

The Mega-Site of Valencina de la Concepción (Seville, Spain): Debating Settlement Form, Monumentality and Aggregation in Southern Iberian Copper Age Societies.

Leonardo García Sanjuán¹

Chris Scarre²

David W. Wheatley³

Abstract

Study of the Iberian Copper Age has experienced a remarkable upheaval in the last two decades. The discovery in central and south-western Iberia of a significant number of ditched enclosures, a site type almost unknown in this region until the mid-1990s, has opened up new lines of research. Particularly interesting is the existence of some exceptionally large sites. Largest of all is Valencina de la Concepción (Seville, Spain), covering an area of 450ha and featuring several outstanding megalithic monuments, thousands of pits and material assemblages revealing middle and long distance contacts. It has become a major reference point for the study of the Iberian Copper Age. In this paper we discuss the implications of the Valencina mega-site for the study of settlement variability, monumentality and population aggregation as key phenomena in the rise in social complexity in Copper Age Iberia.

Resumen

El estudio de Edad del Cobre ibérica ha experimentado una notable convulsión en las dos últimas décadas. El descubrimiento, fundamentalmente en Iberia central y suroccidental, de un número importante de recintos de fosos, una categoría de sitio que hasta mediados de los años 1990 era casi desconocida, ha abierto nuevas vías de investigación para el estudio de este periodo. De particular interés es la existencia de algunos sitios de tamaño excepcionalmente grande. Tal es el caso de Valencina de la Concepción (Sevilla), que con 450 ha de extensión, varios monumentos megalíticos de gran porte, miles de estructuras negativas y una cultura material que revela importantes contactos a media y larga distancia, se ha convertido en un referente importante para la investigación de la Edad del Cobre ibérica. En este artículo se discuten las implicaciones de los descubrimientos recientemente realizados en el mega-sitio de Valencina para el estudio de la variabilidad en la forma de los asentamientos, la monumentalidad y la agregación de población como fenómenos clave de la expansión de la complejidad social que se da en la Edad del Cobre ibérica.

1. Settlement Form in the Iberian Copper Age.

It is generally accepted that, although precedents may be found in the Copper Age (c. 3200-2200 cal BCE) and the Bronze Age (c. 2200-850 cal BCE), the consolidation of the urban way of life in Iberia did not occur until the Iron Age (c. 850-200 cal BCE). Perhaps

¹ Department of Prehistory and Archaeology, University of Seville. María de Padilla s/n, 41004, Seville, Spain. Email: lgarcia@us.es (contact author)

² Department of Archaeology, Durham University, South Road, DH1 3LE, Durham. United Kingdom. Email: chris.scarre@durham.ac.uk

³ Department of Archaeology, University of Southampton, Avenue Campus, SO17 1BF Southampton, United Kingdom. Email: D.W.Wheatley@soton.ac.uk

the most telling evidence of this is that, out of the eleven case studies included in the collective volume *Social Complexity and the Development of Towns in Iberia* (Cunliffe and Keay 1995), which is the only synthetic review of early urbanism for this region, ten deal with the Iron Age whereas only one (Chapman 1995) focuses on the Copper and Bronze Ages and, significantly, the title of this contribution has an interrogation mark: “Urbanism in Copper and Bronze Age Iberia?”.

Throughout the 20th century, the problem of urbanism in the southern Iberian Copper Age lay in the background of the ‘fortified’ settlements debate. As Bob Chapman (1995: 32) comments, in the 1950s and 1960s, Los Millares was described as “having an urban organisation” (Arribas Palau, 1959: 99; Almagro Basch and Arribas Palau, 1963: 45), as a “walled city” (Bosch Gimpera, 1969: 60) or as a “semi-urban site” (Savory, 1968: 146). Linked to the notion that Los Millares was an Aegean colony, these interpretations relied basically on the presence of stone architecture, including substantial walls, domestic structures and megalithic tombs. The abandonment of diffusionist approaches and the new focus on endogenous process in the 1970s and 1980s meant that the notion of ‘urbanism’ is no longer applied to Los Millares or other Copper Age settlements – although a recent paper on Alcalar (Algarve, Portugal), claims that the regular concentric plan of the site boundaries gives to the inhabited surface almost the appearance of an ‘urban’ organised hillfort (Morán Hernández, 2010: 164).

Despite these rather sporadic contributions, there has never really been a thorough debate on the applicability of the notion of ‘urbanism’ to the settlement forms known in the Late Prehistory of southern Iberia. In the early (or formative) period of the Neolithic (c. 5400-4200/4000 cal BCE) caves seem to have provided the basic setting for residence, although very little is known about the small open-air settlements located on arable lands which very probably existed. It was not until the late (or advanced) Neolithic (c. 4200/4000-3200 cal BCE) that sizeable open-air settlements became visible. Although the radiocarbon chronology is fairly deficient, it was in this advanced phase of the Neolithic that the first monumentalised sites (whether in the form of megaliths or ditched enclosures) appeared – or at least became widespread following occasional earlier precedents.

