

BETWEEN THE ATLANTIC AND THE MEDITERRANEAN: THE FRAGA DOS CORVOS MOUNTAIN SITE (MACEDO DE CAVALEIROS, BRAGANÇA) IN THE LATE BRONZE AGE/EARLY IRON AGE TRANSITION*

JOÃO CARLOS SENNA-MARTÍNEZ†**

ELSA LUÍS***

CARLOS MENDES****

Abstract: *Fraga dos Corvos' excavations (2011-2017) have provided important information concerning its Late Bronze Age/Early Iron Age (LBA/EIA) occupation. Both stratigraphic and artefact data show the existence in Eastern Trás-os-Montes of a large and complex «settlement» during this period, which monumentality demands understanding and explanation together with the site cultural exchange links with the Northern Meseta and the Iberian Mediterranean South. An artefactual set, either of orientalizing origin or showing a cultural influence from such southern areas, was recovered. In between bronzes (fibulae, needles, spatulas of cosmetics, etc.), iron implements, and dark blue vitreous beads, the recovered artefactual set surpasses fifty items, many of them recovered from stratigraphic contexts dating after the construction of the talud wall that has monumentalized the site. We will discuss this data and its inter-regional relations within Iberia, namely the how and why of such an early inland and Northern cultural presence of Mediterranean influences.*

Keywords: *Eastern Trás-os-Montes; Late Bronze Age/Early Iron Age; Settlement monumentality; Northern Meseta influences; Mediterranean influences.*

Resumo: *As escavações da Fraga dos Corvos (2011-2017) forneceram abundante informação sobre a sua ocupação durante o final da Idade do Bronze e transição para a Idade do Ferro. Os dados estratigráficos e artefactuais recolhidos mostram a existência, em Trás-os-Montes oriental e durante este período histórico, de um «povoado» grande e complexo cuja monumentalidade exige compreensão e explicação, juntamente com a descoberta de intercâmbios culturais com a Meseta Norte e o Sul Mediterrâneo peninsulares, nomeadamente de um conjunto artefactual de origem e/ou influência orientalizante. Entre bronzes (fibulas, agulhas, espátulas de cosméticos, etc.), ferros (faquinhos) e contas vítreas, o conjunto recuperado ultrapassa já as cinco dezenas de artefactos, muitos destes recuperados em contextos posteriores à construção da muralha em talude que monumentalizou o sítio. Discutimos estes dados e as suas relações inter-regionais peninsulares, nomeadamente o como e o porquê de presenças culturais mesetanas e mediterrâneas neste espaço do Norte Interior de Portugal.*

Palavras-chave: *Trás-os-Montes Oriental; Bronze Final/Ferro Inicial; Monumentalidade; Influências mesetanas; Influências mediterrâneas.*

* If the copyright for tables, graphs and other images is not indicated, it belongs to the authors of this text.

** Centre for Archaeology (Uniarq) of Lisbon University. Cidade Universitária, Campo Grande. 1600-214 Lisboa — Portugal.

*** Centre for Archaeology (Uniarq) of Lisbon University. Cidade Universitária, Campo Grande. 1600-214 Lisboa, Portugal. Email: elsavluis@gmail.com.

**** Collaborator of the Centre for Archaeology (Uniarq) of Lisbon University. President of Associação Terras Quentes. Rua D. Maria Mascarenhas, Escola do Trinta, 5340-326, Macedo de Cavaleiros.

1. INTRODUCTION

Late Bronze Age (LBA) as well as the beginnings, or even the existence, of the Early Iron Age (EIA) are still very badly known periods in Eastern Trás-os-Montes, that's why the results of the fieldwork we developed in the mountain site of Fraga dos Corvos constitute a modern first contribution for an approach to the questions raised about this pre-classical formative period in the region.

The reality the Romans found in this interior area¹ is similar to other areas of Asturian ethnicity as found, for example, in the site of de Pinhovel, also in Macedo de Cavaleiros basin, and that it could be on the Southern area of the *Zoelae* territory, eventually controlling it².

As we understand the available evidence, we think that the abandonment of Fraga dos Corvos *habitat* site in a late moment of the LBA — or even within what some colleagues would call the EIA — could be correlated with the first settlement of Terronha de Pinhovel.

In a *longue durée* perspective, as happened with all the ethnogenesis processes that are going on during the Late Iron Age (LIA) in Iberia³, we could have in our study area a similar process related in this instance to the *Zoelae*.

2. FRAGA DOS CORVOS LOCATION AND ENVIRONMENT

The Fraga dos Corvos Bronze Age *habitat* site occupies a rocky outcrop (870,856 m high) on the northwest slope of Serra de Bornes, parish of Vilar do Monte, municipality of Macedo de Cavaleiros, district of Bragança (Fig. 1).

The site commands an imposing visual dominion over the Macedo de Cavaleiros basin, namely on the areas with fertile soils as well as the most important traditional routes, into and out of this basin, namely the mountain passes where in the middle of last century were found several metal hoards of halberd blades (Abreiro, Carrapatas and Vale Benfeito⁴) belonging to the Early Bronze Age (EBA).

Its substrate consists mainly of schist metamorphic rocks, with some quartz and greywacke veins, known for the acidity they provide to the soil, thus reducing the possibility of preservation of organic matter in the archaeological record.

In the region there are some outcrops of talcoxist, a raw material used in the archaeological site for the elaboration of exceptional artefacts. The region also has some ore deposits that may have supplied the site small scale metallurgy. Tin placers and secondary gossans with copper carbonates, are available within walking distance of less than

¹ LEMOS, 1993.

² BARRANHÃO, TERESO, 2006.

³ RUIZ ZAPATERO, ÁLVAREZ-SANCHÍS, 2002.

⁴ BÁRTHOLO, 1959.

a day from the site⁵. Copper carbonates, due to their bright greenish tonality, probably were easily recognizable to the prehistoric communities.

The region also has abundant water resources in a complex network of tributaries of the rivers Sabor and Azibo and several streams. Closely to the site, two small streams, respectively the Vale de Nogueira and Ribeirinha, border Fraga dos Corvos rocky outcrop from the west and east, providing the two closest sources of water to the site.

The original vegetation cover in the area would have been a temperate oak forest — mainly with Pyrenean oak (*Quercus pyrenaica wild*) and Holm oak (*Quercus ilex L. ssp. Rotundifolia Lam.*) — but also, as shown in a paleoenvironmental approach made from recovered coal in several archaeological sites, a mix of Atlantic and Mediterranean taxa⁶ — such as wild pine (*Pinus pinaster*), cork oak (*Quercus suber*), juniper (*Juniperus communis*) and arbutus (*Arbutus unedo*). Bordering the watercourses ash (*Fraxinus sp.*), alder (*Alnus sp.*), willow (*Salix babylonica*) and hazelnut (*Corylus avelana*) would be found.

3. SOME REMARKS ON THE FIELDWORK HISTORY AND DATA OBTAINED AT THE SITE

First recognized as a Bronze Age site in 2003⁷, when a land cleaning exposed archaeological remains, and following a first excavation campaign in order to evaluate the archaeological potential of the site, Fraga dos Corvos was the object of a total fifteen annual excavation campaigns⁸ (2003-2017).

