'Cicéron c'est Poincaré'. Dealing with geometry: Neolithic house plans and the earliest monuments

Philippe Chambon

AN OFFPRINT FROM

Houses of the Dead?

Neolithic Studies Group Seminar Papers 17

Edited by

Alistair Barclay, David Field and Jim Leary

'Cicéron c'est Poincaré'. Dealing with geometry: Neolithic house plans and the earliest monuments

Philippe Chambon

FROM CHILDE TO HODDER, OR FROM A STATEMENT TO A WHOLE SYSTEM

Considering what actually remains of most Neolithic features, ground plans are a critical and key source of data. Analogy being essential to archaeologists' methodology, it quickly became apparent that comparison between constructions for the dead and for the living would be unavoidable. Indeed, as soon as domestic features were identified for the Neolithic, parallels were drawn between them and the so-called megalithic monuments. Once described as analogous, the interpretation subsequently shifted towards one in which the origin of the megalithic monuments might be seen in the Early Neolithic longhouses.

Beyond the metaphorical assimilation of monuments to houses for the dead, the comparison of building techniques had been proposed by Sprockhoff as early as 1938. But it was Childe who underscored the similarity of the plans, using the houses of Brześć Kujawski and the burial spaces of Baltic barrows (1949, 135). The increasing discoveries of wooden architectural structures during the 1960s, be they houses or burials, led to an interpretation of mutual influence (Daniel 1965, 86). However, all burial monuments did not have a trapezoidal plan. A better understanding of the variability in form of Linear Pottery culture (LBK) domestic features came in handy to justify diversity of mound construction: rectangular shapes existed for the living as well as for the dead (Ashbee 1970). At this time, the hypothesis that the origin of megalithic forms derived from the domestic architecture of the Linear Pottery culture received greater clarity. Corcoran explicitly expressed the idea, perhaps for the first time, but confessed to having no idea of the mechanism (Powell *et al*. 1969, 77). Several years later, Whittle seemed to show some reluctance to embrace the same hypothesis, pointing out geographical missing links between houses and mounds: 'at any rate the possession of long-houses could in some areas have encouraged the acceptance of the long mound, if the sheer monumentality of long mounds were not sufficient attraction in itself' (Whittle 1977, 221). The 1980s provided the first strict and quantitative comparisons, for instance Marshall with house and monument measurements and proportions (Marshall 1981, 110). But it was Hodder who constructed a hypothesis that garnered real success (Hodder 1984), turning the argument into a whole system. He enumerated eight similarities (Hodder 1984, 59), some very general, like the use of trenches and postholes for construction (point 1), and others

rather specific, like the tripartite division (point 6) or the internal decoration (point 7). If these criteria were not really discussed in detail thereafter, the filiation topic came out regularly, like a seasonal feature.

The mere designation of chambered tombs, as well as the number of individuals they accommodated, facilitated the transposition of houses for the living, and houses for the dead. But apart from the semantic point of view, what are the means of examining that issue? In fact, the origin of megalithic monuments, which remain the most impressive structures of the Neolithic, are still a subject of animated debate. This paper aims to explore three main axes. The first one deals with cultural origins of these monuments, their date of emergence and subsequently their roots within Mesolithic or Early Neolithic cultures. The second one is a tale of geometry: a strict comparison between house and monument plans beyond the selection of the most propitious examples to support correlation between the two. Finally, one cannot avoid the question of the meaning, and more precisely the link with ancestry that these monuments were supposed to express.

A MATTER OF DATES

Funerary monumentality is inseparable from the Neolithic of western Europe. Monuments have been known long before the invention of the Neolithic by archaeologists, one might even say since forever. Taking into account their distribution, the hypothesis of an autonomous development, apart from the spread of the Neolithic, has been regularly proposed. It must be said that the character of the Mesolithic in general and Mesolithic burials in particular, remain convenient arguments for scholars, thanks to the scarcity of data. In western Europe, Mesolithic sites dating to just before the Neolithic and in close connection with the first farmers are still quite rare. Knowledge of Mesolithic burial practices remain imprecise, but homogenous would not be an accurate way of describing them. Furthermore, there is no evidence of mounds surrounding burials or any other form of monument. Téviec and Hoëdic contain the only burials that might testify – from a distance – of such a desire (Péquart *et al.* 1937). In fact, monumentality did not appear to be a focus for western European hunters-gatherers. From a more ideological standpoint, could monumentality be regarded as an indigenous response to Neolithic colonisation? The latest populations of hunter-gatherers were not supposed to have disappeared before the earliest monuments were built. However, the first DNA analyses within monument-building populations have shown that a genetic contribution from late hunter-gatherers did exist, but was minor compared with that of earliest farmers (*e.g.* Deguilloux *et al.* 2011; Sánchez-Quinto 2019, 9470).

