

INTERFLUVE TEDO/TÁVORA (NORTH OF BEIRA ALTA), A PHYSICAL AND NATURAL BARRIER, A MENTAL BORDER? — TRANS(I)MUTATIONS BETWEEN THE 4TH AND 1ST MILLENNIUM BC*

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Abstract: *In this paper, the perception of territorial dynamics is tested in a long diachrony, from the 4th to the 1st millennium BC, between Nave and Penedono plateaus. For this purpose, was carried out an analysis drawing on the contrast between the most representative architectures and materialities found to the east and west of the study area.*

As far as architectures are concerned, the archaeological record covers the period between the 4th millennium and the end of the 1st millennium BC. For the materialities, a brief analysis is made regarding the dispersion patterns of the most abundant and representative ceramics grammars belonging to particular chronological periods.

Keywords: *Architecture; Material culture; Continuities; Discontinuities; Biogeography.*

Resumo: *Neste trabalho, ensaia-se a percepção das dinâmicas territoriais numa longa diacronia do IV ao I milénio a. C., entre o planalto da Serra da Nave e o planalto de Penedono. Para o efeito, realiza-se uma análise em ambos os planaltos de algumas das arquiteturas e materialidades mais representativas, contrastando-se os resultados.*

No que às arquiteturas diz respeito, o registo arqueológico destas estruturas deteta-se a partir do IV milénio até inícios do I milénio.

Quanto às materialidades, efetua-se uma breve análise aos padrões de dispersão daquelas mais abundantes e caracterizadoras dos diferentes momentos cronológicos.

Palavras-chave: *Arquiteturas; Materialidades; Continuidades; Ruturas; Biogeografia.*

1. INTRODUCTION

This paper offers a brief analysis of the current information available on the archaeological record of the Nave and Penedono plateaus, compiled from different sources, which seems to reveal the presence of a cultural border between them from the 3rd to the 1st millennium BC, although with minor changes in the latter.

The study area is located in central-northern Portugal, most specifically in the north of the Beira Alta region. For the purpose of our study, we considered to split it in two: the area to the west corresponds to a large part of the Nave and Lapa mountains and adjacent territories whereas the area to the west covers the Penedono and Sernancelhe

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plateaus and their immediate surroundings. Yet, in order to simplify the terminology, we shall refer to them as Nave Plateau and Penedono Plateau (Fig. 1).

2. THE ARCHAEOLOGICAL DATA

This area has been the subject of autonomous studies that resulted in the production of a relevant archaeological dataset, that lacks a comprehensive analysis. This paper makes such analysis on a medium territorial scale and a broad chronology, which allows us to obtain a wide-ranging spatial and temporal perspective.

In the definition of the study area, we have ensured that the two sub-areas (Nave Plateau and Penedono Plateau) had previously been the object of scientific studies in order to avoid, or at least reduce, biases in research that could interfere and distort our analysis of the data.

Such a lengthy chronology leads us to select data from a globalising and chronological sequence from the oldest to the most recent. However, aiming simplification, we present the periodisation across millennia and not based on «chronological-cultural phases» because, in this region, the chronological boundaries differ between authors¹, also due to evident disparities in the survival of particular types of material culture. The 2nd millennium BC is perhaps the most problematical to classify as a compartmentalised temporal unit because recent research has shown continuities, rather than ruptures, between the last quarter of the 3rd millennium and the first quarter of the 2nd millennium. A similar situation occurs between the last quarter of the second and the first quarter of the 1st millennium. We understand that this division in millennia might not be the most adequate option, but in this context this simple division is the most suitable.

Given the large scale of the information available for the 4th millennium BC and the 1st millennium BC, it was necessary to select the most relevant types of architectures and material culture using data from approximately three hundred archaeological sites².

In the first case, we selected two types of architectures: funerary and non-funerary. It seemed to be the most prudent approach following the path of recent works³.

Regarding material culture, we chose to look at ceramics. However, we face the problem of variability of the archaeological record because of the scarcity of excavated settlements and their nature. Obviously, an excavated site delivers a larger amount of ceramic if compared to a non-excavated settlement, in which the information comes from surface finds, rarer and more fragmentary. This situation makes formal

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¹ To understand the variability and correlation between authors see: VIEIRA, 2015: 116-117.

² Throughout this text whenever archaeological sites are mentioned without any bibliographical reference, they can be found in the Endovelico database: <<https://arqueologia.patrimoniocultural.pt/index.php>>.

³ SANCHES, BARBOSA, 2018: 114.

comparisons more difficult, also bearing in mind their wider chronological distribution. Therefore, we chose to privilege decorative grammars using only the presence/absence criterion, with the most «expressive» decorations of each period providing a timeline between each millennium.

Regarding the 4th millennium, we have not identified any distinctive decorative motifs. For the 3rd millennium, we selected Bell Beaker and Combed ware, for the 2nd millennium, the ornamental matrices of Cogeces and Cogotas I and for the 1st millennium, we considered the distribution of Baiões decoration (typical of the first quarter). We also included the *berrões* statuary (representing boars/pigs) from the second half of the 1st millennium or early Roman Era.

3. DATA ANALYSIS

3.1. 4th millennium

Given the scarcity of materialities belonging to the 4th millennium BC, we focused on funerary architectures. In Fig. 2, we find that there is a higher density of monuments in the Nave Plateau if compared to the area on the opposite Távora riverbank.

3.2. 3rd millennium

There is a significant contrast between the two sub-areas regarding the funerary monuments ascribed to this period. The Nave Plateau shows a substantial number of tombs (Fig. 3). The construction of large dolmens ceased, and they are deliberately closed, in this millennium some were reused, but they were replaced by smaller structures that somehow followed the tradition of building under mound. Although less visible in the landscape, they were still easily identifiable.

All 58 sites listed are located on the Nave Plateau. In contrast, barrows are not detected in the Penedono Plateau but there are two burial structures without mound in the surrounding area: Vale da Cerva⁴ and Terraço das Oliveiras⁵. The former dates from the first half of the 3rd millennium whereas the latter provided dates between the 3rd and 2nd millennia. While insufficient, the data somehow allow us to suppose this type of burial is potentially predominant in the Penedono Plateau, even if these structures lacking mounds are difficult to detect and usually found incidentally.

In terms of the materialities, we assessed the distribution of Bell Beaker and Combed pottery.

⁴ CRUZ, 2001: 262.

⁵ GASPAR *et al.*, 2014.

Bell Beakers are found across the whole region. Despite its broad span extending to the 2nd millennium, for instance in Fraga da Pena⁶, Bell Beakers are predominant during the 3rd millennium⁷.

The Nave Plateau shows a significantly higher percentage than the region on the eastern of River Távora. Broadening the area of analysis, crossing up the River Douro (north), the Dão (south) and the Coa basins (east), the initial tendency is slightly diluted but still notable. When the contexts are analyzed, a curious predisposition seems to arise. Bell Beakers tend to occur on the Nave Plateau almost exclusively in funerary contexts, while on Penedono Plateau is only found in non-funeral contexts. A leaning that seems to be maintained when we head south along the basin of the River Dão, only contradicted by the presence of this decoration on the dolmen and the rock shelter of Penedo do Com (Fig. 4). Returning to our study area, we come upon an almost perfect dichotomy: Bell Beaker pottery appears in non-funerary contexts on the eastern banks of the Távora and in funerary contexts on the Nave Plateau, with seven sites with the exception of Chã de Lameiras.

