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# CRASTO DE PALHEIROS – MURÇA (NORTHERN PORTUGAL). CONSIDERATIONS ON THE STUDY AND INTERPRETATION OF A PREHISTORIC MEGA-CONSTRUCTION

by

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Summary: Contingencies inherent to the study and interpretation of Crasto de Palheiros during the 3rd. millennium BC are considered here. Particular emphasis is given to the Iron-Age destruction and site reshaping. During the Late Iron Age the site was enclosed by two generically concentric walls. Some hypotheses concerning (1) chronological phasing, (2) motives for the emergence of this prehistoric mega-construction, and (3) formal interpretation, are put forward.

Key-words: mega-architecture; architectonic/formal plans; Chalcolithic.

Resumo: Faz-se aqui uma alongada reflexão sobre as contingências inerentes ao estudo e interpretação do Crasto de Palheiros durante o 3º mil. BC. Incide-se também nas destruições e remodelações operadas na Idade do Ferro, que é um período em que o Crasto se destaca por ser um povoado bem preservado, aberto. Somente na sua fase final (da I. do Ferro) é circunscrito por duas linhas de muralhas genericamente concêntricas. Além das ideias relativas ao faseamento cronológico e às motivações possíveis para a emergência desta megaconstrução pré-histórica – que pode ser resumida a dois gigantescos taludes concêntricos que circunscrevem dois recintos –, destacamos uma que enunciamos: no plano formal, o Crasto (no Calcolítico) pode ser interpretado como uma representação sintética da paisagem que o incorpora.

Palavras-chave: Mega-arquitectura; modelo/projecto; Calcolítico.

#### 0. INTRODUCTION

Crasto de Palheiros is situated in the south-eastern part of the Mirandela basin depression (Murça, Vila Real), in Trás-os-Montes (Northern Portugal) (Fig. 2). The site was built by taking advantage of a quartzite cliff aggressively exposed to the

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natural landscape; this natural cliff was partly "sculpted" and provided with strong, predominantly drystone, constructions by local communities during the first half of the 3rd. millennium BC (Fig. 1). The site is still under study<sup>1</sup> but the preliminary results have already been published<sup>2</sup>.

Between 2001 and 2003, both the excavation and preservation of this site as a museum acquired a new impetus, thanks to the development of a project proposed by Murça City Council as part of the Operational Programme for Culture (Measure 9.3)<sup>3</sup>.

The site is too vast to be fully excavated and, so far, a surface of only 2600 m2 has been studied (Fig. 3). However, the amount of information is such that it allows us to consider the possible meaning of the structures, artefacts and ecofacts unveiled. This article aims to consider the historical background of Crasto de Palheiros and to consider the role it played in the organization of regional communities through time

#### 1. HISTORICAL BACKGROUND

From a long-term perspective, we could place Crasto de Palheiros, a construction which creates a breach in the landscape, within the group of "buildings" characteristic of the Neolithic – Early Bronze Age communities in Central, Northern and Western Europe. Some of these lasted longer than others, as they were built from stone or stone and earth: the elongated oval or rectangular barrows containing cists, simple megalithic chambers or open chambers, the cairns with one or more megalithic structures and either isolated monoliths or monoliths featuring various forms of spatial organisation (such as circles or alignments). Others appear to have been more perishable, sometimes encircled by a continuous or broken ditches, the long mounds, enclosures known as "causewayed structures", "henges", etc. Regardless of their topography, the regional forms they assumed, their predominant link with ancestors in some cases or the more inclusive "sacred" or "secular" ideological

concepts inherent in others, they all responded to the same need: to create new concepts through the "construction of spaces", structured through collective social action. They are, therefore, constructions that have structured both ideas and individual – collective life, not only because their building and maintenance required the united efforts of the entire community, but also because the *social practices* involved were closely connected with the architectonic plans, and always maintained territory as their background as well as their *object*. These practices effectively introduced conventions and norms of behaviour and justified them (e. g. through tradition or genealogy) in order to make them acceptable, even though their acceptance was subject to permanent social tension. The concept of territory could be subject to negotiation, like the constructs themselves which formed a part of it; meaning that the construction of identities represented a complex system only likely to be understood in specific detail within a regional context.

The issue here concerns a new concept of territory and community which, in terms of the Neolithic period, involved the beginnings of an identity shared with ancestors. In fact, despite the differences in shape and dimensions of these different constructions, which means that they cannot be made to conform to one single interpretation, it is evident that this phenomenon can be identified with the Neolithic period and is frequently associated with ancestor rituals, although this does not mean that all the monuments and constructions can be assumed to be tombs (Bradley, 98, 53). This is the case of the long barrows (early Neolithic), found from Poland to the Atlantic coast, which are assumed to be based on the longhouses of the Linearbandkeramic culture and that are themselves evidence of an intense form of ritual activity and may even contain human remains (Bradley, 2001, 20). Moreover, although within another architectonic tradition, (Mesolithic - Neolithic transition), there is also the example of the smaller funerary monuments - small barrows or cairns with cists or closed chambers - or even menhirs (Alentejo, Portugal) (Calado, 2002) or large stelae (Brittany, France), some of which formed part of later constructions or gave rise to new forms of architecture (enclosures containing menhirs, cromlechs or alignments).

The different European regions display a great diversity of "monuments" whose features are not the object of this study. Nevertheless, a general type of enclosure, known as "causewayed enclosures" should be noted. Their architecture, topography, relationship to living areas (which may also have been included inside the enclosure) and even evidence of domestic and ritual activity (e. g. the handling of human and animal bones) make them comparable to both Crasto de Palheiros, and other Peninsular Chalcolithic constructions. These are enclosures surrounded by embankments and ditches, as well as walls, ramparts and towers. In "causewayed enclosures", surrounded by one or more lines of ditches (and by walls in Eastern France), the fact

At the time of writing, the 2003 campaign was still in progress.

<sup>&</sup>lt;sup>2</sup> Sanches 1996; 2000-2001 (one of the plans of the "domestic" occupation was omitted in error, but can be found in the subsequent edition of the journal *Portugália* i. e. no. 23 from the year 2002); 2002. Barbosa 1999. Amorim 1999. Gomes 2000-2001; 2002. Pinto 2003.

