

Urbanism in Copper and Bronze Age Iberia?

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Introduction

I WOULD LIKE TO BEGIN by expressing my thanks to the British Academy for leaving in the question mark at the end of my title! I wish to express doubt. Doubt that the concept of urbanism, as it is applied in this symposium to first millennium BC centres like Ullastret and Castulo in eastern and southern Spain, is equally applicable to Iberian Copper and Bronze Age settlements in the preceding two millennia. As we shall see, the terms 'urban' and 'proto-urban' have been applied to such sites as Los Millares in the third millennium cal BC, but the Copper and Bronze Age sites which are the subject of this paper bear little resemblance to the cities of the Iron Age and Roman periods.

Of course, if I were to stop there, having argued for the absence of urbanism in the Copper and Bronze Ages, then the reader could ignore the prehistoric record and turn rapidly to the other papers and learn about *real cities*! Instead I have decided to carry on with my task and to examine the concept of urbanism (which in itself opens up a whole can of worms!), how archaeologists have tried to extend its usage back from the first millennium BC to earlier prehistoric contexts, and how distinctive were the kinds of societies which characterized these earlier periods. I am not looking back at the *roots* of urbanism, as this approach tends to assume a kind of gradualism by which an historical process emerges continuously, stage by stage. Rather than look for a 'thread' of continuity going back from Castulo to Los Millares or Zambujal, I will examine the distinctive nature of the archaeological record of Copper and Bronze Age societies in Iberia. Hopefully this approach will lead others to focus attention on the key attributes and historical contexts which initially made Iberian Iron Age centres different from the societies that preceded them.

Urbanism and Archaeology

The last time that European archaeologists, and particularly prehistorians, really talked about urbanism, was in the 1970s, when the insights of the research seminar on 'Man, Settlement and Urbanism' (Ucko, Tringham and Dimbleby 1972) were used to wrestle with the problem of Iron Age oppida north of the Alps (Cunliffe and Rowley 1976; cf. Collis 1984). But the experience of debate with town planners, urban geographers and sociologists was a provocative challenge to archaeologists looking for simple methods by which urban centres could be identified in the archaeological record.

The first observation which became clear was that absolute size and density of sites and populations were inadequate criteria for defining urbanism. Thus, while a Scandinavian city might contain a population of 250 persons, one in Canada would have 1000 persons, and one in Greece or Spain would have 10,000 persons (Grove 1972; Alexander 1972). Such cultural variation ruled out the prospect of cross-cultural thresholds of population size per unit area which could separate 'villages' from 'towns'.

On the other hand, consideration of urban function seemed to be a better avenue of enquiry. Thus the urban planner David Grove (1972, 560) wrote:

The historical origin of towns lies surely in the need to concentrate in one place functions related to a wider area than a village, such as markets, administration or defence. Thus we may define towns as settlements offering a given variety or level of certain characteristic services. The precise threshold may vary with the culture and level of development of a country or region.

This emphasis on function was shared by the geographer Paul Wheatley (1972, 601), who argued that:

as far as morphology is concerned, ancient and modern cities share only traits of so general a character that they are virtually useless for classificatory or analytical purposes. There is, in fact, no *a priori* reason to suppose that all the multifarious groupings of population both past and present that are and have been conventionally designated as 'urban' should necessarily be subsumable within a single logically coherent field. But if structural regularities are ultimately elucidated, then it is practically certain that they will be manifested in shared functions and in trends in systemic change rather than in form.

At first sight, this emphasis on functions offered prehistorians hope that, with the right techniques (usually what we might call 'Blitzkrieg' area excavation!), political, administrative, commercial and industrial functions could be identified in the archaeological record. But a reading of Wheat-

ley's conclusion to his paper in *Man, Settlement and Urbanism* offered further cause for caution:

Faced with the diversity of phenomena that have at one time or another been designated as 'urban', it is . . . impossible to do more than characterise the concept of urbanism as compounded of a series of ideal-type social, political, economic and other institutions which have combined in different ways in different cultures and at different times. It is not unlikely that the only feature which such congeries of institutions will ultimately prove to have in common is the fact of their aggregation. (Wheatley 1972, 623)

Indeed, faced with such definitional problems, it is not surprising that some geographers retreated rather lamely to the opinion that 'a town is when people feel themselves to be in one' (Beaujeu-Garnier and Chabot 1967, 30)!