Interestingly, we should keep in mind that is not uncommon to find Bell Beakers in contexts of the re-use of large dolmens like Moinhos de Rua, Seixas and Castonairas⁸, in Nave Plateau. Yet, in the Penedono Plateau, we attest the re-use of this type of monuments at the dolmens of Lameira de Cima 2 and Senhora do Monte⁹, which lacks this type of pottery. The simplest explanation may be the natural limitation of the data, but the reason may not be limited only to this issue and eventually can be likened to «mental» reasons.

Since Bell Beakers are generally considered an item of trans-regional prestige and used in social practices of differentiation and identity consolidation¹⁰, there seems to be some diversity in the ways it was manipulated on one area it tends to appear in funerary contexts, on the other, is predominantly associated with the «world of the living». Ana Bettencourt also notices a difference in the contexts Bell Beakers usage in northern Portugal. On Northwest, it predominates in sepulchral contexts, in the Northeast, they are more common in monumental enclosures or natural spaces of great collective importance and very scarce in tomb contexts. The plurality of actions and meanings inherent to the circulation, adoption, manipulation and transformation of Bell Beakers, show complex processes in which this pottery would not have an autonomous value or a similar function in the different contexts where it appears¹¹. These variations could somehow correspond to different ways of staging, asserting, and negotiating *Power*¹².

⁶ VALERA, 2007.

⁷ SANCHES, BARBOSA, 2018: 110, Tab. 2.

⁸ CRUZ, 2001: 318.

⁹ VIEIRA, 2015: 239.

¹⁰ LOPES, BETTENCOURT, 2017: 483.

¹¹ BETTENCOURT, 2011: 364, 372.

¹² CRUZ, SANTOS, 2011: 131.

Combed ware (Fig. 5) reveals a more exciting distribution pattern than Bell Beakers. After a preliminary analysis, we needed to enlarge our study area in order to get a broader perspective. The disparity is evident; only 4 of the 41 sites are located on the left banks of River Távora. In three cases the Combed matrix appears — like all those identified on Penedono Plateau — in non-funerary contexts: Senhora das Necessidades¹³, Porqueira, and Graíl¹⁴. It is important to underline the proximity, especially between the first two settlements to the river and that the latter sit on the Tedo/Távora interfluvial. One particularly interesting site is Fraga do Seixo 1 since it is the only one located beyond the Nave Plateau and corresponds to a funerary context associated with a Bell Beaker¹⁵. The evidence therefore suggests that this decorative grammar assumes an exceptional character here, contrary to what happens to the east, where Combed ware seems to appear mainly in non-funerary settings and, in many cases, probably domestic contexts.

Although the River Douro is a natural barrier difficult to cross, it did not prevent the circulation of this decorative pattern. On the contrary, the Tedo/Távora interfluvial, particularly the River Távora, appears an almost insurmountable barrier. Valera proposes Fornos de Algodres Combed-ware grammars are more recent than those from Trás-os-Montes¹⁶. This idea suggests a movement of these grammars from North to South crossing the River Douro until attaining the Mondego platform and Dão basin, however circumventing the Távora valley along its right banks, thus avoiding the Nave Plateau. The upper Mondego and Dão areas present changes: Combed ware is mainly recorded in non-funerary, but also occur in funerary contexts such as dolmen de Fiais da Telha¹⁷ and dolmen 1 de Moinhos de Vento. Furthest this matrix appears from its «nuclear» zone the rarer it is, and the more exceptional it becomes.

The explanation for the significant variation between Nave and Penedono Plateaux does not seem to be found in the difficulty of transposing the Távora River or particular geomorphological features. The dissimilarity in sepulchral practices, asymmetries in the dispersion of Combed pottery and differences in Bell Beaker manipulation, makes us equate the co-existence of two distinct cultural trends parted by Távora River.

3.3. 2nd millennium

In our study area, funerary practices dated to the Bronze Age feature a wide range of burial solutions¹⁸ like tumuli with low barrows and small rectangular or polygonal chambers, as well as open pits in the gravel¹⁹, alongside the re-use of dolmens.

¹³ RIBEIRO, 2020.

¹⁴ PERPÉTUO *et al.*, 1999.

¹⁵ CORREIA, 2014.

¹⁶ VALERA, 2007: 371.

¹⁷ SENNA-MARTINEZ 1989: 400.

¹⁸ CRUZ, 2001: 266.

¹⁹ CRUZ, 2001: 320.

Amongst the novelties in burial architecture are the reduction of mound dimensions and increasing chromatic contrast resulting from the intensification of the inclusion of white quartz covering the mounds²⁰. If it is plausible that some of the monuments inventoried (Fig. 6) may have been built in the 3rd millennium, whereas others are undoubtedly ascribed to this period by radiocarbon dating as Rapadouro 2²¹. However, our concern goes beyond a typological approach; we prefer to highlight the distribution patterns of funerary structures between the two areas. The relative abundance on the Nave Plateau is again in absolute contrast to the Penedono Plateau where no funerary monuments are represented, revealing that the previous millennium trend is kept.

At present, the scarcity of archaeological data makes it difficult to select diagnostic items to produce a thorough analysis of material culture. Nevertheless, we elected two decorative types: Cogeces and Cogotas I pottery (Fig. 6), which is found only in two places: Alto de Santa Eufémia and Castanheiro do Vento in Penedono Plateau²². Away from the study area yet nearby, we find the sites of Eira²³ and Castelo Velho²⁴.

Despite the poverty of available data, the 2nd millennium seems to reflect the permanency of the contrast that seems to occur in the previous millennia. This chronological moment is characterised by rare archaeological data reflected in a generalized invisibility of settlements, which may somehow truncate the scarce conclusions obtained.

3.4. 1st millennium

The 1st millennium BC is the only one that allows a more thorough approach in chronological terms. In this temporal span we encounter three moments which are quite distinct: Late Bronze Age, Iron Age, and Roman period. Although the Late Bronze Age begins in the last quarter of the 2nd millennium, we allocate this period to the 1st millennium because the decorative grammar that typifies this period has its apogee around its first quarter.

Concerning the Late Bronze Age's material culture, we did not find substantial information that could give uniformity to our analysis. Therefore, we have chosen to consider as a diagnostic item the pottery displaying «Baiões/Santa Luzia» decoration (Fig. 7). We did not obtain any records about the decorative grammars of succeeding moments that would allow us to analyse it in comparative terms.

The pottery with «Baiões» decoration reveals some dichotomy between the two areas. It prevails in the left banks of the Távora, while on the right banks, it occurs at

²⁰ CRUZ, 2001: 266.

²¹ CRUZ; 2001: 117.

²² CARDOSO, 2014.

²³ CANHA *et al.*, 2018.

²⁴ PEREIRA, 1999.

Reboledo²⁵. Its presence in both areas is not surprising considering that the Late Bronze Age is a moment associated with a dynamic time of mobility and intensification of supra-regional contacts, by consequence, a culturally permeable period.

