Graphical Markers and Megalith Builders in the International Tagus, Iberian Peninsula

Edited by

Primitiva Bueno-Ramirez
Rosa Barroso-Bermejo
Rodrigo de Balbín-Berhmann

BAR International Series 1765
2008

This title published by

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

BAR S1765

Graphical Markers and Megalith Builders in the International Tagus, Iberian Peninsula

ISBN 978 1 4073 0254 6

Printed in England by Butler and Tanner

All BAR titles are available from:

Hadrian Books Ltd
122 Banbury Road
Oxford
OX2 7BP
England
bar@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

Chapter 9

TOMBS AND ROCK CARVINGS IN THE SERRA VERMELHA AND SERRA DE ALVÉLOS (OLEIROS - CASTELO BRANCO)

João Carlos CANINAS, Armando SABROSA, Francisco HENRIQUES, José Luis MONTEIRO, Emanuel CARVALHO, Álvaro BATISTA, Mário CHAMBINO, Fernando ROBLES HENRIQUES, Mário MONTEIRO, Alexandre CANHA, Luis CARVALHO e Adriano GERMANO

Associaçao de Estudos do Alto Tejo

***Abstract**: Since 2002, within the context of the Wind Farm Project in the Pinhal Interior (Generg Group), systematic archaeological surveys have been undertaken in upland areas of the central massif, south of the River Zêzere in the Tagus river basin.*

The area in question (in the county of Oleiros, district of Castelo Branco) takes in the upper valley of the River Sertã, and is bordered to the south by the Serra do Cabeço Rainha (Serra de Alvélos), to the north by the Serra de Vermelha and to the east by the Serra do Moradal.

This paper presents the results of findings made in the context of environmental studies for the Wind Farm Project, focusing upon sites that could possibly be from Recent Prehistory. These include circular structures of various shapes and forms, built upon artificial mounds (tombs), and rock engravings.

Special attention is given to the results of the already completed excavation of a small structure (Vale de Mós I). Mounds at two other sites (Selada do Cavalo and Feiteiras, also located in the Serra Vermelha) are still undergoing excavation.

The archaeological intervention at Vale de Mós I has revealed a circular constructed mound in a reasonable state of conservation, consisting of an outer embankment (outer ring) made of earth and small fragments of calibrated quartz. Next to this embankment is an inner ring formed of a series of schist slabs laid out radially, mostly lying down and leaning slightly towards the centre. Inside the monument is a broad cairn, consisting of two levels of schist slabs and blocks, mostly laid out horizontally in an orderly fashion, and filling the central space. A small ceramic fragment was collected from the base of the outer ring, corresponding to a handmade vessel, possibly dating from the Chalcolithic or Bronze Age periods. From the slabs of the inner stone ring, we also collected earth, charcoal and a seed, which have been submitted for palaeoenvironmental (pollinic and carpological) testing and radiometric dating. The results of these tests are still pending.

***Key words**: Tagus; Mounds; Rock carvings*

***Resumo**: O Projecto Eólico do Pinhal Interior (Grupo Generg) viabilizou, a partir do ano de 2002, a execução de prospecções arqueológicas sistemáticas em locais elevados de sistema montanhoso integrado no Maciço Central, a Sul do rio Zêzere, na bacia hidrográfica do rio Tejo.*

O território em apreço (concelho de Oleiros, distrito de Castelo Branco) abarca o vale superior da ribeira da Sertã, sendo enquadrado a Sul pela Serra do Cabeço Rainha (Serra de Alvélos), a Norte pela Serra de Vermelha e a Leste pela Serra do Moradal.

Apresentam-se os resultados das descobertas efectuadas no âmbito de estudos ambientais do Projecto Eólico, com destaque para os sítios atribuíveis à Pré-História Recente, em especial estruturas sob montículo artificial, de geometria circular e apreciável diversidade morfo-estrutural (tumuli) e grafias rupestres.

Destacam-se os resultados da escavação, já concluída, de uma pequena estrutura (Vale de Mós I), estando a decorrer trabalhos de escavação de montículos em dois outros locais (Selada do Cavalo e Feiteiras), também situados na Serra Vermelha.

A intervenção arqueológica em Vale de Mós 1 permitiu identificar uma construção monticular, de geometria circular, em razoável estado de conservação, constituída por um aterro exterior (anel externo) constituído por terra e pequenos fragmentos de quartzo bem calibrados. Encostado a este aterro existe um anel (interno) formado por sequência de lajes de xisto, dispostas radialmente, maioritariamente deitadas e ligeiramente inclinadas para o interior. No interior do monumento foi observado um amplo empedrado constituído por dois níveis de lajes e blocos de xisto, dispostos tendencialmente em posição horizontal, bem arrumados, e preenchendo o espaço central. Na base do anel exterior foi recolhido um pequeno fragmento de cerâmica correspondente a uma taça de fabrico manual, atribuível ao Calcolítico ou à Idade do Bronze. Sob as lajes que definem o anel lítico interno fizeram-se recolhas de terra, carvões e de uma semente para análise paleoambiental (polínica e carpológica) e datação radiométrica, cujos resultados se aguardam.

***Palavras chave**: Tejo; Túmulo; Grafías rupestres*

9.1. INTRODUCTION

In 2002 and 2003, archaeological surveys were carried out in the counties of Oleiros, Proença-a-Nova and Sertã in the district of Castelo Branco, as part of the environmental studies for the Wind Farm of Pinhal Interior, a project which involved the construction of ten sets of wind turbines, promoted by the group GENERG SA. The survey was performed by the archaeological company EMERITA Lda on behalf of various consultants (PROSISTEMAS SA, PROCESL Lda, PROFICO Lda and IPA Lda).

This led to the discovery, for the first time in the area, of circular artificial mounds, built of earth and clasts of schist-greywacke and quartz, apparently related to prehistoric funeral rituals (*tumuli*). New rocks with schematic engravings were also identified, in keeping with discoveries made some years earlier in the western part of the Serra de Alvélos (Batata, 1998; Batata & Gaspar, 2000).

After the devastating fires of 2003, which destroyed much of the shrub cover (mostly heather [*Erica sp.*] and broom [*Pterospartum tridentatum*]), the archaeological interest of these mounds was confirmed. Other similar structures were also discovered, which were smaller and had therefore been totally hidden by vegetation.

In 2005, the Upper Tagus Study Association (AEAT) became involved in this work, and organised an extensive archaeological survey in the county of Oleiros. Priority was given to mountain top areas that had been burnt in the fires (Caninas, Henriques & Gouveia, 2003).

The discoveries made in the context of the environmental studies for the Pinhal Interior Wind Farm and the surveys organised by AEAT have already been presented in a regional journal (Caninas *et al.* 2004), at the Colloquium on *Prehistoric Spaces in Central and Northern Iberia* (Viseu, 2005), at the *1st Belmonte Heritage Conference* (2006) and in the Itinerant Exhibition *25 Archaeological Sites of Beira Interior* (Caninas *et al*. 2005).