What does this imply for archaeology, and for our discussion of urbanism in Iberia? While there seems agreement that the functions of towns are more important than their forms, there appears to be no definition of urbanism which holds up to cross-cultural analysis. Thus there is the immediate danger of projecting back into the past forms of urbanism which exist in the present. Even when one retreats, like Bruce Trigger, to a 'crude working model', and defines a city as 'a unit of settlement which performs specialised functions in relationship to a broader hinterland' (1972, 577) then this still begs the question as to the nature of those functions, the size of the hinterland, and how the functions are structured and institutionalized. Perhaps we would be better off avoiding the search for the first 'city', or for the 'roots' of urbanism, and concentrate instead on historical sequences of socio-political and economic institutions, and of the ways in which human populations are aggregated or dispersed in political and economic units in the landscape? In the case of Iberia, this involves us in a process of comparison between the institutions and population aggregations of the first millennium BC cities, and those of the Copper and Bronze Age settlements which are the focus of this paper. Let us concentrate on process rather than haggle over definitions!

Urban and Proto-urban: the Iberian Copper and Bronze Ages

The most famous Copper Age settlement in Spain is that of Los Millares. It is located at the junction of the river Andarax and the rambla de Huéchar, less than 20 km to the north of Almería, in south-east Spain. This fortified settlement occupies an area of some 5 ha on the tip of the promontory, and is associated with a cemetery of megalithic tombs and a series of so-called 'forts' on the crests of hills to the south and south-west.

The site has been known since the excavations of the Belgian mining engineers Louis and Henri Siret in 1892, and for prehistorians has come to represent the type-site of the local Copper Age culture, as well as the ultimate origins of urbanism in Spain. When the site was re-excavated from 1953–57, Martín Almagro and Antonio Arribas described it as having an ‘urban organisation’ (1963, 45), and just over ten years later Bosch Gimpera called it a ‘walled city’ (1969, 60). Others, such as Hugh Savory, were a little more cautious, and used the term ‘semi-urban’ (1968, 146). When it came to interpretation, not surprisingly it was Gordon Childe who placed the emergence of such towns in the context of wider cultural changes:

the urbanisation of Almerian economy seen at Los Millares . . . is presumably a reflection, however indirect, of Oriental cities’ demands for metal . . . the townships thus created . . . constituted local secondary centres of demand and radiated their influence right across the Peninsula. (Childe 1947, 267)

In this sentence, Childe encapsulated the diffusionist viewpoint whereby urbanism arose in response to external demands for a commodity, namely metal. In the light of the subject of this symposium, it is interesting to note that other authors made formal comparisons between these Copper Age settlements, which they called ‘colonies’, and the later Greek and Phoenician colonies (for examples, see Chapman 1990, 25–6), and Louis Siret (1913) originally attributed the Copper Age assemblage to Phoenician colonists.

In retrospect, reference to Los Millares and its contemporary Copper Age sites as ‘urban’ was a classic example of the fallacy of attributing urban status on the basis of a wall, as Kathleen Kenyon did for Jericho. The Siret excavations in 1892 showed the presence of what are now known as three lines of fortifications recorded in a sketch plan (Almagro and Arribas 1964, fig. 4), and two rectilinear structures and a cistern inside the settlement. The focus of the Almagro and Arribas excavations in the 1950s was on the central area of the outer wall and less on the internal parts of the settlement. Even the most recent campaigns by the University of Granada, beginning in 1978, have concentrated initially on the excavation of the fortifications (details and references in Chapman 1990, 75–9; see especially Arribas *et al.* 1985). We still know very little of the internal organization of the settlement, the nature and density of structures, the kinds of activities that were carried out, etc. To use terms such as ‘urban’ and ‘semi-urban’ to describe Los Millares is to assume what we still have to determine. For the rest of this paper I shall treat ‘city’ as the ‘C-word’, not to be mentioned in polite company at the British Academy!

