

Long Mounds and Megalithic Origins in Western France: Recent Excavations at Prissé-la-Charrière

By CHRIS SCARRE¹, LUC LAPORTE² and ROGER JOUSSAUME³

The ancestry of the long mound has long been a key focus in debates on the origins of monumental and megalithic architectures in western France. Typological schemes and absolute dates have alike been invoked in support of different models of monument development, but with limited success. Recent excavations at Prissé-la-Charrière, a 100-metre long mound in the Poitou-Charentes region, have emphasised the importance of internal structure and the complex process of modification and accretion by which many long mounds achieved their final form and dimensions. Excavations have revealed an early megalithic chamber in a dry-stone rotunda, that was progressively incorporated in a short long mound, then in the 100 m long mound we see today, which contains at least two further chamber tombs. The wide range of monument forms present in western and northern France during the 5th millennium BC suggests that the issue of monument origins must be viewed in a broad inter-regional perspective, within which a number of individual elements could be combined in a variety of different ways. Consideration of seven specific elements, including the shape of the mound, the position and accessibility of the chamber, and the significance of above-ground tomb chambers as opposed to graves or pits leads us to propose a polygenic model for the origins of the long mounds and related monuments of western France.

The Neolithic chambered tombs of north-west Europe, despite their prominent architecture, have proved extraordinarily difficult to date. The crucial problem arises from the fact that those elements that are susceptible to radiocarbon dating (such as charcoal, and even human bone) are only indirectly or insecurely associated with the construction phase of the monument itself. This has meant that chronological schemes for these tombs have frequently relied on the morphology and typology of their structure. The first serious attempts to arrange the monuments in a typological series were made in the 19th century. In 1868, for example, W.C. Lukis published a brief account of 'the various forms of monuments, commonly called dolmens, in Brittany, pointing out a progress in their architectural construction, with an attempt to reduce them to

chronological order'. Lukis argued that in Brittany, cist burials may have been the earliest tomb type, with passage graves a subsequent development. Among the passage graves, furthermore, he distinguished two main varieties: those roofed by capstones, which he considered earlier than those roofed by corbelled vaults (Lukis 1868). The scheme presented 60 years later by Zacharie Le Rouzic remained broadly similar to Lukis's, despite the extensive excavations that had been undertaken in the Carnac region in the intervening decades. Le Rouzic considered 'tertres tumulaires à coffres' (long mounds with cists) to be the earliest type, attributing them to the Neolithic. Passage graves and *allées couvertes* followed in the Eneolithic, and closed chambers under the massive Carnac mounds he assigned to the Bronze Age (Le Rouzic 1933).

A fundamental reassessment of Breton monument chronology was made necessary when the first radiocarbon dates became available in the 1960s. Calibration of radiocarbon dates from Barnenez, Carn, and Guennoc on the north coast of Brittany, and from Kercado near Carnac, eventually pushed these passage graves back to the first half of the 5th

¹McDonald Institute for Archaeological Research, Downing St, Cambridge CB2 3ER

²Laboratoire d'Anthropologie, Université de Rennes 1, Campus de Beaulieu, 35042 Rennes Cedex, France

³La Gilbertière, 85440 Talmont-St-Hilaire, France

Received: December 2002; Accepted: March 2003

millennium BC (Giot 1981). On the basis of the dates, new trajectories of tomb development were proposed which argued that passage graves were the earliest type and that they, rather than the long mounds, should be placed at the head of the Breton monument sequence. By the late 1980s and 1990s, however, the pendulum had begun to swing back, and the early dates for passage graves were called into question on a number of grounds. The radiocarbon dates on which so much reliance had been placed were among the first to be produced by the Gif-sur-Yvette laboratory. Furthermore, many of the samples submitted had been too small to give satisfactory results, and had large error margins. At the 95% confidence interval this meant that some of these key dates spanned as much as a millennium, while others were based on charcoal which could have been old at the time the monument was built.

Given the manifest uncertainties of the radiocarbon evidence, archaeologists looked once again to the typology of the monuments, and of the pottery that they contained. This led to the revival of a variant of Le Rouzic's sequence, in which closed chambers in modest long mounds (the so-called *tertres* or *tertres tumulaires*) preceded passage graves, the latter being considered a later development. At the same time this re-evaluation gave Carnac mounds a much greater antiquity than Le Rouzic had supposed, slotting them in before passage graves in a direct succession to the more modest *tertres* with their closed cists or chambers (Boujot & Cassen 1992). The manner of treatment accorded to the dead (individual vs. collective burial) was also accommodated within this chronological scheme (Boujot 1996).

These typological exercises have the important merit of imposing order on chaos, but run the risk of suppressing diversity in order to fit individual monuments into a coherent and continuously developing sequence of types. Typological schemes are powered by their own internal logic, as if a genetic process of descent-with-modification were in operation. Yet the design and construction of funerary monuments is a product of human action, not the result of a natural organic evolution (Steadman 1979). Furthermore, typology too readily assumes what it sets out to prove: that there does indeed exist one single model sequence into which all monuments should be accommodated. This gives no scope for the variability in the material forms created and used by human societies. Furthermore, it pays insufficient

attention to regional differences: a typological scheme developed for southern Brittany need not necessarily apply to the whole of the peninsula, still less to the entirety of north-western France. Yet well-known monuments of southern Brittany such as the Carnac mounds should not be considered to be isolated examples, since similar monuments can be found throughout the whole of north-west France. In particular, a large number of long mounds is known south of the Loire. These may measure over 100 m long in some cases; one of the very largest, the Gros Dognon at Tusson (Charente), measures 10 m high, 45 m wide, and 150 m long, and in its dimensions easily stands comparison with the Tumulus de Saint-Michel at Carnac (Joussaume 1997).

The elongated form and massive dimensions of the west French long mounds south of the Loire does, however, mask a variety of internal arrangements. Some have a single axial chamber opening from the middle of one end; others have a whole series of chambers ranged along the long axis, with passages opening onto one side of the mound. An example of the latter kind is the tumulus of Le Planti at Availles-sur-Chizé, with a series of ten chambers arranged side-by-side (Bouin & Joussaume 1998) (Fig. 11, below). This highlights the contrast between external form and internal architecture. It also draws attention to the character of these monuments as the cumulative products of long processes of modification, enlargement and accretion.

Furthermore, there is evidence that the passage grave tradition may be particularly precocious in this region: the passage grave at the western extremity of the Bougon F long mound has given a stratified series of radiocarbon dates going back to the early 5th millennium BC (Scarre *et al.* 1993; Mohen & Scarre 2002). These dates pose anew the question of the chronological relationship between the long mound and passage grave traditions. They also highlight the role which may have been played by Neolithic communities of the Poitou-Charentes region in the development of the long mound and of other Neolithic funerary architectures.

PRISSÉ-LA-CHARRIÈRE

It was to study these processes that the present authors began excavations in 1995 at the long mound known as Péré C, one of a pair standing in woodland at Prissé-la-Charrière, some 25 km south of Niort