<sup>&</sup>lt;sup>3</sup> This project, known as the "Castro de Palheiros-Murça Project to study, preserve and open to the public the monumental site occupied during the Chalcolithic and the Iron Age: 2001-03" has been able to provide support for the work, particularly the excavation work and conservation of archaeological materials and it also funds the museum infrastructures. The excavation work and archaeological research has also been supported by the *Instituto Português de Arqueologia* (Portuguese Institute of Archaeology) through the PNTA (the National Plan for Archaeological Work), Murça Municipal Council, the *Centro de Estudos Arqueológicos* (Centre for Archaeological Studies) at the Universities of Coimbra and Porto and Aflodounorte (*Associação Florestal do Vale do Douro Norte-Murça* – the Northern Douro Valley-Murça Forestry Association).

that they also contain various entrances/exits is usually emphasised; these were sometimes monumental in appearance, due to the existence of earth embankments. These entrances are considered to be closely linked to the peripheral living area, or, in other words, to the different communities that inhabited them (Bradley, 1998: 72). However, it is even more interesting to note that these constructions were often not seen as "finished works" but rather as ongoing *projects* subject to constant alterations (Bradley, 1998: 71-73). These alterations were connected not only to architectonic/formal plans but also to the different "uses" that prehistoric communities made of both the old and new spaces. Any specific understanding of a particular construction should not, therefore, be sought through generalised explanations, but from within its regional context. This is the approach that has been used in interpreting Crasto de Palheiros.

#### 2. SUMMARY OF ARCHAEOLOGICAL RESULTS

# 2.1. The problems of interpreting an archaeological site which has been continuously occupied during distinct historical periods

Although our discussion will only cover the Chalcolithic occupation (3rd millennium BC), the site was also occupied during the First Iron Age. The latter phase is as important as the former, in terms of architectonic and archaeological remains and in relation to its exceptional status in the region.

The first major period of occupation of the Crasto covers the whole of the 3rd millennium BC (c. 2900-2300 BC), the so-called regional Chalcolithic. This occupation (phases I and II) is responsible for the most visible architectonic adaptations of the topography (Sanches, 2000-01). After a hiatus of c. 17 centuries, when the destruction of some of the earlier structures took place, a second period began (5th century BC) lasting until the 1st/2nd century AD. This Iron Age occupation (phase III) testifies to relations with the Roman administration. The great walls found in the area already excavated date back to the final phase of the Iron Age occupation.

It should be emphasised from the outset that this same place was chosen by historically different communities with *specific* and different purposes. (In fact, it may be hard to acknowledge that the memory of the place, or the oldest monument as a construct linked to the past, had remained intact *as such* until the Iron Age). The fact that the *Fragada* (crag) was so imposing on the landscape and that it had kept its dominant position over the outlying area, suggests that it might have been chosen as the location for an *open settlement* perched on the cliff, for reasons connected with the structuring of the settlement's territory, which may have had

"something" in common with the primitive Chalcolithic occupation. This is a hypothesis only, as little is known about regional populations in the V century (or throughout the 1st millennium BC).

Although the Iron Age populations might have lost any memory of the "primitive" site by the time they founded the settlement and started their work, they would have found previous remains. They might even have been tempted to copy the pottery decorations. In certain cases, earlier foundations were used to support new buildings. This is particularly evident in the lower northern platform (PIN) where an Iron Age hut was built using a Chalcolithic wall; as a result this hut is architecturally and visually different from the others (Fig. 10).

By the final phase of the Iron Age occupation – Phase III-3 – (probably end Ist. century – beginning 2nd century AD) (see 2.2.1.) the functional area had been greatly reduced as a result of the construction of two walls above the already-existing Chalcolithic embankments (Fig. 1, 3 and 11). There was also an unmistakable attempt to reconstruct the formal appearance of the primitive embankments – the outer northern embankment (TEN) and the outer eastern embankment (TEL) – using building techniques that aimed to (unsuccessfully) copy the Chalcolithic constructions (Fig. 5). It is therefore possible that the Iron Age settlement had been acquiring a stronger identity, based on collective memories of the occupation of the area, and that an entire history of the site had been "recovered", where older and more recent traditions were fused into one single narrative.

Another distinctive feature is that, from an archaeological point of view, it is difficult to determine (especially with limited excavation) the overall "appearance" of the site, during the Chalcolithic. Many of the early structures, as well as the sediment covering and/or protecting them, were disturbed, altered or simply removed during the course of the Iron Age. In addition, the area of the Iron Age settlement expanded or retracted according to needs, building materials were moved around as required and lithic materials were reused (Gomes, 2000-01; Idem, 2002).

The historical-constructional trajectory of the Crasto de Palheiros as an imposing, even mythically significant spatial construct in the collective memory of past populations is therefore very difficult to trace in detail, particularly if the intention is to establish its architectonic and spatial functions (the use of internal space) in each distinct occupation phase. It should be remembered that, with the exception of certain areas which were apparently less altered by occupation and later use (including land cultivation and stone quarrying activities in the 1980s)<sup>4</sup>, we are unable to construct an adequate image of the site during the Chalcolithic.

<sup>&</sup>lt;sup>4</sup> This appears to have been the most marked and rapid form of destruction of the site, since modern methods and techniques were used extensively for dismantling and haulage. The outcrop which supported the

# 2.2. Crasto de Palheiros in the 3rd. millennium BC: architecture, space and its interpretation

# 2.2.1. "Phasing"

As previously mentioned, it is possible that the *Fragada do Crasto* might have experienced a discrete occupation before the building of the stone structures which radically altered the physiognomy of the quartzite ridge. This hypothesis is based on two facts:

- it is difficult to explain the systematic occurrence of thousands of fragments of pottery and tools (above all, percussors and nuclei) in some of the embankments.
- the discovery of remains of occupation layers under the inner eastern embankment (TIL), (Sanches 2000-01), the outer northern embankment (TEN), and the outer eastern embankment – TEL – cannot be ignored, and obliges us to put forward different hypotheses concerning the occupation of the area.

