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ENTANGLED WORLDS: MATERIALITY, ARCHAEOMETRY AND MEDITERRANEAN-ATLANTIC IDENTITIES IN WESTERN IBERIA

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ABSTRACT

The aim of this paper is to gain insights into the mechanisms by which new socio-materialities were co-created in western Iberia as a result of encounters between people of Atlantic and Mediterranean cultural and technological backgrounds during the Late Bronze Age (1400/1200-700 BC). Particular emphasis is placed on the landscapes where socio-cultural encounters took place and where material images, artefacts and technologies were hybridised, integrated or recreated. To do this, typology and archaeometry information is taken into consideration. The material evidence analysed comprises specific objects such as gold items, bronze axes, statue-menhirs and stelae, which sheds light on the ways in which the social identity of the Atlantic people shifted or was altered through these encounters, and to what extent the people adopted and adapted socio-material practices within a shared cultural milieu.

KEYWORDS: connectivity, atlantic-mediterranean interactions, colonial and pre-colonial encounters, trade, gift and commodities economies, Bronze Age.

1. INTRODUCTION

The last few years have seen a growing trend in the field of archaeology with attention focuses on the concept of materiality in order to help formulate new perspectives on social connectivity and identity (Gosden 2004; Van Dommelen and Knapp 2010). From this viewpoint the underpinnings of connectivity reside in the encounters of both people and objects in a specific context, as a result of their movements and relationships. Objects may be exchanged and transformed as they are circulated among people, thus co-creating new social and material relations. Connectivity, therefore, functions as a mechanism that serves to establish, bolster or modify trans-regional and local identities.

People and objects are mutually entangled (Gosden 2004: 36). Different socio-material practices (Chapman 2000; Knappett 2006; Glambe 2007) enable individuals to have a social impact on different scales of interaction (local, regional, or interregional contexts), even when not physically present. Accumulation processes (such as grouping objects in deposits) and enchainment processes (by which social groups were held together or established relationships in networks spread over the distance) were two of these socio-materially determined practices of interaction. Artefacts and material forms are commonly conceptualised as constituent parts in the creation of human identity, or regarded as components of an extended sense of personhood (Strathern 1990: 178). In this particular context, objects, or object fragments, moved across the landscape, allowing interaction networks to be sustained across time and space. Thus, social agency was not restricted to the physical presence of individuals, but was also articulated through these artefacts, even at some distance in time and place.

The concept of hybridisation (Knapp 2008: 57-61) is useful for exploring contexts of interaction such as these, as it allows us to move away from a top-down perspective of acculturation by linking the creation of a mixed or altered material culture to the actions and choices of social agents within a contact situation, as an expression of their identity. It is through this notion of hybridisation that cultural encounters can be explored as an interactive process in which diverse social agents actively created new social situations, adopting and adapting new practices and new material forms within a shared cultural milieu (Gosden 2004).

This paper explores issues of materiality, mobility and identity in the study of interactions between Mediterranean and Atlantic backgrounds during the Late Bronze Age, focusing, more specifically, on processes of connectivity linking Southern (the transi-

tion area to the Atlantic façade for Mediterranean agents) and Northwestern Iberia (the Atlantic area furthest away from the Mediterranean Sea with archaeological evidence of the Mediterranean presence). The purpose of this research is to gain insights into the mechanisms by which new socio-materialities were co-created in Western Iberia as a result of encounters between people of Atlantic and Mediterranean cultural and technological backgrounds. Particular emphasis is placed on the landscapes where socio-cultural encounters took place and where objects were hybridised, integrated, or recreated. The material evidence analyzed includes specific objects, such as goldwork, bronze axes, statue-menhirs or stelae that permits the better understanding of the ways in which the social identity of Atlantic people changed or was altered through these encounters during this period.

2. HYBRIDISATION AND MATERIAL CONNECTIONS IN GOLDWORK

In this section, understanding of the material connections between the Mediterranean world and the Atlantic communities of the western Iberia will be explored. Attention will be focused on specific gold artefacts of this period and the material culture involved in the development of identities will be analysed, which involved the development of identities from the mid-second millennium BC and played a part in co-creating landscapes of connectivity (Fig. 1).

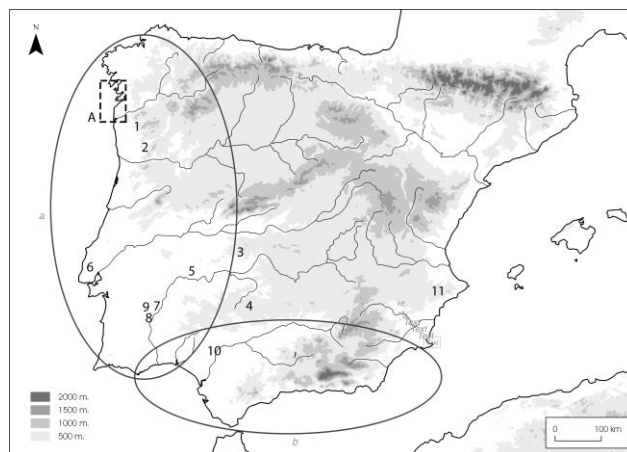


Figure 1. Map of deposits that are mentioned in this article: 1. Baião (Porto), 2. Cantonha (Guimarães), 3. Berzocana (Cáceres), 4. Bélmez (Cordoba), 5. Sagrajas (Badajoz), 6. Sintra (Lisbon), 7. Herdade do Alamo (Beja), 8. Baleizão (Alentejo), 9. Portel (Évora), 10. El Carambolo (Sevilla), 11. Villena (Alicante). Area A: Northwestern region with Phoenician presence. Circle-a: Atlantic background and circle-b: Mediterranean background.

In many Mediterranean regions, an increased demand for metals such as gold and tin, as well as their concentration in mostly marginal areas, encouraged

interaction among social groups from different regions and backgrounds during the Late Bronze Age (Bradley, 2013). This period witnessed the development and intensification of interaction processes (movement of persons, objects, knowledge and social values), and linking processes (regional and trans-regional political alliances), aimed at building exchange and interaction networks. One of the consequences of these processes was the emergence of a shared cultural milieu in regions beyond the Mediterranean borders. New metal artefacts were adopted and/or adapted to permit their integration into hybrid socio-material practices linked to the construction of identities in these new contexts of interaction.

These practices are evidenced particularly in the gold metallurgy of western Iberia. Specifically, three types of supra-regional material connections denote the adoption and adaptation of objects that defined processes of connectivity during the Late Bronze Age: (1) deposits combining Atlantic and Mediterranean objects, (2) hybrid artifacts created from objects or object fragments belonging to different technological domains, both Atlantic and Mediterranean, and (3) objects of Atlantic typology manufactured with Mediterranean technology.

The first type of material connection corresponds to the placement of Mediterranean and Atlantic objects in the same hoard or deposit, in Western and Southern areas of Iberia. Three specific deposits can well exemplify this type of material connection: Berzocana, in the province of Cáceres, Spain; Bélmez, in the province of Córdoba, Spain; and Baleizão, in the district of Beja, Portugal. The first one contains two gold torcs belonging to the Atlantic technological domain, as well as an omphalos bowl from the Eastern Mediterranean one (Perea 2005: 100). The Bélmez deposit holds an Atlantic torc and a combination of miscellaneous gold objects of Mediterranean origin (Perea and Armbruster 2008: 516). The Baleizão deposit consists of a torc, a bangle, an ingot, several axes, six measuring weights, glass paste and filigree wire. In the latter case, apart from the association of Atlantic and Mediterranean objects, it is interesting to note the presence of an ingot and of weight sets, which seems to link the group of objects to trading activities, as is the case for a large number of deposits in the north of Portugal where both types of elements are common (Torres 2008: 64-67; Vilaça 2008a, 2008b; Senna-Martinez et al. 2011).

Additionally, artefacts manufactured with Atlantic technology circulated in western Mediterranean exchange networks: the deposit of Villena (Ruiz-Galvez 1998; Perea 2008), in the province of Alicante (Spain) is a good example of this. However, while this deposit, located in eastern Spain, has the largest

number of artefacts made with Atlantic technology, it also contains Mediterranean objects.

