

Monumental ditched enclosures in southern Iberia (fourth–third millennia BC)

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Large curvilinear enclosures are now established as a principal instrument of human activity in Central Europe from the Neolithic into the Bronze Age (Antiquity, passim). Here the authors introduce us to examples from southern Iberia and make the case that they should be regarded as part of the same continent-wide phenomenon.

Keywords: Europe, Neolithic, Chalcolithic, fourth millennium BC, ditched enclosures, causewayed camps, rondels

Introduction

In the process of deep landscape monumentalisation that took place during the Neolithisation of Western Europe and the millennia that followed (sixth–third millennia BC), the creation of circular enclosures, and more precisely ditched enclosures, was a common occurrence. Overshadowed at first by other forms of monumentality like mounds, stone alignments and megalithic tombs, it was not until the 1980s that their widespread distribution across continental Europe, Britain and Ireland was recognised (Whittle 1988).

In the last 25 years, studies on British and Irish *causewayed enclosures*, French *enceintes fossés*, Central European *unterbrochene erdwerke* and *rondels* and Nordic *indelukke* have flourished (e.g. Burgess *et al.* 1988; Andersen 1997; Thomas 1999; Darvill & Thomas 2001; Varndell & Topping 2002; Kovárník *et al.* 2006; Pásztor *et al.* 2008; Whittle *et al.* 2011). Numerous research projects, surveys and excavations have been undertaken in

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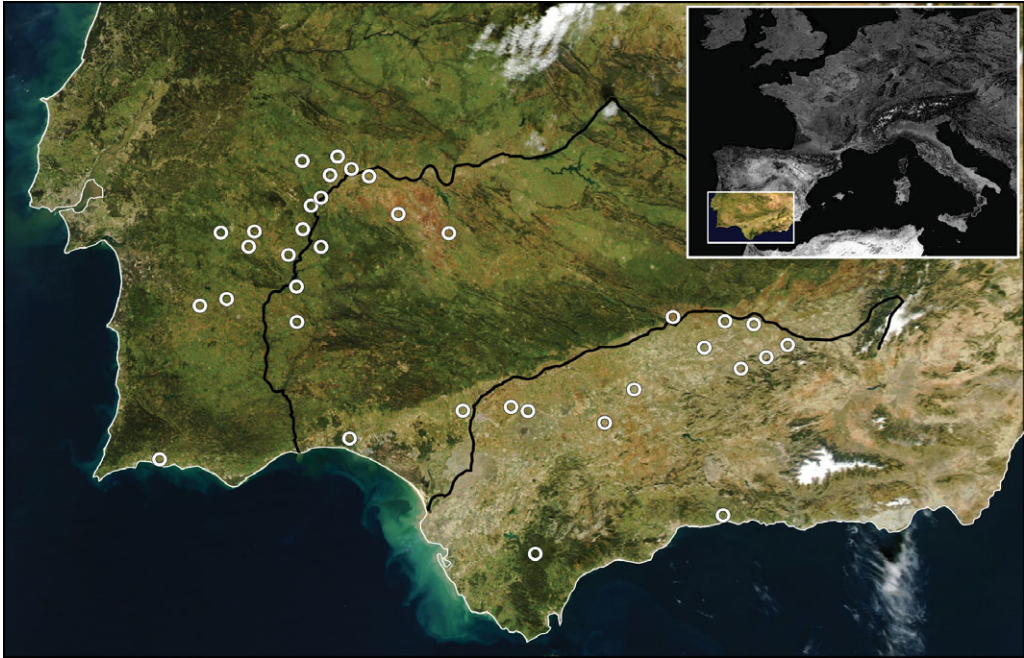


Figure 1. General distribution of southern Iberian ditched enclosures (background image ©NASA Visible Earth n.d.).

areas such as southern England, the Paris Basin and the Jutland Peninsula, amongst others, considerably increasing the quantity and quality of available empirical information. Thanks to this, we now know, for example, that the inherent large scale of this phenomenon is not only geographical, but also chronological: it is a long-lasting tradition in prehistoric Europe, beginning in the Early Neolithic of the Mediterranean and Danubian areas (sixth millennium BC), and nearly reaching the Bronze Age in other regions (late third millennium BC). Today, it could be argued that ditched enclosures are, in fact, a hallmark of late prehistoric Europe.