There is substantial agreement that it was at the start of the Copper Age, in the last third of the 4th millennium BCE, when the first truly permanent settlements appeared in the form of villages with fully residential and domestic functions. It is increasingly clear, however, that these early villages co-existed with semi-permanent settlements and places of occasional aggregation in a social and cultural context in which residential mobility must have been common for many communities. Indeed, the settlement record of 3rd millennium southern Iberia presents a remarkable variability of forms that includes ‘fortified villages’, ‘walled enclosures’ and ‘ditched enclosures’, as well as open-air settlements without any ditches or stone-walled architecture. The debate concerning their nature is far from over (for a recent synthesis see García Sanjuán and Murillo-Barroso 2013).

The aim of this paper is to discuss to what extent the currently available data on Copper Age life ways in southern Iberia fits well with notions of ‘urbanism’ or an ‘urban way of

life'. In the first two decades of the 21st century, research on this time period has experienced a remarkable upheaval. Compared to the mid-20th century when Los Millares was being described as a likely urban settlement, a considerable amount of fresh data is now available, including sites that, because of their remarkable spatial extent, could be called 'mega-sites'. Although the term 'macro-village' has been applied to Marroquíes Bajos (Jaén) (Zafra de la Torre *et al.* 1999), the notion of 'mega-sites' has been, until now, relatively alien to the discussion of the Iberian Chalcolithic. In this paper, we will use the term 'mega-site' to designate sites that, covering several dozen hectares, far exceed the size not only of what for a long time were considered 'classic' Chalcolithic fortified settlements, but also of Neolithic, Bronze Age and even Iron Age sites. A summary of data for all major excavated Copper Age sites in Iberia is provided in **Table 1**. More specifically, we will concentrate on a case-study, namely the site of Valencina de la Concepción (Seville) for which recent research has provided fresh and relevant evidence. Valencina presents a set of formal characteristics that greatly differ from those of Los Millares, the 'classic' referent of the Iberian Chalcolithic, and that make it an interesting case for a comparative assessment of settlement forms in this time period.

2. Background, genesis and foundation.

Today, Valencina de la Concepción lies in the lower Guadalquivir River valley, some 6 km from the centre of Seville as the crow flies (**Figure 1**). In the 3rd millennium BCE, however, the river met the ocean much further up, and therefore Valencina was located barely 5 km away from the Atlantic coastline (**Figure 2**). The farming communities located in this region in the final centuries of the 4th millennium BCE enjoyed a remarkable ecological diversity, with marine and fluvial resources, soils of high agricultural potential in the Seville and Carmona lowlands and in the El Aljarafe plateau as well as, barely 30 km distant, the great biotic (wild game and forests) and abiotic resources of Sierra Morena, including the copper ores of the El Andévalo region, ranked among the richest in the world. This environment matches almost exactly what Elman Service, in his classic work on the origins of civilisation and the state, called the optimum setting for the formation of 'villages of diversified resources' (Service, 1984: 94-95).

Hence, it should come as no surprise that the survey and excavation work carried out in the lower Guadalquivir valley, within the province of Seville, has revealed a very dense Chalcolithic occupation. Among the sites cited in the literature, special reference must be made to Universidad Laboral and Parque de Miraflores, located within Seville's metropolitan area, immediately opposite on the other side of the river, as well as, further up the river, La Morita (Cantillana), El Acebuchal, El Gandul (Alcalá de Guadaira), with a major megalithic necropolis that includes tholoi such as El Vaquero or Las Canteras, and the city of Carmona itself. As recently as January 2016 the universities of Tübingen and Sevilla have jointly excavated the site of Loma del Real Tesoro (Carmona), currently under study, the first Copper Age ditched enclosure so far confirmed in the region. Given the importance of the natural setting and the high density of contemporary sites within a 50 km radius, Valencina must be assessed from a spatial and landscape perspective. There is little doubt that the social practices that led to the formation of this 'mega-site' were inextricably linked to its immediate surroundings.

