From the Origins: The Prehistory of the Inner Tagus Region

Edited by

P. Bueno Ramirez
E. Cerrillo Cuenca
A. Gonzalez Cordero

BAR International Series 2219
2011
Published by

Archaeopress
Publishers of British Archaeological Reports
Gordon House
276 Banbury Road
Oxford OX2 7ED
England
bar@archaeopress.com
www.archaeopress.com

BAR S2219

From the Origins: The Prehistory of the Inner Tagus Region

© Archaeopress and the individual authors 2011

ISBN 978 1 4073 0777 0

Printed in England by Blenheim Colour Ltd

All BAR titles are available from:

Hadrian Books Ltd
122 Banbury Road
Oxford
OX2 7BP
England
www.hadrianbooks.co.uk

The current BAR catalogue with details of all titles in print, prices and means of payment is available free from Hadrian Books or may be downloaded from www.archaeopress.com
THE TUMULUS AT CHARNECA DAS VINHAS
(VILA VELHA DE RÓDÃO, PORTUGAL)

João Carlos CANINAS, Francisco HENRIQUES
Upper Tagus Study Association
João Luís CARDOSO
Open University and the County of Oeiras Centre for Archaeological Studies (Oeiras City Council)

Abstract: In 2000-2001, archaeological excavations were carried out at the mound of Charneca das Vinhas, on the initiative of the Portuguese Archaeology Institute. The immediate motive was an alert issued by the Upper Tagus Study Association that the monument was at risk of destruction due to afforestation schemes. The monument is located at an altitude of 359 m overlooking the Tagus valley, at the edge of a stretch of land that culminates in the table-shaped Falagueira formation. This consists of sandstone and Placencian (Pliocene conglomerates) deposited on rocks of the Beiras Group (Pre-Cambrian and Cambrian).

The tumulus at Charneca das Vinhas is a small tumulus of around 11 metres in diameter and less than 1 metre high. The archaeological excavation revealed a tumulus constructed mostly in clay-sand material, topped with a carapace of metagreywackes, phyllites, quartz and quartzite, a peripheral contention ring and an inner chamber of indeterminate ground plan, of which the only thing that remains is a single complete standing stone and what is probably a passage with its final stretch in the open air.

The artefacts collected during the course of the intervention, which were numerous and diverse in type, were found mainly in the chamber, at the end part of the corridor and in the area adjacent to the entrance, facing southeast. Ceramic objects were most prevalent, followed (in quantitative terms) by arrowheads, which were exclusively concave-based. The ceramics, though scattered widely over the excavated area, seem to have been concentrated in the chamber, while the flake stone tools, particularly arrowheads and other blades, were found predominantly in the sectors adjacent to the entrance. Stone tools, are scarce and occur mostly outside the monument.

These remains suggest that this monument was built quite advanced in the Chalcolithic. Moreover, it also provides evidence of transregional commerce mostly with the Lower Tagus region, and Upper Alentejo, further indicating that this territory occupied a key position in the river route of the Tagus, communicate the Estremadura region, in the western part of the Peninsula, with the south meseta region.

Key Words: Tumulus, Megalithism, Chalcolithic, Tagus Valley, Vila Velha de Ródão

Resumo: Em 2000-2001 foi efectuada escavação arqueológica na mamoa da Charneca das Vinhas, por determinação do Instituto Português de Arqueologia, na sequência de um alerta lançado pela Associação de Estudos do Alto Tejo quanto ao risco da sua destruição por povoamento florestal.

O monumento situa-se a 359 m de altitude, em posição sobranceira ao vale do Tejo, no bordo de um trecho da superfície culminante, em forma de mesa, da Formação de Falagueira, consistindo em arenitos e conglomerados do Placenciano (Pliocénico), depositados sobre rochas do Grupo das Beiras ( Pré-Câmbrico e Câmbrico).

A mamoa da Charneca das Vinhas é um pequeno tumulus com com cerca de 11 metros de diâmetro e menos de 1 metro de altura. A escavação arqueológica revelou estrutura majoritariamente construída em material areno-argiloso, capeada com uma couraça pétrea (metagruauques, filitos, quartzo e quartzito), disposto de um anel de contenção periférica e tendo no interior uma câmara de planta indeterminada, de que restou um único esteio completo, e um provável corredor com trecho final aéreo.

O conjunto artefactual recolhido no decurso da intervenção, numeroso e diversificado de ponto de vista tipológico, ocupava majoritariamente a câmara, a parte final do corredor e a zona adjacente à entrada no monumento, voltada a SE. A cerâmica, embora com larga repartição pelo espaço investigado, parece concentrar-se na câmara, enquanto os elementos de pedra lascada, sobretudo pontas de seta e lâminas/ lamelas, dominam os sectores adjacentes à entrada do monumento. Os instrumentos de pedra polida, tal como as peças afiadasfeadas (domentes e moventes de mós manuais), estão escassamente representados e ocorrem sobretudo no exterior do monumento.

Este espólio indica que o monumento foi construído em momento avançado do Calcolítico e evidencia comércio transregional principalmente com a região do Baixo Tejo, e Alto Alentejo, indicando que este território ocupou uma posição chave na rota do rio Tejo, entre a região da Estremadura, na parte ocidental da Península, com a parte Sul da Meseta.

Palavras chave: Tumulus, Megalitismo, Calcolítico, Vale do Tejo, Vila Velha de Ródão

INTRODUCTION

The tumulus at Charneca das Vinhas was identified in 1984 during an archaeological prospection in the parish of Fratel, in the westernmost part of the county of Vila Velha de Ródão. It was referenced using the toponym Pequenos de Vilar de Boi (Henriques et al. 1986), but later became known as Charneca das Vinhas. At that time, the monument was not easy to see as it was covered with dense scrub and surrounded by pine trees.