The Neolithic evidence is more suitable material for discussion. The quantity and the diversity of burial data makes it possible to consider a general pattern for evolution of these installations. Domestic features and burials are known for the first farmers, and in many cases sequences of funerary behaviour may be reconstructed. Thanks to the advances in Neolithic chronology, the absence of a close temporal connection between the houses of the first farmers and the earthen long barrows of Great Britain, or the long mounds of northern Europe is irrefutable. That the farmers of these regions would have recalled

the appearance of domestic architecture from neighbouring regions dating to some 1,000 years before is simply nonsensical.

As it is home to some of the oldest megalithic burials, Brittany can be seen as the most suited location for a possible filiation. From Le Rouzic (1933), through L'Helgouach (1965), until Boujot and Cassen (1992) much concerted effort has been put into a chronological framework for the typology of megalithic architecture. However, one major point remains a matter of debate: whether the earthen long barrows, here the 'tertres armoricains', appeared first or not, or the earliest 'tombes à couloir' (passage graves) in parallel to the 'tertres armoricains'. In fact, repeated discoveries of long barrows in the heart of the
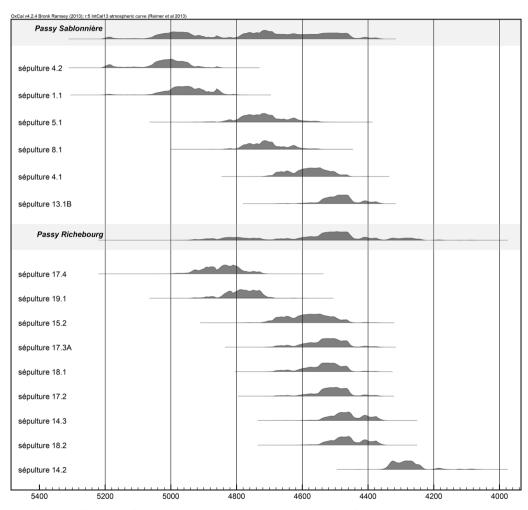

Table 4.1: Radiocarbon dates prior to 4500 BC from burials associated with Passy type monuments at the eponymous cemetery (data from Thomas 2011).

Paris Basin and then in Normandy have fundamentally changed the discussion (Carré *et al.* 1984; Chancerel *et al.* 1992; Delor *et al.* 1997). They were first connected with the later Cerny culture, that means shortly after 4500 BC. Considering the megalithic sequence, that seemed old enough to be placed at the very beginning. This did not consider the dates of Bougon F0 (Bougon, Nouvelle-Aquitaine). However, despite the conviction of their supporters, Bougon dates cannot be used in any reasoning. What had been first described as a unique middle Neolithic level (Mohen 1977) was eventually reinterpreted as two distinct periods of deposits (Scarre *et al.* 1993; Mohen and Scarre 2002), taking into account two sets of dates. However, in 1993, the presentation of the stratigraphy was wrong (it contradicted the one of 1977 and the field documents): without excluding the possibility of two phases of burials, there is definitely only one level for all of the Middle Neolithic. Furthermore, the details of which bones were sampled for dating is not clear (the dates from the Lyon laboratory correspond to bulk bone samples whose designation remained unspecified; Chambon 2003, 73), and, besides, grave goods did not support such a reading. Comparatively, the long barrow dates offer solid evidence. In Brittany, the modern excavation of the mound of Lannec er gadouer (Erdeven, Morbihan) provided dates and artefacts for the construction, coherent with the middle of the fifth millennium BC (Cassen 2000). In the Paris Basin, the dates of the Passy type monument are now numerous and consistent: they clearly indicate the beginning of this phenomenon soon after the Early Neolithic, about 4700 BC (Thomas 2011): in the eponymous cemetery, for instance, some may even span the passage between Early and Middle Neolithic (Table 4.1). However, at the present time, there is no evidence to support the hypothesis suggesting the first monuments occurred during the Rubané's direct successor period, the Villeneuve-Saint-Germain phase.