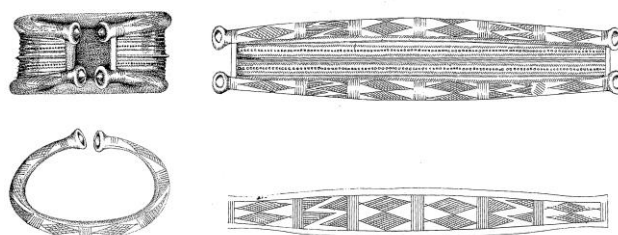


Figure 2. Bangle of Cantonha, Guimarães (Portugal). After Silva, 1986.

The second type of material connection encountered consists of objects made from two or more pieces belonging to two specific Atlantic technological domains (which Perea and Armbruster define as the Sagrajas/Berzonaca typology and the Villena/Estremoz typology), and to the Mediterranean technological domain. The production of these hybrid objects shows two important facts. First, the merging of objects or parts of objects manufactured with different kind of Atlantic technologies. Second, that these artefacts were made not only from old Atlantic objects, but they also incorporated new elements such as filigree, welding or decorative motifs such as bells, all of which were typical of the Mediterranean typology and technology (Perea 2005: 99-100; Perea and Armbruster 2008: 516-517). And thirdly, these objects were created in the last phase of the Atlantic Late Bronze Age, when the Mediterranean and Atlantic encounters were more intensive. Examples of this hybridisation include the Bangle of Sintra and the Bangle of Cantonha (Fig. 2). While the first was found in central Portugal (Armbruster 1995), the second appeared in Northwestern Iberia (López 1951; Silva 1986), in the mineral-rich Atlantic region farthest from the Mediterranean. The location of both pieces suggests that the same hybridisation phenomena took place simultaneously in the North and in the Central Atlantic façade of Iberia during the Late Bronze Age, or perhaps that hybrid objects whose formal characteristics denote a strong connectivity were widely circulated in both regions.

These hybridisation processes have diverse explanations, which are often difficult to establish. Artefacts may have been repurposed after losing their original associations (Fontijn 2008). Additionally, the different constituent parts of hybrid objects may have had separate or dissimilar histories, in which case they could have been reassembled in a new context and reconfigured into a new object—a new identity—in consonance with a new situation of contact. Regarding Late Bronze contexts, as noted above, new identities emerged in this period through the

metonymic and metaphorical qualities of material objects. The grouping of objects to establish a new materiality, which agglutinated and incorporated different spatial and temporal domains might have stemmed from the existence of a relational component in the development of personhood and identity during the Late Bronze Age (Bruck 2006: 297). Nevertheless, this hybridisation should be understood as the result of the growing interaction between individuals from different backgrounds creating different contact situations; i.e. a shared cultural milieu.

Finally, the third type of Atlantic-Mediterranean connection is seen in the Atlantic items which were made using only Mediterranean technology. According to Armbruster and Parreira (1993: 78- 83), they may be an imitation of athletic types "which has been observed but not assimilated". While, from a morphological and typological viewpoint, these artefacts belong in their entirety to the Atlantic domain, from a technological viewpoint they must be ascribed to the Mediterranean domain. An interesting example of this type of Atlantic-Mediterranean connection can be found in the deposit of Herdade de Álamo, in Beja, Portugal, which is located in the same area as the Baleizão deposit mentioned above (fig. 3). The two torcs that comprise this deposit are typologically equals to torcs belonging to the Sagrajas and Berzocana types, characteristic products of Atlantic Iberian metalwork –such as those found in the Late Bronze Age deposits of Sagrajas and Penela, in Spain, or Portel, in Portugal, etc. However, as Perea (1995: 76; see also Perea and Armbruster 2008: 515-517) has pointed out, they were manufactured using only Mediterranean technology, denoted by their hollow rings and the use of welding and filigree workmanship. This type of objects is proof of the existence of direct, personal contacts, and of the establishment of relationships between local and Mediterranean elites. Moreover, the Mediterranean-Atlantic hybridisation fostered by these processes of interaction and knowledge transmission has implications beyond the production of objects themselves. Although these torcs maintained an Atlantic visual appearance, the sensory experience of these artefacts must have presented differences, such as weight, sounds, hardness, etc.

The deposit of Herdade de Álamo also provides additional information that allows us to relate these gold works to the Late Bronze Age iconography. Apart from the two torcs already mentioned, the hoard also contained a necklace featuring a schematic representation of a human figure, analogous to those depicted in the warrior stelae of the Southwest. The representation of Mediterranean iconographic elements in these stelae strengthens the case for a link between the necklace of the Álamo deposit and

the individuals represented in these stelae and the entire deposit, by extension, as noted by Perea and Armbruster (2008: 516).



Figure 3. Deposit of Herdade do Alamo, Beja (portugal).
Photo: Barbara Armbruster

At the end of the Late Bronze Age and beginning of the early Iron Age (eighth to sixth centuries BC), the hybridisation processes and the resulting artefacts gave way to hoards containing Mediterranean artefacts, such as La Aliseda, in the province of Jaén, Spain; Sines, in the region of Alentejo, Portugal; and Baiao, in the Douro Valley, Portugal. Located in Northwestern Iberia, the latter contained a trousseau comprising a necklace and two pairs of earrings (Silva, 1986). Although the technology, typology and iconography of these pieces of jewelry are fully Mediterranean: more concretely, they are Phoenician. Their finding in this region allows the deposit to be understood as part of the exchange of presents (gift economy) that allowed individuals from different backgrounds to build trust and loyalty. The notions of host and guest were essential and inherent to the creation of exchange networks of this kind, given that without them the establishment of peaceful and friendly relations, as well as the reception and exchange of non-local goods, became a risky and unregulated endeavour (Strathern and Stewart 2005: 235). Given their finding at great distance from where they originated—whether the Mediterranean region or the South of Iberia—the objects of the Baiao deposit should be interpreted as belonging to the trousseaus of Tartessian or Phoenician women who married into the local elites (Ruiz-Gálvez 1992: 238). The institution of marriage is indeed one of the earliest forms of social contract (Sahlins 1972: 222) used to establish a relationship structure that ensured the peaceful unfolding of connectivity (mobility, interaction and exchange).

The different types of material connections evi-

denced in the gold metallurgy of the Late Bronze Age embody, at different levels (production, circulation, accumulation, etc), linked processes (Chapman 2000) in the construction of identities among the individuals or the elites of the Atlantic region, within a context of connectivity to the Mediterranean world.

3. CONNECTING PEOPLE: AXES AS EXCHANGE ITEMS

Aside from prestige items made from precious metals, such as those already discussed, raw materials including metals could also have figured among the items that the elites exchanged during the Late Bronze Age. The palstave axes typical of the Northwestern Atlantic seaboard supports this argument, showing hybridisation similar to that of the gold objects. While the palstaves are a type of axe characteristic of many European Atlantic regions, the distribution of the types founded in Northwest and West of Iberia (30D, 31C, 34a; 35a, 35C, Monteagudo, 1977) shows more connections with the South of Iberia than with other European western regions. In other words, their distribution reveals interactions with Mediterranean backgrounds, rather than interactions with Atlantic backgrounds.

Axes were part of a category of objects that was distributed in landscapes of mobility, such as the Douro River and Tâmega River basins, and the coastal areas of the Northwestern Atlantic seaboard (Monteagudo 1977). Palstaves, therefore, belonged to the same geographical core of the deposits that was discussed, plus that of other material forms such as statue-menhirs and stelae which will be explored in the next section. These palstaves were not manufactured for use as axes. Firstly, owing to their chemical composition, they were too soft to have been functional, and secondly, because in many cases they came with their casting mold. An alternative interpretation of these objects suggests that should be regarded as ingots. Following this hypothesis, it has been argued that the weight of these axes corresponded to weight measurement models that were in use in the Mediterranean region (Galán and Ruíz-Gálvez 1996, Galán 2005: 471). Palstaves, therefore, must have been valued principally as exchange items, not as metal tools, given that their use was not advisable because of their high lead content. Although their circulation through trade cannot be completely ruled out, the demarcation between exchanges of gifts and commercial activity during the Late Bronze Age remains nebulous (Pare 2013); furthermore, in economies based on reciprocity, raw materials

could have been considered valuable gifts. From a systemic viewpoint, these objects may be regarded as endowed with power, in the sense that they were used in the building of mediated relationships.