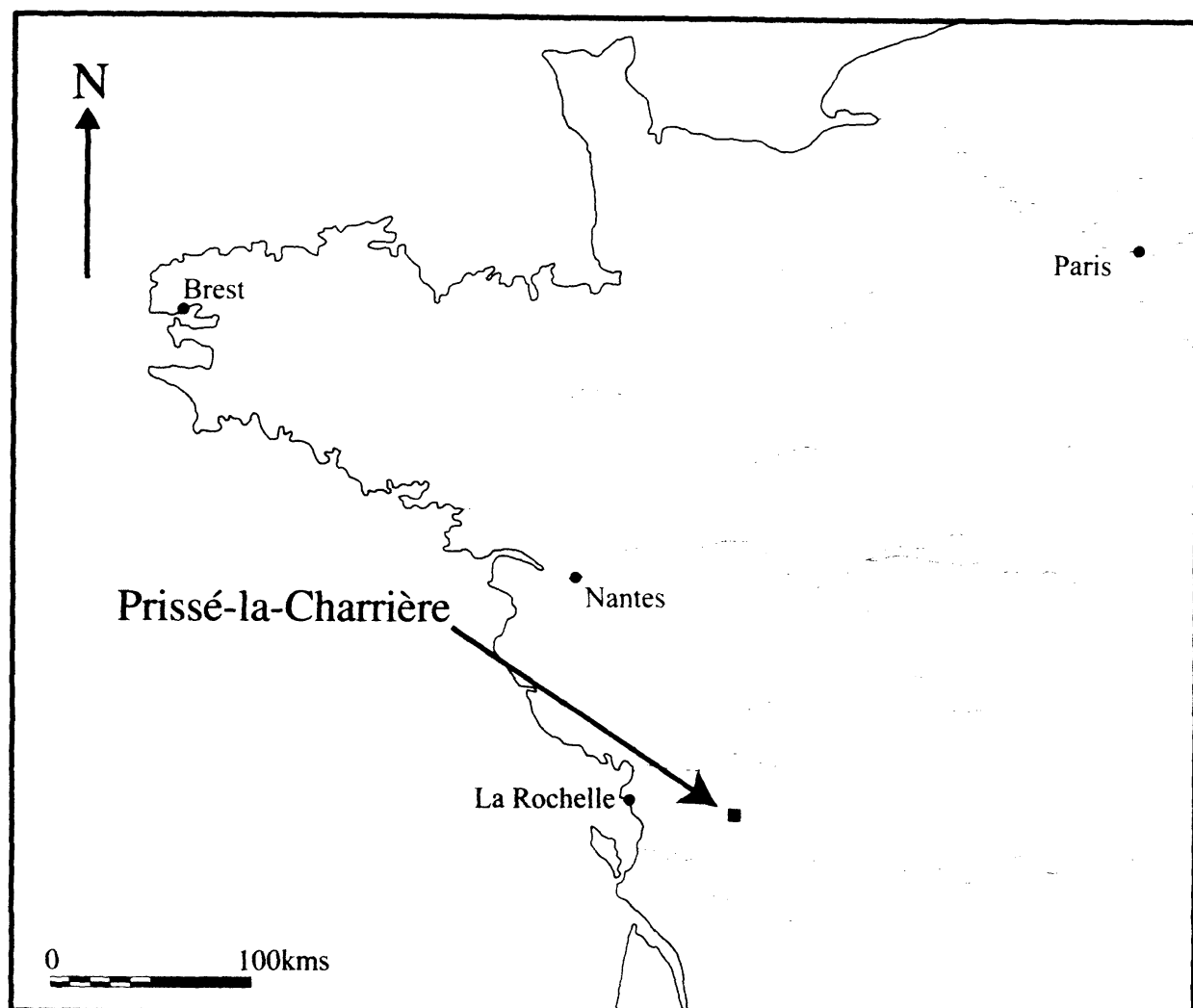


Fig 1.
Location of Prissé-la-Charrière (Deux-Sèvres, France).

(Fig. 1). Eight successive field seasons (1995–2002) have revealed that in its final phase, this monument took the form of a trapezoidal structure approximately 100 m in length, with a maximum width of 19 m at the broader eastern end, tapering to 15 m at the west (Laporte *et al.* 2002a). A pair of parallel kerbs run along the entire length of the northern and southern sides and continue around the eastern terminal. Three major burial features have been discovered: a chamber, without passage, at the western end of the mound; a ruined passage grave opening from the north side of the mound some 60 m from its eastern end; and a second passage grave, as

yet unexcavated, some 12 m east of the first.

The earliest structures lay beneath the western end of the long mound: here was what may have been the core from which the monument grew and developed: a 23 m long mound encircled by a continuous rock-cut ditch (Fig. 2). The primary burial feature was a megalithic chamber within a circular dry-stone rotunda (Phase 0). In front of the chamber entrance two large rock-cut post-holes held upright timber posts; their alignment suggests that they belong with this rather than a later phase. The small megalithic chamber was defined by five modest-sized orthostats, and opened to the east via a funnel-shaped approach

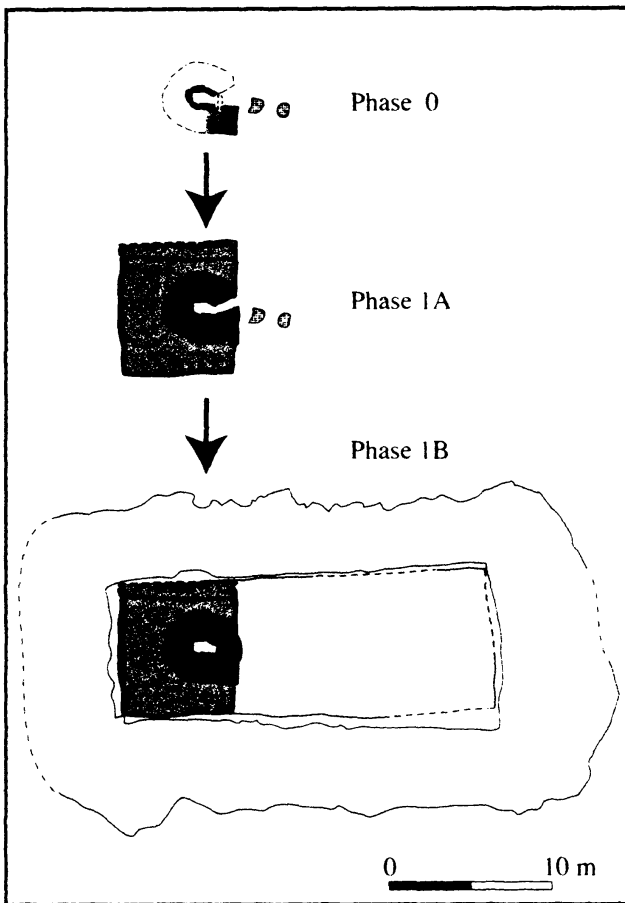


Fig 2.

Prissé-la-Charrière: development of the early long mound (Phase 0/1) beneath the western end of the later cairn. The attribution of the two rock-cut post-holes in front of the small megalithic chamber to Phase 0 is hypothetical. The earliest stages may also have had accompanying quarry-ditches but the form and locations of these cannot now be established.

through the thickness of the rotunda (Fig. 3). The opening was closed at its inner end by a pair of removable limestone slabs forming a door, but this was not the original arrangement. In the initial phase a socket cut into the bedrock suggested that there had been a sixth megalithic orthostat closing this side of the chamber. There was no surviving trace of either a capstone or a corbelled vault, and the chamber roofing may have rested on a timber framework. Within this modest burial space were the

disarticulated remains of three individuals. Two of these have given 5th millennium radiocarbon dates (4360–4160 cal BC/4460–4240 cal BC; Table 1) though whether these date the construction of the chamber, or only its subsequent reuse, is unclear.

Thus in phase 0 at Prissé-la-Charrière we have a chamber, perhaps originally a closed structure of six megalithic orthostats, but later provided with a moveable limestone door (but no passage). In front of it stood two timber posts. The chamber was incorporated within a dry-stone structure that may initially have had a rectilinear form (from a short stretch of walling on the southern side) but was later remodelled into a rotunda. This chamber appears for the present to be without close parallel in this region, though it finds analogues in the Carnac region of southern Brittany. The rotunda can likewise be paralleled in the Carnac region at sites such as Mané Ty Ec (Miln 1883) (Fig. 9, below), but also recalls the structures within certain Cotswold-Severn long mounds of south-west Britain such as Notgrove, Pipton, and Ty Isaf (Clifford 1936; Savory 1956; Grimes 1939).

In the following phase (1A) this rotunda grave was incorporated within the eastern façade of a rectangular monument edged to the south (and probably the north also) by impressive dry-stone walls. Later still, however, in phase 1B, the entrance to the chamber (already blocked) was obscured, and a modest long mound 23 m long by 8.8 m wide was



Fig 3.