In light of the newly obtained radiocarbon dates (García Sanjuán et al. Forthcoming), the overall occupational span of Valencia falls between c. 3200 and 2300 cal BCE. Considering this, what was the genesis of Valencina? No evidence of Late Neolithic activity has ever been recorded at Valencina itself. For some areas of the lower Guadalquivir, a number of Late Neolithic sites have been published, especially in the valley of the Corbones River, a left bank tributary of the Guadalquivir as well as along the former coastline of the Holocene marine gulf that is today filled by alluvial silt. Of them, only two have been excavated: Los Álamos (Fuentes de Andalucía), a small open-air settlement, and La Marismilla (La Puebla del Río). At La Marismilla, some 25 km south to Valencina, in what today is marshland, a salt production site dated to the Late Neolithic and Early Copper Age was identified (Escacena Carrasco *et al.*, 1996). Although no radiocarbon dates have been obtained for La Marismilla that can be compared to those of Valencina, it has been suggested that since the late 4th millennium BC, the production and exchange of salt could have played an important role in the emergence of Valencina as a central place in the lower Guadalquivir valley (García Sanjuán 2013, 50).

Whatever the case, but very probably in connection with the diversity and abundance of available natural resources, including some strategic abiotic resources like salt and copper, towards the 32nd century BCE Valencina started to develop as an important locus of activity within the lower Guadalquivir valley. A recent study that has increased to 170 the number of available radiocarbon dates for Valencina (García Sanjuán et al. Forthcoming) (Figure 3), suggests that Valencina began as a place for recurrent burial activity, rather than the permanent base of a fully sedentary community. As we will see in the next section, the role of burial practices in the formation of Valencina can in fact be argued to have been highly relevant.

3. Settlement Form and Monumentality.

The first thing to be noted about Valencina is its sheer size. Covering an estimated area of c. 450 ha it is by far the largest Copper Age settlement in Iberia (Table 01), and possibly one of the largest in western European Late Prehistory. With a North-South radius of more than 3 km, Valencina could comfortably accommodate 20 sites the size of Los Millares. In the last ten years, geophysical surveys and excavation work have revealed a high density of features. If the 134 Chalcolithic features found at the PP4-Montelirio sector, where an area of 1.8 ha was excavated, are extrapolated to the entire site, Valencina would have in excess of 40,000 structures. Although the scale of the site suggests social dynamics without parallel in the rest of Iberia, however, the true debate starts when considering its form as a settlement as well as the nature of the social practices that led to its formation.

In terms of architectural morphology, no enclosing walls of stone or sun-dried mud like those known in Los Millares, Zambujal and other Iberian Chalcolithic settlements have ever been found at Valencina. The only stone architecture known at this site is that of megalithic monuments, which appear in various forms and sizes, but have in all cases a more or less evident association with burial practices. Some of Valencina's megaliths are remarkable monuments. That is the case, for example, of La Pastora, a 43,1 metre-long tholos with a stone-built corbelled chamber, or Montelirio, a 43,7 metre-long tholos

with two chambers roofed by sun-dried mud vaults that has yielded a remarkable collection of grave goods (García Sanjuán *et al.*, 2016) (Figure 4).

The vast majority of the Chalcolithic architecture recorded at Valencina consists of negative features of variable sizes and shapes: simple pits around 1m in diameter; complex features with poly-lobate plans and variable depths resulting from different features that cut and overlap each other; ditches up to 6m in width and depth; shafts up to 9m in depth, etc. These features have often been interpreted as part of domestic and residential structures such as 'hut floors', 'silos' and 'rubbish dumps'. These interpretations are based on a non-explicit extrapolation to Valencina of the dual pattern of spatial organisation recorded at Los Millares, according to which there would have been a 'village' with a domestic, productive and residential area approximately occupying the northern half of the site, and a 'necropolis', separated from the former by one or more ditches, lying at the south). This interpretation of Valencina's spatial organisation is questionable on various grounds: (i) the formal deposition of human remains is not at all restricted to the southern half of the site, but appears throughout its entire area (Figures 5 and 6); to take just one example, it is worth mentioning the deposit of human skulls found at Calle Trabajadores, virtually at the centre of what has often been described the 'exclusive' domestic, residential or productive area of Valencina. The Bayesian modelling of the radiocarbon dates obtained from those crania, which show evidence of de-fleshing and are associated to one of the largest collections of Bell-beaker pottery at the site, suggests that all those individuals died at the same time, which points to an episode of violence and its subsequent ritual treatment. Remarkably, in none of the best-known residential settlements of the Iberian Copper Age, such as Zambujal, Los Millares or Marroquies Bajos, have a find of this nature ever been made in connection to a dwelling area. (ii) the northern half, supposedly 'exclusively' dedicated to residential and domestic functions, has yielded most of the ideotechnical objects found at the site (including 'idols' and figurines); (iii) in Valencina, the number of circular-plan dwellings with walls made of rows of stone blocks and sun-dried mud of the type well-known at sites like Los Millares, San Blas, Alcalar or Zambujal is zero; (iv) the number of negative structures with typically domestic features such as grinding stones and permanent hearths is very low while at the same time most of the recorded grinding stones appear to be highly fragmented.