Within the context of the wind farm project, archaeological surveys were carried out under the auspices of EMERITA Lda and are now completed. Three different sites (Vale de Mós, Selada do Cavalo and Feiteiras) were also excavated, undertaken as a partnership between EMERITA Lda and AEAT

The works of surveying, excavation and monitoring of the site were licensed by the Portuguese Institute of Archaeology (IPA) and entirely financed by GENERG SA. Logistic support for the excavations was provided by the Oleiros Town Council, and technical support by the Almada Municipal Museum and the Lisbon Regional Board of the Portuguese Institute for Architectural Heritage (IPPAR). In addition to the authors, the archaeologists Carlos Batata, Alexandre Correia, Idalina Medeiros, Carlos Chaves and Ana Rigueiro also participated in this work.

Finally, we would like to thank Professor Primitiva Bueno from the University of Alcalá de Henares and the Ayuntamiento de Santiago de Alcantára for their kind invitation to take part in the *1st Conference on Recent Prehistory in the International Tagus*.

The translation of this paper into English was done by Karen Bennett.

9.2. LOCATION AND ANTECEDENTS

The county of Oleiros, in the district of Castelo Branco, takes in the upper valley of the River Sertã, and is bordered to the south by the Serra do Cabeço Rainha (also known as the Serra de Alvélos and Serra de Lontreira, depending upon the source used), to the north by the Serra de Vermelha (also known as the Serra de Alvélos) and to the east by a quartz crest (Serra do Moradal). The River Zêzere, still part of the Tagus river basin, runs northwards.

The Serra Vermelha, where most of the findings are concentrated, is an extensive upland area, which reaches its maximum altitude of 970m at Povoinha. It lies in a general NE-SW direction, forming a watershed between the river basins of the Zêzere in the north and the Sertã in the south.

It is a vast pre-Ordovician geological formation of schist-greywacke at the southern end of the Central Massif (Figures 9.1 and 9.2). The great age of these rocks means that they reveal signs of the different orogenies (Hercinian and Alpine) which affected the region. They therefore tend to be highly metamorphised, with many folds, fractures and faults. Quartz, the other kind of rock present at these sites, is formed by filonian accumulations in existing fractures.

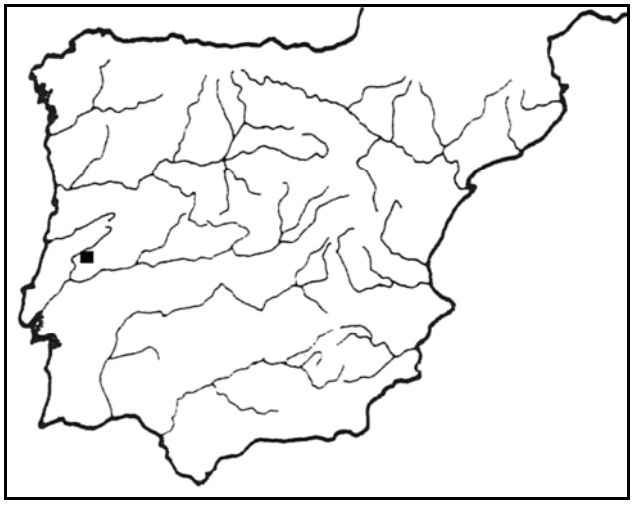

Fig. 9.1. Location in the Iberian Peninsula

Until recently, references to archaeological remains in the county were scarce, and no monuments or sites earlier than the Late Bronze Age were known.

The first Archaeological Charter of the District of Castelo Branco (Proença Jr, 1910) refers to the discovery of ten "stone axes" in the county. These were probably associated to megalithic tombs or to unidentified Neo-Chalcolithic habitats. This archaeological potential was highlighted in the posthumous work by Vera Leisner on megaliths in the Beiras (Leisner & Kalb, 1998), with

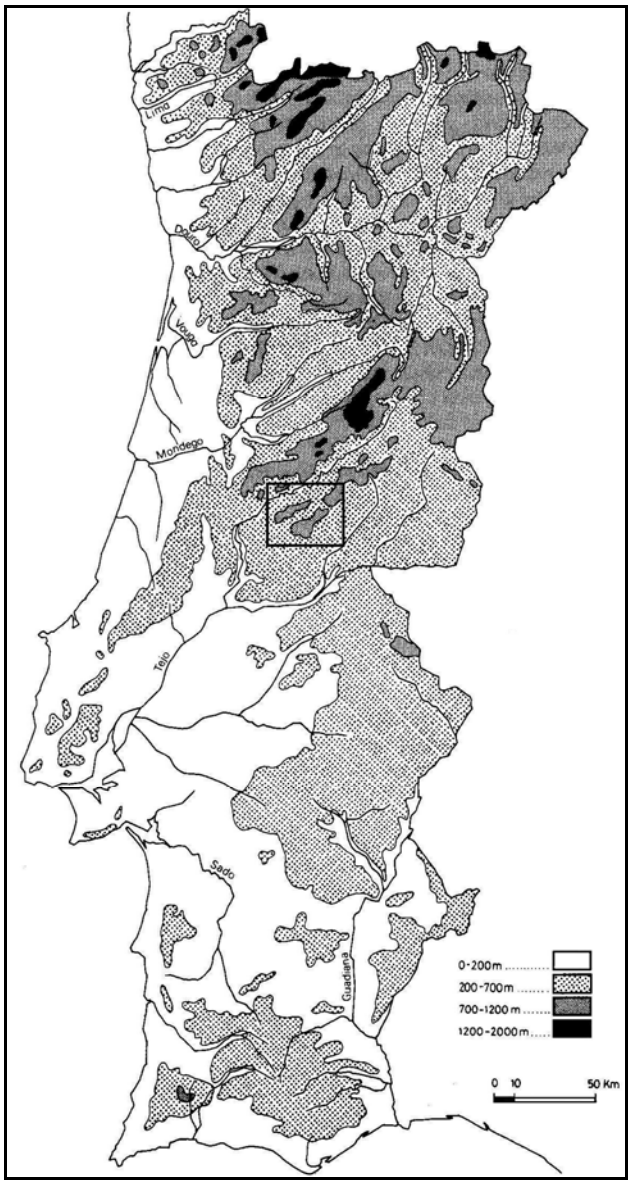

Fig. 9.2. Altimetric location in mainland Portugal (adapted from Alarcão, 1988b:12)

reference to the place name Lomba das Antas ("Slope of the Dolmens").

There is more data available about the human presence from the Late Bronze Age onwards, as has been demonstrated in Carlos Batata's thesis on the Iron Age and Romanization of the area between the rivers Zêzere, Tagus and Ocreza (Batata, 2006), which covers the zone that interests us here. In the catalogue of sites provided by that researcher, there exist settlements very high up in the mountains, different types of Roman habitat, mines from the same period and a network of roads, which the author believes to be of considerable antiquity and connected with the exploitation of mineral resources.

In the county of Oleiros, there is reference to an Iron Age settlement at the southern tip of the Serra do Moradal, already mentioned by Proença Junior (1910). Recently, an unpublished paper was presented at the Regional Conference (W AA, 2005) about findings from the same period at Zebro, in the same mountain range.

From the Roman period, there are references to two hoards of coins (Alarcão, 1988a; Batata, 2006), while archaeological excavations have been carried out in the Vale do Souto (Mosteiro) at a site where there are vestiges of the Roman-Visigoth presence (Diogo & Neto, 2000). The Francisco Tavares de Proença Jr Museum (Castelo Branco) also has in its collection a small bronze statuette of a bull from the vicinity of the Serra de Oleiros, dated from the 2nd – 3rd centuries (Gomes, 2004a).