Significant changes in our understanding of the functionality of these enclosures occurred in parallel with this process. There has been a gradual trend towards abandoning the hypothesis that they were built primarily as rudimentary fortresses: the perception of Neolithic ditched enclosures as permanent settlements has been questioned and the obvious inefficiency of the ditches as defensive systems has been pointed out (see references above). The interpretation of Neolithic pits as ‘storage pits’ or ‘dwelling pits’ seems also to have lost momentum (e.g. Thomas 1999: 64–74; Anderson-Whymark & Thomas 2012).

Here we will present, in this context, a large body of material largely unknown outside the Iberian Peninsula. Between the sixth and the third millennia BC, and particularly in the fourth and third millennia (Late Neolithic and Chalcolithic), countless ditched enclosures were built (Figure 1). Despite their abundance and the huge size of some of them—over 100ha in certain cases—references to Iberian *recintos de fosos* have been, for the most part, scarce, partial or inaccurate in meetings and collective works on the matter.

'Obscured' similarities

Iberian ditched enclosures began to be known in the 1970s, but methodological deficiencies and lack of funding hampered their characterisation. A high percentage of them were found only after development-led initiatives. Methods and techniques that had proved successful in other parts of Europe (e.g. aerial photographs, geophysical surveys, extensive excavations, etc.), were rarely applied to Iberian enclosures. The limits of survey areas were frequently too restricted to perceive a significant portion of the enclosure layout. Preconceptions about site formation also played a role. Since most pit and ditch fills were considered no more than rubbish dumps, they were thought to be chaotic assemblages with no contextual information.

One of the most prominent issues was the unexpected complexity of intra-site temporality. Iberian ditched enclosures were constructed in places of enduring social, economic and symbolical significance, and their specific meanings changed with time. The archaeological evidence is, in many instances, an aggregate of individual occupations accumulated over time. It is not uncommon to find later ditched enclosures or, for that matter, occupations of a completely different nature, located in the same places where earlier ditched enclosures had been built and subsequently abandoned. This is something to take into account especially when dealing with southern Iberian Chalcolithic sites (third millennium BC).

A distinguishing feature of the Iberian Chalcolithic is the emergence of stone walled enclosures, akin to the well-known site of Los Millares in the south-east (Almagro & Arribas 1959; Jorge 2003; Molina & Cámara 2005). Such sites could be described as enclosures delimited with one or more lines of stone masonry walls, with their interior surfaces occupied mainly by what appear to be circular huts with stone masonry foundations and floor deposits. Sometimes, walled enclosures with their walls, 'bastions', 'towers' and 'domestic features' overlap older ditched enclosures (Figure 2). Without knowledge of the occupation sequence of a site, it was relatively easy and even tempting to believe that ditches, walls, pits and houses were all contemporary and therefore coexisted, thus reinforcing the interpretation of ditched enclosures as large settlements protected by sophisticated defence systems.

The combined effect of all these circumstances somehow hid, or at least obscured, the striking similarities between Iberian and other European ditched enclosures, so excluding the Iberian enclosures from the broader discussion. Fortunately, the scene has radically changed in the last 10 years. Many more sites have been discovered, new methods have been adopted and site temporality has begun to receive some attention. More up-to-date interpretative models have been applied, adopting 'enclosure' as a more neutral and hence more appropriate term, as opposed to 'fortified settlement' (e.g. Delibes 2001; Márquez-Romero 2001, 2003; Márquez-Romero & Jiménez-Jáimez 2010; Valera & Evangelista 2010).

Geography and topography

Ditched enclosures have been found in the majority of Iberian regions, especially in the centre (*Meseta*) (e.g. Díaz-Andreu *et al.* 1992; Díaz-del-Río 2004; Delibes & Herrán 2007) and

the east (*Levante*) (e.g. Bernabeu *et al.* 2003), but it is in the southern regions (Andalusia, Algarve and Alentejo) where most fieldwork has been carried out. About 40 *recintos de fosos* have been documented in southern Iberia to date. As is the norm in other European regions, they tend to concentrate in the basins of major rivers and their tributaries; in our case, Guadiana and Guadalquivir (Figure 1).