Again, concerning funerary architecture, we have encountered difficulties in establishing a relationship between chronology and morphology of monuments dated to the 1st millennium BC. Based on the works by Cruz and Vilaça²⁶, despite the typological diversity, we can consider burial structures under shallow mounds, built with small-sized slabs configuring small funerary containers as belonging to this stage. In this case, on the left banks of the Távora, we find Lameira de Travessa de Lobos²⁷. The set of 5 tumuli of Tapada das Arcas may also belong to this period. This is also the case of Calvário burial, which may, however, be associated with a previous moment. On the right banks, we can only find one possible funerary structure: Senhora de Lurdes²⁸ (Fig. 7).

The Nave Plateau does not reveal such a great density or concentration of funerary structures as in the previous millennia. This period shows that disparity has been significantly reduced.

Regarding non-funerary architectures (Fig. 8), we considered those with «defensive» structures (walls, ramparts, slopes, and ditches). Here we notice an apparent balance in the distribution of settlements. On each area we find settlements with evidence for permanent occupation throughout the whole millennium like Mondim da Beira²⁹ and São Jurge³⁰. There are many examples of sites exclusively occupied in the Late Bronze Age and probably abandoned at the beginning or during the Iron Age: Vila-Cova-à-Coelheira, Longa hillfort, on the opposite side, Reboledo and Monte Airoso. The Iron Age and/or Roman period, seems to witness the emergence of settlements with some form of defensive system more evident on the Nave Plateau: Goujoim, São Domingos de Fontelo, Santa Bárbara (?), Torrão and Muro, and the continuity of Mondim da Beira. In the Penedono Plateau, we find only Senhora da Assunção alongside the maintenance of occupation at São Jurge.

Finally, we make a brief analysis of the zoomorphic statuary. It is relevant because the *berrão* found further to the west in Iberia (to the South of River Douro) was discovered in the vicinities of River Távora. It is common to consider the River Coa area as limit of the Vetonne territory³¹ since this type of statuary is associated with this «ethnic group». Alongside the exemplar of Penela da Beira, there may be others. Costa mentions

²⁵ ARQUEOHOJE, 1999.

²⁶ CRUZ, VILAÇA, 1999; VILAÇA, CRUZ, 1999; CRUZ *et al.*, 2000; VILAÇA, 2015.

²⁷ VILAÇA *et al.*, 2017.

²⁸ CARVALHO, GOMES, 2002-2003.

²⁹ VILAÇA, 2008.

³⁰ COIXÃO, 2014.

³¹ ALARCÃO, 2017: 47.

one in Póvoa de Penedono and another outlined in Sabroso³². *Vox populi* references that during the construction of Ranhados dam, near São Jurge, a pig carved in stone appeared, though this information failed to be confirmed. If the presence of *berrões* in Póvoa de Penedono or Sabroso raises many doubts, in São Jurge it does not seem unreasonable.

Lastly, the presence of a *terminus augustalis* near Goujoim, dating from the first century AD, is a landmark that establishes the territory of the *Coilarni* and the *Arabrigenses*³³. This evidence should be highlighted because it indicates that the River Tedo functioned as a borderline between these peoples/groups in the Roman Era.

4. A POSSIBLE INTERPRETATION

The 4th millennium presents a megalithic funerary tradition that despite some tomb diversity, reveals megalithic monuments on both banks of the River Távora, although they are more predominant on the Nave Plateau. Considering that we are dealing with pastoral societies with high mobility in the territory, it may not be inappropriate to think that the strategies of appropriation of space might have been very similar on both areas. However, on the southern half of the Penedono Plateau funerary monuments are virtually absent. Is this gap the result of a lack of research? Or could it be due to the dynamics of population demography, resource availability and economic practices? Regardless the complexity of the answers, what is essential to highlight is that both areas have in common the megalith phenomenon.

The 3rd millennium appears to reveal a very distinct dynamic at all levels. In the Nave Plateau alongside the re-use of large dolmens from the previous phase, changes in the architecture of funerary structures emerged, while «markedly», following the megalithic tradition. However, the same tradition does not imply an absolute continuity, since large dolmens are intentionally closed involving some type of change, although sepulchral practices involving barrows are maintained.

What is exceptionally evident about the distribution of funerary monuments is their total absence towards the east of the Távora area if compared to the opposite side. The possibility of a demographic decrease does not seem plausible, given the population data, at least as far as the second half of the millennium is concerned. In fact, the increasing number of settlements seems to show a process of demographic intensification. The analysis of the archaeological record may point to other clues when analysing the 3rd millennium settlement network. It is possible to find records in both areas. Nevertheless, on the Nave Plateau, the information is substantially scarcer and points out to a lower demographic density. It is possible to find a large number of scattered and inconspicuous material remains, suggesting that the occupation of settlements in this area might have had a largely ephemeral character.

³² COSTA, 1977: 25.

³³ VAZ, 1979.

On the opposite area (Penedono Plateau), we find sites with significant densities of material culture. These data suggest more stable settlements on the eastern side of our region, as opposed to vaster mobility in the western half, apparently rooted in the socio-economic practices of the 4th millennium. These differences may suggest a region with two profoundly contradictory areas.

Once again, it is challenging to explain this discrepancy between the dynamics of the two regions. This 3rd millennium points to cultural differences which seem to be forged and embodied in material culture and architecture.

The data highlights disparities such as the distribution of Combed ware, which is predominantly found on the right margin of river Távora, even if it occasionally appears on the left banks, but always in the Tedo/Távora interfluvial and never extending to the Nave Plateau. The exception lies in the funerary context, indicating that it has acquired an exceptional context due to its rarity. A possibility reinforced by the fact that it occurs associated with Bell Beakers. To understand this disparity, we searched for an explanation based on the natural environment, namely biogeography³⁴.

Archaeologists usually do not consider biogeography in their studies. An exception is Lara Bacelar Alves' work, an author that establishes connections between biogeographical zones and the distribution of Atlantic art and schematic art paintings³⁵. The core of biogeography is to establish territory models based on the circumscription of ecological communities that reveal related climatic and geological features that support species with similar life and adaptation strategies, identified as biomes.

The interest of this approach rests on the idea that biomes deeply influence the economic strategies and the ways societies are structured. If adaptation to what the land has to offer is at the basis of human culture, it may be reasonable to argue that the features that characterise a particular biogeographical region are bound to shape the relationship between humans and the natural world³⁶.

In this case, we made a relational analysis between architectures/materialities and biogeographic regions in our study area. The Tedo/Távora interfluvial corresponds to a biogeographical border area between the Mediterranean and the Atlantic regions. The analysis shows that non-funerary contexts containing Combed ware are inside the Mediterranean bioregion or on its border, including those located in the Tedo/Távora interfluvial (Fig. 9). It is important to highlight that the only context present in the Atlantic area is funerary.

³⁴ COSTA *et al.*, 1998.

³⁵ ALVES, 2012; ALVES, COMENDADOR REY, 2017.

³⁶ ALVES, forthcoming.

To deepen this subject, we have extended the scale of analysis to the Central-Northern Portugal. To do so, we use a base map with a universe of 86 sites with Combed ware³⁷. The analysis revealed that only four sites were identified in the Atlantic biozone (Fig. 10) and, at least, in one case, it may be compatible with a later chronology (Iron Age). Interestingly, the consistency attested in our study area is corroborated with the distribution of Combed ware almost exclusively within the Mediterranean region. As for the Bell Beakers, there seems to be a tendency to be associated with funerary contexts on the Nave Plateau and non-funerary contexts on the opposite side (Fig. 11). Replicating the previous exercise, now using a map of the distribution of Bell Beakers in Northern Portugal³⁸, this trend seems to remain despite the larger scale, even if in a less pronounced way compared to the Combed ware (Fig. 12).