The Archaeological Record of Copper and Bronze Age Iberia

So what do we know about Copper and Bronze Age societies in Iberia? Given the space available, it would be impossible to answer this question in any detail. The commitment to excavation, survey and publication in different regions of Spain and Portugal since the 1960s has made synthesis more difficult, and yielded new types of sites and regional cultural sequences where none existed previously. Thus it was only in the 1970s that the substantial late third and second millennium BC occupation of La Mancha became the subject of fieldwork (see Martín *et al.* 1993 for the most recent synthesis and full references). In the south-west of Spain the scatter of poorly dated Copper and Bronze Age sites known before the late 1970s has been replaced by a cultural sequence based on the stratigraphies of sites such Setefilla and Monte de Berrueco (Aubert, Remedios Serna, Escacena and Ruiz 1983; Remedios Serna, Escacena and Aubert 1984); the first fortified Early Bronze Age settlement with evidence for intramural burial in the Huelva region has been studied at El Trastejón (Hurtado 1989); and the arrival of Paco Nocete has seen the implementation of a research programme designed to place the famous mineral resources and megalithic tombs of Huelva within a long-term context of changing settlement patterns (Nocete *et al.* 1993).

In addition to excavation, the kind of field survey work which is being undertaken here, and elsewhere on the Meseta, in Andalucía and other regions of Spain, is beginning to produce long-term data on settlement sizes and densities. The interpretation of such data is not without problems, as has been pointed out by one of the contributors to this symposium, Gonzalo Ruiz Zapatero (1988). Thus the inference of settlement size from surface materials is clearly problematic, and affects our current understanding of such Copper Age sites as Ferreira do Alentejo, where such materials are reported by José Arnaud (1982) as covering an area of some 50 ha.

In the case of Copper Age fortified sites, fieldwork has extended their distribution beyond the traditional focal areas of south-east Spain and central Portugal. New examples have been found in the south-west of the Peninsula, near Huelva (Los Vientos de la Zarcita — see Piñon Varela 1986), further to the north in the Alentejo at Monte da Tumba (Tavares da Silva and Soares 1985) and Castelo de Santa Justa (Gonçalves 1989), in the Alta Extremadura at sites such as El Castillejos, El Castrejón, La Matilla and El Local (González Cordero 1993, 249), in the Mondego valley at Castro de Santiago (Valera 1993, 156), and now even in the Douro valley in northern Portugal at Castelo Velho (Oliveira Jorge 1993), which does not appear to be the only such site in this region and adjacent parts

of the northern Meseta of Spain (e.g. El Pedroso, in Zamora, with its wall and hollow tower, see Delibes and Fernández-Miranda 1993, 186). Comparative analysis of variation in the form, location and functions of these fortified sites is clearly required as a matter of urgency.

Even in what we might call the 'traditional' areas of archaeological research, such as south-east Spain, our understanding of Copper and Bronze Age societies is changing. For example, the detailed subdivisions of the chronology of the Bronze Age proposed recently by Paloma González-Marcén (1991) and Pedro Castro (1992) enable us to measure cultural and economic change at a finer scale than is possible anywhere else in the Peninsula. Thus for La Mancha, it has recently been admitted that 'we are constrained to treat the Mancha Bronze Age as a single block of evidence' (Martín *et al.* 1993, 31). Even for periods which we thought we knew well, such as the Copper Age in south-east Spain, the critique of Rafael Micó (1991, 1992) reveals unexplained variation and questions the degree to which we can analyse the 'culture' of Los Millares as a single entity.

Given this current state of knowledge and research, I will concentrate attention on three regions which exhibit different sequences of change during the Copper and Bronze Ages. I will begin with south-east Spain, and then move on to central Portugal and La Mancha. In all cases I will end my survey around c.1200 BC, and I will use calibrated radiocarbon dates throughout. I will finish by trying to compare these sequences in terms of social and other changes, and then look forward to the societies of the first millennium BC.