#### 2.2.1.1.

It is possible that the quartzite ridge protruding from the peak of the cliff on the southern side (Fig. 4) had already been used by local agro-pastoral communities in the 4th/beginning 3rd. millennium AD, precisely because it was such a dominant rock formation that it could not have been ignored. Furthermore, it was there that (simultaneously?) the quartz seams and the quartz nodules found on the surface were worked, in order to make lithic tools (Fig. 12).

In fact, both below the outer northern embankment (TEN – or at its base)<sup>5</sup> and in the compact clayey sediment of the outer eastern embankment (TEL) (Fig. 5), dozens of nuclei of varying shapes and sizes have been recovered which contain evidence of extraction (many transformed into percussors, whilst others were simply exhausted). Percussors of various shapes and sizes and a reasonable number of

extraction flakes have also been found, which may indicate that the quartz seams within the quartzite formation had been exploited. Together with these "artefacts" lay dozens of other rounded "nuclei", without evidence of any particular usage, indicating that they also formed part of the material from the seam that had been transported and shaped. This means that the work on the seams could have been carried out directly (and very easily) on the quartzite formations of the Crasto (which are particularly plentiful on the eastern side) (Fig. 12) or simply by collecting the blocks which were lying loose on the ground<sup>6</sup>.

In this region, quartz was, after all, the most widely used raw material during the 4th and 3rd millennium BC. Another quartz seam in the surroundings of Mamoa da Alagoa (a passage grave) in Jou-Murça had been exploited until at least the end 5th/beginning 4th Millennium BC (Sanches, Nunes and Silva, 2003). The location of this monument (first quarter 4th. millennium BC, Sanches, 2002) cannot be a coincidence; it probably testifies to the intentional demarcation of territory by the dolmen builders. It is in places such as these that the conceptual network of territory is founded, and it is these occupations, even when sporadic, which form the basis of the individual and collective memories which may later become the object of a more elaborate physical and symbolic construction. At Mamoa da Alagoa and the neighbouring Crasto the same social attitude that related nature to culture may have existed, involving the reintegration of places, visited only sporadically, although important from a socio-economic point of view, within new cosmological and territorial concepts.

# 2.2.1.2.

The occupation layer below the northern embankment (TEN, current excavation), yields remains of unstructured hearths, together with post holes. Material recovered from these structures includes bones, lithics, mill-stones, a roughly rectangular decorated earthenware slab and pottery, apparently similar to that of the Chalcolithic constructions.

At the base of the outer eastern embankment (TEL), (Fig. 5), the following structures have also been found: (1) a large fireplace located within an elongated ditch purposely covered with a clay sediment, (2) a small, roughly circular structure, surrounded by stones set vertically into the soil, containing black sediment in its interior, again deliberately covered with other stones, (3) a possible post hole. The other archaeological material is similar to that found at the embankment.

embankment and the northern outer wall were ruined by explosives – and later transported by tractor to building sites in the parish of Palheiros – that totally destroyed the physiognomy of the northern part of the site and it is here that excavation work has been most difficult. In addition, the outer western embankment was quite literally removed. The 1980s, therefore, can be defined as the period when the Crasto ceased to exist as a place surrounded by a certain mythical aura and became simply known as a quarry, even though some of the older people there still had memories of the place that were connected with its infancy, or rather, with its history and rituals.

<sup>5</sup> This, in fact, refers to only one of the outer northern embankment ditches (TEN), since no evidence has been found of previous construction work in the others.

<sup>&</sup>lt;sup>6</sup> Our understanding of this issue owes a great deal to Dr. José Feliciano, project advisor and IGM geologist, whose support during the excavation work and in subsequent research has been vitally important.

Below the inner eastern embankment (TIL) the remains are less substantial, with fewer percussors and moveable objects and only a few pottery sherds, displaying more archaic forms of decoration (Barbosa, 1999).

Two hypotheses may explain the existence of these remains:

- they may indicate sporadic occupations before the great stone constructions, particularly the one below the inner eastern embankment (TIL), which contains earlier pottery (in the regional tradition);
- they may testify to an occupation by small groups settled in certain areas
  of the site whilst carrying out building work in others as shown in the
  outer northern embankment area (TEN). The same may have happened in
  the TIL area.

However, below the outer eastern embankment (TEL), (1) the intentionally closed structures, (2) the absence of a discrete "habitational" soil, (3) its stratigraphic position, (indicating that it came after the base slabs which mark the periphery of the embankment (Fig. 5), lead us to accept the idea of a type of foundation ritual in its strictest sense, rather than the closure-destruction of already-existing structures resulting from "domestic" occupations. Besides, as the pottery (from both the interior of this embankment (TEL) and from around the base structures already mentioned) appears very fragmented and may be pieced together, this may indicate that it was transported here, together with other tools and earth from other areas in the settlement, previously occupied.

In this embankment (TEL) we can recognize structures resulting from foundation acts (at the base of the embankment) and also the remains of re-used sediments brought from elsewhere in order provide another "meaning" to the embankment. Similarly, in the other embankments (particularly the outer embankments) the archaeological material originates from places or areas with domestic activity. The hypothesis that these zones were originally located outside the area covered at present by the embankments has not been completely rejected. However it should be emphasised that these "occupations" must have taken place before the construction of any embankment or, at least, any section of an embankment that made systematic use of the artefacts that had been turned into "residue" by fragmentation, or of the "residue" originally contained in the sediment.

For methodological reasons, we include these pre-embankment occupations in phase I, although, as we have explained, they may be contemporary with phase II in other areas of the site.

Phase II includes the entire Chalcolithic occupation represented by the large stone structures and the space which they define, as well as its structured closure or "condemnation". It is therefore a phase of construction, use and condemnation (and abandonment?).

# 2.2.2. Architecture(s) and project(s)

The archaeological evidence excavated so far neither totally confirms nor rejects the existence of a previous plan (even in the form of a model) or "architectonic project" applied to the construction – usage – condemnation. However, some observations do point to the emergence of a very simple model. As this aspect is of vital importance in understanding how time (at least 6-7 centuries) and memory may (or may not) have altered the initial model, we will later consider an approach to this problem (in section 3) and also discuss how this question has become one of the main concerns of our work.