In general, given the widespread and pervasive presence of human remains across the site, it is difficult to find support for the idea of a dual division 'village vs. necropolis' at Valencina. Indeed, it is rather difficult to identify the kind of evidence that in other Chalcolithic sites is indicative of dwellings and domestic spaces. In addition, in at least some sectors of the site, occupation does not seem to have been constant throughout the entirety of the Copper Age. Drawing on these observations, the enormous size of Valencina could well have resulted from the repetition of certain social practices in contiguous and sometimes (but not always) overlapping sectors. In fact, a remarkable characteristic of Valencina (like in other 4th and 3rd millennium sites in southern Iberia) is the total absence of major stratigraphic deposits above the bedrock. The only stratigraphies known in Valencina are those found *inside* negative features (basically pits and ditches). Valencina, therefore, is not a *tell* resulting from the steady and intense occupation of the same space over a long period of time, like the early 'urban' sites of the Near East.

Rather, it is a wide area with thousands of contiguous features forming a dense and continuous footprint of human activity.

Other technological and economic indicators also hint at the possibility that the temporality of use and frequentation at Valencina was complex and non-linear. For example, study of the knapped lithic tools reveals the low frequency of cores and knapping debris, which suggests that only finished objects entered Valencina's deposits, and that the knapping did not take place on site. On the other hand, the archaeozoological study of two sectors (PP-Matarrubilla and Calle Mariana Pineda) showed a selection of the meatiest anatomical parts of large animals, suggesting that slaughtering did not take place there but meat was brought on site ready for consumption – presumably in feasts and celebrations connected with funerals and other major gatherings.

Above all, these issues suggest that no simplistic correlation can be drawn between the size of the site and the size of its resident population, nor between its form and the nature of the society that used it. Not only is the evidence not straightforward; it can be said to be “delightfully contradictory” (cf. R. Chapman 1995: 37). While there is no evidence of in situ flint knapping, remarkable flint objects, such as long blades or dagger blades, have been found and indeed there is unequivocal evidence of the manufacture of other raw materials such as copper, ivory and rock crystal. Valencina was undoubtedly home to one of the most accomplished communities of craftspeople in Chalcolithic Iberia (García Sanjuán 2016) (Figure 7). The prominence of the manufacture of exotic raw materials, rather than the processing of agricultural products (insofar it is possible to tell from the limited number of complete grinding stones), seems to be a major characteristic of Valencina.

A high proportion of the sophisticated and sumptuous artefacts made in exotic raw materials was deposited as grave goods in major megalithic burials such as Montelirio and Structure 10.042-10.049. However, it must be noted that the largest golden artefact ever found in Valencina (and indeed in Iberia) was placed inside a humble non-funerary pit and not a major megalithic tomb (Murillo-Barroso *et al.* 2015). Interestingly, while some of the most refined objects found in these two tombs were made in exotic materials that may have shared a possible mystical or magical character because of their association with distant lands or because of their intrinsic properties (ivory, rock crystal, amber...), copper objects are found wanting.

Undoubtedly, the magnificent megalithic monuments and the grave goods found in some of them suggest dynamics of growing social complexity and, perhaps, political hierarchisation. Monuments like Montelirio, La Pastora, Matarrubilla or Structure 10.042-10.049 may have been used in factional competition for prestige and power. However, if some (or all) of the individuals buried in Montelirio or Structure 10.042-10.049 were the ‘elite’ of Chalcolithic society, then that elite was far from enjoying an institutionally consolidated power: the absence of substantial domestic architecture, let alone a civic architecture that could have acted as the seat of that power, suggests that, at Valencina, social structure never got close to a state-like socially stratified organisation. Furthermore, a recent bioarchaeological and contextual analysis of the evidence from the main

chamber at Montelirio suggests that the (predominantly female) human contingent buried in this tomb can be best defined as a group of religious specialists rather than a social 'class' (García Sanjuán *et al.*, 2016: 539-547).