South-East Spain c.3000–1200 BC

Although the first evidence for the use of domesticated plants and animals in Spain and Portugal appears at the beginning of the sixth millennium BC, it is debatable as to whether full-scale farming in open-air villages, with year round sedentism, emerged before the fourth millennium BC. The precise dating depends, among many other factors, on agricultural potential in different regions of the Peninsula, and on the ways in which local communities chose to integrate the new resources within their subsistence-settlement systems. In the south-east, pottery-using communities exploiting cereals as part of what is reconstructed as an extensive, live-stock-based economy, existed in the intermontane basin of Granada from the middle of the sixth millennium BC, but it was not until the mid-late fourth millennium BC that small, poorly dated and possibly short-lived, Neolithic settlements appeared alongside collective tombs in lowland south-east Spain (Fernández-Miranda *et al.* 1993).

By c.3000 BC settlement patterns changed, with the emergence of the

copper-using 'culture' of Los Millares, which extended until c.2500–2200 BC, depending upon regional variation (Castro, González-Marcén and Lull, in press). The archaeological record now included copper metallurgy, settlements in easily-defendable locations, with fortifications of dry-stone walls and bastions and containing (where excavated) circular and oval structures built on stone foundations, and communal, extramural burial in dry-stone, false-vaulted tombs. Analyses of variation and co-variation in the types, sizes and contents of these collective tombs have prompted inferences of the beginnings of social ranking and unequal access to wealth items between corporate groups (Chapman 1990, 177–95; Micó 1992). Analysis of site sizes, where known, suggests the existence of, at best, a two-level hierarchy, with the occasional settlement like Los Millares or El Malagón having an area of more than 1 ha, and a population greater than 100–200 people (Chapman 1990, 152–3).

The second half of the third millennium BC witnessed the emergence of the Argaric 'culture', named after the type-site of El Argar in the Vera basin of eastern Almería (see Lull 1983 for the definitive modern synthesis; González-Marcén 1991 for the most recent analyses of Argaric relative and absolute chronologies; Castro, González-Marcén and Lull, in press, for the calibrated radiocarbon chronology). Most earlier sites were abandoned in the lowlands, and the new settlement pattern shows a preference for terraced hillsides at the foot of higher sierras, suggesting the increased importance of defensive-strategic factors (e.g. see Mathers 1986 for the first systematic survey, in southern Murcia). Site sizes again suggest at most a two-level hierarchy, and there may be more settlements which were now larger than 1 ha (Chapman 1990, 152–3). The crucial difference from the preceding Copper Age concerns the internal organization of settlements, with terraced, rectilinear structures occupying their entire areas, suggesting a higher density of population, perhaps 300–400 people per hectare. Changes in the material culture included a marked increase in the frequency of metallurgy, with some five times the number of artefacts that are known from the Copper Age (for frequencies, see Montero 1993), the use of silver and gold, and increased standardization in metal and pottery production (Lull 1983). Burial was now intramural, with dead individuals being deposited in urns, cists, pits or artificial caves under the floors and behind the walls of the productive and reproductive units in which they had lived. Analysis of grave associations suggests the existence of social stratification (Lull and Estévez 1986). The new periodization of the Argaric allows us to argue for the increase of such stratification to a peak around c.1800–1700 BC, at a time when the area of south-east Spain covered by Argaric material culture and funerary practices was approaching its greatest extent.

Soon after c.1600 BC, a major change took place, with the appearance of the post-Argaric assemblage, which has been studied most recently by Castro (1992). Although there was initial continuity in site occupation and the technomorphological characteristics of the pottery from the Argaric, intramural burial was abandoned. As much as anything else, this may account for the decrease in the frequency of metal objects in the archaeological record. By the time we reach the period beginning with the thirteenth and twelfth centuries BC, there is new evidence in pottery and metal types for the participation of south-east Spain in wider Atlantic and Mediterranean trade networks.

This is a very schematic summary of the archaeological sequence for south-east Spain, and there are differences of opinion as to what it all means. Indeed I would be, as Alan Clark would say, 'economical with the actualité' if I claimed that everyone agreed with what I am going to say. Although interpretation is open to debate, I am going to proceed by focusing attention on inferences about four variables which are among those relevant to our discussions at this symposium: these variables are demography, subsistence production, craft specialization and political interaction and centralization.