The reassessment of the data allows us to consider a co-existence of two distinct cultural identities in the 3rd millennium. Between them appears to exist significant differences in material culture and funerary rites, which seem to reflect a «rejection» of each other. The profound changes identified in this millennium suggest these two identities do not descend from a common regional cultural background that has evolved into distinct branches, but rather seem to express a rupture between them. The funerary practices reflect a resemblance with the previous millennium, through a tradition of burial mounds, in Nave's Plateau landscapes. The settlements are scarce with few places with evidence of a prolonged occupation. On the contrary, there are a few sporadic sites that may be ephemeral or simply examples of strong mobility. This pattern seems to be somehow attached to pastoral societies from the 4th millennium. The Penedono Plateau reveals a disruption in relation to the 4th millennium, now with the absence of barrows, they might have been replaced by structures with an invisibility on the landscape (like the before-mentioned Vale da Cerva and Terraço das Laranjeiras).

The arrival of profusely decorated pottery is another indicator of the likely presence of distinct cultural identities in the study area. It is known the role that the different pottery styles played in the affirmation of the identity of the communities of the 4th/3rd millennium BC in North of Portugal³⁹. If, on one hand, we have the affirmation of a cultural identity tinged in a stylistic composition (Penedono Plateau), on the other hand, we have the statement of another cultural identity made visible in the non-acceptance of that stylistic grammar on the opposite region. The construction and affirmation of identity sometimes imply the exclusion and rejection of the *other*⁴⁰. This way we could understand the absence of these types of decoration on Nave's Plateau. The appearance of this grammar at a burial site about 30 km from the River Távora may provide hints on

³⁷ VALERA, 2007: 612.

³⁸ SANCHES, BARBOSA, 2018.

³⁹ LOPES, 2019: 377.

⁴⁰ HALL, 1996: 4.

the mobility of these mountain's populations and the extension of their territories (from an area where it is rejected to an area where it is accepted as an exceptional object).

The archaeological contexts of Bell Beakers indicate different ways of manipulation. In the Nave Plateau, they are mainly linked to funerary contexts which seem to be the elected places for collective social demonstrations. In Penedono Plateau, these «gatherings» probably occur in other natural spaces with a wide visual domain such as Castelo Velho, Castanheiro do Vento or, further south Fraga da Pena. Also, the communities seem to reveal a more permanent settlement and a more complex social organisation.

Probably it is time to rethink relinquished determinism and diffusionism theories. The data analysed points out to a people's apparent movement, arising from the east, perhaps, by the end the first half or already in second half of the 3rd millennium, possibly coming from the north-northeast quadrant, carrying different materialities and rites. Their course materialised in the dissemination of Combed ware. Expansion stopped along the edges of River Távora, which corresponds to the biogeographic limits in which these «Mediterranean» populations identified themselves and were adapted⁴¹. That is how we could explain the presence of few settlements with Combed ware in the Tedo/Távora interfluve revealing that was not River Távora, but the biogeographic limit that «restrained» the progression of these populations⁴² further west.

Naturally, the causes for this apparent separation of territories and identities cannot be imputed exclusively to biogeography. The complexity of human behaviour is determined by natural factors, but also by countless other factors. An interesting one is the possibility of territorial voids that have been filled by newcomers. When we observe the distribution of large dolmens of the 4th millennium, it is evident that the Penedono Plateau has quite less than the opposite one, sometimes with evident gaps (like the southern area as we have already pointed out) and that there seems to be a tendency for large dolmen groups. Maria Jesus Sanches notes this cluster tendency for near areas. This may suggest that in the following millennium, a demographic void could exist creating some severe or total depopulation of the area facilitating the establishment of people with a new cultural identity. This is a mere hypothesis in the absence of a better explanation for this «coincidence»

⁴¹ Recent environmental studies point to the end of the 3rd millennium (~2200 BC) as a context of environmental instabilities, with an abrupt oscillation known as the Bond 3 event (or the 4.2-ky B.P. event). In the Iberian Peninsula this event signified aridification, particularly in the Meseta, in the south-west, and the southeast even though it has not been possible so far to establish secure relations between demographic movement and climate change. LILLIOS, 2020: 58.

⁴² Genetic studies reveal a change in mitochondrial DNA in Central Europe and the British Isles. However, the data does not reveal significant changes in the Iberian Peninsula. SZÉCÉNYI-NAGY, 2017. In this study the genetic data does not seem to show major genetic changes over the 3rd millennium, the individuals analysed do not even reveal any ancestral relationship with the steppe, contrary to what is seen in this millennium in Central Europe. SZÉCÉNYI-NAGY, 2017: 8-9. Other studies OLALDE *et al.*, 2018, 2019 indicate «~2000 BCE, the replacement of 40% of Iberia's ancestry and nearly 100% of its Y-chromosomes by people with Steppe ancestry». OLALDE *et al.*, 2019. Unfortunately, none of the studies included samples from our region. It would be exciting to carry out, for example, genome studies on the populations of these two areas.

between two possible cultural identities divided by two distinct bioregions. It seems that this is a mixture of coincidences and opportunities, causes, and consequences.

The 2nd millennium, especially the first three quarters, reveals an enormous lack of archaeological data. So, it is not easy to address this period. Nevertheless, there seems to remain a cultural division physically delimited by the Távora valley. The distinction is marked by a continuity of a funerary tradition under mound in the Nave Plateau and its invisibility in the Penedono Plateau. In terms of non-funerary spaces, the data is quite scarce, but we know that some spaces and sites originating from the 3rd millennium remain active as is the case of the Castanheiro do Vento⁴³ where ceramics with Cogeces decoration occur. It is also found in other settlements inland Penedono Plateau and adjacent areas but absent in the Nave Plateau. Thus, the data reveals, although less pronounced, the continuation of a cultural contrast between the two areas.

In the 1st millennium, despite the preponderance of *Baiões* pottery in the Nave Plateau, it can be found in domestic contexts in the opposite region. There is a decrease in funerary contexts on the western side, and its emergence on eastern areas. The data seems to indicate the mitigation of cultural differences between the two areas. A possible explanation may reside in a greater cultural permeability which occurs during the Late Bronze Age. Albeit weakened, there is an apparent cultural distinction and a group identification, connoted with certain items and rituals. Thus, perhaps the physical frontier concept has lost some significance, becoming vaguer and with an inexpressive meaning.

During the Iron Age we seem to have a resurgence of a physical border tinged in two enclosed settlements that are facing one another (Goujoim and Longa), having the Tedo River as their physical separation. Without further supporting information, we can cogitate shifts in the region's socio-cultural dynamics. In fact, during the second half of this millennium, we observe some settlements' abandonment and the emergence of others.

In the Roman period, the existence of a 1st century AD augustal term, in the Tedo River delimits the *Coilarni* territory to the west, and the *Arabrigensis* on the eastern is an unmistakable marker of a territorial division. It remains to explain whether this division is artificially created with the Roman administrative organisation or whether it respects previous borders established between indigenous populations.

