Bodies in space and time: rethinking the Other in Later Iberian Prehistory

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Dedicated to the memory of Rui Boaventura

Abstract

Prior to the development of radiocarbon dating, the Other, from the eastern Mediterranean, was privileged with the role of stimulating the development of social complexity in the Iberian Copper and Bronze Ages. With the advent of radiocarbon dating and the recognition that many of the hallmarks of social complexity, such as metallurgy and megaliths, actually predated their supposed ancestors in the eastern Mediterranean, the Other faded into the distance. Now, with the development of methods, such as strontium isotope studies, a DNA, and dental morphology, and their application to the analyses of human populations in later Iberian prehistory, the Other is once again making its appearance as an actor in the play of Iberian social evolution.

How should we envision this Other and reframe their role in Iberian history? This paper employs a multiscalar perspective to explore the identification of the ancient Other and their possible relationship to social history and change during the Late Neolithic and Copper Age of the Iberian Peninsula. I draw from two projects and two scales of analysis: 1) excavations at the mortuary rockshelter of Bolores (Torres Vedras), and 2) investigations of populations living in the Sizandro Valley of Portugal.

Keywords

Alterity; the Other; identity; Portugal; Copper Age.

Introduction

This paper is a preliminary attempt to pose and explore a series of questions about the identification of ancient 'others' and their possible relationship to social history and change between the Late Neolithic and Copper Age of Southwest Iberia. It suggests ways that we may begin to productively incorporate and conceptualize new information on mobility and long-distance exchange in the study of dynamic period of the Iberian past.

During the 19th and early 20th centuries, prehistorians credited east Mediterranean colonists for the developments of the Iberian Copper and Bronze Ages. Many scholars proposed that the Copper Age resulted from the arrival of eastern Mediterranean colonists, who came to Iberia in search of metals and set up outposts (Siret, 1913). Some understood the Argaric as the consequence of an invasion of the 'bronze' people (Siret, 1913, p. 57-70) or the subsequent overthrow of the colonists by the indigenes (Blance, 1961). After archaeologists began applying

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radiocarbon dating in the 1970s, they increasingly recognized that material practices, such as megalith-building, predated their supposed exogenous models (Chapman, 1990, p. 35-53). As a result, they turned to local social or economic factors to account for the changes between the fourth-second millennia cal. BCE, and discredited migrationism and diffusionism as explanatory vehicles. Instead they replaced their models with a "radical autochthonism" (Aranda Jiménez *et al.*, 2015, p. 55).

With the development of analytical technologies to source raw materials and track the mobility of people, as well as new archaeological discoveries, the Other – both in the form of non-local individuals and exotic materials - is once again making its appearance in narratives of late prehistoric Iberian social history. Ivory objects found in Copper and Bronze Age contexts have long pointed to long-distance exchange networks, though, prior to the analyses of Schuhmacher *et al.* (2009), these ivory objects were presumed to be relatively few in number and to originate from sources (elephants, hippopotami) in North Africa and Egypt (Harrison & Gilman, 1977). Recent studies suggest that the exchange was larger in scale than imagined and that Asian elephants were sometimes used, as well as African and Pleistocene elephants. Schuhmacher (2013) has also pointed to the marked similarities between an alabaster stele from Mari, Syria, dated from the early third millennium BCE, and the biomorphic engraved stone plaques of Southwest Iberia. The Mari stele has the same ocular imagery and geometric designs sometimes found on the Iberian plaques, with the stags depicted on the stele only found (occasionally) on Symbolkera-mik, such as at Quinta do Anjo (Soares, 2003). With the trade in ivory, Schumacher suggests that it would not be surprising to find common symbols in Iberia and the Near East. Recent analyses of amber have shown that Baltic amber made it first appearance on the Iberian Peninsula during the Copper Age, although sources within the Peninsula were used since the Paleolithic (Murillo-Barroso & Martinón-Torres, 2012). The analyses of a suite of other materials used by third millennium BCE Iberians, including variscite (Villalobos García & Odriozola, 2016), oolitic flint (Nocete *et al.,* 2005), amphibolite (Lillios, 1997), rock crystal (Morgado Rodríguez *et al.,* 2015), cinnabar (Hunt-Ortiz *et al.,* 2011), gold (Murillo-Barroso *et al.,* 2015), and copper (Müller *et al*., 2007), reveal extensive inter-regional connections within the Peninsula, which not only brought people into contact with 'others', but likely made them an 'other' by virtue of their travel and interactions with these 'others'. Those trafficked objects and materials embodied specialized crafting knowledge, and, thus, by crafting these goods artisans transformed themselves into 'others' (Helms, 1993). Finally, those individuals or groups who acquired those goods – through exchange or theft – would have themselves been seen as a kind of 'other' who could harness these objects from distant lands that required esoteric knowledge to produce.

The bodies of non-local individuals recovered in Late Neolithic/Copper Age burial contexts in Iberia have also been identified, primarily through strontium isotope studies, and some sites appear to have particularly high percentages of these individuals. At Cova da Moura, for example, 4 of the 12 individuals sampled were found to be of non-local origin (Waterman *et al.,* 2014). At Perdigões, 6 out of the 8 individuals sampled were non-local (Hillier *et al.,* 2010), in marked contrast to the burial samples studied from Carcavelos and Estria, which had primarily local individuals. At other 'special' sites in southern Spain, similarly high proportions of individuals were discerned to be non-local. For example, at Valencina de la Concepción, 11 out of the 33 individuals sampled were non-locals, and at La Pijotilla, 5 out of 17 were non-local (Díaz-Zorita Bonilla, 2013, p. 265). The significance of these data is highlighted when compared to the results of work carried out at the Middle Neolithic site of Algar do Bom Santo. There, all 14 samples were "non-local or at least mobile for part of the year" (Price, 2014, p. 156). When compared to the Argaric site of Gatas, where all 33 individuals analyzed showed local values (Díaz-Zorita Bonilla *et al.,* 2012), it would appear that the mobility of people in southern Iberia decreased, overall. Nonetheless, some people were still highly mobile even in the Late Neolithic, and some burials of that time housed between 33 to 75% non-local individuals.