The long line of schist mountains (Alvélos, Vermelha) that crosses the county in a northeast-southwesterly direction stretches westward as far as the region of Abrantes and, to the east, at the Serra do Moradal, joins another long ridge, the Serra da Gardunha, thereby providing topographical continuity as far as Fundão. Like the waterway (River Sertã), these hills may have provided long-distance land routes between the regions today known as Cova da Beira, in the northeast, and Alto Ribatejo, in the southwest.

These uplands form a unit known as the *Serras da Gardunha, de Alvélos e do Moradal*, the specific nature of which was recognised in a recent study into the landscape of mainland Portugal (Cancela d'Abreu *et al.* 2004).

9.3. *TUMULI* AND ROCK CARVINGS

There are two types of archaeological remains identified within the context of the work described above (Figure 9.3) and which we shall be dealing with in this text: the circular artificial burial mounds (*tumuli*), which will be dealt with first because of their greater representativity; and secondly, the rock carvings (or *grafias*, in the terminology of Bueno, Balbín & Alcolea, 2003) visible on the schist-greywacke outcrops, achieved using different techniques. They are located at high altitudes, particularly in the Serra Vermelha, although they also occur in other upland areas in the region. The rock carvings are apparently more frequent in the Serra do Cabeço Rainha (or Serra de Alvélos, as it is sometimes known).

The mounds are regular concentrations consisting of earth and clasts of quartz and schist, and are clearly anthropic, which means they may be classified as constructions. There is considerable variation in their form and structure, i.e. in the dimension of the volume visible above ground and in their constitution.

Some may be considered megalithic, although no classic dolmen structures have as yet been documented; the majority, however, are submegalithic. They generally occur in clusters of two or three monuments.

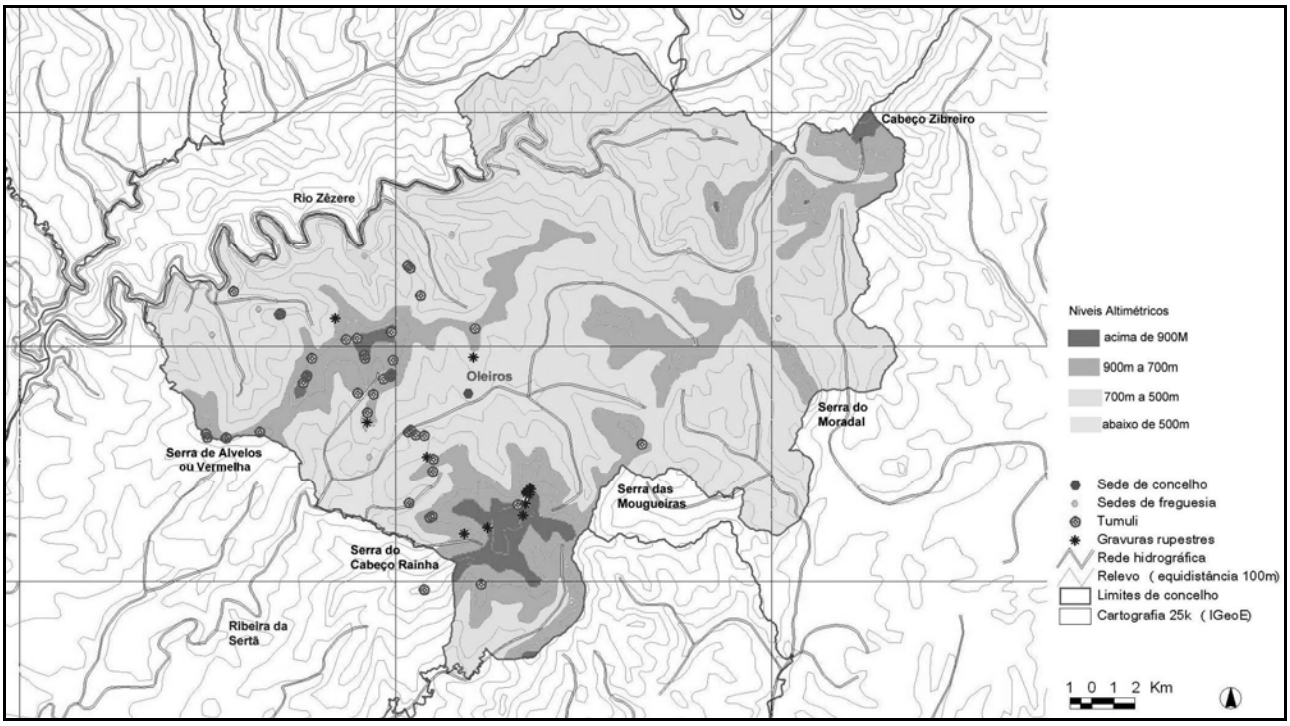

Fig. 9.3. Distribution of *tumuli* (circles) and rock carvings (asterisk) in the county of Oleiros

The most impressive monument found to date is a mound around 23m in diameter and 3m high (Cova da Moura) near Selada da Póvoa (Figura 9.4), at an altitude of around 800m. It contains a central depression, 6m in diameter around the edge, corresponding to the funeral chamber. From the outside, it appears to consist mostly of earth, though there are also some rounded schist blocks and some small blocks of quartz. Other monuments with these characteristics exist in Moura and Mata do Álvaro.

ways. There are *tumuli* composed of mixed stones, including milky quartz and schist (such as Selada do Cavalo at around 900m in altitude, see Figure 9.5); others made almost exclusively of schist (eg. Feiteiras at around 900m in altitude, see Figure 9.6), and yet others that use only milky quartz (such as Cabeço do Seixo at around 560m in altitude, see Figure 9.7). These may be considered *cairns*. One of the monuments identified at Cabeço do Seixo has an inner ring of upright schist slabs.

Fig. 9.4. Mound at Selada da Póvoa

Fig. 9.5. *Tumuli* at Selada do Cavalo

A different kind of cluster (earth *tumuli*), which are more numerous, consists of smaller mounds, with diameters in the order of 12m to 8m, constructed in several different

Even smaller mounds have been identified with apparently similar composition (schist and quartz; schist alone; or quartz alone), such as in the Vale de Mós; however,

Fig. 9.6 Mound at Feiteiras

Fig. 9.7. Tumulus at Cabeço do Seixo

their true dimensions will only become clear after removal of the vegetation. But amongst this cluster of small mounds, there may be others that are more modern in origin, but whose purpose could not be established through surface observation and local information. They do not appear to be agricultural in origin, ruined shelters or territorial markers.

It is significant that, close to these different types of mound, there are almost always ancient cart tracks, marked by furrows made by the passage of wheels. The age of these tracks interests us here, given their proximity to the monuments.

The rock carvings that have been identified to date at different sites in the county are divided into two groups of rocks (Alto do Pobral and Sesmarias), with others scattered elsewhere. The motifs are generally inscribed on subhorizontal panels, discreetly inserted into the landscape. In fact, during the course of the archaeological surveys, the most prominent rocky outcrops were found to be devoid of carvings.

Those identified at Alto do Pobral, in the eastern part of the Cabeço Rainha, are distributed across six different panels located on the northeast (Rocks 1 and 2) and northwest (Rocks 3 and 6) slopes of a plateau lying beneath the summit at Lontreira (1038m). The motifs have been created using pecking, abrasion and incision techniques. The plateau is positioned at the eastern edge of a vast natural amphitheatre (Figure 9.8) at the source of the River Lontreira, which flows north towards Oleiros, where it joins the River Sertã.