Prissé-la-Charrière: western rotunda grave from the east, showing entrance to small megalithic chamber.

TABLE 1. RADIOCARBON DATES FROM PRISSÉ-LA-CHARRIÈRE

<i>Location and Lab. Ref.</i>	<i>Material</i>	<i>Determination BP</i>	<i>Date Cal BC*</i>
<i>Rotunda grave</i>			
OxA-10248	Human bone	5440±45	4360–4160
OxA-10249	Human bone	5500±45	4460–4240
<i>Ditch floor (phase 1)</i>			
OxA-11213	Antler	5460±45	4445–4165
<i>Ruined passage grave</i>			
OxA-10204	Human bone	5470±45	4450–4160
OxA-10205	Human bone	5423±26	4340–4170
OxA-10246	Human bone	5360±45	4330–4040
OxA-10247	Human bone	5295±45	4250–3980
OxA-10258	Human bone	5465±40	4440–4160
OxA-11214	Human bone	5486±40	4450–4245
<i>Crest of mound (phase 2)</i>			
OxA-11216	Human bone	5405±45	4345–4045

*All dates have been calibrated using OxCal 3.8 Bronk Ramsey (2002) and are quoted at the 95% confidence limit, rounded out to the nearest 5 years.

built up against it. This short long mound was surrounded by a continuous rock-cut ditch, some 4 m wide by 1.5 m deep, which showed evidence of having been recut and widened on at least one occasion. The 23 m long mound was edged by a high dry-stone wall. The structure would hence have appeared from the outside as a solid rectangular stone-walled monument, surrounded by a rock-cut ditch.

The second major stage in the history of Prissé-la-Charrière (phase 2) began when this early long mound was buried and incorporated within the western end of the larger long mound that we see today (Fig. 4). The initial long mound of 23 m length was succeeded by a monument four times as long (100 m) and twice as broad (19 m). It extended over the filled-in quarry-ditches of the early mound. The enlarged mound also differed in its construction from the earlier long mound, being built in a cellular manner. Each small constructional unit was formed by a length of dry-stone wall, built up against an earlier cell and filled with rubble or with yellow decayed limestone. The material for construction came from a new pair of linear quarry pits which flanked the monument to north and south, located much further away from the edge of the mound than the quarry of the earlier phase. The edge of the northern quarry lay 8 m from the outer kerb, and in the clear space between, the

surface of the limestone bedrock had been cut into a series of steps running almost parallel to the outer kerb. The edge of the mound was itself of stepped appearance, the outer kerb fronting a bench only 0.60–0.70 m high, the inner kerb rising a metre or so behind this. Thus the rock-cut steps not only gave the monument an enhanced impression of height but also created a sense of continuity between bedrock and built structure, between the ‘concave’ surface of the cut and quarried bedrock and the ‘convex’ surface of the monument, both consisting of exactly the same limestone. The result was an effective elision between the natural and the cultural (Joussaume *et al.* 1998; Scarre 2000; Laporte *et al.* 2002b).

The structural sequence shows clearly that this 100 m long mound was built over the top of the shorter early long mound. The kerbs of the phase 2 mound cross the infilled ditch of the phase 1 monument (Fig. 5), and phase 2 structures at the western end entirely covered and concealed the phase 1 long mound. The available series of radiocarbon dates, however, indicates that the interval between the first and second phases was very short, since both fall within the timespace of a century or so between 4450 and 4150 cal BC (Table 1).

The 100 m long mound of Prissé-la-Charrière is a massive construction, still preserved in places to its

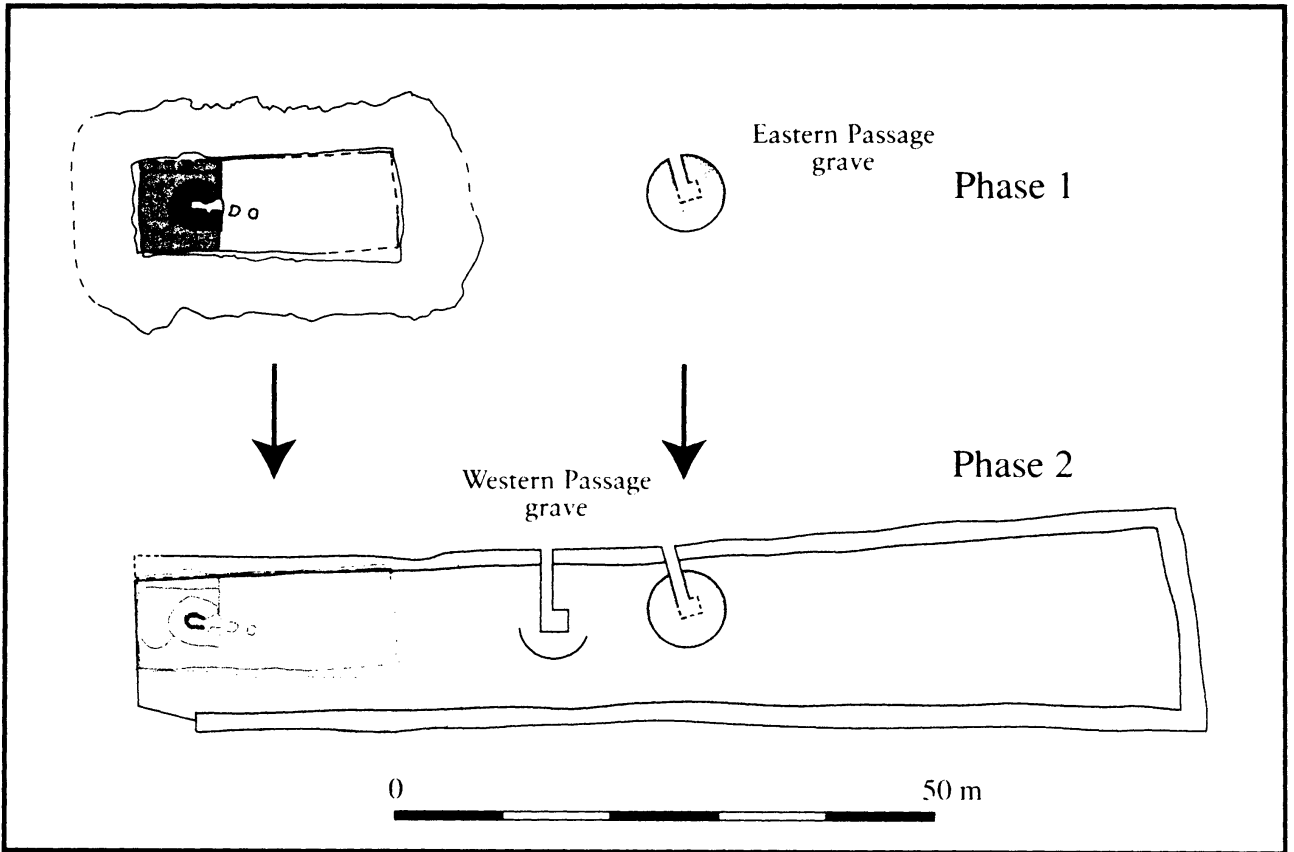


Fig 4.

Prissé-la-Charrière: enlarged long mound (Phase 2), illustrating incorporation of earlier elements: the early western long mound (see Fig. 2) and the free-standing eastern passage grave; the western passage grave was built as an integral part of the Phase 2 long mound and was not designed as a free-standing structure.

original height of 3.5 m with traces of a paved platform on the summit. In cross-section it is asymmetrical, and the two passage graves that have been discovered within it open onto the steeper northern face. The first passage grave to be found, some 40 m from the western terminal, was a *dolmen angoumois*, a regional variety of chambered tomb characterised by a rectangular burial chamber. Quarrying had destroyed much of the structure, but one orthostat survived and the sockets of five more could be located, marking three sides of the chamber. There was no trace of the capstone.