4. Discussion: Living, Gathering, Centrality, Mobility.

During the Late Chalcolithic or 'Uruk' period (4th millennium BCE), settlements between 20 and 110 hectares forming a complex political system developed in the Lower and Upper regions of Mesopotamia. Above the 50 ha mark, most of these settlements are regarded as 'urban' (Algaze 2008: 106; Wattenmaker 2009: 111). By the second half of the 3rd millennium BCE, state societies and the urban way of life had become consolidated in this region. In Iberia, sites of sizes analogous to those of Mesopotamia (or even bigger, like Valencina) arose between the late 4th and early 3rd millennia BCE. By the late 3rd millennium BCE many of these 'mega-sites' had been abandoned: they were never to become the seats of a consolidated urban life style. But not only the trajectory of the Iberian 'mega-sites' is very different from that of their Mesopotamian counterparts: so was their nature. In contrast to Uruk, there is no framing city wall to define and unify the spatial agglomeration at Valencina, nor a central temple complex to provide a communal focus. A succession of ditches have been identified at the smaller site of Perdigões in the Alentejo, and at Alcalar in the Algarve; in both cases, indeed, a central enclosed area is differentiated from a much larger lower or outer zone, itself marked by ditches. Interestingly, at both Perdigões and Alcalar, burial monuments are relegated to the edges of the outer zone, (Morán Hernández 2010; Valera & Evangelista 2014) just as it is at Valencina. Hence, it is possible that all three sites were spatially organised into core and periphery, but spatial distinctions are confused by the fact that funerary deposition extends, at least in Valencina and Perdigões, across almost the entire areas in each case, and that at Valencina no evidence has yet been found for significant encircling ditches.

An obvious conclusion to be drawn from this review of Valencina, the largest of the Iberian 'mega-sites', is that it is not possible to assume that the social processes that led to its formation as a site were the same that led to the formation of 'urban' settlements in 4th millennium Mesopotamia. The social processes that since the late 4th millennium BC gave rise to the formation of mega-sites in Iberia must have been very different from those at work in the Near East.

Another conclusion is that the concept of 'urbanism' is neither very useful for understanding the Valencina 'mega-site' in particular, nor to understand settlement forms in Copper Age Iberia in general. Valencina presents some elements that, taken in isolation, could perhaps fit within a check-list for 'primitive urbanism', such as size, monumentality (ditches, megaliths), craft specialisation, growing social inequality (including perhaps a regional settlement hierarchy), cultural traits shared with neighbouring communities, and a network of long-distance contacts that supplied the material basis for the representation of social dissymmetries in the funerary ideology. Taken together, however, these individual elements do not form a whole meriting the global definition of 'urbanism'. In Valencina, the correlation between size and population is not simple, as it is not clear whether the site was the permanent residence of a large demographic contingent and there is no evidence of civic architecture suggesting the existence of stable power

institutions, monumentality being mostly restricted to the funerary domain. The lack of an architectural context clearly identifiable with an 'urban way of life' mirrors the absence of the defining elements of an élite capable of extracting an efficient and persistent surplus from a lower class through an institutionalised political and religious power physically based on clearly visible administrative buildings (García Sanjuán and Murillo-Barroso 2013). Needless to say, the fact that Valencina did not develop into what we could call an 'early city' does not make it any less important. On the contrary, Iberian mega-sites do challenge us to study less explored but none the less fascinating trajectories towards complexity, involving the combination and re-combination of social practices as well as the negotiation of social space between domestic, production, burial and ceremonial activities, all of which led to remarkable settlement forms. In addition, despite its patchy character, the data available at present points to the need to better understand how Valencina stood in relation to previous and contemporary forms of human occupation across the lower Guadalquivir valley, a question that connects directly with the landscape dimension of early social complexity, as discussed by Bissierka Gardayska in her introduction to this volume.

Though exceptional in its scale, Valencina might indeed be considered not an instance of global processes of proto-urbanisation but as an example of practices of social interaction widespread across Western Europe in the 4th and 3rd millennia (Figure 8). North of the Pyrenees, the region of West-Central France, between the estuaries of Loire and Gironde, has a very large number of enclosures dating to the late 4th and earlier 3rd millennium BC derived in all likelihood from an earlier enclosure tradition going back to the 5th millennium (Joussaume and Large 2014; Laporte *et al.* 2015). They are variable in form and in size, but are typically characterised by multiple concentric ditches and complex 'pince de crabe' entrances. In a few cases, traces of long houses have been found in the interiors, and many have yielded human remains either as complete burials or isolated elements from the ditches, but the most distinctive surviving cultural material is the elaborated decorated pottery with 'oculi' motifs and tunnel handles. The assemblages from these sites do not bear comparison with those of the contemporary Iberian enclosures, either in the exotic nature of the raw materials (relatively limited) nor in the range of symbolic artefacts (absence of figurines), but the complex entrances and elaborate ceramics suggest these were arenas for display and social competition, constantly being reworked, rather than enclosed villages (Scarre 1998; Burnez and Louboutin 2002). They draw to mind the successive ditch circuits and scalloped plans at Iberian sites such as Perdiggões.