Amongst them, La Pijotilla (Hurtado 2003, 2008), Perdigões (Lago *et al.* 1998; Márquez-Romero *et al.* 2011a, 2011b), Porto Torrão (Valera & Filipe 2004), Alcalar (Morán 2008) and Papa Uvas (Martín de la Cruz & Lucena 2003) in the Guadiana basin; and Valencina de la Concepción (Costa *et al.* 2010), Martos (Lizcano 1999) and Marroquies Bajos (Zafra *et al.* 1999) in the Guadalquivir valley, stand out. New discoveries are constantly being made: Xancra, Outeiro Alto and Moreiros in Portugal (Valera & Becker 2011, in press) and Venta del Rapa in Andalusia (Lechuga *et al.* 2011) the most notable.

Many ditched enclosures are located near the margins of their corresponding geomorphological or topographical zones, whether it be the coastline, a plateau, major rivers or the boundaries between highlands and lowlands. As is also the case in other European regions, enclosures are usually placed in easily accessible, low-lying lands. Sometimes the surroundings are at a higher level than the enclosed area itself, as can be seen at Porto Torrão and La Pijotilla. There are even examples of places shaped like a Greek theatre (e.g. Perdigões). From a (modern) practical point of view, they show an obvious lack of interest in the defensive capabilities of the site, as well as the potential physical control of the

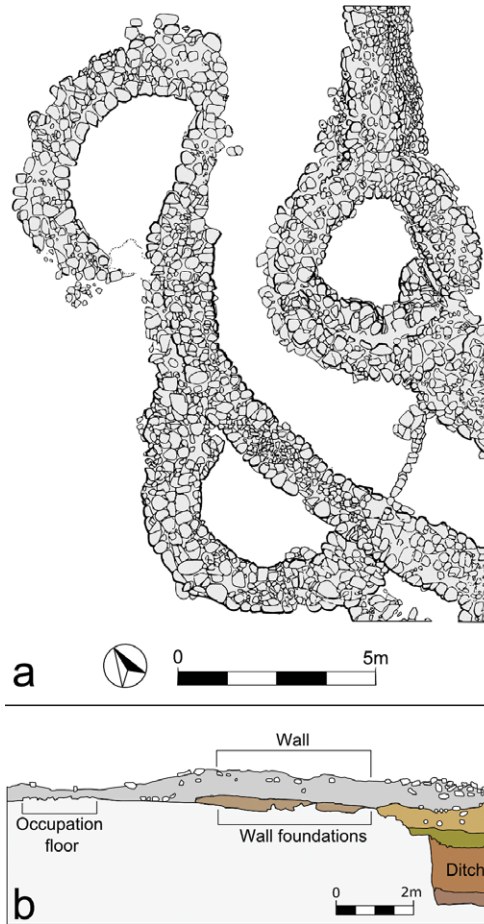


Figure 2. a) Walls and bastions at Monte da Tumba (Portugal), a typical Copper Age southern Iberian walled enclosure (modified after Silva & Soares 1987: fig. 14). b) Complex stratigraphic sequence at Marroquies Bajos (Jaén), with walls and houses in the proximity of ditches (modified after Zafra *et al.* 1999: fig. 5).

territory from that particular point in the landscape. Enclosure of areas prone to flooding or in the proximity of watery locations, such as rivers, marshes or swamps, is another trend. La Pijotilla, Martos and Porto Torrão appear to have been built around the course of streams which split the enclosed spaces into two separate sectors. The geology of ditched sites is variable, but generally consists of permeable, easy to dig rocks.

