often in relation to initiation ceremonies which a boy must undergo before proceeding to manhood, economic independence and marriage) and of socially valued material items (often required to pay

for initiation ceremonies and bridewealth presentations). This enables the elders to control the access of younger men to potential wives ('control of the means of reproduction'), and through this control to make demands on the labour of younger men. The adoption of an agricultural mode of production is likely to have been associated with an intensification of inter-generational asymmetries and, following Meillassoux's argument, we might expect this to be reflected in the archaeological record by evidence for increasingly elaborate ritual practice and for the circulation of 'socially valued material items'. This is, in fact, precisely the pattern that we see at the beginning of the Armorican Neolithic, with the development of monumental ritual and of stone axe exchange networks (see chapter 2) in the mid-fifth millennium cal. BC.

In Southern and Eastern Brittany, and also in the Channel Islands, long mounds appear to represent the earliest manifestations of monumental ritual (figure 3.18). At Le Manio 1, a decorated menhir was placed as an integral part of a long mound, and the deposition of fibrolite axes at the foot of this menhir (Le Rouzic *et al.* 1923) suggests a link between axe exchange and megalithic ritual (see chapter 2) from the earliest stage. The long mounds must initially have been open ceremonial arenas, often with multiple and diverse foci of ritual activity (cf. figure 3.11a). Since the internal features would, in most cases, have been rendered inaccessible by the construction of the mound itself (the sole exception being the covered megalithic chamber at Les Fouaillages, figure 3.14a), this must relate to the abandonment of the monuments rather than to their primary use. Given the clustering of monuments, for example at Carnac (Le Manio 1–3, Le Castellic, Kerlescan, Mané-Ty-Ec, Mané-Pochat), it is possible that we are looking at successive, relatively short-lived monuments. In comparison with other classes of monument, the Armorican long mounds are relatively modest monumental constructions, which would not have required the co-operation of particularly large numbers of people.

The decorated menhirs, as we have seen, represent a much larger monumental effort: the transport and erection of the *Grand Menhir* would have required a minimum working team of around 3800 people (Hornsey 1987), which must have involved the co-operation of many communities. The decorated menhirs also have a more restricted distribution than the long mounds (figure 3.10), and the radiocarbon dates from Locmariaquer suggest that they appeared towards the end of the fifth millennium cal. BC. The carved motifs on the menhirs may give some clues as to the significance of the monuments themselves: carvings of axes and domestic animals suggest a concern with the new agricultural mode of production and, following Meillassoux's argument, it is not difficult to see how these could become key symbols in an ideology concerned to stress inter-generational bonds and obligations in relation to clearance, cultivation

and domestication. The axe may have a double significance, linking its role as a productive tool and as a socially important exchange object (see chapter 2). The decorated menhirs are truly 'statements in stone'. They are pre-eminently visible: massive stones with large, often explicitly naturalistic carvings, declaring the ideological basis of social relations.

These decorated menhirs, however, must be seen as an extremely localised and exceptional phenomenon. Most of the known examples probably relate to a single complex of standing stones at Locmariaquer, which certainly included the *Grand Menhir*. The Kermarquer and Le Manio menhirs are the only examples which clearly do not form part of this complex, and they are less than 30 km away from Locmariaquer. The carved menhirs of Locmariaquer must reflect the emergence of a larger social grouping in Southern Brittany towards the end of the fifth millennium cal. BC. Such a development could perhaps be understood in relation to Friedman and Rowlands' (1977) model of social dynamics. This model involves competition between communities, mediated through the sponsoring of feasts, in which an agricultural surplus is effectively converted into status. Although Friedman and Rowlands, drawing on ethnographic examples, stress feasting as the medium of such competition, monument construction may also have played a significant role. Friedman and Rowlands argue that in kinship-based societies, the ability to produce a large surplus (and thus to sponsor a lavish feast, or the construction of a large monument) is often taken as an indication of supernatural patronage, which in turn is taken to suggest a close genealogical proximity to a founding ancestor or spirit. A group which consistently produces a large surplus thus achieves status as an 'older' or 'more direct' lineage, which may involve control of initiation rites and mediation between the community and the supernatural ('control of the imaginary conditions of production'). If marriage arrangements involve bridewealth, such a lineage may demand higher bride-prices, enabling them to accumulate bridewealth valuables, and thus to obtain more women in the context of polygynous marriages. This increases the size of the labour pool within the dominant lineage, enabling them to produce a larger surplus, and thus escalating the process of increasing social differentiation between groups.

This process of escalating competition and social differentiation between groups could account for the development of a larger social grouping in Southern Brittany at the end of the fifth millennium cal. BC, since it would necessarily involve the development of a network of alliances between groups, linked by reciprocal obligations. The Locmariaquer complex itself may reflect the emergence of a dominant group at the western end of the Golfe du Morbihan. Such a group would have to be able to make demands on the labour of other groups in order

to assemble a work-force large enough to move and erect stones of the size of the *Grand Menhir:* in ethnographic situations, such labour may be demanded by a dominant group, often in return for lavish feasts.

Throughout much of the Neolithic period, the area between Locmariaquer and Carnac, at the western end of the Golfe du Morbihan, seems to have had a particular importance, manifested by an unusually dense concentration of very large monuments (see especially chapters 5 and 6). The evidence of the decorated menhirs may offer some clues as to the social processes involved in the emergence of this area as an important ritual centre, but why did this happen in Southern Brittany and not, to the same extent, anywhere else in the Armorican region? There may be a number of factors involved. Firstly, the diverse range of natural resources provided by this area would facilitate the increasing surplus production required to support this cycle of intensifying social competition. The Golfe du Morbihan is now an inlet of the sea (figure 1.1) with numerous islands, but in Neolithic times it was a low-lying basin, dominated by freshwater marsh. The marshland itself would have provided a wide range of freshwater fish and wildfowl, whilst the higher land on the edge of the basin and on what are now the islands could have been used for

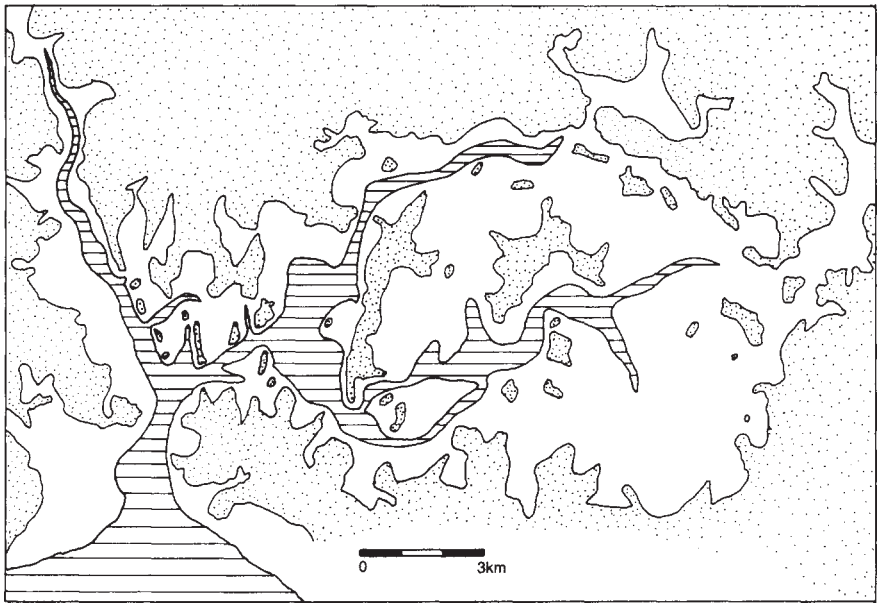


Figure 3.19 Le Golfe du Morbihan in Neolithic times: stippled area represents dry land, shaded area represents open water, unshaded area represents marshland

agriculture and stock-raising. The sea, of course, would have provided a wide range of fish, shellfish and crustaceans. The Locmariaquer peninsula is conveniently located at the junction of these major resource zones (figure 3.19). Secondly, the evidence from Téviec and Hoëdic suggests that Southern Brittany supported relatively large, sedentary Mesolithic populations, which were already involved in competitive social relations before the introduction of agriculture and stock-raising. The adoption of the new mode of production is likely to have given rise to an escalation of these competitive relations, possibly initiating the cycle of intensification which produced the Locmariaquer menhirs and which continued, as we shall see, into the fourth millennium cal. BC.

4

MONUMENTS IN A COASTAL LANDSCAPE

Passage graves of the Armorican Littoral

Of all the megaliths in the Armorican region, the passage graves are probably the best known. In local folklore, these dark stone chambers were seen as passages to another world, the haunt of supernatural beings (known as *Corrigans* in Brittany and *Faitiaux* in the Channel Islands). Essentially, a passage grave consists of a chamber (which may be circular, oval or polygonal in shape), approached by a narrow passage and covered by a cairn. In many cases, however, the cairn has been removed by erosion or quarrying, leaving only the internal 'skeleton' of the site (pl. 4.1). The most common construction method involves horizontal capstones placed over a passage and chamber formed of upright stones, and the table-like appearance of such constructions gave rise to suggestions (cf. Falle 1734) that the monuments were altars, invariably attributed to the Druids, who were thought to have used them for human sacrifice (see chapter 1). Frederick Corbin Lukis, a Guernseyman, was one of the first archaeologists outside Scandinavia to apply the 'three-age system' developed by C.J.Thomsen: Lukis (1849) recognised that passage graves belonged to the Stone Age, and therefore had nothing to do with the Iron Age Druids.

Lukis (*op. cit.*) was also the first to identify the monuments as tombs rather than altars, but it is now clear that burial was only one of their functions. It seems most likely that passage graves served as ritual centres for communities of early farmers, in much the same way as Medieval communities were served by parish churches. In some areas, it has been possible (cf. Patton 1991b) to establish a hierarchical ranking of passage graves, based on comparisons of size: if the smaller monuments can be compared to parish churches, we can perhaps think of the larger passage graves as megalithic 'cathedrals', serving a larger community at a higher level of social organisation.

Most of the Armorican passage graves seem to have been built between 4250 and 3250 cal. BC, though some monuments are clearly earlier. The earliest passage graves in North-western Brittany (Giot 1987) appear to be

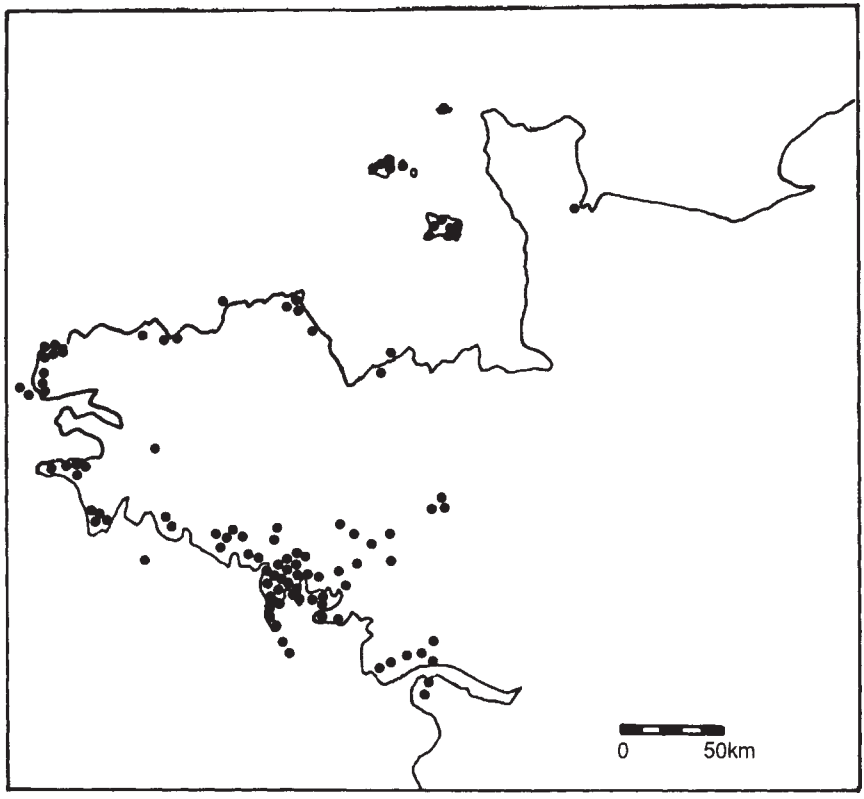


Figure 4.1 Distribution of Armorican passage graves

broadly contemporary with the long mounds and decorated menhirs discussed in the previous chapter (i.e. 4800–4250 cal. BC). In Southern Brittany, the appearance of passage graves seems to have been a somewhat later development, though probably before the end of the fifth millennium cal. BC. Many of the earlier decorated menhirs of this area were deliberately broken, and the fragments incorporated in the construction of the passage graves. At La Table des Marchand (Locmariaquer) and Petit Mont (Arzon), passage graves were built on top of earlier ritual complexes, and many of the carved motifs found on the decorated menhirs are also found in the passage graves, suggesting a degree of continuity in ritual practice. The appearance of passage graves, however, also represents an important transformation. The symbols which had previously been carved on large menhirs in open ritual complexes were now taken into dark chambers, separated from the outside world by narrow passages and covered by massive cairns. The motifs themselves also changed, becoming increasingly stylised and less explicitly representational (Shee-Twohig 1981, Bradley 1989).

The distribution of passage graves in the Armorican region is essentially coastal (figure 4.1), and this seems to reflect the pattern of Neolithic settlement in Brittany prior to *c.* 3250 cal. BC. The ecological diversity of coastal areas seems to have encouraged the development of relatively large, permanent communities from Mesolithic times onward, and this same diversity is likely to have been a factor in generating the food surpluses necessary for the construction of large monuments, and for the elaborate rituals which are likely to have surrounded this.

Finds from Armorican passage graves include human remains (never representing more than a few individuals), pottery and polished stone tools. The range of objects shows that some passage graves remained in use over several centuries. Although the construction of passage graves seems to have ceased at around 3250 cal. BC, many of the monuments remained open and continued in use for several centuries after this (see chapter 6).

THE APPEARANCE OF PASSAGE GRAVES

Figure 4.2 shows the radiocarbon dates from Armorican passage graves (dates relating to demonstrably intrusive activity have been omitted). These dates cover a period of-over 2000 years, from 4800 to 2500 cal. BC, corresponding to the period during which passage graves were in use. The actual construction of the monuments almost certainly took place within a more restricted time period: there is no evidence for the construction of passage graves after 3250 cal. BC, and where later material has been found in these monuments, the context is in most cases clearly secondary (Giot *et al.* 1979). The radiocarbon chronology is corroborated by the archaeological material found within the monuments. Most excavated passage graves in the Armorican region have produced Middle Neolithic pottery (figures 4.3–4.4), dating to the period 4250–3250 cal. BC (L'Helgouach 1965, Giot *et al.* 1979), and some have also produced Late Neolithic (*c.* 3250–2850 cal. BC) and Chalcolithic (*c.* 2850–2250 cal. BC) material.

The earliest dates from Armorican passage graves overlap with the dates from the monuments discussed in the previous chapter:

Barnenez F:	5550 ± 140 BP	=	4570–4240 cal. BC (Gif-1556)
Barnenez F:	5750 ± 150 BP	=	4790–4460 cal. BC (Gif-1309)
Ile Guennoc IIIc:	5800 ± 300 BP	=	5010–4360 cal. BC (Gif-165)
Ile Carn:	5390 ± 150 BP	=	4440–4010 cal. BC (Gif-1362)
Ty-Floch:	5580 ± 120 BP	=	4580–4340 cal. BC (Gif-5234)
Kercado:	5840 ± 300 BP	=	5100–4350 cal. BC (Sa-95).

These dates place the monuments concerned at the very beginning of the Armorican Neolithic sequence. In the previous chapter, a contrast was

noted between the Early Neolithic sequence in Northern and Western Brittany, and that in Southern and Eastern parts of the Armorican region (including the Channel Islands), where the influence of the Epi-Bandkeramik tradition is more marked. In Northern and Western Brittany, the passage graves appear to be the earliest megaliths, and there is no evidence for any Neolithic horizon pre-dating the passage graves themselves. The radiocarbon dates from monuments such as Barnenez, Ile Guennoc and Ile Carn, in North-western Brittany, suggest that these monuments are among the earliest megaliths in Europe.

Although passage graves belong to a megalithic tradition which extends right along the Atlantic façade of Europe from Iberia to the British Isles and Scandinavia (Daniel 1960), it would be difficult to see these monuments as anything other than an indigenous development. The assemblages from the early passage graves in North-western Brittany are dominated by Carn-style pottery (figure 3.6) which, like the monuments

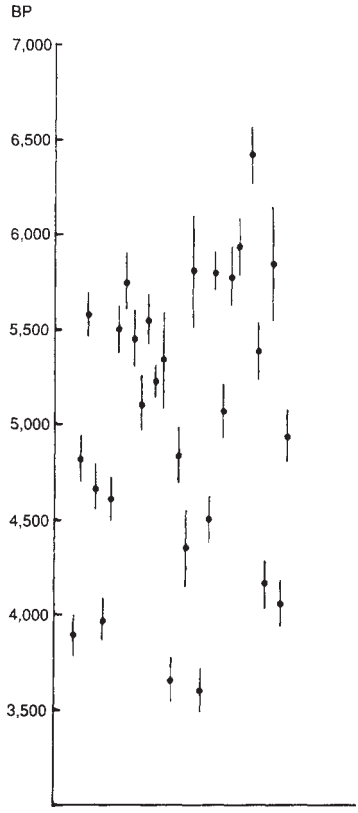


Figure 4.2 Radiocarbon dates from Armorican passage graves

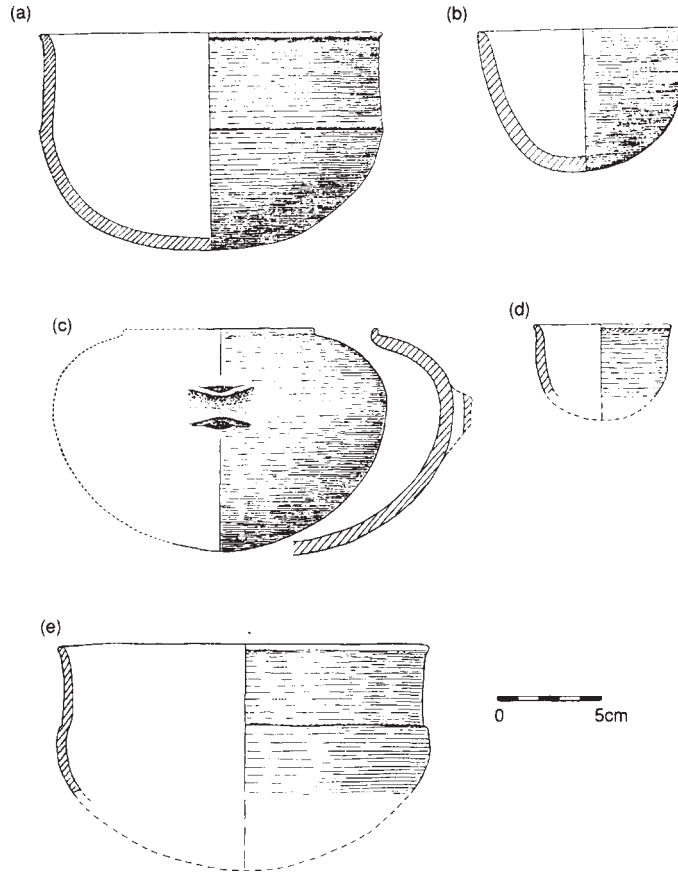


Figure 4.3 Middle Neolithic pottery from Armorican passage graves (after L'Helgouach 1965)

themselves, must be seen as an essentially local development (Giot *et al.* 1979). There is nothing in either the monuments or the material culture of this group to suggest an intrusive (Epi-Bandkeramik) element, and all the evidence points rather to the adoption of a Neolithic lifestyle by local coastal communities.

The densest concentration of passage graves is in the South Breton *département* of Morbihan (figure 4.1). It now seems likely, however, that the earliest passage graves are in the North-west of the region. Of the sites with early radiocarbon dates listed above, only one (Kercado) is in Southern Brittany, and the single radiocarbon date from this site is not entirely reliable (it has a high standard deviation, and derives from material collected during the early excavations, with uncertain

stratigraphic context). The most recent evidence from excavations in Southern Brittany (see chapter 3) suggests the existence of a Neolithic horizon which pre-dates the passage graves. The clearest evidence for this comes from the excavations at Locmariaquer (L'Helgouach and Cassen in press), where fragments of earlier decorated menhirs were found incorporated in the construction of passage graves, and where a horizon stratified beneath the passage grave of La Table des Marchand produced Neolithic pottery which can be related to the Epi-Bandkeramik tradition. The pottery associated with the passage graves themselves (cf. figures 4.3–4.4) is quite different from the pottery of Epi-Bandkeramik affinities discussed in chapter 3, and all the evidence suggests that the passage graves are later in date. Since the Early Neolithic horizon in

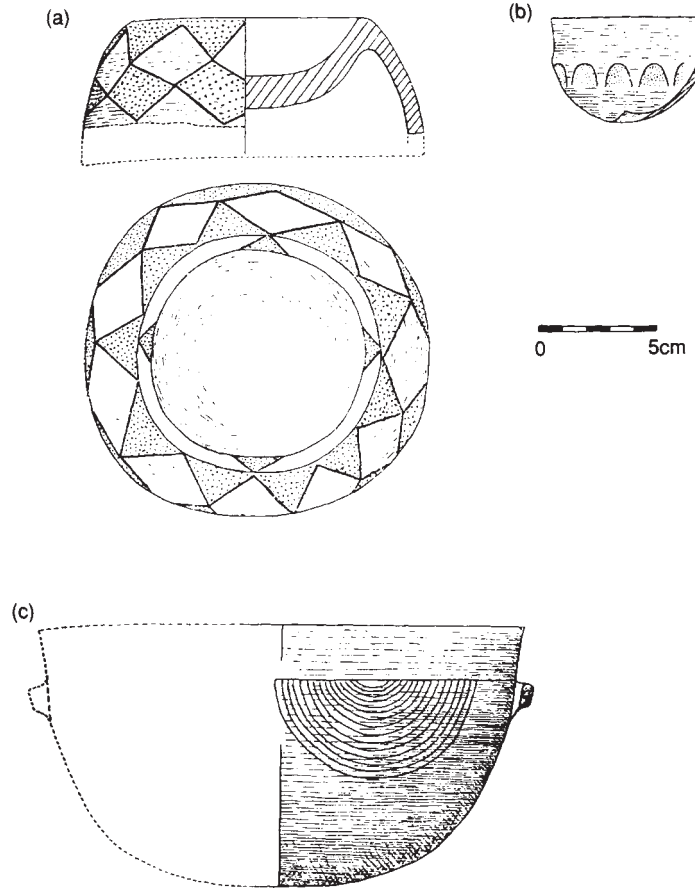


Figure 4.4 Middle Neolithic pottery from Armorican passage graves (after L'Helgouach 1965)

Southern Brittany, with Castellic pottery, long mounds and decorated menhirs, can be dated to the period 4800–4000 cal. BC (see chapter 3), it seems likely that the earliest passage graves in this area date to the final quarter of the fifth millennium or the first quarter of the fourth millennium cal. BC.

The pattern in the Channel Islands is essentially similar to that in Southern Brittany. The evidence from sites such as Le Pinacle, Les Fouaillages and Le Mont Orgueil (see chapter 3) attests to the existence of an Early Neolithic horizon with pottery of Epi-Bandkeramik affinities. Whilst there is no stratigraphic evidence relating this horizon to the passage graves, the assemblages are quite different in character, and there can be little doubt that the passage graves are later.

Passage graves, therefore, seem to have appeared initially in North-western Brittany in the second or third quarter of the fifth millennium cal. BC, and then elsewhere in the Armorican region at around the beginning of the fourth millennium cal. BC. The appearance of passage graves apparently represents an independent development within the Armorican region, and must relate to a fundamental cultural and religious change: in North-western Brittany, large passage graves appeared in areas where monumental ritual was previously unknown, whilst in Southern Brittany and the Channel Islands, they supplanted an earlier megalithic tradition, the monuments of which were, in some cases, deliberately destroyed. This religious transformation may provide important clues to the changing nature of Neolithic society in Armorica during the fourth and fifth millennia cal. BC.

THE STRUCTURE OF ARMORICAN PASSAGE GRAVES

The basic structure of a passage grave (figure 4.5) consists of a chamber, approached by a narrow passage and covered by a cairn. The cairn may be circular, oval or polygonal in form, and the shape of the chamber is similarly variable. The chamber may be elaborated by the addition of side chambers or internal compartments.

The most common form of construction for Armorican passage graves is fully megalithic (pl. 4.1), with a passage and chamber formed of upright stones and covered by horizontal slabs. There is a second form of construction (pl. 4.2), consisting of a dry stone chamber with a corbelled vault, and there are some monuments, such as Ile Longue (Larmor-Baden, Morbihan) and chambers A and D at Barnenez, which combine both forms of construction (L'Helgouach 1965), having a corbelled vault over a partly megalithic chamber. There does not appear to be any chronological distinction between these construction methods, as megalithic and drystone passage graves are found side by side under the cairn of Barnenez (figure 4.12). To some extent, the method of construction

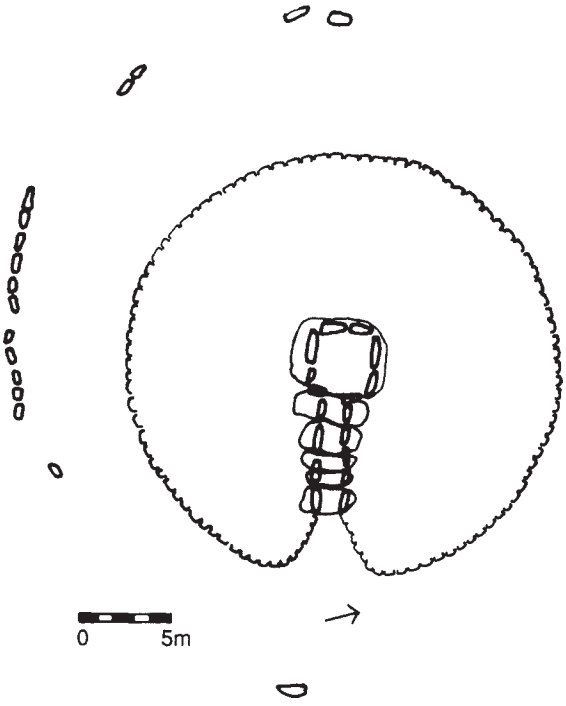


Figure 4.5 The passage grave of Kercado (Carnac, Morbihan)

employed will depend on the nature of the available stone. The construction of a corbelled vault, for example, requires a rock such as schist, which fractures to give long, flat slabs. In Jersey, where the available stone does not fulfil this requirement, there is a single example of a corbelled passage grave (La Sergenté), which seems to have collapsed soon after its construction (Patton 1987a), probably because of the unsuitable nature of the material used. There are three passage graves in Jersey (Le Mont de la Ville, Faldouet and La Hougue des Géonnais) which have large, open chambers (figure 4.6). The chambers of these monuments cannot have been roofed with capstones (the uprights are too small to have supported capstones large enough to span the chambers), and corbelled vaulting would be impractical given the character of the available stone. It is conceivable that these chambers had wooden roofs, but recent excavations at La Hougue des Géonnais (Forrest and Rault forthcoming) provided no evidence for this. Assuming that the chambers were open, the cairns of these monuments cannot have covered the chambers whilst they were in use, and must rather have formed a sort of platform around an open 'arena'. These 'arena chambers' are specific to

Plate 4.1 The passage grave of Crucuno at Carnac (Morbihan)

Jersey (Hibbs 1985), but passage graves with open chambers may exist elsewhere in the Armorican region. There are, for example, a series of passage graves in Southern Brittany with apparently open circular and oval chambers, as at Nelhouët (Martin 1889), La Haye-St-Gravé (Fouquet 1874) and Kermaric (Martin 1911), though it is likely that at least some of these monuments originally had corbelled vaults. There is also a group of passage graves in South-western Brittany, characterised by large, square chambers with internal compartments: these monuments, such as Kerleven (Le Roux and L'Helgouach 1967) and Quelarn (Giot 1983, Le Roux 1981, 1983a) are generally assumed to have had complex corbelled vaults, but in no case has such a vault survived. The largest chamber at Quelarn has a width of 8 metres, and there is no evidence for the construction of corbelled vaults on this scale anywhere in the Neolithic of Western Europe.

The chamber types can be classified according to the scheme shown on figure 4.7, adapted from L'Helgouach's (1965) classification of Armorican passage graves. The following chamber types can be distinguished:

A Circular chamber.
B Square chamber: these can be separated into two distinct groups on the basis of their size:
  B1 Area of chamber less than 13 m^2.
  B2 Area of chamber greater than 13 m^2.
C Rectangular chamber, set at right angles to the axis of the passage.
D D-shaped or pentagonal chamber.
E Polygonal chamber with splayed entrance.
F Elongated assymetrical chamber.
G Transepted passage grave.
H V-shaped chamber, poorly differentiated from passage.

There is a degree of regional variation in the occurrence of these monument types: Type B1 chambers, for example, are found only in the South Breton *département* of Morbihan, whilst Type B2 chambers are concentrated in South-western Brittany (L'Helgouach 1965). Transepted passage graves (G) are found only in Southern and Eastern Brittany, in the *départements* of Morbihan, Ille-et-Vilaine, and Loire-Atlantique.

There is a single example (La Hougue des Géonnais in Jersey) of a chamber which seems to have been modified during its period of use (Forrest and Rault forthcoming): the original monument had a Type

Plate 4.2 Corbelled passage graves at Barnenez (Plouézoc'h, Finistère)

D chamber, which was later extended and converted into a Type B2 (pl. 4.3).

In some cases, the chambers of Armorican passage graves are elaborated by the existence of side chambers (figure 4.8) and internal compartments (figure 4.9). Side chambers are relatively rare features on passage graves in mainland Brittany: L'Helgouach (1965) lists only six passage graves with side chambers (Mané-Bras B, Kerroyal, Loqueltas, Kergavat, Rondossec C and Kermarquer, all in the *département* of Morbihan). In the Channel Islands there are five passage graves with side chambers (La Hougue Bie, Faldouet and Grantez in Jersey, La Varde and Le Déhus in Guernsey). In mainland Brittany, internal compartments are particularly associated with chambers of Type B: L'Helgouach (1965) distinguishes two groups of compartmented passage graves, one group concentrated in Southern Brittany, with chambers of Type B1 (figure 4.9a), the other in South-western Brittany, with chambers of Type B2 (figure 4.9b). There are two passage graves in Brittany (Mané-Rutual and Barnenez H) with chambers of Type F subdivided into two

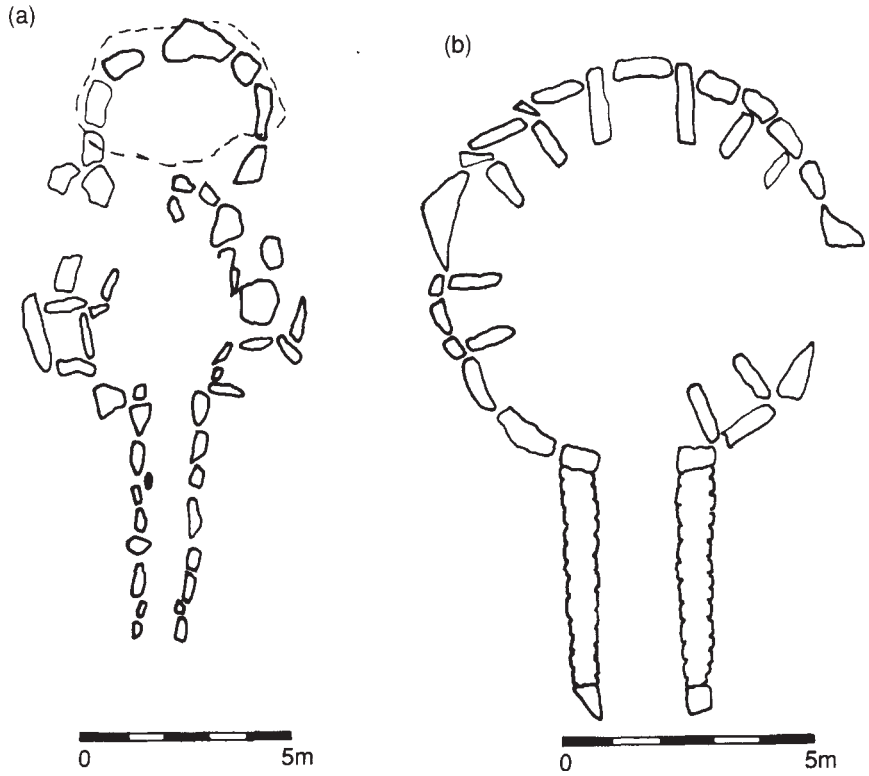


Figure 4.6 (a) Faldouet (Jersey); (b) Mont de la Ville (Jersey)

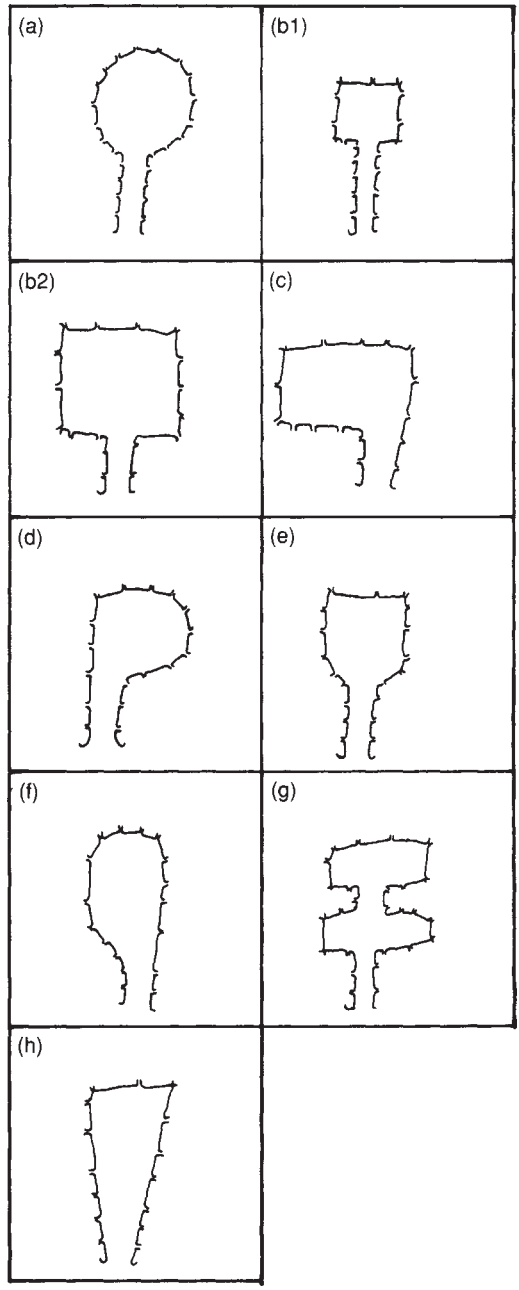


Figure 4.7 Morphology of Armorican passage graves

Plate 4.3 The passage grave of La Hougue des Géonnais (Jersey) under excavation in 1989. The passage is in the foreground, and the drystone wall in the background represents the end of the second-phase chamber. The socket holes for the stones of the first-phase chamber can be seen in the centre of the photograph.

compartments by internal pillars (figure 4.9c). In the Channel Islands, internal compartments are recorded in passage graves with chambers of Types A (Le Mont de la Ville, Jersey; figure 4.6a), B2 (La Hougue des Géonnais, Jersey) and F (La Hougue Bie and Le Mont Ubé, Jersey; figure 4.9d).

L'Helgouach (1965) classifies the passages of Armorican passage graves according to their length, distinguishing long passages (greater than 7 metres), medium (2–6 metres) and short (less than 2 metres). Medium-length passages are by far the most common. Recent excavations, however, have provided evidence for extension of the passage in several phases, for example at Dissignac (L'Helgouach 1990 and see figure 4.10) and Barnenez (Giot 1987), and it is likely that similar evidence has gone unnoticed on other sites. The majority of Armorican passage graves are oriented with the entrance between 90° and 180° (i.e. between south and east), though there are some examples facing south-west or north-east (L'Helgouach 1965).

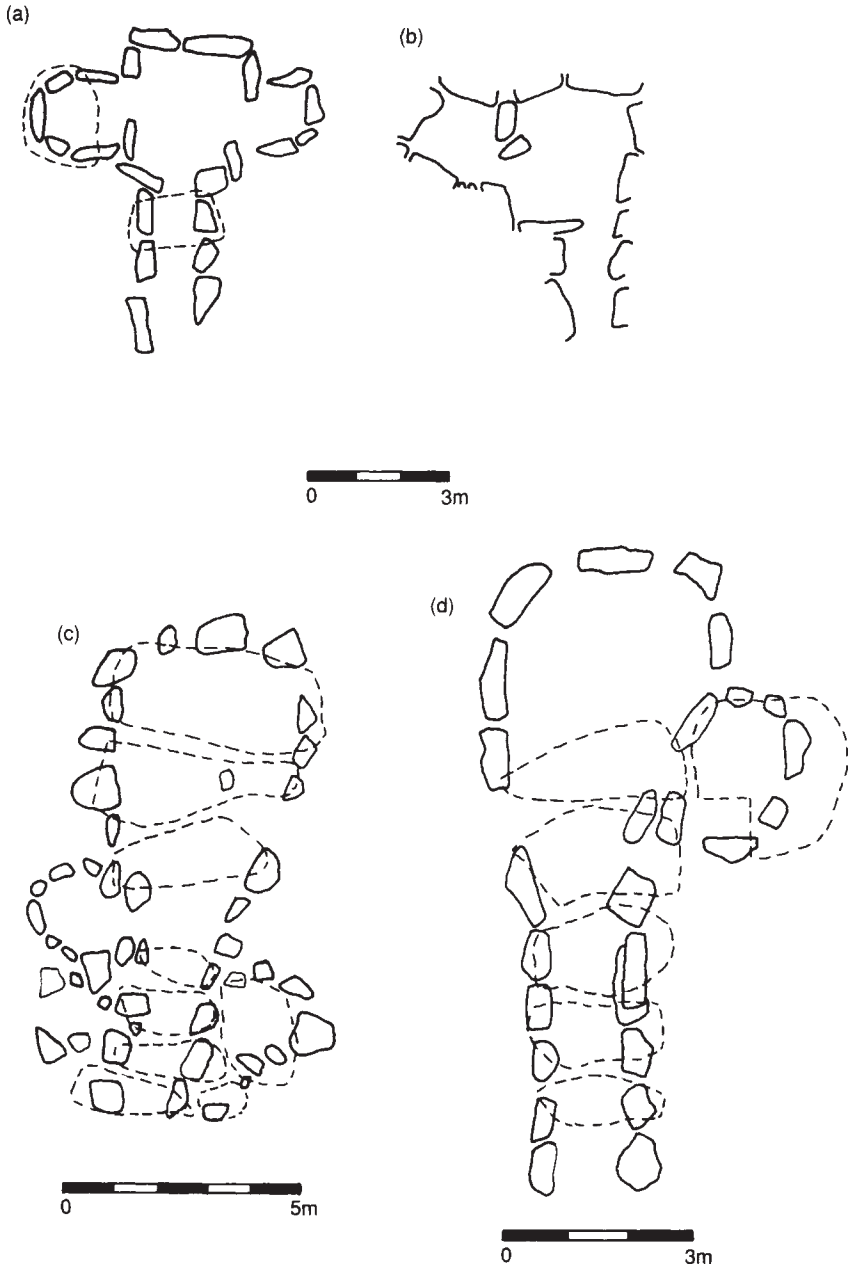


Figure 4.8 (a) Loqueltas; (b) Kermarquer; (c) Le Déhus; (d) Grantez.