The dates of the Passy type monuments opportunely fill the gap between Early Neolithic domestic architecture and the first megalithic monuments. In comparison, the English and Welsh barrows appeared more or less one millennium after the end of the Linear Pottery culture (*e.g.* Bayliss and Whittle 2007); there was neither geographic nor chronological continuity between this culture and the beginning of real megalithic sequence in Atlantic areas of France. Long barrows, distributed both in the Paris Basin and Brittany, just after the spread of the Neolithic, proposed a passage from houses to burial monuments. If chronology and geography do not contradict the hypothesis, can it really be regarded as an argument for it?

THE GRAVES AS REFLECTION OF THE HOUSES?

Studies of the domestic architecture of the Neolithic consist mostly of dealing with Linear Pottery and its later development Mittelneolithikum, Lengyel cultures. In western Europe, discoveries concerning numerous cultures did not, for a long time, include house plans. By contrast, LBK farmers had left hundreds of them from central Europe to Brittany. Identification is made by the presence of postholes and trenches that correspond to house frame and walls. Ground plans show elongated, rectangular or trapezoidal features. The maximal width, of approximately 7–8 m, corresponded to the façade, and the length could vary between 20 to 60 m. Common proportions recur in the marked

trapezoidal buildings of the LBK direct heirs, such as Brześć Kujawski or final Villeneuve-Saint-Germain. The façade, where the entrance is supposed to have always been located, faced east or south-east, depending on the region.

The architectural layout represents the major similarity highlighted by Hodder (1984). However, what is actually compared? On one side, there are houses, but on the other are there monuments or burial features? In the opinion of Childe (1949) and until Marshall (1981), it was the barrow that was reminiscent of the house. According to Hodder, however, it depends.

One can agree that the entrance in the case of Linear Pottery houses was located at the broader end, but the architectural evidence at Brześć Kujawski does not support such an obvious fact for the Lengyel houses (Grygiel and Bogucki 1981). On the other hand, what did Hodder mean by 'mound entrance' (1984, 56)? Not every mound contained a chambered tomb. When they did, a corridor that exited on the mound's border was far from systematic. That this entrance was located at the broader end remains a possibility, and nothing more. Furthermore, that some special feature has been dedicated to the entrance depends on our ability to identify it. When only the ground plan, but not the old ground surface, is preserved, revealing the entrance implies a degree of elaboration 'specifically with façades, antechambers, "horns", or activity concentrations' (Hodder 1984, 59). The case is different with burials, but it is hardly a matter of surprise that a grave entrance should be the place for ritual activity. As for the tripartite division of house and mound, there seems to be confusion between an entrance as a room or as a mere threshold.

To go back to the beginning of the story, what can be said of the shape of monuments? As far as Early Neolithic houses are concerned, monuments taken into consideration should be the oldest ones: Passy type in the Paris Basin and 'tertres armoricains' in Brittany. The former provides the biggest corpus. Passy (Bourgogne-Franche-Comté, Duhamel 1997), Fleury-sur-Orne (Normandy, Ghesquière *et al.* 2014) and Balloy (Île-de-France, Mordant 1997) provide a large range of shapes and dimensions, from less than 10 m long to 371 m (the largest to date). Duhamel and Midgley (2004, fig. 4A) have produced a sketch that summarises the diversity of shape. Generally speaking, some follow a strict rectangular outline, while others are rather more trapezoidal. But that is not all, from a geometrical standpoint, circular patterns clearly existed. Finally, it must also be said that some monuments simply cannot be reduced to single, regular geometric shapes. Indeed, some combine such shapes as the trapeze, the rectangle or the circle (Fig. 4.1).

