Between the 3rd and 2nd Millennia BC: Exploring Cultural Diversity and Change in Late Prehistoric Communities

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Chapter 5

Searching for the Turning Point to Bronze Age Societies in Southern Portugal: Topics For A Debate

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Abstract: This contribution aims to address the Chalcolithic/Bronze Age transition in southern Portugal from a socio-economic perspective. The starting point is the extensive archaeological fieldwork that took place at the Chalcolithic fortification of Porto das Carretas (Luz Territory) on the left bank of the Middle Guadiana river, integrated in multi-geographical scales. Our main goal is to arrive 'just in time' at the dawn of southwest Middle Bronze Age societies, trying to understand their formation. In chronological terms, the deconstruction of Chalcolithic societies began in central-southern Portugal around 2500 cal BC, coincident with the rise of the Bell Beaker phenomenon. At Chibanes (Estremadura), domestic architectures and the wall of the fortification were damaged, with no signs of any reconstruction. Other sites, such as Porto das Carretas and Monte da Tumba (Alentejo) had been rebuilt by Bell Beaker elites, showing a clear cut with the previous architectural programs. Ditched enclosures collapsed *c.* 2200-2000 cal BC, but the construction of the latest ditches of the enclosure systems did not extend beyond 2500-2400 cal BC. The construction of large *tholos*-type collective funerary monuments was replaced by individual graves, although sometimes with the reuse of the previous collective tombs. This trend to single graves reached a peak in the Early/Middle Bronze Age. The crisis of the Chalcolithic society and its collapse in the second half of the 3rd millennium cal BC allowed more unequal and hierarchical regional Bronze Age societies throughout southern Iberia, along with craft specialisation/oriented groups (socio-economic specialisation of labour) in metallurgy and textile activities (mainly linen production). At the same time, the political economy grew more differentiated, controlled by powerful chiefs of the 'Southwest Bronze Age Culture', or ruled by the early state of El Argar in the southeast.

Keywords: Chalcolithic, Bell Beaker, Early Bronze Age, 'Southwest Bronze Age Culture', Porto das Carretas.

Introduction: dealing with the data

Around 2200 cal BC, the old kinship social-organisation inspired by long-lasting communal principles, inherited from Neolithic 'egalitarian' societies, collapsed, not necessarily by the effect of the 4.2 Ky BP event (Meller *et al.* 2015; Risch *et al.* 2015; Blanco-González *et al.* 2018), but rather by socio-economic dynamics (Figure 1). Environmental conditions obviously played a meaningful role, although these have not yet been satisfactory evaluated. A new world emerged, with increasing social complexity, a strong sphere of political economy, wider territorial scales of political organisation, and networks of unequal exchange (Soares 2016; 2017; Bueno Ramirez, Balbín Behrmann and Barroso Bermejo 2005; Bueno Ramírez *et al.* 2019). In southern Iberia, the first state emerged at El Argar around 2200-2000 BC (Lull *et al.* 2015) and the weak development or even crisis of the peripheral south-western societies of the Early Bronze Age (EBA) could not be explained without stressing their geopolitical position on the edges of the Argaric core (Figure 9) (Soares and Tavares da Silva 1998; 2016).

Over the last decades, the empirical record has grown exponentially, with no precedents in the south of the Iberian Peninsula, due to the development of rescue archaeology as a response to accelerated urban growth and to the construction of major public infrastructures, such as the irrigation system of the Alqueva Dam in the Guadiana Basin. Despite the great accumulation of fieldwork data, there are weaknesses and lacunae in its study.

It was a period when archaeological sciences (archaeometry) were becoming increasingly more important (Martinón-Torres and Killick 2015), mainly in the domains of stable isotope analysis (Díaz-Zorita 2017; Waterman, Tykot and Silva 2015; Waterman *et al.* 2013), and genetic studies (Olalde *et al.* 2018; 2019), but these were instrumental and in need of integration, with clarity, in archaeological theories (scientific archaeology rooted in natural and social sciences), avoiding those archaeometry practices addressed to meaningless subjects – or just to technicalities not well contextualised in the archaeological entities. Nowadays, many young scholars are being trained in both archaeological theory and in scientific analysis, and they can be the future bridges to link 'field and lab' archaeologies.

The genetic data is being analysed mostly through 'new diffusionist' approaches, perhaps inspired by the current migration catastrophe, with such outstanding

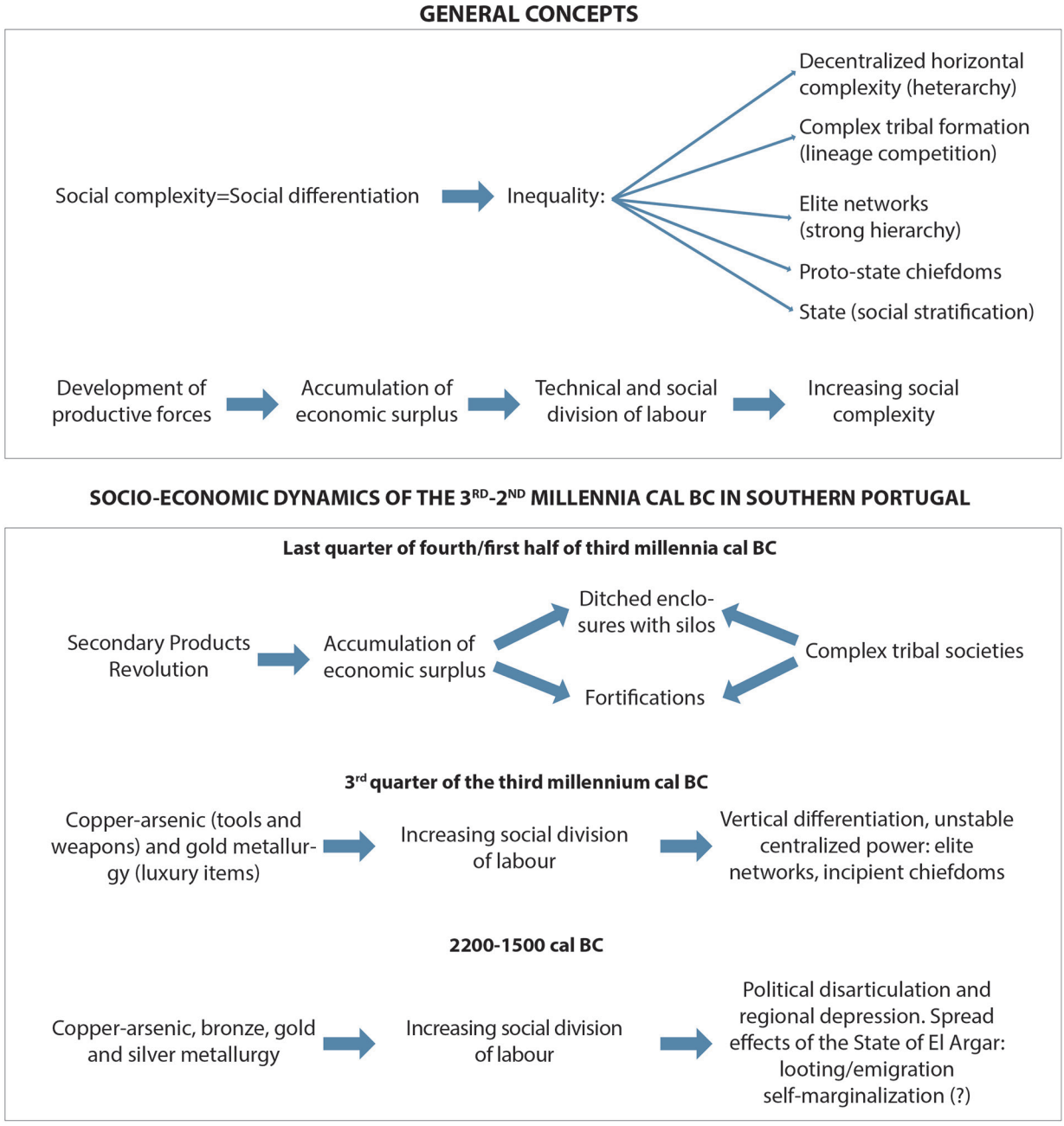

Figure 1. A general framework of social complexity in the Late Prehistory of Southern Portugal (after Soares 2016).

interpretations as, e.g., '[...] by ~ 2000 BCE the replacement of 40% of Iberia's ancestry, and nearly 100% of its Y-chromosomes, by people with Steppe ancestry' (Olalde *et al.* 2019: 1230). Worldwide generalisations are not acceptable in the presence of limited datasets, non-systematic sampling procedures, biased by local and regional research asymmetries (Furholt 2019), taphonomic loss (e.g. soil acidity has strongly hampered the preservation of organic materials, namely human bones, in our region), and insufficient diachronic control. In any case, these new inquiring methods of materialities are influencing the theoretical archaeology (Kristiansen *et al.* 2017; Heyd 2017). As for El Argar, the proposal of a relationship between it and south-eastern Europe, based on metalworking tools (Lull *et al.* 2015: 385) is hardly supported by mtDNA analysis and the haplogroup level *c.* 2200 BC (Szécsényi-Nagy *et al.* 2017).