A final remark to the diffusion of enclosed sites that can be attributed to a final moment in the Iron Age and beginning of the Roman period. Only two in the Penedono Plateau and five in the Nave Plateau. This difference may result from the process of how these two areas faced the Roman arrival. On the eastern half embracing it and, on the other side, a rough and harsh Nave Plateau, averse to change, prone to isolation, rooted in a cultural identity forged in the previous millennia in which resistance was a form of identification and distinction between «us» and «others».

⁴³ CARDOSO, 2010.

5. FINAL REMARKS

Our analysis is made through a narrow window that only allows us to peek into a small interfluve in central-northern Portugal. Naturally, a broader and more comprehensive spatial-temporal approach will show other results. It will undoubtedly reveal the complexity of realities far superior to those we observe. A good example is the endurance of Bell Beakers over almost the whole 3rd millennium. We can even think about the transformations of the 3rd millennium as an inheritance of socio-demographic changes of the 4th millennium, as is evident in the closure of large dolmens or the presence of megalithic clusters in certain regions. It will probably also show distinct border forms; if in Tedo/Távora, there seems to be an almost rigid line, other areas will certainly show more diluted borders, dynamic spaces of transition, and even confluence. Like the case of the distribution of Atlantic art and schematic art paintings, where biogeography presents itself as a transition zone. History is movement in time, and so it is natural to imagine other movement patterns: people, goods, and ideas, each one with its own time of movement.

More than a quest for trends, constancies, or even explanations of social and cultural dynamics, the aim of this paper is to contribute to diversify the paths of archaeological research, particularly on biogeography and population mobility. Hopefully, this is not an end in itself, but a starting base.

The data presented here seems to indicate that our area was a traditional border region at least since the 3rd millennium BC, remaining, in a visible way, during the 2nd millennium, being diluted a little in the first half of the 1st millennium BC, to assert itself again in the second half. Although with fluctuation of the limits shifting from the River Távora to the River Tedo, in the Era's transition. Therefore, we can consider the changes that took place in the 3rd millennium were so profound that they manifested themselves indelibly in the following cultural identities. Perhaps later, more detailed studies with other types of data or the review and filtering of the information we are now using, will attenuate or even, counteract the tendencies and constancies now observed. The data analysed suggests a separation between the Plateau of the Serra da Nave Plateau and Penedono Plateau, through the 3rd to the 1st millennium BC. It seems pertinent to inquiry if the apparent reference of this area, in the wide diachrony, as a territory of separation of cultural identities, has its origin in the changes that took place in the 3rd millennium BC that marked the later moments indelibly, or if they result from the natural conditions that transformed this Tedo/Távora Interfluvial into a border area, par excellence. We can summarize this question through this article's title: Tedo/Távora Interfluvial, a physical and natural barrier, a mental border?

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INTERFLUVE TEDO/TÁVORA (NORTH OF BEIRA-ALTA), A PHYSICAL AND NATURAL BARRIER, A MENTAL BORDER?
 — TRANS(I)MUTATIONS BETWEEN THE 4TH AND 1ST MILLENNIUM BC