It is important to note, however, that strontium signatures do not tell us anything about the cultural geographies in which people lived their lives nor how they identified themselves. People with a similar strontium isotope ratio could have grown up in the same geological region, but self-identified as members of different social groups. If they lived in a large/homogeneous geological region, they may nonetheless have migrated, but that will not be observable in the strontium isotope ratio. Alternatively, in a region with a high level of geological heterogeneity, people who manifest different strontium isotope signatures could have grown up in close proximity to each other and shared similar social identities. Furthermore, a child of a migrant might still culturally identify as a member of a migrant population although they would generate a local strontium isotope signature (Knudson, 2011).

With the heightened recognition of the mobility of objects and people in southern Iberia during the Late Neolithic and Copper Age, and the realization that burial practices were more diverse than previously imagined (Valera, 2012), it seems an appropriate moment to consider the relationship between human mobility, material culture, and social identity, including difference and alterity. This intervention will help us consider the significance of these 'others' of the Iberian past without resorting to old diffusionist or migrationist arguments. There is a vast anthropological and archaeological scholarship that engages with these issues and related concepts, such as plurality, culture contact, hybridity, and ethnogenesis (Jones, 1997; Insoll, 2007; Voss, 2008, 2015; Card, 2013; Beaudry & Parno, 2013; Leistle, 2016, etc.). It is useful to consider, however, that much of this literature draws from colonial (or post-colonial) historical contexts in which alterity served to justify political domination (Said, 1978). In non-colonial or non-state contexts, alterity and social difference may have had different valences.

Nonetheless, a key point is that creating a self or group identity involves constructing a sense of otherness or alterity through a psychosocial process. To see one's self as a self or one's group as distinctive, one needs an Other. Sometimes phenotypic differences can be deployed as markers of alterity. However, alterity does not necessarily translate into biological difference, just as biological similarity does not necessarily translate into social identity. Class, religion, cuisine, language, occupation, experiences, and other factors can also shape people's notions of what makes them who they are and who they are not. For this reason, biological differences, such as non-local strontium isotope signatures, are not enough for us to propose alterity. Because of this complexity, alterity, as purposeful cultural contrast, has resisted archaeological treatment (Lau, 2012, p. 8).

For the purposes of this discussion, I take alterity to be agentive and reflexive. It is at the same time the outcome of social practice and the instigator of that practice. Thus, how can we as archaeologists translate these material 'facts' about non-local peoples and exotic things into lived social realities or social practices? How should we envision alterity in Iberian prehistory and reframe its role in historical transformations? How does biological difference map onto or intersect with spatial or material distinctions?

To address with these questions, I draw from two projects that engage with these questions at different scales of analysis:

1. Excavations at the mortuary rockshelter of Bolores (Torres Vedras) (Lillios *et al.*, 2010, 2014, 2015);

2. Investigations of burial populations of the Sizandro Valley of Portugal (Thomas, 2011; Waterman *et al.,* 2014; Lillios, 2015; Irish *et al.,* in prep.).

Excavations at the mortuary rockshelter of Bolores (Torres Vedras)

Bolores (Torres Vedras) is a semi-artificial rockshelter on the Sizandro River Valley, about 15 m from the Atlantic coast (Fig. 1). Following testing in 1986 (Zilhão, 1987), four seasons of excavation were conducted (Lillios *et al.*, 2015). The aim of this interdisciplinary project was to gain insights into the nature of social difference during the Late Neolithic/ /Copper Age through the analysis of material culture and human skeletal remains. Our team carried out spatial and bioarchaeological analyses, with particular attention devoted to identifying distinct individuals and analyzing their diet, mobility, and health.

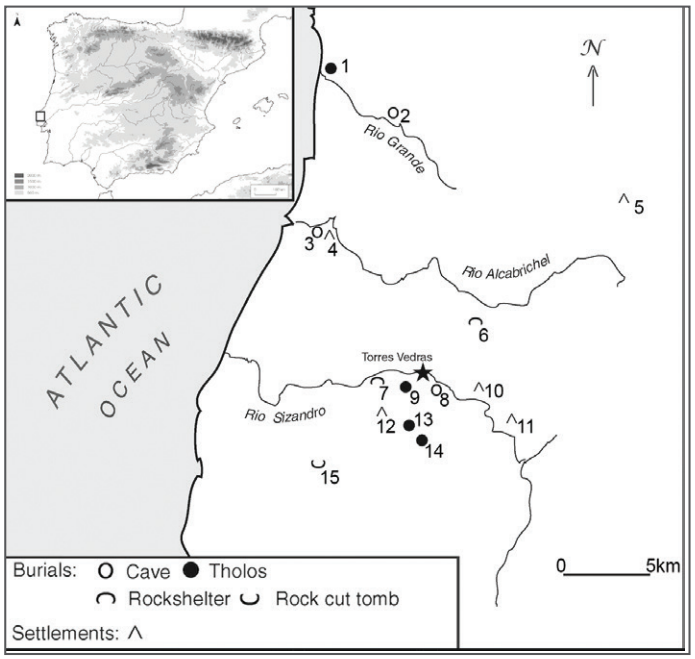

Fig. 1 - Location of Bolores (#7), and other Late Neolithic/ Copper Age burials and settlements in Torres Vedras region). 1. Paimogo, 2. Feteira, 3. Lapa da Rainha, 4. Pico Agudo, 5. Pragança, 6. Algar do Bom Santo, 7. Bolores, 8. Cova da Moura, 9. Charrinho, 10. Fórnea, 11. Penedo, 12. Zambujal, 13. Serra da Vila, 14. Barro, 15. Cabeço da Arruda. Map by Anna J. Waterman.

Bolores is a small tomb (about 5m x 3m) built into an outcrop of soft Jurassic sandstone, which ancient peoples divided into three burial chambers through the placement of large sandstone boulders on the shale bedrock (Fig. 2). They also placed flat limestone slabs on the surface within these chambers, and grouped their dead around these slabs (Fig. 3). We excavated approximately 70% of the site, and thus, we feel we have a fairly representative understanding of the practices that occurred at

Fig. 2 - Bolores. Photograph by Katina Lillios.