Fig. 9.8. Sources of the River Lontreira

The motifs, engraved by pecking and abrasion, are located at an altitude of between 900 and 980m. Throughout the whole of the surrounding area, there are other outcrops with often spacious surfaces that would be eminently suitable for engraving, but which nevertheless remain empty.

Rock 1 shows two “horseshoe” shapes, broad pecked furrows that are hewn well into the rock, and which form a pair with their concavities facing northwards. Rock 2 is a small engraved outcrop with a delicate furrow representing a podomorph (Figure 9.9). The figure extends to the very edge of the rock. Moreover, the symmetry of the panel suggests that a pair of shod feet has been engraved. Rock 3 contains an isolated circular figure defined by a pecked furrow. Rock 4 shows an isolated circular engraving that is small in size, defined by a deeply-hewn but very irregular furrow. This figure was carved in a fine layer of milky quartz. Rock 5 includes an outcrop aligned with the support of Rock 3 and similar in shape. The panel, which is narrow and elongated, shows a pair of circular figures (Figures 9.10 and 9.11) defined by pecked furrows that are well marked in the rock.

Rock 6, which seems to be associated to an etiological myth, has been carved using a different technique to the others and is located higher up, near an old disused cart track. It shows two thread-like broken lines forming an M-shape. These motifs, which may be alphabetiform, are similar to the letters present in the word MITAMVS, engraved on the rock cluster at Fechadura (Batata, 1998).

This would mean that they were in fact from a later period, though, like at Fechadura, they also indicate that the practice of marking open-air rocks persisted.

Fig. 9.9. Podomorph (Alto do Pobral)

Fig. 9.10. Two circles (Alto do Pobral)

Fig. 9.11. Location of the panel with two circles (Alto do Pobral)

These clusters of engravings effectively extend the ancient signs represented on the outcrops of the Serra do Cabeço Rainha eastward from the clusters at Fechadura and Lajeira (Batata, 1998), indicating the territorial importance of that geological feature in the recent prehistory of the region (indeed, this was the highest land in the region south of the Zêzere).

A more remarkable group may be seen on the ridge overlooking the town of Oleiros (Sesmarias, Serra Vermelha). This consists of three rocks, of which copies of two are given below (Figures 9.12 and 9.13). It is characterized by a large number of shod feet (podomorphs), sometimes in pairs, often with pairs of transversal furrows engraved in three different ways and with numerous superimpositions. In addition to the shod feet, there are also other motifs such as elongated figures (*perhaps* idoliforms) and an anthropomorph.

Fig. 9.12. Rock 1 at Sesmarias

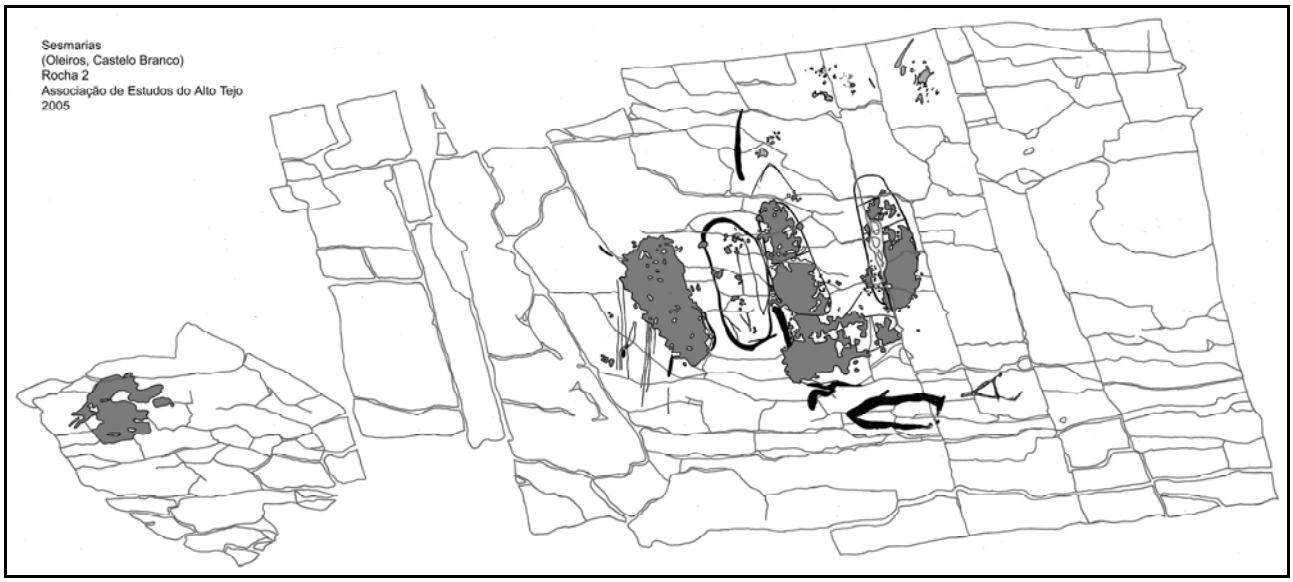

Fig. 9.13. Rock 2 at Sesmarias

At the base of the stratigraphic sequence, there are podomorphs, whose contours have been clearly drawn using narrow furrows or thread-like markings. These may have been sketches (Gomes & Monteiro, 1977a), although some have other figures that are oriented differently superimposed upon them. A second way of representing feet consists of an outline marked with a pecked furrow that is deep and broad.

The feet are also represented in a third way using deep, extensive and rough-hewn pecking (which might be an attempt to annihilate the preceding figures). Two examples of this type may be seen, on Rock 1 (though in only one section) and on Rock 2. The fact that the filling hides the transversal furrows of the underlying engravings would seem to support this hypothesis (Rock 2). Three types of marking may be distinguished, and the respective superimpositions in black and two shades of grey.

In addition to these two clusters, there are also other occurrences with particular markings, in pairs or groups of three, representing circles, spirals and horse shoes. Finally, on a slope of the Serra Vermelha, there are two rocks (Figure 9.14) with cupmarks (Mosteiro).

9.4. TOMB 1 AT VALE DE MÓS AND OTHER INTERVENTIONS

Structure 1 at Vale de Mós is situated on a gentle slope (Figure 9.15) at the top of the Serra Vermelha, within the compound of the Alvélos Wind Farm. It has now been totally excavated. When it was discovered in 2005, approximately half of its area had been cut off by a road that ran alongside the eucalyptus plantation.

It was a well-defined mound, of around 5m in diameter, consisting of schist slabs and small blocks of milky quartz.

Fig. 9.14. Rock 2 with cupmarks (Mosteiro)

Fig. 9.15. Location of the tomb at Vale de Mós 1

On the surface, no central depression can be seen corresponding to the funeral container, nor any other structures consistent with delimitation rings. A stretch of ancient cart track was identified, marked by a channel-shaped depression in the rocky substratum and by wheel tracks near the mound on the SE side.

The structure was therefore squeezed between the present road and the old disused cart track. Moreover, the earth had been visibly churned at the surface and there were fresh deposits of earth, resulting from the passage of heavy machinery, perhaps during the building of the road and/or the planting of the eucalyptus forest.