Moving north, Scandinavian enclosures such as Sarup on Funen, of the late 4th millennium BC, also furnish evidence of practices that can be paralleled at the Iberian sites. Once again, there are indications of structures constructed and dismantled, of pits and ditches opened, filled with ritual debris, and then covered over again. There are human remains, a large assemblage of elaborately decorated pottery, and feasting debris. While there are no megalithic chambered tombs at Sarup itself, a direct association has been suggested between the enclosure and a scatter of tombs in the surrounding area (Andersen 1997; 2016). Hence, at Sarup, as at Valencina and Perdiggões, there are multiple monumentalised burial foci adjacent to a zone of pits and ditches containing multiple

kinds of residues that in some cases may reflect the debris of feasting, consistent with social competition.

Further west, in Britain and Ireland, the evidence for competitive social practices takes a rather different form. In Ireland, the three elaborate passage tombs of the Boyne Valley complex with their massive mounds represent the magnification of a tradition of communal tombs that may have begun as a community enterprise in the early 4th millennium BC but here assumes exaggerated dimensions. Within southern Britain, Stonehenge has been interpreted as a major centre drawing people and livestock from long distances, for ceremonies held probably at midwinter. Excavations at the neighbouring site of Durrington Walls have revealed traces of a substantial settlement of as many as 300 houses under the later enclosure banks (Parker Pearson 2012). Stable isotope analysis shows that cattle were being brought to Durrington Walls from a number of regions, some over distances of more than 100kms (Viner *et al.* 2010). The enclosure that came to dominate Durrington Walls in its later phase is indeed the largest in Britain, measuring 500 m in diameter and enclosing an area of 17 hectares. Impressive as that is, it is much smaller than the 450-hectare Valencina, which differs also in the density of features, the abundance of artefacts, the quantity and quality of the exotics, and the sophistication of the craftsmanship.

None of this suggests of course that Valencina was 'urban'. In some respects, it might indeed qualify: as large as early Uruk, with evidence of long-distance connections (within and beyond Iberia) and indications of significant status differentiation. Size is not everything, however; structure and content are equally if not more important, and as we have seen, current evidence from Valencina suggests a palimpsest of shifting occasional (or perhaps seasonal) occupations, changing through time, rather than dense permanent occupation. Like Stonehenge or Sarup, it may have been a place of aggregation, competitive display, and ritual performance, part of a wider European phenomenon that was replaced by different structures of social power and social practice as the 3rd millennium drew to a close.

The communities that 'founded' Valencina were, nonetheless, early complex societies - or at least societies in the process of developing complexity. They can be characterised by being immersed in a process of full sedentarisation, demographic growth, agrarian intensification, intense animal husbandry, major labour investments in works of funerary and/or religious significance (megaliths, ditches), factional competition, formation of incipient but probably unstable elites and, notably, connection with supra-regional exchange networks devoted to exotic products that were the hallmark of those 'wannabe' elites. Many of these elements were already present in the Late Neolithic in other regions of southern Iberia. What seems to characterise the rise of Copper Age in the Lower Guadalquivir valley, and particularly in Valencina, is their intensification in a relatively short period of time beginning at around 2900 cal BCE and then the collapse of the entire social system at around 2400-2300 cal BCE. The lack of continuity, growth and expansion of the Iberian Copper Age settlement system is a major element setting clearly apart this process from those of 'urbanisation' in 4th millennium BCE Mesopotamia.

The growth of socio-cultural complexity is a critical issue in the evolution of human society and one to which we have recurrently drawn attention (e.g. Cruz-Berrocal *et al.*, 2013). The rise of cities marks a key stage in this process but not all large settlements did necessarily assume urban forms or functions. Valencina might indeed be compared with the large Levantine sites of the Pre-Pottery Neolithic, or Cahokia in the American Midwest: all agglomerations of population that persisted for several centuries but ultimately fractured, unable perhaps to reconcile the conflicting demands of social integration with unstable structures of power and control (Kuijt 2000; Jennings 2016). Each case is unique, however, and unless it comes to be demonstrated that Valencina had been a large permanently occupied settlement, the analogy may have limited application. In Europe, prehistoric states and cities developed relatively late – much later than in adjacent regions (Scarre, 2013) – and regional trajectories in the preceding millennia, like the one we have just discussed, were highly variable. It is regrettable that in a recent global synthesis on social complexity and state formation processes (Flannery and Marcus 2012), little attention is paid to this issue.

The archaeological record of Southern Iberia provides a fascinating glimpse of this developing social complexity, with evidence of mega-sites, nucleated settlements, peer-polity interaction, elite-formation and long distance trade. These may indicate the emergence of more or less pronounced forms of social hierarchy during the 3rd millennium BC, but the true character of such societies remains unclear. The present challenge is therefore to determine the specific character of social complexity in 3rd millennium Iberia, its chronological sequence and trajectory and, in particular, the processes that led to the formation of mega-sites like Valencina.