The first area opened (Sector A) is located on the top north of the hill where we found structural and artefactual evidence of a Middle Bronze Age (MBA) occupation in two separate sub-areas (trenches 2 and 3). This sector provided important data regarding production of the first binary bronzes (Cu, Sn) from North-western Iberia⁹ in a domestic setting (Fig. 2) in a settlement with small sub-circular and ellipsoidal huts¹⁰. The pottery industry shows a clear relationship with the «Protogocotas» culture of central Iberia¹¹.

Parallel to the intervention in Sector A, we excavated Rock-Shelter 2 in the western versant of the site. It provided the first hints for a local Mediterranean influence in the LBA/EIA¹².

The unmistakably Mediterranean character of most of the metallic artefacts recovered hints at a surprisingly old connexion of Eastern Trás-os-Montes to the Phoenician presence in more southern areas of Iberia. The archaeometallurgical study of the set

⁵ GEIRINHAS *et al.*, 2011.

⁶ FIGUEIRAL, SANCHES, 1998-1999.

⁷ SENNA-MARTÍNEZ, VENTURA, CARVALHO, 2004.

⁸ LUÍS, SENNA-MARTÍNEZ, 2018.

⁹ SENNA-MARTÍNEZ *et al.*, 2011b.

¹⁰ SENNA-MARTÍNEZ *et al.*, 2010.

¹¹ ABARQUERO MORAS, 2005; LUÍS, 2010.

¹² FIGUEIREDO *et al.*, 2009.

points towards a local production copying Mediterranean models¹³. The cultural coherence of the set (Fig. 3) and the close proximity of their individual finding spots let us presume that they could be, in concordance to the results of the pottery analysis¹⁴, part of a funerary deposit from the Late Bronze Age.

Finally, a Late Bronze Age/First Iron Age (LBA/EIA) occupation of the site saw the construction and use of a «talud wall»¹⁵ around the North, East and South sides of the hilltop, surrounding an area of more than 1,5 ha. To this late occupation phase belongs the stratigraphic sequence excavated in Sector M on the southern platform of the hilltop (Fig. 1).

In 2008, the partial cleaning of the «talud wall» stone dressing in the southern entrance to the settlement added evidence pointing to its characterization as such and suggested a probable LBA/EIA construction through the finding at its base of a fibula of possible Acebuchal type¹⁶ (Fig. 4).

The evidence for metallurgic activity at this archaeological site during the MBA has been widely studied and published as a result of the development of two transdisciplinary research projects of archaeometallurgy¹⁷, financed by the Portuguese Science Foundation¹⁸.

From the two rock shelters situated close to and below Sector A, on the north-western side of the hilltop, only rock shelter 2 had archaeological contexts preserved.

With 6, 30 m of depth, 3, 60 m of width on the entrance and 3, 10 m of average height, rock-shelter 2 is a deep cavity.

Partially parallel to the intervention in Sector A, the excavation of rock-shelter 2 during 2004-2006, showed a space that was probably used for funerary purposes during a Late Bronze Age/Early Iron Age (LBA/EIA) occupation¹⁹.

A very complex stratigraphy was revealed by excavation, with a lot of disturbances, due to animal activity and also to unauthorized excavations²⁰. Nevertheless, we were able to recover a coherent and important set of archaeological materials, namely pottery and metals, from which the pottery analysis allows a clear attribution of the occupation to the LBA/EIA²¹.

¹³ FIGUEIREDO *et al.*, 2009; GOMES *et al.*, 2013; SENNA-MARTÍNEZ *et al.*, 2011b.

¹⁴ LUÍS, 2016.

¹⁵ A «talud wall» is a very primitive form of terrain consolidation in order to monumentalize and emphasize platforms; it differs from a «normal» wall because it consists of an undressed stone crude revetment of an abrupt earth escarpment previously rectified. In North-Western Portugal, this type of construction seems to appear by the end of the Late Bronze Age (BETTENCOURT, 2000).

¹⁶ SENNA-MARTÍNEZ, LUÍS, 2009.

¹⁷ SENNA-MARTÍNEZ *et al.*, 2010, 2011b; ARAÚJO *et al.*, 2013.

¹⁸ Metallurgy and Society in the Late Bronze Age of Centre Portugal — METABRONZE (POCTI/HAR/58678/2004), and Early Metallurgy of the Portuguese Territory — EARLYMETAL (PTDC/HIS-ARQ/110442/2008).

¹⁹ FIGUEIREDO *et al.*, 2009; SENNA-MARTÍNEZ *et al.*, 2012; REPRESAS, 2013.

²⁰ SENNA-MARTÍNEZ, VENTURA, CARVALHO, 2004, 2005, 2007; SENNA-MARTÍNEZ *et al.*, 2006.

²¹ LUÍS, 2016.

The metal artefacts we found, even coming from disturbed levels, compose one remarkable set (Fig. 3): a double resort fibula (181)²², a flat pendant (252), decorated on both sides with dotted lines which form star-shaped motifs, a cosmetic spatula (361), two needles (188, 457), three bar-shaped fragments, a possible ring fragment, two possible bracelet fragments, a fragment of a Tartessian belt hook (473), a metal plate and a smelting nodule²³.

About 2010, several data hinted at a later occupation of Fraga dos Corvos during the LBA or even reaching the²⁴ EIA, namely: (1) The already mentioned collection of metal artefacts of Mediterranean affiliation recovered from Fraga dos Corvos Rock-Shelter 2; (2) five metal artefacts — a fibula spring and bow of Bencarrón type; two trumpet pendant terminals and both a knife and an axe blades in iron — and six glass beads from secondary stratigraphic contexts from Sector A; (3) the above mentioned needle and spring of a fibula of possible Acebuchal type from under the «talud wall» southern extremity.

That's why, in 2011, we decided to proceed with the excavation of a new sector atop the Southern platform of the site, adjacent to the «talud wall»²⁵ (Sector M).

The opened area of Sector M comprises 125 m², excavated during six field seasons (2011/2013-2015/2017).

Of the total opened area, 66 m² correspond to the occupied space inside the «talud wall» and the rest to the exposed top and front of the talud, which goes around the south and east of the platform, thus monumentalising the west side of the southern entrance to the LBA/EIA settlement.

This platform seems to have been artificially built on a gentle slope, by superimposing layers of dry undressed stone in an area of more than 200 m², from about 10 m inland towards a front of more than 6 m high (Fig. 5).

Inside the talud our expectations were fulfilled by the confirmation that there was indeed a long and complex preserved stratigraphy. Up to the 2017 campaign, all the excavated occupation levels are posterior to the construction of the talud and the platform.

Two main stratigraphical and occupational phases were recognized upon the platform: (1) a first one directly built over its completion; (2) a second one after the area was leveled and covered with rocky, compact and hard gravel.

The evidence recovered from the first phase shows the existence of habitational structures adjacent to the top of the talud. These were superimposed by a dark, organic

²² This exemplar is made in a very fine binary bronze wire, with parallels with more southern exemplars like the LBA one from Coroa do Frade, in Alentejo (ARNAUD, 1979). The carbon-14 dating of the geographically closer Baiões/Santa Luzia exemplar from Outeiro dos Castelos de Beijós (SENNA-MARTÍNEZ, 2000: 47 – Sac-1524 = 2610±60 BP, 814-777 cal BC) opens up the possibility of a similar 8th century chronology for the Fraga dos Corvos exemplars.