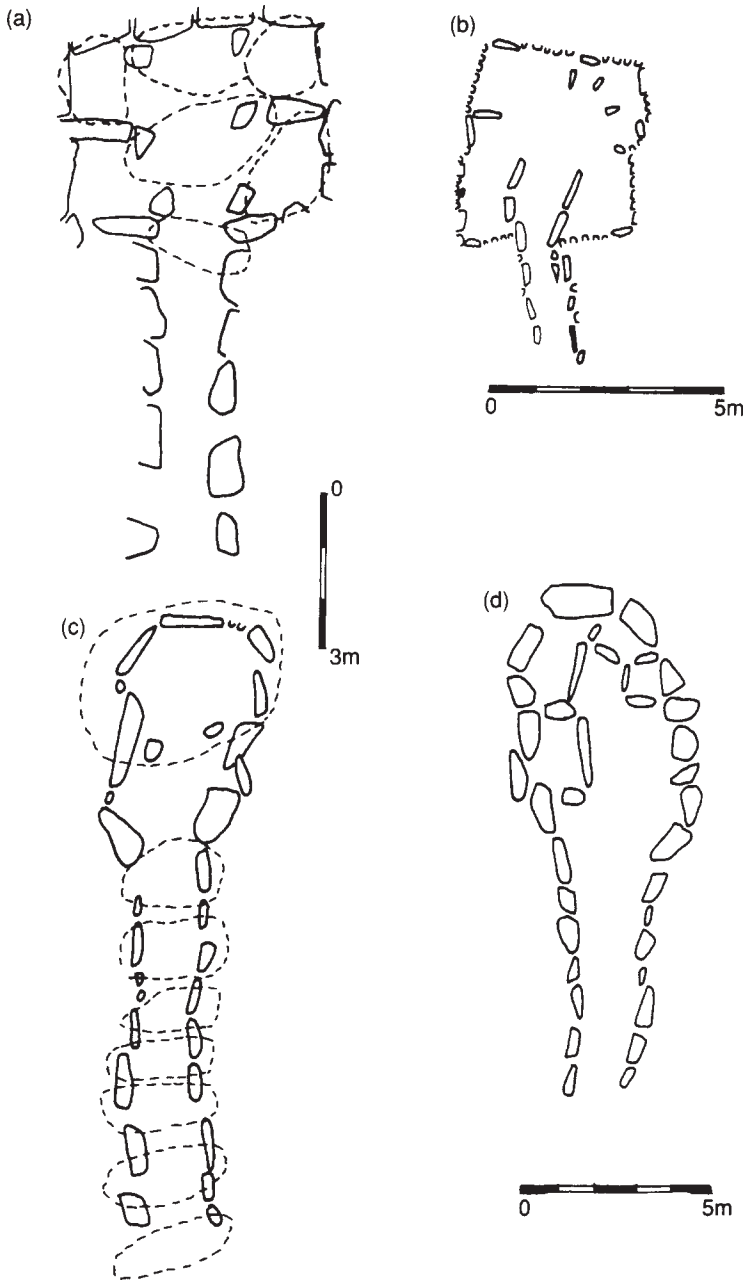


Figure 4.9 (a) Mané-Groh; (b) Kerleven; (c) Barnenez H; (d) Mont Ubé

The cairns which cover the passage graves vary greatly in their size, shape and construction. Most cairns are of rubble, usually built up in a stepped construction (pl. 4.4), but some, such as La Hougue des Géonnais in Jersey (Forrest and Rault forthcoming) have a much looser rubble and earth construction. Some monuments in the Channel Islands (Le Déhus, La Varde and Le Creux-es-Faies in Guernsey) have megalithic peristaliths around the edge of the cairn (Kendrick 1928, Patton in press), and the cairn of Kercado (Carnac, Morbihan) is surrounded by a free-standing stone circle (L'Helgouach 1965). Such elaborations of the cairn structure, however, are rare. The most common form of cairn in the Armorican region is circular, covering a single passage grave. In some cases, as at Notério (Carnac, Morbihan), the cairn covers subsidiary structures in addition to the passage grave itself (figure 4.11). There are a number of examples in Southern Brittany of circular cairns, such as Dissignac (figure

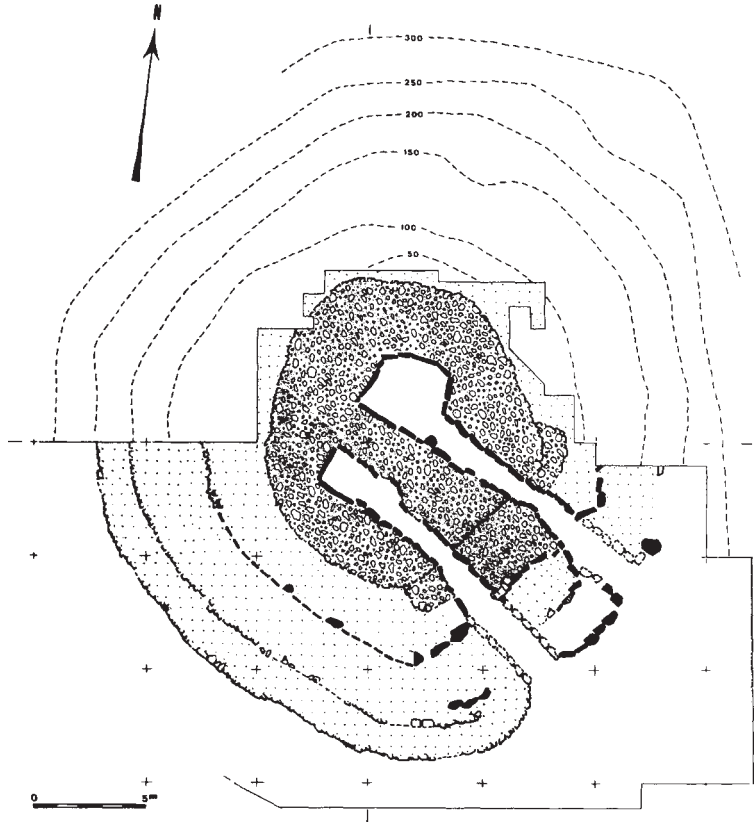


Figure 4.10 Dissignac (after L'Helgouach 1990)

4.10), covering two or more passage graves placed side by side. A second and much rarer form of cairn is trapezoidal or rectangular (figure 4.12), always covering multiple passage graves. These cairns have no strong regional distribution: examples are known from the *départements* of Côtes d'Armor (Ville-Pichard), Finistère (Barnenez, Ile Guennoc, Ile Carn, Kerleven, Quelarn) and Morbihan (Mané-Bras de Kervilor, Kerantrec'h), though there are no known examples in the Channel Islands.

Whilst some cairns appear to be relatively simple, one-phase structures, others show evidence for multi-phase construction. At Dissignac (figure 4.10), for example, the original circular cairn was enlarged in three subsequent phases: with each of these phases, the passages of the two passage graves were extended (L'Helgouach 1990). At Kerleven (Le Roux and L'Helgouach 1967) and Barnenez (Giot 1987), the enlargement of trapezoidal cairns involved the construction of new passage graves. The cairn at Barnenez (figure 4.12) shows two main phases of construction (the western part of the cairn, with structures A to F, was added on to the original cairn, with structures G to J). The occurrence of megalithic and drystone passage graves beneath a single cairn suggests that these chamber types are broadly contemporary with one another. At le Petit Mont (Lecornec in press) a cairn covering a single passage grave was

Plate 4.4 The passage grave of Gavrinis at Larmor-Baden (Morbihan)

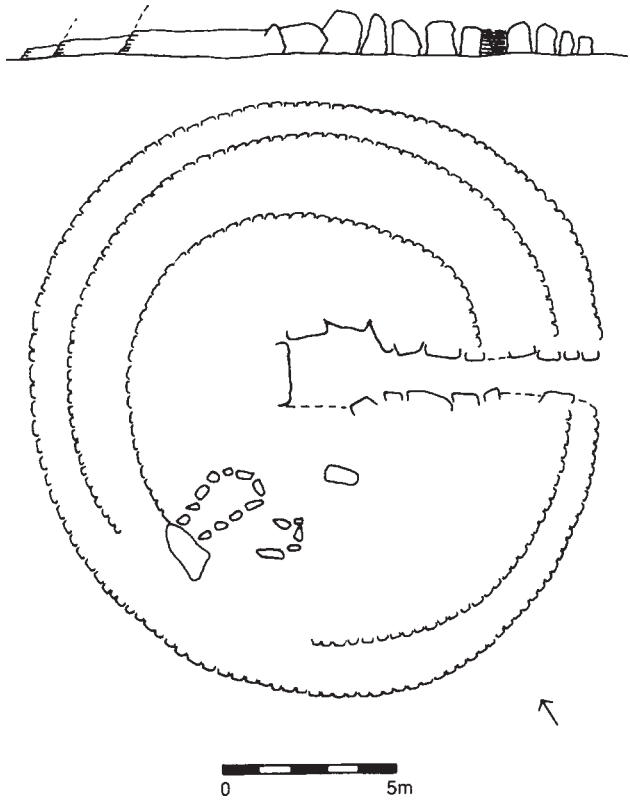


Figure 4.11 Le Notério

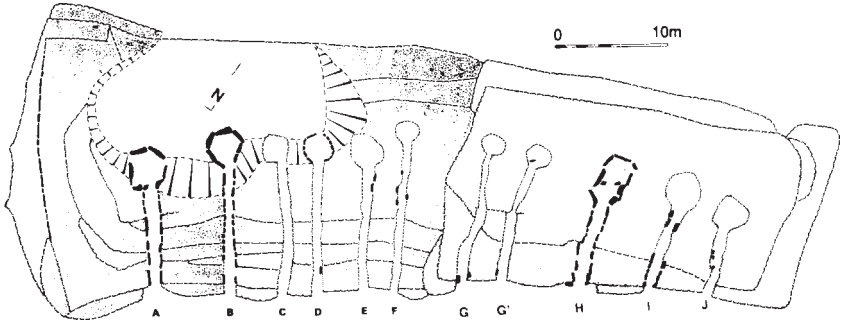


Figure 4.12 Barnenez (after Giot 1987)

added to a primary cairn, apparently containing no megalithic structure. Both of these cairns were later enclosed within a vast tertiary cairn, associated with two passage graves. The construction of this tertiary cairn would have completely obscured the entrance to the passage grave beneath the secondary cairn.

ART IN ARMORICAN PASSAGE GRAVES

Art is a relatively rare phenomenon in Armorican passage graves. Of the 265 Breton passage graves included in L'Helgouach's (1965) inventory, Shee-Twohig (1981) lists art from only twenty-four monuments. Recent research (see chapter 3) has shown that some of the art known from Armorican passage graves is in fact earlier than the monuments themselves, reflecting the re-use of decorated stones. The extent of this phenomenon remains unclear, but it may be more widespread than has hitherto been realised: in the recently discovered passage grave beneath the secondary cairn at Le Petit Mont (Arzon, Morbihan), most of the stones appear to be re-used from an earlier monument (Lecornec, pers. comm.). This evidence for re-use poses a serious problem for any attempt to analyse Armorican megalithic art, since it is difficult to establish which decoration belongs to the passage graves themselves and which relates to earlier monuments. To complicate matters further, this is not limited to the re-use of fragments of the great decorated menhirs discussed in the previous chapter: the majority of the re-used stones at Petit Mont are apparently not menhir fragments. One of the capstones of the passage grave of Le Déhus, Guernsey, is decorated with an anthropomorphic motif (figure 4.13): it has been argued (Kinnes and Hibbs 1989) that this is a re-used stone, but it falls well outside the geographical distribution of the Early Neolithic decorated menhirs, and stylistically has little in common with them.

The principal motifs known from Armorican passage graves are shown on figure 4.14. Some of these motifs (a, c, e, f) reflect continuity from an earlier tradition of megalithic art, associated with the decorated menhirs of Southern Brittany (cf. figures 3.16–3.17), though the examples from the passage graves (figure 4.15) are often more stylised than those on the menhirs. Alongside these familiar motifs are new ones, including the 'yoke' (g), 'boat' (h), 'wheel' (or 'sun') (I), 'bow' (j) and non-figurative or abstract motifs (k-o). The existence of these abstract motifs, including grid patterns, zig-zags, concentric right angles and semi-circles and chevrons, is one of the main points of contrast between the art of the passage graves and that of the decorated menhirs. Bradley (1989), has suggested that some of these abstract motifs may reflect 'entoptic' images (images produced by the human brain in conditions of 'altered consciousness',

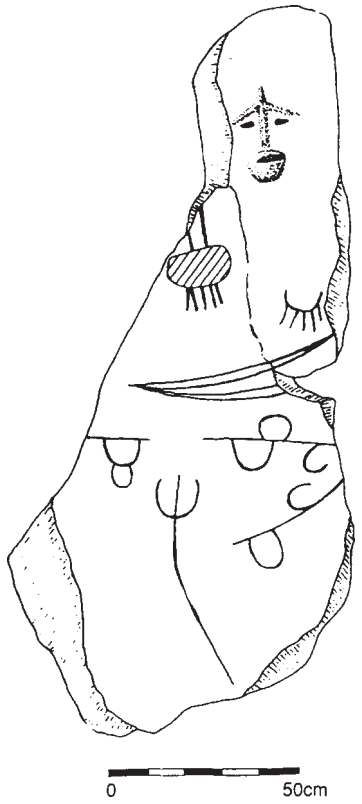


Figure 4.13 Carved anthropomorph at Le Déhus (after Kinnes 1980)

such as trances and hallucinations induced by drugs or sensory deprivation).

Motifs i, k, l, m and n on figure 4.14 are very close to patterns recorded by Lewis-Williams and Dowson (1988) in neurophysiological experiments, and in ethnographically documented rock art in Africa and North America, which is known to have been associated with states of 'altered consciousness'. In the neurophysiological studies cited by Lewis-Williams and Dowson (*op. cit.*) culturally specific motifs are often perceived by subjects to be superimposed on, or surrounded by, entoptic images, and this is also seen in megalithic art, for example in the combination of axes and 'entoptic' motifs on some of the decorated stones at Gavrinis (figure 4.16).

Table 4.1 shows the occurrence of the various motifs shown on figure 4.14. The most common motifs are 'crooks', zig-zags and wavy lines, 'yokes', hafted axes and 'écussons', but the size of the sample is too small to permit any statistical inferences. Although it would not be useful (both

because of the small size of the sample and because of the problem of re-used stones) to attempt a detailed analysis of the positioning of particular motifs, it is possible to look in more general terms at the positions in which decorated stones occur. In broad terms, art in passage graves may be found in the following positions:

A The entrance to the passage (i.e. the first stone on either side).
B In the passage.
C At the junction between passage and chamber.
D On the walls of the chamber.

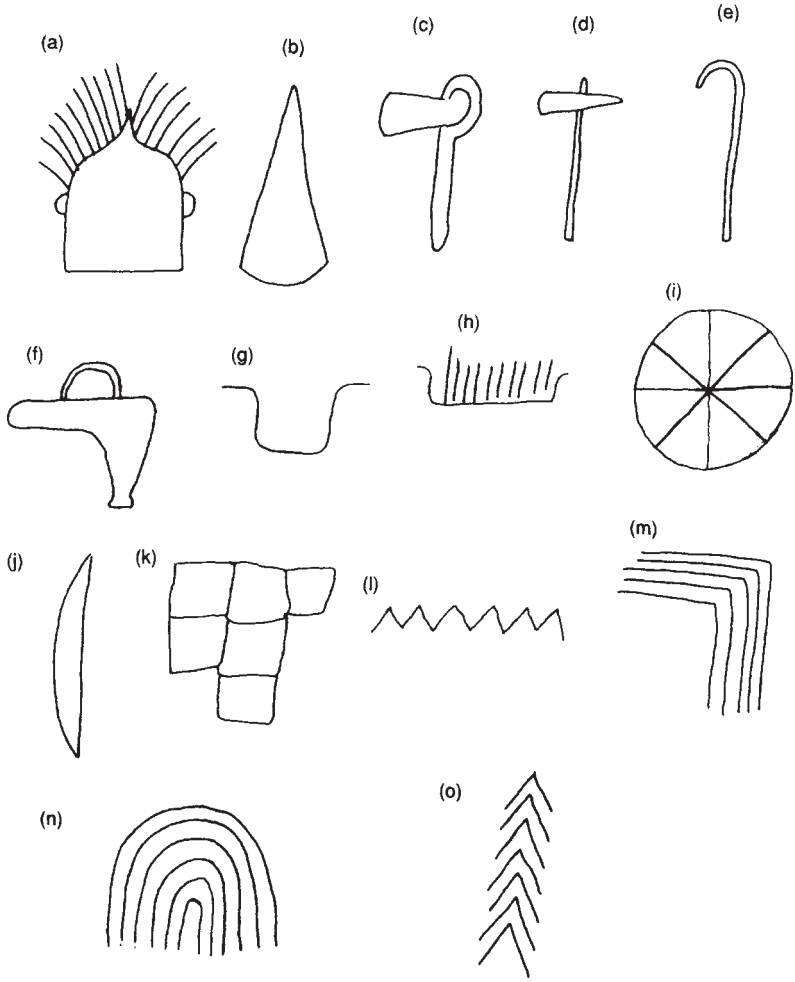


Figure 4.14 Principal motifs in Armorican passage grave art

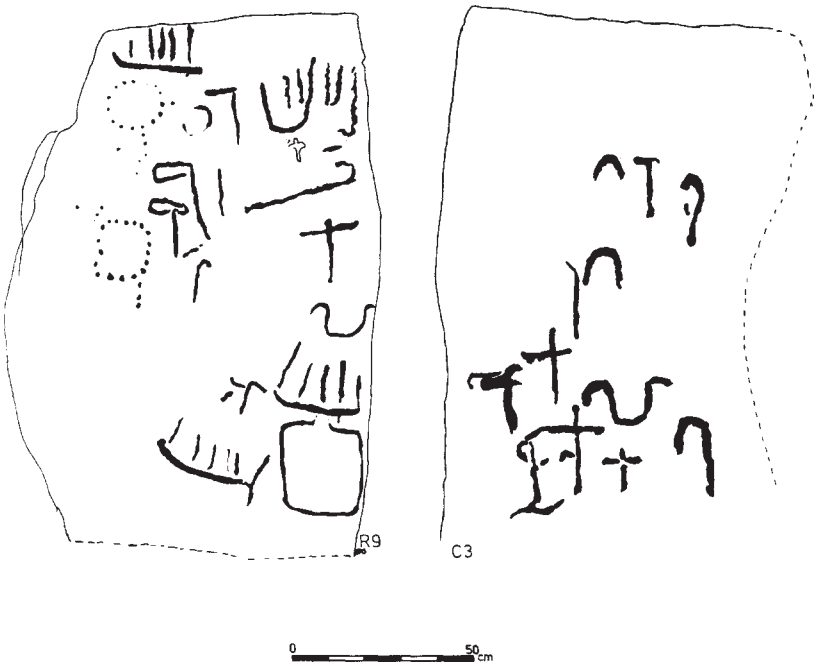


Figure 4.15 Decorated stones at Mané-Lud (after Shee-Twohig 1981)

E On internal pillars.
F On capstones.

Table 4.2 shows the occurrence of decorated stones in these positions in Armorican passage graves. Decoration occurs most frequently in the chamber, and there is only one example (Ile Longue) of decoration at the entrance. Unlike, for example, the passage graves of Ireland, Armorican passage graves never have decorated stones placed around the outside of the cairn. It is true to say, therefore, that art is placed predominantly in positions that did not receive direct sunlight (Bradley 1989) and which would not be visible from outside the monument. Most of the monuments have a relatively small number of decorated stones, the major exception being Gavrinis, which has twenty-five. Gavrinis also stands out in terms of the nature of the art itself: in most of the passage graves listed on table 4.2, each decorated stone has only a few scattered motifs (cf. figure 4.15), whereas at Gavrinis most of the stones are completely covered with carvings (figure 4.16). There is also a difference in execution: in most passage graves the art has simply been pecked out, whereas the motifs at Gavrinis are in low relief, a much more laborious technique. The site of

Gavrinis, which also has by far the greatest concentration of 'entoptic' motifs of any Armorican passage grave, must have some special significance, and this is a question to which we will return in the following chapter.

BURIAL AND DEPOSITIONAL PRACTICE IN THE ARMORICAN PASSAGE GRAVES

The igneous and metamorphic rocks of the Armorican massif decompose to produce acidic soils, which cover most of the region. These soils do not favour the preservation of bone, and it is consequently rare to find preserved human or animal remains in Armorican megaliths. Where special conditions exist, however, human remains have been preserved, showing that burial was at least one element of the rituals conducted in these monuments. At Conguel (L'Helgouach 1962) and Port-Blanc (Gaillard 1883), on the Quiberon Peninsula (Morbihan), bones were preserved by alkaline dune deposits which covered the passage graves, and in the Channel Islands

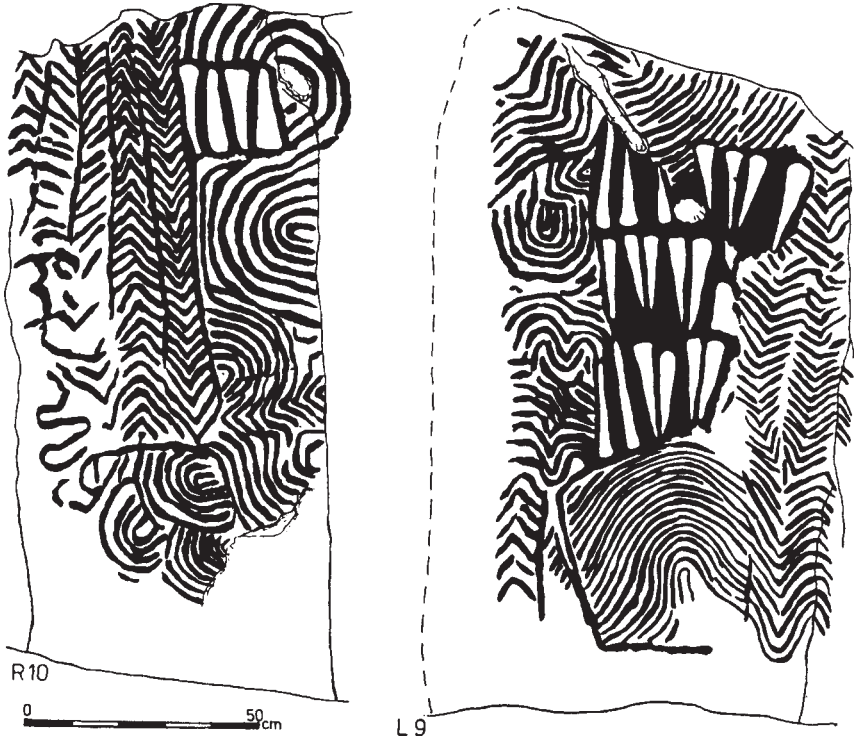


Figure 4.16 Decorated stones at Gavrinis (after Shee-Twohig 1981)

Table 4.1 Presence of carved motifs in Armorican passage graves (a-o refer to the classification of motifs on figure 4.14)

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
Sites															
Barnenez A							X								
Barnenez J	X														
Barnenez H		X		X			X			X		X			
Ile Gaignog IIC					X		X								
Butten-er-Hah											X	X			
Kerozillé					X								X		
Mané-Kerioned A					X										
Mané-Kerioned B				X			X					X	X	X	
Kercado						X					X	X			
Parc Guren												X			
Kerveresse				X	X										
Mané-Lud		X		X	X		X	X							
Table des Marchand	X		X		X										
Mané-Rutual	X				X	X									
Ile Longue	X									X					
Gavrinis	X	X	X		X		X			X		X	X	X	X
Penhap						X									
Petit Mont			X		X				X			X		X	
Grah Niaul		X		X	X		X								
Kermaillard												X			
Colpo I							X								
Dissignac				X	X										
3 Squelettes				X											
	5	4	3	7	11	3	8	1	1	3	2	8	3	3	1

Table 4.2 Position of carved motifs in Armorican passage graves

Sites	*Position*						
	A	*B*	*C*	*D*	*E*	*F*	*No. of decorated stones*
Barnenez H	0	0	0	4	1	0	5
Ile Guennoc IIC	0	0	0	1	0	0	1
Butten-er-Hah B	0	0	1	4	1	0	6
Butten-er-Hah C	0	2	0	0	0	0	2
Mané-Bras (Locoal)	0	0	0	0	1	0	1
Mané-Bras (Erdeven)	0	0	1	0	0	0	1
Kerozillé 1	0	0	0	4	0	0	4
Kerozillé 2	0	0	0	1	0	0	1
Mané-Kerioned B	0	0	1	9	0	0	10
Kercado	0	3	1	2	0	1	7
Parc Guren	0	0	0	2	0	0	2
Kerveresse	0	0	0	3	0	0	3
Mané-Lud	0	2	1	4	0	0	7
Table des Marchand	0	1	0	1	0	1	3
Mané-Rutual	0	0	0	1	1	2	4
Ile Longue	1	1	0	0	0	3	5
Gavrinis	0	15	2	6	0	2	25
Penhap	0	0	0	2	0	0	2
Petit Mont	0	2	0	8	0	0	10
Grah Niaul	0	2	0	2	0	1	5
Kermaillard	0	0	0	2	0	0	2
Colpo	0	0	0	3	0	0	3
Sournan	0	0	0	1	0	0	1
3 Squelettes	0	0	0	1	0	0	1
Déhus	0	0	0	0	0	1	1
La Hougue Bie	0	0	0	2	0	0	2

(Kendrick 1928, Hawkes 1937), the practice of burying large quantities of limpet shells with interred bodies has preserved skeletal remains from several monuments. Whilst the evidence from these few sites demonstrates that the Armorican passage graves did have a funerary role, the sample is too small to provide any reliable statistical information regarding funerary practice, demography or palaeopathology. There are further problems arising from the way in which many of the sites were excavated: in some cases, human remains were re-interred without detailed study (Hawkes 1937), and many of the early excavation reports do not provide sufficient information to enable us to distinguish between depositions belonging to different phases.

One fact that is clear from the limited evidence available is that the number of individuals buried in the passage graves seems always to have been relatively small, particularly given the long time period over which

these monuments were used. At Conguel, for example, the remains of seven individuals were found (L'Helgouach 1962) on two levels (five skeletons on the lower floor, associated with Middle Neolithic pottery, and two on the upper floor with Late Neolithic and Chalcolithic material). At Port-Blanc (Dolmen A), the remains of nineteen individuals were found (Gaillard 1883): again, there were two distinct levels, the lower floor (of Middle Neolithic date) having the remains of eleven individuals, and the upper floor (dating to the Late Neolithic or Chalcolithic) having the remains of eight. The evidence from the Channel Island passage graves (Patton in press) is broadly comparable: the remains of between two and eight people were found at La Hougue Bie, and the remains of a minimum of eight people at Grantez, two at Faldouet, eight at Déhus (excluding material from a Chalcolithic deposition which will be discussed in chapter 7) and one at Herm 13 (the Robert's Cross passage grave).

There is a considerable degree of variation in terms of funerary practice and the treatment of the corpse. In the passage grave of Grantez, Jersey (Nicolle *et al.* 1913), seven articulated skeletons were found (six were in flexed positions in the chamber, the seventh was apparently placed in a seated position in the chamber). Disarticulated remains, however, are more usual, suggesting prior exposure or burial of the corpse. On some sites, the two practices seem to have coexisted: at Le Déhus, for example (Kendrick 1928), side chamber B contained two articulated skeletons (apparently interred in a kneeling position), whilst side chamber C contained disarticulated remains. Three successive floors were found in side chamber D, the lower floor having two flexed inhumations, the two upper floors having only disarticulated remains. At Vierville (Manche), a pit placed in front of the façade of the cairn contained two burials, separated by a layer of flat stones (Verron 1977): the upper burial consisted of a flexed inhumation, whilst the lower one consisted of the disarticulated remains of a single individual. It is possible that these two 'practices' simply represent successive phases in a complex mortuary ritual carried out within and around the passage graves themselves. The chamber of the Vierville passage grave contained only disarticulated remains. Where disarticulated remains are found, the bones are often scattered in the passage and chamber with no apparent organisation, as at La Hougue Bie, Jersey (Baal *et al.* 1925). At Barnenez (Giot 1987), chambers B, F and G contained small fragments of human bone mixed with other material. In other cases, however, the disarticulated remains were deposited in a more structured way. At Port-Blanc (Gaillard 1883), the skulls in the lower level were stacked against the wall of the chamber, and at Ty-Floch (St-Thois, Finistère), a distinct 'ossuary' was noted, occupying three internal compartments (Le Roux and Lecerf 1980). One of these compartments contained a bundle of long

bones ('un veritable fagot'), associated with cranial fragments and representing the remains of two or three people. The lower deposition in the pit in front of the façade at Vierville (Verron 1977) is broadly comparable, in that the long bones were deliberately placed in a bundle, and associated with cranial fragments: in this case the limb bones were found in articulation, suggesting that they were deposited with ligaments still attached. At Le Déhus (Kendrick 1928) the disarticulated remains in side chambers C and D were arranged in discrete piles (in side chamber C, each pile was associated with a pottery vessel). Human remains are recorded from both the passages (as at Barnenez B and G, and at Conguel) and chambers (as at Grantez, La Hougue Bie, Port-Blanc, Vierville) of Armorican passage graves. Where side chambers and internal compartments exist (as at Ty-Floch, Faldouet, Déhus), human remains tend to be concentrated in these. In some monuments, there is evidence for several phases of burial, with pavements placed over earlier burial floors: this was the case at Conguel (L'Helgouach 1962) and Port-Blanc (Gaillard 1883), where successive burial horizons were separated by layers of flat stones, and in side chamber D at Déhus, where three successive burial horizons were separated by layers of limpet shells with paving on top. Since we are dealing here with monuments which were in use over several centuries, it is also possible that the chambers were periodically cleared out to make room for new depositions, but this would be difficult to recognise archaeologically, unless the remains were dumped or buried in the immediate vicinity of the site. Although the sample is too small to provide demographic information, it is clear that men, women and children are represented in the assemblages from passage graves.

Material items (pottery vessels, stone tools, jewellery) are frequently found in the chambers of Armorican passage graves, and in a few cases there is a direct association between these objects and human remains, suggesting that the objects can be seen as 'grave goods'. In side chamber C at Le Déhus (Kendrick 1928), pottery vessels were associated with discrete heaps of disarticulated bone, whilst at Grantez (Nicolle *et al.* 1913), the flexed inhumations were accompanied by piles of brightly coloured pebbles, and by depositions of animal bone, perhaps representing food offerings. In most cases, however, the material items found within the passage graves have no direct association with human remains. In many cases, the objects are simply scattered in the passage and chamber with no apparent organisation, as at Barnenez (Giot 1987), but at Mané-Ven-Guen (Carnac, Morbihan), Le Rouzic (1902) records the existence of discrete concentrations of pottery and flint, associated with areas of charcoal, and it is likely that similar evidence from other sites has gone unrecorded. At Min-Goh-Ru (Colpo, Morbihan), a hemispherical bowl was found at the entrance to the passage (L'Helgouach and

Lecornec 1976), whilst at Ty-Floch (Le Roux and Lecerf 1980), a similar bowl was found among stones fallen from a corbelled vault, leading to suggestions that the vessel was either suspended from the roof or contained within the stones of the vault itself. The arrangement of material in the passage grave of La Hougue Bie is particularly interesting (figure 4.17). According to the excavation report (Baal *et al.* 1925), the disarticulated human remains were scattered on the floor of the chamber. Near the centre of the chamber was a concentration of pottery fragments, representing around fifteen *vase-supports:* no complete vessels were found in this deposition, and it seems most likely that the vessels were deliberately broken. The chamber at La Hougue Bie is divided into four zones by means of internal pillars (figure 4.17), and the westernmost zone was occupied by a platform of rubble, covered by a bed of pebbles. Two intact *vase-supports* were placed at the edge of this platform. The platform itself seems to have been the main focus of ritual activity, since it incorporated the following features: a small rectangular cist, covered by three stones, containing fragments of two *vase-supports* and a quantity of pebbles, a pit lined with stone slabs, and three small standing stones or *'bétyles'*, averaging 30 cm in height.

Recent excavations have provided evidence for ritual activity outside the passage graves, particularly in the forecourt area and in front of the façade of the cairn. The double burial in front of the façade at Vierville has already been mentioned (p. 94). Depositions of pottery vessels have been noted in front of the façade of cairns at Kerleven (Le Roux and L'Helgouach 1967), Min-Goh-Ru (L'Helgouach and Lecornec 1976), Barnenez (Giot 1987) and Ty-Floch (Le Roux and Lecerf 1980). At Gavrinis, a hoard of three polished axes was found in the façade area, as well as fragments of pottery (Le Roux 1983b). At Kerleven, Min-Goh-Ru, Ty-Floch and Gavrinis, the sherds from the façade area were plotted and the sherds of individual vessels were found to be distributed in continuous lines, radiating from the entrance: the pattern of distribution of these sherds suggests that the vessels may have fallen from the façade of the cairn (L'Helgouach and Lecornec 1976).

L'Helgouach (1965) lists the material recorded from Armorican passage graves. Pottery is the most common category of object, and ceramic assemblages are dominated by Middle Neolithic *'Chasséen'* forms (cf. figures 4.3–4.4). Undecorated globular and hemispherical bowls predominate, and *vase-supports* are relatively rare (L'Helgouach lists *vase-supports* from only six passage graves in mainland Brittany). It is interesting to note that *vase-supports* are recorded from five passage graves on the island of Jersey (Hawkes 1937) and that one of these monuments (La Hougue Bie) has produced an exceptionally large number of these vessels (a minimum of twenty-one): surprisingly, *vase-supports* are completely absent from passage grave assemblages on the

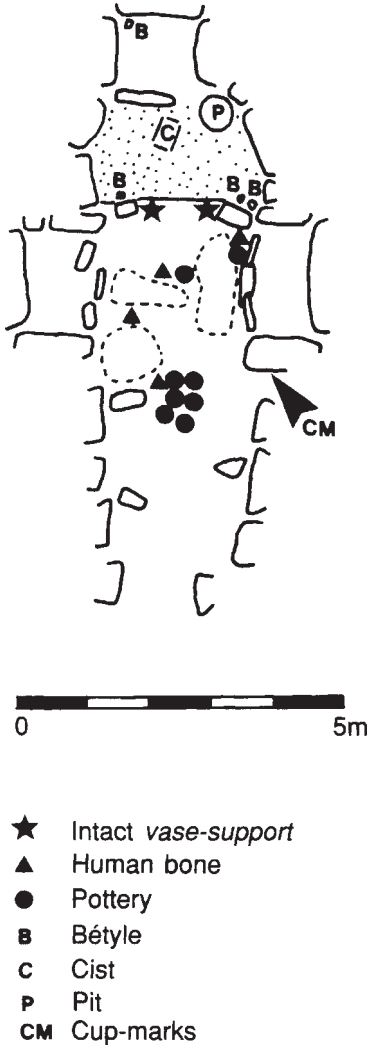


Figure 4.17 Depositions in the chamber of La Hougue Bie

neighbouring island of Guernsey (Kendrick 1928). Stone tools are also known from Armorican passage graves, particularly polished axes: the axes found in passage graves are in most cases identical to those known from other contexts, and they are never found in large numbers. Beads of variscite are occasionally found in passage graves but, again, these do not occur in large numbers. Faunal remains are obviously affected by the same preservation factors which have affected human remains from

Armorican passage graves. Minot (1958) records faunal remains from nine passage graves in mainland Brittany, but this list is based principally on early excavation reports which do not describe the material (much of which is now lost) in any detail. In most cases, the quantity of animal bone appears to have been small. Kendrick (1928) and Hawkes (1937) record animal bone from several passage graves in the Channel Islands: again, the quantities are small and the material is not described in detail. The flexed skeletons at Grantez, Jersey, were accompanied by animal bones (identified as being of cattle, pig, goat, horse and deer), interpreted by the excavators (Nicolle *et al.* 1913) as food offerings, and the presence of animal bone on a layer of paving overlying a burial floor in side chamber C at Le Déhus, Guernsey (Kendrick 1928) is similarly suggestive. The practice of depositing large quantities of limpet shells with human remains in Channel Island passage graves has already been mentioned (p. 92): this appears to have been a specifically Channel Island phenomenon and is not recorded in passage graves in mainland Brittany. At Le Déhus, Guernsey, the burial deposits in side chambers B-D were covered by layers of limpet shells. The significance of this practice is unclear, but it certainly contributed to the preservation of skeletal remains, and it is conceivable that this was intended.

Most of the known passage graves in the Armorican region were excavated in the nineteenth century or in the early twentieth century, and it is often difficult to reconstruct evidence for funerary and depositional practice on the basis of the early reports. In many cases we have only the monument itself and a collection of objects, with little or no information on the contexts in which the objects were found. Early excavators tended to focus on the passage and chamber, ignoring the cairn and the surrounding area: it is now becoming clear that ritual activity was not confined to the interior of the monuments and recent excavations have added much to our knowledge of European graves.