Even in terms of our ready confidence in radiocarbon dating procedures, there are many problems with the selection quality of samples, the control of stratigraphy, and the contextual provenance. Most of the radiocarbon determinations attributed to the

Portuguese Bell Beaker period (the starting point of the changeover Chalcolithic/Bronze Age) from Estremadura had been collected in highly commingled domestic layers and funerary contexts, creating the paradigm of the 'International' or 'Maritime' Bell Beaker pottery having originated in Portugal, at *c.* 2800-2750 cal BC (Salanova 2004), although confident Bell Beaker contexts have not been dated in Portugal before 2600-2500 cal BC (Table 1) (Soares and Tavares da Silva 2010). Modelling the 4th-3rd millennia evolution in southern Portugal through radiocarbon dates, bell beaker pottery starts from the middle of the 3rd millennium (Mataloto and Boaventura 2009: 65). The same is observed in other regions of Iberia (Ríos, Blasco and Aliaga 2011-2012), for example the Madrid region, with a large set of new radiocarbon dates, mainly from Camino de las Yeseras and Humanejos (Ríos 2013): the first bell beakers (International/Maritime style) appeared around the middle of the 3rd millennium BC, and the latest, Ciempozuelos and evolved Palmela bell beakers, disappeared in the first centuries of the 2nd millennium cal BC. We have proposed elsewhere, based only on stratigraphical and typological data (Soares and Tavares da Silva 1974-1977), a similar stylistic sequence for the Portuguese Estremadura Bell Beaker complex. Genetic information also does not confirm the Tagus Bell Beaker origin:

'We observe limited genetic affinity between Iberian and central European Beaker Complex-associated individuals, and thus exclude migration as a significant mechanism of spread between these two regions' (Olalde *et al.* 2018). Following this study, the results showed that the Beaker complex could not be attributed to a homogeneous group. 'Even at a local scale, the Beaker Complex was associated with people of diverse ancestries'. The 100 beaker-associated individual analyses displayed different genetic signatures from distinctive origins. The assemblages of prestigious goods from Beaker complexes, exhibited in particular situations by elites, would be intermediated by exchange networks, in some cases long-distance trade. Population mobility and cultural transactions interplayed depending on regional trajectories. In Iberia, the majority of Beaker complex-associated individuals had almost no Steppe affinities, they were genetically similar to the previous Chalcolithic Iberian populations and they had not transmitted substantial genetic contributions to central Europe. On the contrary, in Britain, the Beaker complex originated a sharp demographic transformation, as indicated by the presence of large amounts of Steppe-related ancestry after 2400 cal BC. This cultural change, perhaps via small-scale movements crossing the European mainland (northern Italy, southern France), is very well represented by the Amesbury Archer, the 'Copper Age Ulysses' (Fitzpatrick 2009), who lived in the span between 2470-2280 cal BC (OxA-13541, 3895±32 BP).

In fact, the cultural change we observe in the archaeological record of the second half of the 3rd millennium cal BC in Iberia can be explained mostly by the socio-economic dynamics of the Late Chalcolithic societies integrated within the European economic system of prestige goods (Soares 2017) (Figure 8), instead of having resulted from massive migrations.

Beyond the empirical analysis, a broad-scale frame of reference is indispensable to interpret the prehistoric record, trying to approach societies in their cultural totality. We are not afraid to use anthropological concepts such as 'tribe', 'chiefdom' or 'state' (Kristiansen 1991; Earle 1991; 1999; Service 1962), 'egalitarian', 'rank', and 'stratified societies' (Fried 1967) as means of analysis, and not as universal socio-political organisational stages (Soares and Tavares da Silva 1998) (Figure 1). Even if these 'unfashionable' categories are subject to controversy (Scarre 2013), they are quite useful to search for pre-state socio-economic systems (Bate 2003; Carneiro 1981) and power structures (Hayden 1995) in the diverse mosaic of Iberian societies at the transition to the 2nd millennium BC (Figure 7). Historical societies can also provide useful information for comparison in order to model Prehistoric societies (Ling, Earle and Kristiansen 2018). Furthermore we are aware of the inexorable loss of information about multiple transition forms between heterarchically organised societies and state societies (Brumfiel 1995).

Highlighting the socio-economic perspective (Soares 2013a: 55-77), we focus on the development of productive forces, productivity, production intensification, surplus accumulation and social division of labour (Figure 1), which are all pre-conditions for the emergence of unstable elites in Iberian late prehistory. 'Meritocracy' forms essayed during the second half of the 3rd millennium BC (Figure 7) could be an ultimate strategy to prevent state deployment, which constitutes perhaps the most unequal socio-political organisation (Clastres 1974; Gailey and Patterson 1988).

Returning to the empirical field, for different approaches and pathways, the analysis of the huge information currently available (Balsera *et al.* 2015) indicates for the late prehistory of the southwest a marked peak of development during the Chalcolithic (2900-2500 cal BC), and a subsequent and prolonged decline beginning with the Beaker phase *c.* 2500 cal BC, until the onset of the Middle Bronze Age, *c.* 1600/1500 cal BC.

The 3rd millennium after the stratigraphy and radiocarbon chronology of Porto das Carretas: Chalcolithic society 2900-2500 cal BC

Trying to explain the deep cultural changes between the social practices of the kinship (corporate) social

Archaeological site	Nº Lab.	Date BP	Date cal BC (2 σ)	Context	Associated materials	Sample	Reference
2nd half of the 3rd millennium cal BC. EBA							
Moita da Ladra	Sac-2371	3810 ± 60	2470-2050	Vala 3	International Bell Beaker pottery style	Animal bones	Cardoso, Soares and Martins, 2013.
	Sac-2122	3700 ± 50	2280-1940	ML55 (30-45)			
	Sac-2123	3700 ± 50	2280-1940	ML9 (30-45)			
S. Pedro do Estoril 1	Beta-178467	3830 ± 40	2460-2140	Human femur, inv. 1892	Palmela Bell Beaker pottery style	Human femur	Gonçalves, 2005.
	Beta-178468	3790 ± 40	2401-2045	Human phalanx with gold spiral ring.		Human phalanx	
Hipogeu 1 Quinta do Anjo	Beta-496305	3720 ± 30	2201-2032		Palmela Bell Beaker pottery style	Human jaw	Gonçalves, Sousa and Santos, 2018.
Malhadas	Beta-126091	4140 ± 70	2336-1912	Archaelogical layer (C.2b)	Palmela Bell Beaker pottery style	*Ruditapes decussatus*	Soares, 2003.
	Beta-126090	3980 ± 70	2117-1711	Archaelogical layer (C.2a)			
Chibanes	Beta-164906	4200 ± 80	2444-1980	Locus L12/P10. C.6B/4B (Phase ID)	Palmela Bell Beaker pottery style	*Ruditapes decussatus*	Tavares da Silva and Soares, 2014.
Freiria	Beta-260301	3770 ± 40	2340-2040	Bell Beaker hut foundation	Palmela Bell Beaker pottery style	Animal bones	Cardoso, Cardoso and Encarnação, 2013.
	Beta-296577	3630 ± 40	2130-1890				
Barranco do Farinheiro	Beta - 386974	4010 ± 30	2616-2469	EU 4, A.5-17	Decorated Bell Beakers	Charcoal	Gonçalves, Sousa and Andrade, 2017.
	Beta - 331680	3930 ± 30	2550-2300	EU 3			
	Beta - 425876	3900 ± 30	2469-2298	EU 4, A.5-28			
Miguens 3	Wk-18507	3934 ± 33	2570-2300	EU 35	International Bell Beaker pottery style	Charcoal: *Olea*	Mataloto and Boaventura, 2009.
	Wk-18508	3902 ± 38	2480-2230	EU 55			
Porto das Carretas (Phase II)	Beta-196681	3920 ± 40	2490-2290	C.2B2, Tower M13 - hearth D	International Bell Beaker pottery style	Charcoal: *Pinus pinea*	Soares, 2013a.
	Beta-204062	3860 ± 40	2460-2200	C.2B2, Tower M13 - hearth B		Charcoal: *Pinus pinea*	
	Beta-193743	3840 ± 60	2470-2130	C.2B2, Tower M13 - hearth A		Charcoal: *Olea*	
Perdigões	ICA-16B/0914	4030 ± 30	2630-2470	Hut 1, EU 267	Decorated Bell Beakers	*Cervus elaphus*	Valera and Basílio, 2017.
	ICA-16b/0912	4010 ± 30	2620-2470	Hut 1, EU 393		*Sus* sp.	
	ICA-17B/1149	4000 ± 30	2580-2470	Hut 2, EU 421		Big mammals	
	Beta-315719	3780 ± 30	2290-2140	Ditch 1, EU 118		*Sus* tooth	
	Beta-315716	3770 ± 30	2290-2060	Ditch 1, EU 11		*Sus* humerus	
	ICA-17B/0104	3700 ± 30	2200-1980	Pit 79/Cairn 488		Animal bone	
	ICA-16B/0913	3690 ± 30	2200-1980	Pit 79/Cairn UE 500		*Cervus elaphus*	
Porto Torrão	Sac-2027	3810 ± 50	2460-2060	Ditch 2, EU 2056	Decorated Bell Beakers	Animal bones	Valera, 2013.
	Sac-2028	3700 ± 60	2290-1920	Ditch 2, EU 2020			
Quinta do Castelo 1	ICA-16B/0304	3890 ± 30	2470-2290	Burial	Decorated Bell Beakers	Human bone	Valera, Mataloto and Basílio, 2019.
Monte da Velha 1	Beta-194027	3900 ± 40	2490-2210	Secondary burial	Ferradeira material culture	Human bone	Soares, 2008.
Tholos Centirã 2	Sac-2791	3940 ± 50	2497-2204	EU 12, Oss. 1	Ferradeira material culture	Human bones	Henriques *et al.* , 2013.
	Sac-2790	3900 ± 45	2469-2205	EU 13, Burial 2			
	Sac-2782	3760 ± 70	2404-2058	EU 14, Burial 4			
	Sac-2788	3810 ± 80	2179-1957	EU 7, Burial 1			
Bela Vista 5	Beta-330091	3740 ± 30	2270-2040	Funerary pit	Ferradeira material culture	Human bone	Valera, 2014.
First half of the 2nd millenium cal BC "Southwest Bronze Age Culture I"							
Montinho 6	Sac - 2878	3390 ± 40	1870-1560	Hypogeum MT6.59	Southwest Bronze Age I	Human bones	Valério *et al.* , 2015.
	Sac - 2867	3380 ± 40	1770-1530	Hypogeum MT6.59			
	Sac - 2877	3360 ± 45	1750-1530	Hypogeum MT6.153			
	Sac - 2879	3360 ± 40	1740-1530	Hypogeum MT6.159			
	Sac - 2876	3350 ± 80	1880-1450	Hypogeum MT6.20			
Horta do Folgão	Sac - 2557	3400 ± 50	1877-1535	Hypogeum 3	Southwest Bronze Age I	Human bone	Nunes da Ponte *et al.* , 2012.
Torre Velha 3	Sac - 2825	3280 ± 50	1680-1450	Hypogeum [1267][1792]	Southwest Bronze Age I	Human bone	Valério *et al* ., 2014.
Herdade do Pomar	ICEN - 87	3510 ± 45	1951-1695	Cist 1	Southwest Bronze Age I	Human bone	Gomes, 1994.
Abelheira 1	Sac - 2918	3460 ± 40	1900-1670	Cist AB1.13	Southwest Bronze Age I	Human bone	Valério *et al.* , 2015.
Monte da Cabida 3	Sac - 2888	3490 ± 50	1940-1690	Pit 41/931	Southwest Bronze Age I	Human bones	Valério *et al.* , 2014.
	Sac - 2437	3330 ± 45	1690-1510	Pit 64			
Torre Velha 12	Sac - 2833	3450 ± 45	1890-1640	Pit TV12.13.3	Southwest Bronze Age I	Human bone	Valério *et al.* , 2015.
Vale Frio 2	Sac - 2917	3360 ± 70	1880-1500	Pit VF2.38	Southwest Bronze Age I	Human bone	Valério *et al.* , 2015.
Torre Velha 3	Sac - 2882	3330 ± 50	1740-1500	Pit 969	Southwest Bronze Age I	Human bones	Valério *et al.* , 2014.
	Sac - 2883	3290 ± 50	1690-1450	Pit 1991			

Table 1. Selection of radiocarbon dates of the second half of the 3rd, first half of the 2nd millennia cal BC in central-southern Portugal.