²³ FIGUEIREDO *et al.*, 2009; SENNA-MARTÍNEZ *et al.*, 2012; GOMES *et al.*, 2013.

²⁴ REPRESAS, 2013.

²⁵ LUÍS, REPRESAS, SENNA-MARTÍNEZ, 2012.

refuse layer with pottery fragments, grinding stones, metal artefacts, and abundant macrofaunal bones²⁶, which was sealed by the gravel layer.

The second phase levels, preserved further away from the talud top, show post-holes, fire-pits and refuse-pits (with plenty of pottery fragments, grinding stones and metal artefacts) that also suggests a domestic area even if its precise nature remains to be clarified.

With two exceptions the pottery vessels are all hand-made. Storage and cooking pots with everted rims and flat bottoms predominate, with a significant presence of extremely everted flattened rims (Fig. 6 – top; Fig. 7) that point to later regionally known Iron Age wheel made types.

Table ware is represented, either by small sub-spherical cups and bowls (Fig. 8), or by small fine ware carinated cups with burnish finish. A few exemplars of such vessels are comb-incised decorated (Fig. 6 — bottom; Fig. 9), and have a red ochre slip finish, with affinities to the so called «Early Soto World» of the Spanish Northern Meseta which Álvarez-Sanchis (1999) situates between the early 7th and the beginning of the 6th centuries BC²⁷. These comb decorated sherds — in a total of nine exemplars coming from the same number of different vessels (Fig. 9) — occur distributed through the levels of the three stratigraphic phases excavated atop the platform of Sector M.

Ten pottery spindle-whorls were found in these LBA/EIA occupations layers. For similar occupation areas opened, there is an increase for the double in the number of spindle-whorls found in the LBA/EIA in relation to the MBA ones²⁸. Like the MBA ones, they tend to be small, between 2,2 cm and 3,4 cm in diameter, and either of spherical, biconical or cylinder shape.

The big surprise of the excavation of both phases of Sector M and the similarly dated levels of Rock-Shelter 2 and Sector A comes from the high number of artefacts with Mediterranean affinities they provided, first of all Sector M.

The set of metals attributed to the LBA/EIA is particularly impressive and distributed through the three identified stratigraphic phases: (1) 15 bronze *fibulae* (Fig. 10) — mostly fragmented, and of Bencarrón²⁹ and Acebuchal³⁰ types, two of double resort type and one of early Annular Hispanic type; (2) three bronze cosmetic spatula; (3) eleven bronze needles (Fig. 11); (4) a pair of bronze tweezers; (5) three iron knives (Fig. 12 — second and third top rows); (6) a small iron axe or adze blade (Fig. 12 — top row);

²⁶ CARVALHO *et al.*, in press.

²⁷ ÁLVAREZ-SANCHIS, 1999.

²⁸ LUÍS, 2014.

²⁹ Bencarrón type *fibulae* are usually situated between the middle/late 8th century BC and the middle 7th century BC (PONTE, VILAÇA, OSÓRIO, 2017: 140).

³⁰ To this other fibula type is usually attributed a time frame between the late 8th and the 6th centuries BC (PONTE, 2006: 142).

(7) one iron awl (Fig. 12 — fifth row from the top); (8) as well as several fragments of bronze plate riveted vessels. The already analysed bronzes show a probable local manufacture³¹.

The majority of these metal artefacts points towards affinities with Mediterranean types of Phoenician introduction, and the iron knives, axe/adze blade and awl (Fig. 12), together with thirteen blue glass beads (Fig. 13), must clearly be imports with the same origin. Thus, judging from the recovered *fibulae* types, the probable time frame for the building and occupation of Sector M platform is between the late 8th and early 6th centuries BC.

4. EVOLUTION OF INTERREGIONAL CONNECTIONS AND LOCAL DEVELOPMENT IN FRAGA DOS CORVOS SETTLEMENT

The interregional relationships of Fraga dos Corvos settlement were quite apparent from the first campaigns onwards. While MBA pottery shows a clear connection to the Protocogotas settlements of Salamanca area³², the early binary bronze producing and working has probable connections' northwards, through Galicia and Asturias as far as France's territory³³. Quite apparent at the artefactual level, these relations probably implied other ties within regional populations thus connected and their perception of the world³⁴.

The symbolic meaning associated to the regional pottery productions, namely decoration ways, could then be transmitted alongside vessel formal types and their utilization, this is clearly a research question to be pursued and that could go either way³⁵.

While it is not as widely disseminated in the excavated areas as the Protocogotas one was for the MBA, the number of identified specimens being much smaller, the «Early Soto» comb decorated pottery (Fig. 14) we find in the settlement LBA/EIA occupation levels points in the same direction.

During the MBA, tin production in Macedo basin area would not constitute a prime raw material for more southerly areas, still mainly processing arsenical copper. But in the LBA the generalization of binary bronze production all over Iberia would have made of tin a very sought of resource³⁶.

However, production of metal through the use of open-vessel reduction of copper oxides and/or carbonate ores, mixed with cassiterite when to produce bronze³⁷, was the rule during Iberia Bronze Age, and consequently the scale of metallurgical operations were always very small and simple³⁸.

³¹ SENNA-MARTÍNEZ *et al.*, 2012: 259-260.

³² LUÍS, 2010, 2013, 2016.

³³ SENNA-MARTÍNEZ, 2007; SENNA-MARTÍNEZ *et al.*, 2013.

³⁴ LUÍS, SENNA-MARTÍNEZ, 2018.

³⁵ SENNA-MARTÍNEZ, LUÍS, in press.

³⁶ SENNA-MARTÍNEZ, LUÍS, in press.

³⁷ ROVIRA LLORENS, AMBERT, 2002.

³⁸ ROVIRA LLORENS, MONTERO RUIZ, 2013: 232-234.

Also this state of affairs militates in favour of circulation, probably in limited quantities, of cassiterite itself, coming predominantly from alluvial placers (distributed between the Portuguese Beiras and Iberian Northwest), and thus explaining the well-known lack of tin ingots in Iberian Bronze Age.

Pre-tenth century BC presence in Portuguese Beiras LBA contexts of bronze weights, and iron blades of Mediterranean origin, together with local manufacture of fibulae that copy pre-Phoenician Mediterranean models³⁹ is a possible indicator of cassiterite (as well as gold) circulation.

One of us already argued⁴⁰ that it were technical and consequently «scale» differences in metal production between East and West of the Mediterranean Basin that were largely responsible for some of the difficulties that we think were felt by Phoenicians and Punic in accessing this important ore resource within Atlantic Iberia.

We called the principal socio-economic transformation of the indigenous societies contacted by the Phoenicians as an «urban revolution» — recuperating the Childean concept (Childe, 1950) — marking the beginning of a new historical period that we call the Iron Age⁴¹.

In the Peninsular Northwest the kind of archaeographic ruptures associated with the beginning of the EIA can only be verified with the advent of what we normally designated as the «Late Iron Age (LIA)» and date from the middle 5th century BC. This is why some authors put the beginning of the Iron Age there⁴², denying the regional existence of an EIA, that could be correlated to what can be found in the southern half of Iberia, an opinion that we tend to share.