However, some 15 years later, a forest fire destroyed an extensive area of the parish, including Charneca das Vinhas (Fig. 1), exposing the whole monument and its surrounding area. It thus became evident that this mound protruded well above ground level and was very regular in shape, though with a deep violation crater inside, where there would have existed a megalithic grave. It was also interrupted on the eastern side, in a position that was compatible with the existence of a passage.
Despite the obvious deterioration that had taken place in the burial space (no orthostats could be seen), the mound structure was in a good state of conservation. Hence, it was feared that the tumulus might be destroyed by forestry operations taking place in the area (i.e. the cutting down of burnt wood). Thus, the City Council (Câmara Municipal de Vila Velha de Ródão) and Portuguese Archaeology Institute (Instituto Português de Arqueologia) were alerted to the possible risk. The latter organization ordered an archaeological excavation with a view to characterising the monument, on the grounds that “any protection measure that does not involve prior archaeological excavation, undertaken as an emergency, will be manifestly inadequate”.

The translation to English was made by Dr. Karen Benett.

This work, conducted within the framework of the activities of the Upper Tagus Study Association and included in the research project Recent Pre-History on the Right Bank of the Portuguese Upper Tagus, was made possible with financial and logistic support from the Vila Velha de Ródão Town Council and the Portuguese Archaeology Institute, on the decision of its president and sub-director (Vítor Carmona and António Monge Soares respectively). Their support is much appreciated.

LOCATION AND GEOMORPHOLOGICAL CONTEXTUALISATION

Charneca das Vinhas is situated within an extensive sub-triangular enclave formed by two river valleys (the Tagus to the southeast and the Ocreza to the west) and a quartzite elevation (the Serra das Talhadas in the northeast) (Fig. 2). This territory lies above the final part of River Tagus’ course through the ancient massif, a few dozen kilometres before the river flows into a broad alluvial valley.

The monument is located at an altitude of 359 metres on the southern edge of the most northerly of the flat-topped table-shaped detrital platforms existing in that territory. In addition to this particular formation, there are four others that are geologically and morphologically similar, and which are also culminations of the territory of Fratel, excluding the quartzite crest. These four areas, Charneca de Vilar de Boi, Charneca de Fratel, Charneca de Janome and Cabeço da Velha, all display prehistoric archaeological remains (Henriques, Caninas & Chambino 2008; Cardoso et al. 1998; Soares 1988), including both habitats and burial structures (mounds).

The fact that the four largest platforms, including Vinhas, have been called “charnecas” (“heaths” or “moors”) may derive from the nature of the geological substratum, land
As for its geological insertion (Fig. 3), the monument is located on part of the Falagueira formation, consisting of sandstones and Placencian (Pliocene) conglomerates deposited over rocks of the Beiras Group (Pre-Cambrian and Cambrian). From the geomorphological point of view, the top of Charneca das Vinhas is characterised as a **culminating surface of a sedimentary fill** (Carvalho et al. 2006). The five charnecas mentioned, including Vinhas, correspond to the five residual outcrops (Fig. 2) or projections of the Falagueira formation present on Ródão territory.

The mound of Charneca das Vinhas is registered under Record No. 12445 (CNS) in the database of archaeological sites of the Portuguese Institute for the Management of the Architectural and Archaeological Heritage (IGESPAR) and is marked on the Municipal Master Plan of Vila Velha de Ródão. The nearest settlement is the village of Marmelal, approximately 1km northwest of the monument. As regards microtoponymy, the land register indicates Barroca dos Pecados (to the northeast) and Corga (to the southeast) as the nearest places, recorded on a map on a scale of 1:2000. A few dozen metres to the west, there is also evidence of a former cart track, which trailed down the plateau to the surrounding lowlands, near which there is an old cross. One of the three owners of the lands adjoining the monument claims that wheat was last planted there in 1940s and ‘50s, after which the land was no longer used for farming and was colonized by pine trees.

**ARCHEOLOGICAL INTERVENTION**

The aim of the archaeological intervention was to describe the structure of the burial container and the mound that surrounded it and to recover any movable heritage associated with the burial rites that took place there. The monument was partially excavated, focusing on the presumed burial container and respective passage, with some involvement in area and depth of the remaining sectors (mound and surrounding space). The extension of the excavation was conditioned by the financial resources available.

**Work sequence and results obtained**

The terrain was generally vegetation-free, with the exception of a few burnt pine trunks (Fig. 4). Therefore, after a quick clearing of the land, work began, in accordance with the circular format of this type of construction, with the implementation of a reference system based on two right-angled axes that passed through the geometrical centre of the mound, with one axis aligned with the length of the violation crater in a roughly W-E direction (Fig. 5). From these axes, a square-shaped working area (20 m²) was traced out.

Then, a microtopographic survey was carried out of this working area based on a grid of 1 m². The results, presented in Fig. 6, in ground plan and in perspective, show a small mound of approximately 11 metres in...
Fig. 3. Hypsometric map and geological map (modified) of the region of Vila Velha de Rodão according to Carvalho et al., 2006. The position (first map) and contours (second map) of the pieces of the Falagueira Formation are shown: Charneca das Vinhas (1), Charneca de Vilar de Boi (2), Charneca do Janome (3), Charneca de Fratel (4) and Cabeço da Vélha (5).
J.C. CANINAS, F. HENRIQUES & J.L. CARDOSO: THE TUMULUS AT CHARNECA DAS VINHAS (VILA VELHA DE RÓDÃO, PORTUGAL)

Fig. 4. General view of the monument when works have started

Fig. 5. General view of the crater in the beginning of the works, showing the alignment W-E

diameter and less than 1 metre in height. This diagram also highlights two aspects that were to some extent evident to the naked eye: the regularity (circularity) of the tumulus, and the presence of two irregularities on the top of the central cavity on the north and south sides, which we interpreted as accumulations resulting from the violation of the monument.

The circularity of the tumulus was a significant detail, taking into account its topographic position on the edge of a plateau (the steepest slope runs towards the south and southeast), which is a zone more subject to erosion processes through gravity. The mound’s regularity also indicated that anthropization had not been severe enough in the area to have contributed to its destruction (alongside natural erosive factors).

The archaeologica l intervention, framed by the four-part division into quadrants (NW, NE, SW and SE), involved the successive removal of the surface sediment in the area, and excavation to the base of the monument. This took place inside the tumulus, in the surrounding structure (tumulus) and in the frontal zone located to the east. Fig. 7 shows the limit of the area involved (grey patch) and the final excavation plan.