Current calculations of changing regional population densities in the third and second millennia BC in south-east Spain depend on variable chronological control, the available publications of sites, and the (often unspecified) methodologies adopted in different field surveys. Given all these imperfections, initial calculations provide no support for high population densities in the south-east as a whole, but there is evidence to support the inference of a marked increase, by a factor of three, in the population density of the heartland of the Argaric 'culture' in the Vera basin. I have yet to revise the figures which I calculated six years ago (Chapman 1990, 157-9), but I would doubt whether the population density for the basin was above 10 persons per square kilometre. In contrast, the area of southern Almería which includes the Copper Age type-site of Los Millares seems to show a halving of population density in the later third millennium BC. One suggestion which deserves greater consideration is that there was a regional reorganization rather than an overall increase in population between the two areas. At the local scale, the change from low-lying Copper Age settlements with internally dispersed structures to hill-zone, tightly-packed, terraced settlements in the Bronze Age raises two questions:

- how far did this change in settlement pattern and population aggregation accentuate pre-existing local pressures for more coordinated leadership?
- to what degree was the spatial reorganization of settlement and popu-

lation the outcome of strategies designed by existing élites to establish more direct, and more secure, political control, rather than the usual assumption of settlement patterns responding passively to environmental and economic factors?

Site locations clearly vary in relation to productive resources, so a fuller consideration of the political and social factors involved in the choice of such locations is long overdue.

New information on subsistence production in the Copper and Bronze Ages is leading us to reconsider its organization, and its importance in the process of emerging stratification. In some cases the data is delightfully contradictory. The earliest phases of the Copper Age settlements included areas devoted exclusively to pit storage, while few such pits were located inside domestic structures. Where stratigraphies are observable, these pits went out of use after the initial occupation, although the degree to which they were all in contemporary use is unknown. Two hypotheses may be proposed to account for these observations (Micó 1990; Chapman, in press a):

- Copper Age communities may initially have been organized around communal production, with grain storage in open, visible areas, and that as inequalities developed such storage became 'invisible', being removed to pottery vessels within houses, and
- that the pits contained the larger amounts of surplus grain produced by increasingly successful, and perhaps more wealthy, households in the local community?

Both hypotheses have weaknesses in relation to the existing empirical record, but a focus on the household as opposed to community organization of production must be central to future research.

Agricultural intensification has featured strongly in all of the models which have been proposed to account for the emergence of social stratification in south-east Spain. The major components of this intensification have been taken to include (a) irrigation, (b) the exploitation of vines and olives, and (c) the use of the secondary products of animals, especially cattle for traction and horses for carriage. Not surprisingly much of the original stimulus for discussing intensification came from Colin Renfrew's (1972) analysis of the Aegean Bronze Age states. As far as animal resources are concerned, more emphasis should be given to regional and intra-regional variation. Thus, in Granada, we see both increases and decreases in horse frequencies from the Argaric to the post-Argaric at different settlements (Cerro de la Encina and Cuesta del Negro, see Chapman 1990, fig. 32). In lowland Almería, excavations on the contemporary Bronze Age settlements at Fuente Alamo and Gatas have yielded minimal numbers of horse bones in all phases of occupation (Driesch 1985; Ruiz

et al. 1992): Gatas does, indeed, remind one of the proverbial one-horse town! The contrast with the Granadan sites mentioned above seems clear. Instead of our usual conception of horse exploitation as part of an economically determined secondary products 'revolution', we must consider its social context: did intensification of use occur in areas like eastern Granada, which were subject to the expansion of the Argaric political system, and its associated demands for tribute, in the first three centuries of the second millennium BC? Intra-site variation in horse frequencies at sites like Cerro de la Encina (Friesch 1987) may also point to inequalities in access to this animal within the Argaric periphery.

At Gatas, it is also clear that, in contrast to the animal exploitation frequencies, there were significant changes through time in the plant remains and, by inference, in the degree of subsistence intensification (Ruiz *et al.* 1992). After initial diversity, incorporating cereals and legumes, suggestive of some kind of horticulture, the period from c.1800–1600 BC (the so-called 'climax' period of social stratification and rich burial) witnessed a change to barley monoculture. This, it may be suggested, was guaranteed to maximize surplus production for élites engaged in the imposition and maintenance of an expansive political system, while minimizing local autonomy, and it may have had the not inconsiderable side-effect of increasing nutritional problems for local populations. Then with the transition from the Argaric to the post-Argaric, supposedly a time of decreased social complexity, we see an increase in diversification, with cereals, legumes, and now, olives and vines being exploited, and the use of possible artificial terracing for cultivation of the area at the southern foot of the hill on which Gatas is located. This sequence of change is supported elsewhere in the Vera basin, and it counters the assumptions that:

- the major subsistence changes occurred at the interface of the Copper and Bronze Ages,
- subsistence intensification was necessarily a major determining factor in the *emergence* of social stratification, and
- subsistence change was simply a process of adaptation to the environment.