Fortunately, despite the extensive disturbance to this passage grave, the greater part of the original chamber floor had been preserved. The burial deposit included skeletal elements from six individuals, all of

them disarticulated. They were accompanied by sherds of a Middle Neolithic 'vase-support' with 'windows' in its side-walls. Two additional individuals were identified in the disturbed deposits around the chamber, increasing the total to eight. Even allowing for the likely destruction of part of the burial deposit it is clear that the bodies were incomplete when the chamber was closed. One individual (the most complete of the series) was represented by a left scapula, clavicle, and humerus still in articulation, but the vertebrae and ribs lying alongside the arm were not in their natural position but had been intentionally placed post-mortem (Soler *et al.* 2003). Radiocarbon dates for five of the six individuals fell within the range 4450–3980 cal BC (Table 1). The close grouping of these dates suggests that the time



Fig 5.

Prissé-la-Charrière: northern kerb of the Phase 2 long mound: note the subsidence as it crosses the lip of the Phase 1 quarry-ditch. (The quarry ditch itself had been back filled at this stage of the excavation.)

interval between the burials may have been very short. It is possible to envisage the deposit of one body every generation. It should also be noted that the interval between the death of the first individual buried in this chamber and of the latest individual in the rotunda grave was no greater than the interval between the successive burials in this passage grave.

The second passage grave, 12 m to the east, has yet to be explored in detail, though photographs that have been taken of the interior show archaeological deposits *in situ* (Fig. 6). The chamber stands within a circular dry-stone cairn, and excavations have demonstrated that the base of the outer wall rests on the old ground surface (Fig. 7). It hence appears probable that this passage grave was originally built as a separate free-standing structure, and was only at a later stage incorporated into the 100 m long mound (Fig. 4). Whether it belongs chronologically to the same period as the 'short' long mound of phase 1, or indeed preceded it, or should instead be attributed to an intermediate stage between the 23 m long mound and the 100 m long mound, remains to be established. The contrast with its excavated neighbour, however, is fundamental. The latter was never intended as a free-standing structure: despite its carefully built semicircular rear wall, it appears to have been built in synchrony with the core of the long mound to either

side. Thus the builders of the 100 m long mound pursued two different but concurrent strategies. Their massively enlarged mound incorporated and linked together a series of existing architectural elements on the one hand (the 'short' long mound and the eastern passage grave); and on the other, it added at least one entirely new funerary space of its own (the western passage grave).

THE REGIONAL CONTEXT

The primary cairn

The closest parallel for the small megalithic chamber in the primary rotunda at Prissé-la-Charrière is without doubt the chamber of Er Grah at Locmariaquer (Fig. 9). Access to that chamber was through an unroofed entrance of funnel-shaped plan that was blocked after use. The chamber of Er Grah stands within a circular cairn with double kerb, and opens to the east like the chamber at Prissé-la-Charrière. This cairn is itself contained within another cairn of more or less rectangular plan, oriented north-south. In contrast to the early western chamber at Prissé, however, the chamber at Er Grah opens onto one of the long sides of the monument. Furthermore, at Er Grah the cairn was subsequently lengthened by several metres both to south and north. At Prissé, by contrast, the subsequent enlargement of the



Fig 6.

Prissé-la-Charrière: interior of the eastern passage grave showing human skeletal remains and vase-support *in situ*.



Fig 7.

Prissé-la-Charrière: the eastern passage grave in its circular dry-stone cairn, from the north.

monument was in a single direction: towards the east. As we have seen, this first enlargement of the Prissé monument gave it the form of a rectangular structure 23 metres long that enclosed and concealed the earlier burial chamber in its rotunda. This stage of the monument recalls the available descriptions of several mounds excavated in the Carnac area in the 19th century, such as Mané Pochat, Mané Ty Ec, and Kerlescan (Miln 1883) (Fig. 9).

At Prissé-la-Charrière the ditch of this early monument has straight northern and southern sides joined by semi-circular loops at either end so as to form a continuous circuit of 'hippodrome' plan. Many such structures have been found by aerial photography during the past 30 years around the edge of the Marais Poitevin (Joussaume & Marsac 1973; Marsac *et al.* 1982). A similar ditch also encloses the Lannec-er-Gadouër mound at Erdeven in the

Morbihan (Boujot & Cassen 1998). Further east, the long mound of Sarceaux in Normandy (Fig. 11) may be in some sense intermediate between the Passy-type monuments and Prissé-la-Charrière. Its surrounding ditch has an interruption at the east and a small lateral bulge, the latter a feature also found in many structures of Passy type. At its centre, the Sarceaux mound covered a grave containing at least three individuals. It was clear that the kerb had been laid out first, and the mound of turf then built within it (Chancerel & Desloges 1998). Parallels for these features exist not only to the east in monuments that may be related to the Passy tradition, but also to the south towards the estuary of the Gironde. A construction technique similar to Sarceaux is found at the long mound of Le Cruchaud at Sainte-L'Heurine in Charente-Maritime, where the dark traces of the turf structures are clearly visible in the body of the chalk

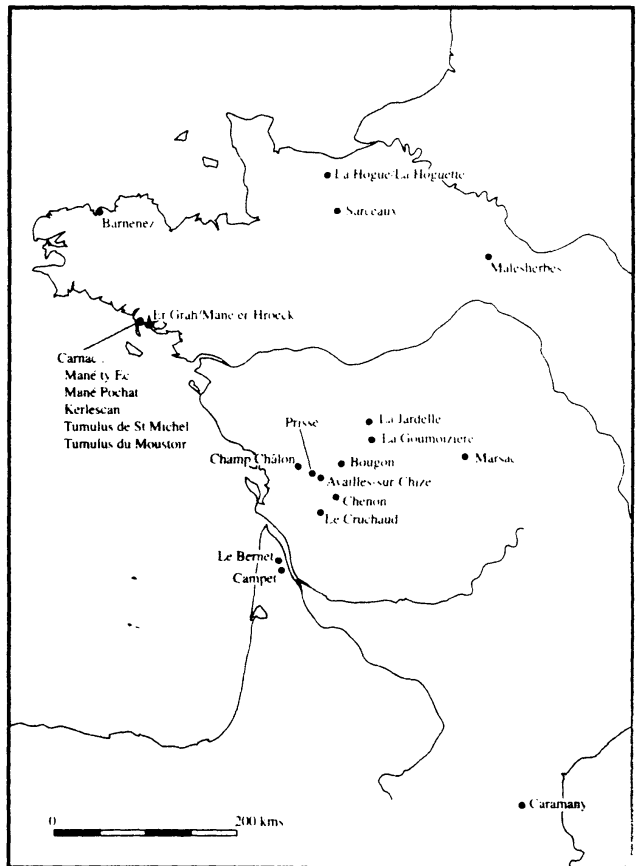


Fig 8.

Location of other sites mentioned in the text.