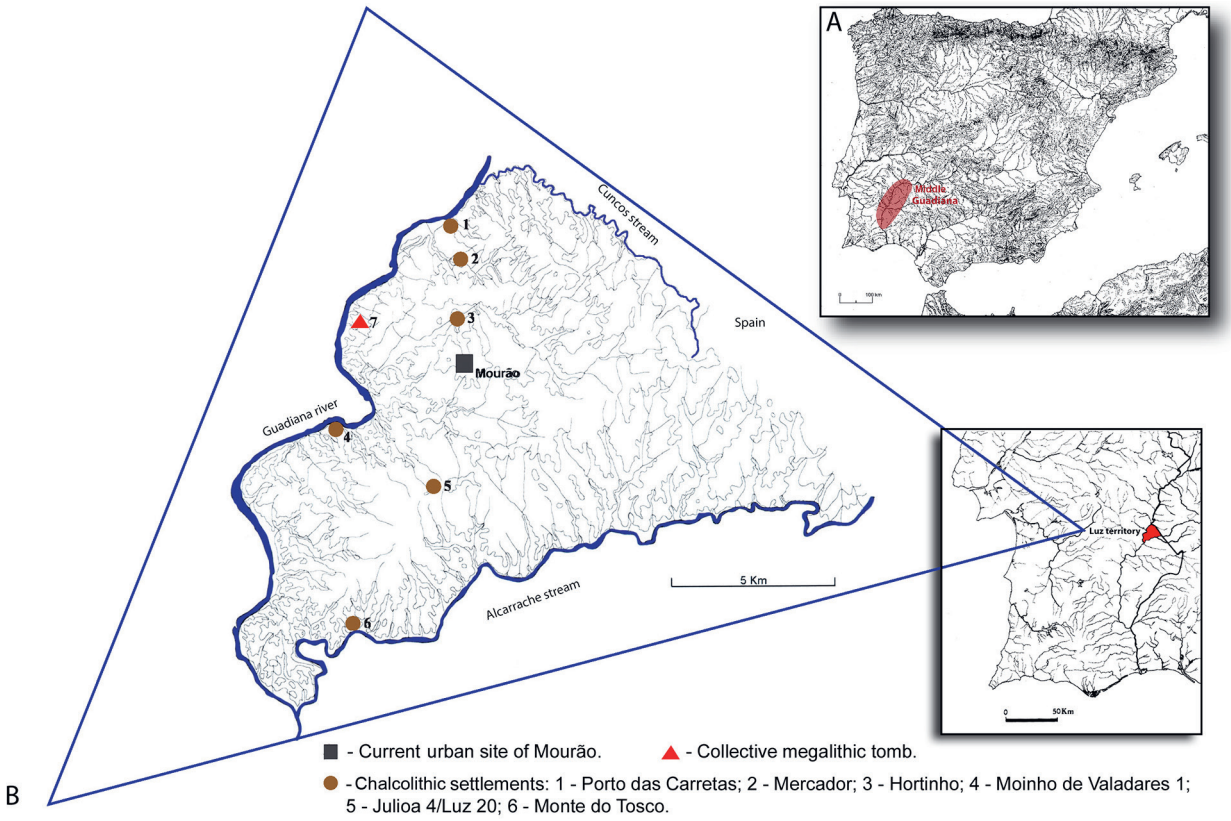

Figure 2. A) The Middle Guadiana River Basin in the Iberian Peninsula; B) Geographical setting of the Chalcolithic fortification of Porto das Carretas integrated in the local productive system of the Luz territory. First half of the 3rd millennium cal BC (after Soares 2016).

system inherited from Late Neolithic or 'Megalithic' societies and the chiefdom-oriented power of Bell Beaker elite networks (Figure 7), our initial example is the fortified site of Porto das Carretas, *c.* 1 ha, on a spur over the Guadiana river (Figure 2) and founded around 2900 cal BC (Phase I). It was destroyed by a huge fire *c.* 2580/2500 cal BC – which made a clear cut between the long-lasting traditional kinship based society, and a new power structure of an unstable chiefdom-oriented society of the second half of the 3rd millennium (Figure 3A). Probably in the course of two generations, roughly 70 years, the site was abandoned (Soares 2013a; 2016).

The military architecture (walled enclosure, with tower and semi-circular bastions) of Phase I (Figure 4A-C) and its material culture, besides the local profile and the particularity of the site, integrate the general pattern of the southern Iberian *Chalcolithic Identity* – coast to coast (Hurtado 2010). This type of settlement is not sustainable on its own, although most have been studied singly; the same can be applied currently to the ditched enclosures.

To improve the territorial perspective, our enquiries extended to the regional scale, revealing a new model for the settlement system of the southwest Chalcolithic based on a concept of the *local productive system* (Soares 2016: 82), which corresponds to a minimal area of an organised community with shared geography, balanced income redistribution, common ancestors, and similar believes and survival aims. In such a territorial unity, all sites were interconnected (Figure 4D, Luz territory); the resources were exploited in a very skilled way, oriented to successful outcomes for the whole local productive system. Each part of the system was represented by functionally distinct sites, accordingly with its articulation linked to a collective project of efficient exploitation of the territory: open sites in particularly rich ecotones, e.g. the pit-site of Mercador, fortified sites on the territory's borders, such as Porto das Carretas and Monte do Tosco, and a ditched enclosure located as usual on the most fertile areas of the territory (Julioa 4/Luz 20). The *local productive system* of the Luz territory could correspond to a segment of a tribal society (Fig 4D) whose main centre could be located at La Pijotilla (Badajoz) (Figure 4D). With *c.* 80 ha, this is the largest mega-site known in the Middle Guadiana Basin, deployed on the most productive soils of the region, generated by the alteration of Miocene deposits (Hurtado 2010). Large, ditched enclosures would include the functions of residence, labour aggregation, storage of foodstuffs and water, celebration and

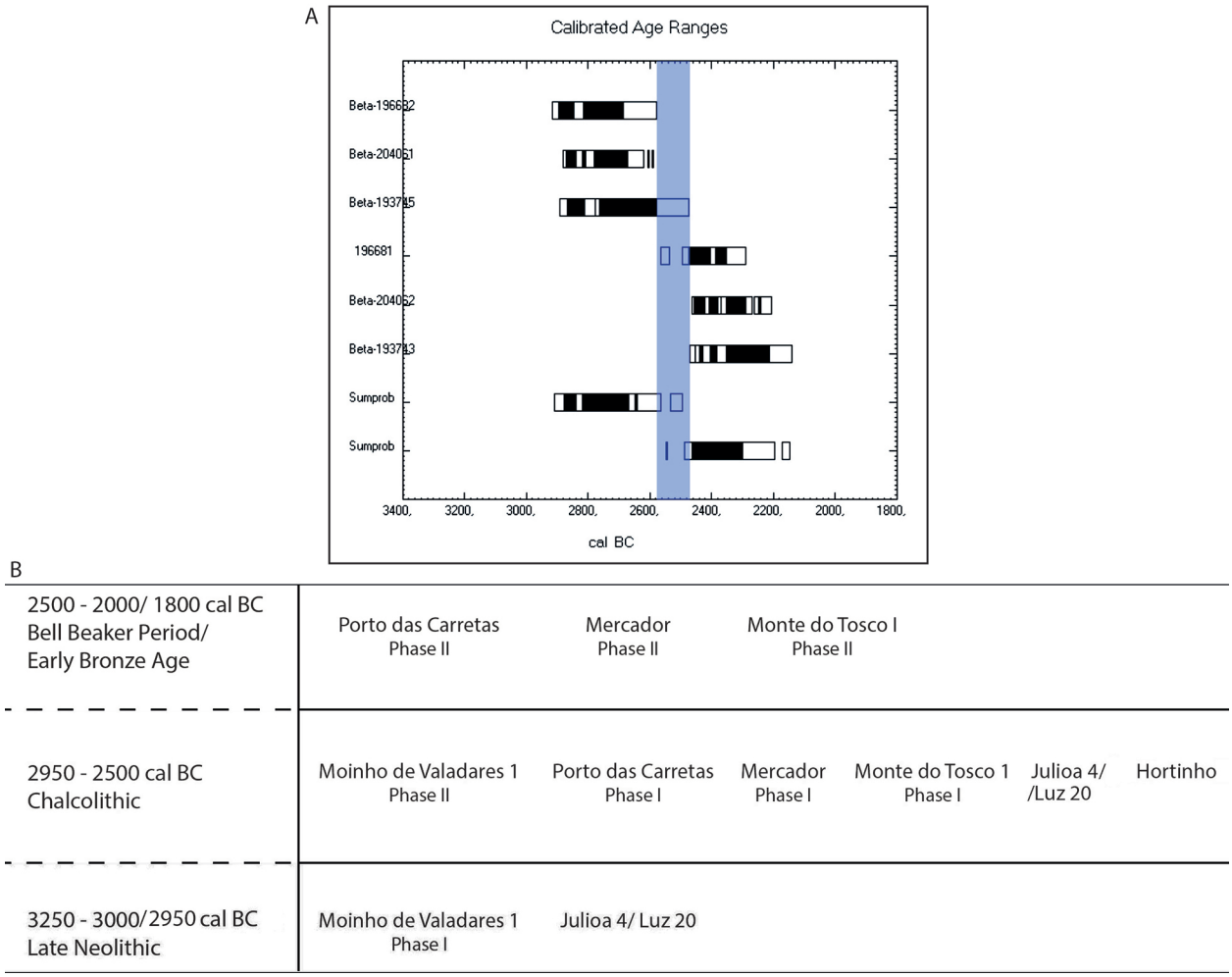

Figure 3. A) The stratigraphy and radiocarbon chronology of Porto das Carretas showed two phases of occupation, separated by an abandonment caused by extensive fire. Phase I corresponds to the first half of the 3rd millennium cal BC, and phase II occurred in the third quarter of the same millennium; B) The main sites of the Luz territory settlement system. It emerged in the Late Neolithic, reached its peak of demographic increase in the first half of the 3rd millennium and declined in the second half of the same millennium (after Soares 2016).