Although the layout of the clasts on the surface of the terrain seemed at first sight to be somewhat chaotic, after the first layer of sediment had been removed, it became clear that this was a regular concentration of small blocks of milky quartz, defining a circular structure (Figure 9.16).

Fig. 9.16. Tomb at Vale de Mós 1

This structure (UE 3) revealed a crown of earth and small blocks of milky quartz, raised in relation to the outer level and thus defining the perceptible limit of the monument, with a nucleus composed almost exclusively of schist blocks (UE 4). The transition from the nucleus to the outer crown consisted of a sequence of schist slabs laid out radially (UE 2), forming a second crown concentric to the first. The slabs of this inner crown lean slightly inwards.

The nucleus (UE 4) was filled with schist slabs laid out horizontally, sometimes one on top of the other, and pointing in different directions. At the start of the intervention, an unsuccessful attempt was made to identify any alignments or regularities that could indicate the top of some structure that might delimit a chamber, cist or other type of funerary container. Thus, the possibility was entertained that the central nucleus of schist slabs, though over-sized, could correspond to the lid or cover of a burial pit, through analogy with the tombs excavated in the Viseu region (for example, Cruz *et al*. 1998).

The fact that this structure was in a reasonable state of conservation indicated that, though it was old, it had never been affected by traditional tilling methods, which would certainly have caused more generalized damage, given its surface position. Indeed, this would seem to prove that the spot had never been used for farming, either in the distant or more recent past. However, there were breaks in the southern quadrant of the structure, and some of the radial stones and part of the milky quartz sequence of the outer ring had disappeared. This could be due to some dragging caused by forestry machinery at a recent date.

A stratigraphic unit (UE 1) was identified formed (inconsistently) of earth, small blocks of milky quartz and small slabs of schist. This may correspond to the remains of a lid or capstone placed upon closure of the central structure, giving it the shape of a mound. Its irregularity may also have been due to disturbances caused at a recent date by forestry machinery.

The dismantling of the nucleus revealed a cairn composed exclusively of schist slabs, as had been seen on the upper level. It was seen, once again, that there was no vertical structure connecting with a funerary container or indications of a negative structure (pit). The schist slabs and blocks that occupied this space were laid out mostly horizontally and were generally well-ordered, i.e. packed closely together to reduce the spaces between them. But there had also been some cracking and vertical displacements of stones, due to pressure exerted by briars which had grown up in that space and spread over the structure from top to bottom.

Next, the second level of the cairn was dismantled and the nucleus excavated as far as the rocky substratum. The outer crown, consisting of earth and milky quartz, was dismantled; and finally, the schist slabs from the inner ring were removed.

When the second level of the inner cairn was removed, it was found that it had been laid almost directly upon the rocky substratum throughout most of the space. But the depressions and irregularities in the rock surface had also been filled in with earth and small schist blocks (UE 5), thereby flattening it out.

The information gathered from the excavation of the nucleus did not provide any clue as to the function of the monument. In fact, there were no ritual artefacts of any kind, of ceramic, stone or even metal. Neither was there any evidence of burning, above or below the cairn, as shown by the presence of thermoclasts, fire-reddened earth or unusually high concentrations of carbons.

The second stage consisted of excavating the outer ring, consisting of earth and milky quartz. This proved to be

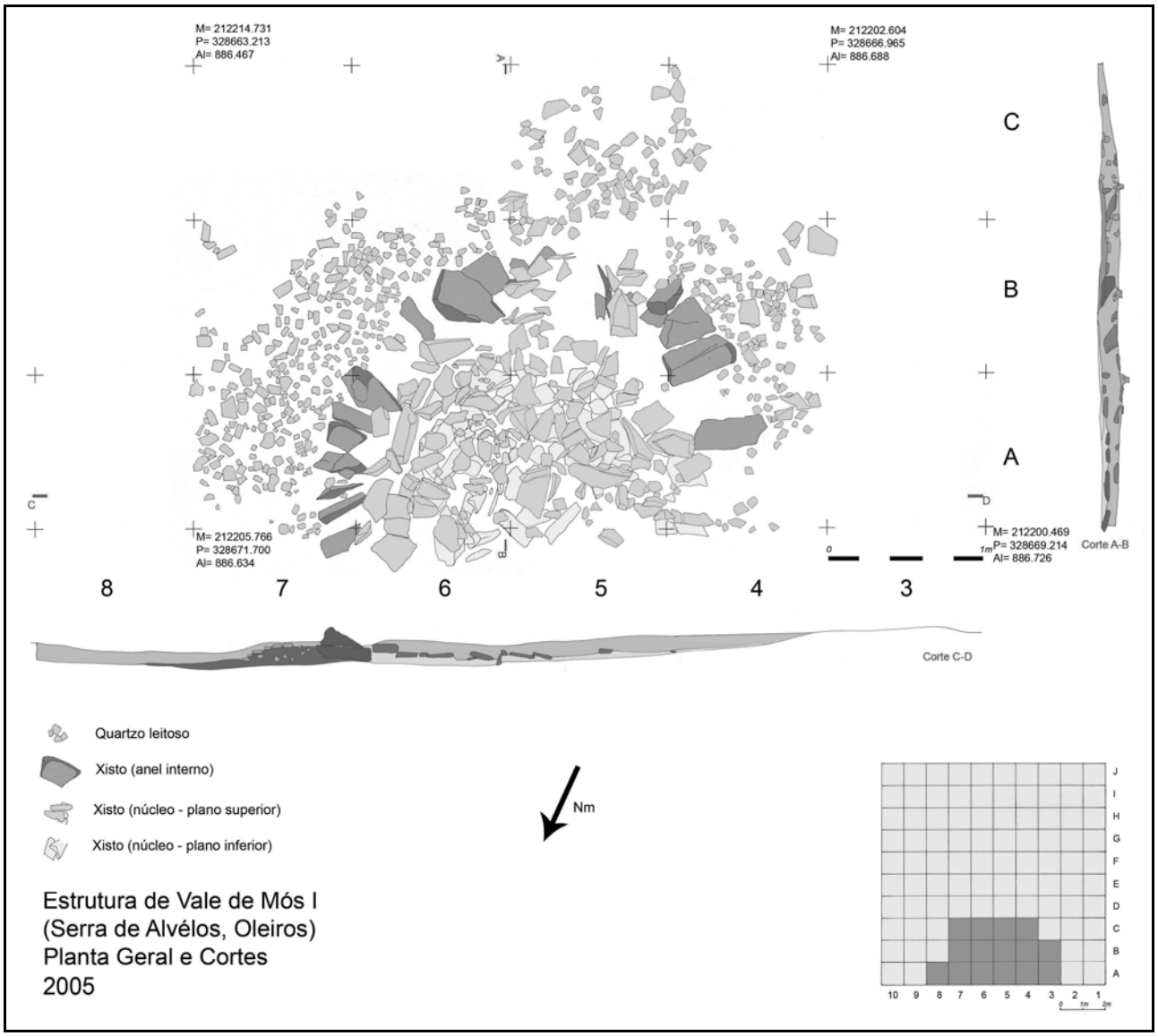

Fig. 9.17. General plan of Vale de Mós 1

homogenous throughout its whole perimeter. It formed an embankment, raised in relation to the outside and inside of the monument, capped by two layers of well-calibrated milky quartz blocks. This embankment appeared, finally, to serve as a support to the inner arch of schist slabs (UE 2). In square B4, at the base of the embankment, a small smooth-sided handmade ceramic fragment was found, possibly dating from the Chalcolithic or Bronze Age periods.