Setting aside proportions that differ significantly from houses, round monuments appeared to contradict the filiation hypothesis. A solution to this conundrum was found by Duhamel, who connected these monuments with Middle Neolithic round buildings discovered in northern France (Duhamel and Midgley 2004, 225). This proposal did not solve the problem posed by the mix of geometric shapes.

A major issue relative to geometry is that there are few two-dimensional shapes. Among the simplest are the ellipse, the trapeze and the rectangle, including the circle as a specific case of the former and the square as an example of the latter. The triangle and the parallelogram, despite also being simple shapes, are less suitable for an inner layout. Furthermore, it should come as no surprise that Neolithic houses followed simple plans. Mounds had less architectonic constraints.
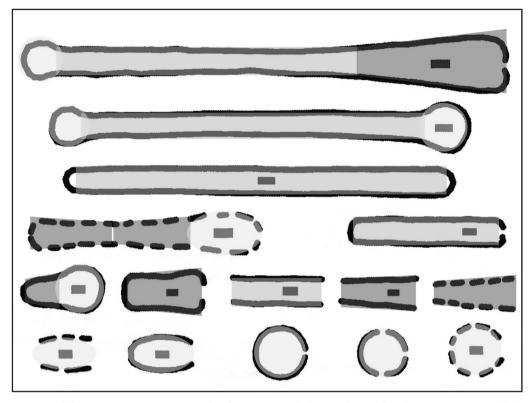
Fig. 4.1: The Passy type monuments reduced to geometrical shapes: they used and sometimes combined the trapeze, the rectangle and the ellipse (sketch of monuments after Duhamel and Midgley 2004).

Building techniques may also explain why burial chambers could have the same plan and even identical proportions as houses. The round plan of many chambers of 'tombes à couloir' may thus recall the one of Middle Neolithic buildings, sometimes with shared details, as Laporte and Tinevez (2004, 22) pointed out after Cassen (2001). Could the same house plan be used on the one hand to justify mound shapes and, on the other, the burial chamber layout? As a matter of fact, the problem with funerary monuments surpasses the comparison with houses. Indeed, should the inner feature be considered dependently or independently of the external aspect of the monument? Regardless, both must correspond to a geometric shape.

REFERENCE TO ANCESTORS?

Considering both the supposed identical shape, as well as the chronological succession of longhouses and long barrows, the underlying idea was that 'long barrow or megalith builders' had wished to emulate the first farmers of western Europe. If the previous houses
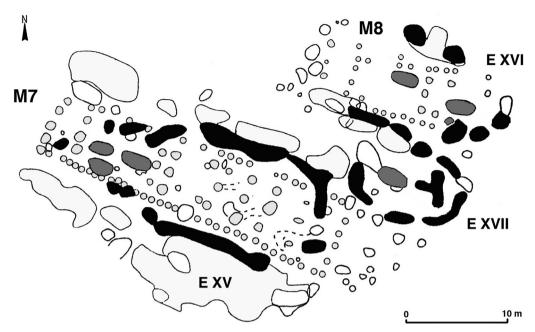
Fig. 4.2: Two monuments, at Balloy, overlapping Rubané houses: appropriation of the value attached to ancestor or practical use of the small mound caused by the ruins of the house? (after Mordant 1997).

were no longer in the spirit of the times, their design was transposed in burial context. By copying the ground plan of these houses, they gained the virtue of their predecessors and might thus lay claim to the land. In this perspective, the superposition of the burial layout over the ruins of the former house was an ideal outcome.

The discovery of three cases of Passy type monuments overlapping Rubané houses, from the cemetery of Balloy, in 1988 and 1993, quickly became famous (Mordant 1997). The sizes of monuments XV and XVI even seem to correspond exactly to those of the prior structures. They also conformed to their orientation. Some other arguments also deserve attention. First of all, monuments attributed to the Cerny culture did not follow immediately the Rubané houses; dwellings of the Villeneuve-Saint-Germain, intercalated between these two cultures, with more or less the same plan, were found a few hundred metres away, without any surrounding monuments. Additionally, at the location of the monumental burial ground, after the Rubané village, only burials occurred until the Iron Age.