PASSAGE GRAVES AND NEOLITHIC SOCIETY

The archaeological evidence suggests that passage graves first appeared in North-western Brittany during the first half of the fifth millennium cal. BC, appearing elsewhere on the Armorican littoral towards the end of the fifth millennium, and replacing the earlier monumental traditions outlined in chapter 3. In some respects the passage graves could be considered to reflect a continuation of these earlier traditions: at La Table des Marchand and Petit Mont, for example, passage graves were built on top of the earlier ritual complexes, and there are several examples (see chapter 3) of fragments of earlier carved menhirs incorporated in the construction of passage graves (L'Helgouach 1983, Le Roux 1984). Continuity is also evident in the artistic motifs found in the passage

graves: the 'écusson', 'crook', 'axe-plough' and hafted axe motifs, which feature prominently in passage grave art (figures 4.14–4.15) are also known from the decorated menhirs of Southern Brittany (figures 3.17–3.18). This continuity, however, conceals an important transformation: the passage graves are fundamentally different from the earlier monuments in terms of their structure and conception, and in the art itself we can see as much evidence for change as for continuity. In the previous chapter, the appearance of megalithic monuments in Southern Brittany was linked to the emergence of a tribal social formation as outlined by Meillassoux (1964, 1967), in which elders' power is based on control of ritual practice, and on control over the circulation of socially valued material items. The transformations associated with the appearance of passage graves can perhaps be seen as evidence for the consolidation and expansion of this social formation.

The decorated menhirs of Southern Brittany, discussed in the previous chapter, were conspicuous monuments decorated with large, often explicitly representational, symbols. These monuments stood in open ritual complexes and the stones, the symbols carved on them and the ceremonies conducted around them, would have been clearly visible. At the end of the fifth millennium cal. BC most of these menhirs were deliberately pulled down, and the fragments incorporated in the construction of the passage graves. The basic structure of a passage grave (figure 4.5) implies a restriction of access: the chambers are relatively small and could accommodate only a limited number of people, whilst the existence of a massive cairn and long narrow passage would effectively prevent people from seeing into the monument. Some ceremonies were apparently conducted outside the passage, and any number of people may have participated in these, but only a few people could have taken part in the ceremonies conducted within the monuments themselves. On entering the monument, the organisation of space is essentially linear: this is particularly clear in the case of La Hougue Bie (figure 4.17), where the main focus of ritual activity appears to have been a rubble and earth platform at the end of the chamber. Access to this platform may have been more restricted than access to the chamber itself, and behind the platform is a terminal cell, partly sealed by a transverse slab. The appearance of monuments such as this, replacing open ritual complexes, suggests that Neolithic religion, and access to the Sacred, was increasingly controlled by a small elite, probably the tribal elders, whose role has already been discussed. This restriction of access is also apparent in looking at the art found within the monuments. Although some motifs represent a continuation of the artistic traditions associated with the decorated menhirs, these motifs are often more stylised in the art of the passage graves (figure 4.15): the symbols whose meaning had been self-evident, now became meaningful only to the initiated. These motifs are also placed

in areas of the monument which are hidden from direct light, and which would not be visible from outside the passage. Alongside motifs such as the axe, the 'écusson' and the 'crook' appeared a new range of abstract motifs (figure 4.14). Bradley's (1989) identification of these as 'entoptic' motifs implies that states of 'altered consciousness' (trances and hallucinatory states) were significant in Neolithic religion, and this may have important social implications. The attainment of such states normally requires special conditions (e.g. sensory deprivation), training or access to drugs, introducing a further possibility for the control of ritual practice. It seems likely that the power of Neolithic elders depended on control over the circulation of stone axes (see chapter 2), as well as on control of ritual practice, and the importance of the axe as a motif in passage grave art represents a continuing ideological link between these two elements of the Neolithic social formation. The funerary role of the passage graves, and the elaborate treatment of the corpse suggested by the evidence from sites such as Vierville, Ty-Floch and Le Déhus, points to an increasing emphasis on the ancestors in Neolithic religion, and it seems likely that elders' control of ritual practice was mediated through a claimed special relationship with the ancestors.

In chapter 3 it was suggested that competitive relations between local groups may have resulted in the emergence of dominant clans or lineages, reflected in the archaeological record by the existence of larger scale monuments in some areas. The size of the decorated menhirs of the Locmariaquer complex suggests that this process became significant in Southern Brittany in the late fifth millennium cal. BC. We might expect the passage graves to provide evidence for a continuation and intensification of this process in the fourth millennium cal. BC, and it may be possible to identify a hierarchy of monuments on the basis of their size. The best indices of size in this case are probably the surface area of the cairn and the length of the internal structure, since the height of the cairn has in most cases been reduced by erosion. Table 4.3 shows the dimensions of monuments in three areas: the Channel Islands, Carnac and the Golfe du Morbihan, and the North Finistère coast. The list of monuments shown on table 4.3 is incomplete, because the original dimensions of many monuments cannot be ascertained. The results, however, are striking. There is a considerable variation between the monuments in terms of the surface area covered by the cairn but, most importantly, the figures do not suggest a continuous range of variation from the smallest to the largest monuments: cairns such as la Hougue Bie, Petit Mont and Barnenez are between three and four times larger than the other monuments in the same areas. In many cases, the largest cairns also cover the largest passage graves, though the variations in cairn size is more marked. In the three areas considered we can identify two classes of monuments: those with cairns covering a surface area of between 100 and 1000 m^2 and those

Table 4.3 Dimensions of passage graves in three core areas

Sites	*Surface area of cairn (m^2)*	*Height of cairn (m)*	*Length of structure (m)*
Channel Islands			
La Hougue Bie	2375	12.0	18.6
Géonnais	314	1.5	11.9
La Sergenté	177	Unknown	5.5
La Varde	254	4.0	12.3
Creux-ès-Faies	254	3.0	10.0
Le Déhus	284	4.0	9.3
Faldouet	855	Unknown	14.0
Carnac/Golfe du Morbihan			
Kercado	490	5.0	9.5
Notério	201	Unknown	9.2
Ile Longue	314	Unknown	13.5
Petit Mont	3000	6.0	7.2
Er Rohec	143	Unknown	7.5
Quelvezin	79	Unknown	4.5
Gavrinis	2552	8.0	17.0
Table des Marchand	616	Unknown	10.5
Rondossec	314	Unknown	13.5
North Finistère Coast			
Barnenez	1640	8.0	13.9
Ile Carn	212	Unknown	7.5
Ile Guennoc I	336	Unknown	8.6
Ile Guennoc II	420	Unknown	7.3
Ile Guennoc III	364	Unknown	8.0

covering a surface area of 1500–3000 m^2. Because the list of monuments shown on table 4.3 is incomplete, it is not possible to establish the ratio of large sites to smaller ones, but it is clear that the large sites are very much rarer.

It seems reasonable to identify monuments such as La Hougue Bie, Petit Mont and Barnenez as higher order ritual centres, serving a wider community than the other passage graves, and at a higher level of social organisation, rather like a modern cathedral. The evidence for this is particularly striking on the island of Jersey (Patton 1991b). The monument of La Hougue Bie is much larger than the other passage graves on the island (table 4.3), and is also more centrally placed (figure 4.18). Because of the unusually varied geology of Jersey, it has been possible to identify the sources of most of the stones used in the construction of the island's megaliths (Mourant 1933, 1937, 1963, 1977). It is surely significant that, whereas most of the island's passage graves are built with stones taken from the immediate vicinity of the sites themselves, La Hougue Bie includes stones taken from a much wider area

(figure 4.18) including sources also used by the builders of the smaller passage graves of Le Mont Ubé and Le Mont de la Ville. The largest capstone at La Hougue Bie weighs around 20 tonnes, and it is estimated (Kinnes and Hibbs 1988) that a minimum of 200 people would have been required to transport this stone to the site and move it into position. If we assume that most of the work was done by adult men, and that adult men constituted around 20 per cent of the population (see chapter 1), a working team of 200 would have to correspond to a community of at least 1000. The smaller passage graves of Jersey could all have been built by communities of 300–600 people: the largest stone of the Grantez passage grave weighs approximately 13 tonnes and could be moved by a team of 80–85 people, whilst the largest capstone of the Faldouet monument would have required a team of around 120 people (Patton in press).

The evidence of sites such as La Hougue Bie suggests the development of a segmentary society (cf. Evans-Pritchard 1940) in which the largest social units are represented by monuments such as La Hougue Bie, Barnenez and Petit Mont. These units (which for the sake of convenience we can think of as 'tribes') consisted of 1000 or more people, and each

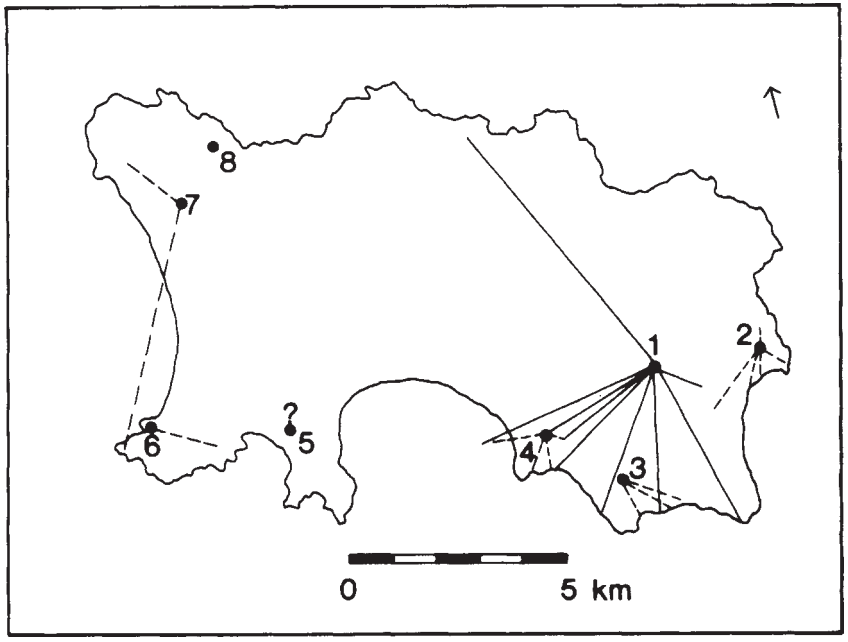


Figure 4.18 Distribution of passage graves in Jersey, showing sources of stone (after Patton 1991b). 1 La Hougue Bie; 2 Faldouet; 3 Le Mont Ubé; 4 Le Mont de la Ville; 5 Les Cinq Pierres; 6 La Sergenté; 7 Grantez; 8 Géonnais

'tribe' must have comprised several 'clans' represented by the smaller passage graves. Each 'clan' in turn probably comprised several 'lineages', corresponding to individual domestic groups. Segmentary societies probably emerged at the beginning of the Armorican Neolithic, if not before: domestic groups are unlikely to have been endogamous, and marriage bonds between groups would almost inevitably lead to the development of larger 'clan' and 'tribal' groupings. With time, however, these larger groupings seem to have acquired a more important ceremonial and religious role, leading to the appearance of an increasing number of larger monuments. This development seems to have involved the centralisation of some aspects of ritual practice which could, perhaps, be understood in relation to Friedman and Rowlands' (1977) model, outlined in the previous chapter. According to this model competitive relations between social groups may lead to the emergence of dominant lineages or clans, which may then acquire a special role in controlling ceremonial and ritual activities.

The overall picture for the Armorican Middle Neolithic (*c.* 4250–3250 cal. BC) suggests a consolidation and expansion of the tribal social system outlined in chapter 3, with power relations based on elders' control of ritual practice and stone axe exchange. The evidence of the passage graves suggests that tribal elders may have increased their control over ritual practice, whilst other evidence (see chapter 2) suggests an expansion of stone axe exchange networks at approximately the same time. The continued significance of the axe as a motif in megalithic art suggests an ideological link between axe exchange and megalithic ritual, and it is likely that both were significant in terms of elders' control of initiation rites and the 'means of reproduction'. The evidence of the passage graves also suggests a degree of centralisation in ritual practice, leading to the emergence of higher order ritual centres: this could be understood as the result of competition between social groups, leading to the emergence of dominant clans or lineages, with special status in relation to ritual, as suggested by Friedman and Rowlands (1977). These processes seem to have been important right around the Armorican littoral, but in some areas they gave rise to special developments, as we shall see in the following chapter.

5

STATEMENTS OF POWER AND SYMBOLS OF WEALTH

The great mounds and alignments of the Carnac region

In the previous chapter, we have seen how the development of competitive relations between social groups resulted in the emergence of higher order ritual centres in some areas of the Armorican region. These monuments are passage graves, similar in form and function to the other monuments of the region, but distinguished from these other monuments by virtue of their much greater size. In some areas, however, the archaeological evidence suggests that these same processes of centralisation and competitive emulation gave rise to entirely new forms of ritual expression, characterised by a much greater degree of overt social differentiation, and by an even greater investment of labour in monumental ritual.

These developments are seen most spectacularly in the area between Carnac and Locmariaquer, at the western end of the Golfe du Morbihan (figure 5.1). This area has one of the densest concentrations of megalithic monuments in Europe, and this concentration includes a small series of massive cairns, covering closed megalithic chambers. The assemblages from the chambers of these monuments include large numbers of variscite beads and elaborate ceremonial axes of jadeite and fibrolite. The jadeite axes are of a type never found in passage graves or other monuments, and rare items such as these must have circulated within a closed social network. The size of these *Grand Tumulus* monuments, and the lavish and exclusive nature of the depositions found within them, suggest that these monuments relate to high status social groups. The chronology of these monuments is unclear, but the most recent evidence suggests that they were built during the fourth millennium cal. BC, overlapping, at least to some extent, with the passage graves.

In the same area is a vast complex of standing stones, which has justly been described as one of the wonders of the prehistoric world. The Carnac alignments, which extend over 3 kilometres, must originally have

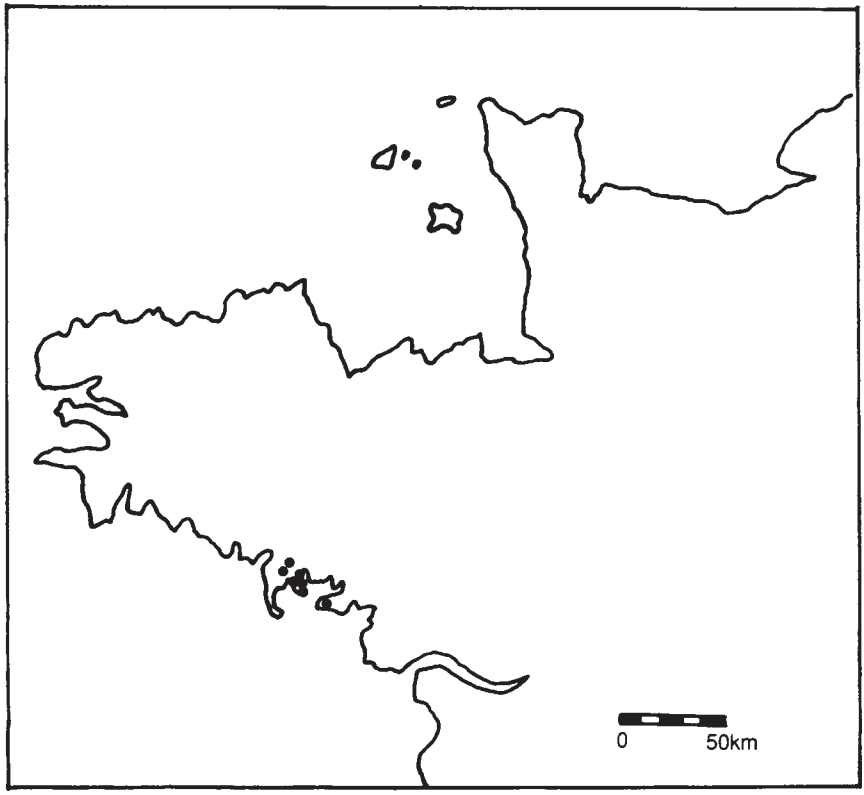


Figure 5.1 Distribution of *Grand Tumulus* monuments

included over 3000 individual standing stones, arranged in three main groups of alignments (Menec, Kermario and Kerlescan), associated with large stone circles or 'cromlechs'. Like the cursus of Neolithic Dorset, the Carnac alignments lie at the centre of a complex ritual landscape, incorporating earlier monuments and providing a focus for later ones. Unfortunately the Carnac alignments are, as yet, poorly understood. The limited excavations carried out by Zacharie Le Rouzic in the early years of this century provided very little archaeological material, and only a large-scale area excavation could be expected to yield significant results. The alignments are conventionally dated to the Late Neolithic period (cf. Giot *et al.* 1979), but the most recent evidence suggests that they, like the *Grand Tumulus* monuments, were built during the fourth millennium cal. BC.

Although the monuments of the Carnac area represent the most spectacular manifestations of megalithic ritual, similar developments can be identified elsewhere, albeit on a smaller scale. At Saint-Just (Illeet-

Vilaine), for example, a series of alignments form the centre of a ritual landscape which also includes a stone circle, long mounds, passage graves and lateral entrance graves (Le Roux 1979b, 1981, 1983a). The St-Just alignments are on a much smaller scale than those of Carnac, and they are not associated with any monuments comparable to the *Grand Tumulus* series, but they may nonetheless reflect a similar process of social and religious development.

Ritual complexes such as Carnac and St-Just are by no means typical of Armorican megaliths: on the contrary, they are exceptional monuments which seem to have developed in a few areas under quite special circumstances. Such developments, however, may be particularly important in terms of understanding the social and cultural processes which affected the Armorican region as a whole.

THE *GRAND TUMULUS* MONUMENTS OF CARNAC AND LOCMARIAQUER

The group of monuments known as the *Grand Tumulus* series (Giot *et al.* 1979) comprises only seven known monuments, all of which lie within a 20 km radius of the town of Carnac (figure 5.1). These sites are Le Tumulus-St-Michel (Le Rouzic 1932) and Le Moustoir (Galles 1865) at Carnac, Mané-Lud (Le Rouzic 1911), Mané-er-Hroëk (Galles 1863), Er Grah (Le Rouzic 1933) and Kerlud (Burl 1985) at Locmariaquer, and Tumiac (Le Rouzic 1935) at Arzon. The site of Crucuny, Carnac (Le Rouzic *et al.* 1923) is in some respects comparable, but the finds from this site include metal objects, suggesting a later date. The site of Les Biards, at Issigny (Manche) is similar in some respects (Pigeon 1885, Coutil 1907), as is La Hougue Boëte, Jersey (Patton 1987a, 1991b), but in neither case can a definite link be made to the South Breton *Grand Tumulus* series.

Monuments of the *Grand Tumulus* series consist typically of a closed megalithic chamber, sometimes with subsidiary structures, covered by a massive elongated or circular mound (pl. 5.1). Table 5.1 shows the dimensions of the cairns (the site of Kerlud is excluded since the mound is destroyed and its dimensions unknown). If these figures are compared with those shown on table 4.3, it will be seen that the *Grand Tumulus* monuments are significantly larger than even the largest passage graves: the largest passage grave cairn is Petit Mont, covering 3000 m^2, whilst the smallest *Grand Tumulus* (Tumiac) covers 3025 m^2, and the largest (Tumulus-St-Michel) covers 7500 m^2 (pl. 5.1).

All of the monuments have a main rectangular chamber (Tumulus-St-Michel has two, side by side), 2–4 metres in length and 1–3 metres in width, which may be at the centre of the tumulus (as at Tumiac, Tumulus-St-Michel, Mané-er-Hroëk, Mané-Lud) or at one end (as at Le Moustoir

Plate 5.1 Le Tumulus-St-Michel at Carnac (Morbihan)

and Er Grah). Some of the monuments also have subsidiary structures in the form of small cists and cairns. In some cases there is evidence for ritual activity prior to the construction of the mound. At Le Moustoir, for example, a large hearth was found at the centre of the mound (figure 5.2a), surrounded by small menhirs and associated with pottery and animal bone (Galles 1865). At Mané-Lud (figure 5.2a), a deposit of charcoal and animal bone found beneath the mound attests to similar activity (Le Rouzic 1911). Two parallel alignments of small menhirs were found near the eastern end of the mound at Mané-Lud (figure 5.2b), and skulls of horse were found in association with the five menhirs at the northern end of the easternmost alignment.

Table 5.1 Grand Tumulus monuments: dimensions of mound (metres)

Site	*Length*	*Width*	*Height*
Er Grah	120	48	?
Mané-Lud	80	50	6
Mané-er-Hroëk	100	60	6
Le Moustoir	89	40	8
Tumiac	55	55	15
Tumulus-St-Michel	125	60	10

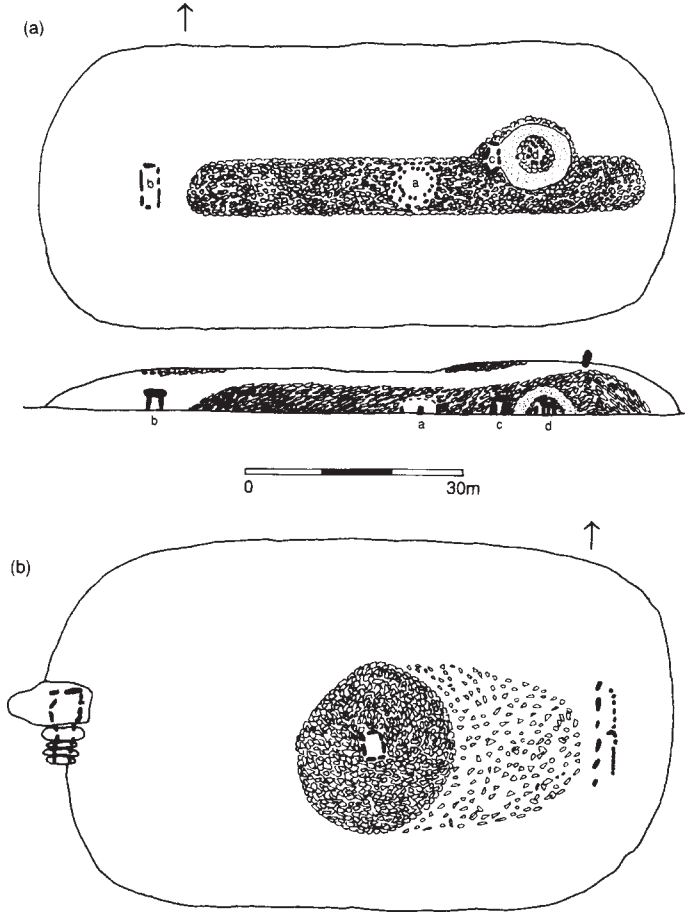


Figure 5.2 (a) Le Moustoir: a: central hearth; b-c: cists; d: primary chamber, (b) Mané-Lud

Although most of the monuments were excavated either in the nineteenth century or in the early part of the twentieth century, the excavation reports do permit the identification of construction phases in several of the monuments. At Le Moustoir (Galles 1865) the evidence suggests at least three construction phases (figure 5.2a): the main chamber is covered by a circular cairn, 10 metres in diameter, which was later incorporated in an elongated cairn, 65×8 metres. This elongated cairn seems, in its turn, to have been covered by a massive earth mound, 89×40 metres. The large hearth and one of the subsidiary cists were associated with the second construction phase, whilst another subsidiary cist was

associated with the final phase. An essentially similar pattern can be noted at Mané-Lud (Le Rouzic 1911), where the main chamber is covered by a circular cairn, 22 metres in diameter, which seems to have been extended at a later stage, covering an area of charcoal and animal bone (figure 5.2b). The whole construction was later enclosed, as at Le Moustoir, by a massive earth mound, and the two alignments of menhirs at the eastern end are associated with this phase. There is a passage grave at the western end of the mound at Mané-Lud (figure 5.2b), but the relationship between this monument and the *Grand Tumulus* remains unclear, and could only be resolved by extensive excavation. A similar series of construction phases was noted at Le Tumulus-St-Michel (Le Rouzic 1932), but the method of excavation (a series of tunnels) makes it difficult to establish the precise stratigraphy of the site: once again, the main chambers seem to be covered by an initial circular cairn, later enclosed in an elongated mound, constructed in at least two phases. Subsidiary cists seem to have been associated with all three phases, and there is a small passage grave at the eastern end of the mound, clearly associated with the final phase. The most recent excavations at Er Grah have shown that the main chamber is covered by a rectangular cairn, which was later incorporated in a large earth mound: postholes found beneath the earth mound suggest the existence of wooden partitions, similar to those noted in long mounds in Southern England and elsewhere (e.g. at Beckhampton; Smith and Evans 1968).

The evidence from sites such as Mané-Lud, Le Moustoir, Tumulus-St-Michel and Er Grah suggests a fairly complex series of rituals, perhaps conducted over several years. In each case, the first phase seems to have been the construction of the main chamber, sealed within a circular cairn. The evidence from Le Moustoir and Mané-Lud suggests that feasts may have been held in the immediate vicinity of the cairn prior to its incorporation in a much larger mound. On several of the sites, the extension of the mound seems to have been associated with a series of rituals involving the construction of small cists and, at Mané-Lud, the erection of two files of menhirs and the deposition of horse skulls. Horse remains are present in quantity both at Mané-Lud and Le Moustoir, and it is possible that this animal had some special significance.

Unlike the passage graves, the megalithic chambers of the *Grand Tumulus* monuments have no access to the outside, and would thus have been sealed up after the construction of the first phase cairn. These chambers are relatively simple rectangular structures, in some cases of mixed megalithic and drystone construction. Human bone was found in the chambers of Mané-Lud and Tumiac, but this material has not been preserved, and the precise nature of these depositions cannot be established from the excavation reports. Grave goods are recorded almost exclusively from the main chambers: the subsidiary cists generally

contain only charcoal and small fragments of animal bone, though fragments of a decorated *vase-support* were found in a subsidiary cist at Le Moustoir (L'Helgouach 1965). Pottery is never found in the main chambers of the *Grand Tumulus* monuments, and the most common elements of these assemblages are stone axes and necklaces of variscite beads. The stone axes are quite different from those found in passage graves and gallery graves. Briard and L'Helgouach (1957) state that 76 per cent of the axes found in these monuments are of fibrolite and 23 per cent are of pyroxenite rocks: this provides clear evidence for selection, since axes of fibrolite and pyroxenite account respectively for only 22 per cent and 5 per cent of the total stone axe assemblage from the Armorican region (Cogné and Giot 1952). In terms of typology, Briard and L'Helgouach (*op. cit.*) distinguish three classes of stone axe from *Grand Tumulus* assemblages:

(i) Large axes of pyroxenite rocks, up to 465 mm in length, triangular in shape, with oval, fusiforme or sub-rectangular cross-section.
(ii) Smaller axes of pyroxenite rock, of similar form but with perforated butt.
(iii) Small axes of fibrolite with rectangular cross-section.

Axes of classes (i) and (ii) (figure 5.3) occur almost exclusively in *Grand Tumulus* monuments, though they have also been identified in hoards from Arzon, Guidel and Quiberon (Le Rouzic 1927, Marsille 1927). These hoards have a broadly similar distribution to the *Grand Tumulus* monuments, and seem to be related to them.

Variscite necklaces, consisting of beads interspersed with oval pendants, are known from several monuments, and three distinct necklaces were identified in the Tumiac chamber (Le Rouzic 1935). These necklaces are relatively rare in other monuments: L'Helgouach (1965) lists variscite beads from ten Armorican passage graves (including 154 from Kercado and 80 from Kerlagad). Variscite (the 'callais' of earlier writers) occurs naturally in the area of Pannecé, Loire-Atlantique (Forestier *et al.* 1973), and this is almost certainly the source of the raw material for beads in Armorican monuments.

The assemblages from *Grand Tumulus* monuments include particularly large numbers of axes and beads (table 5.2), and depositions of this nature have no clear parallels in other classes of monument in the Armorican Neolithic. At Le Tumulus-St-Michel (Le Rouzic 1932), the stone axes in the chamber were found to have been placed vertically, in a deposit of 'ashes and burnt bone'. This vertical placement of the axes finds parallels in the two axe hoards from Arzon, Morbihan (Le Rouzic 1933), where pyroxenite axes are recorded as being arranged in a circle and placed vertically. At Mané-er-Hroëk, most of the axes were found

beneath the pavement of the chamber (Galles 1863), but four axes were found lying on the pavement itself, in a deposition that is of particular interest (pl. 2.2, figure 5.4). The largest of these axes was placed with its butt resting on a polished stone ring, and with two spherical pendants placed at the blade end, in an arrangement that must surely reflect an element of sexual symbolism (see chapter 2). The association of pyroxenite axes and polished stone rings finds parallels in hoards from Guidel and Quiberon (Marsille 1927).

The chronology of the *Grand Tumulus* monuments has always been problematic. Briard and L'Helgouach (1957) assigned them to the

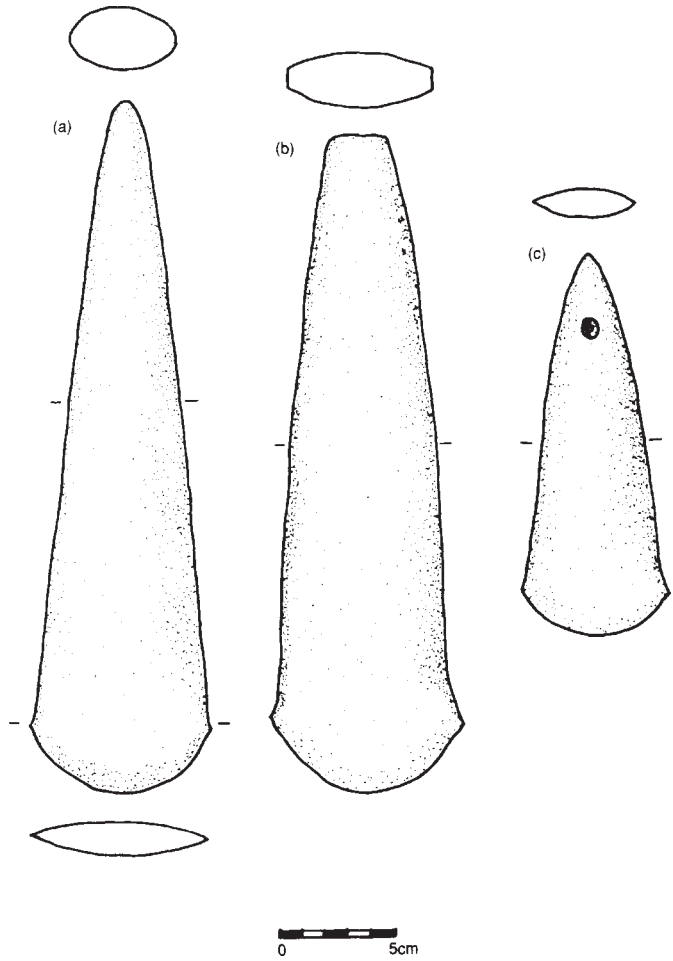


Figure 5.3 Polished axes from *Grand Tumulus* monuments

Table 5.2 Grand Tumulus monuments: grave-goods

Site	*Pyroxenite axes*	*Fibrolite axes*	*Variscite beads/ pendants*
Er Grah	0	0	6
Mané-er-Hroëk	12	90	58
Tumiac	15	15	249
Tumulus-St-Michel	11	26	110

Chalcolithic, largely on the grounds that the expanded blades on stone axes of classes (i) and (ii) (figure 5.3) were thought to reflect imitation of copper axes. More recently it has been argued (Kinnes and Hibbs 1989, Boujot and Cassen in press) that the monuments are of Early Neolithic date, belonging (like the *tertres tumulaires* and decorated menhirs) to a 'pre-passage grave ritual landscape'. There are, however, several lines of evidence which combine to suggest a Middle Neolithic date, overlapping with the passage graves themselves. Firstly, it may be significant that both passage graves and *Grand Tumulus* monuments incorporate re-used fragments of decorated menhirs. The capstone of the megalithic chamber

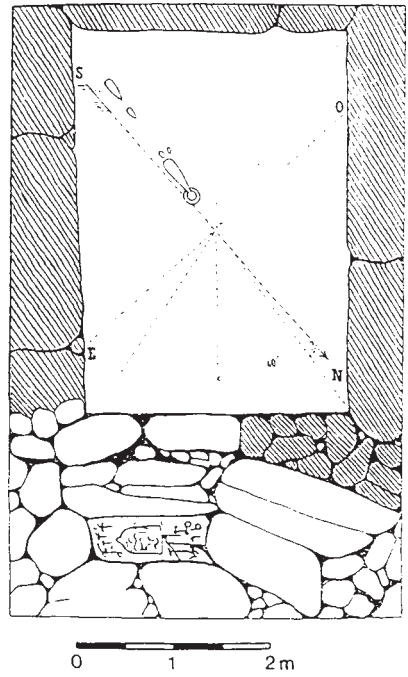


Figure 5.4 Deposition of axes, pendants and stone ring from Mané-er-Hroëk (after Galles 1863)

at Er Grah is one such fragment, and is probably a part of the great menhir represented by fragments from the passage graves of Gavrinis and La Table des Marchand (Le Roux 1984). A fragment of another decorated menhir was found in the blockage of the chamber at Mané-er-Hroëk (figure 5.4). The evidence from recent excavations at Locmariaquer suggests that these menhirs were pulled down at around the beginning of the fourth millennium cal. BC (see chapter 3), and this provides an approximate *terminus post quem* for the construction of the *Grand Tumulus* monuments.

Secondly, the cist associated with the final phase mound extension at Le Moustoir produced a decorated *vase-support*. Such vessels are characteristic of the Middle Neolithic period (*c.* 4250–3250 cal. BC), giving an approximate *terminus ante quem.* Thirdly, although pyroxenite axes of classes (i) and (ii) (figure 5.3) are not found in passage graves, carved representations of such axes are found in the passage grave of Gavrinis (figure 4.16), suggesting a chronological overlap between the passage graves and the *Grand Tumulus* monuments. This suggestion is in no way contradicted by the evidence from Le Tumulus-St-Michel, where a small passage grave is apparently associated with the final phase extension of the *Grand Tumulus* monument. The relationship between the passage grave and the *Grand Tumulus* monument at Mané-Lud (figure 5.2b) remains unclear, but a large-scale excavation of this site could provide important information on the relative chronology of these two monument types. All of the evidence suggests that the *Grand Tumulus* monuments represent a relatively short-lived phenomenon, probably lasting a few centuries at most. Whilst it is not yet possible to fix the chronology of these monuments with any accuracy, a date in the first half of the fourth millennium cal. BC seems most likely.

The passage grave of Gavrinis is one of the 'higher order' monuments identified in the previous chapter: it is one of the largest passage graves in Southern Brittany, and is also distinguished by the quality and extent of the carvings which decorate the walls of the passage and chamber, including an unusually high concentration of 'entoptic' motifs (see chapter 4). The monument of Gavrinis clearly has some special importance in relation to the other passage graves of Southern Brittany, and it appears to have had some specific association with the social group represented by the *Grand Tumulus* monuments. Although carvings of axes are a recurrent motif in Armorican megalithic art, it is only at Gavrinis that we find representations of the elaborate ceremonial axes characteristic of the *Grand Tumulus* series. This link between the *Grand Tumulus* monuments and the Gavrinis passage grave may be particularly important in understanding the social processes associated with the emergence of the largest Armorican megaliths, and this is a question to which we will return at the end of this chapter.

AVENUES OF STONE: THE MEGALITHIC ALIGNMENTS OF CARNAC AND ST-JUST

Unlike the *Grand Tumulus* monuments, megalithic alignments are not unique to the Carnac region: on the contrary, alignments are recorded from all the *départements* of Brittany (Bender 1986, Burl 1985, Decombe 1879, Lecerf 1983, Le Pontois 1929), though they are apparently absent in the Channel Islands and Western Normandy (figure 5.5). These alignments vary greatly both in terms of the number and size of the stones. The majority of them have suffered at the hands of quarrymen, so that the original extent of many alignments cannot now be ascertained. Most of the alignments consist of small menhirs, around 1 metre in height, arranged in between two and six parallel lines, extending up to 50 metres. Three of the alignments in Western Brittany (Lagatjar, Leuré and Raguénés) are distinguished by having stone rows set perpendicular, rather than parallel, to one another (Burl 1985, Le Pontois 1929 and see figure 5.6). Where excavations have been carried out, alignments have generally revealed very little. At Kersolan (Morbihan), for example, excavations revealed no artefacts associated with the menhirs of the alignment, and the only feature identified was a single hearth (Lecerf 1983), the charcoal of which gave a radiocarbon date of 5330±80 BP (4340–4030 cal. BC: Gif-5765). Recent excavations at the alignment of Les Pierres Droites (Morbihan) revealed a similar lack of artefacts and associated features. This is not in itself particularly surprising: with the exception of funerary rituals, ceremonial activity, however elaborate, need not necessarily involve depositing anything in the ground. The lack of material, however, does pose obvious problems in terms of our ability to reconstruct such activities on the basis of the archaeological evidence.

The alignments of St-Just (Ille-et-Vilaine) are more extensive than most other Armorican alignments, and they are better understood as a result of recent excavation (Le Roux 1979b, 1981, 1983a). The principal surviving menhirs form part of the 'Alignements du Moulin', consisting of three parallel lines of stones, extending over 60 metres. The tallest menhirs are over 2 metres in height. Like most megalithic alignments, the St-Just complex seems to have suffered considerably at the hands of Medieval and later quarrymen, and isolated groups of menhirs on the Coujoux heathland, to the west of the surviving alignments, suggest that the complex was originally more extensive than it is today (Burl 1985). Excavation of the northern row of the Alignements du Moulin (Le Roux 1979b) revealed a scatter of pottery between two of the menhirs, representing a series of hemispherical bowls, including at least one vessel decorated with *repoussé* buttons. The excavation of the southern row (Le Roux 1979b, 1981, 1983a) gave more surprising results: postholes were

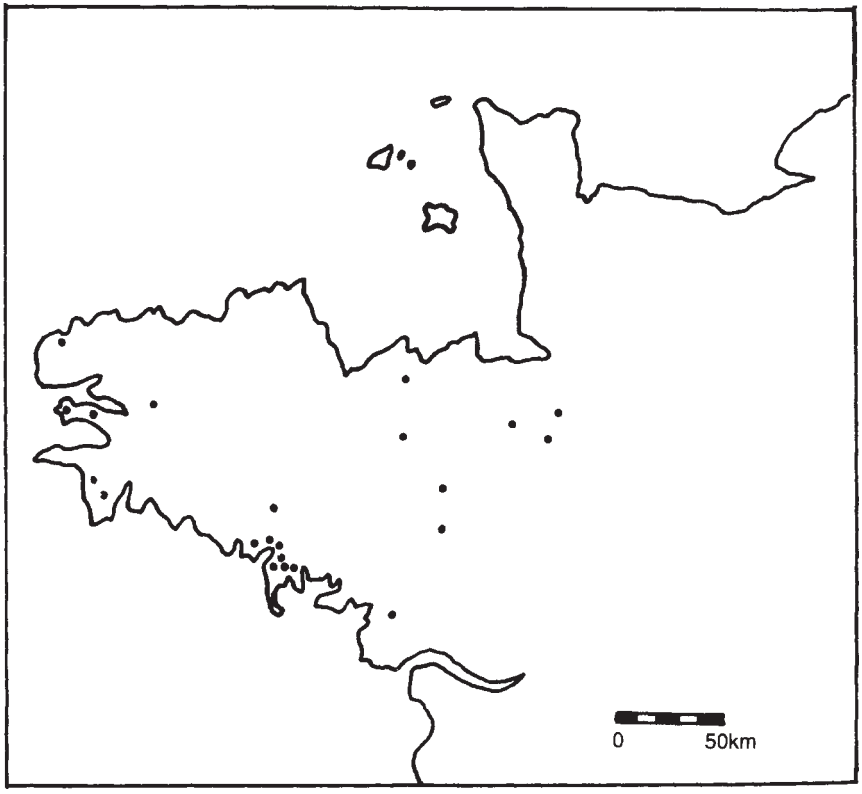


Figure 5.5 Distribution of megalithic alignments

found, suggesting that wooden posts were placed at intervals between the menhirs of the alignment, and a hearth was found in line with the stones of the alignment, surrounded by an irregular setting of postholes, possibly representing a light roofed structure. Some of the stones of this southern row were found to be set into a low, narrow cairn, and a series of six hearths were found on the land surface underlying this cairn. Charcoal from these hearths gave four radio-carbon dates:

5580 ± 120 BP = 4560–4340 cal. BC (Gif-5456)
5550 ± 120 BP = 4510–4330 cal. BC (Gif-5457)
5660 ± 120 BP = 4710–4370 cal. BC (Gif-5458)
5570 ± 80 BP = 4500–4350 cal. BC (Gif-5763)

Some of the menhirs of the alignment were apparently associated with this level (Le Roux 1981), whilst others were set into the material of the

cairn itself. The date of the cairn is uncertain, but there is evidence for continued activity on the site into the Bronze Age.