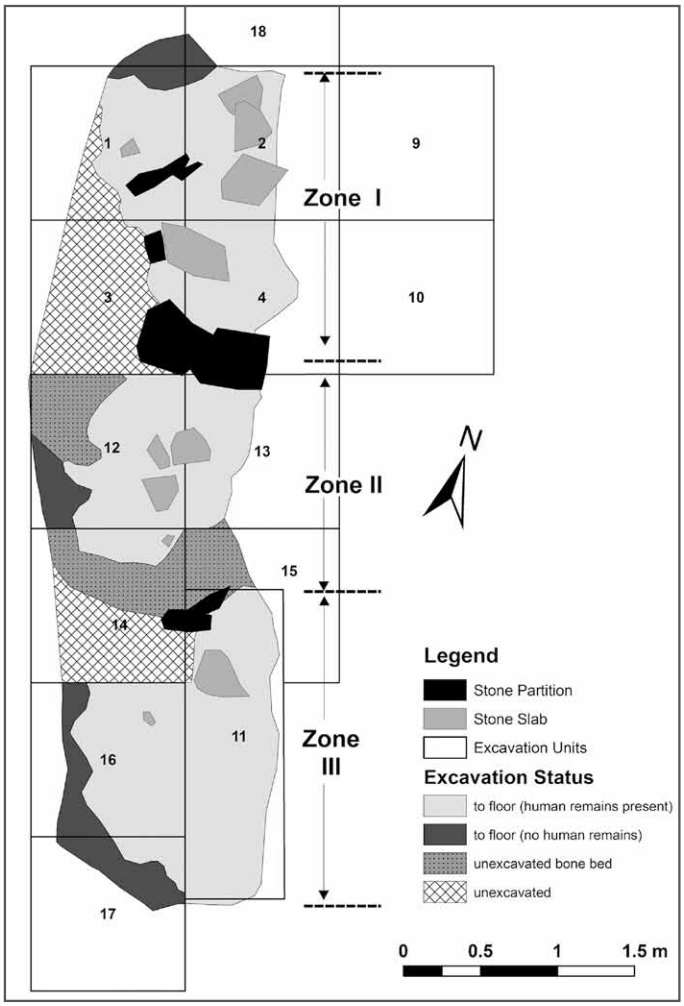

Fig. 3 - Plan of Bolores, showing stone partitions and slabs. Plan by Joe Alan Artz.

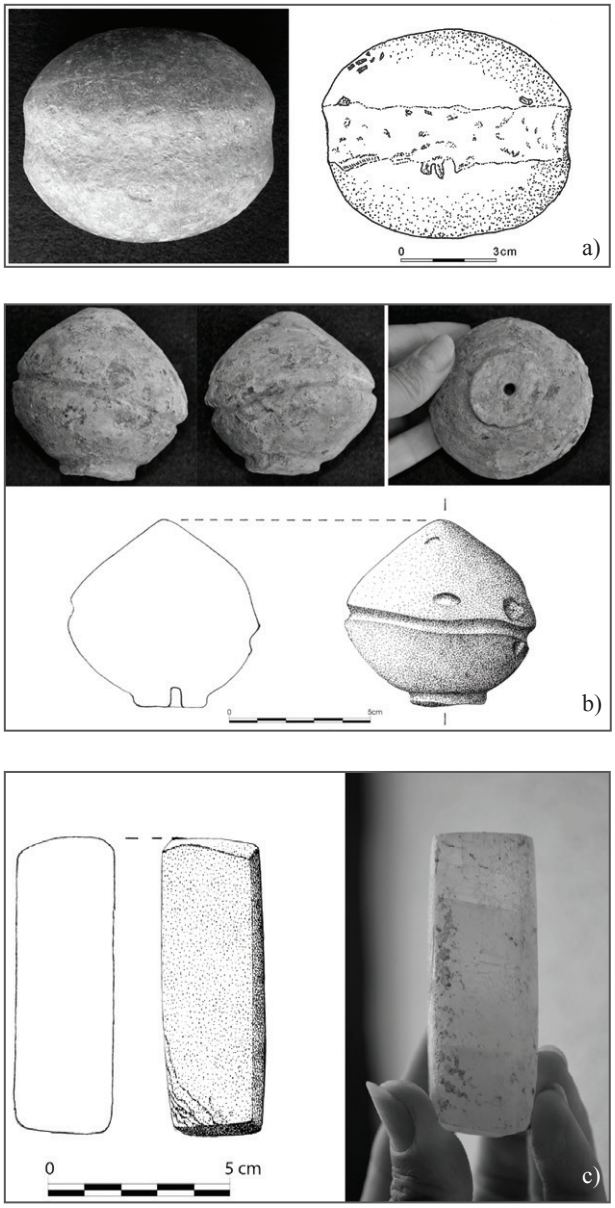

Fig. 4 - Some artifacts found at Bolores. A) Quartzite mace. B) Limestone 'idol'. C) Calcite betyl (BOl.16.2.M008). Drawings by Leonel Trindade, Photographs by Katina Lillios.

the site. We obtained eleven AMS dates from distinct individuals at Bolores, which dated the site between 2800-2600 cal. BCE, with a short period of use around 1800 cal. BCE. The MNI was 36, which included adults, adolescents, and subadults, who were found in all three zones of the site. That is to say, there was no spatial segregation of individuals by age group. Material culture was relatively scarce and consisted of stone and shell beads, stone 'idols' of various forms, flint blades, and ceramic vessels (Fig. 4).