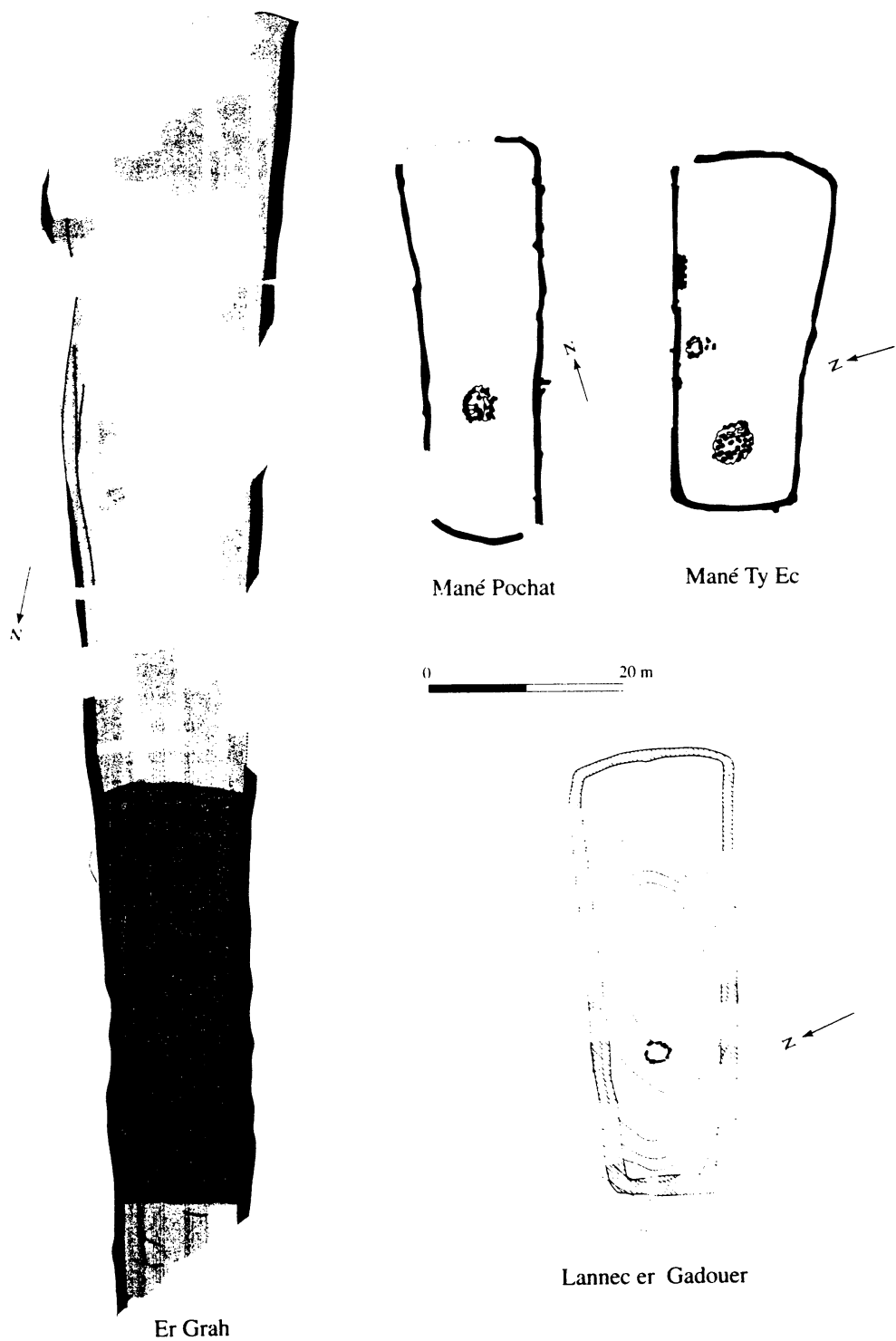


Fig 9.

Long mounds of the southern Morbihan: Er Grah at Locmariaquer; Mané Pochat and Mané Ty Ec (Carnac); Lannec er Gadouer (Erdeven).

mound (Burnez & Louboutin 1999). A skeleton discovered at Le Cruchaud at the beginning of the 20th century has been dated to 4500–4250 cal BC (Table 2), but no cist or chamber was detected at that time.

We have already noted possible parallels between Prissé-la-Charrière and Er Grah. Other monuments of the Carnac region offer points of comparison with the early rotunda grave of Prissé-la-Charrière. The central chamber of the Tumulus Saint-Michel at Carnac was equipped with removable slabs on one of the shorter sides. Furthermore, according to Le Rouzic the central core of the mound in which this chamber was located also contained several other small cists, each within its own cairn (Le Rouzic 1932). Thus the Tumulus de Saint-Michel was clearly the product of a complex process of additions and accretions. The Mané er Hroëck tumulus at Locmariaquer similarly covered a chamber in which removable blocks formed one of the short sides; this chamber is particularly famous for the rich assemblage of grave goods that it contained and for the decorated stele discovered in fragments among the rubble blocking of the entrance. Chamber D of the Tumulus du Moustoir at Carnac was also enclosed within a small circular cairn covered by a layer of clay (Galles 1863). Further south, the tumulus of Le Bernet at Saint-Sauveur in Gironde covered a cist grave, open



Fig 10.
Neolithic funerary structures at the Camp Del
Ginebre, Caramany (Pyrénées-Orientales)
(from Claustre 1998).

TABLE 2. COMPARATIVE RADIOCARBON DATES FROM FRENCH MEGALITHIC SITES

Site	Lab. ref.	Determination BP	Date Cal BC*
Le Cruchaud	Ly 1049	5595±50	4435–4340
	Ly 1050	5535±35	4455–4335
La Goumoizière	Ly 1125	5770±50	4770–4465
	Ly 1047	5620±50	4545–4345
	Ly 1048	5825±55	4825–4540
La Jardelle	Ly 594	5485±60	4455–4170
	Ly 9411	5590±55	4540–4335
	Ly 8616	5580±45	4495–4340
Chenon B-1	Ly 1105	5540±140	4705–4040

* All dates have been calibrated using Calib 4.3 and are quoted at the 95% confidence limit, rounded out to the nearest 5 years.

on one side, which contained the body of a single individual accompanied by Middle Neolithic pottery (Roussot-Larroque 1990). The Campet megalithic cist at Saint-Laurent-et-Benon in Gironde was roofed by an arrangement of inclined overlapping stones rather like a crude corbelled-vault, then buried beneath an enormous mass of sand forming a mound 100 m long by 80 m wide and 4 m high. It contained several bones belonging to a young individual, a miniature polished stone axe, and two pieces of flint (Devignes 1995, 92–3). Many of these arrangements are paralleled in the cists within circular cairns found in the south of France, as for example at Caramany in the Pyrenees, where they are dated to the mid 5th millennium cal BC and attributed to the Montbolo group (Vaquer 1998) (Fig. 10). What the monuments of the Atlantic zone (Prissé and Carnac) have in common with each other is the subsequent incorporation of megalithic chamber and dry-stone rotunda within a long mound or cairn. Thus we have geographically divergent parallels for Prissé phase 1: on the one hand, the overall plan and surrounding ditch recalls the Passy-type structures of northern France; on the other, the small megalithic chamber in its circular rotunda calls to mind the funerary monuments of southern France.

Closer to Prissé, the stone cist graves of La Goumoizière in Vienne have yielded collective burials, although there is no evidence for the form of the covering mound. They are attributed to the Chambon group and dated 4800–4400 cal BC (Airvaux 1996; Table 2). Cist graves at La Jardelle in the commune of Dissay nearby are partially earth-fast like those of La Goumoizière but are located within ovoid ditched enclosures open at the broader end. These enclosures recall once again the Passy monuments of the Paris basin. The Dissay cist graves may be partly contemporary with those of La Goumoizière and are dated between 4550 and 4200 BC (Pautreau *et al.* forthcoming; Table 2). It is interesting to remark that the département of Vienne, where the majority of these various types of cist grave are found, has not a single passage grave with circular chamber of the kind known further west and south. At Bougon in Deux-Sèvres, such passage graves are dated to the same period as the Vienne cists: that is to say, to the first half of the 5th millennium cal BC (Scarre *et al.* 1993; Mohen & Scarre 2002). This apparent contemporaneity (though still disputed by some) suggests the simultaneous construction of a variety of funerary architectures.

The enlarged long mound

As we have seen, the early long mound of Prissé-la-Charrière, like the primary cairn of Er Grah, was subsequently extended to a length of 100 metres. The resulting monument was of trapezoidal form, taller and broader at one end than the other. In its eastern part the extended tumulus contained at least one new burial chamber (plus the existing eastern passage grave), in contrast to the enlarged Er Grah which had no new chambers. At Prissé-la-Charrière, the two passage graves, old and new, opened on the northern flank of the mound, at a point one-third of the way along its length. Regional parallels for this arrangement exist at Mille Ecus (Benon) and La Grande Bourgne (Ardillières) in Charente-Maritime, and at La Motte de la Garde (Luxé) in Charente; these sites too have a rectangular funerary chamber opening via a passage onto one of the long sides of the tumulus.