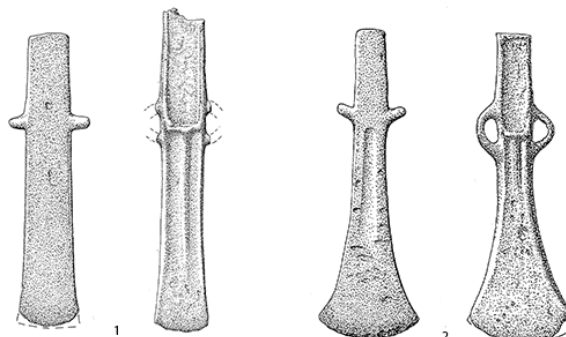


Figure 4. Isomorphism between palstaves and trunion axes in (1) the Atlantic network (840 and 1224, in: Monteagudo, 1977) and (2) the North plateau network (863 and 1263, in: Monteagudo, 1977).

Thus, the distribution of palstaves took place in a context of gift economies where the reciprocity was the foundation of sociability, the negotiation of identities, and the establishment of regional and supra-regional ties. The types of axes mentioned above circulated from Galicia and the north of Portugal towards the south of the Tajo basin since the beginning of the Late Bronze Age. Simultaneously, the trunion axe (from a Mediterranean background) circulated from the south toward the northwest (Martin, 1999: 59-61; see also Díaz-Andreu, 1988). Both models of axes then shared networks of interaction. It was during this process that the Atlantic axes arrived in Italy or islands such as the Balearics and Sardinia, while the Mediterranean axes reached the Northwest of Iberia (Giardino, 1995).

The circulation of Palstaves and Trunion axes encouraged not only the co-presence of both in deposits, but also processes of hybridisation between them with similarity to way to the gold objects. This phenomenon can be compared to what occurred in the western and northern plateau of Iberia - zone where trunion axes arrived from the Mediterranean shores of Iberia. While both models (palstaves and Trunion axes) show narrow bodies with almost parallel edges in the Atlantic network, their bodies are more stylised and their edges expand distally in the northern plateau (Fig. 4). Additionally, the existence of axes with loops and trunnions reveals another example of hybridisation. Such isomorphism and intermingling between trunion axes and palstaves can only be explained by material convergences inside particular networks of interaction. Their co-

presence in two different exchange networks made it possible for them to adopt a 'family resemblance' in each area. The axes must have been appreciated as elements of value for exchange and to create relations between people. If this was so, then the different levels of connectivity between palstaves and trunion axes must have been the result of the materialisation of these relationships. While the movement of the axes shows a bi-directional type of connectivity between the Northwest and the South, their isomorphism and hybridisation seem to instantiate moments of integration between social agents in the context of supraregional interactions.

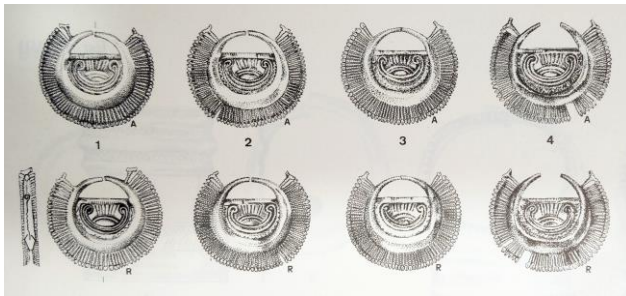


Figure 5. Gold earring with Phoenician decoration from the deposit of Baião. After Silva, 1986.

However, the situation appears to change at the end of the Late Bronze Age, from the eighth century BC onwards. Henceforth, the circulation of palstaves stopped flowing from the Northwest to South of Iberia. Instead, they began to be withdrawn from circulation, which resulted in their accumulation in deposits on the Northwestern Atlantic coast (Galán 2005). Significantly, these deposits (Samieira, Hio, Estea, Alcabre, etc.) are located in strategic areas—such as Rias Baixas, in the region of Galicia, Spain, and Northern Portugal—which are an integral part of the new "seascapes of interaction" that appeared from the eighth century BC onwards, linking the local communities to the Phoenician agents (González-Ruibal, 2004). This transformation of relationships can be understood in the context of the displacement of the exchange networks which characterised systems of reciprocity among the elites of the Late Bronze Age (gift economies) by an emerging more commercial system fostered by the opening of the Atlantic sea route by the Phoenicians.

The late deposits with completely Mediterranean items such as Baião hoard mentioned above seem to reflect the end of the relationship between the Mediterranean and Atlantic backgrounds through and elite economy (fig. 5). The emergence of these items from eighth century BC on was due to the need for the Phoenician to work in alliances with local communities. However, the interactions between Mediterranean and local agents henceforth are based on trade rather than on the gift. The new commercial mari-

time route established by the Phoenicians, focused more on transporting commodities, and could not assimilate the old items of the Late Bronze Age gift economies such as the palstaves. The replacement of the old model of Atlantic-Mediterranean interaction arose as new ways of relating and building identities were taking shape, and therefore can be understood as part of a trend that implied new ways of understanding exchange processes. This new context sheds light on the withdrawal from circulation of palstaves, and their concomitant accumulation in coastal deposits located within the new geography of maritime interaction. The overlap between these two realities is materialized in the Alcabre Peninsula in Vigo, a small archaeological area in the Spanish Northwest. An axe hoard from the Late Bronze Age was found on this small strip of land just a few meters away from a Phoenician baetylic temple (built in the Early Iron Age) where hundreds of Mediterranean pottery sherds were found (González-Ruibal, 2006) – their study is currently in progress (Fig. 6).



Figure 6. Phoenician betyls in Punta do Muiño, Vigo (Spain)

4. STONE PEOPLE IN LANDSCAPES OF MOBILITY

In addition to the gold items and axes circulating during the Late Bronze Age, other material forms such as statues-menhir and stelae also built the landscape (Fig. 7). The statue-menhirs are standing stone engraved with minimalistic human traits, weapons and insignias which were integrated in the landscape from 1400/1200 BC onwards. They were distributed mainly in Northwestern Iberia, in the region nestled between the valleys of the Douro and Minho rivers. The latest findings, however, indicate that their area of distribution extended to the south of the province of Beira Alta, Portugal, and to the Spanish provinces of Salamanca and Cáceres.

In general, statue-menhirs were distributed in areas of transit and mobility. While their largest numbers are concentrated along the Douro and Tâmega rivers, recently discovered examples in Beira Alta

and in the province of Salamanca confirm the recurrence of this typology of standing stone in other areas (Vilaça 2011). The location of statue-menhirs suggests a close association with river landscapes (Faiões, Chaves, Bouça, Muiño de San Pedro, or Nave), as well as with transit zones that later became Roman roads (Marco, Muiño de San Pedro, Vilar de Santos, Tameirón or Ataudes) (Vilaça 2011; Comendador *et al.*, 2011). Additionally, the standing stones of Tremedal de Tiermes, Valdefuentes de Sangusín (Salamanca, Spain) and Segura de Toro (Cáceres, Spain) are located in the vicinity of the natural route along which the Roman Via de la Plata later ran, connecting the west of the Iberian Peninsula from north to south. This distribution pattern suggests that statue-menhirs had a significant role in the construction of the landscapes of mobility that connected Northwestern and Southern Iberia during prehistoric times.



Figure 7. Statue-menhir of Marco at an area of communication between the Northwest and the southern areas.

The location in transit areas of statue-menhirs and other materials forms, such as stelae from the Extremadura region, also points to the existence of a consistent association between these types of artefacts and areas rich in minerals including gold and tin (Senna-Martinez 2011: 293). This link suggests that mineral wealth fostered an intense interaction between local and foreign communities, especially during the Late Bronze Age (Alvés and Reis 2011: 164), a time when a gold and bronze-based material culture became a key element in the negotiation of identity among the elites.

In this context, the role traditionally ascribed to these monoliths in order to explain their location in transit areas has been that of territorial or road markers. The same interpretation has been put forward for the stelae found in the Southwest of the Iberian Peninsula (Ruiz-Gálvez and Galán 1991; Galán 1993; Jorge 1995). However, the type of association between statue-menhirs and transit areas allows us to qualify this interpretation. A GIS-enabled analysis of the location of statue-menhirs vis-à-vis the flow of mobility in the valleys of the Douro and Tâmega rivers demonstrates that, while statue-

menhirs were located near transit areas, they were not completely visible from those areas where mobility took place (Fábrega *et al.* 2011: 317) (Fig. 8). The distribution of statue-menhirs adjacent to transit areas yet often beyond travelers' line-of-sight suggests that these standing stones may have constituted places of special significance established by individuals with ties to the area of transit.