#### 2.2.2.1.

We can say that the quartzite ridge protruding vertically from the south side, whose topography had established a spatial hierarchy – of one higher and one lower area – may also have given rise to a formal model for the creation of the monument (independently of any symbolic concepts, some of which are discussed in section 3). This type of monument involved constructing two stone embankments: TI which surrounds the upper platform (PS) and thus provides a uniform outline – creating an inner or upper enclosure (or internal unit, as it is formally designated) – and TE, broader, stronger, but not quite so lopsided, defining the lower platform (PI), and creating the outer enclosure (Fig. 1, 3, 4 and 11).

Although these embankments contain sediments with a large amount of archaeological material and small stones, they are mainly built in drystone. The periphery of the outer eastern embankment (TEL) is the only exception. Its dimensions

<sup>&</sup>lt;sup>7</sup> All surveys undertaken outside the TEN with the aim of "unearthing" occupations in the area where the land will be disturbed by heavy machines due to the building of the "Centro Interpretativo" (Study Centre), have proved negative.

<sup>&</sup>lt;sup>8</sup> The embankments that contain unusual amounts of archaeological material are principally those which define the outer limits of the site, since in the inner enclosure only one section of an embankment (TIN) has, so far, been excavated in its entirety and contains a much smaller amount of material. However, we can only

hypothesise, rather than state categorically, that only the outer embankments deliberately included sediment and materials that originated from areas of domestic occupation.

owe much to the importation of clay sediments and it is also structured in a manner known to be typical of *tumuli* from northern Portugal (Fig. 4 and 7). Despite slight variations in the internal structure of the embankments according to (1) location, (2) irregularities in the rocks at the base, (3) slabs integrated into the construction to provide a more regular appearance (Fig. 1, 7 and 11), similar constructional and aesthetic outlines were maintained and are recognisable (Sanches, 2000-01). We believe that the constructions had a visual, aesthetic purpose and were kept as such so that the mass of stone remained overwhelmingly visible.

# 2.2.2.2.

It is obvious that a huge effort was invested in these enormous and powerful constructions, which incorporated both medium and large-sized stones and which eventually occupied more useful space than the space they circumscribed. As the raw material was quartzite, the stones were very heavy and would have required sophisticated building techniques – much more complex than any used to construct a vertical wall – since, without this, the pressure exerted by the weight of the stones higher up would have led to the collapse of the entire structure. Although some maintenance was needed, these constructions were built so solidly that they have survived until now.

The outer embankments, which represented the boundary with the exterior, are still marked by peripheral forms of architecture which create an important scenic effect.

In the eastern area of the Crasto, there is a wide area of sunken quartzite slabs arranged like a field of crude quartzite "spikes" sticking out of the ground from which the embankment itself rises (Fig. 5). The outer northern embankment appears to possess a broken peripheral facade made of large blocks that alternates with the natural sheer rock itself which looms over the hillside.

For *purely constructional reasons* we believe that the inner embankment must have been built before the outer one. Field work (excavation and recovery) has clearly shown that the construction required technical knowledge and well-coordinated workmanship; any disturbance whilst moving the stones could have proved fatal, as loose stones would have tumbled down, out of control destroying everything in their path, whether in the lower platform or the outer embankment. Prior construction of the higher embankment would have removed some of the major risks; however it is evident that the element of *risk* must have been constantly present during the building work.

In addition to emphasising the topographical difference between the two platforms – whilst at the same time providing better access to the interior – these powerful embankments divided the surface inside the 2 enclosures and served as a rampart or barrier for the more perishable structures built in the interior.

# 2.2.2.3.

Another question concerns the unclear definition of the architecture of the entrances in both enclosures. This is due both to the Iron Age destruction and remodelling and to the reduced area excavated so far. Two entrances have been identified - one in the (outer) southern embankment (EES) and the other in the outer northern embankment (EEN). In both, only one of the vertical walls has survived. The southern entrance (EES - Figs. 3, and 9) seems less formal. The EES opens on the top upper section of the embankment and we think that it must have been very narrow. In fact, technically speaking, the missing "wall" must also have had to take into account the presence of a large boulder, which restricted the entrance even more. In general, access would have been made even more difficult by a step in the rock, levelled by medium sized stones (Fig. 9). The northern entrance (EEN) has not yet been fully interpreted (Fig. 3 and 10). It also "opens" at the top of the embankment (TEN) and appears to have undergone at least one architectural alteration. It seems to have been defined by two semicircular thickenings of the exterior (in the manner of the heavy "bastions"), with a narrow passageway in between and by the end of the Chalcolithic this had become a corridor flanked by vertical walls. Other entrances might have existed (closed/altered during the Iron Age).

#### 2.2.2.4.

The domestic structures excavated so far are similar to those of other contemporary settlements. There are post holes, possibly surrounded by stones, structured hearths, small, roughly circular structures, oval or rectangular structures marked by sunken stones whose contents vary<sup>10</sup>, "intentional" artefact deposits (vessels which are almost completely intact and lithic material – percussors, axes – in good condition) and

<sup>9</sup> Not only because it has not yet been completely excavated, but also because it has been badly damaged by a bulldozer recently and, much further back in the past, by the Iron Age occupations, which, in addition to the construction of huts in the earliest phase, also resulted in a thick wall whose mass partially "absorbed" the entrance.

<sup>&</sup>lt;sup>10</sup> An analysis of the contents of these structures, as well as of the receptacles, is underway.

even cereals. Animal bones have been detected in the periphery of these structures, and a concentration of bones has been found in an area condemned via the use of stones (in the outer platform). An entire vessel was found next to a small structure (in the upper platform or enclosure) which had subsequently been covered with clay. Next to this vessel lay a slab of slate with small pitted markings. Other "evidence" – droplets of melted copper, fragments of vessels, abandoned tools, remains of cereal, legume and animal consumption, millstones, etc. – have also been found.