However, it is also Bettencourt who proposes that, at least for the Minho area, if not for the whole of the Peninsular Northwest, we should consider, in these regional spaces from the end of the 7th century BC and until the beginning of the LIA between the 5th and 4th centuries BC, a «Bronze/Iron transitional period»⁴³, also assuming the possibility of asymmetries and regional nuances within this wide area.

Thus increasing orientalisising influence in the South and Centre of Atlantic Iberia — during the 8th and 7th centuries BC — together with the establishment of the ports

³⁹ SENNA-MARTÍNEZ *et al.*, 2011a.

⁴⁰ SENNA-MARTÍNEZ, 2013a.

⁴¹ SENNA-MARTÍNEZ, 2013c: 181-182. The «urban revolution» concept implies the rupture of the «domestic forms of production» with poor goods circulation, mainly «prestige items», dominant in the indigenous LBA worlds. It sees the beginning of forms of «workshop centralized production» for trade, reason why the statistical predominance of wheel made pottery has constituted the most immediate archaeographic indicator for such transformation. The emergence of urban spaces being revealed through the presence of separate areas for specialized artefact production — metallurgy, wheel-made pottery, etc. — commerce, temples and elite residences, while the close-by necropolis shows evidence of intensified social stratification (CHILDE, 1950).

⁴² MARTINS, 1990; BETTENCOURT, 2005.

⁴³ BETTENCOURT, 2005: 31.

of trade of Santarém and Santa Olaia⁴⁴ and new movement through the «stele route», North of the Tagus river, if not marking the beginning of the EIA, can nevertheless be probably connected to an effort to intensify contacts with the tin producing areas of the Portuguese Beiras.

Such an attempt to intensify contacts and obtain tin seems not to have been very successful, given the scarcity of material elements of orientalisising origin in the final stages of the Portuguese Beiras LBA⁴⁵ (c. 9th to 7th centuries BC).

We will have to wait for a moment that corresponds, probably, to the second half of the 7th century, beginning of the 6th century BC, to find, alongside the «stele route» a more evident relationship with the Southern Mediterranean influenced environments.

Coming back to Fraga dos Corvos, judging by the number of metal artefacts and metallurgical remains found up to now, the number of metal artefacts produced at the site probably intensified between the MBA and LBA/EIA. If we add to this metal production increase the Mediterranean typology of most of the products, we see the probable importance of the two-way north-south-north connection that we call the «stelae route»⁴⁶.

This old route linking Eastern Trás-os-Montes to North-Eastern Alentejo, and that the modern IP2 closely follows, was marked since the MBA by the succession of statues-menhir and warrior stelae erected alongside it⁴⁷. In the LBA, the distribution of the «panoply» variant of the warrior stelae⁴⁸, concentrated in Beira Interior and Spanish Estremadura, is now proved to extend northwards till Southern Galicia (Castrelo do Val, Ourense)⁴⁹.

Besides the stelae, another item occurs that show that the route was not only a straight north-south-north connection but also provided more lateral eastern links to the south of the Spanish Northern Meseta (Salamanca Province), materialised in the MBA through the occurrence — alongside the Portuguese Beiras side — of pottery of Protocogotas type, and in the LBA by Cogotas 1 and Early Soto exemplars.

The cultural links regarding pottery of Protocogotas (MBA) and Early Soto (LBA/EIA) types found at Fraga dos Corvos probably went through this route, connecting the interior North of Portugal and the Western areas of the Spanish province of Salamanca⁵⁰.

The links with the Early Soto world (7th-6th centuries BC) make it quite possible that either some of the bronze artefacts of Mediterranean typology travelled north alongside this route, as the glass beads and early iron artefacts surely did (Figs. 12, 13),

⁴⁴ ARRUDA, 1999-2000.

⁴⁵ SENNA-MARTÍNEZ, 2013a.

⁴⁶ SENNA-MARTÍNEZ, 2013a.

⁴⁷ SENNA-MARTÍNEZ, 2013a: 10-11; SENNA-MARTÍNEZ, 2013b: 18-19, Figs. 6 and 7. GALÁN DOMINGO, 1994: 47.

⁴⁸ GALÁN DOMINGO, 1994: 47.

⁴⁹ PONTEVEDRA, 2012. Disponible en <http://ccaa.elpais.com/ccaa/2012/02/03/galicia/1328301594_419900.html>. [Consult. 20 jun. 2020].

⁵⁰ LUÍS, SENNA-MARTÍNEZ, 2018.

and then were reproduced locally, or it was their concept that was transmitted accompanying beads and early irons. The later hypothesis is more demanding of the capabilities and achievements of the local artisans.

The discover in the Alto Côa region of village-sites, controlling the mountain passes that connect Beira Alta to Beira Interior, with pottery of Early Soto type⁵¹, together with the recovering of a fibula of Acebuchal type, in the Sabugal Velho site, as well as two fibulae of Bencarrón type from Vila do Touro⁵² (accompanied by another of «Alcores» type) and Alegrios⁵³, goes well with the findings, in the Spanish side of our «stelae route», coming from the settlement of Picón de la Mora⁵⁴ (Salamanca). These findings include Early Soto type pottery, Acebuchal and double spring type fibulae, and a bronze needle identical to some of Fraga dos Corvos examples⁵⁵. All this, points towards an increase in importance of the stele route, allowing the development of the corresponding contacts.

However, this continuity of southern-rooted cultural connections that seems to cover, along the northern part of the stele route, the Late Bronze Age/Iron Age transition does not appear to have changed the status quo prevailing during the LBA: low intensity economic contacts, probably following the networks of solidarity between elites and focusing mainly on «prestige items and fashions».

Monumentalizing structures and prestige objects notwithstanding, all the existing evidence hints towards a continuity model, in Fraga dos Corvos LBA/EIA settlement and its predecessor MBA one. The lacking of other sites excavated and a more comprehensive panorama of the regional settlement system precludes us of being more affirmative.

During the last half of the first millennium BC, we will witness the emergence of a site — central to the Macedo de Cavaleiros basin — that has the geographical, dimensional and organizational characteristics of a local power centre⁵⁶ (Terronha de Pinhovelo). This situation allows the hypothesis that, if a Bronze Age Fraga do Corvos was a more conservative first regional essay towards such a role, Terronha the Pinhovelo could be its replacement going through the LIA into a Roman occupation.

Terronha de Pinhovelo settlement begins as a more lowland site, but still central to Macedo basin. In its beginning — probably encompassing de EIA/LIA transition (c. 450-350 BC) — the site is monumentalised by a two talud walls (Figs. 15, 16), latter substituted by actual fortification walls.

Without further excavations at Fraga dos Corvos, Terronha de Pinhovelo and new sites dating to the Bronze and Iron Ages of Eastern Trás-os-Montes, it is impossible to go much further and substantiate, or no, the hypothesis we propose.

⁵¹ OSÓRIO, 2005, 2009.

⁵² PONTE, VILAÇA, OSÓRIO, 2017.

⁵³ VILAÇA, 1995: 341, 480, Figs. 6, 8.

⁵⁴ MARTÍN VALLS, 1971.

⁵⁵ ÁLVAREZ-SANCHIS, 1999: 72, Fig.18; SENNA-MARTÍNEZ *et al.*, 2012.

⁵⁶ BARRANHÃO, TERESO, 2006.