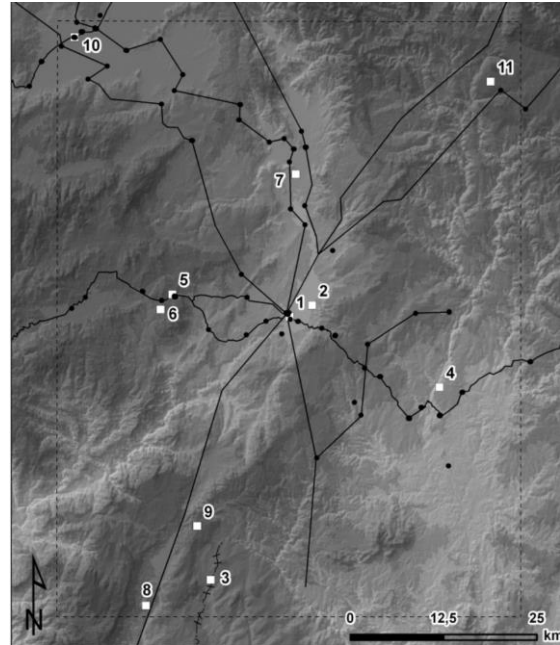


Figure 8. Relationship between statue-menhir and mobility areas in northwestern Iberia. 1. Chaves, 2. Faiões, 3. Marco, 4. Bouça, 5. Tojais, 6. Cruz de Cepos, 7. Muiño de San Pedro, 8. Samarã, 9. Guilhado, 10. Vilar de Santos, 11. Tameirón. (Fábrega *et al.* 2011)

The sites created by the placement of statue-menhirs did not necessarily correspond to a logic that sought to organize time and space—as like road markers—but may have simply resulted from the presence of people in transit through the area over time. As Díaz-Guardamino (2006: 21-23) has stated, the signaling function of statue-menhirs was more often used to designate sites intended for the celebration of commemoration rituals (e.g. the deceased), than to mark transit routes and territorial boundaries. This interpretation has also been applied to Southwestern stelae (Celestino 2001: 279). However, our understanding of statue-menhirs should extend beyond their simple signaling function and should include their enabling role in the construction of place in the Heideggerian sense of the term, given that they transformed (monumentalised) the spaces where they were erected, helping to create a specific landscape and sense of place that was perhaps linked to a funerary function or functioned as a locus of memory for the people who traversed the landscape for concrete purposes.

This framework allows us to better grasp the materiality and semiotic significance of statue-menhirs. Using different sculptural techniques and minimalistic representations, these standing stones were the materialisation of the (social rather than physical) body of a very specific type of individual bearing weapons and insignias, within the context of a landscape of mobility. The performative materiality of these artifacts eliminate many features (movement, stance, gestures, and so forth), focusing on the iconography. Similarly to the southwest stelae of the peninsula, statue-menhirs do not appear to reflect specific individuals' biographies or characteristics, beyond a generic relationship with weapons and insignias. The representation of human faces was very schematic, with features engraved on the stone. In some cases, these features were limited to the eyes, nose and mouth (Nave 2, Longroiva or Valdefuentes de Sanguisín); in others, additional anatomical elements were included—such as the ears—to delineate the contours of the face (Ermida, Muiño de San Pedro or San Joao de Ver). Nevertheless, in others, the facial representation is reduced to the minimum expression, and only one feature serves to denote the whole face, e.g. the eyes, as in the statue-menhir of Boulhosa (Díaz-Guardamino 2010: 137-138). The facial features engraved on statue-menhirs served only to anthropomorphise the monolith, and different physiognomic elements were chosen depending on each case. The remaining iconographic elements, however, were more standardised, and represented both weapons and a type of insignia or symbol that Spanish scholars have dubbed the sub-rectangular motif. The semiotic interpretation of these combined elements has a clear contextual meaning.

Robb (2009: 174) has recently stated out, in the history of the representation of the human body, the use of schematic and minimalistic depictions "has often been associated with the promotion of a simplified and powerful message." In the case of statue-menhirs, the protagonists are weapons and the symbols overlaid on them. The simplified representation of the human body enabled statue-menhirs to embody a concise, strategic enunciation of the message its creators wished to convey. This economy of representation is coherent with the supra-regional landscapes of mobility and interaction that the statue-menhirs belonged to. Whatever these material forms lost in terms of detail and nuance, they gained in immediacy and inter-contextual and supra-regional compressibility. The aforementioned elements involved in the construction of identity and power—for individuals whose sense of self was built around the use of weapons and metalwork trade—operated within a "semiotic ideology" (Keane 2003) that, in the

context of the landscapes of mobility to which they belonged, only required the association of the stone body with the objects depicted on its surface to convey meaning.

In short, our understanding of this set of elements and interpretive evidence can be summarised as follows: Iberian statue-menhirs (1) were associated with mineral-rich areas and should be interpreted as part of landscapes of mobility and connectivity processes; (2) were endowed with the ability not only to represent, but also to create places, in the Heideggerian sense; (3) were inscribed mainly in a Late Bronze Age chronological timeframe, although they may have appeared earlier; and (4) were embedded in a context in which the production of metal objects played an active role in the construction of identities.

5. MOBILITY, IDEOLOGY AND SUPRA-REGIONAL SYMBOLISM

The material images in stone reveal an evolution that is akin to hybridisation found in gold artefacts. The technology and typology of the Atlantic metallurgy remained practically unchanged from the Chalcolithic period to the Late Bronze Age, subsequently growing more complex and hybridising with Mediterranean technology, which resulted in products accordant to their historical context of production and use. Statue-menhirs underwent a similar process: These material forms mingled a series of connections across time and space that reflected the social and identity transformations in which they were embedded as Mediterranean-Atlantic encounters increased.

A material connection with the past is evidenced in the morphology, size, and location of the statue-menhirs in the landscape. As Alves and Reis has pointed out, they "seem to have inherited the monumental and commemorative character of megalithic menhirs" (2011: 176). In fact, a number of statues-menhir (Chaves, Bouça or Muiño de San Pedro) resulted from the re-use of ancient phallic menhirs (Jorge and Jorge 1983; Bettercourt 2005). The emergence of statues-menhirs—they either are new monuments or recycled phallic menhirs—may be related to the transformation of the models of interaction and connectivity and, consequently, to a change in the strategies used by people to create power and identity during the Late Bronze Age. During this period, as noted by Jorge (1999: 122), mounds ceased to be used as places of negotiation, to the detriment of the spaces created by statue-menhirs, both through their inscribing power (monumentalization of space through materiality and iconography) and their incorporation power (as a site for ritual action)

(Connerton 1989). In this context, phallic menhirs became obsolete, or lost their cultural and social meaning, and in the process of being reimagined and recycled, some were anthropomorphised and equipped with weapons and symbols.

Accordingly, statue-menhirs appear to be related to two historical circumstances. The first is the development and consolidation of copper metallurgy from the Early/Middle Bronze Age onwards, in addition to the bronze metallurgy especially during the Late Bronze Age, although there is evidence of its production prior to this period. The engraving of weapons on these monuments, as noted by Bettencourt (2005: 171), denotes the "prestige that was associated with metallurgy" in that moment. The second historical fact is the emergence of strong supra-regional interactions as a result of obtaining raw material and interchanging prestige goods. This can also be evidenced by the aforementioned carving of sub-rectangular motifs on the surface of statue-menhirs (Fig. 9). In this respect, the material symbol allows us to link these monuments to processes of interaction throughout the Western Iberia (bidirectional interaction between the Northwest and the South of Iberia), revealing ultimately an intermingling of Atlantic and Mediterranean backgrounds.

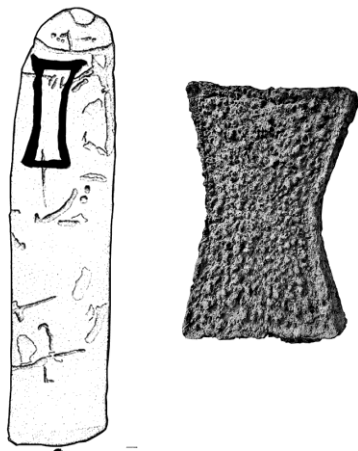


Figure 9. Comparison between a sub-rectangular motif depicted on the Statue-menhir of Bouça (left) and the ox-hide ingot from Zakros, Crete (Heraklion Archaeological Museum) (right).