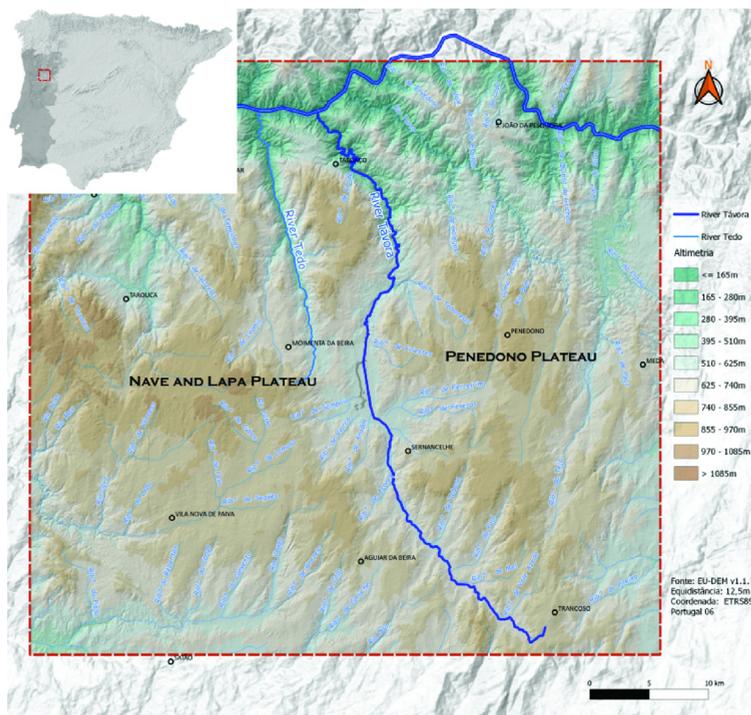


Fig. 1. Location of the study area

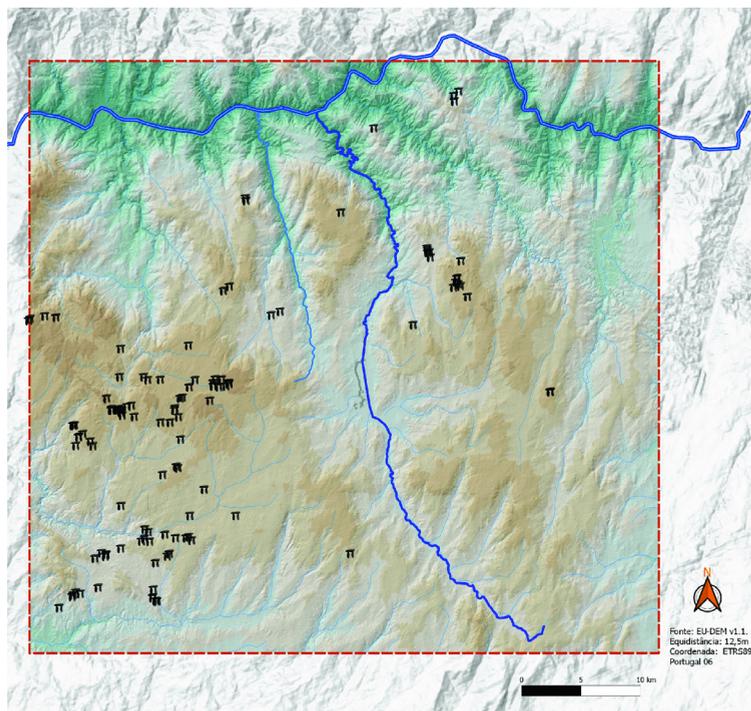


Fig. 2. Distribution of funerary architectures of the 4th millennium BC

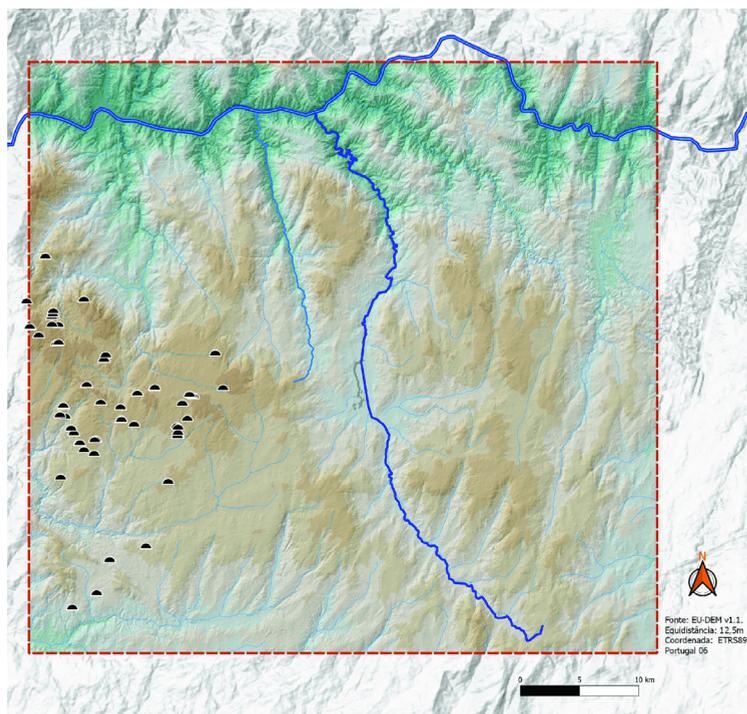


Fig. 3. Distribution of funerary architectures of the 3rd millennium BC

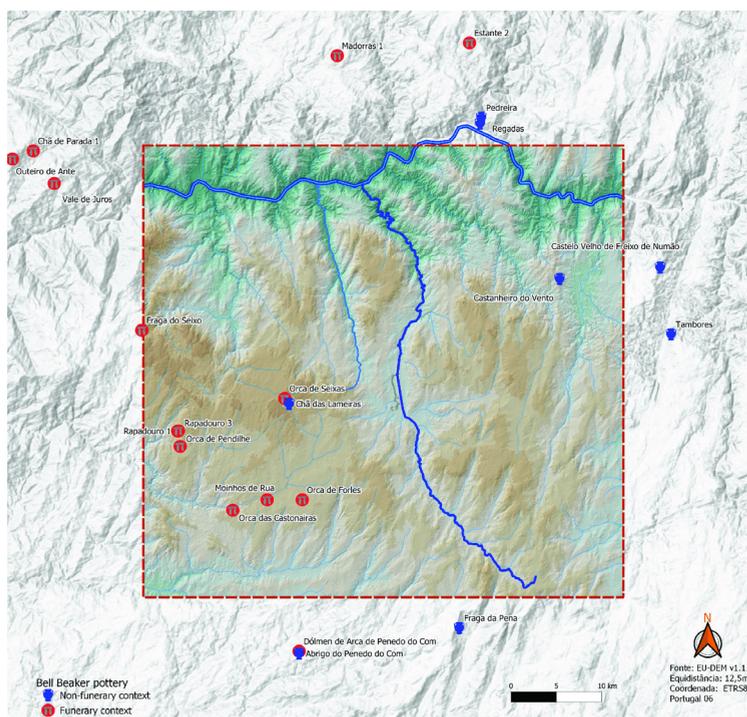


Fig. 4. Distribution of Bell Beakers

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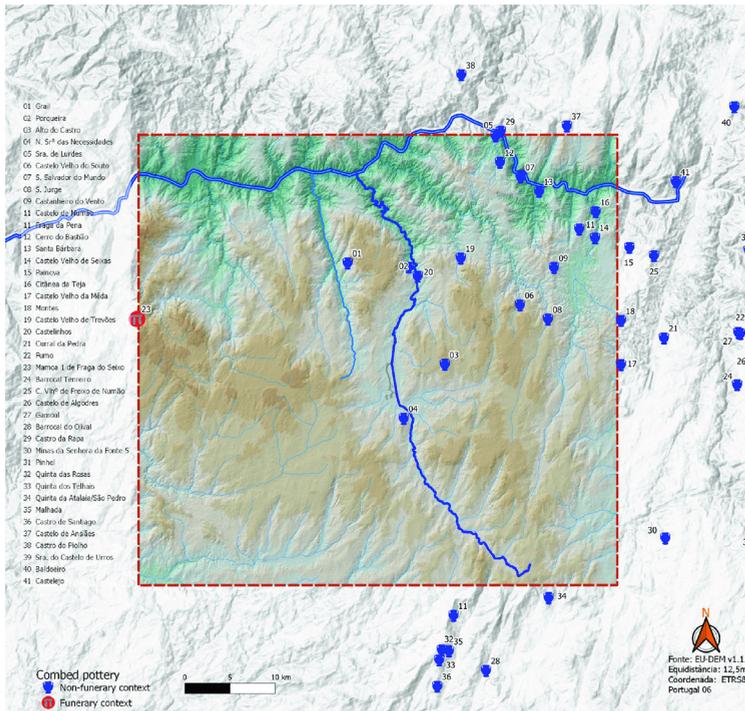


Fig. 5. Distribution of Combed ware

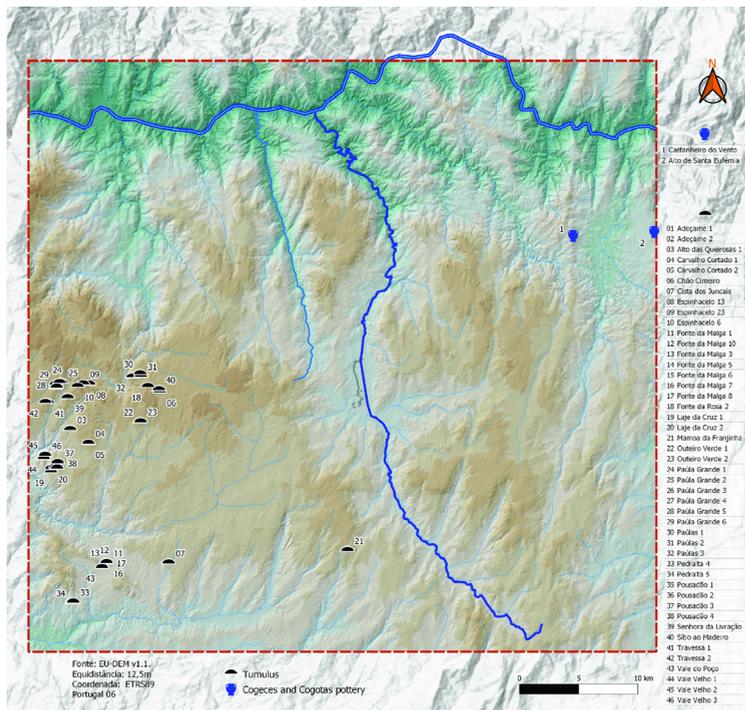


Fig. 6. Distribution of Cogeces/Cogotas and funerary architectures of the 2nd millennium BC