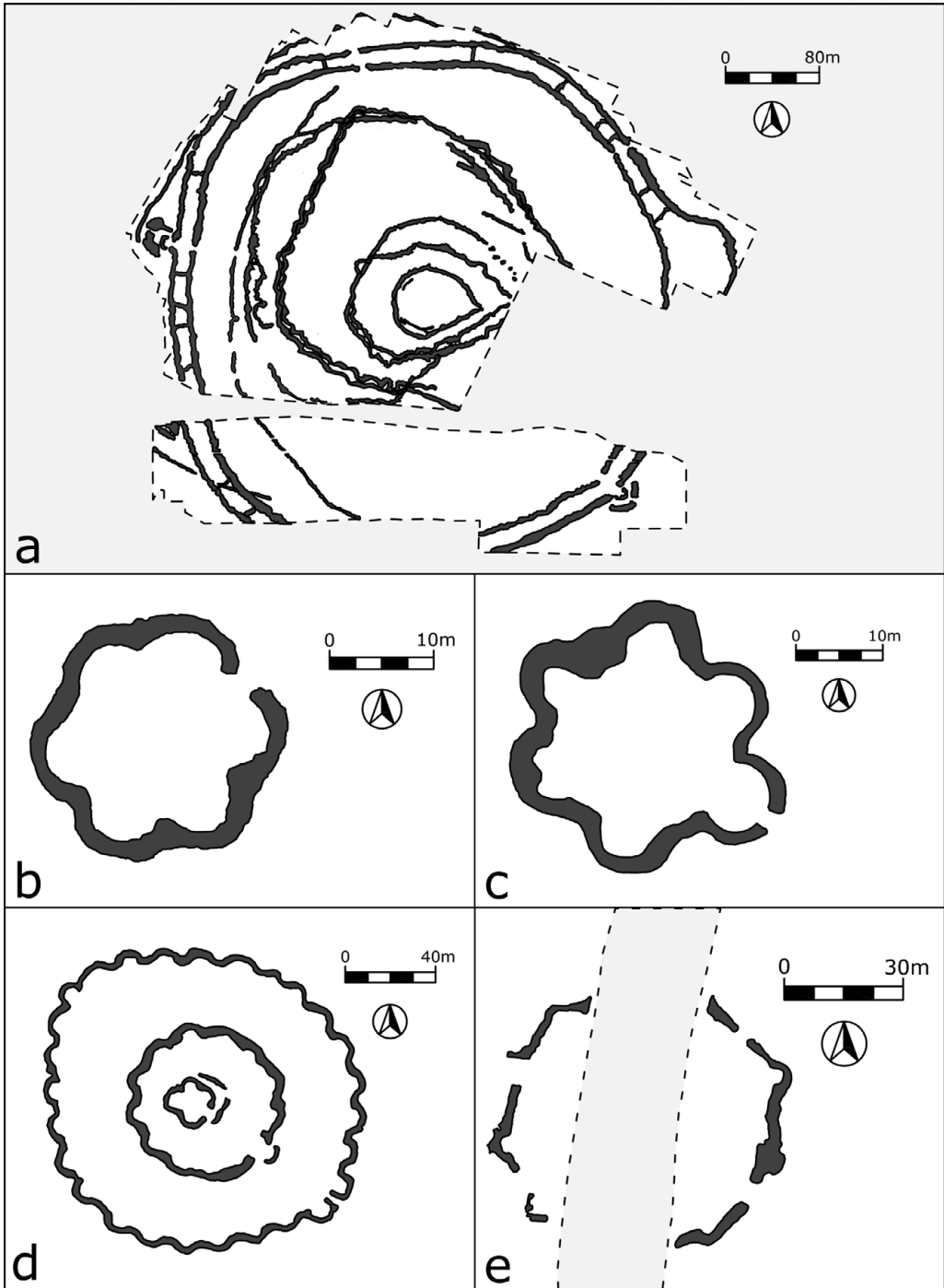


Figure 3. Different Neolithic/Chalcolithic Iberian ditched enclosure layouts: a) Perdigões (Márquez-Romero et al. 2011a: fig. 5); b) Santa Vitória (Valera & Becker 2011: fig. 7); c) Outeiro Alto (Valera & Becker 2011: fig. 7); d) Xanra (Valera & Becker 2011: fig. 3); e) Venta del Rapa (Lechuga et al. 2011: fig. 3). All illustrations drawn by the authors.

Enclosure layout

Our knowledge about the layout of many southern Iberian *recintos de fosos* remains partial. However, today's available evidence suggests that they are, for the most part, roughly circular in plan (Figure 3). The enclosing ditches are U or V-shaped, with variable dimensions, normally ranging from 1–3m deep and 2–3m wide (Figure 4). There

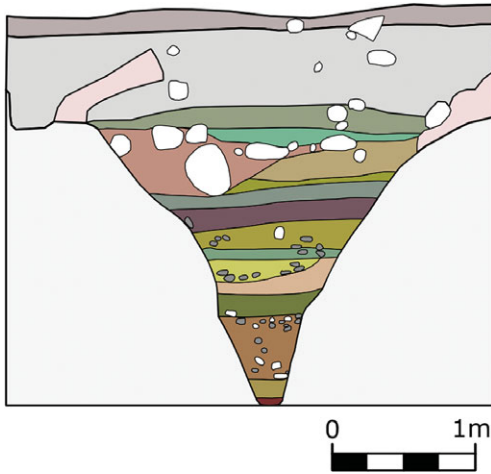


Figure 4. Section through a Chalcolithic ditch at Perdigões (Portugal) (modified after Valera 2008: fig. 9).

are, nevertheless, examples of outstanding size, reaching a depth of 7m or a width of up to 20m. Though still of overall circular appearance, some recently observed layouts include wavy or sinuous ditches (Lechuga *et al.* 2011; Valera & Becker 2011, in press).