While the emphasis on symbolism of these motifs only allows us to interpret them as visual codes reflecting power dynamics (Almagro-Gorbea 1993: 126; Jorge and Jorge 1993: 41; López Plaza et al. 1996: 298; Vilaça et al. 2001: 76; Bettencourt, 2005), a relational interpretation can shed light on other aspects they embody, such as actual connections (the motif as index), and similarity linkages (the motif as icon) (Preucel 2006). Viewed as indices, their presence in the landscape directs our attention to the people who produced these material forms, whose existence is

evidenced by the very materiality of the artefacts. The distribution of these monuments not only reveals people using the same kind of self-representation (the statue-menhir) in different regions, but also shows people shearing the same kind of material symbols (the sub-rectangular motif) throughout different regions. In other words, they provide material evidence of supra-regional strong connections throughout the Atlantic region (Díaz-Guardamino 2011: 78). The material symbol is depicted in the Northwest of Iberia (Douro-Miño region), Beira Alta and inland Beira Baixa (Portugal) and the province of Salamanca (Spain). Thus, if these monoliths are regarded as "people of stone" who shared supra-regional symbols of power, then the identity of the individuals who they materialised encompassed those regions, or in any event, linked them to the act of moving across different zones of interactions from the Northwest to the South of Iberia. Therefore, the people who used this material symbol shared a particular cultural milieu within a context of connectivity that extended beyond logic of local identities.

Likewise, the sub-rectangular motif can be approached as an icon. Generic associations between the sub-rectangular motif and real objects have been put forward in an attempt to identify their meaning. Besides their broad interpretation as an emblem of power, these decorative elements have been associated alternatively with ceremonial robes or stoles (Jorge and Jorge 1993: 39), kardiophilax-type breastplates (Almagro-Gorbea 1993: 126) and weapon belts (Lopez et al. 1996) or breastplates used to protect warriors' vital organs (Díaz-Guardamino 2010). The fact that these motifs are commonly found at the front of the statue-menhirs suggests, however, that the interpretation of them as breastplates may be the most accurate. Authors such as Vilaça et al. (2001: 78) and Rodríguez-Corral (2015) have noted the iconic resemblance of the so-called sub-rectangular motif and the ox-hide form of many artefacts found in the Mediterranean. In this respect, depictions of oxhide ingots in non-Mediterranean areas have been proposed by other authors. According to Celestino (2001), the ox-hide motif may be depicted on a number of warrior stelae from southwestern Iberia such as Cerro Muriano I, Cortejada and Capilla III. Likewise, representations of oxhide ingots in Scandinavian rock art, such as those on the panel Boglosa and panel Kville, have also been recently suggested by Ling and Stos-Gale (2015). In all these cases, a detailed examination shows that the sides of the depictions are concave, forming a shape typical of oxhide ingots. Thus, they show a high degree of similarity with ingots found along the Mediterranean.

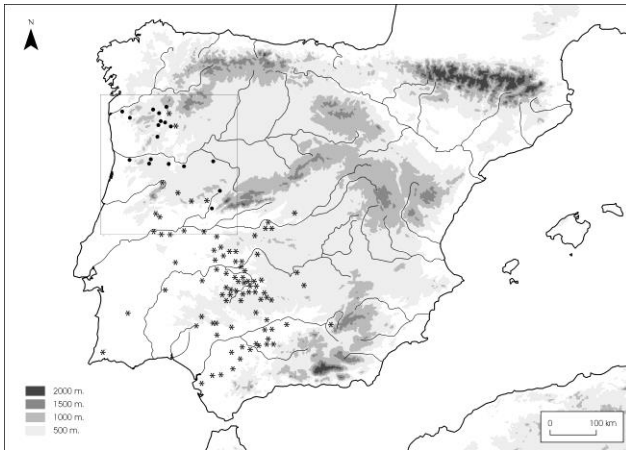


Figure 10. Map of interaction between the northwest statue-menhir (dots) and southern stelae (asterisks)

The oxhide motif is a *representamen* (Pierce 1998: 203) that was materialised across different media, places, contexts, and times. Over a very broad time range (from the fourteenth century BC until the fifth century BC), the formal quality “oxhide” has assumed different forms (ingots, urns, breastplates, altars, pendants, etc.), has been documented in different contexts (shipwrecks, temples, stelae, paintings, sculptures, etc.), has been distributed in different geographies (from Egypt and Cyprus to the Iberian Peninsula). Therefore, the meaning of the motif could be entangled with different contexts of social value and authority, giving rise to what Keane (2003) has called “the openness of iconicity”. Despite this, although the biography of this icon could be diverse and the meaning may have varied according to the context, must be directly linked to the Mediterranean dynamics related to interchange, sacredness and rituality. If the interpretation of the sub-rectangular motif as ox-hide is correct, then this link reveals interactions with Mediterranean backgrounds in the Northwestern Iberia (Duero/Minho region).

6. MATERIAL ENCOUNTERS IN THE LANDSCAPE: STATUE-MENHIRS AND WARRIOR STELAE

A number of material connections show clear links between statue-menhirs and stelae, revealing shared material identities between elites from the Northwest and the South of Iberia (Fig. 10). Some can be found in the weapons with which these people of stone were represented. Statue-menhirs such as those of Chaves and Ataúdes illustrate these processes well. In the first case, for example, the statue-menhirs of Chaves (Fig. 11) share with the Alentejo stela of Gomes Aires –found in Beja along with a Late Bronze Age warrior stela with writing (Almagro Bosch, 1966: 120) – the same long, rectangular figure, in an identical position, that has been inter-

preted as a sword hanging from a belt. Moreover, the same dagger depicted in the statue-menhir of Chaves appears in the warrior stelae of Tres Arroyos (Albuquerque, Badajoz). Indeed, this iconographic connection is far from exceptional, inasmuch as it was common in the intermediate regions that tied the Northwest and South of Iberia (Beira Baja, Beira Alta, Badajoz and Cáceres), where this type of sword was frequently represented (Brandherm, 2007).

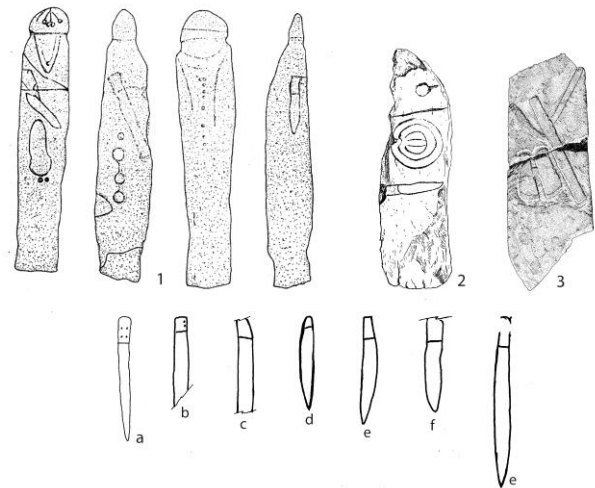


Figure 11. Statue-menhir of Chaves; 2. Warrior stela of Tres Arroyos; 3. Alentejo stela of Gomes Aires; 4. Other depicts of swords on southwestern stela: a. Eiras; b y d. El Manjar de los Puercos, c. Salvatierra de Santiago; e. El Oreganal I; f. Tres Arroyos; g. Los Herraderos

Additionally, the statue-menhir of Ataúdes (Guarda) and the stela of Mourico (Beja) provide another iconic connection between materialities from the northwest and south of the Iberian Atlantic, since exactly the same sword tip is represented in both monuments, (fig. 12). The first is a Northwestern statue-menhir with the sub-rectangular emblem, while the second one has been traditionally considered a Alentejo stela. However, this is not clear since the latter was found broken, probably due to re-use within a necropolis of the first Iron Age (Ourique, Beja). For this reason and the fact that it shares the same tip with Ataúdes, it may actually be a statue-menhir (Diaz-Guardamino, 2010). However, both hypotheses allow a material connection to be made: while the first interpretation argues an iconography shared between ‘Alentejo’ stelae (the southwest) and statue-menhirs (the northwest), the second would imply the presence of a statue-menhir directly in the south of Iberia.