The St-Just alignments form part of a complex ritual landscape on the Coujoux heathland, which seems to span the whole of the Neolithic period. This landscape (figure 5.7) includes the Early Neolithic long mounds of La Croix-St-Pierre and La Croix-Madame, the Middle Neolithic passage graves of Chateau-Bu and La Croix-St-Pierre, and the Late Neolithic lateral entrance grave of Le Four-Sarrazin. The complex also includes a semi-circular setting of stones, known as 'Les Demoiselles de Coujoux', which is of uncertain date. The precise relationships between these monuments and the alignments themselves are obscured by the destruction of so many stones over centuries of quarrying, but the incorporation of the alignments in a wider landscape is important as a parallel for the much more extensive ritual landscape surrounding the alignments at Carnac.

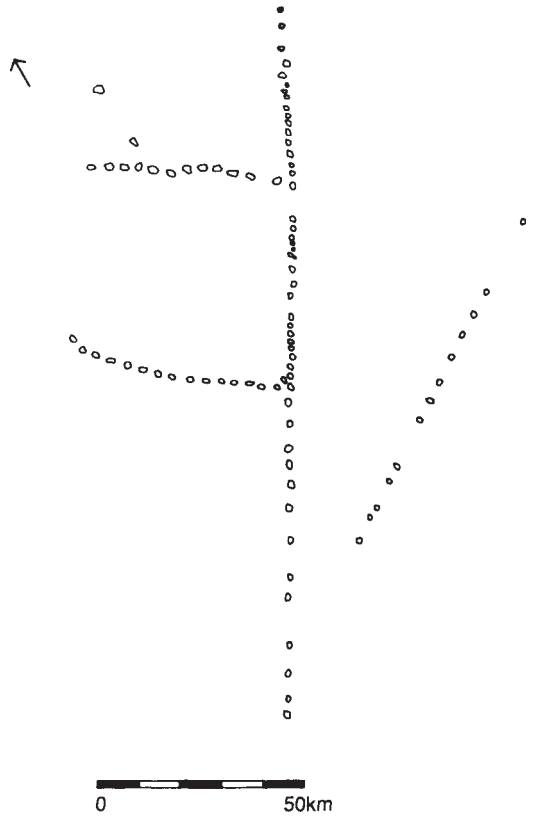


Figure 5.6 The alignments of Lagatjar

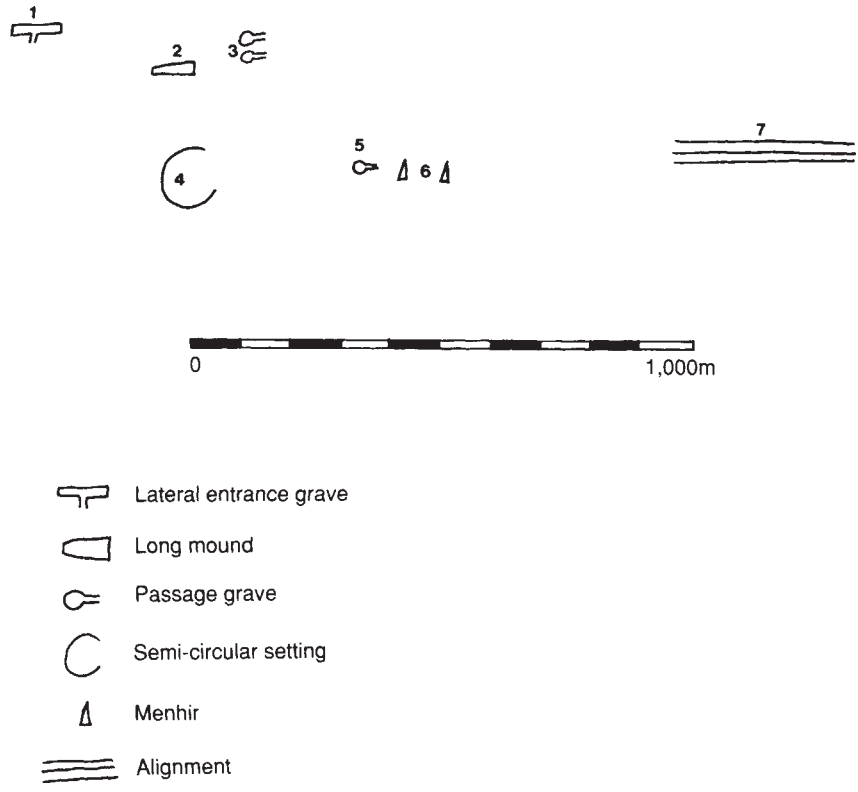


Figure 5.7 The ritual landscape of St-Just: 1 Le Four-Sarrazin; 2 La Croix-St-Pierre long mound; 3 La Croix-St-Pierre passage graves; 4 Les Demoiselles de Coujoux; 5 Chateau-Bu passage grave; 6 Menhirs; 7 Les Alignements du Moulin

The alignments of Carnac (pl. 5.2) were conceived and built on a much larger scale than any of the other megalithic alignments in the Armorican region. The surviving alignments fall into three main groups, Menec, Kermario and Kerlescan, which together extend over 3 km, with over 3000 stones. The more extensively damaged alignments of Petit Menec, Ste-Barbe and Kerzerho (Burl 1985) suggest that the original complex was even larger, extending from the Crac'h Ria in the east to the sea near Plouharnel, in all more than 8 km. The stones of the Carnac alignments range from 50 cm to over 4 m in height, and in each group of alignments the largest stones (weighing up to 50 tonnes) are located at the western end.

The Carnac alignments are associated with stone circles. The Menec alignment (figure 5.8) begins with a stone circle at its western end, and the

Plate 5.2 The alignments of Kermario at Carnac (Morbihan)

remains of a second stone circle have been recorded (Thom and Thom 1978) at the eastern end. The Kermario alignment probably also had a stone circle at either end: that at the western end has been completely destroyed, but aerial photography has revealed traces of the eastern circle (Burl 1985). The stone circle at the western end of the Kerlescan alignment is particularly well preserved, but there is no trace of a circle at the eastern end, where the alignments have been extensively damaged. There is a further stone circle lying 90 metres to the north of the Kerlescan alignment (Thom and Thom 1978).

The alignments themselves change direction at various points along their length: the Menec alignment has one such change of direction (figure 5.8), whilst the Kermario alignment has three. These changes in direction suggest that the alignments may have been erected in several phases. Thom and Thom (1978) make two significant claims with regard to the Carnac alignments: firstly that both the alignments themselves and the stone circles were laid out according to a precise geometry, with a standard unit of measurement (the 'Megalithic Yard'), and secondly that the alignments form part of an extrapolation device for predicting eclipses, linked to a 'lunar observatory' centred on the Grand Menhir

Brisé at Locmariaquer. Neither of these claims has found widespread acceptance. The 'lunar observatory' hypothesis is based on the identification of several megalithic 'backsights' aligned (with the Grand Menhir Brisé as a 'universal foresight') towards the rising and setting positions of the moon at major and minor standstills. There is a problem, however, in that the area is so rich in megalithic remains that plausible 'backsights' would be found on almost any line drawn outwards from the Grand Menhir (Patrick and Butler 1974). As regards the geometry of the alignments, there is a further problem in that both the alignments and the associated circles have been extensively damaged and, more recently, restored, so that it is difficult, if not impossible, to be certain of their precise original form. In such cases, the Thoms have employed a good deal of special pleading to fit the archaeological evidence to their precise geometrical constructions: this is clear, for example, from their plan of the Menec stone circle (figure 5.9), where only a few of the surviving stones actually fall on the dotted line representing the 'egg-shaped' geometrical

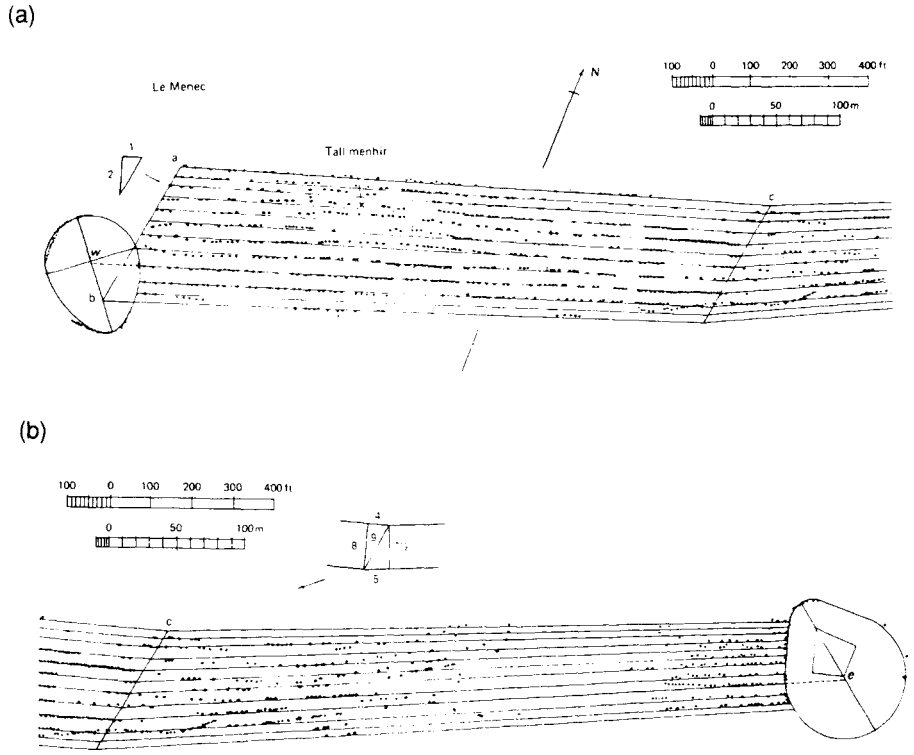


Figure 5.8 The alignments of Le Menec (after Thom and Thom 1978)

construction. The Thoms, however, have done an enormous service to Breton archaeology in producing the first comprehensive set of detailed and accurate plans of the Carnac alignments. Although statistical analysis (Freeman 1975) does not support their claims for a precise unit of length (the 'Megalithic Yard') in the Carnac alignments, it is clear that the alignments and circles were laid out with considerable care. This presupposes some form of measurement, and one possibility is that the 'Megalithic Yard' is simply a megalithic pace (Bender 1986). If the argument for an astronomical function remains unproven, it does seem likely that the megalithic alignments and circles of Carnac were the focus of large-scale tribal gatherings and ceremonies. Burl (1985) suggests that as many as a thousand people could have stood comfortably in one of the large stone circles, and it does seem likely that such monuments were a focus for very large gatherings of people. Unfortunately the evidence currently available offers few clues as to the nature or significance of these ceremonies. One possibility is that the erection of the stones themselves was the main ceremonial event. In Melanesia, for example, megalithic alignments and circles are erected in the context of male initiation ceremonies (Deacon 1934, Layard 1942): the initiates are required to sponsor the construction of these monuments and to offer a large feast, but the megaliths themselves do not become a focus for continued ritual activity after the initial ceremony. Each generation of initiates is required either to build a new monument or, in some cases, to extend an existing alignment.

Like the alignments of St-Just, the Carnac alignments lie at the centre of a complex and extensive ritual landscape (figure 5.10) including monuments of many types, spanning the whole of the Neolithic period. Some of the monuments in this landscape are clearly earlier than the alignments themselves (the Kermario alignments, for example, run over the top of the Le Manio 1 long mound: Le Rouzic *et al.* 1923), whilst others are contemporary with or later than the alignments. Such a landscape must clearly have developed over several centuries.

The chronology of the alignments themselves remains uncertain (see below), but they are clearly later than the long mounds, and are probably earlier than the gallery graves. The construction of the alignments created an artificial landscape in which the existing monuments were incorporated: the monuments of the past were thus appropriated by the alignment builders, as elements in their own religious system. Once established, this culturally constructed landscape provided a spatial network on which new monuments could be located, enabling subsequent generations of monument builders to construct their own symbolic relationship to the past.

The close relationship between the alignments and stone circles at Carnac (figure 5.8) suggests that these should be seen as elements of a

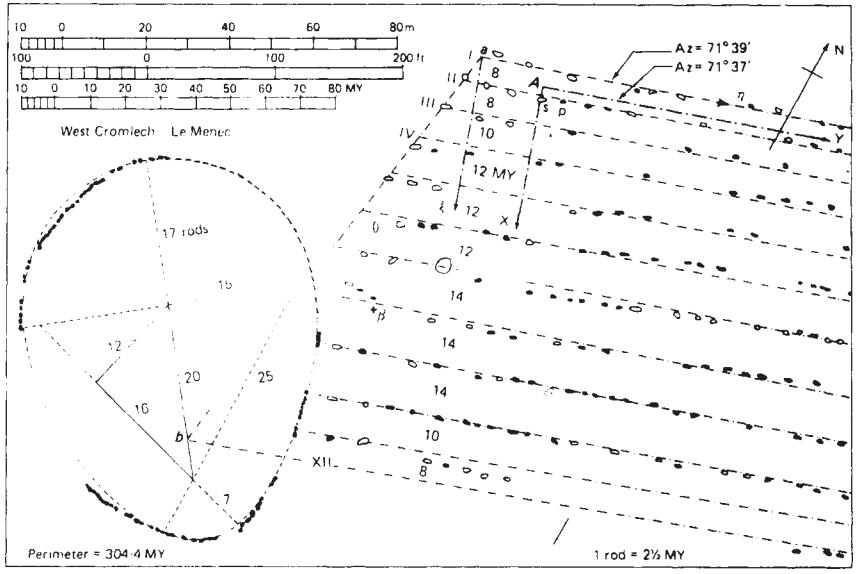


Figure 5.9 The western circle of Le Menec (after Thom and Thom 1978)

single ritual complex. Stone circles, however, also occur separately from alignments, though they occur almost exclusively in Southern Brittany, around the Golfe du Morbihan (Burl 1985). These stone circles, such as Kergonan, Grah-Nioul, Grand-Rohu, Champ de la Croix, Crucuno and Kerbourgnec (Burl *op. cit.*), are essentially similar to those associated with the Menec (figures 5.8–5.9) and Kerlescan alignments. Most have been extensively damaged, but where the dimensions can be established they range from 33 metres (Crucuno) to 180 metres (Grand-Rohu) in diameter (the two circles at Menec have diameters of 90 and 110 metres respectively). In shape they are not true circles, but may be egg-shaped (as at Menec; see figure 5.9), D-shaped (as at Kergonan) or even rectangular (as at Crucuno). Like the alignments, these circles were probably used for large-scale tribal gatherings and ceremonies but, like the alignments, they have provided little detailed evidence. The only site to have been excavated on a relatively large scale is the double stone circle of Er Lannic (figure 2.4). The southern circle, and half of the northern one, are now below sea level, and Le Rouzic's (1930a) excavations were confined to the part of the northern circle which remains above the high-tide mark. Le Rouzic found a series of small cists, both inside the stone circle and around the outside. These cists contained large quantities of charcoal, and in some cases the stones themselves had been damaged by fire, leading Le Rouzic (1930a) to conclude that the cists had been 'ritual hearths'. Apart from the

charcoal, the cists contained pottery, animal bone (cattle, deer and fish), worked flints and polished axe fragments. The number of fibrolite axes and rough-outs found at Er Lannic suggests that the site functioned as an axe production site (see chapter 2), but it must also have been an important ceremonial site, and this provides an interesting link between megalithic ritual and the production and exchange of stone axes. The quantity of pottery from the site is equally remarkable: Le Rouzic (1930a) records 800 kg of pottery, including fragments of 162 decorated *vase-supports*. The ceramic assemblage from the site is essentially similar to that from the pre-

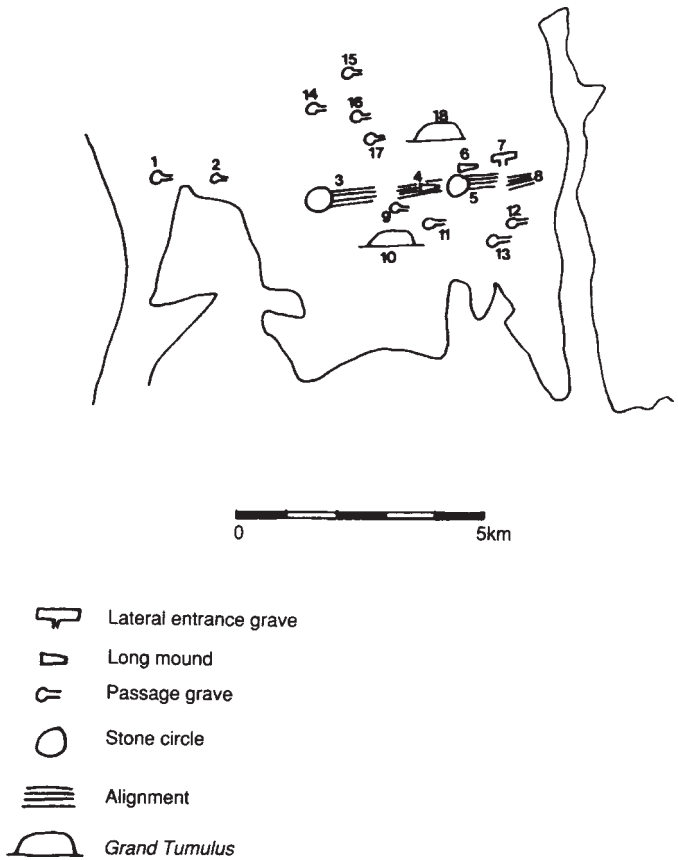


Figure 5.10 The ritual landscape of Carnac: 1 Rondossec; 2 Kergavet; 3 Le Menec; 4 Kermario/Le Manio; 5 Kerlescan alignments; 6 Kerlescan long mound; 7 Kerlescan lateral entrance grave; 8 Le Petit Menec; 9 Kermario passage grave; 10 Le Tumulus-St-Michel; 11 Kercado; 12 Mané-Bras; 13 Kermarquer; 14 Mané-Kerioned; 15 Klud-er-Yer; 16 Mané-Keriavel; 17 Er Mané; 18 Le Moustoir

megalithic horizon at La Table des Marchand (see chapter 3), suggesting a date between *c.* 4250 and *c.* 3750 cal. BC.

The chronology of the Carnac alignments has always been problematic, because of the lack of large-scale excavations and the general scarcity of known archaeological material. Le Rouzic *et al.* (1923) recognised that the Kermario alignments ran over the Le Manio 1 long mound, and from this concluded that the alignments must be later. Since the 'Chasséan' pottery assemblage from the long mound was considered to be of Middle Neolithic date (*c.* 4250–3250 cal. BC), the alignments have conventionally been dated to the Late Neolithic (cf. Giot *et al.* 1979). The most recent evidence, however, suggests that they may be significantly earlier. Recent excavations at Locmariaquer and elsewhere have permitted a series of important refinements in Armorican Neolithic chronology and, on the basis of these, it has been necessary to reconsider the dating of long mounds such as Le Manio 1 (see chapter 3). Such monuments are now thought to have been built in the early to mid-fifth millennium cal. BC, providing a new *terminus post quem* for the construction of the Carnac alignments. The radiocarbon dates from megalithic alignments at Kersolan and St-Just suggest dates within the second half of the fifth millennium cal. BC: we might expect the much larger Carnac alignments to be slightly later than this, but this would still put them firmly in the Middle, rather than the Late Neolithic. Given the close association between alignments and stone circles in the Carnac complex, it seems reasonable to suggest that these two classes of monument are broadly contemporary. The stone circles at Er Lannic are comparable to those at Menec and Kerlescan, and the ceramic assemblage from this site suggests a date between *c.* 4250 and *c.* 3750 cal. BC. On balance, then, it seems most likely that the alignments and stone circles of Carnac were built during the first half of the fourth millennium cal. BC.

Although the largest alignments are concentrated around Carnac, in Southern Brittany (the same area as the *Grand Tumulus* monuments), megalithic alignments are found in most areas of the Armorican massif, apart from the Channel Islands and Western Normandy. Stone circles, on the other hand, like the *Grand Tumulus* monuments, have a more restricted distribution around the Golfe du Morbihan. Both the alignments and the stone circles are likely to have served as arenas for large-scale gatherings and ceremonies, in contrast to the passage graves (to which only a limited number of people could have had access) and the *Grand Tumulus* monuments (which seem to relate to a small social elite). The most recent evidence, however, suggests a significant chronological overlap between the passage graves, the alignments and circles, and the *Grand Tumulus* monuments, and we should perhaps see these as complementary elements in a single religious system. One question that remains

unresolved is that of the relationship (if any) between the megalithic alignments and circles and the earlier complexes of decorated menhirs (see chapter 3). These early complexes, like the alignments and circles, were open ceremonial sites which may have served as arenas for large-scale communal gatherings and rituals. The restricted distribution of the decorated menhirs also coincides broadly with that of the stone circles and larger alignments. Unfortunately, the form of the earlier complexes remains unclear, largely because of the apparently deliberate destruction of these complexes at the end of the fifth millennium cal. BC. There are significant differences between the early complexes and the surviving alignments and circles: the stones of the early complexes are very much larger, and are usually decorated with carved motifs. It is at least possible, however, that the alignments and stone circles of the Carnac region reflect a transformation of an earlier tradition, represented by the great menhirs of Locmariaquer.

MONUMENTS AND SOCIETY IN THE CARNAC REGION: 4250–3250 CAL. BC

In the previous chapters, we have traced the development of a tribal society in the Armorican Neolithic, with a social structure based on elders' control of religion, and control over the circulation of stone axes. Through these related mechanisms, it is suggested, tribal elders were able to control the social progression of young men to adult status, and could thus make demands on their labour and loyalty. This social formation seems to have emerged during the fifth millennium cal. BC (see chapter 3), and was closely linked to the adoption of agriculture. The evidence of the passage graves (see chapter 4) suggests a consolidation and expansion of this social system during the first half of the fourth millennium cal. BC, with increasing control of ritual embodied both in the structure of the monuments themselves and in the nature and positioning of carved motifs within them. The same period is marked by an expansion of stone axe exchange networks, and megalithic art attests to a continued close link between axes and megalithic ritual (see chapter 2).

The passage graves also provide evidence for a degree of centralisation in ritual practice, linked to the development of larger segmentary societies represented by massive monuments such as Petit Mont, Barnenez and La Hougue Bie. This process of expansion and centralisation can perhaps be understood as an outcome of competition between social groups. Friedman and Rowlands (1977) have developed a general model to explain the social dynamics involved in such processes. According to the Friedman and Rowlands model, competition is mediated through the sponsoring of lavish feasts. The ability of a community to produce a large

agricultural surplus, and thus sponsor a more lavish feast, is taken as an indication of supernatural patronage, which is in turn understood as evidence for a close genealogical relationship to a founding ancestor or spirit. Clans or lineages which are consistently able to sponsor the most lavish feasts are thus able to present themselves as 'older' or 'more direct' lineages, with a privileged relationship to the spirit world, and such groups may acquire a special role in relation to the control of initiation ceremonies and other rituals. If marriage arrangements involve bridewealth, such groups may be able to demand higher bride-prices, enabling them to accumulate bridewealth valuables. These valuables can then be used to acquire more women from other lineages in the context of polygynous marriages, increasing the labour pool in the dominant lineage and accelerating the process of social differentiation by permitting the production of an even larger surplus.

This model may give some insight into the significance of developments in the Carnac region during the fourth millennium cal. BC. The scale of the *Grand Tumulus* monuments clearly suggests a degree of centralisation, and the nature of the material found in the chambers of these monuments suggests a specific association with high status social groups. The variscite necklaces and elaborate ceremonial axes can probably be seen as 'symbols of power', and the relative rarity of these items suggests that they must have circulated within a closed social network. The archaeological evidence points to a degree of chronological overlap between the *Grand Tumulus* monuments and the Armorican passage graves, and the carvings in the passage grave of Gavrinis include representations (figure 4.16) of the elaborate ceremonial axes found in the *Grand Tumulus* monuments. The monument of Gavrinis must have had some special significance in relation to the other passage graves around the Golfe du Morbihan: it is distinguished from most of the other monuments both by its size and by the extent and nature of the carved motifs. It may therefore be particularly significant that this monument appears to have some special association with the elite group represented by the *Grand Tumulus* monuments. Certainly it seems likely that this elite group had some special status in relation to the religious life of communities around the Golfe du Morbihan, and Gavrinis should be seen as a powerful expression of this status. The Carnac alignments, however, can perhaps be seen as an even more spectacular manifestation of the power and status of this group. Although megalithic alignments are found across most of the Armorican region, the scale and extent of the Carnac complex sets it apart from any of the other alignments in Brittany. This unique complex is located in the same area as the *Grand Tumulus* monuments, and the Menec alignment is overlooked by the largest cairn, Le Tumulus-St-Michel (figure 5.10). The most recent chronological evidence suggests that the alignments and the *Grand Tumulus*

monuments may be broadly contemporary with one another, dating probably to the first half of the fourth millennium cal. BC. The extent of the alignments, and the size of the associated stone circles, suggest that the complex may have been a focus for ceremonies involving very large numbers of people, and it seems likely that these ceremonies were controlled by the same social elite as is represented by the *Grand Tumulus* monuments. With the construction of the Carnac alignments, the individual monuments which already existed in the area became incorporated in a complex ritual landscape, and were thus encompassed and appropriated by the elite responsible for the alignments. The evidence from sites such as St-Just suggests that similar landscapes developed elsewhere in the Armorican region, probably reflecting similar social processes, but these developments are on a far smaller scale.

The *Grand Tumulus* monuments and the Carnac alignments together represent a unique development in the area around Carnac and Locmariaquer. Whilst this development can perhaps be seen as the outcome of processes which affected the whole of the Armorican region, it is nonetheless quite distinct. This area at the western end of the Golfe du Morbihan, seems to have had a particular importance from the beginning of the Armorican Neolithic, as suggested by the great carved menhirs of Locmariaquer (see chapter 3): throughout the fifth and fourth millennia cal. BC, the Carnac area seems to have been a focus for larger social groupings, with more elaborate monumental ritual and greater social differentiation. The diversity and productivity of the natural environment was probably an important factor in the development of Neolithic society in this area: the resources provided by the fertile agricultural land on the higher ground, by the extensive marshes of the Golfe du Morbihan and, of course, by the sea, would have facilitated the increasing surplus production required for intensive social competition.

Powerful though it must have been, however, the social elite responsible for the *Grand Tumulus* monuments and the Carnac alignments seems to have been relatively short-lived. Only a few *Grand Tumulus* monuments were ever built, and in the second half of the fourth millennium cal. BC, the passage grave of Gavrinis was deliberately sealed up and abandoned. The period which followed saw the decline of larger monuments and the proliferation of new types of megalithic tomb, showing little evidence for social differentiation. The *Grand Tumulus* monuments were once seen (cf. Briard and L'Helgouach 1957) as precursors of the rich tumulus burials of the Armorican Early Bronze Age, but it is now clear that the two monument types are separated from one another by almost a thousand years. The Carnac elite, therefore, did not evolve into a Bronze Age chiefdom, it simply collapsed. The collapse of this local elite seems to have been part of a much more widespread socio-

cultural development which affected the whole of the Armorican region, involving the replacement of passage graves by new monument types. The reason for this collapse remains unclear: one possibility is that the natural environment was unable to sustain the increasing surplus production demanded by a highly competitive social system, another possibility is that internal conflict and social tensions caused the collapse of the system. These hypotheses, in any case, are not mutually exclusive, as social conflict and environmental pressure may have been closely interlinked.

6

LAND FOR THE LIVING, TOMBS FOR THE DEAD

Burial monuments of the Late Neolithic

The second half of the fourth millennium cal. BC was marked by a series of important social and cultural transformations across the Armorican region. Firstly, the evidence suggests a marked expansion of settlement, with much of the interior of the Armorican Massif being settled for the first time. Secondly, the construction of passage graves ceased, though many of the existing passage graves continued in use. The construction of *Grand Tumulus* monuments also ceased. The evidence from St-Just suggests that ritual activity around the alignments continued, though it is unclear whether the actual construction of megalithic alignments continued into the Late Neolithic. Thirdly, the period is marked by the proliferation of new types of burial monument, most notably the gallery graves and lateral entrance graves. The organisation of space in these monuments is less complex than that of the passage graves: a gallery grave (figure 6.1) consists of a simple rectangular chamber, in some cases divided into a main chamber and an antechamber, whilst a lateral entrance grave (figure 6.2) is a similar monument, elaborated by the addition of a short entrance passage, set at right angles to the long axis of the chamber. Gallery graves are found right across Northern France, from Western Brittany to the Paris Basin, whereas lateral entrance graves occur only in the Armorican region. Art is rare in Armorican gallery graves and lateral entrance graves, but carved representations do occur in some monuments in Northern Brittany. Unlike the motifs in passage graves, which are highly stylised and often hidden from general view, these motifs are in prominent positions and are often explicitly representational. The most common motif is a female anthropomorphic representation, stylised as a pair of breasts and a necklace and executed in *haul-relief* (figure 6.11a).

In chapter 4 it was argued that the organisation of space within passage graves and the nature of associated carved motifs embodied restrictions of access to ritual knowledge. In this chapter it will be suggested that these restrictions broke down during the second half of the fourth milennium

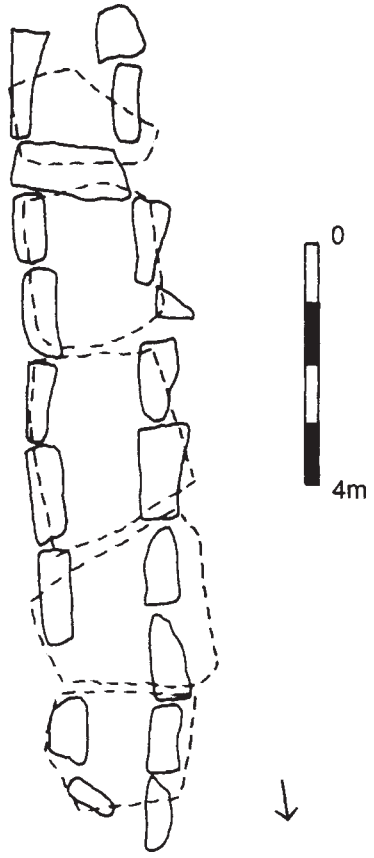


Figure 6.1 Mogau-Bihan (after L'Helgouach 1965)

cal. BC. The model outlined in chapter 4 also involved restricted access to the monuments in death: where human remains are found in passage graves, the number of individuals represented is generally very small. The evidence is limited by the fact that human remains are rarely preserved on the acidic soils of Brittany, but gallery graves in the Paris Basin have been found to contain the skeletons of several hundred people, suggesting a more open access to the tombs in death. The large quantities of human remains found in some gallery graves, combined with the relatively simple structure of the monuments themselves, also suggest a greater emphasis on the remains of the dead as a focus of ritual activity: whilst death and burial appear to have been only one aspect of the rituals associated with passage graves, the gallery graves can perhaps be seen as true charnel houses.

In addition to the gallery graves and lateral entrance graves, the period

is marked by the appearance of other new monument types, including megalithic cists, angled graves and T-shaped graves. Some of these monument types have restricted distributions and appear to reflect the development of distinct regional traditions in megalithic architecture. The emergence of regional traditions is also evident from a study of the material culture of the period. Regional pottery styles such as Quessoy (figure 6.3d), Kerugou (figure 6.3e) and Conguel (figure 6.3f) are found alongside material of the more widely distributed Seine-Oise-Marne tradition (figure 6.3a-b).

In comparing Middle Neolithic and Late Neolithic monument forms in the Armorican region, it is also important to note a marked transformation in terms of the spatial distribution of monuments and the articulation of monuments in the landscape in relation to one another. The distribution of passage graves (see chapter 4) is essentially coastal, and there are marked clusters of monuments in particular areas. Certain passage graves stand

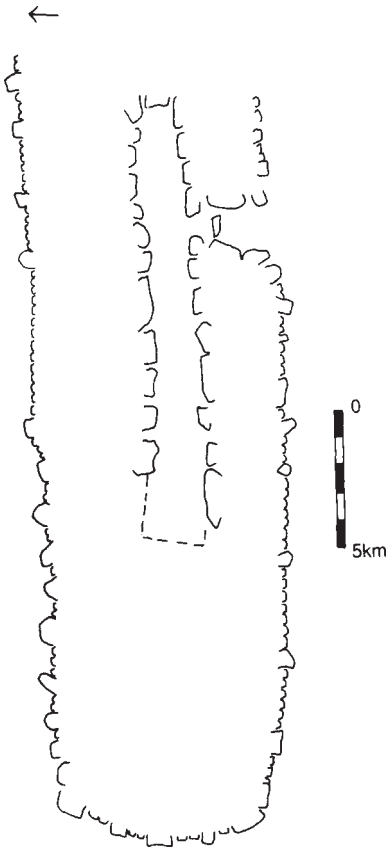


Figure 6.2 Crec'h-Quillé (after L'Helgouach 1967)

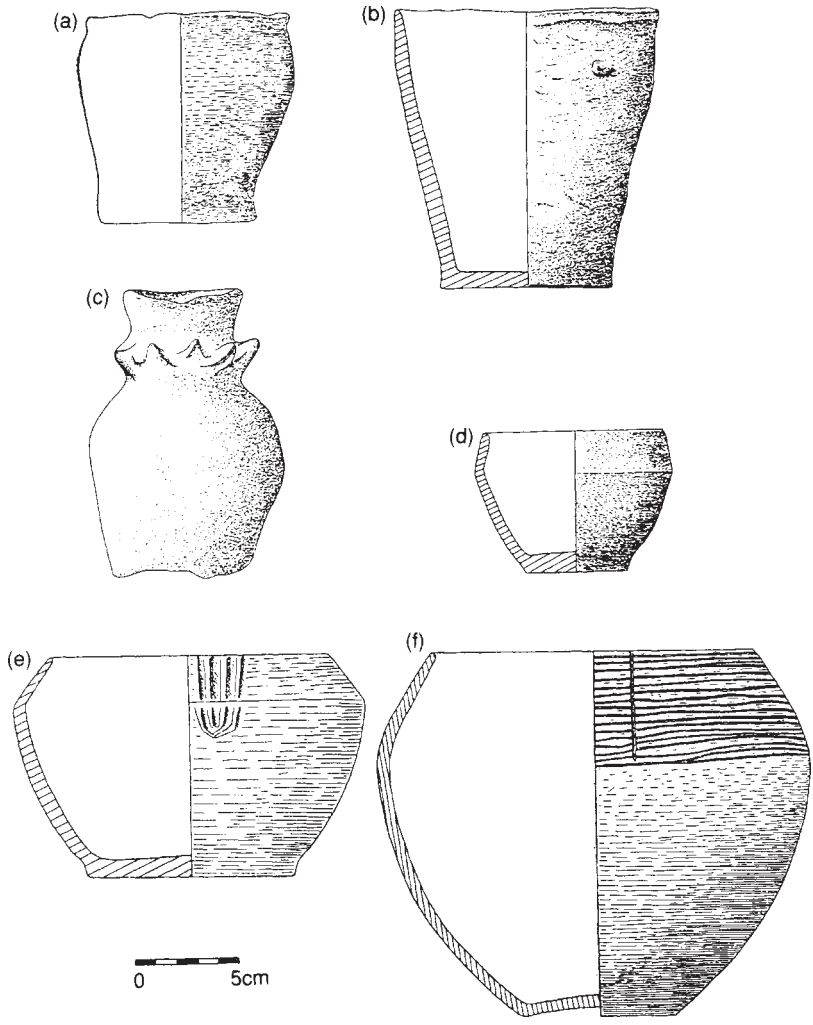


Figure 6.3 Armorican Late Neolithic pottery styles (after L'Helgouach 1965): (a)-(b) Seine-Oise-Marne; (c) Bouteille à collarette; (d) Quessoy; (e) Kerugou; (f) Conguel

out from others by virtue of their size and other features, and should probably be seen as higher order ritual centres. Gallery graves and lateral entrance graves, by contrast, occur extensively in the interior of the Armorican Massif as well as in coastal areas, and no monuments stand out as having special importance. In contrast to the clustered distribution of passage graves, Late Neolithic monuments are in most cases relatively evenly spaced and Renfrew's (1976) 'territorial marker' hypothesis is more

convincing when applied to these monuments than it is when applied to passage graves.

Some of the transformations of the late fourth millennium cal. BC can perhaps be explained in relation to subsistence changes. With the expansion of settlement into the interior of the Armorican Massif the diversity of the resource base decreased, making communities increasingly dependent on agriculture and husbandry and making land increasingly important as the means of food production. This might involve the appearance of 'territorial markers', linked to an increasing emphasis on the ancestors as a focus of ritual activity (cf. Renfrew 1976). This, however, cannot explain the full significance of the transformations which occurred. It is necessary also to explain the disappearance of higher order ritual centres, and it is necessary to explain the transformations which occurred in terms of the organisation of space within monuments and in terms of the nature and positioning of carved motifs within them. It will be argued that these transformations relate to a progressive disintegration of the social formation which had developed during the Middle Neolithic period, and this is a theme which will be taken up in the following chapter.