Only detailed archeographical, archeozoological and palaeobotanical results will allow us to recognise the nature of the activities developed inside these enclosures. Given the variety of the remains and the length of occupation, we believe that the activities were very diverse.

#### 2.2.2.5.

The interior of the enclosures were subject to deliberate condemnation or closure, as seen in the zones least affected by the Iron Age occupation. These were carefully planned condemnations, which consisted of increasing the height of the peripheral embankments with stones or slabs and sediments full of refuse from previous activities (Fig. 5: "e-/(III)"; Fig. 7 and 8). The layers of slabs were often preceded by layers of clay and the surface frequently contains traces of quartz or even utensils that seem to have been chosen because of their colour (white and grey quartz, amphibolite, fragments of granite, etc.). Discontinuity in the layering of slabs is sometimes clearly intentional rather than just the result of earlier damage, as previously thought. In the northern part of the upper enclosure, excavation work is showing that condemnation itself featured stone slabs of different forms (-Fig. 8) but a condemnation did not only involve the laying of slabs, since the sealing off of the spaces between them was achieved by placing thick layers of clay (sometimes in different hues) containing ceramic receptacles broken in-situ. In addition to this, thousands of sharp-edged pottery fragments have been found (often fitted between the stone flags) as well as a large amount of flakes, nuclei, percussors, millstones, (some) axes and adzes, which also seem to have been placed there deliberately.

#### 2.2.2.6.

At Crasto de Palheiros, phase II is subdivided into two (building) sub-phases: II-1, associated with the building of the embankments and the use of the enclosures,

and II-2, which features the deliberate condemnation of both enclosures, although this does not imply that other in-situ activities happened simultaneously. The division into sublevels is therefore more methodological than real, since it deals with the separation of two building phases.

This means that, at any given moment, certain areas could have been under construction or in use – forming part of subphase II-1 – whilst others were the object of closure – and so belonged to phase II-2. This deliberate closing of existing structures is significant, since it alerts us to an important fact: the continual closure, opening and creation of architectonic structures which cannot be assigned to particular constructional phases, due to the large surface area in question.

This is a problem inherent to the understanding of extensive areas occupied for long time periods; the field methodology adopted and the multiplication of 14C dates aim to address these issues.

# 2.3. Some notes on absolute chronology

The *upper enclosure* (eastern zone) is dated CSIC 1280: 4087±34 BP, which, calibrated to 2 sigma, lies within the interval 2862-2493 cal BC, i. e. there is a 66.6% probability that the period lies between **2703-2557 cal BC** and a 19.1% probability that it is between 2862-2808 cal BC<sup>11</sup>.

This single reliable date has been obtained on the basis of a sample of burned earth collected in the top of layer 1 (Lx. 20. 1). This date marks the interface between sub-phases II-1 and II-2 in the eastern area of the upper enclosure and represents an advanced phase in this area. Previous 14C dates are now considered unreliable (Sanches 2000-2001).

Reliable 14C dates for the *lower enclosure* (eastern zone, sub-phase II-1) place its occupation between 2857-2289 cal BC. However, there is an almost 95% probability that the period lies within **2697-2289** cal BC (with only a 0. 045% probability that the date is outside this range).

The relevant dates are CSIC-1617: 4046±29 BP; Ua-18528: 4060±50 BP; Ua-18529: 3920±50 BP, although the latter, which is stratigraphically deeper than the others, provides a more recent date (!). Theoretically, the outer embankment, must have been built before the occupation dated here. As a result, the upper enclosure appears to have been built before the lower enclosure (on the same side). Although, we believe that this is the most likely scenario, we must recognize that, for the time

We would like to thank Eng. A. Monge Soares for helping us to interpret the absolute chronology of the Crasto.

being, we can only place the chronology of the Chalcolithic occupation in general terms between 2800 (or earlier) and 2290 cal BC, and that a more precise chronology must be left for the near future.

3. LOCAL HISTORY: CRASTO DE PALHEIROS AND THE REGIONAL NEOLITHIC – CHALCOLITHIC. AN ESSAY ON THE INTERPRETATION OF MODELS OF TERRITORIAL CONCEPTUALISATION

3.1.

Two questions must be discussed simultaneously. One aims to understand the relationship between the Crasto and its surrounding region. The second relates to the architectonic and conceptual models. A site of such dimensions had never been recorded before in regional pre-history and the fact that it represents an ongoing "project" is also singular.

The first question is based on evidence that the region had been inhabited since at least the 5th, and 4th, millennia (Sanches, 2002). This occupation was particularly substantial in the 4th. millennium, when dozens of megalithic monuments were built / used; these may be linked to settlements (no clear remains, so far) occupied on a short-term basis, shelters containing cave art (particularly painting), and even "domestic" types of occupation in the nearby shelter of Buraco da Pala (levels IV-II and III). Some of these monuments continued to be used during the first half of the 3rd. millennium, as is the case of Mamoa 1 do Castelo, a passage grave built at the end of the 4th millennium, whose ritual closure is dated 2880 - 2460 BC (Sanches, Nunes and Silva, in press). By that time, Crasto de Palheiros would have had its inner embankment (at least), which would have shaped the upper enclosure. There is also a certain degree of contemporaneity between the use - closure of Mamoa 1 do Castelo and the construction, use and deliberate closure of some of the structures of Crasto de Palheiros, particularly within its upper enclosure. Moreover, the 3rd millennium, during which there is still no clear evidence that dolmens were being built<sup>12</sup>, is characterised regionally by open settlements, located either on the top of low hills or on slopes. Their material culture, particularly the style of pottery, is similar to that of the Crasto, although perishable domestic structures predominate.

From a chronological point of view, Crasto de Palheiros is located at the interface of two landscapes: one dominated by the ancestor cult and short-term and "invisible" settlements, the other, with long-term settlements occupying dominant locations.

We believe that Crasto de Palheiros corresponds to a regional re-structuring of populations and illustrates new guidelines in emerging social, political and economic relations. It can be considered as a new regional *pivot* during the whole of the 3rd millennium BC.