At first, the excavation work focused upon the central cavity in the sector corresponding to the SW quadrant (Squares I11, I12, I13, J11, J12 and J13), and was oriented towards identifying the contour of the burial structure. This was then extended to the east along the alignment of the hypothetic passage in the SE quadrant (I8, I9, I10, J6, J7, J8, J9 and J10), and to the west with the opening of a trench (J14, J15, J16, J17) crossing the mound (Fig. 8).

Before excavation works were extended to the top of the mound, the heap on top of it was dismantled on the southern side (Position a in Fig. 6, an area centred on Squares H9, H10 and H11), as it was suspected that it might contain artefacts removed from the interior of the burial chamber during the violation. This hypothesis was in fact confirmed, yielding very interesting results, as we shall analyse below. The position of the heap suggests that the violators may have been acting in the easternmost part of the burial container (or in the transition zone between the chamber and the corridor), with their backs towards the entrance.

The works revealed an accumulation of quartz and quartzite flints in the central part of the cavity, which will have fallen from the upper part of the tumulus and various schist-greywacke blocks that could be interpreted as corresponding to the incipient buttressing structure of the orthostats delimiting the chamber, or fragments of those, as, by their size, they could not be considered complete pieces (orthostats).

The removal of the sediments from the trench in the west revealed the presence of a layer (in J15 and J16) made of blocks of milky quartz and quartzite covering all the surface of the mound (Fig. 9). This was repeated in other sectors excavated later.

When the trench was deepened to the base of the tumulus, other structural characteristics became clear. In fact, it was found that the tumulus was essentially constructed of sand-clay sediment of local origin (tertiary sedimentary deposits from the Falagueira Formation, probably collected on the slope of the heath), which was very compact. This formed a hard nucleus that would have contributed to its durability and resistance to the onslaughts of the weather. Thus, we can conclude that this monument was essentially an earthen mound.

At the base of the tumulus, slightly withdrawn in relation to the limit of the tumulus, there was a line of schist blocks (Fig. 1) extending around the perimeter to configure a stone ring (positioned on the border of J15 and J16). Considering its position in relation to the edge of the tumulus and what would have been the limit of the mound after construction, as well as the depressed position inside the tumulus (meaning that it could not be seen from outside, though it underlay the stone layer), this structure appears to have formed a contention ring, although it did not mark its outer limits. Such a base structure might correspond to an initial phase of
Fig. 6. Microtopography of the tumulus top view and perspective
(graphics edition of B. Ferreira over field design of J. Caninas and F Henriques)
construction of the tumulus, marking the geometric outline of the mound.

Next, the heap located on the top at the northern side (Position b in Fig. 6) was dismantled. The removal of these sediments, resulting from violation, yielded some materials, though fewer than what had been collected from the heap on the southern side.

After longitudinal cross section (W-E) had been drawn, the excavation of the violation crater was extended into the NW and NE quadrants (Squares K6 to K13), symmetrical to what had been done on the southern side. The excavation reached the zone affected by the violation but also focused on the structure of the mound. The results are identical to those observed on the southern side. The fill in this section continues to be of materials consisting of schist-greywacke slabs and blocks of quartz and quartzite, covered with loose black earth with a strong organic component. Various archaeological materials were also found, suggesting that the earth had been turned. The metagreywacke blocks indicate the presence of an empty space, corresponding to a burial space that had been transformed by violation, and from which the orthostats had been removed. On the other hand, the quartz and quartzite elements could have resulted from the collapse of that part of the mound inside the monument. Indeed, the rather tenuous nature of the earth over the crown of the mound is compatible with this explanation.

Once the excavation plane had been levelled, the presence of more compact clay-based sediment suggested that we might now be on the level of the floor of the burial container. However, it was decided to excavate deeper as the deposit was not very thick and seemed to have resulted from the collapse of the side embankments after the final violation, possibly facilitated by rainfall,
generating a false floor. In fact, once this layer had been removed, it was found that the violation had gone beneath the bottom of the primitive funerary chamber, reaching a layer of gravel, with loose coarse material, on which the monument had been built.

The deepening of the excavation in the central area took place in all four quadrants and provided a better picture of the outline of the burial structure, although it was not possible to identify the position of the cavities where the standing stones had been implanted, a necessary requirement to determine its architectural type. However, the hypothesis that this had been a dolmen-type chamber was confirmed by the uncovering of a complete orthostat (Fig. 11), 138 cm long, 80 cm wide and 16 cm thick. It had toppled northwards, leaning over the violation cavity. In addition to its position, its extremities also allowed us to affirm that it formed part of the southern edge of the dolmen chamber. In fact, the top leaning northwards showed signs of splintering compatible with the degradation to which tops are usually subject, due to the pressure of the roof, and after that has disappeared, exposure to the elements.

The last phase of work consisted in the excavation of the eastern frontal zone, immediately adjacent to the mound (Fig. 12) and in the removal of sediments from the mound structure in the area of the NE and SE quadrants (Figs 13 and 14). This was carried out, though belatedly, in order to document the representation of the cairn already revealed in other sectors. In the NE quadrant, where this action covered a larger and more representative area, it was found that this stony structure on top of the mound extended continuously, though with irregularities, from the crown to its outer limit, involving
The excavation of the area adjacent to the monument, on the eastern side, did not enable any stone structure to be documented, marking an outer ritualization space (atrium); however, it did yield a considerable quantity of archaeological remains, which were distributed almost exclusively to the south of the longitudinal axis of the monument (W-E axis). One of the most interesting pieces found here was an engraved schist plaque, the fragments of which were scattered over four positions. This indicates post-depositional disturbances, due to modern farming or to the removal of the deposit possibly existing in the intratumular open-space area. However, the quantity of material collected here might indicate that its position corresponded to rituals contemporary with the use of this monument.