MONUMENTS IN DECLINE

Although the construction of passage graves appears to have ceased in the mid-fourth millennium cal. BC, many of these monuments continued in use through the Late Neolithic period, before being finally abandoned in the early third millennium cal. BC. Late Neolithic artefacts are frequently found in secondary contexts in Armorican passage graves: L'Helgouach (1965) lists blades of Grand Pressigny flint from thirteen monuments, Kerugou pottery from eight monuments and Conguel pottery from four. It is often difficult to establish the nature and significance of Late Neolithic activity in passage graves, owing to the disturbed condition of the deposits and the inadequacy of early excavation techniques. In some cases, Late Neolithic re-use of passage graves may have involved the clearing out of earlier deposits. In the passage grave of Le Déhus (Guernsey), for example, a series of important Late Neolithic and Chalcolithic depositions were found in the main chamber (Kendrick 1928), whilst almost all of the Middle Neolithic material was found sealed in the side chambers, suggesting that the main chamber had been cleared of earlier deposits (Patton in press). In other cases the re-use of earlier monuments involved the laying of a new floor on top of the original deposits: in the passage grave of Conguel (St-Pierre-Quiberon, Morbihan), for example, Late Neolithic and Chalcolithic pottery was found in association with two skeletons on the uppermost of two floor levels (L'Helgouach 1962). Insofar as it is possible to reconstruct the activities

carried out in passage graves, these do not seem to have changed fundamentally from Middle Neolithic times: at Le Déhus and at Conguel both Middle and Late Neolithic phases involved the deposition of human remains and pottery. In most cases, however, the surviving evidence does not permit the detailed analysis of depositional activity within the monuments. In one unusual case, at Beg-an-Dorchenn (Plomeur, Finistère), a gallery grave (figure 6.4) seems to have been tacked onto the end of an abandoned passage grave (Giot 1947).

Although many passage graves have produced evidence for continued activity throughout the Late Neolithic period, some monuments were abandoned in the mid-fourth millennium cal. BC. This is particularly the case with some of the larger passage graves identified in chapter 4. The passage grave of La Hougue Bie (Jersey) has provided no evidence for Late Neolithic activity (Patton 1987a and in press), whilst the closure of the Gavrinis passage grave (Larmor-Baden, Morbihan) is dated by a

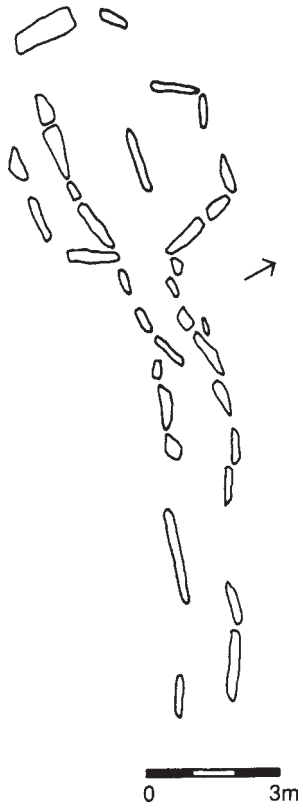


Figure 6.4 Beg-an-Dorchenn (after L'Helgouach 1965)

radiocarbon date (Le Roux 1983b) of 4470±80 BP (3340–2910 cal. BC: Gif-5766). The abandonment and closure of passage graves will be discussed in more detail in the following chapter.

The *Grand Tumulus* monuments, in contrast to the passage graves, seem to have been abandoned completely at the end of the Middle Neolithic period. Although the precise chronology of these monuments remains uncertain (see chapter 5), there is no evidence for Late Neolithic activity at any of the monuments. The final phase of the cairn at Le Moustoir incorporates a cist which contained Middle Neolithic pottery (L'Helgouach 1965). The chronology of the megalithic alignments is even more problematic, though it has been argued (see chapter 5) that most were probably constructed during the Middle Neolithic period. Certainly the evidence from Carnac and St-Just suggests that the alignments continued to be a focus for ritual activity, and that Late Neolithic monuments were located with reference to them (see figures 5.7 and 5.10).

THE ARMORICAN GALLERY GRAVES

A gallery grave (figures 6.1, 6.5) consists of a rectangular megalithic chamber, built of upright stones and roofed with horizontal slabs. Unlike the gallery graves of the Paris Basin (Bailloud 1964), which are generally sunk into bedrock, those of the Armorican region are fully megalithic and free-standing (pl. 6.1).

In many cases the chamber is divided into a main chamber and an antechamber or vestibule, as at Mogau-Bihan (Commana, Finistère: figure 6.1) and Liscuis III (Laniscat, Côtes d'Armor: figure 6.6). This division of space is also found in the Paris Basin gallery graves (Bailloud 1964) where the junction between antechamber and main chamber is often formed by a 'port-hole slab'. True port-hole slabs are not found in Armorican gallery graves (the predominantly hard igneous rocks of the Armorican Massif would make them difficult to execute), but in some cases the junction is made by a single slab with a semi-circular hollow or notch carved into it: such stones are known (Hawkes 1937, L'Helgouach 1965) from the gallery graves of Le Couperon (Jersey), Toul-an-Urz (Duault, Côtes d'Armor), Liscuis I-III (Laniscat, Finistère), Coat-Menez-Guen (Melgven, Finistère) and Men-Meur (Le Guilvinic, Finistère). More commonly, however, the junction between antechamber and main chamber is formed simply by the addition of a transverse pillar, as at Mogau-Bihan (figure 6.1).

Some Armorican gallery graves are elaborated by the addition of terminal cells, as at Mogau-Bihan (figure 6.1), Kernic (figure 6.5) and Liscuis III (figure 6.6). These cells, formed by two or three blocks, are generally separated from the main chamber by a transverse slab and may

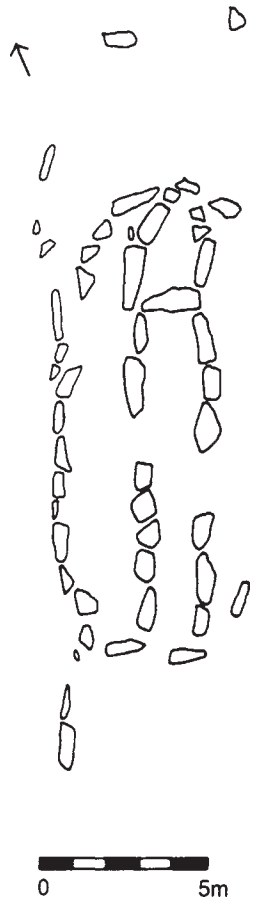


Figure 6.5 Kernic (after L'Helgouach 1965)

be open to the exterior, as at Liscuis III, or sealed, as at Kernic. In many cases, as at Liscuis, the terminal cells are unroofed. L'Helgouach (1965) lists twenty Armorican gallery graves with terminal cells.

'Arc-Boutée' gallery graves, such as Lesconil (Poullan, Finistère) represent a distinctive variation on the gallery grave theme, in which the uprights lean inwards at an angle of 45°, making capstones unnecessary (figure 6.7). L'Helgouach (1965) lists eight such monuments, all in the south of Brittany (the *département* of Morbihan and the southern part of Finistère).

Most of the existing gallery graves of the Armorican region are freestanding, and are not covered by cairns or mounds. L'Helgouach (1965) argues, however, that this is largely a result of post-depositional

Plate 6.1 The gallery grave of Ville-ès-Nouaux (Jersey), under excavation in 1884 (photo: Société Jersiaise)

factors: many of the monuments are situated on fertile agricultural land and the area around them has been intensively farmed, possibly destroying any trace of a mound. A few monuments have provided evidence for mounds but these are generally of earth, rather than stone, and are considerably less monumental than the rubble cairns which cover passage graves. Traces of mounds are recorded (L'Helgouach 1965) at the gallery graves of Liscuis II and III (Laniscat, Finistère), Coat-Menez-Guen (Melgven, Finistère), St-Nizon (Malguenac, Morbihan) and Kerfily (Trédion, Morbihan) and (L'Helgouach and Lecornec 1968) at Mein-Goarec (Plaudren, Morbihan). The gallery grave of Coat-Menez-Guen was contained (L'Helgouach 1965) within a rectangular mound, 22 metres in length and 12 metres in width, defined by stone blocks. The mound itself was of earth with quartz pebbles, and extended to the height of the tops of the orthostats. The arrangement at Liscuis III (Le Roux 1977) is essentially similar: the subquadrangular earth mound, which does not cover the capstones, is delimited at each end by a façade of upright stones (figure 6.6) and on the sides by a poorly preserved drystone wall, which probably completed a system of isolated uprights, a few of which have survived. It is likely that similar mounds on other monuments have been destroyed without trace.

Although the mounds themselves have in most cases been destroyed, many of the Armorican gallery graves are set within rectangular enclosures, similar to those which define the mounds at Coat-Menez-Guen and Liscuis. The gallery grave of Kernic, for example, has an enclosure with a forecourt (figure 6.5). L'Helgouach (1965) lists ten Breton gallery graves with similar enclosures, to which must be added the monuments of Le Couperon and Ville-ès-Nouaux in Jersey (Hawkes 1937) and the Norman gallery graves of Le Bois de la Plesse (Lithaire, Manche: Edeine 1971) and Le Clos-ès-Pierres (Bretteville, Manche: Bender 1968).

The distribution of gallery graves (figure 6.8) is more widespread than that of earlier monument types. They are not confined to Armorica, but are found right across Northern France (cf. Bailloud 1964, Daniel 1960), though there are important regional variations. Within the Armorican region itself, gallery graves are quite evenly dispersed (figure 6.8), in contrast to the coastal distribution of passage graves (figure 4.1). This may reflect an expansion of settlement, with increasing exploitation of

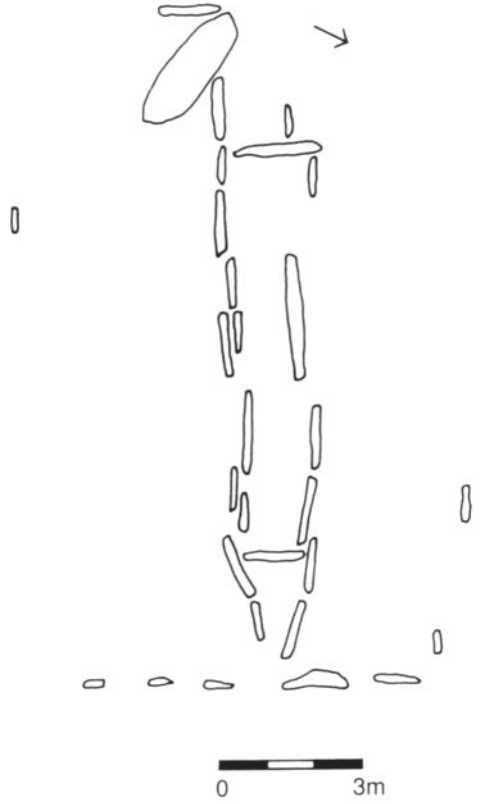


Figure 6.6 Liscuis III (after Le Roux 1977)

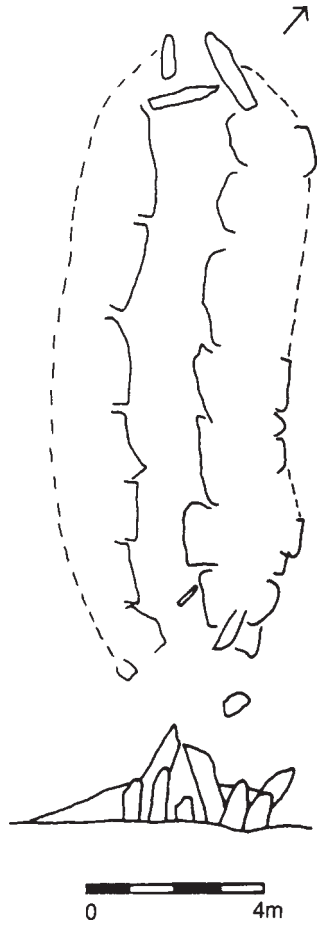


Figure 6.7 Lesconil (after L'Helgouach 1965)

inland zones in the second half of the fourth millennium cal. BC. The distribution of gallery graves is also less clustered than that of earlier monument types.

Figure 6.9 shows the radiocarbon dates from Armorican gallery graves with, for comparison, those from gallery graves in the Paris Basin. It should be stressed that these dates relate to activity within the monuments, and not necessarily to their construction. The range of dates in the two areas are broadly comparable. The assemblages from Armorican gallery graves (L'Helgouach 1965) include pottery of Seine-Oise-Marne type, axe-shaped stone pendants and blades of Grand Pressigny flint, suggesting a date range of *c.* 3250–2850 cal. BC. Where later material is found (see chapter 7), it is usually in a clearly secondary

context. The assemblage from the gallery grave of Kerbannalec (Beuzec-Cap-Sizun, Finistère) is fairly typical, including local round-based vessels (similar to those found in Middle Neolithic contexts) as well as flat-based Seine-Oise-Marne (SOM) forms (figure 6.10). The question of the derivation of gallery graves remains an open one. The traditional view (cf. Daniel 1960) has been that gallery graves emerged in the Paris Basin, and were diffused from there into the Armorican region, supplanting earlier monument types. More recently, however, an Armorican origin for gallery graves has been sought and L'Helgouach (1973) argues for an evolutionary sequence from passage graves to gallery graves, with V-shaped passage graves as an intermediate form. Some support for this hypothesis comes from the site of Liscuis (Laniscat, Finistère), where a V-shaped passage grave (Liscuis I) and two gallery graves (Liscuis II and III) were found in close proximity (Le Roux 1975, 1977). The monument of Liscuis I, like the associated gallery graves, has a vestibule or antechamber defined by a transverse slab, and a terminal cell, formed by two uprights,

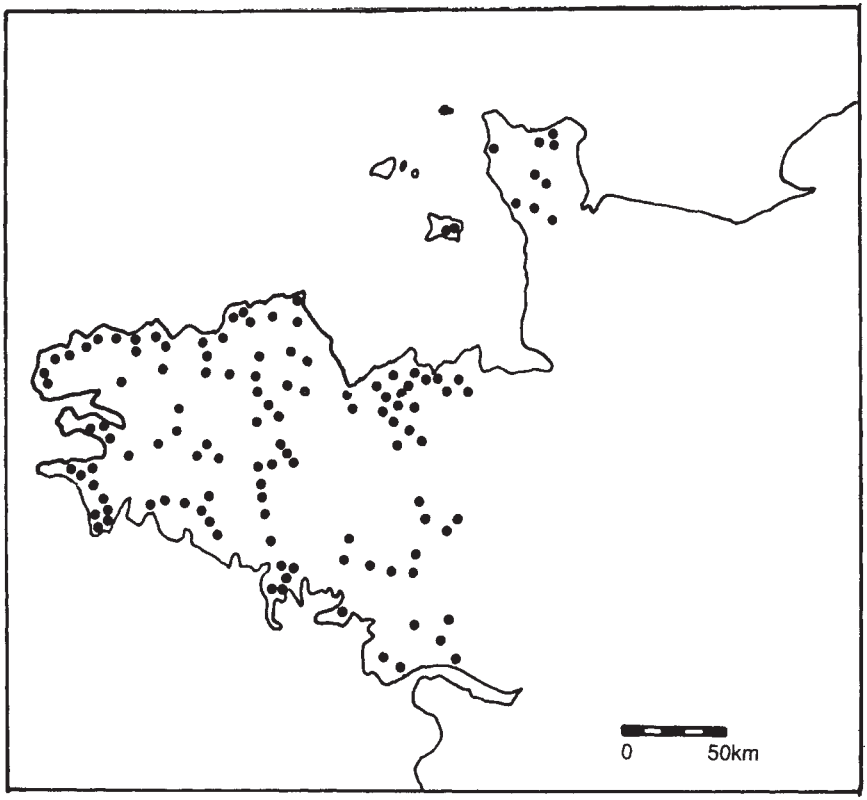


Figure 6.8 Distribution of Armorican gallery graves

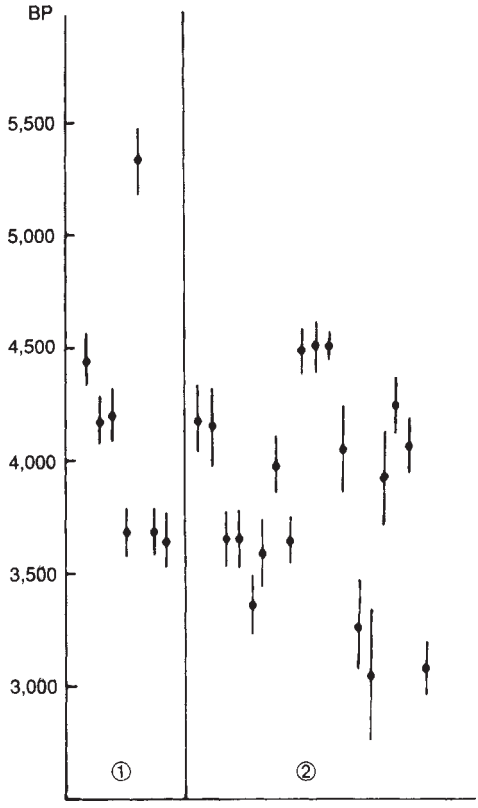


Figure 6.9 Radiocarbon dates from gallery graves in Armorica (1) and the Paris Basin (2)

suggesting a clear link between these two monument types. The precise typology and chronology of these monument types, however, remain unclear (it is uncertain, for example, whether Liscuis I can really be seen as a 'passage grave') and the question of derivation must therefore remain open.

Because of the acidic soil conditions prevalent across most of the region, none of the Armorican gallery graves has produced significant human remains, and it is therefore difficult to speculate on the nature of funerary practices within these monuments. It is always dangerous to extrapolate from one area to another, as this may mask important regional differences, but in Upper Normandy and the Paris Basin, the role of gallery graves as collective tombs is beyond doubt. In most of the Paris Basin gallery graves, human remains are concentrated in the main chamber. These monuments often contain large numbers of skeletons. At La Chausée-Tirancourt (Somme), for example, a minimum of 350 individuals were represented by

bones found on two levels, completely covering the floor of the chamber (Masset 1971). If the Armorican gallery graves were used in a similar way, this would mark a dramatic departure from the Middle Neolithic practices outlined in chapter 4.

The assemblages from Armorican gallery graves include pottery (predominantly of SOM type with some local round-based vessels; figures 6.3, 6.10), polished stone axes, stone pendants and blades of Grand Pressigny flint. Grand Pressigny flint is a significant component of gallery grave assemblages, but never occurs in large quantities: in most monuments where it occurs, it is represented by a single blade (L'Helgouach 1965). It is rare that discrete formal depositions can be identified in gallery graves: where these have been recognised, they are generally of Chalcolithic date

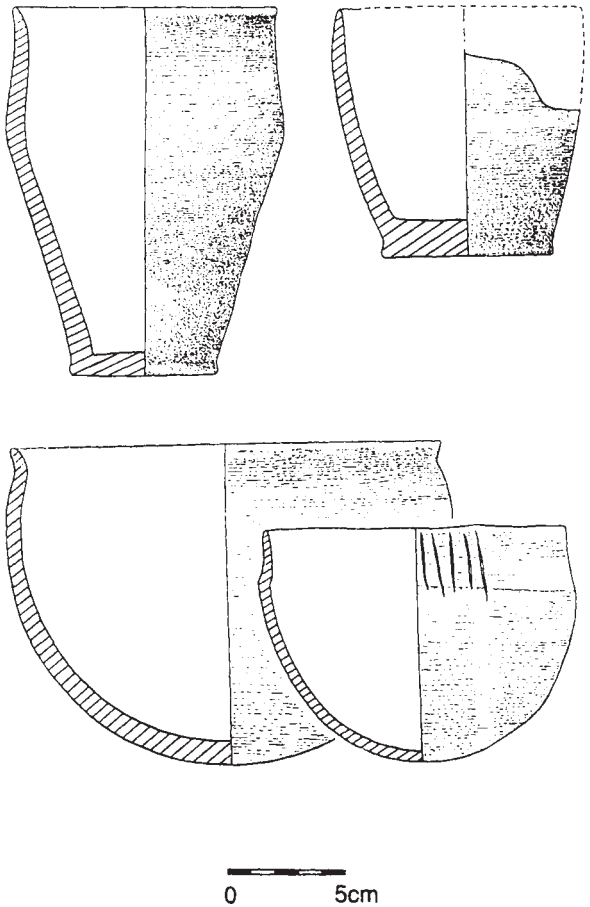


Figure 6.10 Pottery from the gallery grave of Kerbannalec (after L'Helgouach 1965)

(see chapter 7), suggesting that the original deposits were disturbed by later activity. Many of the monuments have paved chambers (L'Helgouach 1965) and, where records exist, the material can usually be shown to have been resting on the paving. At Liscuis II (Le Roux 1975, 1977) the paving was particularly well preserved, and was found to be resting on horizontal 'sleepers'. SOM type pottery was found in the antechamber, and fragments of a carinated bowl were found at the opposite end of the chamber. At Prajou-Menhir (Trébeurden, Côtes d'Armor) the main chamber contained a scatter of SOM pottery, whilst the terminal cell contained an intact 'collared bottle' (L'Helgouach 1966). There is little evidence for ritual activity around the outside of Armorican gallery graves, though this may simply be a factor of post-depositional disturbance and inadequate excavation on many sites. The forecourt at Kernic (figure 6.5) is highly suggestive but, as this site is situated in the intertidal zone (Giot 1984), no trace of these activities could be expected to survive.

Art is rare in Armorican gallery graves, but is recorded (Shee-Twohig 1981) in four surviving monuments (Tressé, Prajou-Menhir, Mogau-Bihan and Mein-Goarec) and two destroyed sites (Kerallant and Kerdonnars). The art comprises a very restricted range of motifs (figure 6.11). The most significant motif, present in all four of the surviving decorated monuments, is a female anthropomorph, stylised as a pair of breasts and a necklace (figure 6.11a) and executed in *haut-relief*. The identification of this motif as a female anthropomorph is confirmed by the existence of identical motifs (figure 6.12) on statue-menhirs (Shee-Twohig 1981) from Le Trévoux (Laniscat, Finistère), Kermené (Guidel, Morbihan), Le Catel and St Martin (Guernsey). Other motifs include an arc (figure 6.11b), possibly related to the earlier 'crook' motif found in passage graves, a motif (figure 6.11e) which is probably derived from the earlier 'écusson' representation and a hafted axe (figure 6.11e), which is recorded from the destroyed sites of Kerdonnars and Kerallant as well as from the gallery grave of Mogau-Bihan. A further motif (figure 6.11d) is of uncertain significance, having been interpreted variously as a representation of a Cypriot tanged dagger (this must certainly be discounted) and as depictions of hallucinogenic mushrooms!

These motifs are fundamentally different from those found in passage graves and are often more visible, being executed in *haut-relief*. Abstract and 'entoptic' motifs are entirely absent. Unlike the carved motifs found in passage graves, they are not concentrated in parts of the chamber hidden from direct light. Figure 6.13 shows the positioning of carved motifs in the gallery graves of Tressé, Prajou-Menhir and Mogau-Bihan. Carved motifs occur both in the main chamber and in the antechamber but female anthropomorphs are concentrated in the antechamber, whilst the only representation of an axe (at Mogau-Bihan) is in the main chamber. Whilst

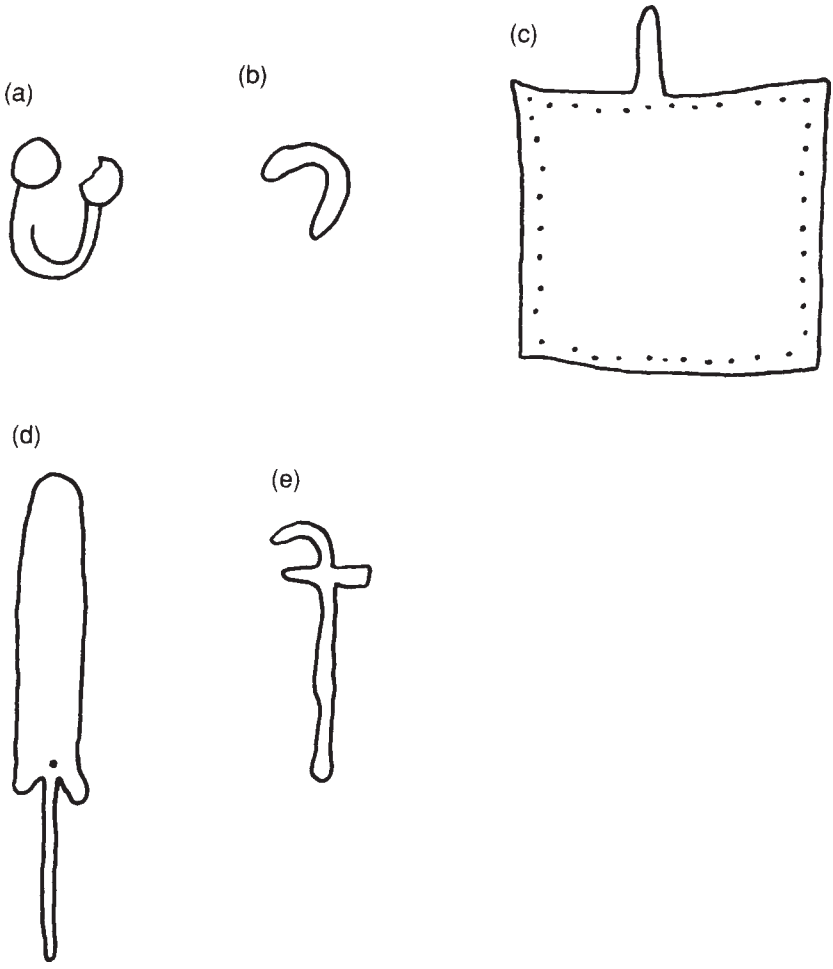


Figure 6.11 Motifs in Armorican gallery grave art

it would be dangerous to draw conclusions on the basis of such a small sample, it is interesting to note that Kinnes (1980) has identified a similar opposition between the placing of representations of axes and women in the gallery graves and rock-cut tombs of the Paris Basin. This can perhaps be linked to the axe symbolism discussed in previous chapters.

LATERAL ENTRANCE GRAVES

A lateral entrance grave (figure 6.2) consists of a rectangular chamber approached by a short entrance passage, usually on the south side. The

construction of these monuments is essentially megalithic, with upright stones covered by capstones. Gaps between the stones of the chamber, however, are frequently filled with drystone walling, as in passage graves. Most monuments are asymmetrical, as the passage is not central (figure 6.2). The junction between passage and chamber is in some cases formed by a pair of notched stones placed together to form a 'porthole' (L'Helgouach 1965), as at Kerlescan and Kerléarec (Carnac, Morbihan), Coët-Correc (Mur-de-Bretagne, Côtes d'Armor) and Les Cartésières (St-Symphorien-des-Monts, Manche). At Kerlescan (L'Helgouach 1965) the

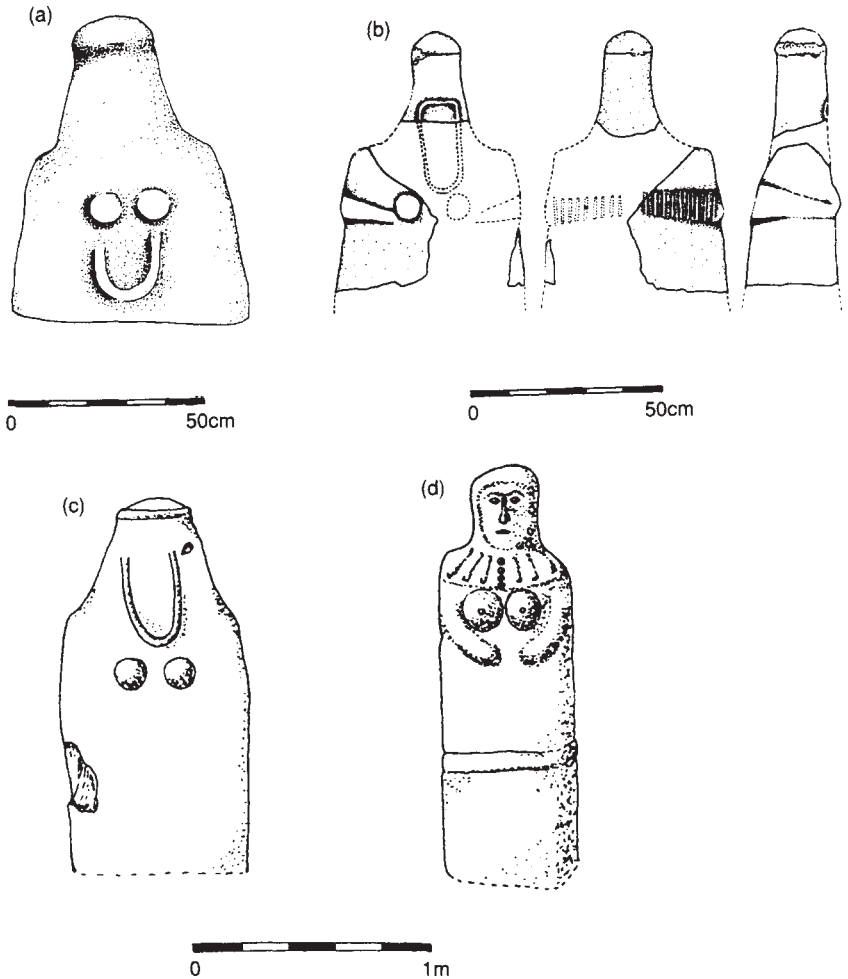


Figure 6.12 Statue-menhirs from (a) Le Trévoux, (b) Kermené, (c) Le Catel, (d) St-Martin ((a)-(b) after Shee-Twohig 1981; (c)-(d) after Kinnes 1980)

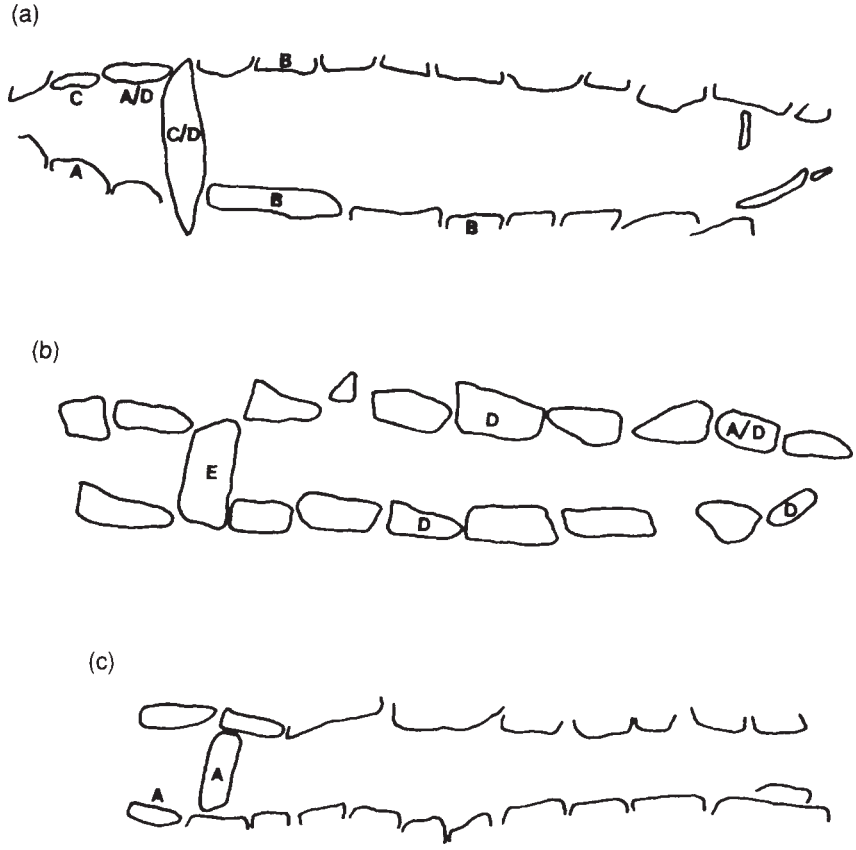


Figure 6.13 Positions of carved motifs in the gallery graves of (a) Prajou-Menhir, (b) Mogau-Bihan, (c) Tressé. The letters refer to the classification of motifs on figure 6.11

chamber itself was divided into two parts (recalling the antechamber/main chamber division in gallery graves) by a further pair of these notched uprights.

Most of the Armorican lateral entrance graves were probably associated with mounds, but these have survived in only four cases (the monuments of Kerlescan, Champ-Grosset, La Roche-Camio and Crec'h-Quillé). Like the mounds associated with gallery graves, these are rectangular and consist principally of earth. The mounds themselves are defined by rectangular enclosures, usually of mixed megalithic and drystone construction. The monument of Crec'h-Quillé (St-Quay-Perros, Côtes d'Armor) has provided the clearest evidence for the construction of the mound (L'Helgouach *1967a*). The rectangular enclosure surrounding

this monument (figure 6.2) consists of upright stones and areas of drystone walling, sloping inwards to form a revetment to the earth mound. The top of the mound is level with the bases of the capstones, which were probably never covered.

There is a particular concentration of lateral entrance graves in Northern Brittany, but monuments are known in most areas of Brittany and in Western Normandy (figure 6.14). As far as chronology is concerned, the assemblages from the lateral entrance graves (L'Helgouach 1965, 1967b) are almost identical to those from Armorican gallery graves. There are only three radiocarbon dates from Armorican lateral entrance graves, and these seem to relate to the final blocking of the monuments rather than to their main period of use:

Crec'h Quillé;	3740±200 BP=2450–1890 cal. BC (GSY-344)
	3760±120 BP=2440–1970 cal. BC (Gif-814)
Champ Grosset;	3820±200 BP=2560–1970 cal. BC (Gif-283).

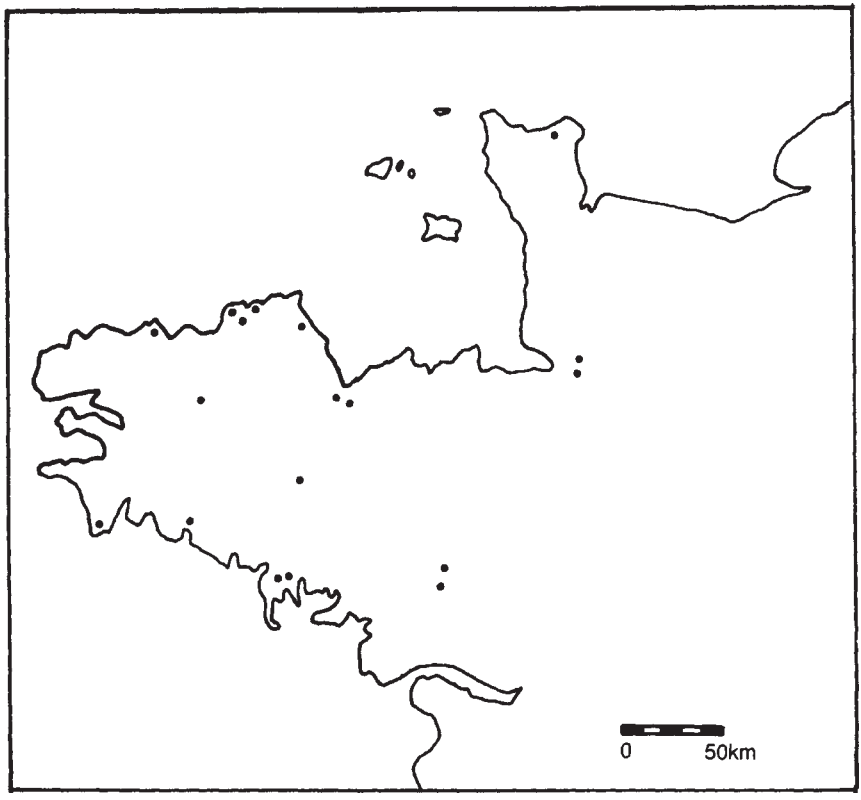


Figure 6.14 Distribution of Armorican lateral entrance graves

L'Helgouach (1967b) has sought to trace an evolutionary sequence in Armorican megalithic architecture, deriving lateral entrance graves from passage graves. In many respects, however, the lateral entrance graves are closer to gallery graves, and one possibility is that they represent a synthesis of these two megalithic traditions. The basic form of a lateral entrance grave is similar to that of a gallery grave, and the assemblages from Armorican gallery graves and lateral entrance graves are also comparable. In the lateral entrance graves, however, the existence of a passage involves a division of space essentially similar to that which characterises the passage graves. This division of space embodies a restriction of access, and limits the extent to which objects and activities within the chamber could be seen and understood by people standing outside.

Because of acidic soil conditions, bone has rarely been preserved. At Champ Grosset (Quessoy, Côtes d'Armor), however, there were apparently two successive floor levels, each associated with a deposition of human bones extending along the entire length of the monument (L'Helgouach and Le Roux 1965). In some cases, there is evidence for re-use of the chamber over several generations: at Bretteville-le-Saire (Manche), three successive pavements were found (Verron 1973). The archaeological material recovered from lateral entrance graves is essentially similar to that from the gallery graves: ceramic assemblages typically include both flat and round-based vessels (cf. figure 6.10), and collared flasks are recorded from Le Mélus (Fournier *et al.* 1956) and Crec'h-Quillé (L'Helgouach 1967a). Kerugou pottery is recorded from Lestrigiou and Kerlescan (L'Helgouach 1965, 1967b). Other finds include polished stone axes and pendants and, in some cases, blades of Grand Pressigny flint (L'Helgouach 1965, 1967b). In most cases the material recovered is from disturbed contexts within the chamber, but at Crec'h-Quillé (St-Quay-Perros, Côtes d'Armor), a cist was found at the junction of passage and chamber, containing five pottery vessels and a schist pendant (L'Helgouach 1967a).

Carved motifs are known only from one lateral entrance grave, the monument of Kerguntuil (Trégastel, Côtes d'Armor). The carvings in this monument (Shee-Twohig 1981) are typical of the gallery grave tradition, including motifs of types A, B and D (figure 6.11), emphasising the link between Armorican gallery graves and lateral entrance graves.