3.2.

The Crasto roughly occupies the centre of a densely occupied area. On the basis of the available records, it is clear that the areas with the largest number of tombs (the "image" of the 4th Millennium), are those furthest away from the contemporary settlements, so that the Crasto may have represented a new conceptual model of spatial, political and territorial authority, in which monuments linked to ancestors, as well as the rituals associated with them, would have been gradually declining in importance.

The originality of this mega-architecture must have faced some resistance from the community. This means that the communities of the 3rd. millennium, with no centralised political organisation and therefore not endowed with mechanisms to enforce any completely new formation, must have required a legitimising discourse to justify such a construction. This is how we interpret what appears to be a compromise with the tradition and ideology of the 4th – 3rd millennia – with the traditional procedures and techniques that featured in the megalithic monuments being used in the Crasto.

In short, although this is a changing world, in which the Crasto would have represented one of the main instances of this new form of political organisation, various aspects of its construction, both in the design and building of its embankments and the use of fire, as well as the closure/condemnation of various structures, copied constructional and ritual traditions that came from the regional dolmens (Sanches, Nunes and Siva, in press). In this way, under the illusion of maintaining continuity of identity and with small communities organising themselves to invest in greater efforts than those required to build dolmens, they were in fact creating a new network of political relations between local communities, in which Crasto de Palheiros would be one of the structuring axes (another, although architectonically less visible and dominating a different visual horizon, would be the neighbouring shelter of Buraco da Pala) (Fig. 6).

<sup>&</sup>lt;sup>12</sup> Although some of the small monuments in the Pópulo plateau (the Cabeço Carvalho necropolis), as well as the megalithic "cist" nº 4 at Estante (Burneira), might date back to the 3rd and/or 2nd millennium BC. We would like to thank Susana Nunes for this information.

Crasto de Palheiros appears to unite the concepts of habitat and tomb, ritually emphasising the domestic world, whilst maintaining the traditions and building concepts of the monuments linked to ancestors. Although, so far, no "funeral" remains have been found at the Crasto, this does not mean that its architectonic concept did not include the realm of ancestors within its practices. Maybe, by then, ancestors, as memories, were incorporated into that immense (and enduring) structure that was the landscape itself. This may have been mimicked by the actual Crasto, since it may also be understood as a complete, synthesised model or representation of itself and of the "natural" and social space surrounding it.

#### 3.3.

This concept of the Crasto as a microcosm, circumscribed by an extensive outer embankment, may also *contain an image of the territory which surrounds it* – or rather, that defined by the immediate visual horizon – which was the object of the social activity of these communities and contained the majority of the settlements of the time. The lowlands are effectively dominated, in a visual sense, by the natural *Fragada* (fig. 4 and 6). Only in the background beyond it, shrouded in mist, can any other similar feature be seen, such as the Serra de Passos/Sta Comba and nearby Garraia, to the NE and N, when the view is clear.

Moreover, the Crasto is a gigantic construction developed not only on a horizontal plane – where it covers an area of 2.5 hectares – but also in terms of altitude – since it rises 35-45 m. Therefore, the overall image is of a monumental three-dimensional representation which not only prevails over what the eye can see, but also enters into the realm of thought and collective action. This collective action was exercised within the community itself – through construction work and other activities which formed part of its calendar – and also on the territory which the communities organised, managed and constructed.

In fact, spatial hierarchy is clearly emphasised in this monument, since its inner enclosure rises on average 12 metres above the outer one. Such an extreme height means that from the whole of the upper enclosure (the upper platform) both the image of the exterior landscape and the image of the outer enclosure can be seen, simultaneously and without any visual obstacles (Fig. 4 and 6). Thus the Crasto assumed territorial centrality in all its dimensions and it can therefore be surmised that the plan or "model" of the Crasto, achieved using the resources of the time (and without any need for our present-day aerial photography), was designed to be a greatly elevated enclosure – which may have been a mimetic representation of the site itself on which it was constructed – surrounded by a lower enclosure,

which may have represented the lowlands surrounding it, circumscribed by the particular topography of the area (Fig. 6).

This possible interpretation, together with the recuperation of local traditions, would justify the unique nature of the site, which has no parallel, or very few parallels, in any contemporary Peninsular construction plans. It may also contribute towards an effective understanding of the wider phenomenon of enclosures constructed to contain settlements and the various types of architecture that emerged and were maintained in Iberian pre-history between the end 4th – 2nd millennium BC.

The more universal type of explanations may be placed on another level of analysis which aims to understand the "need" felt by certain pre-historic societies to create, maintain and transform large architectonic creations that, nowadays, seem inappropriate or disproportionate. Naturally, what is at issue here is our understanding. The only path forward appears to be a methodology open to multifaceted concepts and approaches.

# 3.4.

The question of the models and projects involved in these Iberian constructions seems to be one of the most important problems. Varying explanations have been put forward, due to the apparently common nature (in terms of models) of many of these constructions, which have long been assumed to represent fortified settlements. S. O. Jorge (1994) was the first to reveal their diversity, and to destroy concepts taken for granted up to then.

However, we believe that the problem of the interconnection between model and project has not been discussed clearly enough. A model is a formal (architectonic) concept and a project is a sequence of actions which makes the model materialise. In between, there is the time factor – time of execution/time of use/time of transformation – which may be very long or, on the contrary, short. In terms of the model – project relationship, we can distinguish (1) the degree to which formal concepts are shared across the nearest or most distant territories – and, by extension, the degree of originality of local projects – and (2) the extent to which an idea that has been transformed into a project is (or is not) maintained intact through time.

Another important question is that of the possible existence of a *very simple prior model*, meaning that the "work" itself can be seen as a "project". In other words, it is not only the successive transformations which confer meaning and continually update these constructions, but it is precisely these transformations that are necessary and fundamental to the structural realisation of the apparently dominant "model".

Despite the excavations undertaken in various fortified settlements, monuments or enclosures (regardless of their type), it has seldom been possible to propose any phasing that would take the site as a whole into account. This creates serious obstacles to this type of analysis.