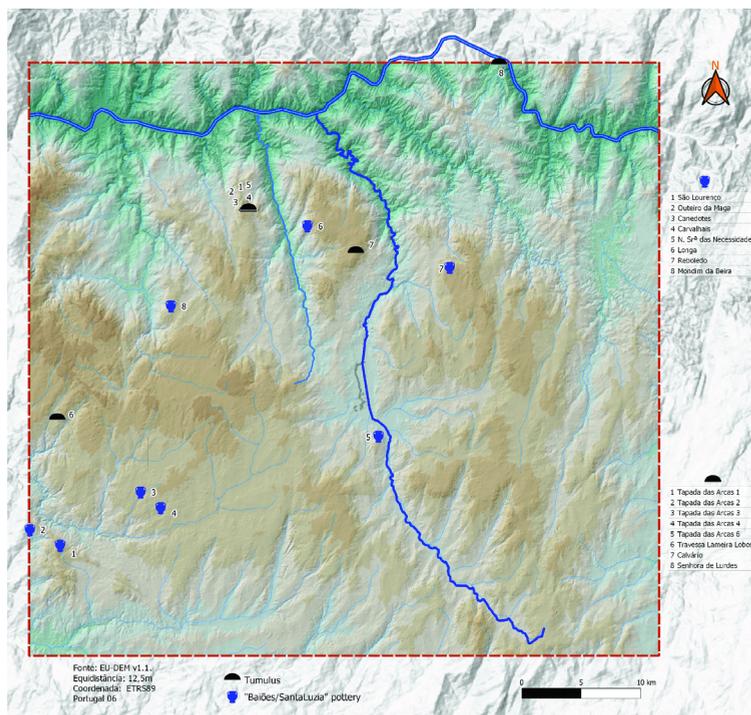


Fig. 7. Distribution of funerary architecture and «Baiões/Santa Luzia» pottery (first half of 1st millennium BC)

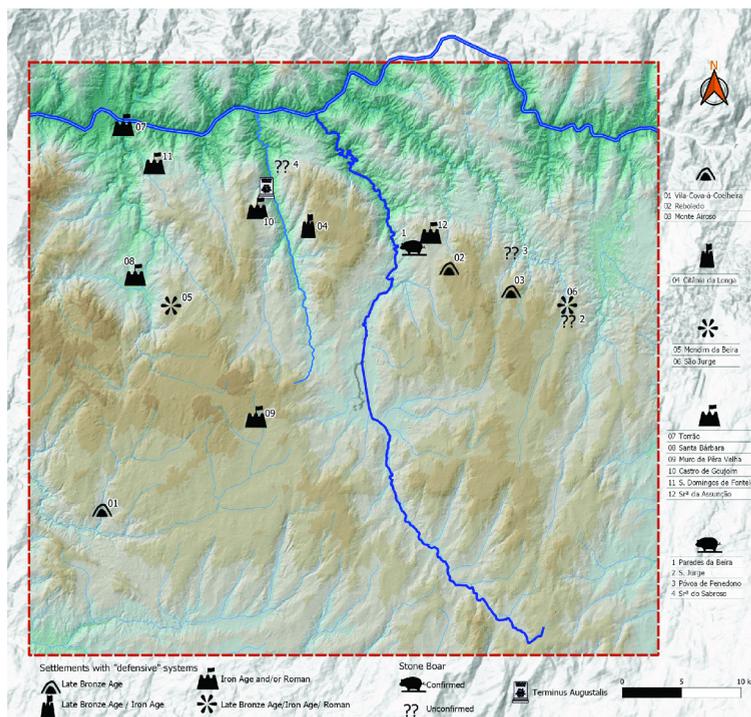


Fig. 8. Dispersion of non-funerary architectures of the 1st millennium BC

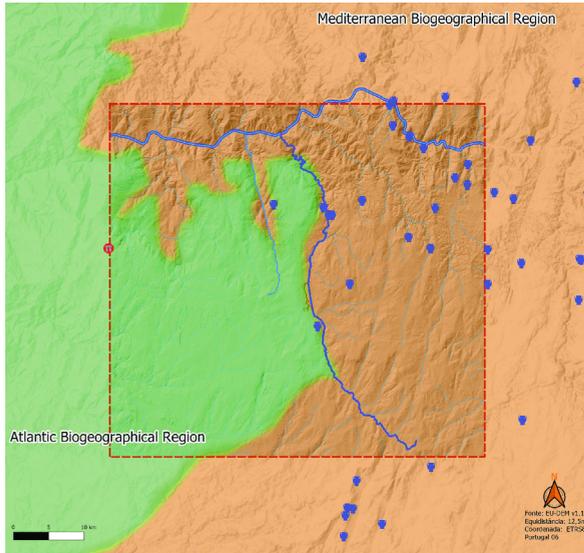


Fig. 9. Biogeographical distribution of Combed ware (after COSTA *et al.*, 1998)

- D1 – Fraga de Pena (Fornos de Algodres)
- D2 – Malhada (Fornos de Algodres)
- D3 – Quinta das Roxas (Fornos de Algodres)
- D4 – Quinta dos Telhas (Fornos de Algodres)
- D5 – Castro de Santiago (Fornos de Algodres)
- D6 – Quinta de Assançada (Fornos de Algodres)
- D7 – Provilgas (Fornos de Algodres)
- D8 – Paredo dos Mouros (Gouveia)
- D9 – Buraco da Moura (Sala)
- 10 – Murganho 1 (Nelas)
- 11 – Corujera (Nelas)
- 12 – Paredo de Penha (Nelas)
- 13 – Lameiras (Carregal do Sal)
- 14 – Dólmens dos Filas de Telha (Carregal do Sal)
- 15 – Linharas (St. Comba Dão)
- 16 – Dólmens 1 dos Montinhos de Vento (Arganil)
- 17 – Quinta de Alalua (Trancoso)

- 40 – Castelo Velho F. Numão (V. N. Foz Côa)
- 41 – Castelo de Ansilães (Carrazeda de Ansilães)
- 42 – Castelo de Linharas (Carrazeda de Ansilães)
- 43 – Barrocal Alto
- 44 – Larga de Jime
- 45 – Senhora do Castelo (Torre de Monconvo)
- 46 – Fraga do Fojo (Torre de Monconvo)
- 47 – Penas Roias
- 48 – Gruta de Ferreiros (Miranda do Douro)
- 49 – Buraco da Pais (Mirandela)
- 50 – Murilha (Mirandela)
- 51 – Mãe d'Água (Mirandela)
- 52 – Castro de Palheiros
- 53 – Novilho (Mirandela)
- 54 – Vila Verde da Castosa (Mirandela)
- 55 – Arganz (Valpaços)
- 56 – Cachão de Rapia
- 57 – Baldouero (Torre de Monconvo)
- 58 – Castelojo (Carrazeda de Ansilães)
- 59 – Vinha da Soutêha
- 60 – S. Lourenço
- 61 – Pastoria
- 62 – Castelo de Aguiar
- 63 – Fonte do Milho (Peso da Régua)
- 64 – Castelo Velho de Seixas (V. N. Foz Côa)
- 65 – Castanheiro do Vento
- 66 – Fumo
- 67 – Panova (V.N. Foz Côa)
- 68 – Cláudia de Tejo (V.N. Foz Côa)
- 69 – Castelo de Numão (V. N. Foz Côa)
- 70 – Curral da Pedra
- 71 – Poço do Camoal
- 72 – Penascosa Sul
- 73 – Castelo Velho da Meda
- 74 – Montes
- 75 – Castelo Velho de Travões
- 76 – S. Salvador do Mundo
- 77 – Senhora de Lurdes (S. João da Pesqueira)
- 78 – Cerro do Basílio
- 79 – Santa Bárbara
- 80 – Castelo Velho do Souto
- 81 – S^{ra} das Necessidades (Sernanceia)
- 82 – Castelo Alto (Pinhal)
- 83 – Vila Chã (Espouende)
- 84 – Faria (Barcos)
- 85 – Monte de Insaia (Guimarães)
- 86 – Penha (Guimarães)