It is important to mention the general characteristics of the stratigraphy observed during the archaeological excavation (subdivisions are not given), which basically resulted from anthropic disturbances and subsequent natural degradation. Layer 1 (surface) has a loose texture and incorporates a great deal of organic material, roots and clasts; it is dark brown in colour (10YR 3/4, dark yellowish brown, according to the Munsell Soil Color Charts, 2000), sometimes blackened on top by the aforementioned forest fires, and is found inside the violation cavity and on the slopes of the mound and its surrounding area. This deposit was absent on the top of the mound. Layer 2 (structural) is compact, with few clasts; it is light in colour (2.5Y 7/4, pale yellow) and corresponds to the nucleus of the mound or results from its disintegration, as mentioned previously. Layer 3 (base) has the characteristics of gravel, with thick sands and pebbles, very loose in texture, and reddish in colour (5YR 5/6, yellowish red). This corresponds to the substratum (soil/subsoil) on which the monument was constructed.

The characteristics shown in Layers 1, 2 and 3 may be correlated with the natural stratigraphy observed in the cross-section of a sandpit at Charneca de Vilar de Boi, documented in Fig. 15. In that cross-section, the thin surface layer is identical to Layer 1 of the excavation. This is followed by Layer (A), about a metre thick, corresponding to sandy quartzite gravel (according to the sedimentological categorisation of P. Proença e Cunha), which correlates with the layer underlying the monument (Layer 3). Finally, overlying the phyllites and metagreywackes of the Beiras Group, there is a coarse gravelly arkose (cf. P. Proença e Cunha), various metres thick (B). This deposit will have been used in the construction of the mound (forming Layer 2), by direct extraction from the slopes of Charneca das Canas, where there are outcrops as a result of the erosion of the gravel level (A) which overlies it, which is less thick and has less cohesion than the underlying deposit (B).

**General considerations**

The mound at Charneca das Vinhas has characteristics in common with similar monuments found in other plateau areas, such as those in the Centre and North of Portugal, where the structures are better preserved due to the
absence or lower incidence of farming. However, the nearest parallels are in the territory of Fratel where there are other mounds in a similar topographic position, i.e. on the edge of detrital tables. This is the case of the mound at Charneca da Canas (a site also known as Sobreiro-da-côr-da-terra), which was excavated by in the 20th century by Fernando Augusto Pereira da Silva (1991). These two tumuli are the only funerary prehistoric monuments of this category that have been excavated in that territory.

The data obtained from the excavation at Charneca das Vinhas indicate that this tumulus is mostly constructed in clay-sand material, topped with a stone carapace with an inner chamber of indeterminate plan of which only a single complete standing stone remains, and probably also with a passage with its final stretch in the open air. The absence of other complete standing stones may be explained by the pillaging of stone by locals, in order to mark the boundaries of properties on the top and slopes of the plateau. In fact, in this specific case, the area covered by the monument is shared by three different landowners, and the limits of each property are marked by two boundary stones.

The archaeologist responsible for excavating the monument of Charneca das Canas (Silva 1991) faced a similar problem in interpreting the structure of the funerary space. However, despite the destruction suffered by the chamber, which left only a single standing stone and two fragments of others, it is believed that this might have been a polygonal shape without passage. As for the surrounding structure, the monuments are similar, built basically of “earth” covered with blocks of quartz and quartzite, with a contention ring around the periphery and a buttressing structure, such as the kind we found vestiges of at Charneca das Vinhas.

The artefacts recovered from the monument at Charneca das Vinhas were coherent, numerous and diverse in type, indicating a specific cultural-chronological context that is the same as the identified at Charneca das Canas. Thus, it has provided useful indications for understanding the organization of ritual space, despite the disturbances it underwent.

The archaeological materials were found mostly in the chamber, at the end of the passage and in the zone adjacent to the entrance to the monument, facing SE, as can be seen in Fig. 16. The assymetrical distribution in the third position is documented in other tombs, and Domingos Cruz (2001) mentions the decentralization of the atrium in relation to the main axis of the corridor. In addition to these positions, some pieces were also collected on the crown of the mound, resulting from the violation of the grave. The dismantling of the mound structure in the western trench meant that some artefacts were collected at the base of the mound at a level that coincides with the top of Level 3. These might possibly be related to a preparatory ceremony held prior to construction or to the existence of an earlier habitat, as suggested by Fernando Silva with regard to the mound at Charneca das Canas (Silva 1991). Few materials were obtained during the removal of the surface sediments in the eastern quadrants. The pieces positioned outside the excavated areas were collected on the surface (No. 2, 6, 8, 10, 12, 13 and 59 in Fig. 16).

However, the (structural) configuration of a ritual space outside the monument, suggested by the concentration of pieces along the SE side, remains less clear. Moreover, the results of the excavation indicate that there would have been a passage running to the limit of the mound, but which may not have been covered over in its final
part (intratumular open-air space, cf. Cruz 2001). But, once again, there are no structural indications of this, except for the presence of artefacts in this space. During the course of the research project into megalithic monuments in the international Tagus, a structure of this type associated to a dolmen (Amieiro 3) was documented with clearly differentiated chamber and passage (Cardoso, Caninas & Henriques 2003).

At Charneca das Vinhas, there was no evidence of delimitation structures or of the deliberate closure of either the corridor or the supposed atrium, which is uncommon in tombs of this kind. The presence of ritual depositions outside the perimeter of the mound or in a non-closed space is also documented further upstream, in the dolmen of Lagunita III (Bueno, Barroso & Balbin 2008), situated in the region of the International Tagus. There, an abundant deposit in an open-air space (atrium) was explicitly documented, constituted principally of ceramic vessels but also including arrowheads, polished stone tools and even a schist plaque.

As for the remains collected here (Fig. 16), ceramic items were the most widespread, followed (in quantitative terms) by arrowheads, all of which are concave-based. The ceramics seem to have been concentrated in the chamber, despite being scattered widely about the space.
investigated, including the level underlying the tumulus. They are mostly in the form of fragments, and only one vase was (almost) reconstituted.

On the other hand, the flake stone items, mostly arrowheads and blades, are predominant in the sectors adjacent to the entrance to the monument. Polished stone tools are scarce, occurring mostly outside the monument (though we should not discount the possibility that they were once more numerous but were pillaged over the years as “magical” items). There are also few stone artefacts shaped by use.

Curiously, the rare decorative and symbolic pieces (respectively, a greenstone bead and an engraved schist plaque) were collected in the area near to the entrance, when we might have expected to find them inside the monument associated with a corpse.