In addition, representation of elements of clothing also provide substantial information about the processes of interaction. Some statue-menhirs, such as Ermida, Nave 2 or Millarón, share the fishbone pattern decoration with various metal objects that circu-

lated during the Late Bronze Age in the Atlantic-Mediterranean networks (Taramelli, 1921; Vilaça, 2004). The statue-menhir of São João de Ver (Aveiro), which is dated to eight-seventh century BC, is represented with a Mediterranean style helmet (Queiroga, 2003: 85). Other statue-menhirs, for their part, share clothing elements with Late Bronze Age stelae from the south of Iberia. The monuments such as Nave 2, Faiões or Alto de Escrita are represented with the same belts and necklaces to those of the warrior stelae and so-called pebble stelae of the southwest (Celestino, 2001). Likewise, these necklaces find good parallels in both Mediterranean – i.e. necklaces of the Balearic Islands (Delibes and Fernandez-Miranda 1988: 122) – and Atlantic archaeological records – i.e. the necklaces of Sintra (Armbruster, 1995). It is worth noting that Atlantic ancient pieces were re-used and combined in this latter necklace to create a final Mediterranean-style product.

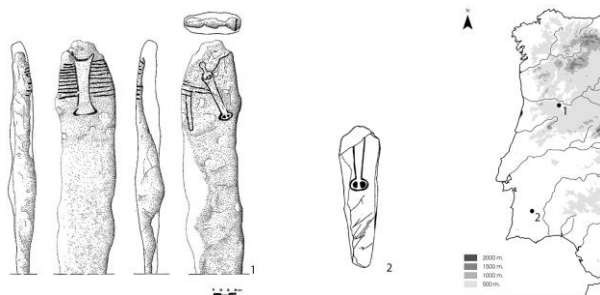


Figure 12. The statue-menhir of Ataúdes (after Vilaça *et al.* 2001) and the stela de Mourifeos (after Díaz-Guardamino 2010).

The group of stelae of San Marinho (Castelo Branco) (Celestino, 2001), localised in Beira Baixa, also provides evidence about connectivity. It is composed of three monuments found on the slope of a Late Bronze Age hillfort – a large number of artefacts such as palstaves, trunnion axe or Mediterranean gold objects decorated with fishbone pattern have been found in this settlement and surrounding areas. Piece number 1 is a stela in which two individuals with horns appear – or with a horned helmet. Piece number 2 is a reused menhir in which a hunting scene, an elbow fibula and a mirror were depicted. Monument number 3 reveals two material connections. On the one hand, the monument has the logic of a statue-menhir and a stela at the same time. While the human figure that is represented on the front seems to indicate that the monolith could function as a support for the image – namely, as a stela –, the belt and kilt engraved under the image seem to use the monolith itself as a representation of the human body. On the other hand, the human figure is represented by the sub-rectangular motif, meaning firstly, stela and statue-menhirs became hybridised and, secondly,

the sub-rectangular emblem come to transcend the world of statue-menhirs in regions of transition between the northwest and the south.

Additionally, the supraregional north-south connections are also detected conversely by the presence of material indicators of southern elites such as the warrior stelae in the Northwestern area itself (fig. 13).



Figure 13. Southern stela of warrior founded in the Northwest of Iberia. After Alves *et al.* 2011.

Pedra de Atalaia (Guarda) is found in the north sector of the Serra de Estrala, in the Beira Alta (Vilaça *et al.* 2011). Further north, on the western edge of the Chaves mass (Vila Real), the stela of Tojais is found (Vilaça *et al.*, 2001). Its location is relevant for three reasons. Firstly, it was found in the north of Portugal in a region rich in tin, where in ancient times there was an important exploitation not only of this mineral but also of gold. This fact enforces the vinculation of the warrior stelae with networks of access to mineral resources (Senna-Martínez 2011: 293). Secondly, the Tojais stela share the landscape with the statue-menhir of Cruz de Cepos (Alves and Reis, 2011), both situated in the border passage. Thirdly, arriving from the south, this highland landscape is the last point that needs to be overcome before descending towards the flood plain of Tâmega, the traditional area of communication and catchment of southern artefacts (González-Ruibal, 2006-2007).

Finally, Pedra Alta (Castrelo do Val, Ourense) is situated in the extreme north of this flood plain, which is home to a great number of statue-menhirs (fig. 14). On its surface, there are engravings of a sword, a v-notch shield and a cart (Reboreda and Nieto 2012). The cart, far from being exceptional in the northwest, may also be present in the art-rock of this region, taking into account the undeniable similarity existing between some of the denominated shield shapes and inscribed carts in the warrior stelae (fig. 15).



Figure 14. Hybrid monument of Pedra Alta. Photo: F. J. Torres Goberna.

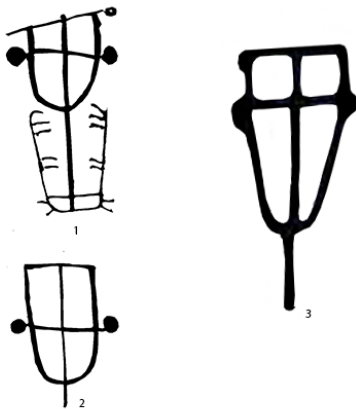


Figure 15. Engravings of carts on warrior stela (1-2) and the armed rock of Agua da Laxe, Gondomar, Pontevedra (3).

In any case, the monument of Pedra Alta seems to instantiate a hybrid form between the iconography of the warrior stela –where are depicted Mediterranean elements such carts (Celestino, 2008)– and the anthropomorphic character of the statue-menhirs. A similar case is found in La Barranca del Águila monument (Talavera) (Celestino, 2001: 355), situated in the intermediate area of communication that joins the northwest with the south of Iberia. It is also a statue-menhir which reflects the iconographic characteristics of the warrior stelae, with no evidence of previous engravings. Possibly, these hybrid monuments are expressing either the prestige that the southwest panoply (with a Mediterranean background) acquires for the elites represented in the statue-menhirs or the adoption of the new way of representation by elites with the southwest panoply. Nonetheless, they seem to be instantiating a well-established shared milieu between elites.

7. TOWARDS AN ARCHAEOOMETRY OF THE CONNECTIVITY IN WESTERN IBERIA

The same geographical distribution of the material forms analysed above and of the tin and gold ores shows how the mobility of the elites was closely linked to these mineral resources (fig.16). Accordingly, it is important to understand that the copper and tin sources have a different geographical location. Whereas in the western region of Iberia copper shows a more general dispersion, although mainly focuses in the southern region, the concentration of the tin is only located in the northwestern region. Thereby, in the context of the circulation and consumption of bronze during the Late Bronze Age, this dualistic distribution seems to encourage the dynamics of interaction and exchange between both regions, giving rise to the emergence of supraregional elites involved in the control, exploitation and distribution of minerals needed to produce bronzes.

While the exploitation of copper resources in Iberia is widely accepted, it has traditionally been more difficult to ascertain the exploitation of tin resources. Nonetheless, evidence of tin exploration come from sites such as the settlement of Cerro de Logrosan (Caceres, Spain) (Rovira, 2002) and the mine of S. Martinho (Orgens, Viseu) (Correia *et al.*, 1979). In the latter, a bronze dagger of the 'Porto de Mos' type was found at the bottom of the rubble which filled its shaft, proving its original opening and posterior infilling during the Late Bronze Age, probably for cassiterite exploration (Gomes *et al.* 2013). In addition, a recent study by optical microscopy, micro-EDXRF, SEM-EDS and XRD of metal artefacts from the site of Baiões (Viseu, Portugal) has also suggested the exploration of tin resources during the Late Bronze Age, indicating that metalworking and smelting could have been a commonplace activity in this area (Figueiredo *et al.*, 2010).

Although in Europe many publications on archaeological issues use lead isotope ratios, in western Iberia such studies are scarce. Recently, however, this situation seems to have changed. Regarding skeletal remains, the acidity of the soil in much of western Iberia makes archeometric studies difficult, and whenever this has been possible, the results have usually not been conclusive. Nevertheless, it is worth noting recent research which has used the strontium isotope ratios ($^{87}\text{Sr}/^{86}\text{Sr}$) in dental enamel of 55 humans in the center Portugal. That has allowed the distinguishing of migrant individuals from seven burial populations of the Late Neolithic and the Bronze Age (3500-1800 BC). Based on this calculation, nine percent (5 out of 55) of the total surveyed population have been considered as mi-

grants, the majority of which come from the cave burial of Cova da Moura (Lisbon), marking this site as socially distinct. This would correspond with known exchange patterns and suggests, as noted by Waterman *et al.* (2014), that both people and items were moving between different areas in West Iberia since the early stages of the Bronze Age.