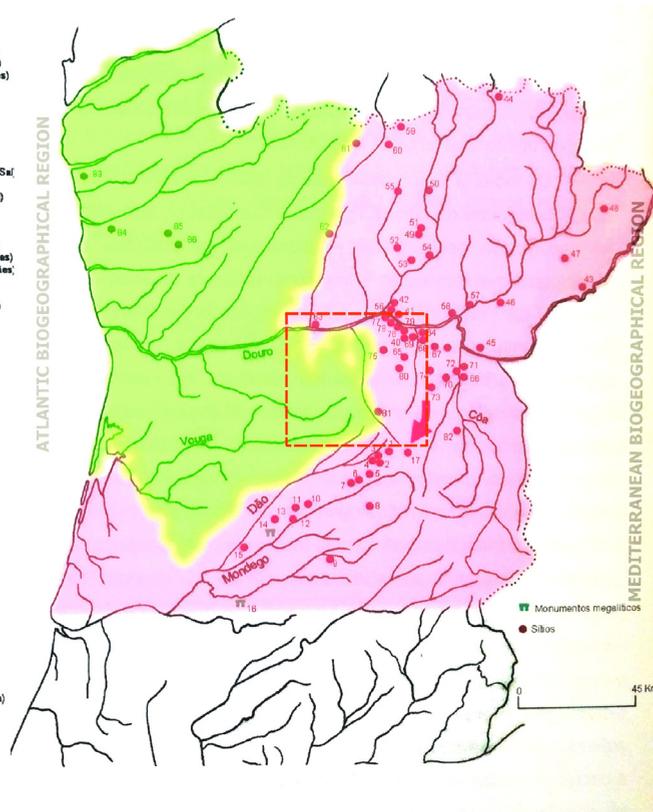


Fig. 10. Biogeographical distribution of Combed pottery in Northern Portugal (after COSTA *et al.*, 1998; VALERA, 2007)

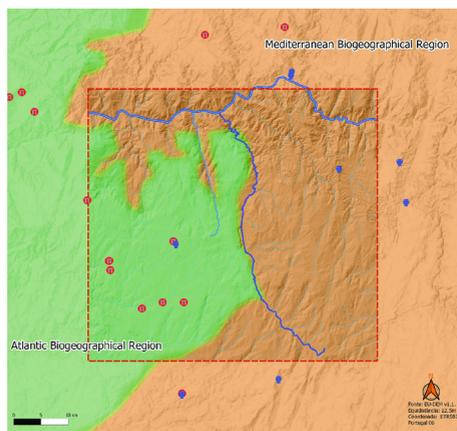
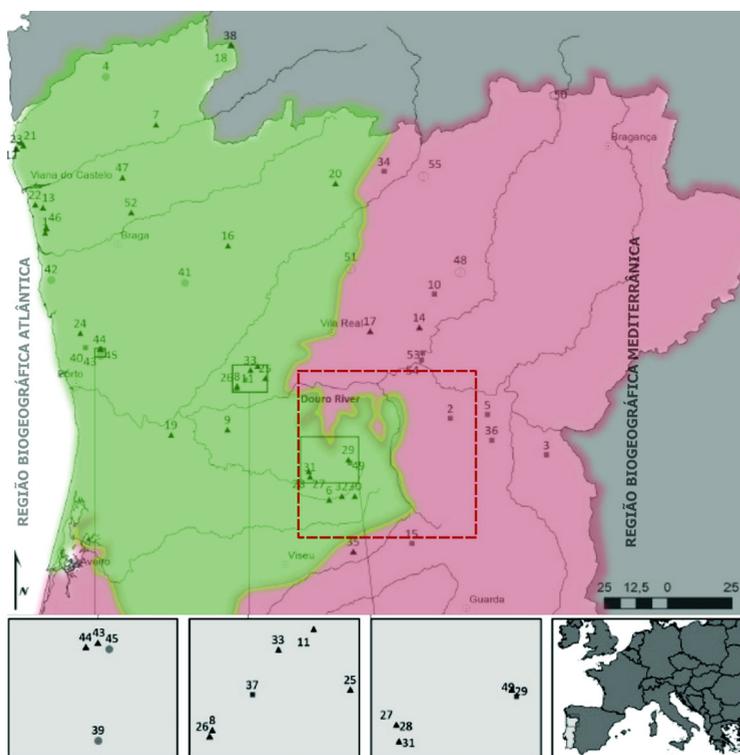


Fig. 11. Biogeographical distribution of Bell Beaker pottery (after COSTA *et al.*, 1998)



- Sites:**
- ▲ Funerary
 - 1 - Antela da Portelagem; 6 - Castonairas 1 (Orca das Castonairas); 7 - Mamoa de Chã de Arcas 1; 8 - Mamoa de Chã do Carvalho 1/Cruz de Ferro 1; 9 - Dólmen 1 de Chão do Brinco; 11 - Dólmen 1 de Chã Parada; 12 - Dólmen da Barrosa; 13 - Dólmen da Pedreira/5. Romão do Neiva 1; 14 - Estante 2/Anta 2 da Estante; 16 - Lugar de Vargo; 17 - Mamoa 1 de Madorras; 18 - Mamoa 1 da Portela Do Pau; 19 - Mamoa 1 de Carvalho Mau; 20 - Mamoa 2 de Carvalhos; 21 - Mamoa de Aspra; 22 - Mamoa de Chafé; 23 - Mamoa de Eireira; 24 - Mamoa de Guilhabreu; 25 - Mamoa de Vale de Juros; 26 - Monte Maninho/Mamoa de Chã do Carvalho 3; 27 - Monumento 1 do Rapadouro; 28 - Monumento 3 do Rapadouro; 29 - Orca das Seixas/Orca do Padrão; 30 - Orca de Forles; 31 - Orca de Pendilhe; 32 - Orca do Porto Lamoso ou dos Moinhos de Rua; 33 - Mamoa de Outeiro de Ante 2; 35 - Penedo do Com; 38 - Alto da Portela do Pau 3; 43 - Mamoa 2 do Leandro; 44 - Mamoa 5 do Leandro; 46 - Dólmen da Bouça do Rapido 3; 47 - Mamoa do Alto da Maronda; 52 - Mamoa do Carreiro da Quinta.
 - Non Funerary
 - 2 - Castanheiro do Vento; 3 - Castelo 1; 5 - Castelo Velho de Freixo de Numão; 10 - Crasto de Palheiros; 15 - Fraga da Pena; 34 - Pastoria; 36 - Tambores (Castelo Velho III); 37 - Tapado da Caldeira; 39 - Bouça da Cova da Moura (ritual precinct); 40 - Recinto da Forca; 49 - Chã das Lameiras; 53 - Regadas; 54 - Pedreira
 - Non Characterizable
 - 4 - Castelo de Fraião; 41 - Monte da Penha; 42 - Estela; 45 - Leandro 3.
 - Other
 - 48 - Buraco da Pala; 50 - Lorga de Dine; 51 - Castelo de Aguiar; 55 - São Lourenço.

Fig. 12. Biogeographical distribution of Bell Beaker pottery in Northern Portugal (after COSTA *et al.*, 1998; SANCHES, BARBOSA, 2018)