This study constitutes a preliminary synthesis on the available data on Fraga dos Corvos.

This being a site that we think is one of the most important ones to elucidate the beginning of the regional pre-classic ethnogenesis processes.

BIBLIOGRAPHY

- ABARQUERO MORAS, Francisco Javier (2005). *Cogotas I. La difusión de un tipo cerámico durante la Edad del Bronce*. Castilla Y León: Junta de Castilla y León, Consejería de Cultura y Turismo. (Monografías; 4).
- ÁLVAREZ-SANCHIS, Jesús (1999). *Los Vettones*. Madrid: Real Academia de la Historia.
- ARAÚJO, Maria de Fátima et al. (2013). *Investigação em Arqueometalurgia em Portugal resultados recentes e perspectivas futuras de uma equipa multidisciplinar*. «Al-Madan». S. II. 17:2, 69-78.
- ARNAUD, José Morais (1979). *Coroa do Frade: fortificação do Bronze Final dos Arredores de Évora. Escavações de 1971-72*. «Madrider Mitteilungen». 20, 56-100.
- ARRUDA, Ana Margarida (1999-2000). *Los fenicios en Portugal: Fenicios y mundo indígena en el centro y sur de Portugal (siglos VIII-VI a.C)*. Barcelona: Universidad Pompeu Fabra de Barcelona/Carrera Edició, S.L. (Cuadernos de Arqueología Mediterránea; 5-6).
- BARRANHÃO, Helena; TERESO, João (2006). *A Terronha de Pinhovelo na ciuitas zoelorum: primeira síntese*. «Cadernos Terras Quentes». 3, 7-26.
- BÁRTHOLO, Maria de Lurdes (1959). *Alabardas da época do bronze no Museu Regional de Bragança*. In *Actas e Memórias do I Congresso Nacional de Arqueologia, Vol. I*. Lisboa: Instituto de Alta Cultura, pp. 431-439.
- BETTENCOURT, Ana (2000). *O Povoado de São Julião, Vila Verde, Norte de Portugal, nos finais da Idade do Bronze e na Transição para a Idade do Ferro*. Braga: Unidade de Arqueologia da Universidade do Minho. (Cadernos de Arqueologia. Monografias; 10).
- BETTENCOURT, Ana (2005). *O que aconteceu às populações do Bronze Final do Noroeste de Portugal, no segundo quartel do I milénio AC, e quando começou, afinal, a Idade do Ferro?* In CARVALHO, Teresa Pires, coord. *Castro. Um Lugar para Habitar*. Penafiel: Museu Municipal, pp. 25-40. (Cadernos do Museu; 11).
- CARVALHO, M. et al. (in press). *Late Bronze Age faunal remains from Fraga dos Corvos (Macedo de Cavaleiros, Eastern Trás-os-Montes, Portugal)*. Faro: Proceedings of the Iberian Zooarchaeology Meeting 2017.
- CHILDE, V. Gordon (1950). *The urban revolution*. «Town Planning Review». 21, 3-17.
- FIGUEIRAL, Isabel; SANCHES, Maria de Jesus (1998-1999). *A contribuição da antracologia no estudo dos recursos florestais de Trás-os-Montes e Alto Douro durante a Pré-história Recente*. «Portugalia». Nova Série». XIX-XX, 71-95.
- FIGUEIREDO, Elin et al. (2009). *Orientalizing Artefacts from Fraga dos Corvos Rock Shelter in North Portugal*. «Materials and Manufacturing Processes». 24, 949-954.
- GALÁN DOMINGO, Eduardo (1994). *Estelas, paisaje y territorio en el Bronce Final del Suroeste de la Península Ibérica*. Madrid: Editorial Complutense. (Complutum Extra; 3).
- GEIRINHAS, Filipa et al. (2011). *Copper isotopes on artifacts from Fraga dos Corvos First Bronze Age habitat site and nearby Cu occurrences: an approach on metal provenance*. In MATA-PERELLÓ, Josep M. et al., coord. *Actas del Quinto Congreso Internacional sobre minería y metalurgia Históricas en el Suroeste Europeo*. Pallars Jussà: SeDPGYM, pp. 177-184.
- GOMES, Susana Sousa et al. (2013). *Isotopic Lead Characterization of Archaeological Bronzes from Fraga dos Corvos (N Portugal)*. «International Journal of Conservation Science». 4: special issue, 661-672.

- LEMOS, Francisco Sande (1993). *O Povoamento Romano de Trás-os-Montes Oriental*. Braga: Universidade do Minho. PhD Thesis.
- LUÍS, Elsa (2010). *A Primeira Idade do Bronze no Noroeste: O conjunto cerâmico da Sondagem 2 do Sítio da Fraga dos Corvos (Macedo de Cavaleiros)*. Lisboa: Universidade de Lisboa. Master's Dissertation.
- LUÍS, Elsa (2013). *Cerâmica do 3.º milénio a. C. em Macedo de Cavaleiros — Um caso de estudo*. «Cadernos Terras Quentes». 10, 89-99.
- LUÍS, Elsa (2014). *Nunca a Boa Fiandeira Ficou Sem Camisa. Os cossoiros da Fraga dos Corvos (Macedo de Cavaleiros)*. «Al-madan online». 19:1, 105-112.
- LUÍS, Elsa (2016). *Mudança e transformação. Calcolítico, Bronze Inicial e Bronze Médio em Trás-os-Montes Oriental: reflexões a partir dos recipientes cerâmicos*. Lisboa: Universidade de Lisboa. PhD Thesis.
- LUÍS, Elsa; REPRESAS, Jessica; SENNA-MARTÍNEZ, João Carlos (2012). *A Fraga dos Corvos (Vilar do Monte, Macedo de Cavaleiros)*. *A Campanha 9 (2011). Primeira análise comparativa dos Sectores A e M – I Idade do Bronze/Bronze Final?* «Cadernos Terras Quentes». 9, 15-33.
- LUÍS, Elsa; SENNA-MARTÍNEZ, João Carlos (2018). *Bronze Age at a Crossroads: The Fraga dos Corvos Mountain Settlement in Eastern Trás-os-Montes, Middle and Late Bronze Age*. In SASTRE BLANCO, Jose Carlos; RODRÍGUEZ-MONTECUBIO, Óscar, eds. *Archaeology in the River Duero Valley*. Newcastle upon Tyne: Cambridge Scholars Publishing, pp. 85-101.
- MARTÍN VALLS, Ricardo (1971). *El castro del Picón de la Mora (Salamanca)*. «Boletín del Seminario de Estudios de Arte y Arqueología (BSAA)». 37, 125-144.
- OSÓRIO, Marcos (2005). *Contributos para o estudo do I milénio a. C. no Alto Côa*. In PERESTRELO, Manuel Sabino, coord. *Lusitanos e Romanos no Nordeste da Lusitânia [2.ª Jornadas do Património da Beira Interior]*. Guarda: Centro de Estudos Ibéricos, pp. 35-65.
- OSÓRIO, Marcos (2009). *A Idade do Ferro no Alto Côa: os dados e as problemáticas*. In SANABRIA MARCOS, Primitivo Javier, ed. *Lusitanos y vettones. Los pueblos prerromanos en la actual demarcación Beira Baixa — Alto Alentejo — Cáceres*. Cáceres: Museo de Cáceres, pp. 95-115. (Memorias; 9).
- PONTE, Salette da (2006). *Corpus Signorum das fíbulas proto-históricas e romanas de Portugal*. Coimbra: Caleidoscópio.
- PONTE, Salette da; VILAÇA, Raquel; OSÓRIO, Marcos (2017). *Dois fíbulas da I Idade do Ferro de Vila do Touro (Sabugal, Guarda)*. In CRUZ, Domingos J., coord. *Mesa-Redonda «A Pré-história e a Proto-história no Centro de Portugal: avaliação e perspectivas de futuro»*, [Estudos Pré-históricos XVII, 2012], Viseu: Centro de Estudos Pré-históricos da Beira Alta, pp. 135-145.
- PONTEVEDRA, Silvia (2012). *Castro do Val se resiste a entregar a Patrimonio el menhir que halló un vecino*. «El País». February 4, 2012.
- REPRESAS, Jessica (2013). *Existe uma «I Idade do Ferro» em Trás-os-Montes Oriental? O exemplo da Fraga dos Corvos (Vilar do Monte, Macedo de Cavaleiros)*. «Cadernos Terras Quentes». 10, 123-128.
- ROVIRA LLORENS, Salvador; AMBERT, Paul (2002). *Les céramiques à réduire le minerais de cuivre: une technique métallurgique utilisée en Ibérie, son extension en France méridionale*. «Bulletin de la Société Préhistorique Française». 99, 105-126.
- ROVIRA LLORENS, Salvador; MONTERO RUIZ, Ignacio (2013). *Iberia: Technological Development of Prehistoric Metallurgy*. In BURMEISTER, Stefan et al., eds. *Metal Matters; Innovative Technologies and Social Change in Prehistory and Antiquity*. Leidorf: Rahden/Westf.
- RUIZ ZAPATERO, Gonzalo; ÁLVAREZ SANCHÍS, Jesús (2002). *Etnicidad y arqueología: tras la identidad de los vettones*. «SPAL». 11, 253-277.
- SENNA-MARTÍNEZ, João Carlos (2000). *O problema dos primeiros ferros peninsulares em contextos do Bronze Final da Orla Atlântica: os dados do «Outeiro dos Castelos de Beijós» (Carregal do Sal)*. «Trabalhos de Arqueologia da EAM». 6, 43-60.