As for many collective burials of the Iberian Late Neolithic and Copper Age, distinguishing between individuals at Bolores was difficult because of the fragmented and commingled state of the human remains, the result of repeated use of the site, including the movement of remains to the sides and back of the rockshelter to make space for newer bodies. Analysis of the bones using the methods of archeothanalogy (Lillios *et al.,* 2015, p. 121-141) revealed that most of the bodies were originally placed in the tomb as primary burials, most likely wrapped in some kind of cloth or container. However, a bone bundle was also found (representing the bones of at least two individuals), indicating the practice of secondary burial, as well. The individuals analyzed for stable isotopes (Sr, C, N, O), including both

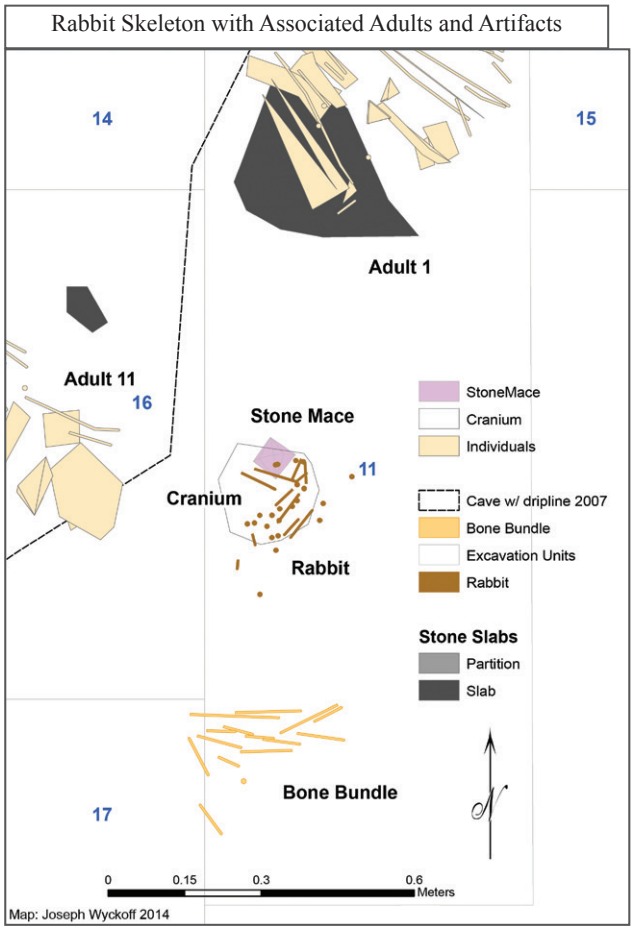

Fig. 5 - Bone bundle and child skull with rabbit skeleton. Plan by Joseph Wyckoff.

adults and subadults, all presented evidence for a fairly homogeneous population, at least in terms of diet (terrestrial proteins) and mobility (local) (Waterman, 2012, p. 233; Lillios *et al*., 2015, p. 86-90). The relative scarcity of material culture found at the site also contributed to an overall impression of homogeneity. The artifacts that were found appear to have been made from local materials, such as flint, calcite, limestone, shale, bone, ceramic, and shell.

It would be easy to aggregate the finds from Bolores and characterize its population as a homogeneous group of people buried over a fairly short period of time (perhaps 200 years, or so). However, a closer look at the practices involved in their burial suggests that social distinctions were being made at the site throughout its history. First, we need to consider why Bolores was constructed at all, when there was at least one other tomb in the Sizandro Valley - Cova da Moura - that had been in use and continued to be used at the same as Bolores (and did not require any labor to construct, and was about 3 km to the east). Were the people who buried their dead at Bolores not permitted to use Cova da Moura, or did they want to assert a distinctive identity from those buried at Cova da Moura (or both)? (Lillios, 2015) Some human remains were even found at Zambujal (Kunst *et al.*, 2014), the settlement located closest to Bolores and contemporary with the use of Bolores, which also begs the question: why were some individuals deposited at the settlement, while others found at a more 'formal' burial site? Some clues are available about the nature of the people buried at Cova da Moura, which I discuss in the next section.

Second, it appears that Bolores was originally used as a tomb without any chambers. Some human bones were found beneath one of the sandstone boulders used to divide the burial space, and thus, for a time, all the dead could 'rub shoulders' with each other. After a period of time, the chambers were created. The construction of these chambers was the result of some planning, as the chambers are very similar in area, and coordination of labor, as some of the stones would have likely required at least two to three able-bodied individuals to move and put into place.

Within each chamber, individuals of different ages and sexes were housed: adults, adolescents, and children, women, and men. Thus, age and sex distinctions do not seem to have been the most important marker at death. The dead, however, were grouped around flat stone slabs, suggestive of social groups within these chambers. The existence of such slabs in burial contexts is not unknown in Late Neolithic/Copper Age Iberia (see Gonçalves, 1999, p. 96; Navarrete *et al.*, 1992; Juárez Martín *et al.,* 2010), but they are fairly unusual. In general, the bodies at Bolores were found as primary burials, which were moved within the tombs to make room presumably for later burials.

Some individuals were treated in distinctive ways, however, and these seem to be concentrated in Zone III. In addition to the bone bundle, a child was buried with a rabbit buried beneath its head in

Zone III (Fig. 5). This was the zone in which all the stone idols were also found. Thus, at least spatially, the dead were distinguished, and certain individuals ritually treated in markedly different ways.

How do the material and spatial distinctions found at Bolores correlate with biological difference? In terms of overall diet and health, the population was largely healthy, although cases of arthritis were evident (Lillios *et al.*, 2015, p. 70-90). No significant differences in diet were found; their diet was based mostly on C_3 plants and terrestrial animals. Of the 19 individuals analyzed for strontium isotope ratios, all appeared to be local. Biological distinctiveness was more apparent in dental traits (Lillios *et al*., 2015, p. 91-94). Some of the individuals have dental traits that are more commonly found in North African populations (notably Cusp 7, Bushman Canine, and three-rooted UM2). What is striking is that while these individuals may have had a non-local ancestry, they appear to have spent their lives in the area. There are also suggestions that these individuals were spatially and materially marked, as their teeth were found in Zones I and II, but not in Zone III, where the unusual finds of the bone bundle, the rabbit/child burial, and the stone idols were recovered.