5. Bibliographic References

Algaze, G. (2008): *Early Mesopotamia at the Dawn of Civilization: The Evolution of an Urban Landscape*. Chicago: University of Chicago Press.

Almagro Basch, M. and Arribas Palau, A. (1963): *El Poblado y la Necrópolis Megalíticas de Los Millares (Santa Fé de Mondújar, Almería)*. Madrid. Consejo Superior de Investigaciones Científicas

Andersen, N. H. (1997): *Sarup volume 1: The Sarup Enclosures*. Moesgaard: Jysk Arkeologisk Selskab.

Andersen, N. H. (2016): The clustering of megalithic monuments around the causewayed enclosures at Sarup on Funen, Denmark, in *The Megalithic Architectures of Europe*, eds. L. Laporte & C. Scarre. Oxford: Oxbow Books, 127-35.

Arribas Palau, A. (1959): “El urbanismo peninsular durante el Bronce primitivo.” *Zephyrus* 10, 81-128.

Bosch Gimpera, P. (1969): “La Cultura de Almería” *Pyrenae* 5, 47-93.

Burnez, C. & C. Louboutin (2002): The causewayed enclosures of western-central France from the beginning of the fourth to the end of the third millennium, in *Enclosures in Neolithic Europe. Essays on causewayed and non-causewayed sites*, eds. G. Varndell & P. Topping. Oxford: Oxbow Books, 11-27.

Chapman, R. (1995): "Urbanism in Copper and Bronze Age Iberia?" In: Cunliffe, B. and Keay, S. (Eds.): *Social Complexity and the Development of Towns in Iberia. Proceedings of the British Academy* 86, 29-46. London. British Academy

Cunliffe, B. and Keay, S. (eds.) (1995): *Social Complexity and the Development of Towns in Iberia: Proceedings of the British Academy* 86. London. British Academy

Cruz Berrocal, M.; García Sanjuán, L. and Gilman, A. (eds.) (2013): *The Prehistory of Iberia: Debating Early Social Stratification and the State*. New York. Routledge.

Escacena Carrasco, J. L., Rodríguez De Zuloaga Montesino, M. and Ladrón de Guevara Sánchez, I. (1996): *Guadalquivir Salobre. Elaboración Prehistórica de Sal Marina en las Antiguas Bocas del Río*. Sevilla. Confederación Hidrográfica del Guadalquivir

Flannery, K. and Marcus, J. (2012): *The Creation of Inequality. How our Prehistoric ancestors set the Stage for Monarchy, Slavery, and Empire*. Cambridge MA: Harvard University Press.

García Sanjuán, L. (2013): "El asentamiento de la Edad del Cobre de Valencina de la Concepción: estado actual de la investigación, debates y perspectivas." In: García Sanjuán, L.; Vargas Jiménez, J. M.; Hurtado Pérez, V.; Ruiz Moreno, M. T. and Cruz-Auñón Briones, R. (eds.): *El Asentamiento Prehistórico de Valencina de la Concepción. Investigación y Tutela en el 150 Aniversario del descubrimiento de La Pastora*, 21-59. Sevilla: Universidad de Sevilla.

García Sanjuán, L. (Forthcoming): "Farming economy and wealth economy in the Copper Age of the Lower Guadalquivir River: Debating strategic resources at Valencina de la Concepción (Seville, Andalusia, Spain)." In: Bartelheim, M.; Bueno Ramírez, P. and Kunst, M. (eds.): *Key Resources and Socio-Cultural Developments in the Iberian Chalcolithic*. Tübingen. University of Tübingen

García Sanjuán, L. and Murillo-Barroso, M. (2013): "Social complexity in Copper Age southern Iberia (c. 3200-2200 cal BC): reviewing the 'state' hypothesis at Valencina de la Concepción (Seville, Spain)." In: M. Cruz Berrocal, L. García Sanjuán and A. Gilman (eds.): *The Prehistory of Iberia: Debating Early Social Stratification and the State*, 119-140. New York. Routledge

García Sanjuán, L.; Fernández Flores, Á. and Díaz-Zorita Bonilla, M. (2016): "Montelirio. Valoración e Interpretación de una tumba excepcional" In Fernández Flores, Á; García Sanjuán, L. and Díaz-Zorita Bonilla, M. (eds.): *Montelirio: Un Gran Monumento Megalítico de la Edad del Cobre*, 503-553. Sevilla. Junta de Andalucía