- SENNA-MARTÍNEZ, João Carlos (2007). *Aspectos e Problemas das Origens e Desenvolvimento da Metalurgia do Bronze na Fachada Atlântica Peninsular*. «Estudos Arqueológicos de Oeiras». 15, 119-134.
- SENNA-MARTÍNEZ, João Carlos (2013a). *Um rio na(s) rota(s) do estanho: O Tejo entre a Idade do Bronze e a Idade do Ferro*. «CIRA Arqueologia». 2, 7-18.
- SENNA-MARTÍNEZ, João Carlos (2013b). *Metals, Technique and Society. The Iberian Peninsula between the first Peasant Societies with Metallurgy and the «Urban Revolution»*. In GUERRA, Maria Filomena; TISSOT, Isabel, eds. *A Ourivesaria Pré-Histórica do Ocidente Peninsular Atlântico. Compreender para Preservar*. Lisboa: Projecto AuCORRE, pp. 11-20.
- SENNA-MARTÍNEZ, João Carlos (2013c). *Aspectos do Centro-Norte do Ocidente Peninsular no Final da Idade do Bronze: Povoamento, Metalurgia e Sociedade*. «Estudos Arqueológicos de Oeiras». 20, 173-190.
- SENNA-MARTÍNEZ, João Carlos et al. (2006). *A Fraga dos Corvos (Macedo de Cavaleiros): Um sítio de habitat da primeira Idade do Bronze em Trás-os-Montes Oriental*. *A Campanha 3(2005)*. «Cadernos Terras Quentes». 3, 61-85.
- SENNA-MARTÍNEZ, João Carlos et al. (2010). «Melting the Power» — *The Foundry Area of Fraga dos Corvos (Macedo de Cavaleiros, North-Eastern Portugal)*. In BETTENCOURT, Ana, eds. *Conceptualising Space and Place. On the role of agency, memory and identity in the construction of space from the Upper Palaeolithic to the Iron Age in Europe*. Oxford: Archaeopress, pp. 111-117. (BAR International Series; 2058).
- SENNA-MARTÍNEZ, João Carlos et al. (2011a). *Metallurgy and Society in «Baiões/Santa Luzia» Culture Group: Results of the METABRONZE Project*. In MARTINS, Carla B. et al., eds. *Povoamento e Exploração de Recursos Mineiros na Europa Atlântica Ocidental/Settlement and Mining in the Atlantic Western Europe. Proceedings of the First International Congress, Braga, 10th December of 2010*. Braga: CITCEM/APEQ, pp. 409-425.
- SENNA-MARTÍNEZ, João Carlos et al. (2011b). *First Bronzes of North-West Iberia: the data from Fraga dos Corvos Habitat Site*. In MARTINS, Carla B. et al., eds. *Povoamento e Exploração de Recursos Mineiros na Europa Atlântica Ocidental/Settlement and Mining in the Atlantic Western Europe. Proceedings of the First International Congress, Braga, 10th December of 2010*. Braga: CITCEM/APEQ, pp. 377-390.
- SENNA-MARTÍNEZ, João Carlos et al. (2012). *Metal Artefacts of Mediterranean Affiliation from Fraga dos Corvos Habitat Site (Eastern Trás-os-Montes, Portugal): A First Appraisal*. «O Arqueólogo Português». 2, 241-263.
- SENNA-MARTÍNEZ, João Carlos et al. (2013). *Os Machados Bujões/Barcelos e as Origens da Metalurgia do Bronze na Fachada Atlântica Peninsular*. In ARNAUD, José Morais; MARTINS, Andrea; NEVES, César, eds. *Arqueologia em Portugal — 150 Anos*. Lisboa: Associação dos Arqueólogos Portugueses, pp. 591-600.
- SENNA-MARTÍNEZ, João Carlos; LUÍS, Elsa (2009). *A Fraga dos Corvos (Macedo de Cavaleiros): Um sítio de Habitat da Primeira Idade do Bronze em Trás-os-Montes Oriental*. *A Campanha 6 (2008)*. «Cadernos Terras Quentes». 6, 69-79.
- SENNA-MARTÍNEZ, João Carlos; LUÍS, Elsa (in press). «Patriarchs» and «Ladies of Power»: *Gender and Social transformation in Early Peasant Societies. Presentation to the «Workshop Gender and Change in Archaeology»*. Lisbon, 19-20 October 2018. Lisboa: Instituto de História Contemporânea da Universidade Nova de Lisboa/Secção de Arqueologia da Sociedade de Geografia de Lisboa.
- SENNA-MARTÍNEZ, João Carlos; VENTURA, José Manuel; CARVALHO, Hélder Alexandre (2004). *A Fraga dos Corvos: Um caso de Arqueologia e Património em Macedo de Cavaleiros*. «Cadernos Terras Quentes». 1, 32-58.
- SENNA-MARTÍNEZ, João Carlos; VENTURA, José Manuel; CARVALHO, Hélder Alexandre (2005). *A Fraga dos Corvos (Macedo de Cavaleiros): Um sítio de habitat do «Mundo Carrapatas» da primeira Idade do Bronze em Trás-os-Montes Oriental*. «Cadernos Terras Quentes». 2, 61-81.