It has long been thought that the quadrangular chambers of the so-called *dolmens angoumoisins* were relatively late in date, and came in chronological terms after the passage graves with circular chambers. The mound of Bougon E with its circular chamber remodelled into rectangular form is the classic example of that sequence. Excavation of the Tumulus du Planti at Availles-sur-Chizé, however, has shown that the circular chamber in the first structural module is contemporary with the four rectangular chambers built in the same module (Bouin & Joussaume 1998) (Fig. 11). There is in addition a mid/late 5th millennium date from Chenon B1 (Gauron & Massaud 1980; Table 2) that suggests that rectangular chambers with off-centre passages are relatively old.

The crucial difference between the two phases of the Prissé-la-Charrière tumulus is that the passage graves remained accessible even after the construction of the extended long mound. This was not the case with the rotunda grave of the first phase. The difference lies in the provision of a passage. The point at which the passage grave makes its appearance in western France is, however, difficult to fix. It might coincide with the practice of collective inhumation in these tombs, but that is thrown into doubt by the existence of Late Mesolithic collective graves at Téviec, and by earlier Neolithic cist graves such as those of La Goumoizière. It is more likely to have arisen from a new attitude and response to death, rather than from the collective character of the burial deposits in itself.

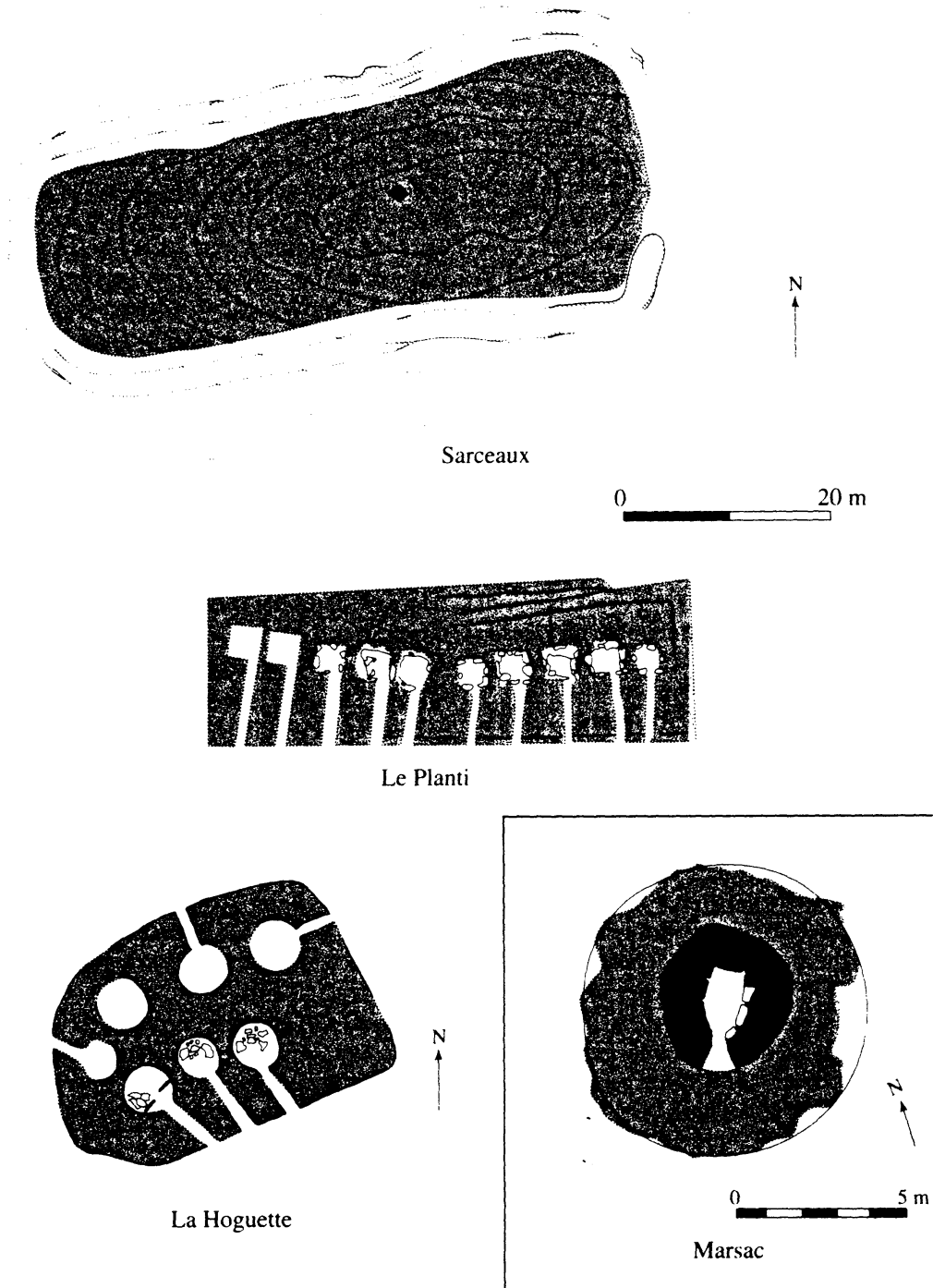


Fig 11.

Neolithic chambered tombs of northern and western France: Sarceaux (Orne): the black rectangle marks the position of the burials; Le Planti at Availles-sur-Chizé (Deux-Sèvres), less than 30 kilometres from Prissé-la-Charrière but with a contrasting arrangement of burial spaces; La Hoguette at Fontenay-le-Marmion (Calvados); Bois-Neuf III at Marsac (Creuse).

We believe that the variety of forms taken by funerary monuments in the course of their development in western Europe has its roots in the diversity of impulses that contributed to their origin. Thus, while it may be possible to construct an evolutionary typology, typological classification alone cannot be used to establish the date of a particular monument. The low mound with individual burial may have been contemporary with a range of other funerary forms: cists of La Goumoizière type, simple chambers as in the first phase at Prissé-la-Charrière, and passage graves with circular or rectangular chamber. Interaction between the individual communities may have led to spread of the long mounds as the structure for covering these various kinds of funerary structure. It is quite possible that the long mounds were contemporary with the passage graves in circular mounds. One would thus see the simultaneous development, at the beginning of the Middle Neolithic, of long structures of Passy type, of 'sépultures sous dalle' of Malesherbes type, and of passage graves (Duhamel 1997; Duhamel & Mordant 1997; Verjux *et al.* 1998; Laporte *et al.* 2002a; Scarre 2002; Laporte forthcoming).

BROADER REFLECTIONS

The excavations at Prissé-la-Charrière, although still in progress, allow us to reflect on the character of the structures employed to mark out funerary spaces in Neolithic western France. A number of specific components, more or less independent of each other, can be identified:

- burial mound of circular or elongated quadrangular form
- funerary locus established on the ground surface
- position of the chamber within the mound
- accessibility of the burial chamber
- form of the burial chamber or 'dolmen'
- collective character of the funerary deposits
- relationship of the quarry-ditch to the burial mound

By considering each of these elements in turn, a polygenic model for the development of the megalithic monuments of Atlantic Europe can be constructed. This subject demands extended discussion elsewhere, but the following present a number of avenues for ongoing research.

1. *Burial mound of circular or elongated quadrangular form*

We have already seen that parallels for the early rotunda grave at Prissé-la-Charrière can be found both in Brittany and in southern France. We have also noted that the concept of the long mound is equally present from the mid 5th millennium cal BC in the Passy-type structures of the Paris basin.

2. *Funerary locus established on the ground surface*

In western France, an invariable feature of megalithic chambers within their mounds is that they were built on the ground surface, the floor being occasionally slightly sunken as at Prissé-la-Charrière. In the Early Neolithic of the Paris basin, graves were dug into the ground, and the dead were consigned to the earth, whereas in southern France from an early stage funerary cists were built above ground (or very slightly sunken), and were covered by a circular mound. The burial chambers, the houses of the dead, were located at the same level as the houses of the living. This marks a new conception of the relationship between the dead and the living which finds interesting parallel in the tombs of the Madagascan plateau (Joussaume & Raharijoana 1985).