It was possible to partially reconstruct some of the pieces, such as three ceramic vessels (Fig. 16, No. 76, 80 and 81) and an engraved schist plaque (Fig. 16, No. 74). This has provided useful information as to the extent of the disturbances (anthropic and possible biotic) in these ritual spaces. The maximum distance between fragments from the same piece is greater than 2 metres, in the case of the schist plaque (No. 74) and 2 metres in the case of one ceramic vessel (No. 80).

MATERIALS COLLECTED DURING EXCAVATION

The manner in which the materials were distributed around the monument has already been described (Fig. 16). The majority of artefacts collected during the course of the archaeological intervention are shown on the plan corresponding to the final phase of the excavation, categorised according to type and identified with different icons. The numbers associated to the icons identify the pieces drawn in Figs. 17 to 28. The unnumbered pieces correspond exclusively to pottery fragments that have not been drawn.

As has already been mentioned, the pieces found on the top of the mound (No. 1, 3, 11, 15, 17, 71, 86 and 87 in Fig. 16) will have been moved from the chamber by the violators, and thus should more properly be understood as belonging to that space.

Polished stone

The polished stone materials have invariably undergone marked chemical alteration on their surface due to soil acidity. Made of grey-green amphiboloschists, many of them are perforated by vacuoles, which have appeared as the result of the dissolution of the amphibole crystals (the main elements of these rocks), which causes them to become softer and more fragile. Given the intensity of this phenomenon, the surfaces, which were once smooth, are now rough and wrinkled, with their sharp points often obliterated.

Bearing in mind the differentiation that is usually made between axes and adzes (based on the asymmetry of the lateral profile of the blade and the arching of the body of the stone artefacts themselves), it can be seen that most of the examples found can be classified as adzes (Fig. 17, No. 2 to 4; Fig. 19, No. 9 and 10). The only exceptions, attributed to axes, are the piece shown in Fig. 17, No. 1, whose blade is approximately symmetrical in cross-section and develops obliquely to the longitudinal axis, favouring vertical activation and facilitating cutting; and the piece of Fig. 18, No. 6, which, despite being incomplete, has a solid body and blade that is approximately symmetrical in cross-section, making it compatible with that attribution. The pieces identified as adzes always have blades perpendicular to the longitudinal axis, and they are mostly intact, as is frequent in funerary environments. However, in one case, there are signs of wear and tear, suggesting that the piece had been used before being deposited in the tomb (Fig. 17, No. 3).

In fact, there are two examples that show signs of violent percussive use (Fig. 18, No. 7 and 8), suggesting that they were used (or reused?) as hoes.

There is one example that cannot be categorised in any of these groups, because it is incomplete (Fig. 18, No. 5).

Artifacts shaped through use

There are two pieces in coarse-grained granite that have been slightly altered, one with pinkish colouring. One is very incomplete (Fig. 19, No. 11); the other has a convex surface that has become polished through use (Fig. 19, No. 12). They correspond probably to the movable elements of grinding stones.

On the surface, at the SW outer side of the mound, a quartzite mealing stone was identified, ellipsoid in shape, with a slightly concave surface, that corresponds to the dormant element of a grinding stone (Fig. 20, No. 13). The presence of grinding stone elements, has been mentioned in various megalithic monuments, which suggests connotations between funerary environments and the symbolism associated with farming (i.e. the regeneration and fertilization of the earth itself). Some of the many examples identified on Portuguese territory illustrating the association between grinding implements (and consequently agriculture) and funerary monuments were listed in the study of the menhir at Cegonhas, Rosmaninh (Idanha-a-Nova) (Cardoso et al. 1995). Moreover, an identical procedure has been observed in the Spanish territory adjacent to the region in question, illustrated by the grinding stone collected at the base of the chamber of the La Encina dolmen (Cáceres) (Ruiz- Gálvez Precio 2000: fig. 24), whose position demonstrates that this was not merely a case of reuse of a simple building material, as might have occurred in other cases. Here, it is not possible to determine the associations attributed to the piece, as it was found outside the funerary structure, although it might originally have belonged to it.
Twenty four classifiable arrowheads were found (Fig. 21, No. 14 to 25; Fig. 22, No. 26 to 38), all concave-based, with the exception of one example that is broken – though this is unlikely to have been any different (Fig. 22, No. 38).

All these examples are very well worked on both surfaces, and have an elongated body (No. 14 to 29), with straight, or slightly convex or concave, sides. Other examples have a shorter body and base that is more or less hewn out (No. 33 to 36).

All are made of silex, and are predominantly brownish/reddish or pinkish in colour, though there are also a few that are more greyish or white.

This type indicates an evolved stage of development, within the Final Neolithic or Chalcolithic, as there are no cases of arrowheads with peduncular, triangular, convex or rectilinear base – unlike in Anta 6 at Couto da Espanhola (Idanha-a-Nova), where these were in the majority, alongside concave-based heads identical in all respects to those collected here (Cardoso, Caninas & Henriques 1997: fig. 10). While this association demonstrates that both groups coexisted, possibly with different functions, it is no less significant that, of the twenty-four examples collected here, all are concave-
based. This accords with the reality observed in the tumulus at Charneca das Canas (Vila Velha de Ródão), situated nearer, where all the classified arrowheads (nine) had a concave base (Silva 1991: figs. 9 and 10), including types that were clearly Chalcolithic, with deeply dug-out bases, similar to those collected in the tholoi of Alcalar (Portimão) by Estácio da Veiga, where the arrowheads are also exclusively concave-based. Thus, it is reasonable to attribute the occupation of the grave of Charneca da Vinhas to the Chalcolithic, near to that corresponding to the Charneca das Canas. In contrast, another group of eleven arrowheads exhumed at the Anta at Penedo Gordo, in the neighbouring county of Gavião, on the right bank of the Tagus, had only one with a concave base. This situation will certainly have cultural and chronological implications, as the groups where the concave bases predominant are considerably more modern (Cunha & Cardoso 2002/2003).