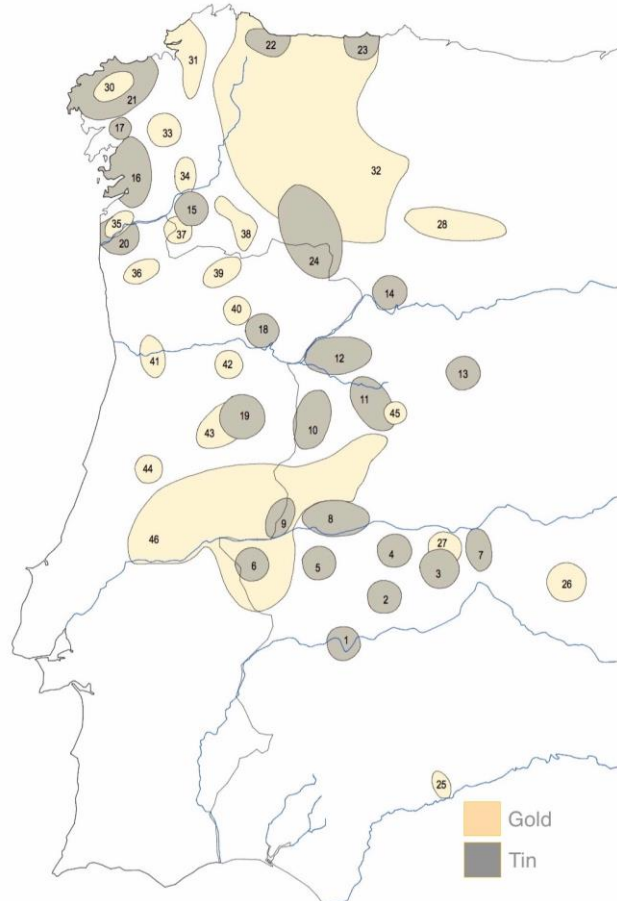


Figure 16. Distribution map of gold and tin ores in western Iberia. Tin ores distribute along the same territory as statue-menhir and stelae.

Metal provenance has always been a central and complex issue in the investigation of the Bronze Age. Elemental composition analyses of metal artefacts were conducted in western Iberia under the framework of the SAM project, however, despite the high number of artefacts under study, it was impossible to determine direct relationships between those artefacts and particular ores (Junghans *et al.*, 1960; 1968; 1974). This could be a result of the geochemical variability of ore deposits and the fractioning of some trace elements during metallurgical processes from ore to metal, as noted by Gomes *et al.* (2013: 662). Nevertheless, the principal technique to obtain information about the provenance and trade routes of archaeological metal artefacts is the analysis of the lead isotopic composition by ICP-MS. It is based on the different distributions of the four stable lead iso-

topes present in the materials that were used in the manufacturing of artefacts. The traces of lead with specific isotope ratios do not change during their production, remaining identical in the manufactured artefacts. Therefore, in principle, lead isotopic composition can be directly associated to particular mineral ores.

Lead isotope and elemental analysis has recently provided evidence that western Iberian mines supplied metal at a suprarregional scale and, more specifically, from northern Europe. The data suggest that this metal was not supplied directly from western Iberia to northern European regions, but rather the movement of metal between both areas took place through the western Mediterranean networks. There are at least two elements to suggest that the western Mediterranean worked as a proxy between western Iberia and northern Europe. On the one hand, the archaeological data discussed in this paper suggest that the interaction/exchange extended from northwest Iberia to south Iberia and *vice versa* – or at the very least had to be the main network of interaction according to the geographical distribution of the statue-menhirs and warrior stelae as well as axes and deposits of gold items. On the other hand, the archaeometry analysis also provides remarkable evidence that the northwestern European regions accessed the metal resources of western Iberia through a network of contacts that included regions such as southern, southeastern and northeastern Iberia as well as islands such as Sardinia.

These processes of interaction and circulation of metals between the Atlantic and northern regions of Europe through the western Mediterranean were increased as the Bronze Age continued. A number of artefacts from Swedish locations, which were analysed by MC-ICP-MS lead isotope and EPMA, provide significant insights in this regard. The results demonstrate that the lead isotope compositions of these copper-based items are considerably different from the Scandinavian ores and, therefore, the copper used to produce them was imported (Ling *et al.* 2013). The analytical data of two shaft-hole axes founded at Ödsmål (Bohuslän) (1700-1500 cal. BC) were compared with radiogenetic copper mines from different European regions. The study shows the same lead isotope composition between one of the shaft-holes and the copper ores from El Aramo (Asturias) in northwestern Iberia – a place with a strong evidence of mining activity during the second Millennium BC (Blas *et al.* 2015). Likewise, according to the author of this investigation, the lead isotope compositions of these two axes “lie on the mixing lines of copper ores from the Portuguese part of the Ossa Morena Zone”. The authors conclude that the “axes have a close compositional and isotopical con-

sistency with the copper ores from the western and northwestern region of the Iberian Peninsula" (Ling *et al.* 2014: 122).

The Isotopic characteristics of items dated to 1500-1300 cal. BC – for example, a lance head (Ånimskog), a palstave (Östra Ämtervik) and a metal from a crucible (Grimeton) – and dated to 1300-1100 cal. BC – such as a flange-hilted sword (Östra Hoby), a tanged sword (Sunne) and a copper rod (Tillinge) – also match the characteristics of ores from southeastern Iberia. The copper rod is consistent isotopically with the ores from Ossa Morena (Beja-Badajoz) in western Iberia and from Los Pedroches in southeastern Iberia. However, the geochemistry makes it impossible to exclude either of them, as noted by Ling *et al.* (2014: 122). Furthermore, items from the Grava deposit (Varmland), for example, the hilt-plated sword (1100-950/900 cal. BC), the arm ring (1100-950/900 cal. BC) and the fragment of a bronze lure (950/900-750/700 cal. BC), are consistent isotopically with the ores from south and southeastern Iberia and Bronze Age copper-based artefacts from Spain. They have similar lead isotope and trace element compositions with 0.2% each of As, Sb and Ni (Ling *et al.* 2014: 122).

Finally, two v-notched shields founded in Västergötland (Sunnarsberg) provide remarkable evidence of material connections between western Iberia and northern European regions. According to the authors (Ling *et al.* 2014: 125), their composition is analogous in their trace element signature, particularly by the presence of cobalt and antimony in the same order of magnitude and a somewhat higher arsenic concentration. In summary, the shields have lead isotope compositions consistent with copper ores from southwestern Iberia (Beja-Badajoz) in the central area, which connects the northwest to the south of Iberia, and where the warrior stelae with depicted v-notched shields are distributed. In addition, findings of Baltic amber at Late Bronze Age sites in the same region must not be neglected (Murrillo-Barosso, 2012). Similarly to other copper rich zones in Europe such as North Tyrol, Sardinia or Cyprus, the presence of Baltic amber can be explained as result of interaction between western Iberian and northern European communities.

A number of studies have been carried out on bronze artefacts, which mainly focused on the alloy composition determination and microstructural characterisation in order to explore the metallurgical technological evolution in west Iberia during the Later Prehistory. In this type of studies, technological innovation is used as a proxy to understand the cultural changes encouraged by the interaction between agents from Atlantic and Mediterranean backgrounds. In a Micro-EDXRF analyses on arte-

facts from Quinta do Almaraz (Almada, Western Coast of Portugal) concerning bronze artefacts with diverse typologies, chronologies and lead contents, the use of Mediterranean technology could be established (Velerio *et al.* 2012). The study demonstrates that the metallurgy at the settlement was very different from the local technology of the Late Bronze Age. The relatively high content of iron in the composition of artefacts, which is the result of an initial smelting of the raw materials under a strong reduction atmosphere, is characteristic of the fully Mediterranean backgrounds. In addition, the low content of tin in the composition of the bronzes seems to suggest a different process to obtain metal objects. However, there is also evidence of the adoption of innovations by the indigenous cultures, above all, at the end of the Bronze Late Age. As noted by the authors of this investigation, the "complexity of social interactions is quite evident in certain indigenous typologies that were apparently produced using Mediterranean technology, such as Acebuchal or double-spring fibulae" (Velerio *et al.* 2012: 81). Accordingly, this type of artefact seems to be a regional production made by metallurgists working in a context of hybridity.