The archaeology at Bolores suggests a burial population that was relatively homogeneous in terms of mobility patterns, health, and diet. Some individuals appear to have had ancestors from North Africa, and they may have been spatially or materially marked, although they were found in association with individuals who do not appear to have had North African ancestry. What is most notable about the spatial/material patterning at Bolores is

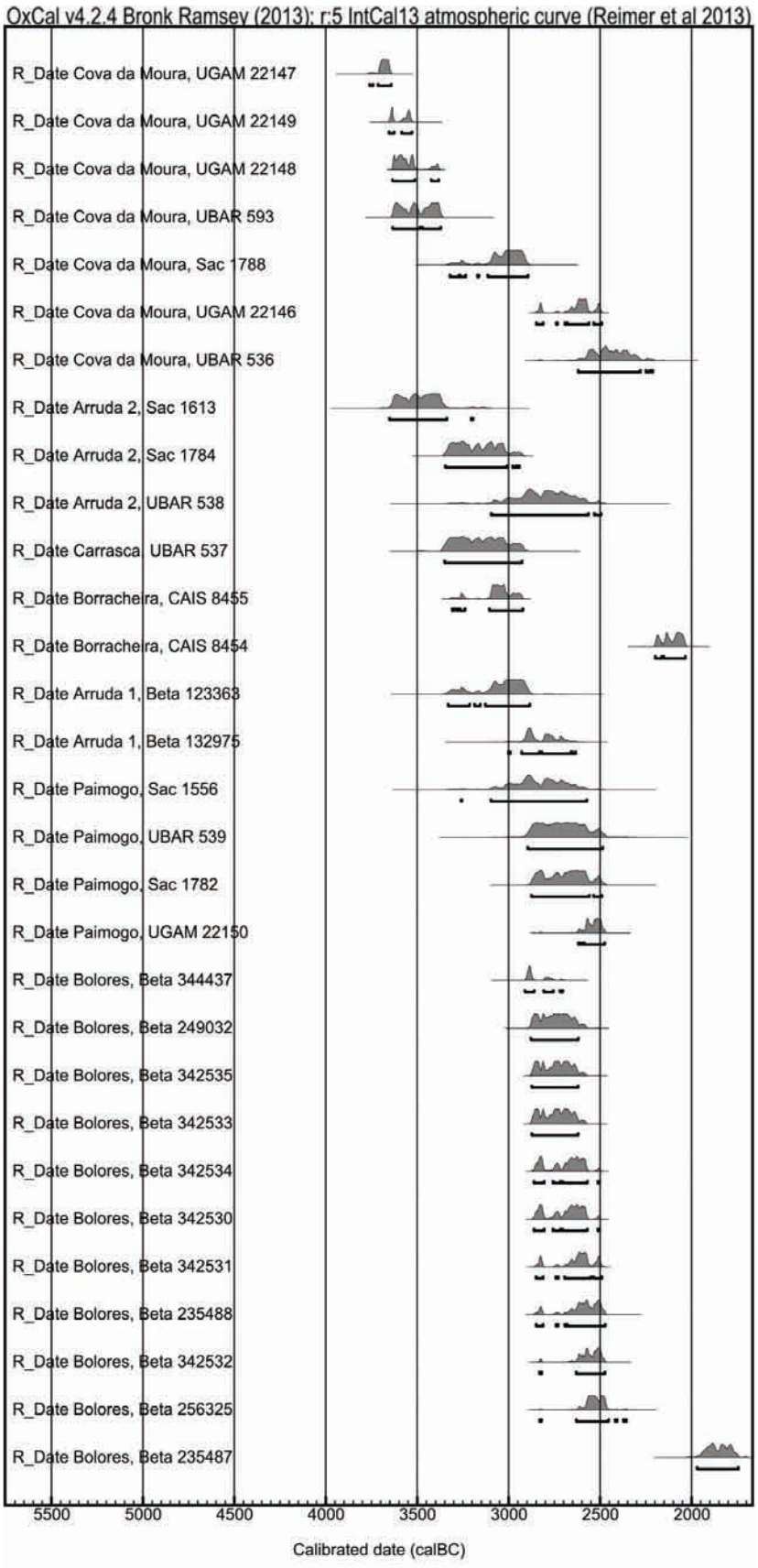

Fig. 6 - Radiocarbon dates for Sizandro Valley burials.

that the unusual grave goods, as well as ritual practices, appear to have been located in one zone of the site, suggestive of some kind of social distinction being made. Compared with other sites in the region, in terms of material goods (relatively few in number, some unusual idol forms), architecture (semi-artificial cave), and ritual practices (such as the placement of stone slabs), Bolores is distinctive. More importantly, the fact that Bolores were even constructed, requiring some labor, while there were other local burial sites available, does seem to indicate a conscious attempt to mark some kind of social difference. But it is difficult to speak about social difference by analyzing one site, particularly a small site like Bolores. A comparative study, which draws on multiple sites, is more meaningful.

Burial populations of the Sizandro Valley (3700-1800 cal. BCE)

Thus, in conjunction with the excavations at Bolores, interdisciplinary investigations of Neolithic and Copper Age burial populations of the Sizandro Valley were also undertaken (Fig. 1). These investigations included analyses of material culture, specifically beads (Thomas, 2011), bioarchaeological studies (Waterman, 2012; Waterman *et al*., 2014; Waterman *et al.,* 2015), and diachronic studies of practices involved in the construction of tombs (Lillios, 2015). Other than Bolores, the burials included in these investigations were excavated by other archaeologists, using different methods; thus, direct comparisons between these sites are often challenging. Nonetheless, comparative studies, for which there are a suite of radiocarbon dates for excavated sites in a river valley (or in neighboring valleys), provide a critical source of information on long-term history and change from both cultural and biological perspectives. They also provide a framework for interpreting individual sites, such as Bolores.

As elsewhere in the Estremadura, the dead of the Sizandro were buried in a variety of collective tombs – including caves, artificial caves, and tholoi (Kunst & Trindade, 1990). Cave burials are the oldest, beginning 4000–3700 cal. BCE in the Sizandro (Fig. 6). Later, around 3300 cal. BCE, artificial caves were constructed and used as burials. However, cave sites overlapped in use with artificial caves towards the latter quarter of the fourth millennium BCE, and, by 3000 cal. BCE, all tomb types, including tholoi, were in use by populations to bury their dead. Thus, a proliferation of tombs and tomb types developed over the course of the fourth and third millennia BCE in the Sizandro, as in the Iberian Peninsula as a whole (Lillios, 2015).