religious meetings, and funerary practices. Indeed, it is very difficult to find in the archaeological record a separation between profane and sacred spaces/ behaviours, as their boundaries may have not existed within prehistoric societies (Márquez 2003). Those central places would have some attributions in rear defence, but the functions of surveillance and defensive vanguard of the territory were guaranteed by small- or medium-sized border fortifications, such as Porto das Carretas, Monte do Tosco, Cerro dos Castelos de S. Brás (Parreira 1983), on the left bank of the Guadiana, or Monte da Tumba in the Sado Basin (Tavares da Silva and Soares 1987). Each *local productive system* would be integrated within the whole tribal territory, polarised by a mega-site of complex, ditched enclosures, e.g. La Pijotilla (Figure 4D) in the Middle Guadiana Basin, or Porto Torrão (*c.* 100 h) in the Sado Basin, Valencina de la Concepción in the Guadalquivir Basin (*c.* 450 h), or Alcalar (*c.* 30 h) on the Algarve coast. The economies of the Chalcolithic societies of southwest Iberia were based on an integrated and intensive agroforestry/ livestock strategy, complemented by hunting, fishing and gathering, oriented to the production of economic surplus (Soares 2013a: 350-60). The bone pathology in the metatarsal observed from the faunal remains of *Bos taurus*, from the site of Mercador (Valera 2013a), an open-site satellite of Porto das Carretas, was attributed to the plough and cart traction. Bovine traction applied to agriculture substantially increased the area a person can work with hoe and allowed the cultivation of the thickest and most fertile soils, thereby increasing profit and lessening the fallow cycle.

The regional variant of the *Mediterranean polyculture* agro-managerial model (Gilman 1981) generated in Alentejo and Andalucia a particular anthropogenic landscape (Soares 1994; 2013a; Stevenson and Harrison 1992), referred to as *montado/dehesa.* This was the result

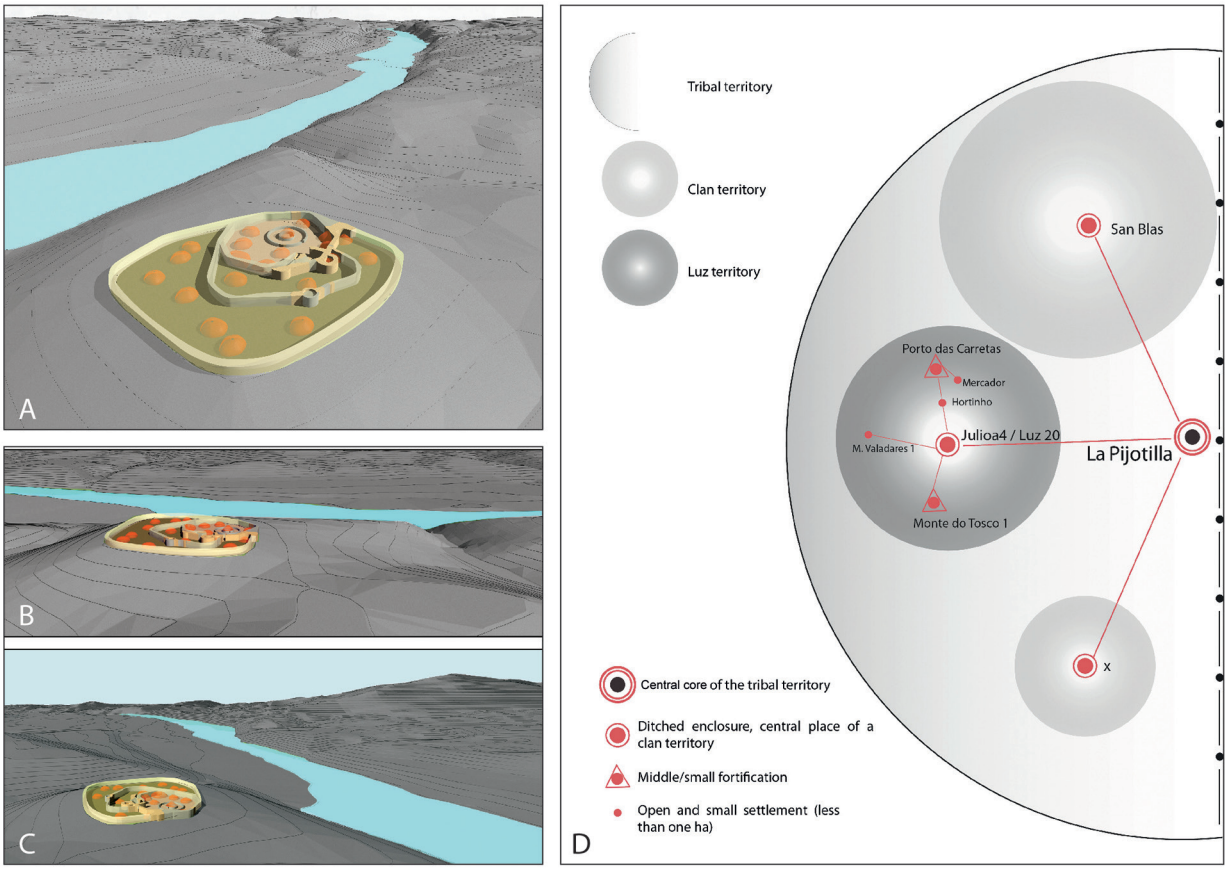

Figure 4. Architectural reconstruction of Porto das Carretas, Phase I, by António Alfarroba (in Soares 2013a). The two main locative factors were the good position for the surveillance of the Guadiana river and the proximity of fertile soils: A) From southwest to upstream; B) Southeast view; C) View from east to downstream; D) A complex tribal organisation model for the Middle Guadiana Basin in the first half of the 3rd millennium cal BC commanded by La Pijotilla. The Luz territory could correspond to a clan segment (after Soares 2016).

of high-return pig grazing in evergreen oak forests, dominated by *Quercus rotundifolia* and *Quercus suber*, taking advantage of the huge production of holm oak acorns. Pigs were a very important food resource, in association with sheep, goats and bovids; the presence of ivory figurines of pigs and acorns in the *tholos* of Montelirio (García Sanjuan *et al.* 2018a) is in accordance with the economic value of the *montado* ecosystem. In general, the preservation of organic remains in the southwest of the Iberian Peninsula is very poor due to the acidic nature of soils, but in some particular situations, like the Chalcolithic macro-village of Alcalar (Morán 2014), located on limestone, a large set of macro-botanic remains were preserved, displaying a diverse ensemble of cultivated species, with the major crops including cereals (*Triticum aestivum*, *Hordeum vulgare*), legumes (*Vicia faba*, *Pisum fabacea*), and also linen (*Linum usitatissimum*), *Papaver somniferum*, and vines (*Vitis vinifera L.*). Fruit trees, such as olive (*Olea europaea*) and pear/apple (?) (*Pyrus* sp.) were the least favoured, as observed at Porto das Carretas (Tereso *et al.* 2011).

In short, we propose a complex tribal organisation for the first half of the third millennium cal BC in southern Portugal by crossing archaeological data with the anthropological concepts of unilocal/plurilocal clan and conical territory (Friedman and Rowlands 1982). This social model, rooted in the kinship structure, inherited from the Late Neolithic, allowed a growing social inequality promoted by competing lineages with unequal status legitimated by the genealogical distance to the mythic ancestor (Sahlins 1963). Communitarian ideology would hide the uneven wealth distribution inside the limits of psychosocial pressure. The inter-tribal sphere could have been the escape valve of conflict.

There is evidence for the emergence of economic specialisation in textile production. Although it would have been embedded in the domestic activities, weaving was spatially segregated at Porto das Carretas (Soares 2013a: 389-393). This observation can support the idea of an emerging trend to full-time craftspeople, completely exempted from agriculture and animal