Southern Iberian ditched enclosures do not strictly follow the 'causewayed enclosure' form which is widely spread across other parts of Europe. Instead, they often consist of continuous ditched rings, except for a small number of gates or entrances where ditches are interrupted. Prototypical 'causewayed enclosures' have nevertheless been identified in other Iberian regions (Figure 5b). Some entrances were monumentalised with additional ditch segments; for instance, there is a clear

example of 'crab's pincers', a feature well documented in France (*pince de crabe*), in the Iberian *Meseta* (Figure 5a). Astronomical alignments of gates in southern Iberian sites have been mentioned in recent publications (Valera & Becker 2011, in press). In the last few years, traces of possible banks and palisades parallel to ditches have been recorded through systematic geophysical surveys (e.g. Márquez-Romero *et al.* 2011a; Valera & Becker in press).

Southern Iberian enclosures are generally larger than their European relatives. Internal surface area, where known, is highly variable, ranging from less than 1ha to nearly 100ha. At three sites, Porto Torrão (Valera & Filipe 2004), Marroquíes Bajos (Zafra *et al.* 1999) and Valencina de la Concepción (Costa *et al.* 2010: 89), although researchers have not yet been able to determine the limits and layout of the enclosure(s), prehistoric pits and ditches are scattered across vast areas: more than 70ha for Porto Torrão, more than 110ha for Marroquíes and around 400ha for Valencina. Huge areas like these should probably be analysed bearing in mind that the construction, use and abandonment of multiple enclosures at the same place does not necessarily mean they were in use at the same time.

Internal features

Certain Chalcolithic ditched sites, such as San Blas (Hurtado 2008), Alcalar (Morán 2008) or Marroquíes (Zafra *et al.* 1999), contain circular huts with stone foundations

and central hearths, as well as masonry-based walls. Similarly, at sites like Perdigões (Márquez-Romero *et al.* 2011a), La Pijotilla (Hurtado 2003, 2008), Alcalar and Valencina

(Costa *et al.* 2010), megalithic tombs of different types with human remains and rich and exotic grave goods have been found. Although investigations into the occupation sequence at each of these sites is still in progress, their diachronic nature has been proved more often than not. It is important to recognise, however, that these are exceptions: to date no Neolithic and only a few Chalcolithic Iberian ditched enclosures have been shown to include walls, houses or occupation deposits within the enclosed space.

All Iberian ditched sites so far identified share a characteristic feature of their European counterparts: the presence of a considerable number of pits (Figure 6). Their dimensions range from a few centimetres to 3m in depth and from 1–3m in diameter, with rare exceptions exceeding 5m in diameter. Their spatial distribution is apparently random, although sometimes clusters can be perceived. The fact that many pits overlap earlier filled pits offers further evidence for sequential occupation in the enclosure.

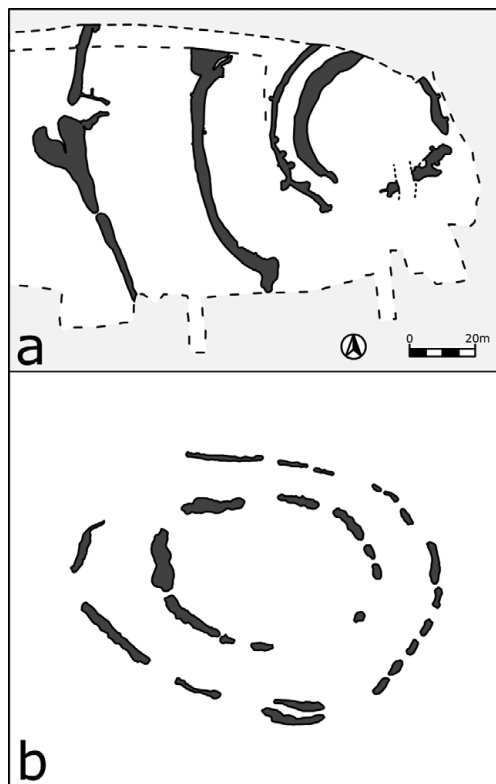


Figure 5. Iberian recintos de fosos from the Meseta Central: a) Fuente de la Mora (modified after Díaz-del-Río 2004: fig. 3); b) Moscatel (modified after Delibes & Herrán 2007: 149).