Bioarchaeological analyses were carried out to compare the diet, biological affinity, and mobility pattern of individuals housed in some of these burials, including Cova da Moura, Cabeço da Arruda I, Paimogo, Zambujal, and Bolores (Waterman 2012; Waterman et al. 2014; Irish et al. in prep.). Several burials, most notably Cova da Moura (MNI=90), were found to house individuals with significantly enriched delta $^{13}C_{ap}$ values without corresponding enriched delta $^{13}C_{co}$ values – which suggest they had access to C4 or CAM products (Waterman *et al.*, 2015). The Bolores population does not evidence access to these plants. Therefore, it appears that some dietary differences existed between Sizandro burial populations.

In order to assess the biological affinity of burial populations in the region, Irish compared up to 36 nonmetric dentals traits from the Arizona State University Dental Anthropology System (Scott & Turner, 1997; Irish *et al*., in prep.) for samples from three of the burials in the region: Cova da Moura, Paimogo I, and Bolores. These were the three sites that generated large enough samples of dental remains to allow for statistical analyses to be conducted. Analyses showed that the populations at Bolores and Cova da Moura do not differ significantly (MMD [mean measure of divergence] =.045; $p<0.025$), which is suggestive of short-term population continuity in the Sizandro valley (given that Cova da Moura is an older site than Bolores, though overlapping in date). What is of particular interest is that some dental traits at Cova da Moura (as with Bolores) are common in North Africans.

A comparative study of 55 individuals sampled from six Neolithic/Copper Age burials in the Torres Vedras region were carried out to discern variation in mobility patterns (Waterman *et al.*, 2014). Of the 55 individuals analyzed, only 5 were non-local, but 4 of these 5 came from one site: Cova

da Moura. A recently obtained radiocarbon date of one of the non-local individuals from Cova da Moura indicates that this person returned the oldest date we have for the site - approximately 3700 cal BCE (4820±25 BP; UGAMS 22147).

Biological difference is not in itself a marker of alterity. As purposeful action, alterity is marked through material, including spatial, means. Analyses of the material culture of these sites, however, also points to Cova da Moura as being particularly distinctive. It is the richest site in the region in terms of the number and diversity of burial goods (Thomas, 2011). For example, it has the largest number of engraved slate plaques in the area (22 plaques or plaque fragments). It also has the largest number of beads of any burial in the region (1536), and it has beads made from the largest diversity of raw materials, including ivory, variscite, and jet.

With a site used for such a long period of time as Cova da Moura and with so many individuals (at least 90), it is unfortunately impossible to know which goods were associated with which individuals. The aggregate picture we have, however, is of a site with a deep history, which was settled by people who appear to have had a North African ancestry and whose strontium isotope signatures appear to be pointing to a larger population of non-local individuals than other burials in the region, and who were buried with a large amount of exotic goods, particularly beads made of distinctive stones. The association of biological difference and material difference of the Cova da Moura population, in comparison to others in the area, is suggestive of migrant (or refugee) population that maintained distinctive material and spatial practices, such as placing slabs on the floor of the tomb and producing/using unusual stone 'idols'.

Discussion

The fourth-second millennia cal. BCE in southern Iberia was a time of important social transformations. This paper examines some of the material, spatial, and biological expressions of these transformations from a multi-scalar perspective, incorporating evidence for an individual site – Bolores, and comparing Bolores to other burials in the Sizandro Valley region. It also draws on an agency-based model of social practice. What is apparent throughout this long historic period is that Iberians engaged in many ways of marking difference – by constructing different forms of tombs, by segregating their dead within these tombs, and by acquiring and consuming distinctive or non-local raw materials.

How can we understand these practices? Why did people living in southern Iberia engage in this labor-intensive work of marking difference? One thing that is striking is that these practices emerged at the same time as increasing territoriality, in the form of constructing fortified settlements and ditched enclosures. I would like to suggest that there is a relationship between these patterns, as Whittle (1996) and Robb (2001) have argued for other regions of Europe in the Neolithic. That is, as people came to be increasingly tethered to places and landscapes (perhaps an outcome of economic lifeways), those who traveled (traders, migrants) and things that came from far afield (exotic goods), increasingly took on a powerful valence. Alterity can pose as both a potential threat but also a source of cosmological power (Helms, 1988). It is this engagement of 'self' and 'other' that triggered new forms of marking social difference, and not simply the movement of peoples from 'elsewhere'.

However we interpret the appearance of non-local peoples and things in the late Iberian prehistory, we must avoid the pitfalls of diffusionism and migrationism. We must work to better understand why people moved at all, and the factors – both the 'pulls' and 'pushes' - that might have activated this mobility (Anthony, 1990). And finally, we need to remember that social identity and alterity are, fundamentally, cultural constructions and the outcomes of social practices, which are not always isomorphic with phenotypic or biological markers.

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References

ANTHONY, D. (1990) - Migration in archeology: The baby and the bathwater. *American Anthropologist*, 92 (4), p. 895-891.

ARANDA JIMÉNEZ, G.; MONTÓN-SUBÍAS, S. & SÁNCHEZ ROMERO, R. (2015) - *The Archaeology of Bronze Age Iberia. Argaric Societies.* New York: Routledge.

BEAUDRY, M.C. & PARNO, T.G. (eds.) (2013) - A*rchaeologies of Mobility and Movement.* New York: Springer.

BLANCE, B. (1961) - Early Bronze Age colonists of Iberia. *Antiquity*, 35, p. 192-202.

CARD, J.J. (2013) - *The Archaeology of Hybrid Material Culture.* Carbondale, IL: Southern Illinois University Press.

CHAPMAN, R. (1990) - *Emerging Complexity.* Cambridge: Cambridge University Press.

DÍAZ-ZORITA BONILLA, M. (2013) - *The Copper Age In South-West Spain: A Bioarchaeological Approach To Prehistoric Social Organisation.* Unpublished PhD dissertation. University of Durham.