- SENNA-MARTÍNEZ, João Carlos; VENTURA, José Manuel; CARVALHO, Helder Alexandre (2007). *A Fraga dos Corvos (Macedo de Cavaleiros): Um sítio de Habitat da Primeira Idade do Bronze em Trás-os-Montes Oriental. A Campanha 4(2006)*. «Cadernos Terras Quentes». 4, 85-110.
- VILAÇA, Raquel (1995). *Aspectos do povoamento da Beira Interior (Centro e Sul) nos finais da Idade do Bronze*. Lisboa: Instituto Português do Património Arquitectónico e Arqueológico. (Trabalhos de Arqueologia; 9).

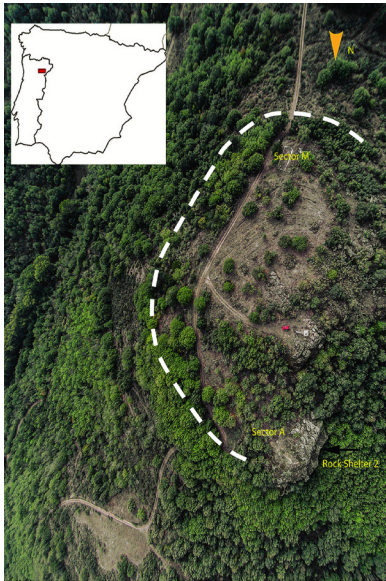


Fig. 1. Fraga dos Corvos location in the Iberian Peninsula (insert) and drone view (2014) with the main excavation areas and contour of the LBA/EIA talud wall (dashed line)

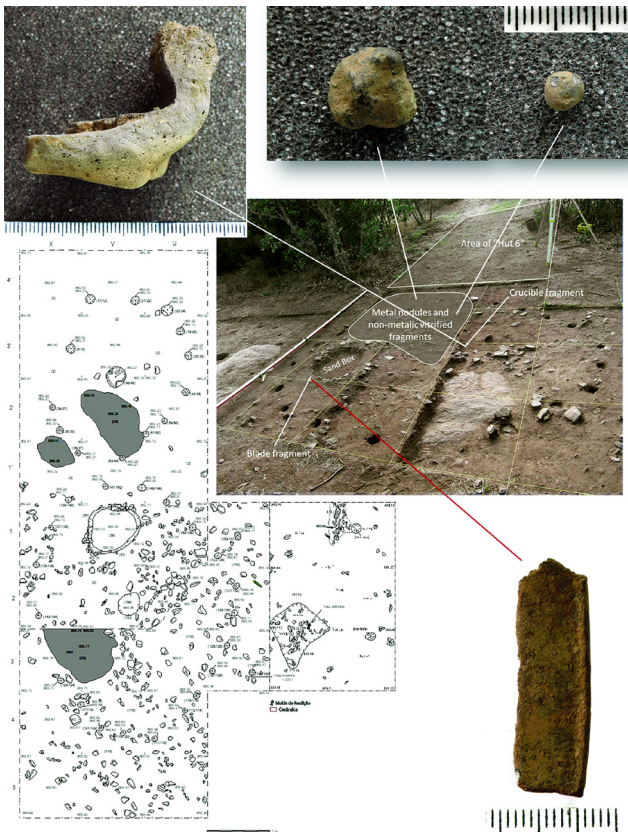


Fig. 2. Fraga dos Corvos. Photograph, excavation plan and some of the findings of the foundry area of Sector A (MBA — SENNA-MARTÍNEZ, et al., 2010, 2011) — Clockwise: crucible fragment with traces of binary bronze; binary bronze prills; binary bronze blade

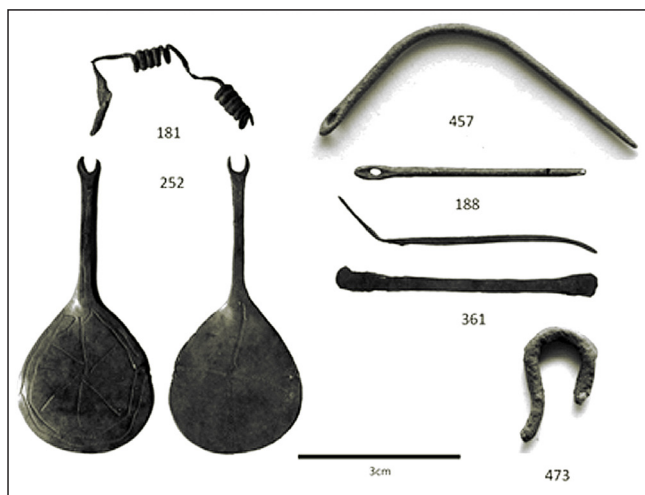


Fig. 3. Fraga dos Corvos. The main metallic artefacts from Shelter 2 (FIGUEIREDO *et al.*, 2009) — (1) Binary Bronzes: 181 — double spring fibula; 252 — pendant; 457, 188 — needles; 361 — cosmetics spatula. (2) 473 — Copper wire loop from a Tartessian belt hook



Fig. 4. Fraga dos Corvos. Needle and spring of a fibula of possible Acebuchal type from under the «talud wall» southern extremity

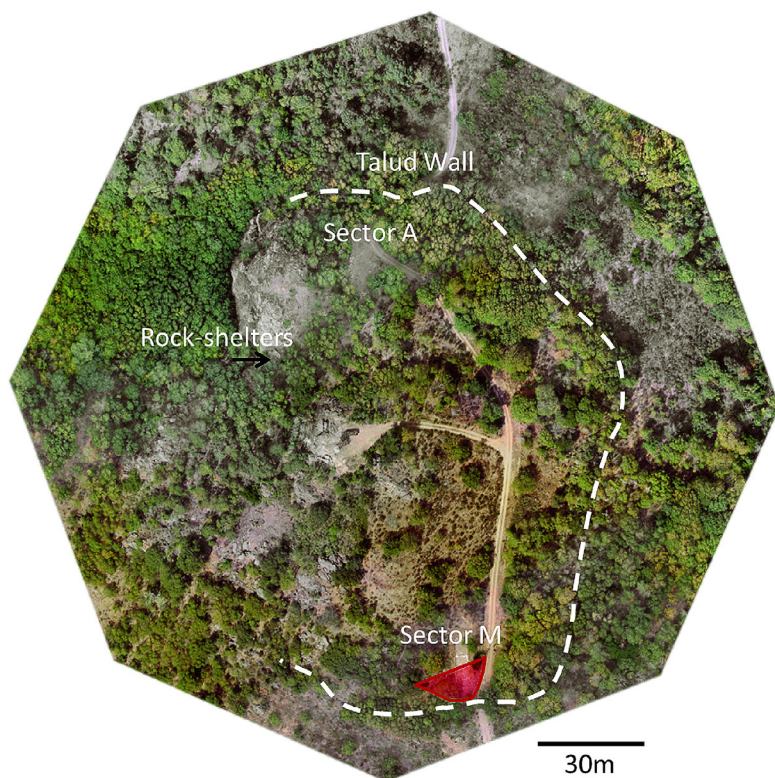


Fig. 5. Fraga dos Corvos. Orthophotomap (2019-09-14) with the main excavation areas and contour of the LBA/EIA talud wall — The red grisé area corresponds to the estimated extension of the LBA/EIA monumentalizing platform