Depositional practices

Currently available data strongly point towards pit and ditch filling assemblages being, for the most part, the result of deliberate human actions (Márquez-Romero & Jiménez-Jáimez 2010: ch. 8). Similar results for such deliberate actions have also been obtained from a number of wider European sites where ‘highly structured depositions’ have been documented (e.g. Andersen 1997; Whittle *et al.* 1999); as explained by Richards and Thomas (1984: 215): “when the material was deposited, it was done in a particular manner, obeying certain rules which were important to the actors involved”.

Despite the varying quantity and quality of information provided in the archaeological reports, some regularities of material deposition are immediately apparent. Ditches and pits were filled with different combinations of soil (sometimes non-local), artefacts and ecofacts, either in one step or as a sequence of actions. Finds may include stones (often pebbles), potsherds, flint tools, flint knapping waste, quern stones, charcoal, ashes,

seashells and small clay, stone or bone figures (possible 'idols'). Most objects are broken; complete artefacts do exist but are rare. The deposition of unpreserved perishable organic items seems plausible, although this is as yet unproven. In addition to these, huge amounts of faunal remains (Márquez-Romero 2006) and a small but significant number of human bones (Márquez-Romero 2004) have been found.



Figure 6. Examples of internal ditches and pits at Perdigões (Portugal) (photograph by the authors).

Among the most frequently identified animal species are *Bos taurus* (cattle), *Capra hircus* (goat), *Ovis aries* (sheep), *Canis familiaris* (dog), *Sus domesticus* (pig) and *Cervus elaphus* (deer). In pit and ditch assemblages, the majority of animal remains are incomplete carcasses and body parts, although a good number of complete and fully articulated bovine and canine carcasses have also been documented. When complete, animal bodies are occasionally covered by a layer of stones and/or broken quern stones. Individual specimens can be treated in different ways (complete/dismembered)

within the same context. In one instance, skeletal elements of a single individual were scattered across multiple pits (Lizcano 1999: 112).

Human remains are relatively common within ditches and, especially, pits. As with animals, both complete bodies (crouched or in fetal position) and isolated or piled up body parts (skulls, joints, individual bones) have been recorded. Just like cattle and dogs, when human bodies appear complete they sometimes lie beneath a concentration of pebbles and/or broken quern stones, or simply a big stone. At the moment there is little indication of a differential or preferential treatment of human remains compared with other finds. Potsherds, lithic tools and the other items deposited with them do not appear to show distribution patterns that suggest that they were funerary offerings or grave goods of any kind. Rather, human bodies, skulls and bones seem to be nothing more than one of the possible items involved in depositional episodes that included a wide variety of artefacts and ecofacts. Because of this, we could claim that pit and ditch fillings are not true 'funerary contexts', at least in the traditional sense.

Chronology

In spite of the scarcity of reliable radiocarbon dates, the chronology of the ditched enclosure tradition in the Iberian Peninsula is slowly starting to be clarified. The oldest Iberian enclosures date back to the second half of the sixth millennium BC (Early Neolithic) although only a few sites such as Mas d'Is (Bernabeu *et al.* 2003) in the east or Los Cascajos

in the north (García & Sesma 2001) are known as yet. In southern Iberia, however, the construction of *recintos de fosos* appears to span from the fourth millennium BC to the last third of the third millennium (Late Neolithic and Chalcolithic), thus coinciding with the building of the majority of megalithic structures in the area (Márquez-Romero & Jiménez-Jáimez 2010: 202). The emergence of the Beaker culture and its development in the second half of the third millennium BC seems to mark the beginning of the end for southern Iberian ditched sites.

For the sake of clarity, we will divide this process into three distinct phases (Márquez-Romero & Jiménez-Jáimez 2010: ch. 11):

Phase 1: Late Neolithic (fourth millennium BC)

The tradition commenced, as in other regions of the Atlantic façade, in the first half of the fourth millennium BC. Similarities between Iberian sites dating from this period and other contemporary European ditched enclosures are obvious: circular ditched rings, countless pits filled as a consequence of deliberate human actions, almost complete absence of houses and walls, etc. Both the underground features (ditches, pits) and the enclosed areas themselves were predominantly average in size compared to other European sites.