As Mordant has suggested (Chambon and Mordant 1996, 398), the interpretation oscillates between two extremes. In the most symbolic one, it could be seen as a will to incorporate values attached to first inhabitants. But from a materialistic standpoint, it may correspond to a practical use of the pre-existing small mound resulting from the decay of the Rubané house, in order to obtain monumentality at little effort (Fig. 4.2). Of course, all intermediate scenarios may also be considered.

Without de-valuing this amazing case, you cannot see the woods for the trees. More than a hundred Passy type monuments have been excavated, as well as hundreds of Danubian houses in the Paris Basin. Taking them all into consideration, the case of Balloy remains unique. At Passy, Gron or Escolives-Sainte-Camille, monuments were set up not far from Rubané dwellings, even on the same plot in the case of Gron. There was, however, no superimposition. Even more surprising, in the Cerny non-monumental cemetery of Vignely (Île-de-France, Bostyn *et al.* 2018), burials were scattered amidst the ruins of the former Villeneuve-Saint-Germain village: nonetheless they most often managed to avoid the exact location of houses. It is only following the Cerny period, around one millennium after the village, that we find a small burial monument superimposed on the ruins of a house.

The issue is not so different for true megalithic monuments. For just one case of direct replacement of a Cerny house by a cairn including a 'tombe à couloir' at Cairon (Normandy, Ghesquière and Marcigny 2011), how many others with nothing of the sort? The question surpasses the simple overlapping of former houses by burial monuments. It is a matter of remembrance, or how people recalled what happened before and the way they positioned themselves in front of the past. Did they pay attention to the real identification of features, such as houses, or were they satisfied with the mere knowledge of the overall location of a former village? Nonetheless, one cannot deny a form of assignment to certain locations. In the Paris Basin, Rubané and Villeneuve-Saint-Germain burials occurred within villages. This pattern shifted with the arrival of the Cerny culture. By this time and afterwards, some places seem to have been dedicated to the dead or to religious purposes (with reservations that domestic settings remain, archaeologically speaking, very discrete for several periods).

Actually, proving the continuity, particularly in the symbolic domain, does not appear that easy. Although more recent, the case of the Bury 'allée sépulcrale' (gallery grave) is remarkable from this perspective. After a short use during the Late Neolithic, the grave was maintained for several centuries before being used again for burials (Salanova *et al.* 2017). There could hardly be a doubt about the meaning.

Ancestry is of real concern when it comes to talk about burial practices. However, the idea tends to be used in a very general way. As Hodder pointed out, 'any marker or inhumation cemetery could have functioned as a focus or as a symbol of the ancestors' (1984, 52). But, above all, predecessors cannot be seen systematically as ancestors. The process of becoming an ancestor is long and punctuated by ritual events (Hertz 1907). Ancestors, both real and mythical, are namely invoked. How could the builders of the first burial monuments have included amidst their religious patrimony anonymous predecessors, whose only remembrance would have been the ruins of theirs houses or villages?

CONCLUDING REMARKS

Undeniable similarities exist between plans of Early Neolithic houses and of later burial monuments. But these communal traits result mostly from the simple geometric forms used for the construction of structures across time. When considering a house or a burial chamber, a quadrilateral provides an easier space to organise than a triangle and the architectural constraints increase with more than four sides. In the case of mounds, an elongated

form is the simplest way to suggest monumentality, and a trapezoidal shape allows for the installation of a real façade at one end, maintaining the elongated impression while reducing the work at the other end. The round shape appears more suitable when height was the main goal.

The concept of a house of the dead remains unclear. If it pertains to the type of burial, use of the term is excessive. It may be retained for chambered tombs: large vaults, passage graves, gallery graves, *etc*. It does not fit with individual burials included in the first long barrows. Monumental burials do not imply megaliths; furthermore, the most impressive ones, which were also the first ones and the closest to LBK houses, had no real inner architecture. And in a practical sense, a mound cannot be regarded as a house.