The last phase of work consisted of removing the inner ring of schist slabs and excavating the underlying volume as far as the rocky substratum. This removal was oriented, first and foremost, by the collection of ecodata. In fact, the sediments compacted under these slabs seemed to offer the most reliable context of the whole monument for the sampling of pollens and carbons, given the incidence of biogenic (incarbonizations of shrub roots subsequent to the construction/use of the monument) or anthropogenic disturbances. The samples collected by the field team were sent for analysis by José Mateus and Paula Queiroz of the Palaeobotany Laboratory at the CIPA (Research Centre in Human and Archaeoscientific Palaeoecology).

A petrographic and granulometric characterization was done of the archaeological structure, involving the counting and measurement of all clasts included in it. That allowed us to recognise regularities in the spatial distribution of stones and calibres. It was noted, in particular, that the milky quartz had greater expression in the outer ring, with a granulometry mostly of 5cm or less at the corners (clasts of this nature tend to be cubic in shape). This might reveal an intention on the part of the builders to select stones of a particular size. However, there are no signs of any intentional splitting of stones; indeed, the high degree of fracturing along the veins would have meant that clasts could have been obtained with granulometry identical to those found.

The uniqueness of this structure (for indeed no formal parallels have been found) make it difficult to speculate about its function and chronology. In this case, as in many others, it might perhaps be easier to investigate its antiquity rather than its purpose. In fact, the central receptacle is broad in relation to the size of the structure as a whole, and differs from the various types of containers usually found in small mound architectures, such as cists, pits or empty spaces inside cairns (Cruz *et al.* 1998; Cruz & Vilaça, 1999). The structure suggests that it was used as an open-air receptacle. The suggestion that it may have been used as a base for a funeral pyre or as a receptacle for the skinning of corpses (Schutter, 2005) is interesting, but unfortunately cannot be proved through lack of evidence.

Further discussion of this case will thus have to wait for a future paper, when the results of the palynological and anthracological tests, and C^{14} dating are available.

The works carried out at Selada do Cavalo involved two mounds with distinct characteristics, between which a fossilized cart path was identified. The precedence relations between one of those mounds and the path have yet to be established. In Feiteiras, there are three mounds, and the removal of the surface sediment has begun on one of them (Figure 9.18), the largest, a cairn around 9m in diameter, which has to date yielded one flint microlite and a few ceramic fragments.

Fig. 9.18. *Tumulus* at Feiteiras

9.5. GENERAL CONSIDERATIONS

1. The county of Oleiros is a remote mountainous area in the region of Castelo Branco, and has the dubious distinction of being the county with the worst external access system in the district. Moreover, throughout the 20th century, and until the wave of fires that devastated the region in the present millennium, it was extensively covered by forest, part of the largest stretch of pinewood in Europe. This fact, together with the topography, made travelling through the region difficult.

The fact that the archaeological potential of the area was unknown until recently (apart from the studies undertaken by Carlos Batata - Batata, 2006) may be due to a reluctance on the part of archaeologists to explore such an isolated forestry area. The development of the wind farm project by the GENERG SA Group was therefore a determining factor for revealing new vestiges of human presence during Recent Prehistory.

Despite the significant quantity of data now available concerning burial mounds and rock carvings, the frame of reference is still very incomplete. The territory has not yet been fully surveyed, and as a result, the sites of habitats correlating with the occurrences mentioned are still unknown (it should be remembered that this work has taken place primarily in upland areas). It may be hoped that the survey of the hydrographic network, particularly the River Sertã, will bring some interesting surprises.

With the exception of the banks of the River Sertã, there has been very little human presence in the uplands of Oleiros county in recent centuries, as can be seen in the map showing the distribution of cultivated and uncultivated lands in the 19th century (Silbert, 1978). This means that there is more chance of finding older more fragile remains in these mountains, compared with the lowlands in the district of Castelo Branco, for example, such as the case of Campina da Beira (counties of Castelo Branco and Idanha-a-Nova).

In fact, as has already been mentioned (Henrique & Caninas, 2004), the county of Castelo Branco (the largest in the district and the one with the most extensive stretch of agricultural land in the 19th century, cf. Silbert, 1978), was where Tavares Proença collected the most stone axes. It is also the area with the fewest dolmens – there are much fewer here than in the county of Vila Velha de Ródão, for example. The relatively high number of (polished stone) implements found near the surface may suggest that habitats and tombs have been destroyed by farming activity, carried out since at least the Roman period. This could also partly explain the absence of small funerary structures (*tumuli*), which may have been destroyed over this period, unlike in Oleiros.

However, more recent (20th century) forestry activity has caused profound, definitive and irreversible damage in many parts of this territory. Forestation, which involves land reinforcement through terraces or contour furrows, and the construction of associated infrastructures, such as roads leading to clearings, may have destroyed mounds and rock engravings on some mountain tops, such as in the Serra do Cabeço Rainho.

Fortunately, in the Serra Vermelha, this activity has been limited. This, together with the fact that the land has very limited agricultural potential (according to local sources),

has meant that these remains have been conserved. There are, however, folk memories of pasturing and the production of charcoal from briars, at these altitudes. Attempts have been made to check whether there is any similarity between the structures used for charcoal production (the so-called "carvoeiras") and our mounds. They appear to be different. But, based upon oral information obtained at Serra do Carujo, there is evidence that milky quartz (locally known as "seixo" or flint) was often removed from mounds to be used in civil construction; this may have made other monuments unrecognisable.

To date, the local people have been unable to explain the purpose of these mounds. There appears to be no record of them in the oral tradition or in legend, which may indicate that they have definitively disappeared from the collective memory.

2. On the local, rather than regional, level, there is also very little information available that can allow us to reliably define the purpose and chronology of the structures identified. We have to await the results of the work begun at Selada do Cavalo and in Feiteiras, and the analysis of the palaeoenvironmental and archaeometric data collected from Vale de Mós 1.

However, on the basis of external morphostructural analysis and comparison with other monuments in neighbouring regions, it would appear that most are clearly related to prehistoric funeral rituals (characterized in other regions under the common concept of Megalithism) and to later non-megalithic funerary traditions, during the long span between the Middle Neolithic and Late Bronze periods.

Another interesting aspect concerns the diversity of shapes and volumes of the mounds already identified, built using local materials (clasts of schist-greywacke and milky quartz), and the clustering of these monuments in groups of two or three.

However, we should not overlook the possibility that some, if not most of these structures, may have had different functions. Indeed, taking into account the results of the excavation of similar shaped constructions in other parts of the Iberian Peninsula (Moraza *et al.* 2003; Moraza & Mujika, 2005), they may date from more recent periods. The subcircular mound shape of the structures may induce errors in assessment through merely formal comparison.

As for the rock carvings, these appear to be more easily established. In fact, it does not seem rash to attribute great antiquity to most of the representations identified (circles, horseshoes, cupmarks, fusiform shapes and podomorphs), though in a differentiated way.

Their dispersion may indicate that they function as territorial markers, following the argument put forward by Primitiva Bueno for the region situated in the hydrographic basin of the Tagus (Bueno *et al.* 2006a), and by other researchers working in the Iberian Peninsula (such as Bradley *et al*. 1994).