Phase 2: Early–Middle Chalcolithic (first half of the third millennium BC)

While in other European areas ditched enclosures seem to disappear around 3000 BC or even before that, in the southernmost regions of the Iberian Peninsula some *recintos de fosos* continued to be built thereafter and according to the same set of basic characteristics, but with a crucial difference for certain sites: a much larger scale. Some Chalcolithic ditched enclosures, like Valencina, La Pijotilla or Marroquíes, were impressive monuments with gigantic internal surface areas and dense human activity. Enclosed features were scattered across enormous areas (up to 400ha), and individual ditches and pits reached an unprecedented width or depth.

Phase 3: Late Chalcolithic (Bell Beaker, second half of the third millennium BC)

Evidence suggests that very few, if any, new ditched sites appeared after 2500 BC. But at the same time, some of the most important ditched enclosures from the previous phases continued to be visited (depositional practices, recuttings) and further rings were added, usually concentric. A few ditches stand out because of their dimensions: up to 9m (Perdigões) or even 20m (Marroquíes) wide. It may be that at the end of the third millennium the remaining ditched enclosures were definitely abandoned. The places where some of them had been located were subsequently occupied by groups of circular huts and stone masonry walls. It is even possible that, for the first time in the history of Iberian ditched enclosures and for a relatively short time, walls and huts coexisted with pits and ditches, although further research is necessary.

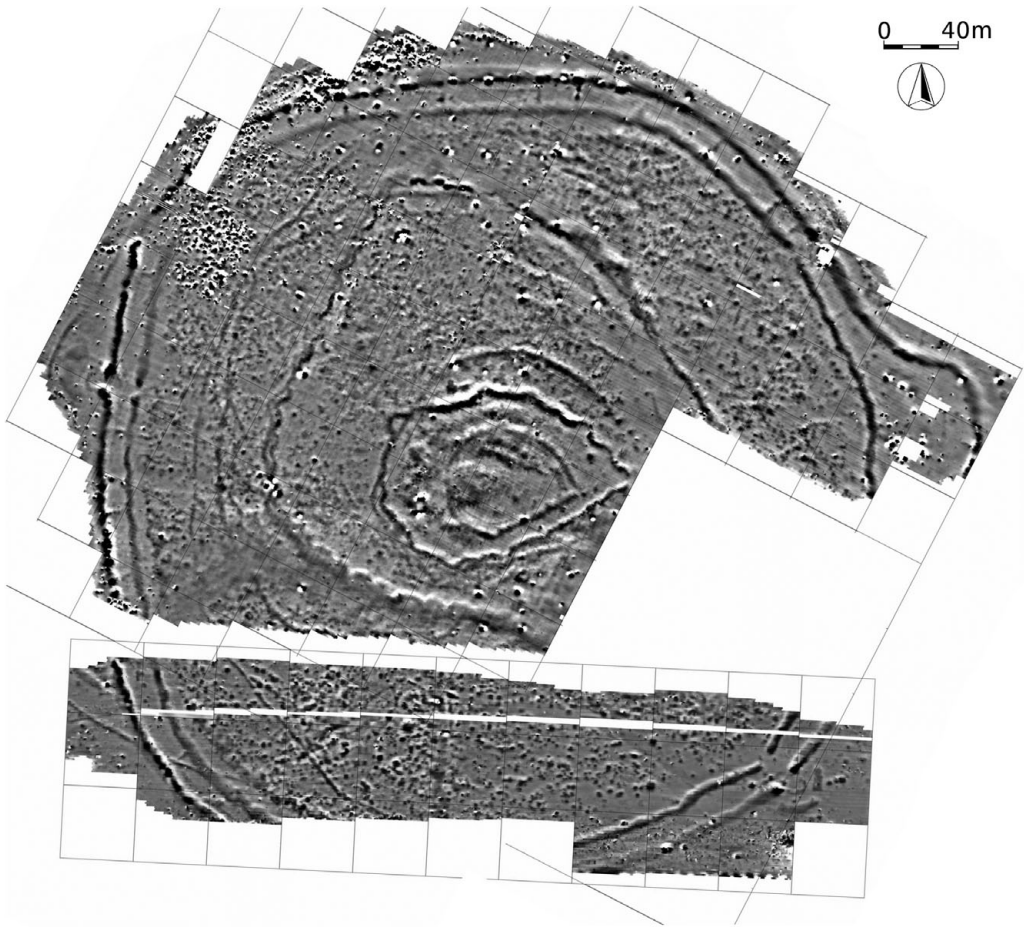


Figure 7. Magnetogram of the geophysical survey carried out by H. Becker as part of the research activities of the University of Málaga at Perdigões (Portugal).