There is evidence which supports the existence of complementary production between settlements during the Copper and Bronze Ages, and further evidence relating to the existence of craft specialization (for fuller details, see Chapman, in press b). For the Copper Age there is still somewhat fragmentary evidence, some of it from old excavations (e.g. Cerro de las Canteras, Almizaraque), but the spatially restricted evidence for metal production which is emerging from Los Millares may suggest that only certain households had access to copper artefacts (as is visible in the tomb evidence). The most recent excavators of Almizaraque argue against

the existence of specialized metal production, and for the exploitation of local ore bodies to which all households had access (Delibes *et al.* 1989, 1991; Montero 1993). Without full publication it is difficult to evaluate this claim, but I am somewhat dubious of the use made of trace element analysis to match copper artefacts with their ore sources, and the suggestion that Almizaraque was a specialist, metalworking site cannot yet be ruled out of consideration.

For the Bronze Age, an intensification of metal production has been documented from the archaeological record (Montero 1993), and there is evidence for spatially restricted metal production from four settlements (Lull 1983). In the best example, at La Bastida de Totana, three rooms yielded all the evidence for smelting and casting, including slag from silver production, furnaces, crucibles and an axe mould. No other metalworking evidence was found in the 3400 sq m of the site which were excavated in the 1940s. Two of these rooms were associated with the site's wealthiest adult and child burials. Increased standardization of some metal forms and sizes (e.g. daggers) has been argued for the Argaric as a whole, and in the case of a small number of swords from El Argar and Fuente Alamo in the basin of Vera, Vicente Lull has argued that they were produced in the same workshop. Standardized production of pottery types, as the result of specialized production, has also been argued by Lull, most strongly in relation to the *copa*.

Overall, it is proposed that there was supra-household control over productive activities in the Bronze Age, and that during the Copper and Bronze Ages there was some specialized production of items made out of materials such as metal, bone, ivory, and flint. Given the kinds of items which were produced, and the frequency of those items, can we propose that metallurgy and other crafts were in the hands of what are called 'attached specialists' (Earle 1981)? These worked for emerging elites, who symbolized and legitimated their power through control over the production of luxury and wealth items. The use of metal goods, the products of special skills, within a political economy, would not be surprising, and might also help to explain the preliminary findings of a lead isotope analysis programme (Z. Stos-Gale, pers. comm.). These results do not yet support the use of local ore deposits within the Vera basin, as proposed recently by Ignacio Montero (1993). Perhaps the 'exotic' metals were symbolic of elite power, and their use part of the strategies by which elites sought to establish and maintain that power? It would be interesting to examine the ratio of local:exotic sources through time, and to see whether changes in this ratio related to wider changes in the political and social structure.

This brings us to the question of political interaction and centralization,

as well as to the limits to the expansion of élite power. I have already argued that settlement patterns, subsistence strategies, and other productive activities in south-east Spain have to be understood in the context of politics as well as economics. During the Argaric we see the expansion of a well-defined cultural assemblage and funerary practices to incorporate an area of some 50,000 sq km, that is over four times the size of Wessex. Ideological representations of power in the form of metal weapons, copas and other distinctive pottery vessels also assumed an importance when inserted into earlier megalithic tombs, thus 'claiming' the ancestors and legitimizing the new elites. And then, around 1600 BC, the use of the dead to make these ideological statements ceased, the metal types changed, and the copas went out of use, suggesting two hypotheses:

- the overall, regional political structure of the Argaric 'broke down', reverting to more local political units in the post-Argaric, or
- that the political structure continued, but that it was no longer thought necessary to represent it in the same way through material culture?