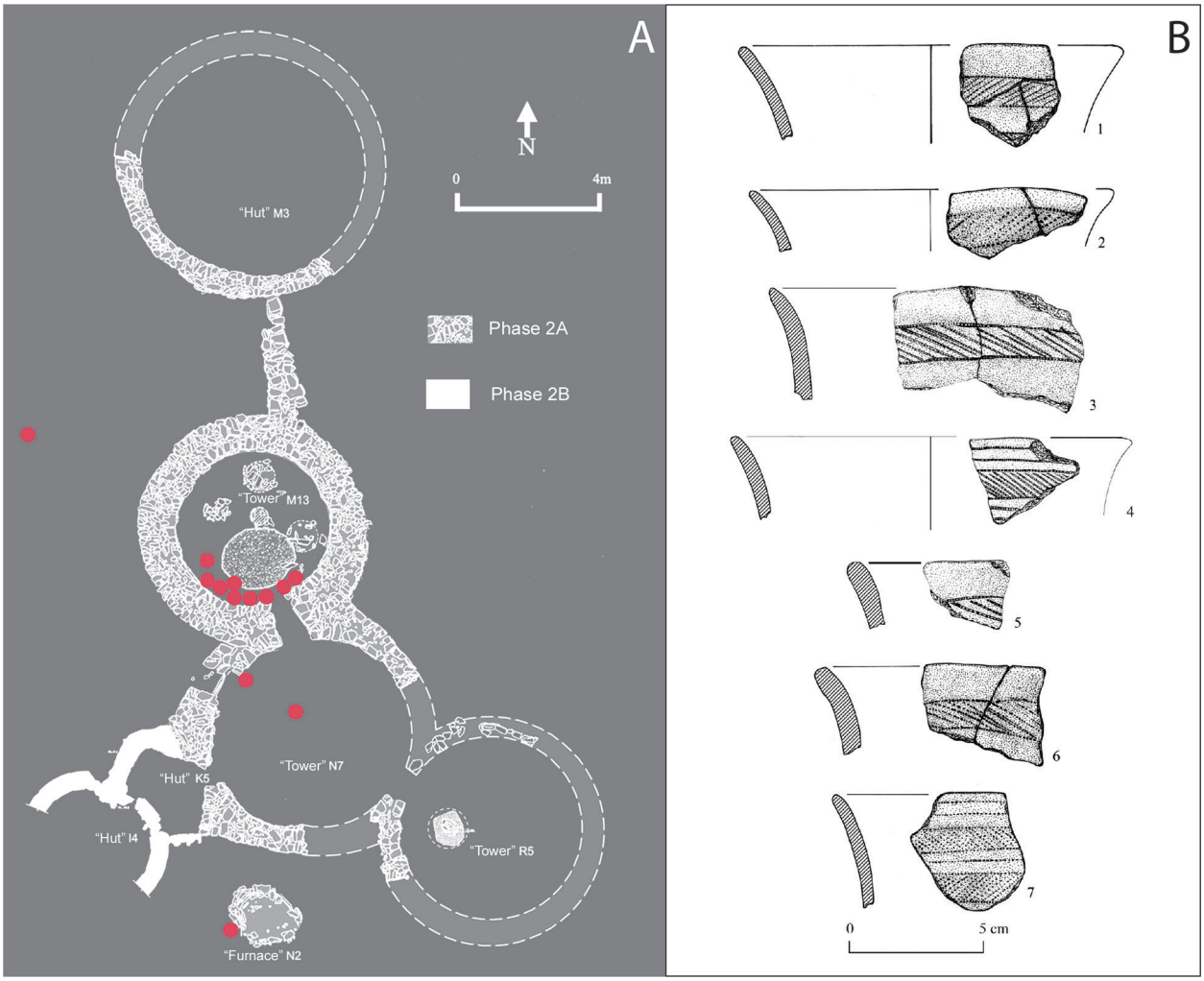

Figure 5. A) Porto das Carretas, Phase II. Distribution of Bell Beaker pottery (International style) (•) on the architectural plan of Porto das Carretas, constituted by a set of three terraced and monumentalised towers interconnected, three huts and a metallurgical furnace, built in the open space; B) Porto das Carretas, Phase II. Bell Beaker pottery (International style) (after Soares 2016).

husbandry (social division of labour). From Andalucía (the Montelirio *tholos*), expressive data has arrived to support the proposal of social division of labour in southern Iberia in the first half of the 3rd millennium: the luxury beaded textiles (about a million perforated beads in shell, limestone, greenstones, ivory and amber) used to dress corpses of a probable female priestess community inhumated in the large chamber of the Montelirio *tholos*. For manufacturing those ceremonial costumes, it would have been necessary to spend *c.* 200,000 hours of work. This corresponds to 208 persons working full-time over some six months (Díaz-Guardamino, Wheatley, Williams, Garrido 2016).

In general, we can hypothetically admit that Chalcolithic societies could achieve the coordination required for political action, as well as the previous Megalithic organisation, through assemblies, consensus, local solidarity, communal rituals and collective graves. The political power could be shared among multiple *loci*, preventing state formation (Clastres 1974; 1987). Ancestors would still be playing a relevant role in structuring the social relations of the living, even if investment in funerary architectures dropped, regardless of the Neolithic megalithic tombs. In the Chalcolithic, the investment in architectural projects was shared between funerary and domestic spaces. The latter became progressively more exigent due to increasing sedentism and growing inter-lineage, as well as inter-tribal competition and conflict at the transition to the 3rd millennium onwards. Thus, the major innovation of this time in funerary architecture was the introduction of a new type of collective tomb – the *tholos*: much easier to build and with less consummation of raw material and workforce requirements. The construction of this new type of collective funerary monument spread over southern Iberia from the end of the 4th and during the first half

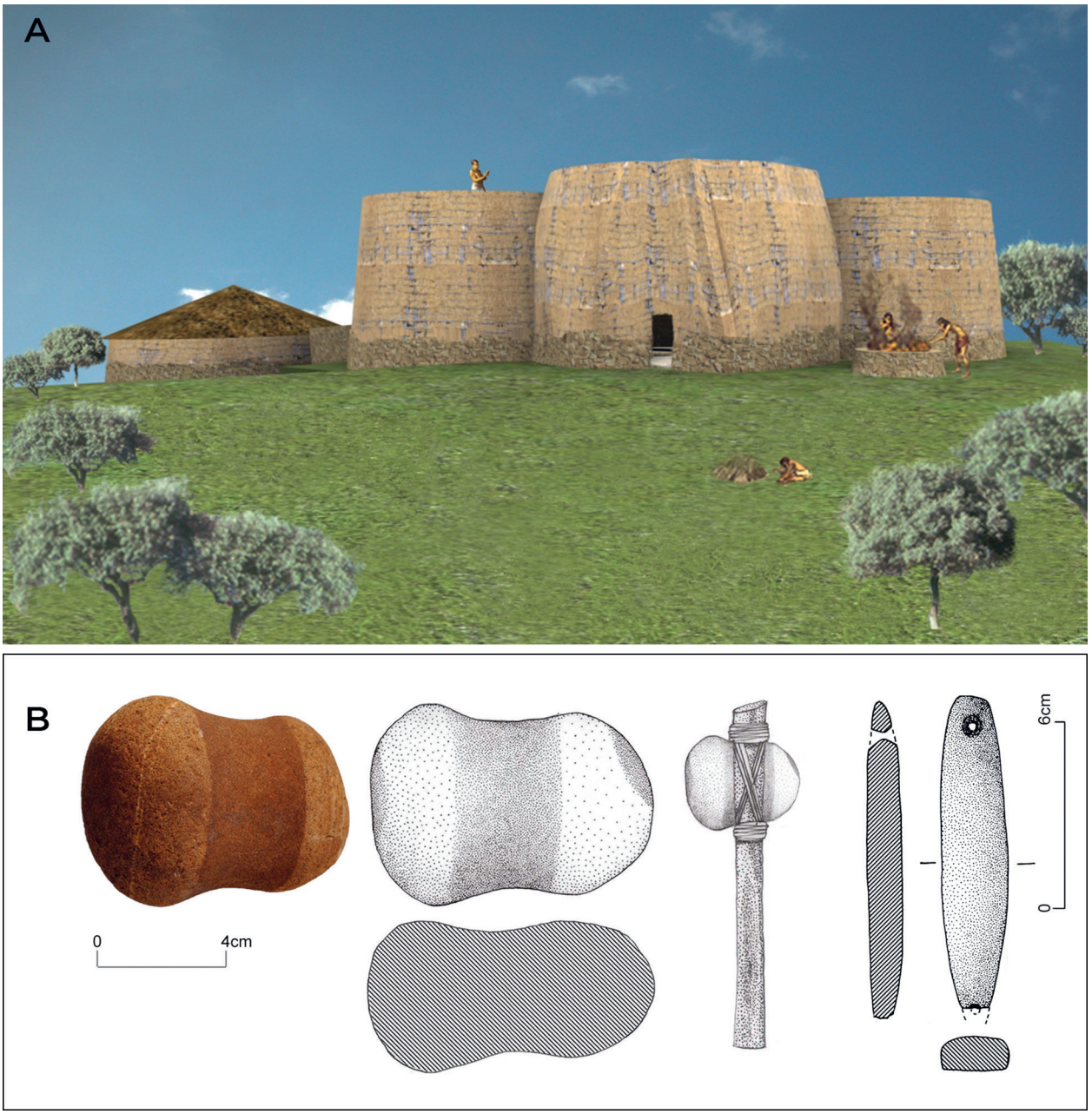

Figure 6. A) Architectural reconstitution of Porto das Carretas in Phase II. Southwest view (drawing by C. Menezes, in Soares 2013a); B) Porto das Carretas, Phase II (Bell Beaker complex): a probable forging hammer on a quartzite pebble and a polished wrist-guard on quartzite (after Soares 2013a).

of the 3rd millennium. At Valencina, *tholoi* construction started at about 3200, peaked at 2900/2800 and lasted until 2400 cal BC (García Sanjuan *et al.* 2018b). In south-central Portugal, *tholoi* also emerged at the end of the 4th, but appearing mostly from the early 3rd millennium (Sousa 2016). However their use could extend during the second half of the 3rd millennium, receiving single burials of the *Horizon of Ferradeira*, as observed at the *tholoi* of Monte da Velha 1 (Soares 2008) and Cardim 6, or Bell-Beaker inhumations, e.g. the *tholos* of Praia das Maçãs. The calibrated radiocarbon dates at 2σ of those final moments of *tholoi* (re)utilisation are respectively: Beta-104027, 3900±40 BP = 2479-2211 (Soares, 2008); SANU-53037, 3795±26BP = 2297-2140 (Valera *et al.* 2019); H-2048/1458, 3640±60 BP =2295-1865 (Soares and Cabral 1984).

Underlying the general trends of the political organisation of the Chalcolithic of southern Iberia, quite different trajectories of change could occur at regional and local scales between segments encompassing the same tribal unity, or regarding different tribes. Power exercise and social inequality could have distinct configurations. At Estremadura, for example, intra-

social inequality and communitarian principles seem to have been under control (Soares 2003; Tavares da Silva and Soares 2014) when compared with Guadalquivir valley, where the funerary record of Valencina (Seville) displayed a sharp intra-site social inequality (García Sanjuan *et al.* 2018b); in fact, a strong hierarchical social organisation, probably dominated by a theocratic power, could have succeeded to a 'paternalist' kinship society.

Increasing contradictions related to the rise of intra-social inequality inside a complex ideological system pretending to submit to communitarian principles, without an institutionalised coercive force, would create internal stress that could hardly be absorbed by the inter-tribal conflict zones. From an economic perspective, this type of political power, based on kinship and sacred ancestors, with a tangle of restrictive norms, would block the productive forces of the most innovative sectors (craftwork and trade of metals, salt and textiles). Thus, the whole complex tribal organisational model started to crumble at 2500/2400 cal BC onwards. At Valencina, the funerary activity declines from 2400 cal BC onwards; the site probably survived with reduced output until the Early Bronze Age; activity in copper metallurgy continued until the last quarter of the 3rd millennium BC (García Sanjuan 2013; García Sanjuan *et al.* 2018a, 2018b).

Reading the signs of the collapse of the Chalcolithic society and the evidence of the southwest Early Bronze Age

International/maritime Bell Beaker complex in the Late Chalcolithic/dawn of the Early Bronze Age (EBA1): 2500/2400-2200 cal BC

After the abandonment of Porto das Carretas, which may have lasted about two generations, a new architectural project was deployed on the remains of the old Chalcolithic fortification. A set of three monumentalised and terraced towers, three huts, and a metallurgical furnace were constructed (Figs. 5-6) and used between *c.* 2500-2200 cal BC.