Dagger

A brown silex dagger was found, carefully worked on both sides, with its distal tip missing (25, No. 70). Three such pieces, analogous in all respects, were found in the neighbouring mound of Charneca das Canas (Vila Velha de Ródão) (Silva 1991: fig 13), though in two cases, only the bases were found. As with the arrowheads, this type is common to many sites in Estremadura region (Portugal); indeed, it might be considered as its most inland extension, before the lands of the meseta.
There are various examples of microliths in brownish or grey silex, or rock crystal, distributed across the following categories:

**Segments**
Three silex segments were collected, carefully retouched along their convex blade (Fig. 23, No. 39, 42 and 43), and one of sizeable proportions, similar to the example collected in the inhabited site of Cabeço da Velha (Fratel, Vila Velha de Ródão), attributed to the Final Neolithic. Whatever, the occurrence of these artefacts in such an evolved context should be considered as reminiscent of the industries of the Ancient Neolithic on Portuguese territory of which they are characteristic.

**Truncated blades**
Two incomplete silex blades have two oblique truncations on the end (Fig. 23, No. 40 and 41), carefully wrought.

**Triangles**
Only one triangle was found, in silex, though its apex is not very clearly defined, giving it a shape similar to the segments (Fig. 23, No. 43).
Backed edge blades
One very thick narrow silex artifact was found, probably used to bore holes (Fig. 23, No. 45), and another, incomplete at one end (Fig. 23, No. 44).

Retouched bladlets
One incomplete example was found in hyaline quartz, with both edges retouched (Fig. 24, No. 58).

Retouched notches
One artefact partially retouched, in silex, ellipsoid in shape (Fig. 23, No. 46) and another, corresponding to a micro-denticulate tool, also of silex (Fig. 23, No. 53).

Non-retouched notches
One irregular, in hyaline quartz (Fig. 23, No. 47).

Blades and flake stone industries
These are worked in varieties of silex and are in similar colours to those identified in the groups above. The most common are tones ranging from browns to a pinkish hue (in one example), and greys, sometimes darkening to almost black (in one example). Exceptionally, one was made in hyaline quartz corresponding to an unworked flake piece (Fig. 24, No. 56).

Blades
Worthy of mention are two large examples (Fig. 25, No. 72, 73), one retouched, both in brown silex, with parallels in other monuments in the region, such as the examples collected at Anta 5 at Amieiro, and Anta 2 at Couto da Espanhola, Idanha-a-Nova (Cardoso 2008a: fig. 10.23, and 10.24).

Non-retouched blades
Two unretouched blades, one of modest size (Fig. 24, No. 68), and another much bigger (Fig. 25, No. 73), both in brownish silex, slightly arched.

Retouched blades
11 silex blades or blade fragments were identified, mostly showing signs of continuous retouches on one or both blades (Fig. 24, No. 60 to 62; 64 to 69; Fig. 25, No. 71 and 72). They are mostly incomplete, a fact attributable to prior interferences with the tomb, as is clear from the absence of standing stones structuring the chamber and corridor. The distal tips, when preserved, are crude or unworked (two examples) or take the form of a scraper, with carved on both surfaces with slightly raised or sub-horizontal relief (24, No. 60). The size of some of these examples should be pointed out, and the refined carving techniques displayed, presupposing the use of pressure-engraving, using a leverage device.

Retouched flakes
Three flakes of different shapes in brown silex (two) or grey (the other) present continuous retouches along one of edge, indicating that they were used as end-scrapers (Fig. 23, No. 52 and 54; Fig. 24, No. 63).

Crude flakes
It is interesting to note the occurrence of three crude flakes, of different sizes and types, which must have been intentionally deposited in the monument. They were perhaps used as they are, simply hafted, or formed part of other artefacts of unknown characteristics and function. There is one example in quartzite (Fig. 23, No. 55); another in rock crystal (Fig. 24, No. 56); and a third in dark brown silex (Fig. 24, No. 57).

Bladelet cores
Four prism-type bladelet cores were collected, all in rock crystal, three uncoloured, the other smoked (Fig. 23, No. 48 to 51). The prevalence of rock crystal cores unaccompanied by similar items in silex (as might be expected given the greatest incidence of that raw material in microlithic industries) has also been found in other monuments in the region, such as the mound of Charneca das Canas (Vila Velha de Ródão), where two rock crystal cores were also recovered without any silex example being identified (Silva 1991, Fig. 8, No. 1 and 2); an analogous situation was observed in Anta 2 of Couto da Espanhola (Idanha-a-Nova), where a small core of semihyaline rock crystal was found, unaccompanied by any others (Cardoso, Caninas & Henriques 1997: fig. 9, No.
Fig. 21. Lithic industry pieces 14 to 25
Fig. 22. Lithic industry pieces 26 to 38
Fig. 23. Lithic industry pieces 39 to 55
Fig. 24. Lithic industry pieces 56 to 69
8). The particular incidence of hyaline quartz cores in burial monuments both in the region and outside it, illustrates the doubly symbolic character of these pieces. That is to say, they are not merely offerings, like the other artefacts found near the deceased, but embody certain important principles, such as purity, associated to transparency, and vitality/fecundity, arising from their hardness and capacity to transmute into other pieces obtained from them (i.e. blades).
Ceramic industry

Non-decorated ceramics

At least six vessels were identified, distributed as follows:

1 – Large spherical vessel with a simple lip (Fig. 26, No. 76);
2 – Small curled-edge pot, represented by a maximum of three fragments (Fig. 26, No. 78, 79; Fig. 27, No. 81);
3 – Large calotte-shaped pot (Fig. 27, No. 82);
4 – Two small calotte-shaped pots (Fig. 26, No. 77; Fig. 28, No. 90);
5 – Curled-rim pot, perforated around the bulge of the belly (Fig. 27, No. 80);
6 – Flat-bottomed pot (Fig. 27, No. 83 to 85; Fig. 28, No. 97);

Four small fragments of edges were also collected, of which two might belong to a seventh vessel (Fig. 28, No. 88 and 89); another to an eighth (Fig. 28, No. 87) and finally a last (Fig. 28, No. 86) to a ninth example (Fig. 28, No. 86). The example depicted in Fig. 28, No. 87 has an outward-turned lip, more similar to the vessels represented by G. and V. Leisner at Site XXVII, of Group A2 and B1 of the megalithism in the region of Reguengos de Monsaraz.