Archaeometric analysis carried out in the Late Bronze Age archaeological site of Figueiredo das Donas, located in the core of the interaction area studied, also show evidence of Atlantic-Mediterranean hybridisation in a context of local metalwork production. According to the EDXRF and the micro-EDXRF analyses, all metal objects from this site were made of a binary bronze with traces of Pb, As and Sb. It is worth to mention the exceptional character of the nails under study, without parallels in other regions of Iberia. Their large size shows that they were used in heavy structures. In this regard, it has been suggested that they could have been shieldnails as those depicted in warrior stelae (Figueiredo *et al.*, 2011: 1206). Similar to other bronzes from the region, this alloy composition suggests that they were regional productions. However, X-ray digital radiography analysis, associated with detailed visual observations, indicates that the production of the nails involved joining the head to the pin by the casting-on technique. As the authors themselves note, the use of the casting-on technique can be assumed as evidence of the assimilation of "innovative technological solutions by the local metallurgists", due to the various spheres of interactions that were taking place "among the Mediterranean and Atlantic cultural axes" during the Late Bronze Age (Figueiredo *et al.*, 2011:1210).

Finally, the study of the artefacts from the site of Fraga dos Corvos also provides remarkable information. This site is located in Trás-os-Montes, a re-

gion where a number of statues-menhir and stelae appear. The material culture of this site allows us to better understand the Atlantic-Mediterranean interactions in northwestern Iberia. This is due not only to the Mediterranean items found there, but also to the archaeometric analysis, which shed some light on the mixture of both technological backgrounds. In this respect, a set of metallic items from Fraga dos Corvos were subjected to EDXRF analyses. Artefacts such as tartessian belt hook fragments seem to consist of an unalloyed copper with various impurities (Sn, Pb, As, Sb, Ni and Fe). According to Valério *et al.* (2012), the typological features of most of the assemblage and the higher Fe content indicates a new and more efficient smelting process incorporated by local communities as a result of their interactions with Mediterranean agents. In this regard, according to Senna-Martinez (2011a: 145-146), the manufacture of this type of items, which are made of copper, could be related to the ability of gilding techniques. The technique implies that the piece to be gilded is made of copper and not of bronze. This type of artefacts also appears in the Baiões/Santa Luzia cultural group where there is evidence of the use of gilding by thermo-diffusion technique, a technology originating in Eastern Mediterranean areas (Figueiredo *et al.*, 2010b). Likewise, as noted by Senna-Martinez, the finding of a Bencarrón type fibula and a cauldron handle made of 'unalloyed' copper [...], from the site of Almaraz, above mentioned, concurs with "the idea that prestige and ornamental items could be produced in copper in contexts where indigenous and orientalisating metallurgical traditions mix" (Senna-Martinez, 2012: 257).

8. ENDPOINT...

The deposit of Carambolo (Camas, Seville) located in southern Iberia is an interesting endpoint for the line of argument adopted in this article. In contrast to the other deposits of gold objects discussed above, it was found in a specific archaeological context: a sanctuary and center of power with several oxhide shaped altars whose foundation appears to have been established during the Late Bronze Age (1020-810 BC) (Fernández *et al.* 2007: 103-104). The presence of artisans from both the Atlantic and the Mediterranean technological domains have been documented by typology and archaeometry studies (topographic examination using a Scanning Electron Microscope (SEM), and microanalytical study using Energy Dispersive X-ray Spectroscopy (EDS) in order to establish the elemental composition of the alloys) (Perea and Armbruster 2008; Perea and Hunt-Ortiz 2010; Bandera *et al.* 2010).

Two types of gold items have been dealt with above: those made with hybrid Mediterranean and

Atlantic technologies (Late Bronze Age) and those that are fully Mediterranean, Phoenician (Early Iron Age). It is interesting to note that both types appeared together in the same deposit concealed under ground. An oxhide shaped gold breastplate, two bangle bracelets, several ornamental plaques and a seal-bead necklace was found as part of a hoard kept in a ceramic urn. Although traditional views have regarded this deposit as the homogenous gathering of Tartessian technology (Carriazo 1980: 222), recent archaeometric and morpho-typological studies have shown its heterogeneous and hybrid character (Perea and Armbruster 1998; Ontalba *et al.* 2002; Bandera *et al.* 2010). These artefacts reveal two different temporalities in connection with the Atlantic-Mediterranean interactions. The first one is embodied by the set of breastplates, bangles and plaques manufactured with hybrid technology. From a technological and ornamental viewpoint, these pieces are characteristic of the Atlantic technology, as evidenced in elements such as the cylindrical structures, the arrangement of the decoration in clusters, the semicircular shapes, and the spiked strips obtained using the lost-wax casting technique. However, as in the case of the gold pieces, their production also made use of Mediterranean technology: some of the spikes are hollow and decorated with typical Mediterranean motifs, such as rosettes (Bandera *et al.* 2010: 303). This hybridisation confirms the collaboration between workshops belonging to both technological domains during the Late Bronze Age, as demonstrated by Perea and Armbruster (2008; see also Bandera *et al.* 2010). In other words, the manufacturing methods, as well as the aesthetic and symbolic characteristics of the pieces of the Carambolo deposit, along with the rest of artefacts discussed above, stand as evidence of the interaction between people of Atlantic and Mediterranean extraction. The coming together of individuals from different cultural backgrounds encouraged the exchange of ideas, giving rise to different ways of doing things, which caused new items to be added to the material culture, leading to the creation of a new socio-material reality.

The second temporality revealed in the deposit emerges through the seal-bead necklace manufactured with Mediterranean technology and featuring a decorative scheme of eastern Mediterranean origin— more specifically, from the Phoenician world of the eighth and sixth centuries BC which also produced the treasure of Baião (Tâmega), in Northwestern Iberia. While the ox-hide-shaped breastplates and the bangles denote connectivity and hybridisation in the Late Bronze Age (similar to the other gold objects discussed in previous sections), the Phoenician necklace indicates a moment when

the artefacts were concealed in a deposit (Perea and Armbruster 2008: 519). Interestingly, the ox-hide-shaped breastplate and the bangles (the objects that embody a model of connectivity characteristic of the Late Bronze Age) were buried under the floor of the sanctuary sometime between the eighth and the sixth centuries BC. Thus, the breastplates were removed from circulation coinciding with the Phoenician colonisation of the Portuguese coast and with the opening of the Atlantic sea route to Northwestern Iberia by Phoenician vessels, a development that probably diminished the movement of people and goods over the land route that connected this region with Southern Iberia during the Late Bronze Age. Therefore, both the concealment of the breastplates and the rising importance of the sea route may be seen as embedded in the previously mentioned transitional context that saw a reciprocity-based model of exchange among elites (to which statue-menhirs belong) to give way to another model of exchange controlled by a merchant class based in the ports of Gadir and Onuba, and to a network of colonies and factories located on the Atlantic coast (Arruda 2002).

9. CONCLUSION

This article has focused on cultural contact between the Northwest and the South of Iberia and, by extension, Atlantic and Mediterranean backgrounds in the West of Iberia. These encounters resulted in the exchange of goods, the swapping of ideas and technologies and the learning of new ways of doing things. This adoption of new and foreign items, technologies and ideas meant that not only were assumed, but were also redefined and put to new uses and practices in a myriad of ways.

It has been sought to show the intermingling of relations amongst the people from different regions who procured raw materials in Western Iberia, those

who commissioned the finished object, partners in exchange networks and the individuals who used these objects. It became clear that the agency of the object –as well as the people behind its production– was crucial to maintaining these complex networks. People (elites) and objects (gifts) that made and used were irrevocably entwined. Artefacts such as the bracelet of Cantonha or the bangle of Sintra helped to unite different people and cultural backgrounds in a shared cultural milieu. Gift exchange has long been recognised as one of the fundamental logics of the Late Bronze Age. In this regard, gifting is far more than a mere economic transaction; instead, gift exchange encourages “appropriation of objects as part of one’s *personalia*” (Gell 1986: 112).

The study of the statue-menhirs and stelae of the Late Bronze Age allows us to link them to the elites of Northwestern and Southwestern Iberia respectively. The distribution of these material images in mineral-rich transit areas, where these objects were circulated and the technologies were mixed, make them a form of stone people in motion and connection. Likewise, as is the case with the gold items and bronze axes, the hybridization of both types of monuments (statue-menhirs and stela) reveals strong relations between people from two cultural backgrounds, adopting a mixture of Atlantic and Mediterranean features. The movement of artefacts in the landscape, the hybridisation in a technological and typological level and the shared traits in the iconography were not just a consequence of exchange between groups from different regions or backgrounds, but also a consequence of the emergence of supra-regional elite identities. All in all, the intention here has been to show how during the Late Bronze Age people, their identity and their social relations were totally entangled with the hybrid and suprarregional material world they inhabited.

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