The central tower, N7, has an internal diameter of 5.70 m; its walls are 0.90 m and 1.5 m wide. The best similarities for this architecture are found in the tower of Miguens 3 (Calado 2006), constructed *ex-nihilo* on the opposite bank of the Guadiana, and the tower of Monte da Tumba, with a sub-circular plan and an external diameter of 12m, built on the remains of a Chalcolithic fortification (Tavares da Silva and Soares 1985; 1987). Both were built in the Bell Beaker period (International ceramic stylistic group and Mixed-Maritime Bell Beaker style).

The architectural features of the Bell Beaker occupation phase of Porto das Carretas, associated with prestige goods such as arsenic copper, socially-prominent lithic artefacts and international/maritime Bell Beaker pottery (Figs. 5-6), compared to perishable domestic structures, can be interpreted as a metaphor for the emerging new social organisation, based on 'omniscient' leaders (Soares 2013a: 69) and followers, integrated in multi-scale elite networks. At the same time, in the Portuguese Estremadura there are also some stone structures over the ruins of the walled enclosures of the first half of the 3rd millennium, such as towers A and B of Zambujal (Sangmeister and Schubart 1981; Kunst and Arnold 2011), or even new architectural foundations, i.e. Moita da Ladra (Vila Franca de Xira) (Cardoso, Soares and Martins 2013), a walled enclosure with a large tower of sub-circular plan and about 10 m in diameter, associated with Mixed-Maritime Bell Beaker pottery and prestige items, including gold ornaments. The ditched enclosure of Barranco do Farinheiro (Coruche) also seems to have a late foundation at about 2600 cal BC. The excavations delivered Mixed-Maritime, Ciempozuelos and evolved Palmela Bell Beaker pottery (Gonçalves, Sousa and Andrade 2017).

Returning to the Middle Guadiana Basin, in the second half of the 3rd millennium cal BC, we observe that the previous local productive system of the Luz Territory had collapsed. The population density had probably decayed, along with the number of sites (Figure 3B). The demographic pressure over the landscape was reduced, enhancing the development of a supra-Mediterranean forest, with the growth of *Quercus faginea*, as well as the development of the riparian forest (*Fraxinus angustifolia*) (Duque Espino 2004; Queiroz and Tereso 2013). The role of the 4.2 ky BP event (abrupt climate change *c.* 2350/2450–1850/1950 cal BC that led to a colder and drier climate regime) could not be directly associated with the social dynamics of the Late Chalcolithic/Early Bronze Age cycle at a local or even regional scale (Risch *et al.* 2015; Lull *et al.* 2015: 391). In Phase II at Porto das Carretas, the river no longer seems to have formed a rigid boundary, as it was in Phase I, becoming instead an axis of interaction. Metallurgical remains and marine-estuarine shells, perhaps related to salt trading (Soares 2008; 2013b), suggest the integration of Porto das Carretas in regional exchange networks. A set of 14 International or Maritime Bell Beaker vessels, although locally/regionally manufactured, connected this site with a long-distance exchange network, in an economic system of prestige goods, with sub-continental expansion (Figure 8).

Dwelling-space reduction in the macro-villages seems to be a general trend in southern Iberia (Pajuelo Pando and López Aldana 2016; Tavares da Silva and Soares 1987; Morán 2014), connected with deep social changes.

Pre-state socio-economic systems of Iberian Southwest; 3rd millennium cal BC

(adapted from Soares 2013a)

Socio-economic indicators	*Hierarchical complex tribal system* First half of the 3rd millenium	*Elite networks* Second half of the 3rd millenium
Power strategy	Diffused but stable, based on kinship relations associated to ancestors cults; in it's extreme version it can take the form of theocratic power. E.g. Valencina de la Conception/Montelírio tholos.	Centralized/personalized and unstable power based on the flow of prestige goods by large exchange networks. E.g. phase II of Porto das Carretas.
Social relations of production	Exploitation and extorsion of surplus encapsulated in communitary principles; lineages competion at high rank levels; maintenance of solidarity at the lower segments of each group.	Feudalization relationships; individual prestige inside inter-group networks; meritocracy principles. Wealth-based social relations. Control of craftwork in mettalurgical and textile productions. Social relations of prodution with expoitation legitimated by chiefs "wisdom".
Scale of action	Local/regional.	Regional/"global" (long distance prestige goods trade).
Ideological strategies	Communal rituals, collective representations, ancestors and fertility cults; traditional and religious knowledge.	Personalised power representation; increase of sociothecnic artifacts; manipulation of prestige goods, rhetoric of heritage.
Archaeological expressions	Collective architectures; collective tombs with a paraphernalia of ideotechnic artifacts like occulated idols. E.g. tholoi of Olival da Pega, walled and ditched enclosures (Porto das Carretas I, S. Brás, San Blas, Perdigões, Pijotilla, Alcalar).	Elaborate prestige goods in individual graves; Extended production and standardization of prestige goods like arsenic copper weapons, gold ornaments, ivory buttons and Bell Beaker pottery. E.g. hoard of S. Brás; reuse of ancestors funerary monuments like the hipogea cemeteries of Quinta do Anjo, S. Pedro do Estoril or Dolmen da Pedra Branca; power architecture as the towers of Porto das Carretas II, Monte da Tumba IV, Miguéns 3.

Figure 7. Socio-economic dynamics in the 3rd millennium cal BC of the Iberian Southwest (after Soares 2013a).

By the end of the millennium the abandonment process of these agglomerations becomes evident, replaced by a spectrum of social fission dynamics, with increasing dispersion of open and small settlements (with incised Bell Beaker pottery of Ciempozuelos and evolved Palmela styles), such as Barrada do Grilo (Santos, Soares and Tavares da Silva 1972), Castelos do Torrão (Soares and Tavares da Silva 1986), Vale Vistoso (Soares and Tavares da Silva 1976-77), and Quinta do Estácio 14 (Soares 2017) in Alentejo. The same phenomenon has been observed in Estremadura (Soares 2003; Sousa 2013; Tavares da Silva 2017). Unstable political power, as already proposed, seems to be controlled by skilled leaders who were also managing the *chaînes opératoires* of metallurgy and textile craftwork (Barber 1991; Murra 1962; Soares *et al.* 2018). This new economic sector (not regulated by the traditional peasant society) could have been the driving factor in the constitution of elites progressively consolidated by heredity after 1500 cal BC in southwest Bronze Age societies (Soares and Tavares da Silva 2016).

The subsistence economy was mostly based on cereals and livestock (*Sus* sp., *Bos taurus*, *Ovis aries/Capra hircus*), and millstones were better represented in Phase II of Porto das Carretas than in Phase I (Soares 2013a: table 33), which can indicate that the local elite might have been receiving tribute from peasant households. The increase in hunting for larger species is remarkable, namely *Cervus elaphus* and *Bos primigenius* ('aristocratic hunting' with *Canis familiaris*), as observed at the Bell Beaker occupation site of Monte da Tumba in the Middle Sado Basin (Antunes 1987: 125). The same trend occurred with riverine fishing, with evidence of a

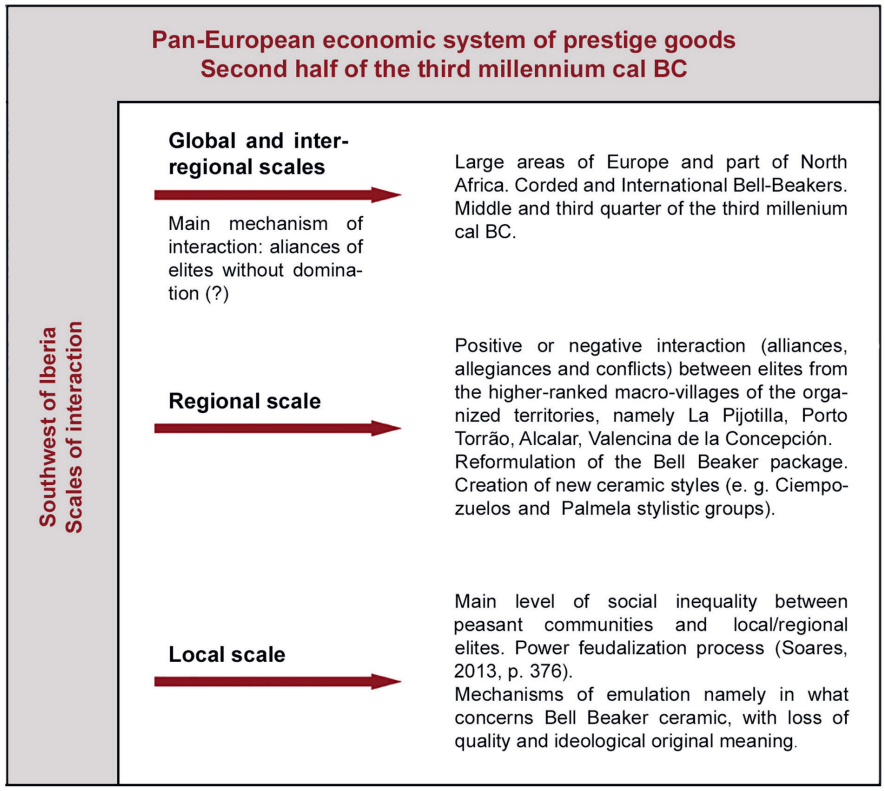

Figure 8. Outline of the main interaction scales during the second half of the 3rd millennium in the Iberian Southwest (after Soares 2016).

complete fishing net found in tower M13 of Porto das Carretas (Soares 2013a: table 20). Weaving activity also seems to have reached a peak of development (Soares *et al.* 2018). The typology of loom weights (*crescentes*), and the high quality of linen revealed by a painted fragment of linen from the necropolis of Belle France in Algarve, directly dated to the middle-third quarter of the 3rd millennium (Soares *et al.* 2018: Figure 17), illustrate the technological development of weaving in southern Portugal, a region that may have been at an advantage compared to other parts of Portugal (Cardito Rollán 1996).

In synthesis, striking social changes took place in the third quarter of the 3rd millennium cal BC (Phase II of Porto das Carretas). The complex tribal organisation of the first half of the 3rd millennium was exhausted, probably due to excessive territorial and social segmentation, which blocked the development of productive forces (craft activities of weaving and metallurgy, and trade). In the second half of the 3rd millennium cal BC, we find evidence of an unstable politic power, still without capacity for hereditary perpetuation, which fits well with the anthropological concept of chiefdom (Carneiro 1981; Kipp and Schortman 1989; Kristiansen 1991; Service 1962).