ANGLED GRAVES AND T-SHAPED GRAVES: REGIONAL TRADITIONS IN MEGALITHIC ARCHITECTURE

An angled grave (figure 6.15) is a megalithic tomb in which the chamber is placed at an angle of 45–90° to a passage. In the early literature (cf. Le Rouzic 1933) they were described as 'angled gallery graves', but it has

Plate 6.2 The Chalcolithic site of La Tête des Quennevais (Jersey) under excavation in 1988

since been argued (L'Helgouach 1965) that the monuments are morphologically closer to passage graves than to gallery graves, and the term *sépulture coudée* is now almost universally preferred. In most cases the chamber form does recall that of the passage graves (figure 6.15a), but at Goërem (Gavres, Morbihan) and Mané-Bihan (Locoal-Mendon, Morbihan), the chambers are rectangular (figure 6.15b), like those of gallery graves (L'Helgouach 1965, 1970). Angled graves have a very localised distribution (figure 6.16) in the South Breton *départements* of Morbihan and Loire-Atlantique.

The chambers are in most cases of mixed megalithic and drystone construction, and are roofed with capstones. The structures themselves are covered by oval cairns, up to 4 metres in height (L'Helgouach 1965). Several of the monuments show evidence for an internal subdivision of space. The angled grave of Les Pierres Plates (Locmariaquer, Morbihan) has an end chamber (figure 6.15a), demarcated by a transverse slab: this feature finds a parallel in the passage grave of La Hougue Bie, Jersey (figure 4.17). The angled grave of Goërem is divided into four compartments by means of transverse slabs placed on alternate sides of the chamber (figure 6.15b). The fourth compartment is an end chamber, similar to that at Les Pierres Plates, demarcated by two slabs placed at the centre of the chamber: when the monument was abandoned, the spaces

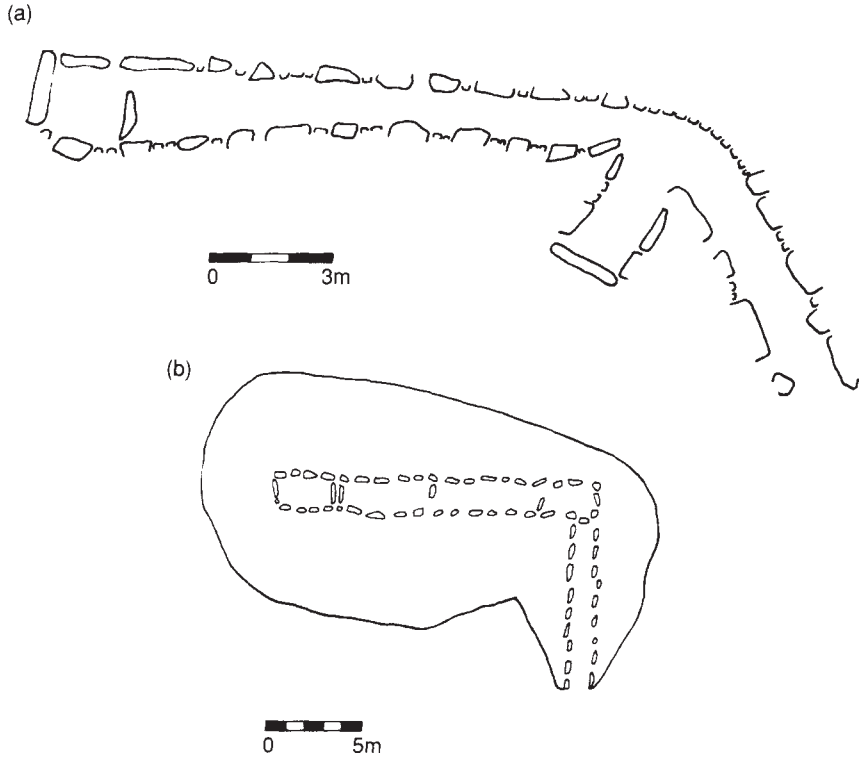


Figure 6.15 (a) Les Pierres Plates (after L'Helgouach 1965); (b) Goërem (after L'Helgouach 1970)

between these slabs and the walls of the chamber were blocked up with dry stone walling, sealing the end chamber completely (L'Helgouach 1970). The Pierres Plates monument has a side chamber similar to those found on some passage graves (cf. figure 4.8).

The chronology of angled graves is problematic, since most monuments have suffered at the hands of early excavators. Only at Goërem has an undisturbed monument been excavated in recent times (L'Helgouach 1970). Charcoal from this monument produced the only radiocarbon date so far available for this class of monument: 4430±140 BP= 3360–2920 cal. BC (Gif-1148).

The assemblages from Armorican angled graves (L'Helgouach 1965) are dominated by Late Neolithic elements, including Kerugou and Conguel pottery and blades of Grand Pressigny flint. L'Helgouach (1965) considers the angled graves to be earlier than gallery graves, and argues

for a derivation from passage graves. It seems clear that angled graves developed locally in Southern Brittany, and certain aspects of their structure do support the idea of an evolution from passage graves. The division of space within the angled graves of Les Pierres Plates and Goërem (figure 6.15) finds parallels in some passage graves (see chapter 4), as does the side chamber at Les Pierres Plates. The angled structure, like the passages of Armorican passage graves, would effectively restrict access to the chamber, and would conceal the ceremonies conducted within the monument from the view of people standing outside. Whilst it seems likely that angled graves developed from passage graves, the precise chronological relationship between passage graves, gallery graves and angled graves remains unclear. The assemblages from the angled graves, however, suggest that most of these monuments were built during the second half of the fourth millennium cal. BC.

The assemblages from Armorican angled graves are quite different from those found in gallery graves and lateral entrance graves. Round-

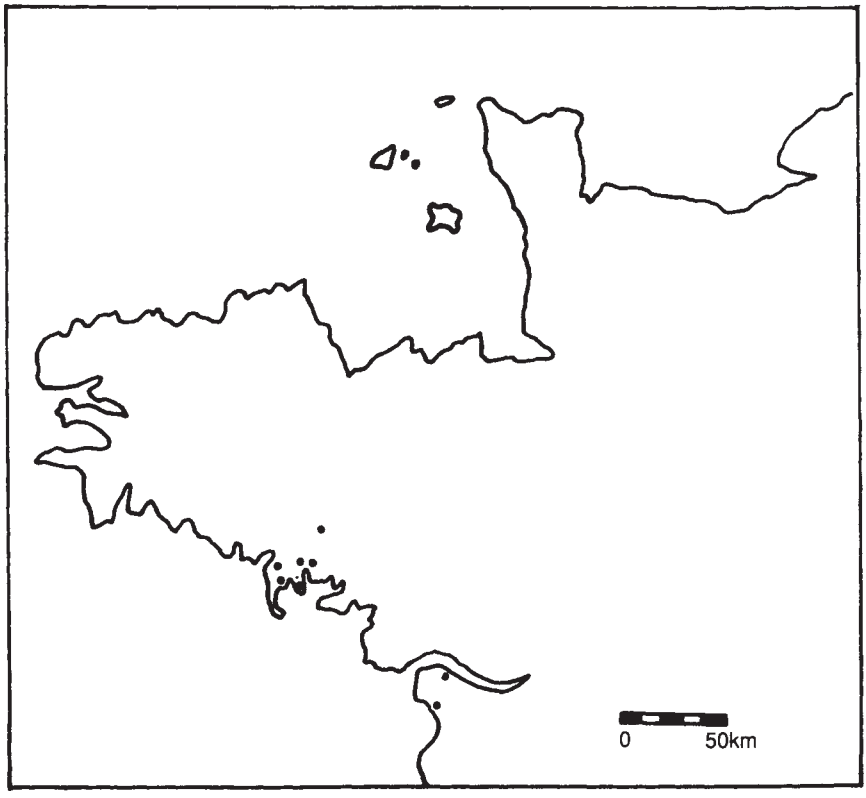


Figure 6.16 Distribution of Armorican angled graves

based vessels were present at Mané-Bihan (L'Helgouach 1965), but SOM tradition flat-based vessels (figures 6.3a-b, 6.10) are absent from angled graves. Ceramic assemblages are dominated by Kerugou style pottery (figure 6.3e) recorded at Mané-Bihan, Le Rocher, Luffang, Moulin Peret and Goërem (L'Helgouach 1965). Conguel style pottery is recorded from Le Rocher (L'Helgouach *op. cit.*). Stone axes are recorded from several sites, as are blades of Grand Pressigny flint (L'Helgouach 1965). More surprisingly, ten variscite beads were found at Luffang (Crac'h, Morbihan): these are identical to the beads found in *Grand Tumulus* monuments (see chapter 5) and in certain passage graves, and such beads are unknown in assemblages from gallery graves and lateral entrance graves. Understanding of depositional practice and the function of the monuments is hampered both by preservation factors and by inadequate recording. Traces of bone were identified at Goërem (L'Helgouach 1970), but these were not identifiable: elsewhere, bone has not been preserved. The excavations at Goërem (L'Helgouach 1970) have added considerably to our understanding of these monuments since, for the first time, we have detailed contextual information from a virtually undisturbed monument. Traces of a wooden floor were noted on top of a stone pavement, and most of the depositions seem to have been placed on this wooden floor. Fragments of four pottery vessels were found in the passage, and a single flint arrowhead was found in the first compartment of the chamber. The second compartment contained traces of bone (not identifiable) but no artefacts, whilst the third compartment contained a quartz pebble pendant and fragments of three vases. The end chamber was distinguished by a layer of deliberately deposited marine sand below the stone paving. This chamber contained a deposition of Bell Beakers and objects of copper and gold, probably placed in it at the time of abandonment of the monument (see chapter 7).

Carved motifs are recorded from the angled graves of Goërem, Luffang, Le Rocher and Les Pierres Plates (Shee-Twohig 1981), and these carvings make up a distinctive artistic tradition, specific to the angled graves. There is a single dominant motif (figure 6.17), which is usually interpreted as a variation on the theme of the 'écusson' motif found in Armorican passage graves (see chapter 4). Bradley (1989) identifies this as an 'entoptic' motif (see chapter 4). At Goërem, Luffang and Le Rocher, this motif occurs exclusively in the chamber, but at Les Pierres Plates it is also found on stones in the passage and side chamber (Shee-Twohig 1981). Other motifs are relatively rare in the art of the angled graves: a very stylised representation of a stone axe has been noted on one of the uprights at Luffang (Shee-Twohig 1981, figure 40) and simple abstract motifs are recorded on stones of the passage at Goërem and Le Rocher.

The angled graves represent a distinct megalithic tradition which

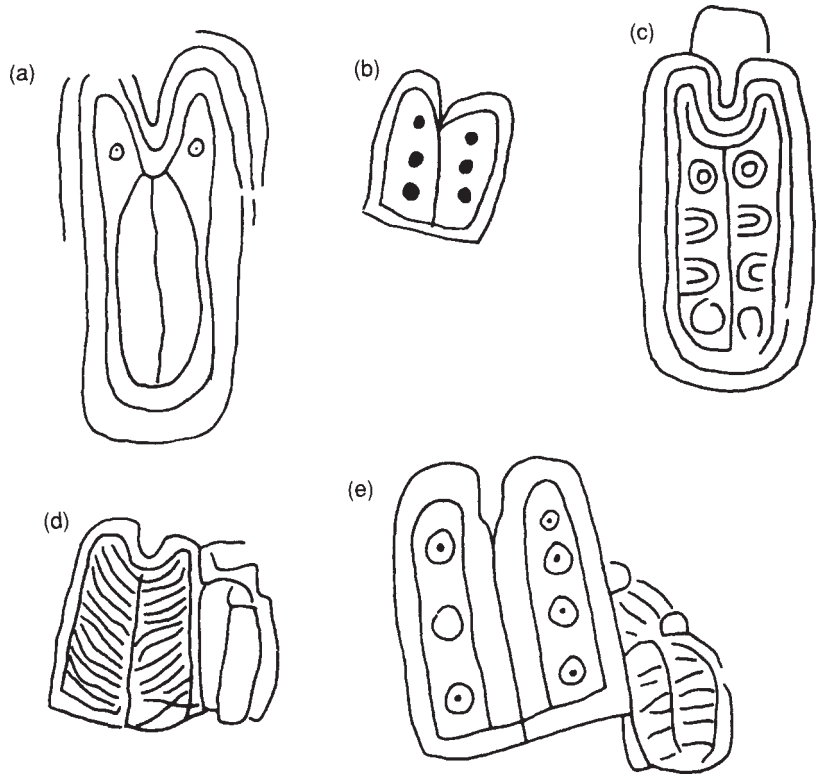


Figure 6.17 Carved motifs from Armorican angled graves ((a) Luffang; (b)-(e) Les Pierres Plates)

developed locally in Southern Brittany in the late fourth millennium cal. BC. In several respects, this tradition could be seen as a localised survival of some aspects of the passage grave tradition into the Late Neolithic period. In terms of structure and division of space, the angled graves are certainly closer to passage graves than to gallery graves or lateral entrance graves, and their design embodies the same possibilities for restriction of access. The link with passage graves is also evident from the carved motifs found in angled graves, which are not explicitly representational and which are in most cases located in parts of the monument which would not receive direct light. In contrast to the art of the gallery graves and lateral entrance graves, that of the angled graves apparently includes 'entoptic' images. Given the importance of Southern Brittany in the development of Middle Neolithic monumental traditions (see chapters 3 and 4), and the spectacular elaboration of these traditions (see chapter 5) in the area around Carnac and the Golfe du Morbihan, it is

perhaps not surprising that aspects of these traditions survived longer in this area than elsewhere, and the angled graves provide some evidence for this.

L'Helgouach (1965) identifies three monuments which he characterises as T-shaped passage graves. These monuments (Keriven at St-Pol-de-Léon, Kerugou at Plomeur and Poulguen at Penmarc'h) are all located in the West Breton *département* of Finistère and, like the angled graves of Southern Brittany, they must be seen as reflecting a local megalithic tradition. Like the angled graves also, they can in some respects be considered to reflect a survival of aspects of the earlier passage grave tradition. A T-shaped passage grave consists of a rectangular chamber with a passage set perpendicular to it (figure 6.18). The construction is fully megalithic, and the chamber is contained within a circular or oval cairn: the cairn at Poulguen was particularly large, with a diameter of 40 metres and a height of 8 metres (L'Helgouach 1965). Like the angled graves, the T-shaped graves can probably be dated to the second half of the fourth millennium cal. BC: the assemblage from Poulguen includes an SOM tradition pottery vessel and a blade of Grand Pressigny flint, whilst that from Kerugou includes pottery of the Kerugou style (figure 6.3e) as well as polished axes and stone pendants (Martin 1902, Du Chatellier 1877, L'Helgouach 1965). Martin (*op. cit.*) records that fragments of burnt bone were found in the chamber at Poulguen, resting (with the pottery and flint blade) on what was interpreted as the remains of a wooden floor. Since the publication of L'Helgouach's (1965) book, a fourth monument of this class has been identified (Lecornec 1983) at Port-Maria (St-Gildas-de-Rhuys, Morbihan) and this is interesting, since it extends the distribution of T-shaped monuments into Southern Brittany, overlapping with the angled graves. This monument had been extensively damaged, but paving had survived in parts of the chamber, and a series of round-based bowls were recovered.

MEGALITHIC CISTS

The late fourth millennium cal. BC is marked by the appearance of simple megalithic cists, which seem to have existed alongside the larger monuments. These cists are rectangular or irregular in shape and are built, like the larger megaliths, of upright stones, and roofed with horizontal slabs. The chambers themselves are relatively small, covering an area of 2–8 m^2 and with a height of 1–1.5 metres. Where evidence for a cairn has been found, as at L'Hotié-Viviane (Le Roux 1983a, Briard 1984) and Lost-er-Lenn (Lecornec 1972), this is circular or oval in form, with a diameter of 8–18 metres and a height of 1–1.5 metres. At Les Platons, Jersey (Baal and Sinel 1915a), the mound covering a megalithic cist was surrounded by a circle of boulders. In comparison with the gallery graves, lateral entrance

graves, angled graves and T-shaped graves, these cists are relatively modest megalithic constructions.

There are, in the Armorican region, a great many of these 'simple dolmens', most of which have been plundered or excavated in antiquity. Bender (1968) lists seven monuments on the Cotentin peninsula, but no archaeological material is preserved from any of these sites, so that their date and significance remain uncertain. In Brittany, cists such as Trédion (Coëtby, Morbihan) and Ezer (Loctudy, Finistère) pose similar problems (Le Roux 1977, Milon and Giot 1949). A few cists, however, have produced datable material. The assemblage from L'Hotié-Viviane (Le Roux 1983a, Briard 1984) includes pottery of SOM type, stone pendants and axes of Type A dolerite, whilst that from Lost-er-Lenn (Lecornec 1972) includes pottery of SOM and Kerugou affinities, as well as a single variscite bead. The Channel Island cists of Les Platons (Jersey) and Herm I have also produced SOM type pottery (Baal and Sinel 1915a, Kendrick 1928, Patton in press). These assemblages suggest a date between 3250 and 2850 cal. BC. Other monuments of essentially similar form (e.g. The Ossuary', Jersey), however, appear to be significantly later (see chapter 7), so that it is

Figure 6.18 Keriven (after L'Helgouach 1965)

impossible to be certain as to the date of those monuments from which no material is known.

The assemblages from Late Neolithic cists include the same elements as are found in other contemporary monuments (pottery of SOM and Kerugou affinities, stone pendants, polished axes, flint arrowheads), but burial rites seem to have varied considerably. Because of acidic soil conditions, skeletal remains are not preserved from most sites. The cist of Herm I, however, contained the disarticulated bones of 'a vast number' of individuals, deposited on two separate levels (Kendrick 1928), whilst the monument of Les Platons, Jersey (Baal and Sinel 1915a) contained cremated human remains (representing one or two individuals) placed in the larger of two SOM type pottery vessels.

Unlike the other monument types discussed in this chapter, the megalithic cists are in most cases small enough to have been built by individual domestic groups of less than 100 people. The proliferation of such monuments is an important feature of the third millennium cal. BC, particularly in the Channel Islands, and this is a theme to which we will return in chapter 7. It may be possible to see these monuments as reflecting a progressive decentralisation of ritual practice, associated with the disintegration of larger social groupings: this process seems to have started in the late fourth millennium cal. BC, with the disappearance of *Grand Tumulus* monuments and the abandonment of larger passage graves, and continued into the third millennium cal. BC with the abandonment of gallery graves and lateral entrance graves, as well as the remaining passage graves, and the proliferation of much smaller megalithic cists (see chapter 7).

CAIRNS WITHOUT CHAMBERS

Most of the cairns described in this book were built to cover megalithic or dry stone chambers. There is, however, a small group of Late Neolithic monuments in Brittany and the Channel Islands consisting of cairns without chambers or internal structures. The precise significance of these monuments is uncertain: ceremonies may have been conducted around them or on top of them. This group includes only four known monuments: Kermené (Guidel, Morbihan), Pleyben (Finistère), Tossen-Keler (Peneven, Côtes d'Armor) and La Hougue Mauger (Jersey). These cairns are all circular or oval in form, but vary considerably in size. Diameters vary from 17 metres at La Hougue Mauger (Baal and Sinel 1915b) and 18 metres at Kermené (Giot 1960, 1973) to 40 metres at Pleyben (Anon 1876) and Tossen-Keler (Briard and Giot 1968), whilst heights vary from 2.5 metres (Pleyben) to over 7 metres (Tossen-Keler). The mound at Tossen-Keler has a megalithic peristalith which incorporates a number of re-used decorated stones (Briard and Giot 1968).

Where material has been recovered from these monuments, it is invariably of Late Neolithic date. The assemblage from Kermené (Giot 1960, 1973) includes SOM tradition pottery vessels and a stone pendant, as well as three fragments of a statue-menhir with breasts and a necklace. This statue-menhir is essentially comparable to that of Le Catel, Guernsey (Kendrick 1928, Patton in press), and is clearly related to the female anthropomorphic motifs found in Armorican gallery graves. Charcoal from the Kermené site gave a radiocarbon date (Gif-1966) of 4390±140 BP (=3340–2910 cal. BC). Charcoal from a hearth at Tossen-Keler gave a radiocarbon date (Gif-260) of 4500±500 BP (=3780–2575 cal. BC). The assemblage from La Hougue Mauger (Baal and Sinel 1915b) includes pottery vessels with afinities in the Gord group of the Paris Basin (Blanchet 1984), dating to the early third millennium cal. BC.

None of these monuments has produced any indication of burials, or of any internal structure, though it is possible that wooden structures were missed by the excavators at Pleyben (Anon 1876) and La Hougue Mauger (Baal and Sinel 1915b). The only indication of features beneath the mound is from Tossen-Keler (Briard and Giot 1968), where two large hearths were found on the pre-mound land surface. Most of the material from these sites (including the statue-menhir fragments from Kermené) comes from the matrix of the mounds themselves, and must be considered as redeposited. The assemblages include pottery, flint arrowheads and polished stone axes, but perhaps the most remarkable feature is the presence of broken querns. Fragments of seventy-five querns were found at Kermené (Giot 1960, 1973) and twenty-two were found at La Hougue Mauger (Baal and Sinel 1915b). These querns are almost invariably broken. Querns are also recorded from Pleyben (Anon 1876) and a single quern was found in the peristalith of the Tossen-Keler mound (Briard and Giot 1968). The significance of these depositions is unclear, but it seems difficult to interpret them as anything other than ritual deposits.

MEGALITHIC ARCHITECTURE AND SOCIAL STRUCTURE IN THE ARMORICAN LATE NEOLITHIC

The archaeological evidence outlined in this chapter points to a series of important changes in megalithic architecture during the second half of the fourth millennium cal. BC, which in turn suggest fundamental changes in Neolithic religion and society.

The spatial distribution of Late Neolithic monuments is fundamentally different from that of earlier monument types. The proliferation of monuments in inland areas seems to be associated with a general expansion of settlement, which can perhaps be seen as a response to

pressure on resources in coastal areas brought about both by demographic factors and by the social demands for increasing surplus production caused by intensifying social competition (see chapters 4 and 5). As communities were severed from the nutritional life-line provided by coastal resources, land became increasingly important as the sole means of food production. Following Renfrew's (1976) hypothesis, we would expect to see evidence for an increasing importance of megalithic monuments as 'territorial markers' and this is perhaps reflected in the dispersed distribution pattern of Late Neolithic monuments, in marked contrast to the clustered distribution of Early and Middle Neolithic sites. If group titles to land were legitimised by reference to the ancestors, we might also expect to see an increasing emphasis on the dead as a focus of ritual activity and, although there is no direct evidence from the Armorican region itself, the evidence from neighbouring areas, such as the Paris Basin, suggests that the appearance of gallery graves was indeed associated with developments of this nature.

Whilst changes in the distribution of monuments may reflect responses to pressure on resources, changes in the structure and ceremonial function of the monuments themselves require a more complex social explanation. The gallery graves (by far the most numerous and the most widespread of Late Neolithic monument types) embody a division of space which is fundamentally different from that of the passage graves. In chapter 4 it was argued that the division of space in passage graves embodies a restriction of access to sacred space and knowledge. This is manifest both from the structure of the monuments themselves (relatively small chambers separated from the outside world by dark, narrow passages, preventing those outside from seeing or comprehending the ceremonies conducted within) and from the nature and positioning of carved motifs (often highly stylised motifs, the meanings of which would be apparent only to initiates, carved in positions hidden from direct light). It was suggested that this restriction of access was linked to the development of a tribal social formation, in which power was based on elders' control of religion. If the appearance of passage graves can be considered to reflect increasing restriction of access to ritual, associated with the development of such a system, the appearance of gallery graves seems to correspond to a breakdown of these restrictions, perhaps linked to a weakening of existing power structures. The chambers of these monuments are not separated from the outside world by narrow passages and, where carved motifs are present, these are not concentrated in parts of the monument hidden from direct light. The carved motifs themselves are in many cases more explicitly representational than those found in the passage graves, and 'entoptic' motifs are conspicuous only by their absence. In other Late Neolithic monument types, however (lateral entrance graves, angled graves, T-

shaped graves), the restrictions of access characteristic of the passage graves reappear, both in the structure of the monuments themselves, and (in the case of the angled graves) in the nature and positioning of the carved motifs found within them. The existence of such monuments alongside the gallery graves suggests at least a limited survival of earlier traditions, albeit in an altered form.

Angled and T-shaped graves are both confined to relatively small areas: angled graves are found exclusively in Southern Brittany (the area which seems to have been the greatest centre of megalithic activity throughout the Neolithic period), whilst T-shaped graves are confined to Western Brittany. The existence of these local monument types provides evidence for increasing regional differences, also reflected in the distribution of certain pottery styles such as Conguel (confined to Southern Brittany) and Kerugou (found in Southern and Western Brittany). It may be significant to note that these regional pottery styles are largely absent from gallery graves and lateral entrance graves, but dominate the assemblages from angled graves and T-shaped graves (L'Helgouach 1965), suggesting the existence of two parallel traditions, distinguished from one another both by monument types and by material culture. The emergence of distinct regional traditions is linked to a more general diversification in terms of ritual practice, marked by the appearance of new monument types. This pattern of increasing diversification and regionalisation suggests a breakdown of the earlier regional unity, marked by the predominance of passage graves.

A further trend which can be noted is the disappearance of higher order centres: none of the Late Neolithic monuments stands out from the others in terms of their size, monumental construction or location, in the way that passage graves such as Gavrinis and La Hougue Bie clearly do. These large passage graves were in many cases sealed and abandoned in the mid-fourth millennium cal. BC, whilst other passage graves remained open and continued to be used (see chapter 7). The *Grand Tumulus* monuments were also abandoned, and no comparable monuments were built during the Late Neolithic. The disappearance of these higher order monuments suggests a collapse of the larger social groupings which had emerged during the Middle Neolithic period. Most of the gallery graves, lateral entrance graves and other Late Neolithic monuments could have been built by communities of a few hundred people, whereas the construction of the larger passage graves would clearly have required the co-operation of several such communities (see chapter 4), corresponding to a higher ('tribal') level of social organisation. The disappearance of these large monuments coincides with a proliferation of much smaller megaliths (notably the megalithic cists) which could in many cases have been built by individual domestic groups of less than a hundred people, suggesting a progressive decentralisation of Neolithic religion.

It seems clear that changes in megalithic architecture during the late fourth millennium cal. BC must correspond to a fundamental social transformation. The structure of the gallery graves suggests a more open access to ritual, perhaps linked to a weakening of elders' power, whilst the abandonment of higher order centres and the proliferation of smaller monuments suggests the collapse of Neolithic tribal groupings. The expansion of settlement into inland areas suggests that these transformations may have occurred in the context of pressure on resources. In other respects, however, the basis of the Middle Neolithic social formation seems to have remained intact.

In previous chapters it was argued that the Neolithic social system was based on inter-generational bonds and asymmetries, mediated through elders' control of ritual practice and control over the circulation of socially valued objects (most significantly stone axes). Although control of ritual practice appears to have been weakened, the continued construction and use of megaliths suggests that such control remained a significant feature of the social formation during the Late Neolithic. The exchange of stone axes also continued, and the production of axes for exchange at the 'factory' site of Plussulien seems to have intensified in the mid-fourth millennium cal. BC (Le Roux 1970). Alongside the established networks of stone axe exchange, however, new exchange systems developed which may provide some clues to the significance of the cultural transformations which occurred during the Late Neolithic. Foremost among these new exchange systems is the exchange of flint blades produced at Grand Pressigny, in Central France. The flint from Grand Pressigny has a characteristic 'honey' colour, and was used principally to produce finely worked long blades, which were probably more ceremonial than functional. These blades are widely distributed in Northern France but, unlike the stone axes discussed in chapter 2, they are relatively rare. L'Helgouach (1965) lists blades from thirteen passage graves, eight gallery graves, four angled graves and two lateral entrance graves, but in most cases there is only a single blade per monument. The widespread distribution and relative rarity of these blades suggest that they circulated within a more competitive and individualistic exchange system than that represented by stone axes.

Such competitive exchange networks are typical of political systems dominated by 'Big Men' (Sahlins 1963). Unlike tribal elders, 'Big Men' acquire their status through competing for clients. Normally they gain clients by producing a surplus and using this to offer assistance to others (often in putting together payments for bridewealth transactions or initiation ceremonies). This creates a situation of indebtedness, which enables the 'Big Man' to make demands on his client's labour at a later stage. This in turn enables him to produce a larger surplus, which may be used either to acquire more clients or to acquire prestige items through

competitive exchange. The emergence of 'Big Men' in the mid-fourth millennium cal. BC may have been facilitated by increasing dissatisfaction with the demands that elders had to make in order to sustain the cycle of intensifying social competition associated with the construction of increasingly large monuments. Once established, 'Big Men' would undermine the power of the elders by offering younger men an alternative route to economic independence. As the 'Big Men' gained more clients, the elders' ability to requisition surplus production to support the construction of large monuments would be greatly diminished, and their claims to supernatural or divine patronage would look less and less credible. As the cycle of social competition and large monument construction wound down, the larger social groupings which had emerged as a result of it would have collapsed, leading to the abandonment of higher order centres and the progressive decentralisation of ritual practice noted in the archaeological record. Tribal elders may have responded to the crisis by adapting their own legitimation strategies to play down their power and mask social asymmetries: this may have been manifested in a religious 'reformation', removing some of the restrictions of access to sacred space and knowledge. The Late Neolithic period appears, then, as a time of crisis marked by conflict between the established power structures and an emergent new political system which would ultimately supplant them. The outcome of this conflict will be seen in the following chapter.

7

SEALING THE TOMBS

The abandonment of megaliths

Although the construction of passage graves ceased in the mid-fourth millennium cal. BC, many of these monuments seem to have remained open, and to have continued in use alongside the gallery graves, lateral entrance graves and other Late Neolithic monuments. Late Neolithic material, essentially similar to that known from gallery graves, has been recorded in secondary contexts in a number of passage graves (L'Helgouach 1965 and see chapter 6). During the third millennium cal. BC, virtually all of the Armorican megaliths (passage graves, gallery graves, lateral entrance graves and other monuments) were abandoned. Where evidence has been preserved and adequately recorded, it suggests a deliberate sealing of the monuments, accompanied by rituals and, in some cases, involving terminal depositions.

For previous generations of archaeologists, this transformation was understood as reflecting the arrival of a new people, who suppressed the religious practices of the native population. Much has been made of the relationship between the abandonment of megalithic tombs and the appearance of a new material culture package including Bell Beakers and metal objects. The assumption that material culture packages correspond to 'peoples' or ethnic groupings, however, is no longer accepted uncritically and, in any case, the abandonment of Armorican megaliths seems to have taken place over a period of several centuries: some were clearly abandoned before the appearance of Bell Beakers.

This chapter will focus on the evidence relating to the abandonment of megaliths in Armorica. In some cases there is evidence for terminal depositions, placed within the chamber or at the entrance to the monument as a final offering. Pottery is the most common element of these depositions, but metal objects, flint arrowheads and animal and human remains are also known. In some cases the floor of the monument seems to have been covered by a sterile layer of earth, rubble or limpet shells, a procedure which finds parallels in Paris Basin gallery graves (Leclerc 1987). Of particular interest, however, is the evidence relating to

the physical closure of the monuments: in some cases this involves a simple wall built across the entrance, whilst in others it involves a massive extension of the cairn to enclose the earlier monuments.

The evidence suggests that the Armorican passage graves were abandoned between 3250 and 2250 cal. BC, whilst the gallery graves and lateral entrance graves were abandoned between 2850 and 2250 cal. BC. Within this broad sequence, some of the larger passage graves seem to have been abandoned at a relatively early stage (3250–2850 cal. BC). Following on from the discussion in the previous chapter, this can perhaps be seen as evidence for the progressive disintegration of the Neolithic social formation, with the higher order centres being abandoned first, followed by the smaller monuments. In some areas, the third millennium cal. BC is also marked by the proliferation of smaller ritual complexes, sometimes associated with individual settlements, lending further weight to the suggestion of increasing decentralisation of ritual practice. The period is also marked, across the Armorican region, by the appearance of new material culture forms and the development of new exchange systems, and these may give some important clues to the nature and significance of the social transformations taking place. It will be argued that the collapse of the Neolithic tribal organisation was matched by the rise of a new social order, involving competition between local 'Big Men'.

EXCHANGE SYSTEMS AND MATERIAL CULTURE IN THE THIRD MILLENNIUM CAL. BC

The appearance of new material culture forms in the Armorican region in the early third millennium cal. BC is part of a pan-European development. Bell Beakers (figure 7.1), the most characteristic element of the new 'package', are found from the Netherlands to Italy, and from Portugal to Czechoslovakia. Whilst recent research (cf. Harrison 1980) has stressed regional differences, destroying the notion of a homogenous 'Beaker People' or 'Beaker Culture', Beakers in the different areas of Europe are sufficiently similar to be recognisable as Beakers. In most areas, Bell Beakers occur as part of a distinctive material culture 'package', which also includes stone wristguards, barbed and tanged flint arrowheads, copper axes and daggers and gold jewellery. Clearly, then, the appearance of Bell Beakers in the Armorican region must be seen as part of a much more widespread phenomenon, the scale of which suggests a considerable expansion of inter-regional contacts and exchange. Western France became, to a far greater extent than before, part of a wider European social and economic system. In many areas of Europe, the appearance of the 'Beaker Package' coincides, as it does in Brittany, with major social and cultural changes, involving the development of new religious and

funerary practices. In Armorica, the Neolithic axe exchange systems seem to have collapsed. The production of dolerite axes at Plussulien (see chapter 2) seems to have halted at around 2700 cal. BC (Le Roux 1979a), whilst axes of fibrolite, jadeite and eclogite are rarely found in Chalcolithic or later contexts. This is not to say that the production and use of stone axes ceased: copper remained a rare commodity well into the Early Bronze Age, and (until it was alloyed with tin) was inferior to stone as material for making functional tools. The Early Bronze Age settlement of La Moye I (Jersey) has provided evidence for the manufacture of stone axes in the first half of the second millennium cal. BC (Patton 1988). The production of stone axes at 'factory' sites, however, seems to have been abandoned in favour of local procurement, and stone axes ceased to have exchange value. In place of stone axe exchange, new exchange systems developed, centred principally on metal objects.

Most of the Bell Beakers found in the Armorican region belong to a distinctive style known as *Type Maritime* (cf. L'Helgouach 1963), characterised by vessels with smooth S-shaped profiles, with decoration (often comb-impressed) organised in evenly spaced horizontal bands (figure 7.1). Finewares predominate, though coarseware sherds with Beaker-derived decoration have recently been found in surface surveys at Les Blanches Banques, Jersey (Finlaison and Patton in press) and at St-Nicholas-du-Pelem, Côtes-d'Armor (Le Provost *et al*. 1972). Most of the Bell Beakers known from the Armorican region come from secondary contexts in earlier monuments. L'Helgouach (1963) lists Beakers from thirty-eight passage graves, seventeen gallery graves, seven cists and three other sites in Brittany: to this list must be added the material from the Channel Islands, where Beakers are known from seven passage graves, one gallery grave, one cist and one other site (Patton in press). The concentration of Bell Beakers in monuments and ritual sites may be partly a function of recovery bias (few settlements are known in the Armorican region), but where Chalcolithic settlements have been excavated (as at Les Blanches Banques, Jersey and Les Fouaillages, Guernsey) true Beaker sherds are rare, despite the abundance of contemporary decorated and undecorated coarseware sherds (Finlaison and Patton in press, Kinnes in press). The distribution of Armorican Bell Beakers (figure 7.2) is essentially coastal, though this may simply reflect the distribution of the earlier monuments (especially passage graves) in which most of the vessels have been found. Stone wristguards are found in similar contexts, and often in association with Bell Beakers. Briard and L'Helgouach (1957) list wristguards from six Breton gallery graves, and two 'dolmens'.

Flat tanged daggers and flat axes of copper are also found in contexts dating to the third millennium cal. BC. Daggers are relatively rare (Briard and L'Helgouach 1957 list only eight surviving examples in Brittany,

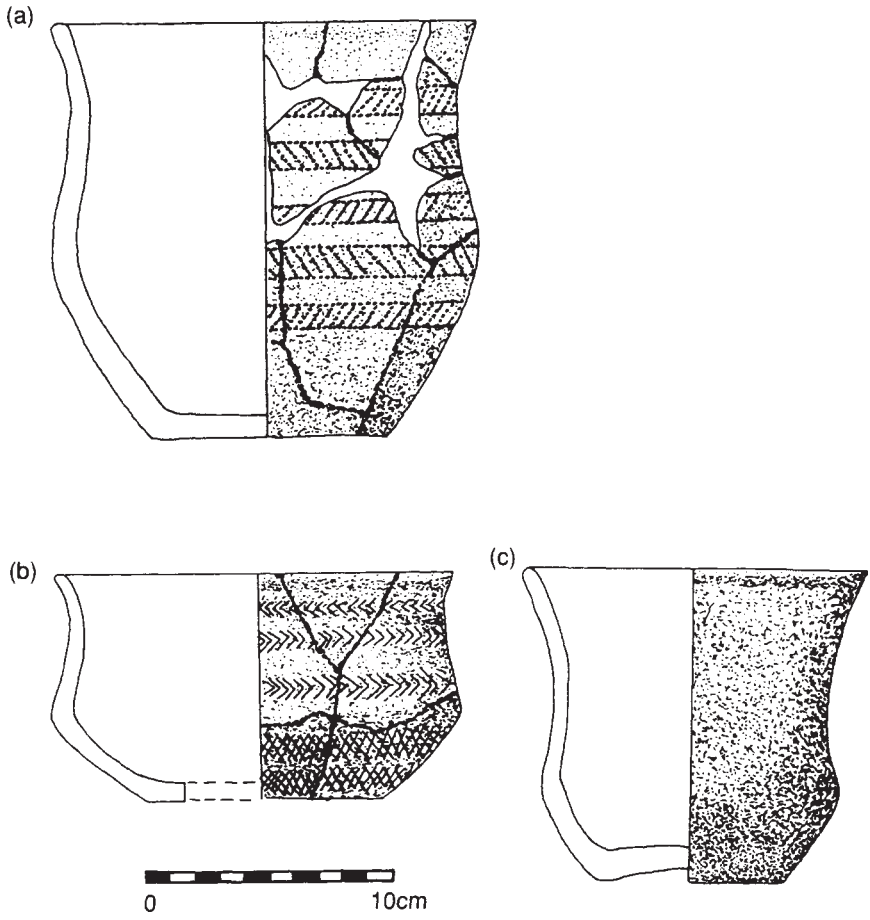


Figure 7.1 Armorican Bell Beakers from the Channel Islands

though there are records of several others) but occur in similar contexts to the Beakers and wristguards: Briard and L'Helgouach (*op. cit.*) list examples from two passage graves, two gallery graves and a megalithic cist (there is a further example from the passage grave of Le Déhus, Guernsey). Flat axes, by contrast, are never found in megalithic monuments. Briard (1965) lists 181 examples from Brittany, of which the vast majority are chance finds with no archaeological associations: Briard's inventory, however, does include several hoards. Many of the axes included in Briard's inventory are of bronze rather than copper, and must therefore post-date the abandonment of megaliths. The earliest copper axes, however, are apparently contemporary with the tanged daggers (Briard 1965) and it is significant that none of these has been found in a megalith.