If, in enclosures circumscribing small areas, such as at Fraga da Pena (Fornos de Algodres-Beira Alta) (Valera, 1998 b), or Cerro do Castelo de Santa Justa (Alcoutim-Algarve) (Gonçalves, 1989) the model and the project seem to be fused, in the larger areas it is much more difficult to verify such a situation. Even so, in El Pedroso (Zamora) (Delibes, Herrán; Santiago and Val Recio, 1995), covering 4 hectares, which has an apparently simple architecture, the wall surrounding the area (which contains a tower in front of the entrance), seems to have been planned and developed as a continuous activity, expected to take a short time. Los Millares (Almeria) and Leceia (Oeiras – Portuguese Estremadura) (Cardoso, 1994) are the only two published cases we know of in which a complex architectural plan was completed in a relatively short period of time<sup>13</sup>. There are several examples of the opposite situation, of which the better-known cases are Castelo Velho de Freixo de Numão (V. N. Foz Côa-Alto Douro) (S. Jorge, 2002) and Zambujal (Torres Vedras, Estremadura) (Kunst 1995). Despite the difference in scale, both Castelo Velho (half a hectare<sup>14</sup>) and Zambujal (4 hectares<sup>15</sup>) may be considered as ongoing projects. In Castelo Velho, it was from Turret 1 (in the first constructional phase) that all the subsequent architectural features were later developed (the second constructional phase during the long-term span of roughly one millennium?), and these later gave rise to a highly elaborate "design" 16. At Zambujal, 5 different plans were explicitly drawn for the "citadel" – corresponding to various different systems of defence - and changed over time according to tactical needs (Kunst, 1995).

This close relationship between model and project, and between this and the dimensions of the architectonic space, will certainly open up a new type of approach, in the sense that it will enable us to have a more accurate idea of the way in which human communities altered the concepts which expressed their constructed areas and territory. This is because it is always a *territorial notion* – with territory understood

as both object and subject and the constructed area as a representation or model of this act – which conforms to an intention and to a greater or lesser ability to achieve it.

If the constructed area of Crasto de Palheiros is compared with other peninsular enclosures with stone structures, it stands out in terms of size – 2.5 hectares – apparently larger than the majority of others that we know of, but smaller than Los Millares (S. Jorge, 1994), Zambujal and El Pedroso. Although absolute chronology does not provide a reliable image of its sequence, both the enclosures seem to have been built in a short period of time, at the start of the 3rd. millennium BC. In Crasto, although the inner enclosure may have been constructed first (also for technical reasons), the model and the project seem to have been fused into one single formal and representational concept.

Moreover, this mega-construction does not seem to follow any model, even a general one, adopted by a large number of Peninsular constructions which contain walls, "bastions" and "towers" in addition to other specific (and no less important) structures. In this aspect, the Crasto must be recognised as an original "model" in its regional context, where local building traditions interacted with new concepts of organisation and management of community life.

In this aspect, it reveals clear similarities with known sites at Fornos de Algodres – Castro de Santiago and Fraga da Pena (Valera, 1998 a and b) – mainly in terms of the close links these enclosures display with topography and even, in the case of Castro de Santiago, in terms of a possible technical relationship with local traditions. Here, in fact, "imbricated slabs, laid vertically, reminiscent of orthostats (but smaller) in a megalithic monumental corridor" (Valera, 1998: 45) were placed to make the entrance. These also seem to be very original sites, although they possess constructional features related to supra-regional concepts, such as walls with semi-circular bastions.

In conclusion, we must underline the fact that the excavation work at Crasto de Palheiros is not over yet, and all we have is "impressions". Only when the excavated area is enlarged, will we be able to obtain a more reliable image of the site.

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<sup>&</sup>lt;sup>13</sup> Los Millares (Almeria), was founded with 3 lines of walls that contained bastions and towers (and where later the usable space was retracted) and Leceia (Oeiras – in Portuguese Estremadura) is a smaller site for which J. L. Cardoso (1994) explicitly claimed the existence of a previous complex plan, – 3 lines of concentric walls with bastions – completed in 3 phases of construction over a short period of time.

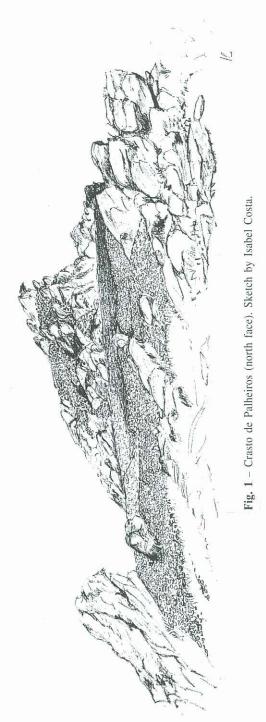
<sup>&</sup>lt;sup>14</sup> Based on published maps: S. Jorge 2002.

<sup>&</sup>lt;sup>15</sup> Information provided by Michael Kunst at the "Recintos Murados da Pré-história Recente" Round Table discussion (May, 2003; Faculty of Letters, Porto University).

<sup>&</sup>lt;sup>16</sup> This opinion does not necessarily collude with that of S. Jorge (2002: 159), who states that "these "monuments" are the result of previously planned architectonic programmes that follow a general group concept", since the entire plan only appears to have been developed during the 2nd constructional phase.

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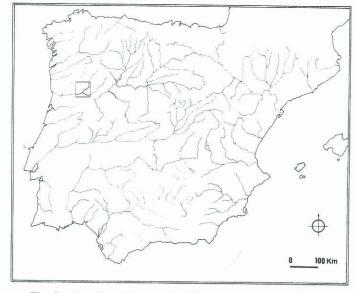
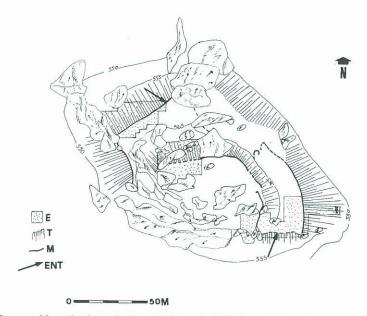


Fig. 2 – Location of Crasto de Palheiros, north-western Iberia (for an enlarged view of the immediate area, see the map in fig. 6).