A new socio-political organisation emerges from the wreckage of the precedent, polarised by personalised leaderships: adventurers, holders of the control of the production and circulation of arsenic copper artefacts, namely weapons, gold and ivory sociotechnic artefacts (Schuhmacher *et al.* 2009), textiles, and other prestigious goods. The accumulation of socially recognised wealth guaranteed these individuals the capacity to organise supportive factions and labour force reserves, thus creating a new kind of social relations in terms of production (vassalage /feudalisation), different from the traditional lineage structure. Primary subsistence production would hypothetically continue to be secured by peasant communities with direct access to the land; the extraction of surplus value from the labour force involved in production would be carried out by Beaker elites within the framework of the economic power of symbols (Lash and Urry 1999; Soares 2003) and in the context of an emergent warrior ideology, as mechanisms of wealth accumulation. The social division of labour, a prerequisite for social stratification, can now begin its development outside the rigid Chalcolithic tribal organisation. The archaeological record reveals not only widespread dissemination by the vast majority of habitats of copper smelting practices on a domestic scale, but in parallel shows the existence of an integrated metallurgical specialisation crossing the whole Iberian Peninsula, both in the sources of supply, for example in underground mines (Blas Cortina and Suárez Fernandéz 2009), in small open-air mining camps (Montero Ruiz and Rodríguez de la Esperanza

2008), and at stable mining sites, such as Cortadouro (Tavares da Silva and Soares 1976-1977) and Cabezo Juré (Sáez *et al.* 2003; Nocete *et al.* 2006), or in functionally specialised spaces inside macro-villages, such as at Valencina de la Concepción (Nocete *et al.* 2008) and San Blas (Hunt *et al.* 2009; Hurtado Pérez 2004: 153).

The main changes that occurred in the second half of the 3rd millennium cal BC in the Middle Guadiana Basin, compared to the previous Chalcolithic complex tribal society, can be listed as the following (Figure 7):

1. Development of arsenic copper metallurgy and textile manufacturing –› gains of productivity.
2. Development of exchange networks. Production and consumption of standardised prestige commodities: metallic weapons, ivory buttons, fine textiles, Bell Beaker pottery –› fluidity of territorial boundaries.
3. Weakening of kinship relations *versus* strengthening of residential solidarities.
4. Power centralisation + knowledge-based political economy linked to personalised leaderships, integrated into extended exchange networks of prestige goods (D'Altroy and Earle 1985; Earle 1999; Clark and Blake 1999; Guyer and Belinga 1995; Soares 2013a) –› unstable and 'omniscient' leaderships based on the control of esoteric and ecological knowledge systems; use of rhetoric heritage accounts (Lash and Urry 1999; Graham, Ashworth, Tunbridge 2000; Soares 2013a: 69-70 and 386-388) –› individual appropriation of wealth.
5. Intensification of the social division of labour –› (Soares 2008; 2013a; 2016) –› managerial activities –› political leadership.
6. Death of the 'sun eyes' Chalcolithic divinities – 'occulated idols'– replaced by symbols of warrior and heroic ideologies.

Thus it was the onset of a new socio-political organisation with a vertical structure, increasingly personalised in its representation. Insofar as this process advanced, the old world of tribal societies and the correlated communitarian ideology were entering into a profound crisis. The collective funerary ritual changed sharply to single grave inhumations, some with rich assets: Palmela copper arrowheads, tanged copper daggers, stone wrist-guards, Bell Beaker vessels, ivory buttons with V-shaped perforation, gold ornaments.

The Early Bronze Age (EBA2): 2200-1800 cal BC

The radiocarbon chronology of the mega-sites of the Iberian Southwest Chalcolithic demonstrates a very long permanence that began with the Secondary Products Revolution (Sherratt 1983; Soares 2003, Greenfield, 2010) at the end of the 4th millennium, decayed at 2500 cal BC onwards, and collapsed at *c.* 2200 cal BC, as observed for example at La Pijotilla (Badajoz). Moving towards the east, at the upper Guadalquivir region, in a semi-periphery of El Argar, the mega-site of Marroquies Bajos (Jaen), of more than 100 ha and with five concentric ditches, underwent a similar sharp transformation, being abandoned at *c.* 2200-2100 cal BC, 'to be replaced by small farms that testify to the fragmentation of the previous economic collectivism' (Lull *et al.* 2013: 605).

The EBA elites, who held control of metallic production and its distribution, either in southern or northern Portugal, grasped the right to have coercive means – such as fortress-towers and weapons (e.g. the São Brás copper hoard at Serpa, and the single grave of Quinta da Água Branca in Vila Nova de Cerveira) (Soares 2013a: 400-411; Valério *et al.* 2018; Armbruster and Parreira 1993: 36-39; Fortes 1905-1908).

The regional demographic signature displays a clear reduction at the transition to the 2nd millennium cal BC. Settlements and domestic architectures became hardly visible in the archaeological record. Currently, archaeological rescue works have been filling the gap, revealing a few open silo-sites of long-lasting peasant communities in southern Portugal, from Chalcolithic to Late Bronze Age (the resilient dimension of continuity), such as Monte da Cabida 3 (Soares *et al.* 2009) and Casarão da Mesquita 3 (Santos *et al.* 2008). Additionally, the archaeological record of this period is based mostly on funerary evidence (Table 1): individual burials even if they reuse collective tombs of ancestors (late Ciempozuelos and Palmela beakers, and Ferradeira horizon), such as the dolmen of Pedra Branca - Melides (Ferreira *et al.* 1975a, 1975b), the *hypogea* cemeteries of the Lisbon and Setúbal Peninsulas (Soares 2003; Sousa and Gonçalves 2019), the *tholoi* of Monte da Velha 1 (Soares Monge 2008), Centirã 2 (Henriques *et al.* 2013), Cardim 6 (Valera *et al.* 2019), and the single graves of the Ferradeira complex at Guadajira (Hurtado and Garcia Sanjuan 1994), and Bela Vista 5 (Valera 2014).

In the material culture of the Ferradeira complex (southern Portugal), we can observe a 'dematerialisation' process that will continue during the culture of Southwest Bronze Age I. The showy Bell Beaker pottery lost its decoration and correlated ideological/ communicational functions; on the contrary, the metallic weapons of the Bell Beaker package, namely the Palmela copper arrowhead type had a noteworthy presence in the Ferradeira horizon.

Meanwhile other regions, such as the southeast, experienced a demographic increase and growing cultural activity. In the Iberian southeast a new

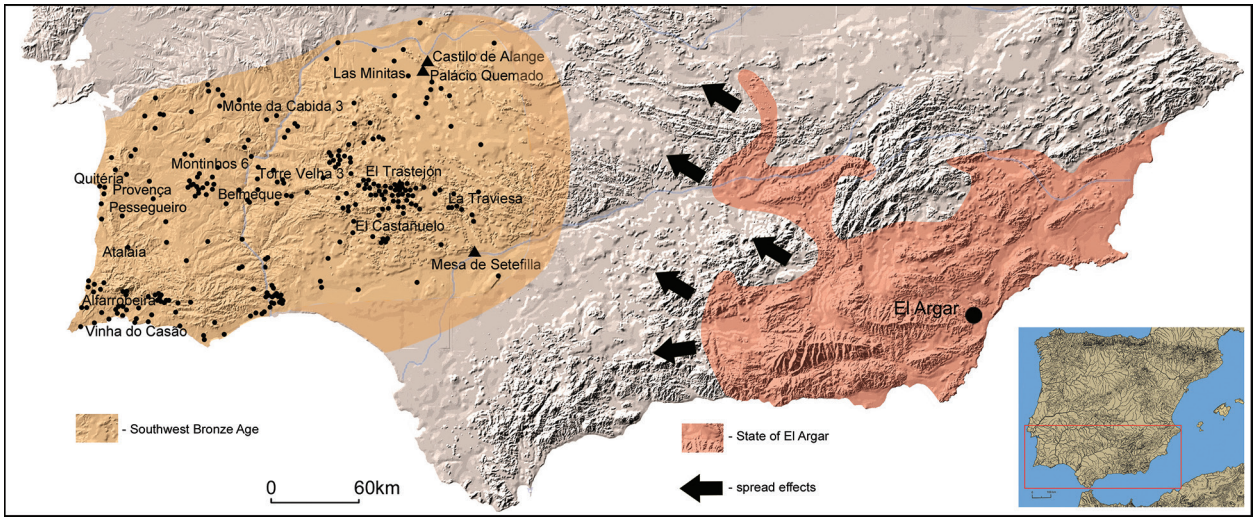

Figure 9. Southern Iberia with the territories of the 'Southwest Bronze Age Culture' (yellow) and El Argar State (red). Locations of the most important achaeological sites of the 'Southwest Bronze Age Culture' (after Soares and Tavares da Silva 2016).

archaeological reality emerges around 2200 cal BC 'unrelated to any Chalcolithic construction' (Lull *et al.* 2015: 366), dominated by very strong, inaccessible and monumental fortifications: La Bastida, Gatas, Fuente Alamo, El Argar. This politically organised territory corresponds to the early state model (Lull *et al.* 2005; Cámara and Molina 2011).

At the onset of the Middle Bronze Age (EBA/MBA) (1800-1500 cal BC)

After the moment of a probable political disarticulation, to which the neighbouring state of El Argar would have given an important contribution, the sphere of political economy confirms the precedent turn towards its detachment from subsistence economy (Soares 2013a: 431). A probable scenario of short-lived, incipient chiefdoms in the Early Bronze Age evolved slowly into a progressively more vertical hierarchical organisation (along with growing social inequality), but one subjected to fragmentation and weakening by the alleged assaults of El Argar (Soares and Tavares da Silva 2016) (Figure 9).

Taking into account the hypothesis we are defending, by which the Iberian southwest was one of the peripheries subjected to direct or indirect action of the state of El Argar (Soares and Tavares da Silva, 2016), the southwest had been probably affected by exploitation during the Early Bronze Age, likely by looting and destruction of the means of production by El Argar forces, which hindered political centralisation in that region. Chiefs of the extended peripheries of the El Argar territories could have had different agreements with this state, moving at distinct rhythms on emulation, competition increases, and even on the exploitation of their own peripheries. In more favourable conditions, a few chiefdoms might essay mechanisms of power transmission by hereditary. However, in general, social instability created by the strongest neighbour may have been an adverse factor to the reinforcement of political power and consolidation of class society in peripheral/marginal areas.