DÍAZ-ZORITA BONILLA, M.; COSTA CARAMÉ, M. E. & GARCÍA SANJUÁN, L. (2012) - *Funerary Practices and Demography From the Mesolithic to the Copper Age in Southern Spain.* In GIBAJA BAO, J. F.; CARVALHO, A. F. & CHAMBON, P. , Funerary practices from the Mesolithic to the Chalcolithic of the northwest Mediterranean. British Archaeological Reports. Oxford: Archaeopress, p. 51-65.

GONÇALVES, V. S. (1999) - *Reguengos de Monsaraz, Territórios Megalíticos.* Lisbon: Câmara Municipal de Reguengos de Monsaraz.

HARRISON, R. J. & GILMAN, A. (1977) - Trade in the second and third millennia BC between the Maghreb and Iberia. In V. MARKOTIC, V. (ed.), A*ncient Europe and the Mediterranean.* Warminster: Aris and Phillips, p. 89-104.

HELMS, M. W. (1988) - *Ulysses' Sail: An Ethnographic Odyssey of Power, Knowledge, and Geographical Distance.* Princeton: Princeton University Press.

HELMS, M. W. (1993) - *Craft and the Kingly Ideal: Art, Trade, and Power.* Austin: University of Texas Press.

HILLIER, M.; BOAVENTURA, R. & GRIMES, V. (2010) - Moving around? Testing mobility with strontium isotopes (86 Sr /87 Sr) in the Late Neolithic of South – Central Portugal. *8.º Encontro de Arqueologia do Algarve – A Arqueologia e as outras Ciências*, Silves, Portugal, 2010.

HUNT-ORTIZ, M. A.; CONSUEGRA-RODRÍGUEZ, S.; DÍAZ DEL RÍO-ESPAÑOL, P.; HURTADO-PÉREZ, V. M. & MONTERO-RUIZ, I. (2011) - Neolithic and Chalcolithic –VI to III millennia BC– use of cinnabar (HgS) in the Iberian Peninsula: analytical identification and lead isotope data for an early mineral exploitation of the Almadén (Ciudad Real, Spain) mining district. In J. E. ORTIZ; O. PUCHE; I. RÁBANO & L. F. MAZADIEGO (eds.), History of Research in Mineral Resources, *Cuadernos del Museo Geominero*, 13. Madrid: Instituto Geológico y Minero de España, p. 3-13.

INSOLL, T. (2007) - *The Archaeologies of Identity: A Reader.* New York: Routledge.

IRISH, J. D.; LILLIOS, K. T.; WATERMAN, A. J. & SILVA, A. M. (in prep.) - *Regional and extra-regional dental affinities of populations between the Late Neolithic and Copper Age in the Portuguese Estremadura*.

JONES, S. (1997) - *The Archaeology of Identity*. London: Routledge.

JUÁREZ MARTÍN, J. M.; MORENO, E.; CÁCERES, P.; LACALLE, R.; GUIJO, J. M.; NIETO, J. M.; GUILAR, J. A. & RICO, E. (2010) - El Enterramiento en Cueva Artificial de La Molina (Lora de Estepa, Sevilla). *Arqueología Monografías, Consejería de Cultura*. Sevilla: Junta de Andalucía.

KNUDSON, K. J. (2011) - Identifying archaeological human migration using biogeochemistry: Case

studies from the south-central Andes. In. G. S. CABANA & J. J. CLARK (eds.), *Rethinking Anthropological Perspectives on Migration.* Gainesville: University Press of Florida, p. 231-247.

KUNST, M.; CARDOSO, J. L. & WATERMAN, A. (2014) - Human bones from Chalcolithic walled enclosures of Portuguese Estremadura: the examples of Zambujal and Leceia. In A. C. VALERA (ed.), *Recent Prehistoric Enclosures and Funerary Practices in Europe* (Proceedings of the International Meeting Held at the Gulbenkian Foundation, Lisbon, Portugal, November 2012). *BAR IS* 2676, p. 83-98.

KUNST, M. & TRINDADE, L. (1990) - Zur Besiedlungesgeschicte des Sizandrotals: Ergebnisse aus der Küstenforschung. *Madrider Mitteilungen*, 31, p. 34–83.

LAU, G. (2012) - A*ncient Alterity in the Andes: A Recognition of Others*. London: Routledge.

LEISTLE, B. (ed.) (2016) - *Anthropology and Alterity. Responding to the Other.* New York: Routledge.

LILLIOS, K. T. (1997) - Amphibolite tools of the Portuguese Copper Age (3000-2000 BC): A geoarchaeological study of prehistoric economics and symbolism. *Geoarchaeology*, 12 (2), p. 137-163.

LILLIOS, K. T. (2015) - Practice, process, and social change in third millennium BC Europe: A view from the Sizandro Valley, Portugal. *European Journal of Archaeology*, 77 (2), p. 245-258.

LILLIOS, K. T.; ARTZ, J. A.; WATERMAN, A. J; MACK, J.; THOMAS, J. T.; TRINDADE, L. & LUNA, I. (2014) - The rock-cut tomb of Bolores (Torres Vedras): An interdisciplinary approach to understanding the social landscape of the Late Neolithic/Copper Age of the Iberian Peninsula. *Trabajos de Prehistoria*, 71 (2), p. 282-304.

LILLIOS, K. T.; WATERMAN, A. J.; ARTZ, J. A. & JOSEPHS, R. L. (2010) - The Neolithic-Early Bronze Age mortuary rockshelter of Bolores, Torres Vedras, Portugal: Results from the 2007 and 2008 excavations. *Journal of Field Archaeology*, 35 (1), p.16-36.

LILLIOS, K. T.; WATERMAN, A. J.; MACK, J. M.; ARTZ, J. A, & NILSSON-STUTZ, L. (2015) - *In Praise of Small Things: Excavations at the Late Neolithic-Early Bronze Age Burial of Bolores (Torres Vedras), Portugal.* Oxford: British Archaeological Reports, International Series.