Metaphorically speaking, the question is quite different. A well identified location for the dead may be seen as the house of the dead, moreover in the case of a monumental one. Nowadays in the Occident, the dead person rests at the cemetery, and the living go there to visit them, as they do with living relatives. The dead place is organised, often with streets, districts and groupings. The word necropolis, literally city of the dead, first applied to the antic cemetery of Alexandria, though rare in English, is not a matter of misunderstanding. However, in the symbolic perspective, there is no place for a continuity or a transposition between Early Neolithic houses and later burial buildings. The investment in burial features implies firstly a separation of the dead and the living, secondly that some of the dead have been assigned a new social role.

The emergence of burial monumentality is often considered as being connected to the end of a colonisation phase (*e.g.* Renfrew 1976; Kinnes 1981). Regardless of locality this almost always corresponds to the Middle Neolithic. Does this then imply a constant recollection of early farmers?

Furthermore, if the link may appear logical, burial monumentality did not occur under the same conditions everywhere: in Mediterranean areas of Spain and France, evidence of monumentality is scarce before the Late Neolithic. Even putting the questions of houses and of later monumentality aside, the role of the Linear Pottery culture has been posited as crucial in this emergence. There have been, and there still are fierce debates over whether 'tertres armoricains' were connected to Rubané, but Villeneuve-Saint-Germain is now found up to Brittany lending credibility to this hypothesis. Unfortunately for the proponents of this hypothesis, monumental cemeteries, with Passy type monuments, have been recently discovered in areas never reached by LBK and its successors. The first case was in the Centre-Ouest, at Dissay, in a Chambon context (Pautreau *et al*. 2006) and more recently in the Rhône and the Ain valleys (Frascone 2008), east of Lyon, a context in which this period should correspond to Saint-Uze (Fig. 4.3). Both cultures were supposed to have further links with the Mediterranean Neolithic. Hardly anything is known of the first farmers domestic features in these regions.

Finally, the progression of longhouses to burial monuments corresponds to fluctuating investment over the course of the Neolithic. Periods with investment in domestic features differ from periods with monumental architecture for the dead. Remembrance of the dead is a token of perpetuation of the society. To argue that the souvenir included, somehow, the house shape of preceding populations, remains fully speculative; in the words of a bad classical French pun, first mentioned in *Le Croix* newspaper of 28th July 1893 – if it's round, it's not square!
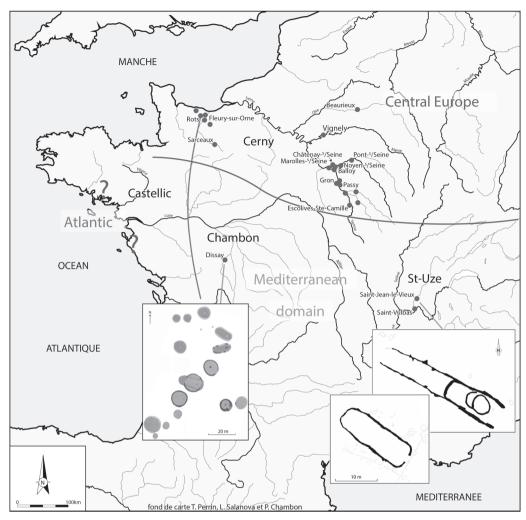
Fig. 4.3: Earthen long barrows from the second and the third quarter of the fifth millennium BC. Setting considering cultural spheres, most are located in the area previously under LBK influence, but recent discoveries concerned cultures related to the Mediterranean area. The question of the 'tertres armoricains' remains under discussion (Dissay after Pautreau et al. *2006; St-Jean-le-Vieux after Frascone 2008).*

REFERENCES

Ashbee, P. (1970) *The Earthen Long Barrow in Britain*. London, Dent.
Bayliss, A. and Whittle, A. (eds) (2007) Histories of the dead: building chronologies for five southern British long barrows. *Cambridge Archaeological Journal* 17.1, supplement.
Bostyn, F., Lanchon, Y. and Chambon P. (ed.) (2018) *Habitat du Néolithique ancien et nécropoles du Néolithique moyen I et II à Vignely « la Porte aux Bergers », Seine-et-Marne*. Paris, Société Préhistorique Française (mémoire 64).

Boujot, C. and Cassen, S. (1992) Le développement des premières architectures funéraires monumentales en France occidentale. In C.-T. Le Roux (ed.) *Actes du 17ᵉ colloque interrégional sur le Néolithique, Vannes 1990*, 195–211. Rennes, Suppl. 5 à la Revue Archéologique de l'Ouest.