Cultural southeast influences beyond El Argar borders are documented in the far southwest mainly in metal production and funerary practices: inhumation of bodies in single containers; proximity and even spatial overlap of residential and funerary functions; rituals of commensality; metallic grave goods in arsenic copper, bronze, silver and gold (Valério *et al.* 2019), as well as greenstone beads (Odriozola *et al.* 2016). However, the distance/resistance may have avoid the mischaracterisation of the southwest cultural profile.

The slow cycle of development of the Southwest Bronze Age Culture (SBAC) (Schubart 1975) includes a growing component of social inequality between the early phase, *c.* 1800 cal BC, and the latter, *c.* 1200 cal BC, observed namely by the application of the Lorenz curve to funerary data of Algarve (Gomes 1994): cemeteries of Vinha do Casão (SBAC I), Vale da Telha and Alfarrobeira (SBAC II) (Figure 10B). Therefore, at that stage the southwest would have been subject to very asymmetrical power relations, even among intra-social local groups (Tavares da Silva and Soares 2009). The social hierarchy is very well expressed in the typology of habitats, displaying a sharp contrast between:

– Hilltop fortified settlements such as Cerro del Castillo de Alange (Pavón Soldevila 1998; Pavón Soldevila and Duque Espino 2014), Setefilla,

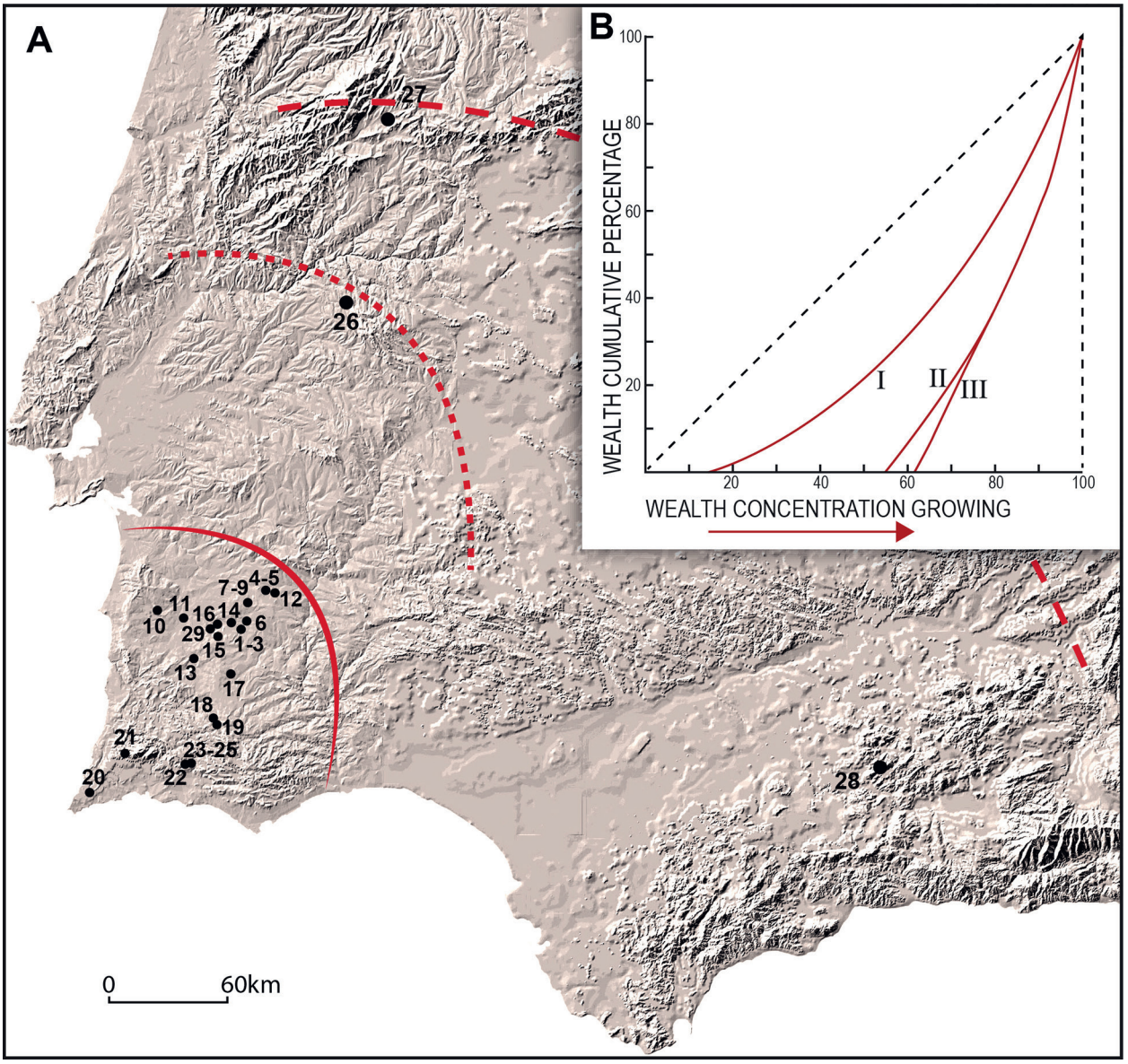

Figure 10. A) Southern Iberia with the distribution of the stelae of Alentejo type, a good indicator of the sociocultural identity of the Southwest Middle Bronze Age: 1) Assento, Santa Vitória (Beja); 2) Pedreirinha, Santa Vitória (Beja); 3) Santa Vitória; 4) Trigaches I (Beja); 5) Trigaches II (Beja); 6) Monte do Ulmo, Santa Vitória (Beja); 7) Mombeja I (Beja); 8) Mombeja II (Beja); 9) Mombeja III (Beja); 10) Abela (Santiago do Cacém); 11) Defesa, Alvalade do Sado (Santiago do Cacém); 12) Monte de Abaixo (Beja); 13) Panóias (Ourique); 14) Ervidel I (Aljustrel); 15) S. Salvador (Aljustrel); 16) S. João de Negrilhos, Messejana (Aljustrel); 17) Castro Verde; 18) Gomes Aires (Almodôvar); 19) Mouriços (Almodôvar); 20) Milrei, Raposeira (Vila do Bispo); 21) Marmelete (Monchique); 22) Alfarrobeira (S. Bartolomeu de Messines); 23) Passadeiras I (S. Bartolomeu de Messines); 24) Passadeiras II (S. Bartolomeu de Messines); 25) Passadeiras III (S. Bartolomeu de Messines); 26) Tapada da Moita (Castelo de Vide); 27) Corgas, Donas (Fundão); 28) El Torcal (Córdoba); 29) Carniceira (Aljustrel) (after Soares and Tavares da Silva 2016. B) Lorenz curve, showing the growth of social inequality in the Southwest Bronze Age at Algarve: Vinha do Casão – I (Southwest Bronze Age Culture I), Vale da Telha – II and Alfarrobeira – III (Southwest Bronze Age Culture II) (after Gomes 1994).

Seville, (Aubet *et al.* 1983), or the terraced site of El Trastejón, Huelva (Hurtado 1990; García Sanjuán, L. and V. Hurtado 2011), probably with political control functions, which were occupied from the Early to Late Bronze Age.

– Open peasant lowland villages, with perishable huts near cist cemeteries, of the far southwest Atlantic coast: Pessegueiro, Provença and Quitéria in Sines Municipality (Tavares da Silva and Soares 1981; 2009; Soares and Tavares da Silva 1995), Vale da Telha, in Aljezur, the Algarve (Gomes, 2015).

After the decay and collapse of El Argar, around 1400/1375 cal BC (Molina and Camara 2004), the southwest enters a cycle of development, from about

1600/1500 to 1200 cal BC, i.e. the full Middle Bronze Age, encompassing the Southwest Bronze Age Culture II (SBACII). There are important innovations, such as the repertoire of fine, dark-coloured pottery inspired by metallic models, and metal-rich weapons as grave goods in *hypogea* and cist cemeteries, as well as the Alentejo stelae type, a good indicator of the sociocultural identity of the Southwest Middle Bronze Age (Figure 10A). The practice of bronze metallurgy is documented, namely in the settlement of Malhada do Vale da Água, Ferreira do Alentejo, with radiocarbon dates between 1535-1294 cal BC (Valério *et al.* 2013). This empirical record converges on the hypothesis of the emergence of a proto-state in the Middle Bronze Age, encompassing southern Portugal (Figure 10A), from the Guadiana river to the Atlantic shore, polarised by the region of Beja – the *Santa Vitória Cultural Horizon* (Soares and Tavares da Silva 2016).

From the Middle Bronze Age (1500-1200 cal BC) onwards, societies in the southwest of the Iberian Peninsula multiply the evidence of trans-Mediterranean interactions, expressed, for example, by the long swords, a characteristic item of Alentejo stelae iconography (Barceló 1991; Díaz-Guardamino 2014; Gomes and Monteiro 1977), and by the Montejícar-style halberds, which seem to follow models of the Creto-Mycenaean circle (Gomes 1994: 122; Buchholz and Karageorghis 1973). This integration into the Mediterranean world will be reinforced in the Late Bronze Age (Ruiz-Gálvez 2009; Vilaça 2011-2012).

Conclusion

In the first half of the 3rd millennium cal BC, a complex tribal social formation blossomed in the Middle Guadiana Basin, as observed from the local productive system of the Luz Territory. After 2500 cal BC that Chalcolithic society decays, being replaced by unstable elite networks of Bell Beaker groups. This new unstable hierarchical social model, with vertical organisation integrated within the economic system of prestige goods, spread over most of the European continent.

The Chalcolithic communitarian principles and 'peasants' identities represented by ideological artefacts, such as 'occulated idols', were replaced by symbols of the glorification of specific individuals and their association to a warrior ideology, as expressed in metal weapons and by other sociotechnic artefacts. The commemoration of Beaker leaders will drive onwards to the paramount chiefs of the Middle/Late Bronze Age.

For the late prehistory of the Iberian southwest, the Early Bronze Age represents a deep cultural crisis and political disconnection, with demographic decrease and cultural dematerialisation. In trying to explain this social decline, we highlight the socio-economic dynamics of the Late Chalcolithic and geopolitical factors during the Early Bronze Age: the peripheral position of the southwest in relation to the state of El Argar.

We are, ultimately, aware of the limitations of the available data in approaching Early Bronze Age societies, dominated by fission dynamics and socio-political disarticulation, which hide the trajectories of local and regional changes, as well as Bronze Age settlement strategies.

Acknowledgements

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