MORGADO RODRÍGUEZ, A.; LOZANO RODRÍGUEZ, J. A.; GARCÍA SANJUÁN, L.; ODRIOZOLA LLORET, C. & LUCIÁÑEZ TRIVIÑO, M. (2015) - The allure of rock crystal in southern Iberian Copper Age: Technical mastery and distinguished objects at Valencina de la Concepción (Seville, Spain). *Quaternary International.* doi:10.1016/j.quaint.2015.08.004.

MÜLLER, R.; GOLDENBERG, G.; KUNST, M.; BARTELHEIM, M. & PERNICKA. E. (2007) - Zambujal and the beginnings of metallurgy in southern Portugal. In S. LA NIECE; D. HOOK & P. T. CRADDOCK (eds.), *Metals and Mines. Studies in Archaeometallurgy*. Papers from the Conference Metallurgy: a Touchstone for Cross-cultural Interaction (British Museum), London 28-30, April 2005, p. 15 – 26.

MURILLO-BARROSO, M.; COSTA CARAMÉ, M. E.; DÍAZ-GUARDAMINO URIBE, M.; GARCÍA SANJUÁN, L. & MORA MOLINA, C. (2015) - A reappraisal of Iberian Copper Age goldwork: Craftmanship, symbolism and art in a non-funerary gold sheet from Valencina de la Concepción. *Cambridge Archaeological Journal*, 25 (3), p. 565-596.

MURILLO-BARROSO, M. & MARTINÓN-TORRES, M. (2012) - Amber sources and trade in the prehistory of the Iberian Peninsula. *European Journal of Archaeology*, 15 (2), p. 187–216.

NAVARRETE, M. S.; CARRASCO, J. & GAMIZ, J. (1992) - La Cueva del Coquino (Loja-Granada). *Monografías del Servicio de Investigación y Promoción Patrimonial.* Loja: Excmo. Ayuntamiento de Loja.

NOCETE CALVO, F.; SÁEZ RAMOS, R.; NIETO LIÑÁN, J. M.; CRUZ-AUÑÓN BRIONES, R.; CABRERO GARCÍA, R.; ALEX, E. & RODRÍGUEZ BAYONA, M. (2005) - Circulation of silicified oolitic limestone blades in South-Iberia (Spain and Portugal) during the third millennium B.C.: An ex-

pression of a core/periphery framework, *Journal of Anthropological Archaeology*, 24 (1), p. 62-81.

PRICE, T. D. (2014) - Isotope proveniencing. In Bom Santo Cave (Lisbon) and the Middle Neolithic Societies of Southern Portugal. In A. F. DE CARVALHO (ed.), *Promontoria Monográfica*, 17, p. 151-157.

ROBB, J. (2001) - Island identities: ritual, travel and the creation of difference in Neolithic Malta. *European Journal of Archaeology*, 4 (2), p. 175-202.

SAID, E. W. (1978) - *Orientalism*. New York: Random House.

SCHUHMACHER, T. X. (2013) - Some reflections about an Alabaster stele from Mari (Syria) and its possible relations to the Western Mediterranean. *CuPAUAM*, 39, p. 7-20.

SCHUHMACHER, T. X.; CARDOSO, J. L. & BANERJEE, A. (2009) - Sourcing African ivory in Chalcolithic Portugal. *Antiquity*, 83, p. 983-997.

SCOTT, G. R. & TURNER, C. G. (1997) - *The Anthropology of Modern Human Teeth: Dental Morphology and its Variation in Recent Human Populations.* Cambridge: Cambridge University Press.

SIRET, L. (1913) - *Questions de chronologie et d'ethnographie ibériques. I. De la fin du quaternaire a la fin du bronze.* Paris: P. Geuthner.

SOARES, J. (2003) - *Os Hipogeus Pré-históricos da Quinta do Anjo (Palmela) e as Economías do Simbólico.* Setúbal: Museu de Arqueología e Etnografia do Distrito de Setúbal.

THOMAS, J. T. (2011) - Fashioning identities, forging inequality: Late Neolithic/Copper Age personal ornaments of the Portuguese Estremadura. *European Journal of Archaeology*, 14 (1-2), p. 29-39.

VALERA, A. C. (2012) - Ditches, pits and hypogea: New data and new problems in South Portugal in Late Neolithic and Chalcolithic practices. In J. F. GIBAJA, A. F. CARVALHO & P. CHAMBON (eds), *Funerary Practices in the Iberian Peninsula from the Mesolithic to the Chalcolithic.* BAR International Series 2417. Oxford: Archaeopress, p. 103-112.

VILLALOBOS GARCÍA, R. & ODRIOZOLA, C. P. (2016) - Organizing the production of variscite personal ornaments in later prehistoric Iberia: The mines of Aliste and the production sites of Quiruelas de Vidriales (Zamora, Spain). *European Journal of Archaeology*, 1-21.

VOSS, B. (2008) - *The Archaeology of Ethnogenesis: Race and Sexuality in Colonial San Francisco.* Berkeley: University of California Press.

VOSS, B. (2015) - What's new? Rethinking ethnogenesis in the archaeology of colonialism. *American Antiquity*, 80 (4), p. 655-670.

WATERMAN, A. J. (2012) - *Marked in Life and Death: Identifying Biological Markers of Social Differentiation in Late Prehistoric Portugal.* PhD Dissertation, Department of Anthropology, The University of Iowa.

WATERMAN, A. J.; PEATE, D. W.; SILVA, A. M. & THOMAS, J. T. (2014) In search of homelands: Using strontium isotopes to identify biological markers of mobility in late prehistoric Portugal. *Journal of Archaeological Science*, 42C, p. 119-127.

WATERMAN, A. J.; TYKOT, R. H. & SILVA, A. M. (2015) - Stable isotope analysis of diet-based social differentiation at late prehistoric collective burials in southwestern Portugal. *Archaeometry*. Early View.

WHITTLE, A. (1996) - *Europe in the Neolithic: The Creation of New Worlds.* Cambridge: Cambridge University Press.

ZILHÃO, J. (1987) - Bolóres (Torres Vedras). *Informação Arqueológica*, 8, p. 54-55.