3. *Position of the burial chamber within the mound*

Circular mounds generally have a single chamber located at their centre. In the elongated quadrangular mounds of western France, however, the chamber may be situated at one or other end, or along the length of the mound, and in that event usually around one-third of the distance from the narrower end of a trapezoidal mound. In every chambered long mound that has been studied the chamber is placed on the longitudinal axis of the monument, that is to say, centrally with respect to the long sides of the mound. The same phenomenon is found where there are several chambers side-by-side in the body of a single mound (most notably at Le Planti in Deux-Sèvres). This marks a clear contrast with La Hogue and La Hoguette in Normandy which present a pattern of radiating chambers and hence adhere to an entirely different rationale (Fig. 11). Such radiating plans have never been recorded in western France south of the Loire, though remains of one such monument have recently been discovered beneath the château of Angers.



Fig 12.
Prissé-la-Charrière: general view from the western terminal.

4. Accessibility of the burial chamber

A chamber with multiple burial deposits located in the middle of a mound requires a means of access. The only exceptions are those stone cists where access was achieved by lifting the covering slab (as in the cists of La Goumozière in Vienne, from the beginning of the Middle Neolithic).

Repeated access to a burial chamber can be secured through provision of a covered passage (as in the passage grave), or by a funnel-type access opening from one side of the mound (as in the *caveau*). This is what we find in the first phase at Prissé-la-Charrière. At Prissé, therefore, the funnel-shaped access preceded the covered passage. Lest we be tempted to generalise from that observation, it should be remarked that the unroofed funnel-shaped entrance recurs in more recent monuments, such as those of Marsac in the Creuse (Joussaume *et al.* 2002) (Fig. 11).

5. Form of the burial chamber

The characteristics of Neolithic burial chambers have already been extensively discussed by previous writers seeking to establish the typology of these monuments in the decades before their covering mounds had become a regular focus of study. The morphology of the chamber remains an essential feature but has tended to lose some of its importance now that there is a broader range of information to be taken into account. Chambers can no longer be considered in

isolation but only in the context of their mounds. We may note once again, however, that at Prissé-la-Charrière, the small polygonal megalithic chamber is earlier than the quadrangular megalithic chamber with passage opening onto the northern side of the long mound. The chronological position of the second passage grave is less clear, as it precedes the construction of the phase 2 long mound in which it was subsequently incorporated.

6. Funerary deposits

Western France south of the Loire has the advantage of being a limestone region where bone preserves well. Unfortunately, many Neolithic monuments have attracted attention from an early period and several were re-used in prehistory. For this reason it is practically impossible to affirm that the skeletons discovered in a chamber are those that were initially deposited. It accordingly becomes very difficult to study the funerary practices of the builders of these monuments.

It is well known that collective burial was practised as early as the Final Mesolithic at Téviec and Hoëdic in the Morbihan, dated probably to the end of the 6th millennium BC (Schulting 1999). It is unclear, however, whether that tradition was maintained during the Early Neolithic in this region, since burial evidence of that period has not yet been discovered. Collective burial was certainly present from the beginning of the 5th millennium BC in the cist burials of La Goumozière in Vienne. It is not impossible, therefore, that the practice was local in origin, but a Mediterranean origin could just as easily be envisaged.

The early western chamber of Prissé-la-Charrière yielded the remains of three individuals, but we do not know if these represent a primary deposit or a later re-use of the chamber. In passage graves, likewise, relatively few individuals are usually represented – some eight to ten – and these may have been laid out alongside each other on the floor. This process of depositing the bodies in juxtaposition is to be contrasted with laying them on top of each other (Chambon 2000). It is difficult, however, to determine whether the bodies were deposited simultaneously or successively over a relatively lengthy period of time. There may have been occasional disturbance including rearrangement of the bones and even the removal of some of them. This could reach the point where a burial chamber such as that of Tumulus A a

Champ-Châlon in Charente-Maritime no longer contained more than a very few bones of several individuals, whereas three complete vessels of Middle Neolithic II type were discovered. In the excavated passage grave at Prissé-la-Charrière it is probable, despite the extensive disturbance, that remains belonging to eight individuals had been deposited in the chamber.

7. Relationship of quarry-ditch to burial mound

Both of the major phases at Prissé-la-Charrière were associated with pits or ditches that served as multi-phase quarries for the construction of the monument. In the first phase, the quarry-ditch enclosed a surface area which was only gradually filled as the mound was built and extended in stages. A large part of that area must hence have remained clear for a period of time the duration of which we cannot easily determine, and it was the locus for structures that are still under analysis (represented notably by the two post-holes). The quarry-ditch was infilled before the extension of the monument in the second major phase. Other such infilled ditches are readily visible on aerial photographs and several have been discovered in western France.

The 100 m mound of the second phase is flanked by two large depressions. The northern quarry has a clear terminal to the west, but it is not yet certain whether the two quarries are continuous around the eastern end. Cut into steps, the northern quarry gave the final phase monument an added impression of size, making it an all the more imposing feature in the landscape.

CONCLUSION

The Prissé-la-Charrière long mound, along with many other excavated examples in north-west France, incorporates a series of structures and constructional stages. The major distinction between the early rectangular mound and the later trapezoidal long mound must indicate a division of the monument into at least two major phases, as the later stage was built across the infilled quarry-ditch of the early stage, and the 'short' long mound was buried beneath the western end of the later monument. The transition from a western chamber contained within a rotunda in the first monument, to passage graves in the enlarged long mound, does not however preclude the possibility that the two types of tomb developed in

parallel with each other. On present evidence, the second passage grave within its circular surround could be earlier than or contemporary with the rotunda grave. This is not to deny that in certain other regions it seems that the passage grave may not be the earliest chamber form. At the same time, regional patterns of development must provide the perspective through which such sequences are evaluated.

In this discussion we have presented alternative parallels from different regions of France for the funerary structures excavated at Prissé-la-Charrière. The analysis reveals the diversity of early monument forms which do, however, sometimes resemble each other from region to region. Fifty years ago, the pioneering syntheses of Glyn Daniel sought to place the megalithic tombs of France, and indeed of western Europe as a whole, within a single frame of reference. Since that time, the emphasis has been on a better understanding of regional sequences and morphologies. These regional patterns remain important, but can never provide more than partial understandings of what seems at some level to be a larger phenomenon. One task for the coming years is to seek better integration of these regional and chronological models within a broader framework of interpretation, at the west European scale.

BIBLIOGRAPHY

- Airvaux, J. 1996. Découverte d'une nouvelle sépulture néolithique en ciste à la Goumoizière de Saint-Martin-la-Rivière (Valdivienne). Premiers résultats. *Le Pays Chauvinois* 34, 65–105.
- Bouin, F. & Joussaume, R. 1999. Le tumulus du Planti à Availles-sur-Chizé (Deux-Sèvres). In Gutherz, X. & Joussaume, R. (eds), *Le Néolithique du Centre-Ouest de la France. Actes du XXle Colloque Interrégional sur le Néolithique, Poitiers 1994*, 169–82. Chauvigny: Association des Publications Chauvinoises.
- Boujot, C. 1996. Le mégalithisme dans ses rapports avec le développement des sépultures collectives néolithiques. Apports d'une synthèse à l'échelle de la France. *Bulletin de la Société Préhistorique Française* 93, 337–41.
- Boujot, C. & Cassen, S. 1992. Le développement des premières architectures funéraires monumentales en France occidentale. In Le Roux, C.-T. (ed.), *Paysans et Bâtisseurs. Actes du 17e Colloque Interrégional sur le Néolithique*, 195–211. *Revue Archéologique de l'Ouest* Supplément 5.
- Boujot, C. & Cassen, S. 1998. Tertres armoricains et tumulus carnacéens dans le contexte de la néolithisation