On the other hand, the vessel that was fully reconstituted (Fig. 27, No. 80), does not have clear parallels in that geographic area, although the authors have identified a typological group (Group 3), characterised by “Large globular vessels with thick edges” (Leisner & Leisner 1951: 88). In fact, our example differs from those described by the German couple, as it possesses a well-defined curled rim, differentiated from the bulge of the belly of the vessel, not observed before. But this shape is not completely unknown in the Upper Alentejo, as it was identified by those authors in Anta 1 of Herdade da Ordem, Avis (Leisner & Leisner 1959: tf. 15, 1, Nº. 68). Finally, a certain type of Chalcolithic “lamp”, such as the examples collected in the tholos of Monte Velho, Ourique (Leisner & Leisner 1959: tf. 43, No. 1), have in common curled walls around the opening, but they differ from this example because this one is deeper and bigger, which goes against such usage.

As this is also a shape not recorded in Estremadura, once again the closest parallel is found at the tumulus of Charneca das Canas, where two identical examples were found (Silva 1991: fig. 15, No. 39, 40). One of these has small flaps placed on the belly, horizontally perforated to enable suspension; this distinguishes them from the example under study, which has oblique perforations on the belly for suspension.

This ceramic typology is evidently widespread across the region, extending downstream along the Tagus valley; it has been identified in the Anta at Penedo Gordo (Belver, Gavião) through a fragment that is analogous in all respects (Cunha & Cardoso 2002/2003: fig. 13, No. 12). Another particularity of the pottery collected at this site concerns the three fragments of flat-bottomed vessels (Fig. 27, No. 84 and 95; Fig. 28, No. 97). This shape is remarkably rare in the Neolithic period, and even more so in the Chalcolithic, although it has been documented in this region in the form of a small pot with a strip handle, collected from Anta 8 in Amieiro, Rosmaminh I (Idanha-a-Nova) (Cardoso et al. 2003: fig. 15, No. 9) and, in Spain, amongst others, as fragments of at least two pots found in the Chalcolithic megalithic tomb of Trincones I (Cáceres) (Cardoso et al. 2004: fig. 8; Bueno Ramirez, Barros Bérmejo & Balbín Behrmann, 2004: fig. 36). Another two handles were also identified, though they did not seem to be related to any of the examples mentioned above: a small horizontally-perforated handle (Fig. 28, No. 91), and the beginning of a similar one (Fig. 28, No. 96).

Decorated ceramics

Two small fragments were found with a somewhat eroded surface, of indeterminate shape, but which may have come from the same example; they also bear carved decoration, similar to that identified in the Estremadura examples of the Full Chalcolithic (Fig. 28, No. 93, 94). The occurrence of decorated ceramics in megalithic contexts in the region is exceptional, and this may indicate a connection with Estremadura, provided by the River Tagus, which flows nearby.

Another two fragments of vessels with vertical or slightly inclined walls, belonging to conically-stemmed vessels, have simple fluting under the edge (Fig. 28, No. 92, 95), a characteristic associated in the Neolithic sites of Comporta (Grândola) of the Middle Neolithic (Silva et al. 1986). One of the examples has a decorative band bearing nine fine incisions, running from the inside to the edge, executed using a comb. This decorative technique, which has already been identified in two fragments from the mound at Charneca das Canas (Silva 1990: fig. 17, No. 44, 45), corresponds to one of the aspects of the Chalcolithic decorated ceramics from the south of the Beira Interior; and has obvious affinities with the north, an area of the country that is particularly well represented. Its occurrence in the region, alongside another cultural tradition of Alentejo origin (represented by smooth ceramics, with thick-rimmed pots and almond-edged plates) provides evidence of the encounter, in the Chalcolithic period, between distinct cultural traditions in the region, in keeping with its geographic position as the hub between two cultural domains (Vilaça 2008).

Objects of adornment

The only object of adornment found is a bead from a necklace in a greenstone (Fig. 26, No. 75). This is probably variscite, as is the case with most contemporary examples found on Portuguese territory (Calado & Cardoso, in Dominguez-Bella, ed., 2004). Pieces like this seem to have been difficult to extract from the fine veins.
Fig. 26. Simbolic (decorated schist plaque) and ornament (green stone bead) elements and ceramics. Pieces 74 to 79.

of variscite identified in metasedimentary formations of the Siluric age in northern Portugal (Meireles, Ferreira & Reis 1987), which is the only occurrence registered in the present-day Portuguese territory till now. Although there was marked exploitation of variscite in the Roman era near Zamora (Campano, Rodriguez & Sanz 1985), the only known occurrence of its extraction in prehistory in the SW of the Iberian Peninsula is at Encinasola (Nocete 2001; Dominguez-Bella et al. 2002). Thus, this occurrence is inscribed into the transregional trade in this raw material, justified by the special value given to these green beads by the prehistoric peoples of the Iberian...
Peninsula, the most obvious proof of which is the particular concentration of these occurrences in Portuguese Estremadura.

**Ritual artefacts**

Items of a ritual nature are represented by a single engraved schist plaque (Fig. 26, No. 74). This warrants special attention as it corresponds to a pattern that was isolated (Caninas & Henriques 1994), confined to the territory situated in the northern Alentejo around the counties of Nisa, Crato, Castelo de Vide and Marvão (Fig. 29). This fact suggests common manufacture and enables a cultural-chronological connection to be established between the funeral rites that took place in the monuments where they were collected. The regional
representation of this model extended to the region of Ródão, which merges with the counties mentioned above, with the example identified at Charneca das Vinhas. After publication of the above mentioned work, another schist plaque was found in Anta 2 at São Gens (Oliveira 1999-2000), in Nisa, belonging to that group.

In addition to the two examples already cited, the plaques from Charneca das Vinhas (Vila Velha de Ródão) and Anta 2 of São Gens (Nisa), the others that make up the group were found in the Anta at Terra da Azinheira in Nisa (1 ex., Caninas & Henriques 1994), the Anta of Tapada da Laje at Peles (1 ex., Isidoro 1971: figs 21 and
Fig. 29. Distribution of the schist decorated plaques similar to the one identified in the tumulus of Charneca das Vinhas (Charneca das Vinhas, Terra da Azinheira, São Gens, Couto do Bisaia, Tapada da Laje de Peles, Cabeça, Lameira, and a plaque attributed to a non-identified monument located in Marvão or in Castelo de Vide)

Some of these examples may be contextualised with funerary remains and architectural types. This is the case with the pieces found at the mound at Charneca das Vinhas (V.V. Ródão), Anta 2 of São Gens (Nisa) and Anta 1 of Couto do Bisaia and of Tapada da Laje de Peles (Crato). In the other cases, the correlation with architectures and remains is doubtful or unknown.