Carré, H., Duhamel, P. and Fajon, P. (1984) Monuments et sépultures de Passy (Yonne), un ensemble funéraire du Néolithique moyen d'affinités danubiennes. In Colloque interrégional sur le Néolithique, Mulhouse, 5–7 act. 1984, résumé des communications, 23–5.

Cassen, S. (ed.) (2000) *Eléments d'architecture. Exploration d'un tertre funéraire à Lannec er Gadouer (Erdeven, Morbihan)*. Chauvigny, Association des Publications Chauvinoises.

Chambon, P. (2003) *Les morts dans les sépultures collectives néolithiques en France; du cadavre aux restes ultimes*. Paris, Suppl. 35 à Gallia Préhistoire.

Chambon, P. and Mordant, D. (1996) Monumentalisme et sépultures collectives à Balloy (Seine-et-Marne). *Bulletin de la Société Préhistorique Française* 93 (3), 396–402.

Chancerel, A., Desloges, J., Dron, J.-L. and San Juan, G. (1992) Le début du Néolithique en Basse-Normandie. In C.-T. Le Roux (ed.) *Paysans et bâtisseurs, Actes du 17ᵉ Colloque International sur le Néolithique, Vannes, 1990*, 153–73. Rennes, Suppl. 5 à la Revue Archéologique de l'Ouest.

Childe, V.G. (1949) The origin of Neolithic culture in northern Europe. *Antiquity* 23, 129–35.

Daniel, G.E. (1965) Editorial. *Antiquity* 39, 81–6.

Delor, J.-P., Genreau, F., Heurtaux, A., Jacob, J.-P., Leredde, H., Nouvel, P. and Pellet C. (1997) L'implantation des nécropoles monumentales au sud du Bassin parisien. In C. Constantin, D. Mordant and D. Simonin (eds) *La Culture de Cerny, Nouvelle économie, nouvelle société au Néolithique*, 381–396. Nemours, APRAIF (Mémoires du Musée de Préhistoire d'Ile-de-France, 6).

Deguilloux, M.-F., Soler, L., Pemonge, M.-H., Scarre, C., Joussaume, J. and Laporte L. (2011) News from the West: ancient DNA from a French megalithic burial chamber. *American Journal of Physical Anthropology* 144 (1), 108–18.

Duhamel, P. (1997) La nécropole monumentale de Passy (Yonne): description d'ensemble et problèmes d'interprétation. In C. Constantin, D. Mordant and D. Simonin (eds) *La Culture de Cerny, Nouvelle économie, nouvelle société au Néolithique*, 397–448. Nemours, APRAIF (Mémoires du Musée de Préhistoire d'Ile-de-France, 6).

Duhamel, P. and Midgley, M. (2004) Espaces, monumentalisme et pratiques funéraires des sociétés néolithiques en voie de hiérarchisation: les nécropoles monumentales Cerny du bassin Seine-Yonne. In L. Baray (ed.) *Archéologie des pratiques funéraires: approches critiques*, 211–48. Glux-en-Glenne, Bibracte (Bibracte; 9).

Frascone, D. (2008) *Saint-Jean-le-Vieux (Ain), occupations néolithiques et gallo-romaines*. Bron, Inrap Rhône-Alpes-Auvergne.

Ghesquière, E., Chambon, P., Giazzon, D., Hachem, L, Thevenet, C. and Thomas, A. (2014) Présentation liminaire de la fouille de la nécropole des Hauts de l'Orne à Fleury-sur-Orne (Calvados). *Internéo* 10, 179–81.

Ghesquière, E. and Marcigny, C. (ed.) (2011) *Cairon; vivre et mourir au Néolithique; la Pierre Tourneresse en Calvados*. Rennes, Presses universitaires de Rennes (Archéologie et culture).

Grygiel, R. and Bogucki, P.I. (1981) Early Neolithic Sites at Brześć Kujawski, Poland: Preliminary Report on the 1976–1979 Excavations. *Journal of Field Archaeology* 8, 9–27.