- de la France occidentale. In Guilaine, J. (ed.), *Sépultures d'Occident et Genèses des Mégalithismes*, 109–26. Paris: Errance
- Burnez, C. & Louboutin, C. 1999. Le long tumulus du Cruchaud à Sainte-L'Heurine (Charente-Maritime). *Bulletin de la Société Préhistorique Française* 96, 442–3
- Chambon, P. 2000. Les pratiques funéraires dans les tombes collectives de la France néolithique. *Bulletin de la Société Préhistorique Française* 96, 265–74
- Chancerel, A. & Desloges, J. 1998. Les sépultures mégalithiques de Basse-Normandie. In Guilaine, J. (ed.), *Sépultures d'Occident et Genèses des Mégalithismes*, 91–106. Paris: Errance
- Claustre, F. 1998. Monuments mégalithiques et grottes sépulcrales en Roussillon. In Soulier, P. (ed.), *La France des Dolmens et des Sépultures Collectives*, 159–74. Paris: Errance
- Clifford, E.M. 1936. Notgrove Long Barrow, Gloucestershire. *Archaeologia* 86, 119–61
- Devignes, M. 1995. *Inventaire des Mégalithes de la France*, 9: Gironde. Paris: CNRS
- Duhamel, P. 1997. La nécropole monumentale de Passy (Yonne): description d'ensemble et problèmes d'interprétation. In Constantin, C., Mordant, D. & Simonin, D. (eds), *La Culture de Cerny. Nouvelle économie, nouvelle société au Néolithique*, 397–448. Nemours: Mémoires du Musée de Préhistoire de l'Île de France 6
- Duhamel, P. & Mordant, D. 1997. Les nécropoles monumentales Cerny du bassin Seine-Yonne. In Constantin, C., Mordant, D. & Simonin, D. (eds), *La Culture de Cerny. Nouvelle économie, nouvelle société au Néolithique*, 481–8. Nemours: Mémoires du Musée de Préhistoire de l'Île de France 6
- Galles, R. 1863. Fouilles du tumulus du Moustoir-Carnac. *Bulletin de la Société Polymathique du Morbihan* 1863, 117–25
- Gauron, E. & Massaud, J. 1983. *Nécropole de Chenon (Charente)*. Paris: CNRS
- Giot, P.-R. 1981. The megaliths of France. In Evans, J.D., Cunliffe, B. & Renfrew, C. (eds), *Antiquity and Man*, 82–93. London: Thames & Hudson
- Grimes, W.F. 1939. The excavation of Ty-isaf long cairn, Brecknockshire. *Proceedings of the Prehistoric Society* 5, 119–42
- Joussaume, R. 1997. Les longs tumulus du Centre-Ouest de la France. In Rodríguez Casal, A. (ed.), *O Neolítico Atlántico e as Orixes do Megalitismo*, 279–97. Santiago de Compostela: Consello da Cultura Gallega
- Joussaume, R., Fouéré, P. & Crédot, R. 2002. Dolmens des Quatre Routes et de Bois Neuf III à Marsac (Creuse). *Bulletin de la Société Préhistorique Française* 99, 49–80
- Joussaume, R., Laporte, L. & Scarre, C. 1998. Longs tumulus néolithiques et organisation de l'espace dans l'ouest de la France. In Cauwe, N. & Berg, P.-L. van (eds), *Actes du XXIIIe Colloque Interrégional sur le Néolithique*, Bruxelles 1997, 259–75. *Anthropologie et Préhistoire* 109
- Joussaume, R. & Marsac, M. 1973. Détection aérienne et sondage dans un fossé à Xanton-Chassenon (Vendée). *Bulletin de la Société d'Emulation de la Vendée* 1973, 17–20
- Joussaume, R. & Raharijoana, V. 1985. Sépultures mégalithiques à Madagascar. *Bulletin de la Société Préhistorique Française* 82, 534–51
- Laporte, L., Joussaume, R. & Scarre, C. 2002a. Le tumulus C de Péré à Prissé-la-Charrière (Deux-Sèvres). Résultats préliminaires. *Gallia Préhistoire* 44
- Laporte, L., Joussaume, R., Scarre, C. 2002b. The perception of space and geometry, mégalithic monuments of west-central France in their relationship to the landscape. In Scarre, C. (ed.), *Monuments and Landscape in Atlantic Europe*, 73–83. London: Routledge
- Laporte, L. forthcoming. Néolithisations de la façade atlantique du Centre-Ouest de la France. *Bulletin de la Société Préhistorique Française*
- Le Rouzic, Z. 1932. *Carnac: Fouilles faites dans la région. Tumulus du Mont Saint-Michel*. Vannes.
- Le Rouzic, Z. 1933. Morphologie et chronologie des sépultures préhistoriques du Morbihan. *L'Anthropologie* 43, 225–65
- Lukis, W.C. 1868. On the various forms of monuments, commonly called dolmens, in Brittany, pointing out a progress in their architectural construction, with an attempt to reduce them to chronological order. *International Congress of Prehistoric Archaeology. Transactions of the Third Session 1868*, 218–22. London: Longmans, Green, and Co. 1869
- Marsac, M., Riley, D. & Scarre, C. 1982. Recent discoveries of possible Neolithic long mounds in western France and their British parallels. *Aerial Archaeology* 8, 1–16
- Miln, J. 1883. Exploration de trois monuments quadrilatères. *Bulletin de la Société Polymathique du Morbihan* 1883, 36–49
- Mohen, J.-P. & Scarre, C. 2002. *Les Tumulus de Bougon: complexe mégalithique du Ve et IVe millénaire*. Paris: Errance
- Pautreau, J.-P., Farago-Szekeres, B. & Mornais, P. forthcoming. *La nécropole néolithique de la Jardelle à Dissay, Vienne (France)*
- Roussot-Larroque, J. 1990. Tertre néolithique à structures complexes du Bernet à Saint-Sauveur (Gironde). In Joussaume, R. (ed.), *Mégalithisme et Société. Actes de la Table Ronde, Les Sables d'Olonne 1987*, 98–108. La Roche-sur-Yon: Groupe Vendéen d'Etudes Préhistoriques
- Savory, H.N. 1956. The excavation of the Pipton long cairn. *Archaeologia Cambrensis* 105, 7–48
- Scarre, C. 2000. Forms and landforms. The design and setting of Neolithic monuments in western France. In Ritchie, A. (ed.), *Neolithic Orkney in its European Context*, 309–20. Cambridge: McDonald Institute
- Scarre, C., Switsur, V.R. & Moen, J.-P. 1993. New dates for French passage graves. *Antiquity* 67, 856–9
- Schulting, R.J. 1999. Nouvelles dates AMS à Tévéc et Hoëdic (Quiberon, Morbihan). Rapport préliminaire. *Bulletin de la Société Préhistorique Française* 96, 203–7
- Soler, L., Joussaume, R., Laporte, L. & Scarre, C. 2003. Le tumulus néolithique C de Péré à Prissé-la-Charrière (Deux-Sèvres): le niveau funéraire de la chambre mégalithique 1 (phase II du monument). *Bulletin de la Société Préhistorique Française*

8. C. Scarre et al. LONG MOUNDS & MEGALITHIC ORIGINS, W. FRANCE: PRISSE-LA-CHARRIÈRE

- Steadman, P. 1979. *The Evolution of Designs. Biological Analogy in Architecture and the Applied Arts*. Cambridge: University Press
- Vaquer, J. 1998. Les sépultures du Néolithique moyen en France méditerranéenne. In Guilaine, J. (ed.), *Sépultures d'Occident et Genèses des Mégalithismes*, 167–86. Paris: Errance
- Verjux, C., Simonin, D. & Richard, G. 1998. Des sépultures mésolithiques aux tombes sous dalle du Néolithique moyen I en région Centre et sur ses marges. In Guilaine, J. (ed.), *Sépultures d'Occident et Genèses des Mégalithismes*, 61–70. Paris: Errance