Anta 2 at São Gens is a structure with a polygonal chamber made of eight granite standing stones and a short corridor, clearly differentiated in ground plan and height. An almost identical number of engraved schist plaques (five) and polished stone tools (four axes and two adzes) were found, suggesting the number of bodies placed there; however, the objects were randomly distributed across the burial space, with the plaques restricted to the western half of the chamber and the axes and adzes in the corridor and eastern part of the chamber. The collection includes a large number of ceramic vessels, including round-bodied pots and two small flat-bottomed pots, and a small collection of arrowheads (concave-based) and geometric pieces.

The two plaques from Anta 1 of Couto do Bisaia were accompanied by many different items, marked (as Agostinho Farinha Isidoro points out) by polished stone tools, ceramic vessels and engraved schist plaques, as well as arrowheads, though without the concave base. An interesting detail is that there is an equal number of schist plaques and polished stone tools (axes and adzes) (11). The polygonal chamber, with seven granite slabs, did not conserve the passage.

The excavation undertaken by A. Farinha Isidoro at the Anta of Tapada da Laje de Peles (a trapezoidal monument with seven standing stones and a short passage marked by a long standing stone) yielded three engraved schist plaques, eight polished stone tools, including five axes and three adzes, a triangular-based arrowhead, a bead in black material and three ceramic vessels. The schist plaque corresponding to our model was collected in the corridor zone and seems to have undergone reformattting, giving it an anthropomorphic shape and new engravings.

The findings from these monuments suggest that they belong to the conventional Late Neolithic or Early Chalcolithic period (second half of the IV-first quarter of
the III millennium BC), an attribution that is coherent with the architecture of the monuments, although this is a period prior to the funeral rites at the mound of Charneca das Canas. It is possible that the schist plaque from Charneca das Vinhas may have arrived there later, perhaps in the context of reuse on a regional scale of a symbolic artefact as important as this. However, despite this chronological displacement, the unique occurrence of the schist plaque at Charneca das Vinhas and its positioning outside the monument may indicate a significant ritual, distinct to that which presided over the use of these artefacts in the monuments cited above, where they were more directly associated with the corpses deposited in them. This hypothesis is reinforced by the absence of this type of artefact in the neighbouring tumulus of Charneca das Canas.

**FINAL CONSIDERATIONS**

The work carried out at the prehistoric tumulus of Charneca das Vinhas makes an important contribution to the understanding of architectural structures and funeral rites of Recent Prehistory at Vila Velha de Ródão, a municipality which is under-characterised in this regard and where 64% of the 44 monuments listed to date have been irremediably destroyed (Henriques, Caninas & Chambino 2008).

In fact, despite the arduous cataloguing process undertaken essentially by the Upper Tagus Study Association, until 2000, only a few monuments had been excavated. These were: the Anta of Uregueria, excavated by Francisco Tavares de Proença Jr at the beginning of the 20th Century (Proença Jr 1909); various antas at the necropolis of Atalaia, such as the Vale de Lucriz (Henriques & Caninas 2004); the much-destroyed dolmen, the anta of Farranhão, excavated by J. Caninas and F. Henriques in 1983 and 1985; and the already mentioned mound at Charneca das Canas, excavated by Fernando Augusto Pereira da Silva (Silva 1991).

The described panorama may be extended to the region of Castelo Branco, where, despite studies by O. da Veiga Ferreira and D. Fernando de Almeida, in the area of Idanha-a-Velha (Cardoso 2008b) and by Félix Alves Pereira (Pereira, 1933) and Proença Jr in the area of river Ponsul, the most reliable information that we have about the megalithic phenomenon was obtained in the south of the county of Idanha-a-Nova, in the International Tagus, in the ambit of research projects promoted by the Upper Tagus Study Association. These include an extensive inventory (Henriques, Caninas & Chambino 1993; Henriques, Caninas & Cardoso, 1999) and archaeological excavations, which enabled a detailed theory to be formulated about megalithism in that zone (Cardoso, Caninas & Henriques 2003; Cardoso 2008a).

The tumulus at Charneca das Vinhas is located in a territory delimited by important geographic accidents, as mentioned above, and is characterised by a diversified network of archaeological sites, with potential inter-relationships. These include habitat zones, located exclusively on the Pliocene sedimentary platforms; dense clusters of rock art on the river banks (the so-called Tagus rock art); and tombs (dolmens and mounds), found not only at the edge of the residual relief tables but also on top of the rocks of the Palaeozoic massif (Caninas, Henriques & Gouveia 2004).

The monument discussed here may correspond to the apogee of the rock sanctuary of the river Tagus, marked by the geometric-symbolic sumbology, although no link has been obtained with that graphics complex in the only slab conserved in situ.

The tumulus of Charneca das Vinhas occupies a similar topographical position to the one of Charneca das Canas, suggesting the preference of the Chalcolithic necropolis for the edges of the residual relief tables of the Falagueira formation. The two sites also occupy the same chronological and cultural horizon, and the remains found at both suggest that the megalithic phenomenon was quite advanced in the midst of the Chalcolithic. This topographic position is illustrated by other mounds (Charneca do Janome, Charneca de Vilar do Boi).

The monument discussed here was probably of a passaje grave megalith, but it cannot be characterised more precisely due to its poor state of conservation. However, the various remains collected there, particularly abundant as regard silex concave-based arrowheads, indicate funeral rituals taking place in the chamber and around the entrance to the monument, both outsider it (atrium) and in the intratumular and open-air area. This indicates transregional affinities and contacts with the Lower Tagus, Upper Alentejo and the hinterland of Central and Northern Portugal, further emphasising the role played by this territory as a nodal area between Beiras plateau, the Alto Alentejo, and the western lands of Portuguese Estremadura.

**Bibliography**