García Sanjuán, L.; Cáceres Puro, L.; Costa Caramé, M. E.; Díaz-Guardamino-Urbe, M.; Díaz-Zorita Bonilla, M.; Fernández Flores, A.; Hurtado Pérez, V.; López Aldana, P. M.; Méndez Izquierdo, E.; Pajuelo Pando, A.; Rodríguez Vidal, J.; Vargas Jiménez, J. M.; Wheatley, D.; Dunbar, E.; Bronk Ramsey, C.; Delgado-Huertas, A.; Dunbar, E.; Mora González, A.; Bayliss, A.; Beavan, N.; Hamilton, D. and Whittle, A. (Forthcoming): "Assembling the dead, gathering the living: radiocarbon dating and Bayesian modelling for Copper Age Valencina de la Concepción (Sevilla, Spain)." *Journal of World Prehistory*

Jennings, J. (2016): *Killing Civilization: A Reassessment of Early Urbanism and its Consequences*. University of New Mexico Press

Joussaume, R. and Large, J. E. (eds.) (2014): *Enceintes Néolithiques de l'Ouest de la France de la Seine à la Gironde*. Chauvigny: Association des Publications Chauvinoises

Kuijt, I. (2000): "People and space in early agricultural villages: exploring daily lives, community size, and architecture in the late Pre-Pottery Neolithic." *Journal of Anthropological Archaeology* 19, 75-102.

Laporte, L.; Bizien-Jaglin, C.; Wattez, J.; Guyodo, J. N.; Barreau, J. B.; Bernard, Y.; Aoustin, D.; Guitton, V.; Hamon, G.; Jallot, L.; Lucquin, A.; March, R.; Marcoux, N.; Mens, E.; Soler, L. and Werthe, E. (2015): "Another brick in the wall: fifth millennium BC earthen-walled architecture on the Channel shores." *Antiquity* 89, 800-17.

Morán Hernández, E. (2010): "Spatial organisation of the Alcalar Copper Age settlement (Algarve, Portugal)." In: Valera, A. C. And Shaw Evangelista, L. (Eds.): *Proceedings of the XV UISPP Congress (Lisbon, September 4-9 2006). Session WS29: The Idea of Enclosure in Recent Iberian Prehistory*. BAR International Series 2124, 161-167. Oxford. Archaeopress

Murillo-Barroso, M.; Costa Caramé, M. E.; Díaz-Guardamino Uribe, M.; García Sanjuán, L. and Mora Molina, C. (2015): "A reappraisal of Iberian Copper Age goldwork: craftsmanship, symbolism and art in a non-funerary golden-sheet from Valencina de la Concepción." *Cambridge Archaeological Journal* 25 (3), 565-596.

Parker Pearson, M. (2012): *Stonehenge: Exploring the Greatest Stone Age Mystery*. London: Simon & Schuster.

Savory, H. (1968): *Spain and Portugal: The Prehistory of the Iberian Peninsula*. London, Thames and Hudson

Scarre, C. (1998): "Arenas of action? Enclosure entrances in Neolithic Western France c.3500-2500 BC." *Proceedings of the Prehistoric Society* 64, 115-37.

Scarre, C. (2013): "Social Stratification and the State in Prehistoric Europe: The Wider Perspective." In: Cruz Berrocal, M.; García Sanjuán, L. and Gilman, A. (eds): *The Prehistory of Iberia: Debating Early Social Stratification and the State*, 381-405. London, Routledge.

Service, E. (1984): *Los Orígenes del Estado y la Civilización. El Proceso de la Evolución Cultural*. Madrid. Alianza [First English Edition 1975]

Valera, A. C. & Shaw Evangelista, L. (2014): "Anthropomorphic figurines at Perdigueiros enclosure: naturalism, body proportion and canonical posture as forms of ideological language." *European Journal of Archaeology* 17, 286-300.

Viner, S., J. Evans, U. Albarella & M. Parker Pearson (2010): "Cattle mobility in prehistoric Britain: strontium isotope analysis of cattle teeth from Durrington Walls (Wiltshire, Britain)." *Journal of Archaeological Science* 37, 2812-20.

Wattenmaker, P. (2009): "States, landscapes and the urban process in upper Mesopotamia: inter-polity alliances, competition and ritualized exchange." In: Falconer, S. E. and Redman, C. L. (Eds.): *Politics and Power. Archaeological Perspectives on the Landscapes of Early States*, 106-124. Phoenix. The University of Arizona Press

Zafra de la Torre, N.; Hornos Mata, F. and Castro López, M. (1999): "Una macro-aldea en el origen del modo de vida campesino: Marroquies Bajos (Jaén) c. 2500-2000 cal. ANE." *Trabajos de Prehistoria* 56 (1), 77-102.