Gold objects have been found in a number of monuments, and in 1811 a company was even established at Auray (Le Rouzic 1930c) to prospect for gold in the megaliths of Locmariaquer! Chalcolithic gold objects from the Armorican region include beads, perforated plaques (typologically similar to the stone wristguards), bands of gold with 'palette' terminals and bands with zig-zag edges, possibly used to decorate wooden or bone maces. Two massive collars were found in the passage grave of Rondossec (Plouharnel, Morbihan), and these have been compared (L'Helgouach 1965) to *gargantillas* of the Iberian Chalcolithic. Most of the Chalcolithic gold objects known from the Armorican region are from secondary contexts in megalithic monuments: Gold objects are recorded from twelve passage graves and one gallery grave (Le Rouzic 1930c, Briard and L'Helgouach 1957, L'Helgouach 1965). A major exception to this rule, however, is provided by gold lunulae (crescent-shaped gold ornaments, often decorated, probably worn around the neck): Briard (1965) lists five finds of lunulae in the Armorican region, none of which are from passage graves or gallery graves. The finds from Kerivoa (Bourbriac, Côtes

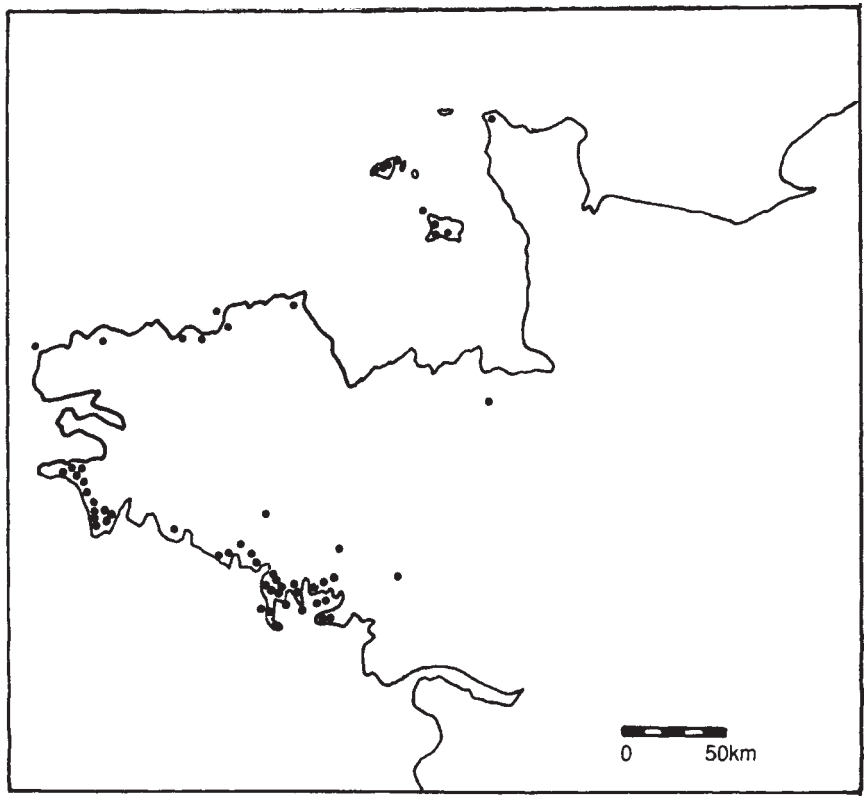


Figure 7.2 Distribution of Armorican Bell Beakers

d'Amor) and La Montagne du Roule (Tourlaville, Manche) were apparently hoards (the Tourlaville hoard comprises two lunulae, whilst that from Kerivoa includes three lunulae, a small torque and a gold band with 'palette' terminals).

The material culture of Armorican Chalcolithic communities testifies to the extensive network of international contacts in which they were involved. The widespread occurrence of Bell Beakers themselves has already been mentioned, but stone and metal objects also provide evidence for exchange. Stone wristguards, for example, occur with Beakers in many areas of Europe. A tanged copper point from Kercadoret (Locmariaquer, Morbihan) has been compared (L'Helgouach 1965) to 'palmella points' from Iberia, whilst the gold collars from Rondossec have affinities in the Chalcolithic of Portugal. The Armorican gold lunulae are probably of Irish origin (Coffey 1913), though examples are also known from Britain, Luxembourg, Germany and Denmark. The expansion of inter-regional exchange networks in the third millennium cal. BC was probably, at least in part, a function of the increasing importance of metals. Unlike stone, metal ores are very unevenly distributed in Europe, and most communities could only have obtained copper and gold by exchange. Copper is relatively rare as a natural resource in the Armorican Massif and, although Briard (1965) suggests that small-scale exploitation of copper may have occurred at Huelgoat (Finistère) and at St-Pierre-Montlimart (Maine-et-Loire, on the southern edge of the Massif) this is unlikely to have been sufficient to meet local demand. Gold, by contrast, occurs in significant quantities in rock outcrops at St-Pierre-Montlimart and at La Lucette (Mayenne, on the eastern edge of the Massif), and in alluvial deposits of the rivers Vilaine and Odet, so that some Armorican communities may have been exporters of gold. The growing importance of metals, however, does not provide a sufficient explanation for the development of wide-reaching exchange networks during the third millennium cal. BC. These exchange networks are not only quantitively, but also qualitatively, different from those of the Middle Neolithic period. Whilst stone axes (even those of fibrolite and eclogite) are relatively common, copper and gold objects are much rarer, and the exchange networks in which they circulated are likely to have been intensely competitive: it is clear that only a few people can ever have possessed gold lunulae, *gargantillas,* or even copper daggers. Many of the new material items which characterise the Chalcolithic period are symbolic or ornamental rather than functional, and are likely to have served as 'symbols of power'. The development of these new exchange systems, therefore, implies the development of a fundamentally different social formation, and this is a question to which we will return at the end of this chapter. The third millennium cal. BC also saw a significant increase in the practice of

hoarding, which became even more important during the Bronze Age. There seems to be a distinction between objects considered appropriate to place in earlier megaliths (Bell Beakers, copper daggers, gold beads, bands and plaques) and those which were buried as hoards (copper axes and gold lunulae), though this distinction may (at least in part) be a chronological one.

THE ABANDONMENT OF PASSAGE GRAVES

Successive generations of archaeologists (cf. Lukis 1849, Daniel 1960, L'Helgouach 1965, Joussaume 1985) have focused on the question of megalithic origins: the appearance of large stone monuments along the Atlantic façade of Europe must correspond to a fundamental transformation in religion and society, which merits explanation. It has seemingly occurred to fewer specialists, however, to think that the disappearance of these monuments around 2000 years later must correspond to an equally fundamental transformation. To earlier generations of archaeologists, who interpreted changes in material culture and burial practice as evidence for invasions and migrations, the solution was simple: the megalith builders were replaced by another race, who imposed their own religion on the natives in much the same way as the sixteenth-century Spaniards imposed Christianity on the Indians of Central America. To modern archaeologists, however, such interpretations appear simplistic and inadequate.

Part of the problem arises from the quality of the recorded evidence. Early excavators were in most cases concerned only with the chambers of passage graves, and failed to record the structure of the cairn in any detail. In many cases the cairn had already been destroyed by erosion, quarrying or agriculture. Recent excavations of megalithic cairns, however, have provided important new evidence, suggesting that the passage graves did not simply fall into disuse, but were deliberately sealed and abandoned. This evidence comes principally from the sites of Ile Carn (Ploudalmézeau, Finistère), Gavrinis (Larmor-Baden, Morbihan) and Ty-Floc'h (St-Thois, Finistère).

At Ile Carn (Giot 1967, 1987), a trapezoidal cairn containing three passage graves was completely enclosed within a massive circular cairn, blocking the entrances to the structures (figure 7.3). There is no precise dating evidence for the construction of this massive cairn, but the chambers contained Late Neolithic pottery, and charcoal from the North chamber gave a radiocarbon date (4160±120 BP=3030–2425 cal. BC; Gif-810), providing a *terminus post quem* for the blockage itself. At Gavrinis, the façade of the cairn was obscured by a deposit of rubble, blocking the entrance to the passage grave (Le Roux 1983b). This blockage covered a deposit of charcoal, which gave a radiocarbon date (Gif-5766) of 4470±80

BP (=3340–2910 cal. BC). At Ty-Floc'h (Le Roux 1979b, 1981), a similar blockage placed in front of the façade covers a deposit which has given a radiocarbon date (Gif-5233) of 4670±120 BP (=3560–3340 cal. BC). The evidence from these three sites suggests that the passage graves were deliberately sealed. It is likely that similar evidence from other sites has gone unrecorded in the course of earlier excavations. In several cases, simple dry stone walls have been noted, blocking access to passage graves. At Ile Carn, the central structure was blocked by two such walls (figure 7.4), one near the entrance to the passage, the other at the junction between passage and chamber (Giot 1987). Similar blockage walls were noted by early excavators at Port-Blanc (Gaillard 1883) and Rosmeur (Du Chatellier 1879). At La Hougue Bie, Jersey, the passage was blocked by a dry stone wall (Baal *et al*. 1925, Mourant 1974), whilst the passage at Grantez, Jersey (Nicolle *et al*. 1913) was effectively blocked by a cairn of pebbles, covering a skeleton, supposedly interred in a seated position. At La Hougue des Géonnais, Jersey, a low rubble blockage, associated with Chalcolithic pottery, was placed in front of the entrance to the passage (Forrest and Rault forthcoming).

The radiocarbon dates from Gavrinis and Ty-Floc'h suggest that these monuments were sealed at a relatively early stage in the Late Neolithic, whilst the closure of Ile Carn seems to have been significantly later. The abandonment of passage graves seems, therefore, to have occurred over a period of several centuries, beginning in the late fourth millennium cal. BC and continuing into the third: L'Helgouach (1963) lists Bell Beakers from thirty-eight Armorican passage graves, and these must have remained open at least until *c.* 2850 cal. BC. The evidence from Gavrinis (Le Roux 1983b) suggests that the closure of the tomb was preceded by a series of rituals. Excavation beneath the rubble of the blockage revealed an extensive area of burning, associated with a series of postholes and with concentrations of flint, stone tools (including a hoard of three polished axes), pottery and animal bone. The condition of the burnt wooden stakes preserved in some of the postholes suggests that the blockage was placed on almost immediately after the structure had been fired. Once again, it is likely that similar evidence on other sites has been missed, though fragments of several 'Jersey Bowls' (a local pottery style contemporary with Bell Beakers) were found associated with the blockage at Géonnais, Jersey (Forrest and Rault forthcoming).

In a few cases, structured formal depositions have been identified within the chambers of passage graves, representing final offerings placed in at the time of closure. The clearest example of this is at Le Déhus, in Guernsey, where human remains, three decorated Bell Beakers and a tanged copper dagger were placed on the floor of the chamber, before the floor was completely covered by a thick layer of limpet shells, which

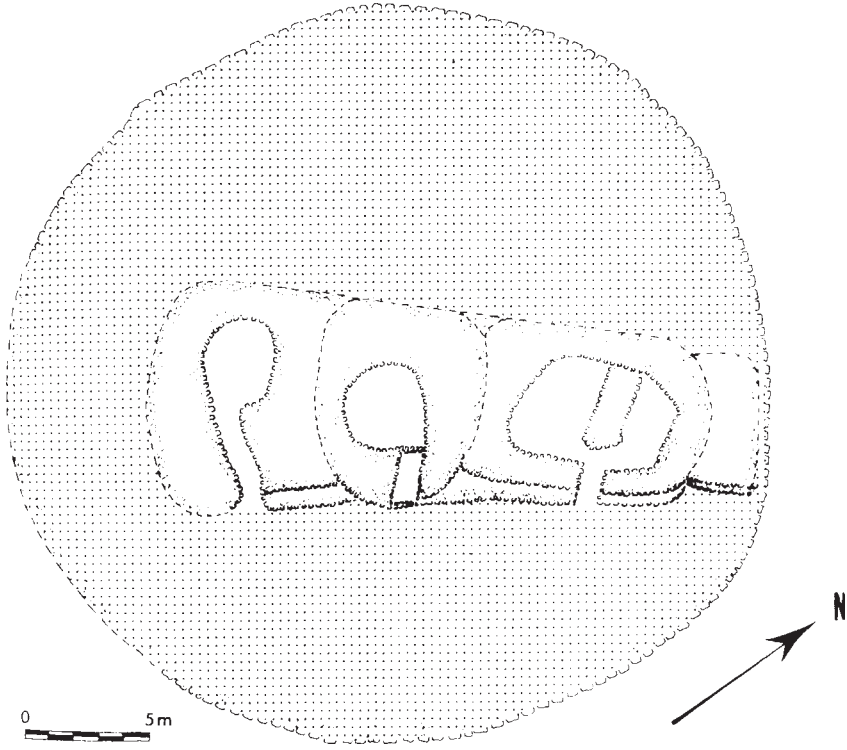


Figure 7.3 The cairn of Ile Carn, showing the extension to the mound blocking access to the passage graves (after Giot 1987)

would effectively have prevented access to the chamber. The arrangement of these objects (figure 7.5) can be largely reconstructed (Patton in press) on the basis of the diary and notes (cited in Kendrick 1928) kept by the excavator, F.C.Lukis, when the site was explored in 1837. According to Lukis, the human remains were found within the layer of limpet shells: his original diary notes suggest that three skeletons (two adults and a child) were found, but his description in the *Collectanea Antiqua* (a series of unpublished volumes, produced between 1853 and 1865) suggests disarticulated remains. The practice of covering the floor of the chamber (presumably to protect it and perhaps also to prevent access) is paralleled at Barnenez (Plouézoc'h, Finistère), where the floors of chambers D, G and G' were found (Giot 1987) to be covered by layers of rubble, and that of chamber A was covered by a layer of earth.

Unfortunately, few sites have provided evidence for final depositions as clear as that from Le Déhus and, even in this case, there are ambiguities in the description. In several cases, however, passage graves have

produced important Chalcolithic assemblages. In cases where the material appears to represent the final activity in the chamber, and particularly when the pottery vessels are largely intact (suggesting minimal post-depositional disturbance), it is likely that such material was placed in the chamber immediately prior to its closure. The passage grave of Mané-Lud (Locmariaquer, Morbihan), for example, produced Beaker pottery and a number of gold objects (Le Rouzic 1911), as did the passage grave of Kerlagad (Carnac, Morbihan: Le Rouzic 1930c). In the Channel Islands, the passage grave of La Creux-ès-Faies (Guernsey) produced a series of nine intact Beakers, associated with barbed and tanged flint arrowheads (Kendrick 1928, Patton in press).

THE ABANDONMENT OF LATE NEOLITHIC MONUMENTS

Like the passage graves, the gallery graves, lateral entrance graves, angled graves and T-shaped graves seem to have been systematically abandoned

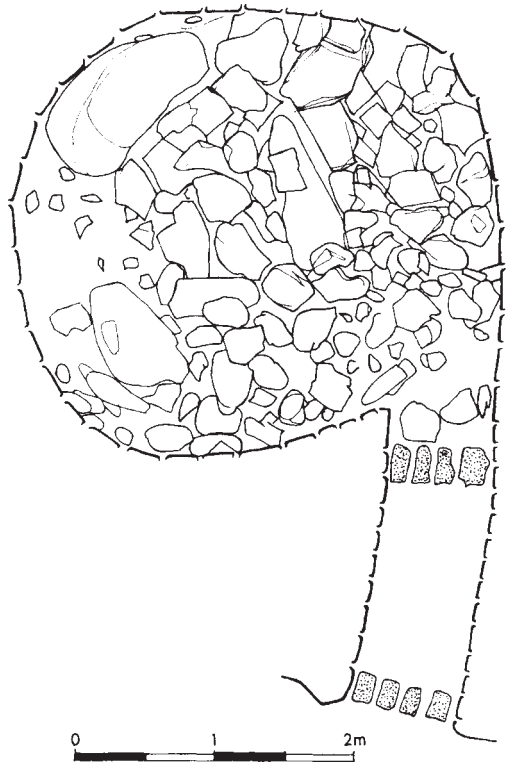


Figure 7.4 The central passage grave of Ile Carn, showing two blockage walls in the passage (after Giot 1987)

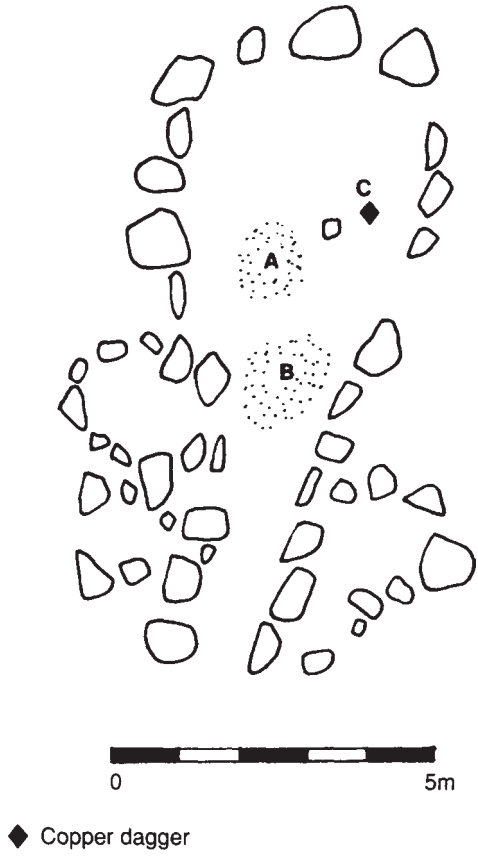


Figure 7.5 Terminal deposition in the passage grave of Le Déhus (Guernsey): A: concentration of pottery (Bell Beaker sherds); B: concentration of human bone; C: copper dagger

during the third millennium cal. BC. Because the mounds covering these monuments are less monumental than the cairns of the passage graves, however, the closure is never on the same spectacular scale as at Gavrinis or Ile Carn.

Because of the relatively small scale (and, in most cases, poor state of preservation) of the mounds covering Armorican gallery graves, it has generally been difficult to identify evidence for closure. At Prajou-Menhir (Trebeurden, Côtes d'Armor), L'Helgouach (1966) noted a deposit of rubble in front of the structure, which was interpreted as an external blockage, whilst at Mein-Goarec (Plaudren, Morbihan), the floor of the chamber was covered by a protective layer of rubble (L'Helgouach and Lecornec 1968), similar to those found in the Barnenez passage graves,

and in gallery graves of the Paris Basin (Leclerc 1987). Several Armorican gallery graves have produced Chalcolithic assemblages which can probably be seen as terminal depositions: a tanged copper dagger, a jet button and a stone wristguard were found in the gallery grave of Penker (Plozevet, Finistère) and a wristguard and a copper dagger were found at Kerandrèze (Moelan, Finistère: Briard and L'Helgouach 1957). The gallery grave of Men-ar-Rompet (Kerbors, Côtes d'Armor) produced an assemblage of thirty-eight Bell Beakers (Giot *et al.* 1957), one of which contained a stone wristguard: no earlier material was found in this monument, so it seems likely that this was cleared out. The clearest evidence for a final deposition, however, comes from the gallery grave of Ville-ès-Nouaux (Jersey), where a series of intact Bell Beakers and 'Jersey Bowls' had been placed in groups of three (figure 7.6) along the north side of the chamber, protected by small stone slabs (Oliver 1870). A stone wristguard was also found at Ville-ès-Nouaux.

The lateral entrance grave of Crec'h-Quillé (St-Quay-Perros, Côtes d'Armor) was found to be blocked (L'Helgouach 1967a) by a drystone wall placed across the passage. The stones of this wall were found to be

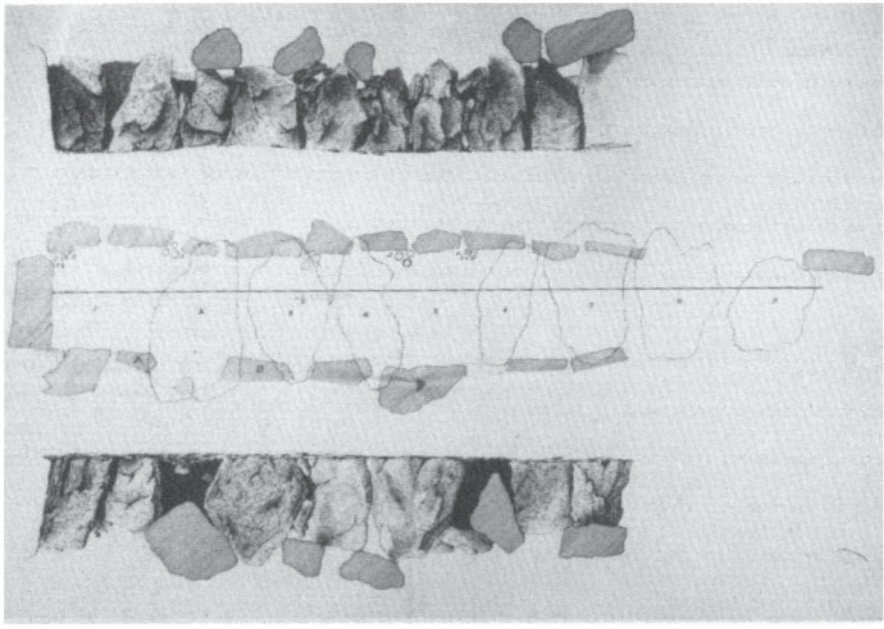


Figure 7.6 Terminal deposition in the gallery grave of Ville-ès-Nouaux (Jersey): nineteenth-century plan by Lieut. S.P.Oliver

resting on a hearth, which was considered to be contemporary with the closure ceremony. Charcoal from the hearth gave two radiocarbon dates:

3740 ± 200 BP = 2450–1890 cal. BC (Gif-344)
3760 ± 120 BP = 1440–1970 cal. BC (Gif-814).

A radiocarbon date (Gif-283) of 3820±200 BP (=2560–1970 cal. BC) from the lateral entrance grave of Champ-Grosset (Quessoy, Côtes d'Armor) is broadly comparable, and probably also relates to the closure of the monument (L'Helgouach and Le Roux 1965). Other lateral entrance graves have provided little evidence relating to closure, though a Bell Beaker from Kerlescan (Carnac, Morbihan) and a wristguard from Lestrigiou (Plomeur, Finistère) may represent final depositions (L'Helgouach 1965).

Most of the Armorican angled graves were excavated or plundered in antiquity, so that these monuments have provided only limited information. The monument of Goërem (Gavres, Morbihan), however, has been excavated using modern techniques and is therefore more informative (L'Helgouach 1970). A rubble blockage was found at the entrance to the passage, but L'Helgouach (*op. cit.*) considers this to be natural, resulting from cairn collapse. The chamber of the monument was found to be divided into four compartments, by means of transverse slabs (figure 6.15b), and the end chamber had been completely sealed by the construction of drystone walling between the slab which demarcates it and the walls of the chamber. Within this compartment were found two Bell Beakers, two gold fasteners, two barbed and tanged flint arrowheads and a fragment of a copper awl. These objects were resting on stone paving, below which was found a layer of sterile marine sand. Above the paving was a layer of earth and stones (probably collapsed from the mound), above which was a hearth, associated with Early Bronze Age material. Charcoal from the floor level of this end chamber produced a radiocarbon date (Gif-1148) of 4430±140 BP (=3350–2900 cal. BC), though this is probably not contemporary with the Chalcolithic material. L'Helgouach (1970) noted that the drystone wall sealing the end chamber had been broken into in antiquity and, on the basis of this, he suggests that the Chalcolithic material represents intrusive activity, after the closure of the monument. Given the evidence for final depositions at other sites, however, and the fact that the Chalcolithic material at Goërem is stratified beneath an Early Bronze Age hearth, it seems more reasonable to attribute the violation of the monument to the Bronze Age, and to see the Chalcolithic assemblage as a terminal deposition, placed in at the time of closure.

CHALCOLITHIC RELIGION AND SOCIETY

At *c.* 3000 cal. BC, most of the Armorican gallery graves, lateral entrance graves, angled graves and T-shaped graves, as well as many of the passage graves, were in regular use. By *c.* 2250 cal. BC, almost all of these monuments had been abandoned: very few have produced Bronze Age material and, where such material has been found, it is usually in an intrusive context. The chronological evidence suggests that these monuments were abandoned over a period of centuries; the passage graves between 3250 and 2250 cal. BC, the other monuments between 2850 and 2250 cal. BC. The evidence from passage graves such as Ile Carn, Gavrinis and Ty-Floc'h, the gallery grave of Prajou-Menhir, the lateral-entrance grave of Crec'h-Quillé and the angled grave of Goërem suggests that, far from simply falling into disuse, the monuments were deliberately sealed and closed. The existence of final depositions in some monuments, and of protective layers of rubble, earth or limpet shells covering the floor, suggests that this closure was conducted in a spirit of reverence rather than desecration and, in some cases (as at Gavrinis), the evidence suggests that the closure of the monuments was accompanied by elaborate rituals. It is true, of course, that only a minority of sites have furnished evidence of this sort, but this is probably a result of recent disturbance and inadequate recording, and excavations in the future will undoubtedly provide further information.

At the same time as the large megaliths were being abandoned, other monuments were being built and new ritual sites were being established. Megalithic cists and 'simple dolmens' have already been mentioned in the previous chapter: some of these, such as L'Hotié-Viviane and Lost-er-Lenn, have produced material of Late Neolithic date, whilst others are dated to the Chalcolithic. Many of these monuments, however, have produced no material, having been plundered in antiquity (Bender 1968). The site of Kourégan (Ploemeur, Morbihan) seems to have been a complex of small cists, possibly surrounded by an enclosure of upright stones (Le Rouzic *et al*. 1922). One of the excavated cists produced an important Chalcolithic assemblage, including fragments of six decorated Bell Beakers. A second, adjacent cist (interpreted by the excavators as the chamber of a passage grave) contained a hearth, associated with pottery sherds and flint flakes. In the Channel Islands, Chalcolithic material has been recovered from megalithic cists at Beauport (Cable 1877, Johnston 1972), and Les Blanches Banques (The Ossuary': Darrell Hill 1924), Jersey, La Platte Mare (Kendrick 1928), Guernsey, and Structure 2, Herm (Kendrick *op. cit*.). There are a number of other megalithic cists in the Channel Islands, many of them set within small stone circles (Kendrick

1928, Hawkes 1937), but some of these have produced earlier material (see chapter 6), whilst others have produced no datable material at all.

The megalithic cist known as The Ossuary' (figure 7.7), at Les Blanches Banques, Jersey, produced two 'Jersey Bowls' (a local style, contemporary with Bell Beakers), associated with disarticulated human bones representing 10–20 individuals (Darrell Hill 1924, Patton in press). The cist is set between two menhirs (Hawkes 1937) and is directly associated with a Chalcolithic settlement, excavated between 1978 and 1980 (Finlaison and Patton in press). Recent excavations (Patton 1991c) have revealed a further ritual site on La Tête des Quennevais (pl. 6.2, p. 148), the plateau immediately overlooking The Ossuary'. The first phase of activity on this site involved the deposition of a series of Jersey Bowls', associated with an area of burning around a natural shale outcrop: this deposition was then covered by a small tumulus, which was itself surrounded by an earth platform, associated with two small cists. The Ossuary', together with the menhirs, the Blanches Banques settlement and the site of La Tête des Quennevais, make up a complex landscape (figure 7.8) in which several small ritual sites seem to be associated with a Chalcolithic settlement.

The cist-in-circle of La Platte Mare, Guernsey (Kendrick 1928) forms part of a similar landscape. The megalithic cist itself, associated with the remains of a surrounding circle, was excavated in the nineteenth century, and produced a decorated Bell Beaker, two polished stone axes and a barbed and tanged flint arrowhead. Recent excavations at Les Fouaillages (Kinnes 1982, Kinnes and Grant 1983) revealed evidence for a Chalcolithic settlement in close proximity to La Platte Mare and immediately adjacent to the Early Neolithic long mound (see chapter 3). On top of the earlier long mound was a further, enigmatic ritual site, consisting of a platform of alternating layers of packed beach pebbles, earth and boulders: on top of the platform was a circle of recumbent boulders, with two semicircular enclaves, enclosing a 'long mortuary zone' defined by two massive posts. Within the 'mortuary zone' was found a deposition of eight barbed and tanged arrowheads. The structure was covered by an oval mound of turf, and charcoal from the base of this mound gave a radiocarbon date (BM-1891R) of 4020±100 BP (= 2865–2460 cal. BC).

The Blanches Banques sites in Jersey and the Lancresse Common sites (Les Fouaillages and La Platte Mare) in Guernsey are particularly important in terms of the information they provide for changing ritual landscapes at the end of the Neolithic. The pattern here seems to be one of small settlements, each associated with one or more small ritual sites, in contrast to the Middle Neolithic and Late Neolithic configurations (see chapters 4–6), in which larger ritual sites must have served several settlements, reflecting larger social groupings. These sites, therefore,

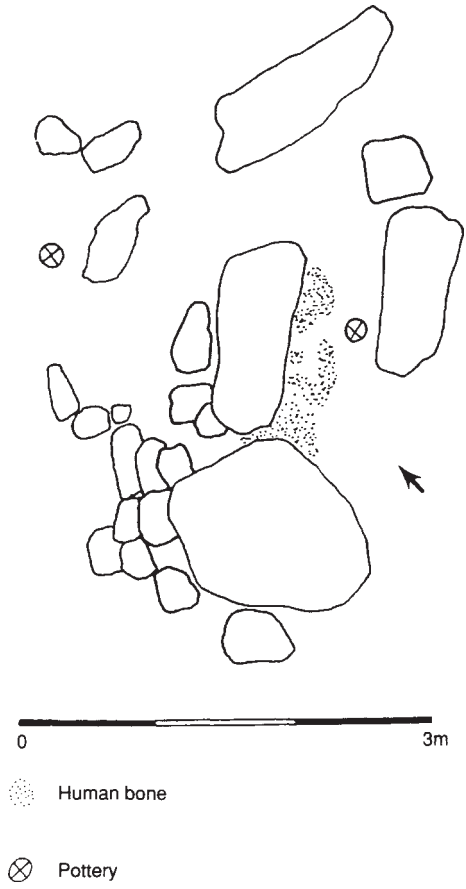


Figure 7.7 Megalithic cist known as The Ossuary' (Jersey)

provide further evidence for the disintegration and collapse of these tribal groupings, and for the decentralisation of ritual practice which seems to have occurred as a result.

There is some evidence for the appearance of open-air ceremonial sites at the beginning of the third millennium cal. BC. The Late Neolithic/ Chalcolithic strata at the site of Le Pinacle, Jersey, were interpreted by the excavators (Godfray and Burdo 1949, 1950) as evidence for domestic occupation, but this interpretation has recently been challenged (Patton 1987a, Finlaison and Patton in press). The site consists of a natural amphitheatre, with a platform constructed at the foot of a massive natural pinnacle of granite. There are no traces of dwellings, no midden remains or domestic rubbish, but the assemblage from the platform includes blades and arrowheads of Grand Pressigny flint, a flat axe and bead of

copper, polished stone axes, decorated Beaker sherds and pottery of Quessoy affinities. Chronologically, the assemblage seems to span the transition between the Late Neolithic and Chalcolithic periods. The location of the site, the nature of the site itself and the assemblage, all suggest an open air ceremonial site rather than a settlement. The site of Er Yoh (Houat, Morbihan) is in some respects comparable. Like Le Pinacle, Er Yoh has been interpreted (Le Rouzic 1930b) as a settlement and, in this case, there is a significant quantity of animal bone and domestic rubbish, suggesting that the site was occupied. Other aspects of the site, however, are suggestive of ritual activity: there is a series of platforms, built around a natural outcrop, as at Le Pinacle, and two natural niches in the rock had been walled up, one containing an intact pottery vessel, the other containing human remains. The assemblage from Er Yoh includes Conguel and Kerugou pottery, but Bell Beakers are absent, suggesting that the site is earlier than Le Pinacle. The evidence from Er Yoh may simply represent a ritual component to domestic occupation (as on many Neolithic sites in Europe) or alternatively it could suggest a ritual site, periodically occupied by groups of people temporarily secluded in the context of extended rituals such as, for example, initiation ceremonies. The evidence from Le Pinacle is less ambiguous, but in both cases the evidence

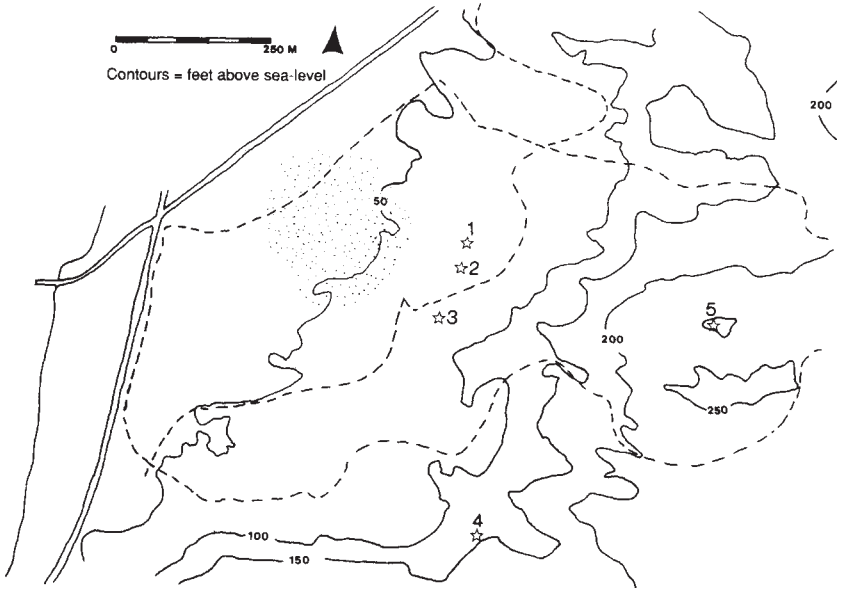


Figure 7.8 Chalcolithic ritual landscape of Les Blanches Banques (Jersey): 1 Broken Menhir; 2 The Ossuary'; 3 Little Menhir; 4 Great Menhir; 5 La Tête des Quennevais. Stippling shows area of settlement

suggests a continued diversification of ritual practice, as seen in the previous chapter.

In general terms, the evidence for the third millennium cal. BC suggests a continuation of the processes and trends that emerged in the second half of the fourth millennium. The abandonment of large monuments suggests the final collapse of earlier religious traditions, whilst the continued proliferation of smaller monuments, in some cases associated with individual settlements, marks a continued trend towards the decentralisation of ritual practice. The exchange of stone axes appears to have ceased and new exchange systems developed. Like the exchange of Grand Pressigny flint (which ceased early in the fourth millennium), these exchange networks involve relatively rare items (principally of copper and gold), suggesting a more competitive and individualistic system than that involved in axe exchange (see chapter 2). In terms of the model developed at the end of chapter 6, this evidence suggests the final collapse of Neolithic tribal organisation and the continued rise of 'Big Men'. Comparison of the Late Neolithic and Chalcolithic evidence, however, shows a marked expansion of these competitive exchange systems at the beginning of the third millennium cal. BC, both in terms of their geographical extent and in terms of the range of items involved. Many of the items involved in these exchange systems can be seen as 'symbols of power', and the proliferation of such items suggests increasing social differentiation, probably linked to intensifying competition between 'Big Men'. As the traditional power structures collapsed, the ability of 'Big Men' to requisition a surplus would have increased significantly, leading to an escalation of competition between them. A successful 'Big Man' would acquire more clients than his rivals and could thus command a larger surplus which, in turn, would enable him to acquire more clients, often 'poaching' them from his rivals. Such processes would lead to increasing social differentiation, expressed through possession of prestige items such as copper objects and gold jewellery. In such a system, the son of an established 'Big Man' would have an inherent advantage, since he would stand to inherit both his father's prestige goods and, potentially, his clients. The system would lead, therefore, to increasing concentration of wealth, power and prestige, a process that may ultimately have given rise to the emergence of chiefdoms in the Armorican Early Bronze Age.

8

CONCLUSION: RITUAL LANDSCAPES AND SOCIAL STRUCTURE IN THE ARMORICAN NEOLITHIC

The monumental traditions discussed in this book cover a period of over 2000 years, and one of the most interesting aspects of the data is the evidence for change through time. In many areas of Europe, it is difficult to compare the evidence for one phase with that for another, since these phases are often marked by different categories of evidence (e.g. megalithic tombs from one phase, large settlements from another) which give information on different aspects of prehistoric life. This poses serious problems for any attempt to establish a diachronic synthesis. The archaeological record is always incomplete and, for the Armorican Neolithic, it is principally settlement evidence that is lacking. This will, of course, bias our understanding of Armorican Neolithic societies: Man may not live by bread alone, but people have nevertheless to eat, reproduce and raise children as well as worshipping their gods and burying their dead. We have a considerable amount of information on the religion and burial practices of Armorican Neolithic communities, but we can say very little about their economy and daily life, and we can only hope that future excavations will rectify this imbalance.

In one sense, however, the consistent bias towards religious and funerary evidence gives us an advantage. Because all phases of the Armorican Neolithic are represented by the same type of evidence (principally megalithic monuments) it is easier to make comparisons between phases and to arrive at an understanding of how Neolithic religion changed and developed through time. Throughout this book, the emphasis has been on the relationships between changing monumental traditions and changing social structure, and the aim of this chapter will be to develop a synthesis of the social and cultural transformations discussed in the book, placing these developments in the context of a more general theoretical discussion, in an attempt to understand the underlying processes of cultural change.

Placing these developments in chronological context, four phases can be identified.

1 Early Neolithic (4850–4250 cal. BC)

This phase saw the introduction of farming and animal husbandry in Brittany, and the appearance of the earliest megalithic monuments: long mounds and complexes of decorated menhirs in Southern Brittany, early passage graves in North-western Brittany (see chapter 3). The period is also marked by the development of extensive interaction networks, involving the exchange of stone axes (see chapter 2). In chapter 3 it was suggested that the developments of this phase represent the emergence of a tribal social formation, in which social power was held by elders and based on control of religion and control over the circulation of socially valued objects: following Meillassoux (1967), it was argued that the adoption of an agricultural economy favoured the development of a hierarchy between elders and younger men. The symbols carved on the decorated menhirs include representations of stone axes and domestic animals and, as Bradley (1989) has stressed, are 'peculiarly appropriate to the new mode of production'. In chapter 2 it was argued that the axe was a particularly important symbol, linking agricultural production to human reproduction and axe exchange to megalithic ritual.