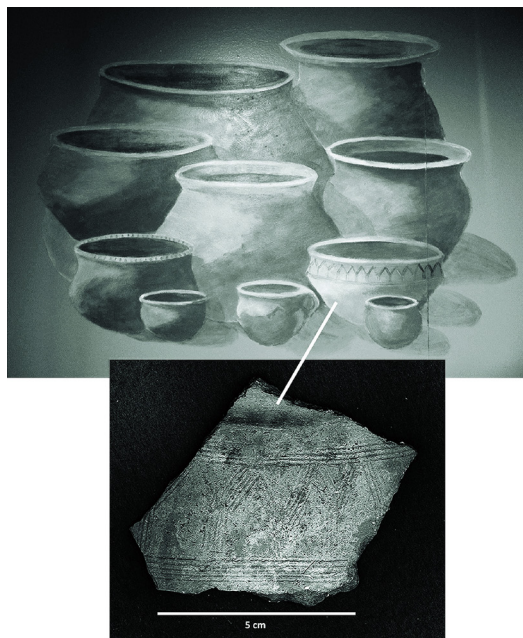


Fig. 6. Fraga dos Corvos. Pottery from Sector M LBA/EIA levels (top — original painting by M. A. Martínez) and comb-incision decorated fragment of Early Soto type

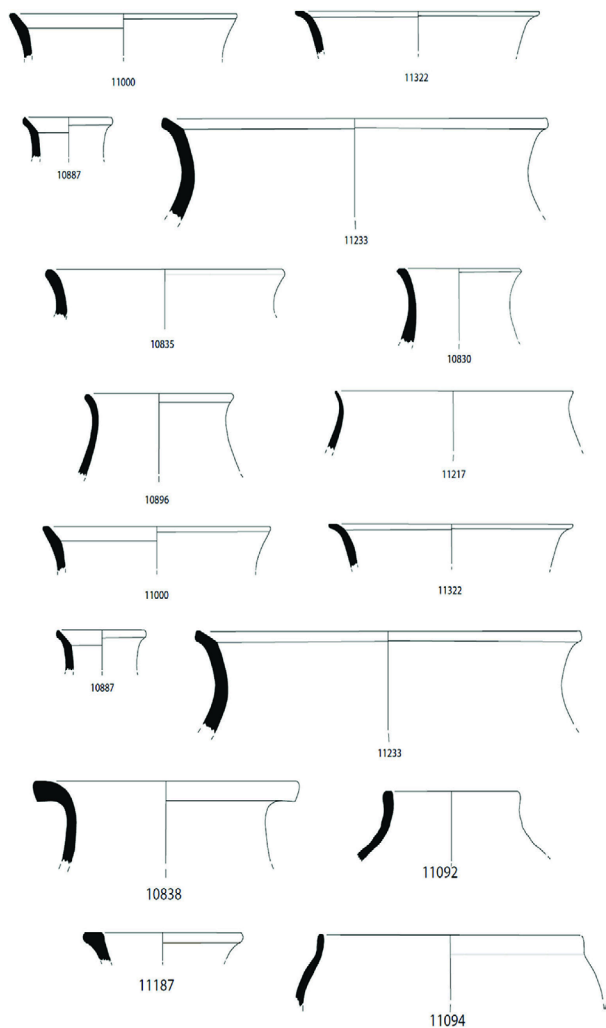


Fig. 7. Fraga dos Corvos. Kitchen and storage vessels

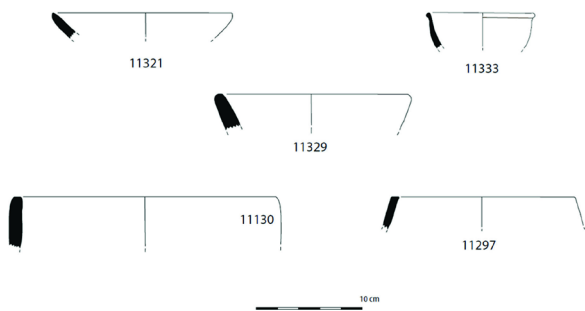


Fig. 8. Fraga dos Corvos. Sub-spherical cups and bowls

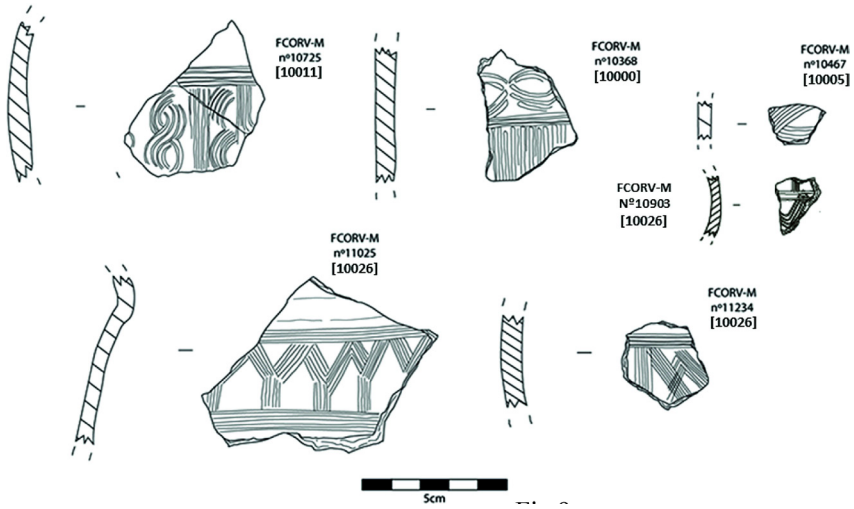


Fig. 9. Fraga dos Corvos. Comb incised pottery of Early Soto type



Fig. 10. Fraga dos Corvos. Fibula types, of binary bronze, from the LBA/EIA, counterclockwise from the top right hand corner: Double-spring; Acebuchal; Bencarrón; Early Annular Hispanic



Fig. 11. Fraga dos Corvos. Binary bronze needles from the LBA/EIA



Fig. 12. Fraga dos Corvos. Iron artefacts from the LBA/EIA

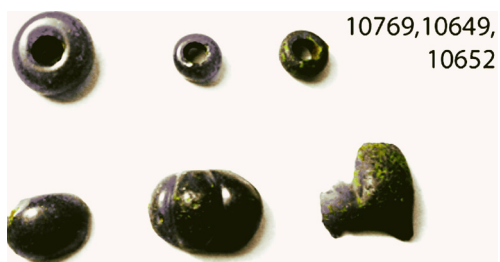


Fig. 13. Fraga dos Corvos. Blue glass beads of Mediterranean origin from the LBA/EIA



Fig. 14. Fraga dos Corvos. Pottery sherd with comb incised decoration of Soto type



Fig. 15. Terronha de Pinhovel. North and South Talud Walls (photo Carlos Mendes)



Fig. 16. Terronha de Pinhovel. Top of Talud Wall North superimposed by a Late Iron Age wall (BARRANHÃO, TERESO, 2006: Fig. 7)