However, denser and more complex clusters, such as those in Fechadura and Lajeira, in the Serra de Alvélos, and Sesmarias in Serra Vermelha, should be understood in the context of ritualization; the markings appear to have an autonomous symbolic charge, and there are recurrences which, in the first case, appear to have persisted into more recent historical periods, though with other meanings. We are referring here to the presence of a Latin inscription, pentagrams and a swastica on the rock at Fechadura (Batata, 1998).

In any case, it should be pointed out that the three groups are not identical. In fact, the themes and techniques used clearly differentiate them, even as to their chronology (and the surveys of Lajeira and Fechadura have not yet been totally completed)

The motifs at Lajeira – pecked spirals, meanders, wavy lines, points and anthromorphs (Batata, 1998) – bring this closer to the art of the Tagus, therefore possibly suggesting that it is older than the other cases. At Fechadura, the filiform and fusiform figures, created using incision techniques, and also the pecked markings – a shield shape, pentagrams, alphabetiforms, arrowheads, polygons, a swastika, points (Batata, 2006) - certainly emerged much later and persisted longer. The rocks of Sesmarias, mostly engraved with podomorphs, are more thematically homogenous and may correspond to a final moment in Recent Prehistory or even Protohistory, if we accept current theses as to their chronological location in the Late Bronze or Early Iron Age, which have been generalized on the basis of diverse evidence, such as the association of tombs or the superimposition of engravings representing weapons (Sevillano, 1991) or zoomorphs (Gomes, 2000).

The circle theme, carved using pecking techniques, should be inserted into the universe of the Tagus Valley art, a perspective which is reinforced by the neighbouring group of Lajeira, gravitating into the space outside the Tagus complex.

Podomorphs, or shod feet, seem to continue the discoveries that have multiplied in recent years to the north, in the mountains of the Central Massif (personal information from António Martinho Baptista). The Sesmarias group however, is worthy of more profound study, given the superimpositions and complexity of the associations that it contains. I am referring to the presence of an anthromorph and other hypothetically idoliform figures.

As for the ubiquitous cupmarks, these have been recorded from at least the Late Neolithic (Gomes *et al*. 1983; González & Barroso, 2003), and are also represented in

megalithic monuments and tombs from the Bronze Age (Gomes, 2002), though they may go right through to the modern age. In the district of Castelo Branco, this motif is significantly represented, occurring on the plateau, generally on open-air rocks, sometimes in association with megalithic monuments, or near to modern temples, almost always away from the main water ways (Henriques *et al*. 1995a). It is rarely represented in Tagus Art (Monteiro & Gomes, 1977)

The documented motifs – circles, cupmarks, horseshoes and podomorphs – have at present monospecific occurrence, though they may appear associated/superimposed in many other sites in the west of the Iberian Peninsula (Gomes, 2002).

There are remarkable analogies between the topography, isolation and the themes of the rock carvings in this region and those of Las Hurdes (cf, for example Sevillano, 1991), both of which are mountainous schist regions, located on the edge of the Tagus river basin.

3. We have only just begun to explore the spatial-temporal ordering of these remains, within a regional perspective, and many more surveys and explorations of sites are required in order to glean information about the structures, rituals, artefacts, ecodata and dating that form the pillars of this knowledge.

The recent addition of dozens of new sites in the Oleiros region, including mound structures and rock carvings, indicates that the previous lack of information about archaeological remains in the region was due to a deficit of research, rather than to an absence of settlements or the depopulation of inhospitable upland areas. This has been pointed out by Primitiva Bueno, Rodrigo de Balbín and other researchers in the inner Meseta (for example, Bueno & Balbín, 2003; Cerrillo & González, 2006), who have shown the antiquity of this occupation on the level of habitat, megalithism and rock carvings.

Consequently, we disagree with Jorge de Alarcão (Alarcão, 2001), when he claims that there was no core population in the Beira Interior when the Lusitanians arrived in the Early and Middle Bronze Age (*"the area where the Lusitanians settled was almost completely deserted. We may not, however, overlook the fact that, although Early or Middle Bronze Age remains are almost entirely non-existent in the Beira Interior, there are rock carvings in the Tagus region which can be attributed to this period*", Alarcão, 2001:325; "*...in the territory that we attribute to the Lusitanians, there is no evidence of any Early or Middle Bronze Age core population from whom the Lusitanians may have descended, through internal evolution*", Alarcão, 2001:343). He does not, however, discard the possibility that this lacuna may be due to lack of knowledge.

That settlement would have taken place before the Late Bronze Age, contrary to what Carlos Batata argues for the region between the Tagus, Zêzere and Ocreza. He claims: "*this territory appears to have been conquered during the Late Bronze Age with the establishment of various settlements, almost always fortified*" (Batata, 2006:91). And we should remember the occurrences of more remote rock carvings from the Late Palaeolithic at the Rivers Zêzere (Baptista, 2004) and Ocreza (Baptista, 2001), very near to here (though these are sporadic and thus may not signify effective occupation of the territory).

The remains that we have identified here suggest a stable and spatially expressive occupation of the territory of Oleiros during Recent Prehistory, although the locations of the habitat remain unknown. Moreover, the appearance of *tumuli* in the Oleiros mountains, at the other end of the mountain chain, has forced us to revise our notions about megalithism in the region. It was thought that this was concentrated into the lowland areas in the districts of Castelo Branco, near the River Tagus – i.e. in the southern parts of the counties of Idanha-a-Nova (Rosmaninhal) and Castelo Branco, and also in Vila Velha de Ródão and Proença-a-Nova, where several hundred dolmens have been counted (Henriques *et al.* 1993, 1995; 2007; Henriques *et al.* 1999; Cardoso *et al*. 2003), not to mention the left bank of the Tagus (Bueno *et al.,* 2004a; Oliveira, 1998, 2000b; Oliveira & Oliveira, 2000) and the rock art complex associated with the river (Caninas & Henriques, 1987a). This no longer seems to be the case.

4. At first glance, the territorial distribution of these sites suggests that they are basically anchored along the Sertã river basin, near its headwaters and source streams, from the highest points (in the case of Vale de Mós, Selada do Cavalo and Feiteiras) on the mountain tops (Vermelha, Alvélos and others), extending down the lower slopes (in the case of Selada da Póvoa) to positions overlooking the river (case of Cabeço do Seixo). As has been seen in other parts of the Tagus valley (Vila Velha de Ródão and Idanha-a-Nova), these monuments are found at all altitudes, ranging from the highest peaks to the banks of streams in the alluvial plain (Henriques *et al.* 2007).

This impression, if it were to be reinforced with new findings, may indicate that these prehistoric herding-farming-gathering communities may have settled around the banks of the River Sertã, using similar settlement strategies to those adopted by later communities. Thus, we should not be surprised to find indications of prehistoric settlements beneath the present–day town of Oleiros.

However, if habitats existed at lower altitudes, conditions may not have been conducive to their conservation. There are two reasons for this: a) this topographic position would have been more susceptible to marked anthropic action (urbanization and agriculture) and related erosion processes; b) the habitat structures would have been less durable. In the region of Ródão, for example, the only remains of the Recent Prehistoric habitat that are known

are on tertiary and quaternary debris formations (Henriques *et al*. 2007), a geological substratum that is absent in the area of Oleiros.