Many of the monuments of this phase, like the long mounds of Southern Brittany, are relatively small, and could have been built by individual domestic groups of around a hundred people. Some monuments, however, such as the complex of decorated menhirs at Locmariaquer and the larger passage grave cairns in North-western Brittany, are considerably larger and would have required the co-operation of many such communities, hinting at the development of larger social groupings in some areas. In chapter 3, this was explained in relation to Friedman and Rowlands' (1977) model of social dynamics, in which competition between social groups leads to the emergence of dominant groups with special status in relation to ritual practice, and thus to centralisation, especially in the religious sphere. The landscape of this phase is summarised by figure 8.1, showing the relationships between monuments and individual domestic groups on the basis of the size and distribution of the monuments themselves.

2 Middle Neolithic (4250–3250 cal. BC)

The Middle Neolithic is marked by the proliferation of passage graves along the Armorican littoral. The decorated menhirs of Locmariaquer appear to have been deliberately pulled down at this stage, and the fragments re-used in the construction of the passage graves. The structure of the passage graves, and the nature of the carved motifs found within them, suggest that access to ritual sites and sacred knowledge

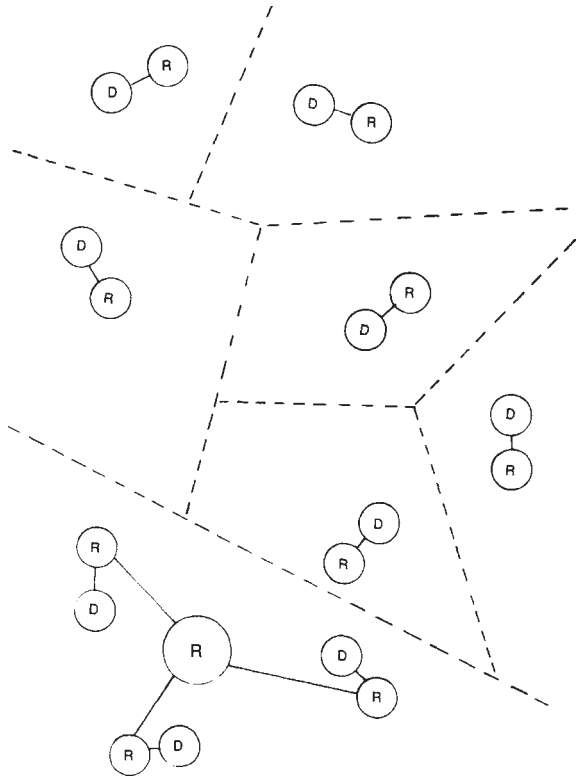


Figure 8.1 Model of Early Neolithic landscape and social structure: D: domestic site; R: ritual site; broken lines show territorial boundaries

became increasingly restricted. The symbols which had been visibly carved on massive standing stones were taken into relatively small, dark chambers, covered by mounds and separated from the outside world by long, narrow passages. Only a small number of people could have participated in the ceremonies conducted within the monuments, and their structure would have prevented people outside from seeing or comprehending the activities inside. The symbols themselves became increasingly stylised, and comprehensible only to the initiated, and the existence of 'entoptic' motifs suggests that trance-like states (probably attainable only by ritual specialists) played an increasingly important role in Neolithic religion. In chapter 4, these developments were interpreted as evidence for a consolidation of elders' control over ritual practice and sacred knowledge. The Middle Neolithic period is also marked by increasing evidence for centralisation. The construction of most passage graves would have required working teams of 100–150

people, corresponding to communities of 300–600 (see chapters 1 and 4). Monuments such as Gavrinis and Petit Mont, in Southern Brittany, and La Hougue Bie in Jersey are very much larger than other contemporary monuments and must represent higher order centres, probably associated with the development of larger social groups (figure 8.2). In chapter 4, it was suggested that this process of coalescence and centralisation resulted from escalating competition between social groups. Following Friedman and Rowlands' (1977) model, it was argued that competition, mediated through competitive feasting, and perhaps also through the construction of monuments themselves, led to the emergence of dominant lineages or groups. Since the success of such groups is likely to have been attributed to supernatural patronage, these groups may have acquired a special status in relation to the control of rituals. If high status groups were able to demand higher bride-prices, this would enable them to accumulate bridewealth valuables, and to use these to acquire more women in the context of polygynous marriages. This in turn would increase the labour pool in the dominant group, enabling them to produce a larger surplus and thus to sponsor even more lavish feasts or build even larger monuments. The process is therefore one of continual escalation and intensification, leading to increasing social differentiation and demanding increasing surplus production, to support the construction of larger and larger monuments. Dramatic evidence for the emergence of high status social groups is provided by the *Grand Tumulus* monuments of Southern Brittany (see chapter 5), where massive mounds cover burial chambers with lavish grave-goods. The Carnac alignments are likely to be contemporary with these monuments (see chapter 5), suggesting that the dominant group associated with the *Grand Tumulus* monuments may also have controlled communal rituals on a massive scale.

3 Late Neolithic (3250–2850 cal. BC)

By the end of the fourth millennium cal. BC, the construction of passage graves had ceased, and the powerful elite groups of Southern Brittany had apparently collapsed. Some of the larger passage graves were sealed up and abandoned, though many passage graves continued in use. The period also saw the proliferation of gallery graves and lateral entrance graves (see chapter 6), and a study of these monuments suggests a widening of access to ritual knowledge and a progressive decentralisation of ritual practice, probably linked to the disintegration of larger social groupings. The organisation of space in these monuments is less complex than in the passage graves, and does not embody the same restrictions of access. The carved motifs found within the chambers are more visible, less stylised and more explicitly representational, and

'entoptic' motifs are absent. Other monument types, such as the angled graves and T-shaped graves, suggest the emergence of distinct regional traditions, and a localised survival of some aspects of the passage grave tradition (see chapter 6). There are apparently no higher order monuments in this phase: no monuments stand out from the others in terms of their size and monumental construction, in the way that some passage graves clearly do. All of the monuments of this phase could have been built by communities of a few hundred people. The period also sees the appearance of smaller megalithic cists, which could have been built by individual domestic groups of around a hundred people. The Late Neolithic evidence, therefore, suggests a reversal of earlier trends, with the disintegration of larger social groupings (figure 8.3), linked to a widening of access to sacred space and knowledge. At the intra-communal level, however, the social formation seems to have changed little: control of megalithic ritual (albeit on a less restricted basis) and control of axe exchange networks (which continued and even expanded)

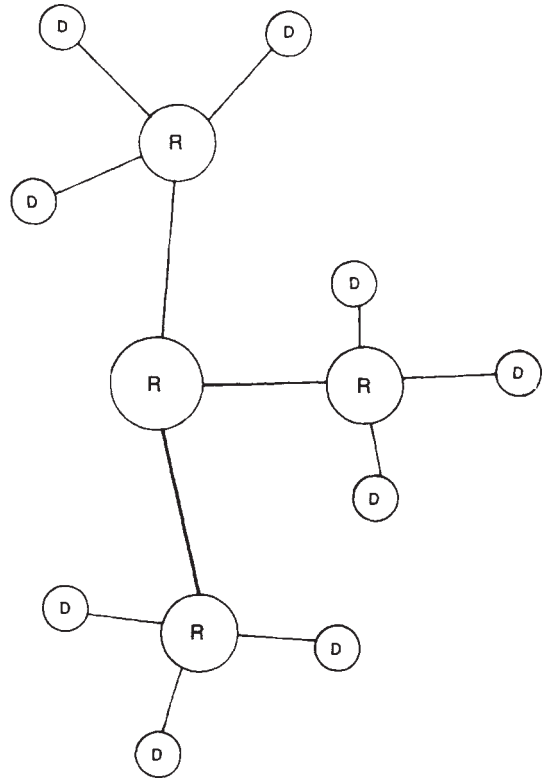


Figure 8.2 Model of Middle Neolithic landscape and social structure. D: domestic site; R: ritual site

remained fundamental. New exchange systems, however, developed alongside the established axe exchange networks, and these suggest a more competitive, individualistic mode of exchange (see chapter 6). This was interpreted as evidence for the development of a new political system, based on competition between 'Big Men'. 'Big Men' (cf. Sahlins 1963) compete for status through a system of patronage, usually by producing a surplus and using this to offer assistance to others (often in putting together payments for initiation ceremonies or bridewealth transactions). This creates a situation of indebtedness which enables the 'Big Man' to make demands on his clients' labour at a later date, thus enabling him to produce a larger surplus which can be used to acquire more clients, or to obtain prestige items through competitive exchange. The rise of 'Big Men' may have been facilitated by pressure on both the social formation and the natural environment, caused by the escalating demands for surplus production which characterised the Middle Neolithic social formation (see chapters 4 and 5). Once established, 'Big Men' would have challenged the power of the traditional elites by offering younger men an alternative route to economic independence (see chapter 6). This would have limited the ability of the traditional elites to requisition surplus production (an increasing amount of which would go, instead, to the 'Big Men'), causing the cycle of escalating surplus production and monument construction to wind down.

4 Chalcolithic (2850–2250 cal. BC)

The third millennium cal. BC saw the abandonment of the Armorican gallery graves and remaining passage graves, and the collapse of the Neolithic stone axe exchange networks. The collapse of axe exchange was not caused by the replacement of stone by copper (which remained a rare commodity), and should probably be attributed to social factors (particularly since stone axes continued to be made and used, but not exchanged). In some areas, the period was also marked by the proliferation of small megaliths, associated with individual settlements (as at Les Blanches Banques, Jersey and L'Ancresse, Guernsey: see chapter 7). In most respects these developments can be seen as a continuation of the trends identified in the Late Neolithic evidence. A further decentralisation (figure 8.4) marks the final collapse of the Neolithic social formation, with the abandonment of megaliths, the end of axe exchange and the apparent disintegration of social units above the level of the individual domestic group. The period is also marked, as one might expect, by the development of rapidly expanding new exchange networks. Most of the items involved in this exchange are relatively rare (copper axes and daggers, gold jewellery, schist wristguards) and many are ornamental or symbolic rather than functional. Many of these objects

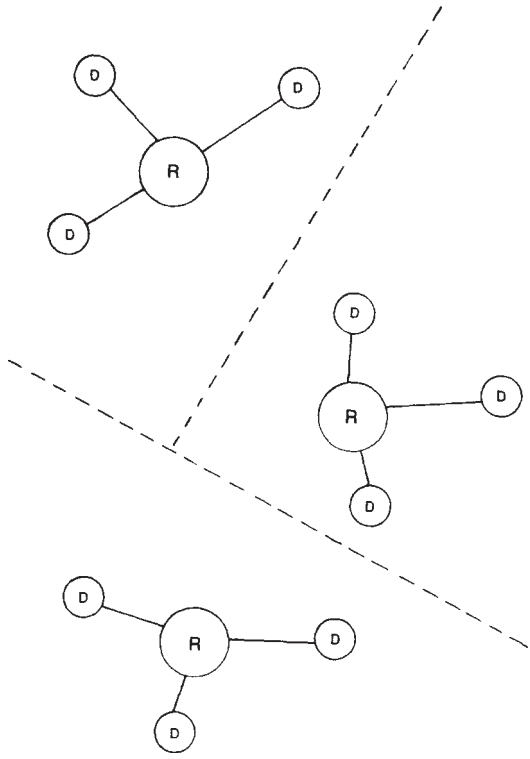


Figure 8.3 Model of Late Neolithic landscape and social structure. D: domestic site; R: ritual site; broken lines show territorial boundaries

are items of personal adornment, which are likely to have served as symbols of prestige and social power. In chapter 7 it was argued that the development of these exchange systems corresponds to an intensification of competition between 'Big Men', following the collapse of the Neolithic social formation. In a competitive system, obviously some were more successful than others: since a successful 'Big Man' would attract more clients than his rivals, he could requisition a larger surplus, enabling him to gain further clients and also to obtain prestige goods, which would enhance his status. Like the Neolithic social formation which preceded it, therefore, the system which emerged during the Chalcolithic had an in-built tendency towards increasing surplus production and increasing concentration of wealth and status.

These developments can perhaps be followed into the Armorican Early Bronze Age (*c.* 2250–1500 cal. BC). This period is marked (Briard 1984) by the appearance of a series of tumuli, covering individual burials. The burials are in wooden or dry stone chambers, or in wooden coffins, covered by circular mounds, and are in most cases accompanied by

grave-goods, including bronze daggers and rapiers (in some cases with handles inlaid with gold studs), bronze axes, gold and amber jewellery, and elaborately worked flint arrowheads. The grave-goods show marked evidence for social differentiation: almost all sites have flint arrowheads and bronze daggers, but of the thirty-one sites listed by Briard (1984), only nine contain gold objects and only two contain amber. The numbers of objects are also variable: the tumulus of Kerodou (Beuzac-Cap-Sizun, Finistère) produced only three arrowheads, one dagger and one bronze axe, whilst the tumulus of Kernonen (Plouvorn, Finistère) contained sixty arrowheads, four daggers (inlaid with gold studs) and four axes, as well as an amber pendant and beads. The sizes of the mounds themselves vary considerably (diameters vary from 5 metres to 60 metres, whilst heights vary from 1 metre to 6 metres), and there is a general correlation

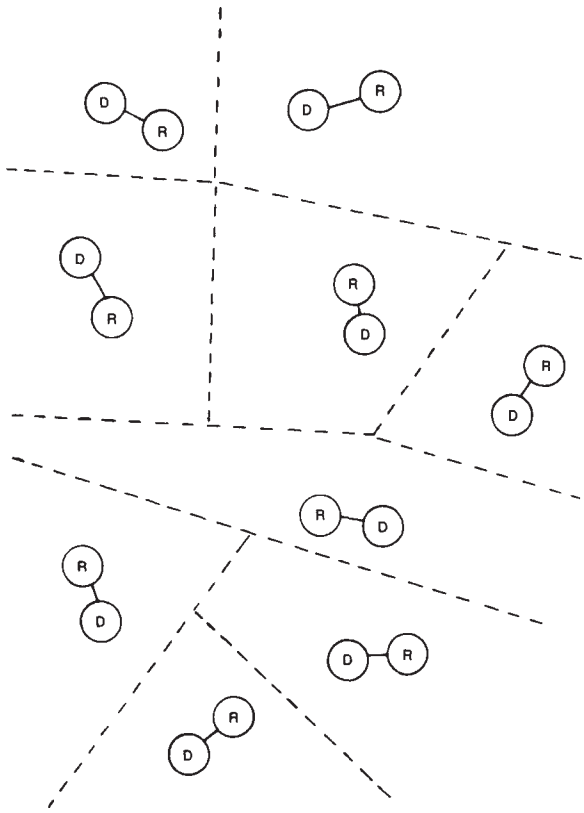


Figure 8.4 Model of Chalcolithic landscape and social structure. D: domestic site; R: ritual site; broken lines show territorial boundaries

between the size of the mounds and the character and quantity of the grave-goods. Of the six largest sites (the tumuli of Kerhué-Bras, Tanwedou, Tossen-Rugouel, Tossen-Kergourognon, Kernonen and St-Fiacre), four have gold, two have amber, all have at least four daggers and three have more than forty-five arrowheads (the average number of arrowheads for the Armorican tumuli taken as a whole is twenty-three). Of the six smallest sites (the tumuli of Tossen Maharit, Cazin, Kerlivit, Kerodou, Cosmaner and Kervini Sud), none has gold or amber, only one has more than two bronze daggers, none has more than thirty-three arrowheads and only two have more than twenty-three). There is a second series of tumuli, of similar construction but with very different grave-goods (Briard 1984). Pottery, which is never found in tumuli of the first series, is the most common item in the mounds of the second series. A number of the second series mounds contain bronze daggers (never more than two), and one (Pont de la Planche at L'Hermitage, Côtes d'Armor) contained amber, but flint arrowheads, bronze rapiers and axes and gold are completely absent. Radiocarbon dates (Briard 1984) suggest that the two series are broadly contemporary, and their spatial distributions also overlap, although the second series sites are more widespread (figure 8.5).

Comparison of the Chalcolithic and Early Bronze Age evidence suggests a marked increase in social differentiation, with a wider range of prestige items (some of which appear to have been more valuable than others) and the development of a burial tradition which emphasises social status. The Early Bronze Age evidence is consistent with a 'Prestige Goods System' as defined by Friedman and Rowlands (1977). According to Friedman and Rowlands' model, competition between local elites leads to the emergence of powerful chiefdoms, whose power is expressed through the possession of prestige goods. As chiefs compete for control over the circulation of prestige goods, the more successful rulers emerge as 'Paramount Chiefs' who, not surprisingly, keep the most valuable items as expressions of their own power and status. Lesser prestige goods, however, are handed down to local chiefs, who in turn give tribute to the Paramount, often in the form of agricultural produce. This system of patronage enables the Paramount to requisition a larger surplus (since he may have a number of lesser chiefs as clients), which can be used to secure prestige goods through exchange. This system, however, is unstable, since there may be several competing Paramounts in a given area, and the lesser chiefs may change their allegiances from one to another. A successful Paramount will gain more clients than his rivals, enabling him to requisition a greater surplus and to acquire more prestige goods, which in turn will enable him to attract more clients. The tendency within this system, therefore, is towards increasing concentration of wealth and power which, in the Friedman and

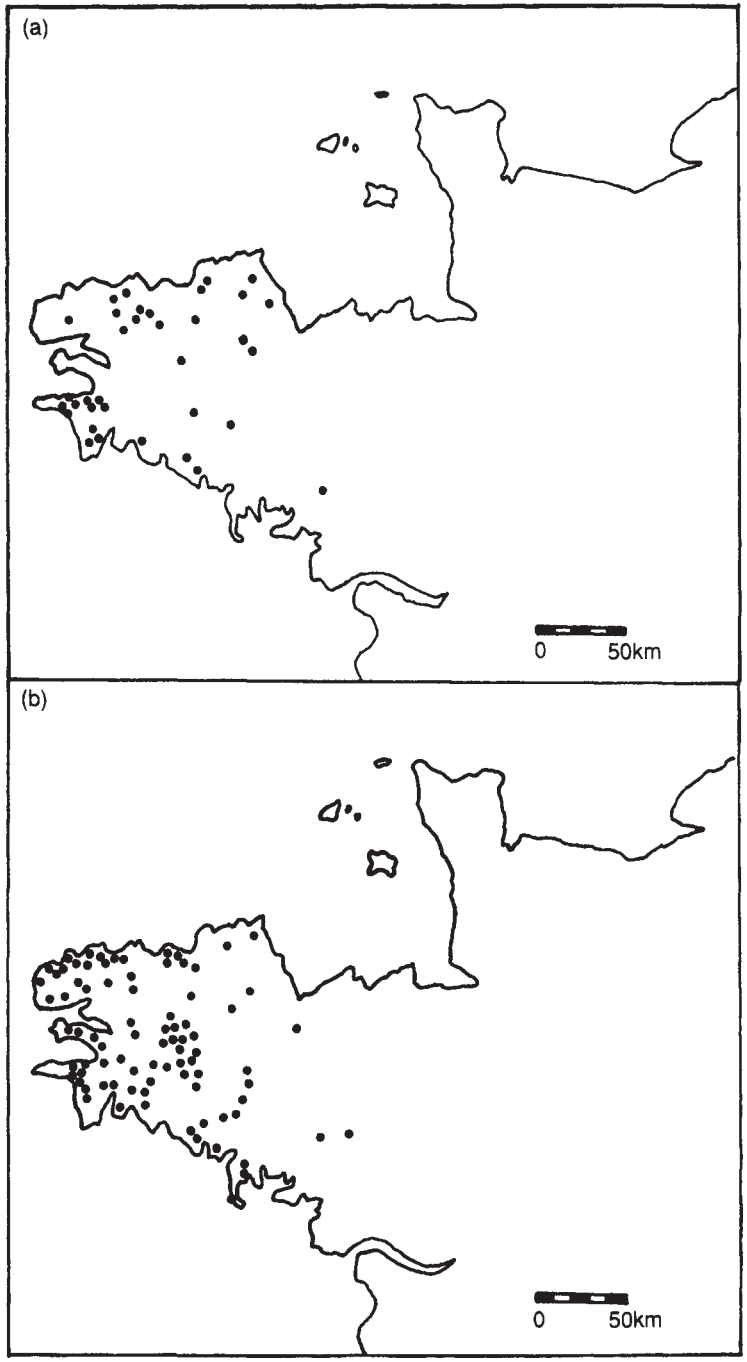


Figure 8.5 Distribution of Armorican tumuli: Series A (a) and B (b)

Rowlands' (1977) model, may lead ultimately to the emergence of the state. Archaeologically, we would expect a Prestige Goods System to be marked by the appearance of a range of prestige items, some of which would be much rarer than others. We would also expect to see evidence for expanding networks of competitive exchange, and for increasing concentration of wealth and power. This, in fact, is precisely what we do see at the beginning of the Armorican Bronze Age.

BEYOND SOCIAL EVOLUTION: APPROACHES TO CULTURAL CHANGE

Since the nineteenth century, most general models of social and cultural change have been based on an evolutionary perspective. This involves an assumption that change is directional: societies evolve from 'simple' to 'complex', from 'bands' to 'chiefdoms', from 'savagery' to 'civilisation'. All too often, this conception of the past has served to reinforce the political ideologies of the present. Nineteenth-century authors, such as Lubbock (1865), saw in evolutionism a justification for British imperialism: they traced an evolutionary sequence in European prehistory from Stone Age savagery to Bronze Age barbarism and classical civilisation, and slotted modern 'primitive' peoples into this scheme, showing them to be inferior to enlightened western man. For Marx (1965) and Engels (1972), on the other hand, the same evolutionary sequence showed that capitalism would eventually give way to communism (at which point, they believed, the sequence would end). The continued faith in evolutionary models may also be largely ideological in character. Since the nineteenth century, Western cultures have invariably seen themselves as representing the pinnacle of human technological and cultural achievement. History has been taught largely as a series of 'landmarks' in an evolutionary progression: the first use of fire, the first agriculture, the first writing, the first men on the moon. Human cultural evolution follows neatly on from the biological evolution which produced the human species itself. The basic notion of cultural evolution is rarely questioned or even reflected on.

Recent approaches to social and cultural change, though fundamentally different from the perspectives of Pitt-Rivers or Engels, still rely in most cases upon an evolutionary framework, and this applies equally to 'Processual' and 'Neo-Marxist' approaches. Renfrew (1979), in looking at the Neolithic of Orkney, identifies an ongoing process of centralisation with the emergence of clans and tribes and, ultimately, the development of chiefdoms. Society becomes progressively more complex, more hierarchical and more centralised, and each stage in this process is seen as a logical outcome of the previous stage. Friedman and Rowlands (1977) have attempted to develop a Neo-Marxist approach to social

change in tribal societies, and their model has formed the basis for much of the discussion in this book. According to Friedman and Rowlands, competition between lineages in a tribal society leads to the emergence of dominant groups, who may acquire special roles in relation to the control of religion and initiation ceremonies. The status of such groups may enable them to demand higher bride-prices, allowing them to accumulate bridewealth valuables and thus to acquire more women from other groups in the context of polygynous marriages. This increases the labour pool within the dominant lineage, enabling them to produce an even bigger surplus and thus leading to increased concentration of status and wealth. Eventually, a dominant group may develop into a chiefly dynasty, whose power and status are expressed through possession of prestige goods, and this, in turn, may lead to the development of a Prestige Goods System as outlined above. As rival Paramount chiefs compete for status and power, some are more successful, leading to further concentration of power and wealth and, ultimately, to the emergence of the state. In both of these models, social change is seen as a continuous evolutionary progression, occurring through the consolidation and expansion of existing power structures: it is the dominant lineage that becomes the tribal elite, and it is the most powerful tribal elite that becomes the chiefly dynasty. Each stage builds upon the secure foundations established in the previous phase.

Briard and L'Helgouach (1957) attempted to develop a similar model to explain the cultural transformations of the Late Neolithic and Chalcolithic periods in Armorica. They argued for a Chalcolithic date for the *Grand Tumulus* monuments of Southern Brittany (see chapter 5), and suggested that these massive cairns, with lavish grave-goods, were precursors of the rich tumulus burials of the Armorican Early Bronze Age. Again, we see cultural change conceived as an evolutionary progression, with society becoming increasingly hierarchical and centralised. Briard and L'Helgouach's (1957) model, however, can no longer be supported. Excavations over the past three decades have caused the chronology of Armorican monuments to be revised, and it now seems clear that the *Grand Tumulus* monuments date to the Middle Neolithic, over a thousand years before the Early Bronze Age mounds.

It would be difficult to fit the evidence outlined in this book to the kind of evolutionary model presented by Renfrew (1979) or Friedman and Rowlands (1977). The Armorican evidence does not suggest a continuous progression from simple to complex, but rather a cyclical development. The Early and Middle Neolithic periods are indeed marked by evidence for centralisation and for increasing concentration of status, power and wealth, but this seems to collapse in the Late Neolithic. The Chalcolithic and Early Bronze Age are again marked by evidence for centralisation and concentration of power, but in the context of a fundamentally different

social formation. The tribal elites of the Middle Neolithic, therefore, seem not to have become the chiefly dynasties of the Early Bronze Age: on the contrary, these dynasties seem to have developed following the collapse of the Middle Neolithic system. Friedman and Rowlands (1977) recognise that the evolutionary sequence may be halted, particularly if the natural environment will not support increasing surplus production, but such a collapse is seen as an evolutionary dead-end, leading either to stagnation or to regression. In the Armorican evidence, however, it is the collapse of the Neolithic social formation, rather than its development and expansion, that seems to lead to the emergence of the Early Bronze Age chiefdoms.

A DIALECTICAL APPROACH TO SOCIAL CHANGE

The evolutionary approaches outlined above cannot adequately account for the sequence identified from the archaeological record. A dialectical approach (cf. Patton 1987b, 1991d), however, may offer some insight into the social and cultural processes associated with this sequence. The concept of the dialectic originates in the philosophical writings of Aristotle and Plato, and was later elaborated by Hegel. Marx (cf. 1959), in elaborating the concept of 'dialectical materialism', introduced the dialectic to social studies. Essentially, the idea of the dialectic is of a logical development of thought or reality through 'thesis' and 'antithesis' to a 'synthesis' of these opposites. In the historical dialectic of Marx, social change is considered to occur through the resolution of contradictions. Rapid technological change, for example, can set up contradictions between the 'forces of production' (technology) and the 'relations of production' (the social system through which production is organised): this creates pressure which may lead either to the rejection of new technology or to fundamental social change to accommodate it (e.g. the emergence of capitalism following the development of industrial production). Alternatively, contradictions may occur within the social system itself, between the interests of particular groups or classes, leading to conflict and, potentially, to social change (as with the French Revolution). Central to this dialectical conception of history is the notion that social change does not necessarily occur through the expansion and consolidation of existing power structures, but may occur through crisis and conflict. In this case, the collapse of a social formation, far from leading to stagnation or regression, may lead to rapid and fundamental social change.

Dialectical approaches to historical and social studies have been criticised (cf. Popper 1940) on the grounds that they are unduly deterministic, reducing human agency to a passive status, responding to external forces. This criticism applies particularly to approaches (cf.

Godelier 1966) which emphasise the significance of 'inter-systemic' contradictions (between the 'forces' and 'relations' of production) as causes of social change, regarding 'intra-systemic' contradictions (conflict within the social system) as epi-phenomenal. Ultimately, such approaches almost invariably rely on technological determinism. The deterministic view of dialectical process has its origins in the writings of Engels (1934) and in some of Marx's works (cf. 1970). Engels (1934) attempted to identify a 'Dialectic of Nature', and to define the historical dialectic as an extension of natural law. There is, however, an alternative view of dialectical process, originating in the earlier works of Marx (1898, 1959) and elaborated by Sartre (1976). Sartre's approach takes human agency as its starting-point, insisting that The entire historical dialectic rests upon individual *praxis* insofar as it is already dialectical' (Sartre 1976, p. 80; *praxis* refers to human agency or action). Human action, according to Sartre, is always dialectical, since it involves the transcendence of an existing reality (the 'thesis' of the dialectic) towards an intended future reality (the 'antithesis') and has a concrete result (the 'synthesis') which may be different from that intended. In Sartre's model of social change, *praxis* is always situated in a given socio-historical field, which is itself defined (and is continually redefined) through *praxis.* This socio-historical field is what Sartre defines as the *practico-inert:* it is the inert structure created by *praxis* in the past, which constrains *praxis* in the present. Social change involves the transcendence of *practico-inert* structures through *praxis,* and results ultimately in the development of new *practico-inert* structures. In practical terms, this means that social change occurs when, in response to pressures or conflict within society, people act to change the social system. This action leads to the establishment of a new social formation, which embodies its own internal pressures and conflicts.

Each of the social formations outlined at the beginning of this chapter embodies structural tendencies towards expansion, intensifying competition and increasing concentration of wealth. These trends, as Friedman and Rowlands (1977) stress, require the production and appropriation of increasingly large surpluses, and this is likely to put pressure both on the natural environment and on the social formation. This pressure produces crisis within the social formation, which may lead ultimately to its collapse. In the model outlined at the beginning of this chapter, the collapse of the Neolithic tribal formation was caused by the emergence of a rival political system (based on competition between 'Big Men'), which undermined it and eventually became dominant. The rise of this new system, however, involved the same trends towards expansion and intensification which had characterised the previous social formation.

Like the 'epi-genetic' evolutionary model of Friedman and Rowlands (1977), the model presented here seeks to explain the development of a

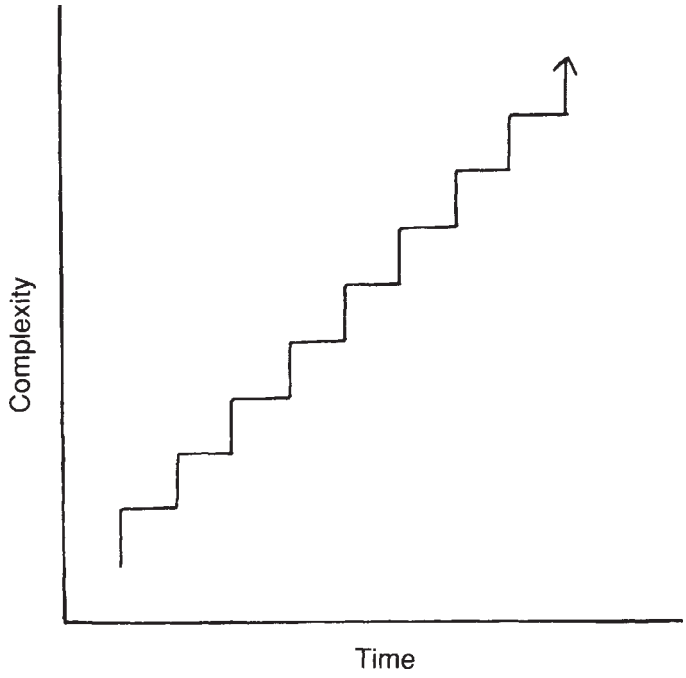


Figure 8.6 An evolutionary model of social change

social system by reference to structural features of the social formation which historically precedes it. Unlike evolutionary models, however, it does not assume that social change is necessarily uni-directional (i.e. from 'simple' to 'complex', or that social change necessarily occurs through the expansion and consolidation of existing power structures. The collapse of social formations, far from being an evolutionary 'dead-end' leading to stagnation or regression, is seen as a dynamic process which can lead to the development of entirely new systems.

An evolutionary model of social change can be conceived as a staircase (figure 8.6). Each phase of change is seen as a step on an evolutionary progression, with society becoming increasingly hierarchical and increasingly centralised. This process requires increasing surplus production, and this demand is met by colonising new land, and by technological innovation. A dialectical model, by contrast, can be conceived as a cycle or wave (figure 8.7). The cycle begins with the development of a given social formation, a phase of increasing social differentiation and centralisation, requiring increasing surplus production. Surplus production and appropriation, however, are constrained by environmental, technological and social factors and, at a

given point (the top of the wave), these constraints produce a crisis in the social formation. This may lead to its collapse, and to the development of a new social formation, at which point the cycle begins again. A dialectical approach does not rule out evolutionary developments, rather it places them in a broader context, situating them on the upswing of the cycle rather than seeing them as part of a continuous trajectory leading inevitably to modern civilisation. For more than a decade, archaeologists have shown much interest in the possibility of cyclical change (cf. Bintliff ed. 1990, Kristiansen 1978), but this approach has not so far been applied to the Armorican Neolithic.

SOCIAL AND IDEOLOGICAL CYCLES IN PREHISTORY

Most of the discussion in this chapter has focused on changing social formations in prehistory. Archaeologists, however, do not dig up social systems: when we are dealing with the religious and burial practices of past societies, we are looking, in effect, at ideological representations of past social formations. If we are to understand the development of prehistoric societies, therefore, it is necessary to have some conception of the relationship between changing social structure and changing ideology. In looking at the archaeological evidence presented in this book, we can identify a sequence of ideological changes which corresponds closely to the cycle of social change outlined above.

The first phase in this sequence can be characterised as a *consolidation* phase. The Early Neolithic period, for example, sees the emergence of an

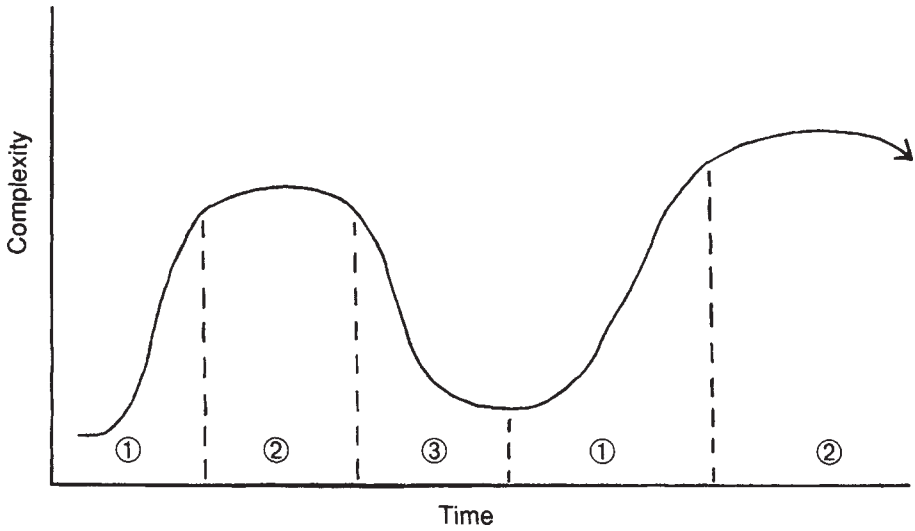


Figure 8.7 A dialectical model of social change: 1 expansion phase; 2 crisis phase; 3 collapse

ideology which stresses inter-generational bonds and obligations in relation to the past and the ancestors (see chapters 2 and 3). There are a number of key symbols in this ideology (notably the axe), and these continue into the Middle Neolithic period. The context of these symbols, however, changes significantly during the fourth millennium cal. BC, suggesting increasing control of the ideology by an elite (see chapter 4). Certain categories of monument provide evidence for marked social differentiation (see chapter 5), expressed through manipulation of the same symbolism (e.g. the large numbers of elaborate stone axes found in monuments of the *Grand Tumulus* series). The consolidation phase corresponds to the up-swing of the cycle shown on figure 8.7, and is marked by continuity in terms of symbolism. The context of the symbolism changes, however, and the symbols themselves may become more stylised and less explicit, suggesting increasing control of religion and ideology.

The second phase can be characterised as *adaptation in crisis*. In the Late Neolithic period, we see a reversal of many of the earlier trends, with less emphasis on social differentiation in ritual and less evidence for restriction of access to sacred space and knowledge (see chapter 6). The symbolism itself changes, becoming less stylised and more explicit, but some of the symbols (notably the axe) continue, and the basis of ritual practice remains, in many respects, unchanged. The reversal of earlier trends, combined with evidence for the disintegration of Neolithic tribal groupings (see chapter 6) suggests that we are dealing with a period of crisis. This phase corresponds to the top of the wave shown on figure 8.7, and involves a change in ideological strategy on the part of the elite. This change in strategy can be seen as an adaptation to crisis conditions, de-emphasising social differentiation in an attempt to minimise the crisis.

The third phase, corresponding to the down-swing of the wave on figure 8.7, marks the *replacement* of one elite by another. This is marked by fundamental changes in ritual practice (the abandonment of megaliths), and by a complete break in terms of symbolism. The axe, for example, seems to lose its symbolic importance, and decorated pottery, items of personal adornment and weapons become powerful symbols of the new elite. The third phase is also marked by the apparent collapse of social groupings above the level of the individual domestic group, but this is immediately followed by a new phase of centralisation and increasing social differentiation as the Early Bronze Age marks the beginning of a new cycle.

The cycles of social and ideological change identified above offer a coherent explanation of the archaeological evidence outlined in this book. This, however, is simply one among many possible interpretations of this evidence. No amount of evidence could ever constitute 'proof of a general

model such as this, and the whole concept of 'scientific proof is largely discredited (cf. Popper 1959, Feyerabend 1975), but there ought still to be some means of evaluating models against one another. For Popper (1959) models are evaluated on the criterion of 'potential falsifiability': whilst it may not be possible to prove a hypothesis true, it should be possible to prove it untrue by testing it against independent data. A model which could not potentially be falsified is of little value, since there is no way of assessing it in relation to the data. In practice, however, it is difficult to define any data as truly 'independent', since all 'facts' are constructed within a theoretical context (cf. Wylie 1982). Attempts to evaluate models on methodological rather than substantive criteria also tend to privilege particular types of model (because they are more easily testable), despite the fact that these are no more likely to be 'true'. Wylie's (1982) Realist alternative is a process of:

> Trying out different…ways of conceptualising the data…to see if, when the data are conceived as the outcome of one type of mechanism rather than another, they are better integrated or take on more intelligible form. (1982, p. 42)

This, in general, is the approach that has been adopted in this book. Whilst it may not be possible to falsify a general model in any formal sense, we might still expect it to have predictive value. The cycle shown on figure 8.7 was explained by reference to structural features of the social formations concerned, so we might expect to recognise similar cycles in data relating to similar social systems elsewhere or at different times, and this may be a fruitful avenue for future research. This model, however, can only be expected to predict general trends in social and cultural change, and is in no sense deterministic. Social change, as we have seen, occurs as a result of human action, and is not in itself determined by any external process or law. People act, however, in response to material situations, and it is possible to predict the development of these situations. The nature of the response will depend upon the particular circumstances of time, place and culture. Whilst we might expect to find evidence for similar cycles of social change in other contexts, therefore, we cannot predict from a general model the type of social systems that will develop as a result of it.

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