**Fig. 3** – Topographic and schematic plan of Crasto de Palheiros, showing the 2 enclosures – the inner or *upper* enclosure and the outer or *lower* enclosure – defined by embankments (T). E – area excavated by 2002; M – Iron Age walls; **ENT** – Chalcolithic entrances in the lower enclosure.

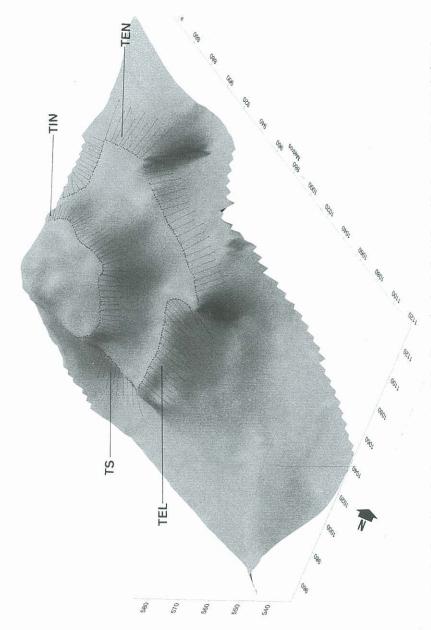


Fig. 4 – Three-dimensional representation of the Crasto, showing both platforms (the inner and the outer platforms) defined by embankments (TIN, TS,TEL,TEN) (in black) (see Fig. 3, 1 and 11).

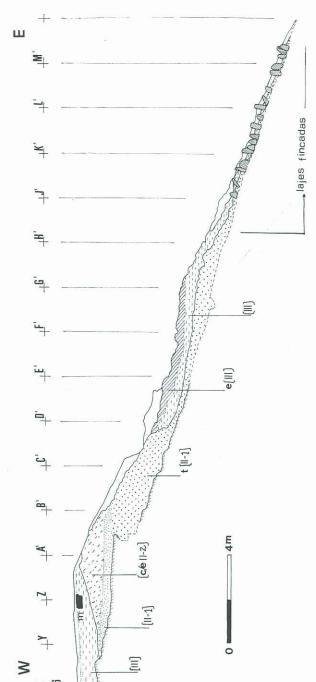
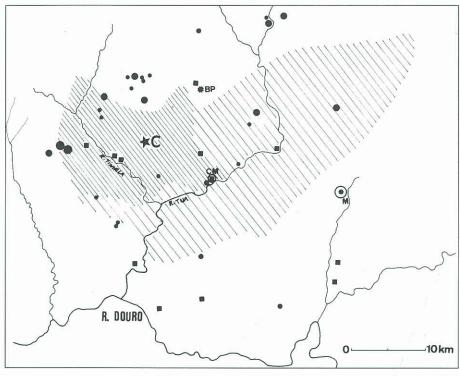


Fig. 5 – Schematic drawing of the stratigraphic section across the eastern embankment/platform (TEL). The Chalcolithic occupations (II and standing stones "fajes fincadas) disturbed and superimposed by Iron Age occupations (III). t (II-1) – Chalcolithic embankment; (II-1) – "domestic" Chalcolithic occupation; c/e (II-2) – Chalcolithic condemnation/paving; (III) – Iron Age domestic occupations; e /(III) stone closure above Iron Age occupations (restoration of the Chalcolithic embankment); m – wall (inner face) from the final phase of the First Iron Age.



**Fig. 6** – Representation of the region surrounding Crasto de Palheiros (C), in the south-western part of the Mirandela basin in the NW of the Iberian Peninsula (see fig. 2). The narrower-lined area corresponds to *the immediate visual horizon* of the Crasto (the closest field of vision); the area with wider hatching corresponds to the *more distant horizon* where the forms in relief multiply indistinctly. *Circles* – monuments with *tumuli* (mainly megalithic), 54 in total. 24 of these monuments are located in the immediate visual horizon (including 6 non-megalithic monuments, indicating that they do not belong to the 4th. mil. BC) and 34 lie outside this area. *Squares* – 3rd. mil. BC settlements, 12 in total. 5 of these are located in the immediate visual horizon of the Crasto and the remainder cannot even be glimpsed from there. **M** – stelae enclosure of Cabeço da Mina (V. Flor); **CM** – grouping: settlement and stelae of Cemiterio de Mouros (Mirandela); **BP**- the Buraco da Pala shelter (Mirandela).



Fig. 7 - Inner northern embankment (TIN) and upper platform (or upper enclosure) of the Crasto.

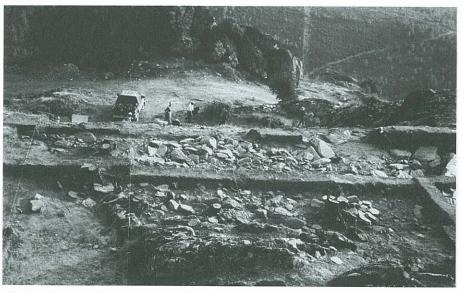


Fig. 8 - Roughly circular paving resulting from condemnation/closure in the upper enclosure.



Fig. 9 – The southern entrance (EES).



Fig. 10 - The northern entrance (EEN), which is the vertical wall in the foreground.



Fig. 11 – Crasto – general view (north face). In the foreground: Chalcolithic embankment (surrounding the lower platform) (TEN) superposed by the wall; in the background: upper platform, supported by ''its'' embankmen (TIN)t; part of the restored Iron Age wall is also visible.

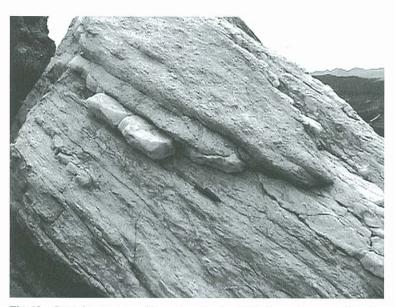


Fig. 12 - Quartzite outcrop, with quartz veins, located in the eastern area of the site.