One aspect that has repeatedly been noted is the proximity of mounds to ancient cart tracks, revealed by furrows in the geological substratum (schist) caused by the repeated passage of wheels. This spatial convergence does not necessarily imply a causal relationship between the two phenomena. In fact, the topography of the area means that constructions of different types that require stable, flatter locations will tend to converge into the same spots, given the narrowness of the mountain ridges. The narrow strips along the tops of the mountain are more suitable both for cart tracks and for mound structures, which find there greater resistance to erosion through gravity. This means that it is not easy to demonstrate that the mounds were constructed there because of the prior existence of roads. Nevertheless, this could still be an interesting working hypothesis. The excavations presently under way at Sela-da do Cavalo will certainly shed some light on this matter.

It is not easy to establish the chronology of the cart tracks, although many of these routes were in use until the 20th century. The multiplicity of parallel duplications, the width of the furrows or the channel depth, when the option would be "to avoid a detour", are aspects to be taken into consideration when investigating the matter of chronology.

Although the bibliography is scarce on this subject (W AA, 2006), the study by Broncano & Alfaro (1990) on road access to the Iberian settlement of Castellar de Meca (Valencia) gives an example of an ancient pre-Roman cart track perhaps dating from the 8th century BC, whose relevance has been recorded as follows:

> "*The importance of the results of these findings made in the excavation of tracks from the city of Meca is based upon the observation that they were only used in the pre-Roman period, and were not expanded for wheeled traffic afterwards. This fact alone is of the greatest importance for research into Iberian culture, since we find the presence of a truly fossillized work which, after use, suffered no further alteration by traffic from chronologically later periods or cultures in Iberia. This suggests a genuine, exclusive and unique model of pre-Roman road, and further research is needed in order to establish parallels or morphological relations with other similar works in order to fully identify it and inscribe it into the culture*" (Broncano & Alfaro, 1990:212).

This hypothesis may acquire another significance, i.e. it is possible that the mountain tops where our cart tracks have been found, and which are no longer used, may have supported regional and local traffic even before the arrival of the wheel. The antiquity of these cart tracks in the region in question, going back to the Roman period, together with local mining activity, was insistently argued in the recent thesis by Carlos Batata (Batata, 2006), a praiseworthy attempt at investigating those "minor" forms of ancient roadway, given the lack of research to date.

However, for there to exist a direct correlation between the position of the mounds and areas of passage, the question of visibility generally associated with the use of milky quartz in those structures will have to be reassessed. In fact, for the mounds to have been visible, regular maintenance would have been necessary to burn or cut down of the vegetation that would inevitably overgrow them.

Following this line of argument, certain distinctive aspects of the topography of this region are important, namely the long mountain ridges of the so-called "Ancient Massif", south of the River Zêzere. Firstly, there is a long dorsal extension, around 60 km in length, running between the area of Cova da Beira in Fundão and the area of Vila Rei near the confluence of the Rivers Tagus and Zêzere. Going in a southerly direction, this crest consists of a single ridge (generally known as the Serra da Gardunha) which extends as far as the intersection with the Serra do Moradal (quartzite). From that interruption, three parallel alignments emerge, the Serra Vermelha to the north, the Serra de Alvélos, the highest, in central position, and the Serra das Corgas to the south. A second aspect refers to the general NE-SW alignment of these sequence of schist-greywacke uplands. Thirdly, this mountain ridge does not have any sharp variations in altitude; its undulations do not impede progression and allow easy passage, compared to alternative routes along the slopes or in the valley.

This mountain system (the Gardunha-Alvélos corridor) may therefore have functioned as a land route or corridor between the middle Tagus, in the area of confluence of the Zêzere and the great depression of Cova da Beira, which, for its part, is connected to the north of the Beira Interior (Guarda region) through a natural corridor situated between the mountains of Estrela and Malcata (Vilaça *et al*, 1998). Although there may also have existed a main corridor running north-south across the plateau of Castelo Branco (illustrated in modern times by the seasonal cattle route), this may have provided an alternative means of communication going in the same general direction, provided that it was supported by local mountain communities.

The importance of the Tagus river route has been made amply clear in the context of cultural development during the Bronze and Iron Ages, functioning even as an axis for orientalizing influences that penetrated inland from the coast (Vilaça & Arruda, 2004). But without denying the importance of the waterway, a land route would have allowed greater flexibility and freedom in that period, as in others.

Moreover, the mountain topography in the area of the Gardunha-Alvélos corridor would have allowed subsidiary

routes to join it at different points. These would have run perpendicular to it, heading down the valleys and rivers, along the gentle slopes that radiate out from it, with mounds continuing to occur along them.

In contrast with this, we can point to the absence of ancient cart tracks and mound structures on the tops of the main quartz crests of the region (Serra da Talhadas and Serra do Moradal), despite the fact that these are generally at a lower altitude than the Gardunha-Alvélos corridor. If the association between the mounds and the cart routes (or the footpaths that preceded them) is proven, the absence of such remains could signify the irrelevance of quartz mountains for regional traffic. In support of this hypothesis, three points might be made: 1) the quartz crests are much shorter in length than the Gardunha-Alvélos corridor; 2) they contain sharp breaks which would make a continuous route impossible (some of these breaks are notable at other levels, as in the case of Portas de Ródão); 3) they are oriented in a NW-SE direction.

However, it has been practically confirmed that the highest points in those quartz mountains were occupied at the end of Recent Prehistory, and maybe in Protohistory (Vilaça, 1995). This is shown by the presence of walled enclosures, such as at the sites at Picoto (Serra do Moradal), Serra de São Miguel (southern part of the Serra das Talhadas), Serra da Monforte, and Cabeço de São Martinho, as well as the still unpublicized enclosures identified by AEAT in various parts of the Serra das Talhadas.

The interregional relevance of the Gardunha-Alvélos corridor may help to explain the emergence of the small mound structures, as are most of those identified in Oleiros. If they were later non-megalithic developments, they may have a cultural affinity (i.e. inserted into the same funerary tradition) with the numerous necropolises of *tumuli* that have been investigated in the regions of Viseu (Cruz, 1995; Cruz *et al.,* 1998; Cruz & Vilaça, 1999) and Aveiro (Silva, 1997). The recent discovery of a significant cluster of *tumuli* in the north of the county of Abrantes, at the southern tip of that corridor, supports this perspective (Batista & Gaspar, 2007).

Other *tumuli* have also been identified at stopping points along the Central Massif, north of the Zêzere, such as in the Serra da Lousã (county of Goís, Miranda do Corvo and Figueiró dos Vinhos) and in the western part of the Serra da Malcata (site of Casinhas on the border between the counties of Penamacor and Sabugal). This shows that there is still a great deal of work to be done to fill in the gaps in our knowledge about the ancient occupation of the region.

The archaeological sites that we have had occasion to describe in this paper may, as we have suggested, reveal the continuous occupation of this mountainous territory, sustained by the exploitation of local biotic resources, integrated into a network of exchange and cultural traditions of a transregional scale, with territorial ordering that may be reflected in the models suggested by our colleagues in both Spain (Bueno, *et al.* 2004a) and Portugal (Oliveira, 1998).

However, their character within the material culture still has to be established. We await the results of the archaeological excavations that are presently under way.