Discussion

The Iberian site which has provided us with the most meaningful information to date is Perdigões (Reguengos de Monsaraz, Alentejo, Portugal), where an international research project coordinated by A. Valera and involving the University of Málaga is being developed. The geophysical surveys carried out in 2009 (Márquez-Romero *et al.* 2011a) and the ongoing excavations (Valera 2008, 2010; Márquez-Romero *et al.* 2011b) have been very fruitful. The site comprises no fewer than 12 roughly concentric ditched rings, some of them wavy ditches, with at least one palisade (inner circle) and thousands of pits (Figure 7). Magnetometry reveals the existence of an 'empty' strip (i.e. space without pits) that extends parallel to Ditch 2, which hints at the presence of an inside bank at some point in the past. Five entrances, with astronomical alignments, are known and at least three of them were monumentalised following the same pattern, a fence-like feature that we provisionally called an 'imbrex'. Fieldwork has exposed the long-standing importance of the site, which

witnessed intense human activity from the second half of the fourth millennium to the end of the third.

One of the main problems has always been how to explain the size. Some southern Iberian ditched enclosures, such as Valencina de la Concepción, Porto Torrão or Marroquies Bajos, are amongst the largest archaeological sites in the history of the continent. Their monumentality has been explained as the product of a massive labour force in a social context dominated by inequality, social unrest, violence, coercion and/or ideology (e.g. Nocete 2001). Contrary to these statements, it has been pointed out more recently that Iberian ditched enclosures might not have been ‘stable and fortified settlements’, but meeting places visited repeatedly and for relatively short stretches of time by mobile and dispersed populations, to carry out a multiplicity of activities within the enclosed areas. Hence, the concentration of labour force required for their construction was not permanent, but temporary (Márquez-Romero & Jiménez-Jáimez 2010: ch.10). As suggested in cross-cultural studies like that of Parkinson and Duffy (2007), the act of building these enormous enclosures may have been a very significant social event in itself.

Another relevant question concerns the relationships between Chalcolithic walled and ditched sites. Although they have been defined as a peculiar form of monument or enclosure as of late (e.g. Jorge 1994, 2003; Whittle 1996), traditional hypothesis conceived walled sites as fortified settlements with bastions and defensive towers (Almagro & Arribas 1959; Molina & Cámara 2005). In any case, walled and ditched sites coexisted in southern Iberia for about 700–800 years, but few attempts have been made to understand if and how they interacted with one another, why they overlap so frequently or why there are similarities and differences between them.

Conclusion

Lack of funding, obsolete methods and a predominantly local focus to archaeology in Spain and Portugal have delayed the definition of ditched enclosures in Iberia, which have been lost in a set of more familiar and less demanding categories such as ‘ditched settlements’, ‘fortified villages’ or ‘macro-villages’. These have offered a good fit for the now outdated notion of the ‘Neolithic package’. Today, new methods and approaches are emerging and the idea of a ‘stable and fortified settlement’ is starting to fall slowly away (for a comprehensive discussion and full references on this, see Chapman 2008; Márquez-Romero & Jiménez-Jáimez 2010: chs. 7, 11).

Although Iberian ditched enclosures possess certain regional peculiarities, they do not differ greatly from what is documented in the rest of Western Europe, in terms of position in the landscape, site layout, depositional practices and chronology. Radiocarbon dates, however, invite us to think that, while other European ditched enclosures seem to have been replaced by later types of monuments (hengés, palisade enclosures. . .) before or during the transition from the fourth to the third millennia BC, building activity did not cease at southern Iberian ditched enclosures until the last centuries of the third millennium, with impressively large sites and features. Further chronological research, however, needs to be done (for instance, following the methodological principles pioneered by Whittle *et al.* 2011).

Given this alignment in the wider European context, the Iberian Peninsula as a whole, and southern Iberia in particular, has become a crucial area to understanding the intriguing archaeological problem of prehistoric European ditched enclosures.

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