Hertz, R. (1907) Etude sur la représentation de la mort. *Année sociologique* 10, 48–137.

Hodder, I. (1984) Burials, houses, women and men in the European Neolithic. In D. Miller and C. Tilley (eds) *Ideology, Power and Prehistory*, 51–68. Cambridge, Cambridge University.

Kinnes, I. (1981) Dialogues with death. In R. Chapman, L. Kinnes and K. Randsborg (eds) *The Archaeology of Death*, 83–91. Cambridge, Cambridge University Press.

L'Helgouach, J. (1965) *Les sépultures mégalithiques en Armorique*. Rennes, Travaux du Laboratoire d'Anthropologie Préhistorique.

Laporte, L. and Tinevez, J.-Y. (2004) Neolithic houses and chambered tombs of western France. *Cambridge Archaeological Journal* 14 (2), 217–34.

Le Rouzic, Z. (1933) Morphologie et chronologie des sépultures préhistoriques du Morbihan. *L'Anthropologie* 43, 225–65.

Marshall, A. (1981) Environmental adaptation and structural design in axially-pitched longhouses from Neolithic Europe. *World Archaeology* 13, 101–21.

Mohen J.-P. (1977) Les tumulus de Bougon; 4000–2000 ans avant Jésus-Christ. *Bulletin de la Société Historique et Scientifique des Deux-Sèvres* 2/3, 5–48.

Mohen, J.-P. and Scarre, C. (2002) *Les tumulus de Bougon, complexe mégalithique du Ve au IIIe millénaire.* Paris, Errance.

Mordant, D. (1997) Le complexe des Réaudins à Balloy: enceinte et nécropole monumentale. In C. Constantin, D. Mordant and D. Simonin (eds) *La Culture de Cerny, Nouvelle économie, nouvelle société au Néolithique*, 448–79. Nemours, APRAIF (Mémoires du Musée de Préhistoire d'Ile-de-France, 6).

Pautreau, J.-P., Farago-Szekeres, B. and Mornais, P. (2006) La nécropole néolithique de la Jardelle à Dissay (Vienne). In R. Joussaume, L. Laporte and C. Scarre (eds) *Origine et développement du mégalithisme de l'ouest de l'Europe*, 375–9. Bougon, édition du Musée des Tumulus.

Péquart, M., Péquart, S.-J., Boule, M., and Vallois, H. (1937) *Téviec, station nécropole mésolithique du Morbihan.* Paris, Archives de l'Institut de Paléontologie Humaine (Mémoire n° 18).

Powell, T.G.E., Corcoran, J.X.W.P., Lynch, F. and Scott, J.G. (1969) *Megalithic Enquiries in the West of Britain.* Liverpool: Liverpool University Press.

Salanova, L., Chambon, P., Pariat, J.-G., Marçais, A.-S. and Valentin, F. (2017) From one ritual to another: the long-term sequence from the Bury gallery grave (Northern France, fourth-second millennia BC). *Antiquity* 91 (355), 57–73.

Sánchez-Quinto, F., Malmströma, H., Fraser, M., Girdland-Flink, L., Svensson, E.M., Simões, L.G., George, R., Hollfeldera, N., Burenhult, G., Noble, G., Britton, K., Talamo, S., Curtis, N., Brzobohata, H., Sumberova, R., Götherström, A., Storå, J. and Jakobsson, M. (2019) Megalithic tombs in western and northern Neolithic Europe were linked to a kindred society. *PNAS* 116, 9469–74.

Scarre, C., Switsur, R. and Mohen, J.-P. (1993) New radiocarbon dates from Bougon and the chronology of French passage-graves. *Antiquity* 67 (257), 856–9.

Thomas, A. (2011) Identités funéraires, variants biologiques et facteurs chronologiques: une nouvelle perception du contexte culturel et social du Cerny (Bassin parisien, 4700–4300 avant J.-C.). Unpublished thesis, Université de Bordeaux 1.

Sprockhoff, E. (1938) *Die Nordische Megalithkultur.* Berlin and Leipzig: De Gruyter.

Whittle, A.W.R. (1977) *The Earlier Neolithic of Southern England and its Continental Background.* Oxford: BAR Supplementary Series 35.