This raises the question of the ability of these Bronze Age elites to maintain and/or strengthen their position without *either* increased local intensification of production and technology, *or* increased access to a wide variety of exotic luxury and wealth items. Strategies like barley monoculture were very risky, and their failure might indeed have contributed to the failure of the Argaric political system.

Central Portugal and La Mancha c.3000–1200 BC

I now turn, more briefly, to two other areas of the Iberian Peninsula, central Portugal and La Mancha, where there were interesting similarities and differences in the cultural sequence from c.3000–1200 BC. In central and southern Portugal it can also be argued that full-scale, open village farming did not develop until the mid-late fourth millennium BC, with more mobile strategies being followed earlier on (*contra* Zilhao 1993). However, like south-east Spain, it seems that it may have been only a matter of some five hundred years between the appearance of full-scale farming based on open-air settlements in the Late Neolithic, and the construction of comparable fortified settlements in the area of the Tagus estuary, the Setubal peninsula and the Alto Alentejo. Data on site areas, and hence on population size and density are rare, but again we are talking about settlements of about 1 ha in size. There is evidence for metal production, and in the case of Zambujal it has been argued that it was in the control of higher status individuals, in fact the same individuals who had access to Beaker pottery (Kunst 1987). This, and other wealth and

luxury items were disposed of in megalithic and rock-cut tombs nearby. Evidence for subsistence production is currently less detailed than in south-east Spain. The rebuilding of the fortifications, as in south-east Spain, could be interpreted as a response to functional factors, but it is also worth considering the possibility that the multiple phases of construction were the outcome of élite, inter-site competition. Whatever the political dynamics, these fortified sites in the lowlands tended to be abandoned around c.2200–2000 BC (Monge Soares and Peixato Cabral 1993). Where surveys have been undertaken on any scale, as in the Nabão valley to the north of Lisbon, it is proposed that there was a change from clustered settlement on hilltops in the Copper Age to the dispersed occupation of hilltop and valley bottom locations in the Bronze Age (Lillios 1993). No comparable use of mortuary rituals to dispose of increasing amounts of wealth, as occurred in south-east Spain, can be documented here.

The most recent interpretation of these changes and of the abandonment of Copper Age settlements, is that of Katina Lillios (in press), who has argued that a prestige goods economy existed during this period. The fortified settlements in the lowlands were, according to Lillios, integrated in an exchange system involving prestige goods made out of schist, copper and amphibolite, as well as Beakers. The sources of the raw materials were outside and to the east of the lowland area, and where there is production evidence, as in the case of amphibolite axes, it occurs in the fortified settlements and the finished objects were deposited in funerary contexts. This is not down-the-line trade. Lillios also argues that there were two spheres of exchange for groundstone tools:

In one, the larger, more roughly hewn groundstone tools may have circulated. One might hypothesise that these were acquired through reciprocal exchanges, involving food or other subsistence related items, between individuals of equal status. The second sphere may have included the smaller, finer, and unusual tools, and circulated with metal items, fine ceramics, and other craft specialist goods. This sphere might have been operated through redistribution by leaders of communities and/or in important feasts and rituals associated with births, marriages, alliances and deaths.

Lillios argues that the competitive nature of these exchanges had a deleterious effect on the environment, as more impressive feasts and rituals took place. The quality of land would have declined, hence the (albeit rather restricted) evidence from sedimentary and micro-faunal data for large-scale forest clearance and soil erosion. In essence, this would suggest that the prestige goods economy had its own built-in life expectancy.

The details that are known of the cultural sequence in La Mancha have been summarized recently (Chapman 1990, 237–43; Martín *et al.* 1993),

and I will try to make a few brief points in relation to the known settlements and settlement patterns. Until the 1970s, as was mentioned earlier, there was no Bronze Age archaeological record for this region, and yet now survey work in Ciudad Real, Almansa and northern Albacete has yielded traces of over three hundred and fifty settlements. Traces of Neolithic and Copper Age occupation are much less visible, and it would seem that we are dealing with 'settlement of lesser duration and intensity' (Martín *et al.* 1993, 41) than during the Bronze Age. Indeed, the energy investment in the construction of *motilla* settlements, with central stone towers and outer, concentric stone walls and surrounding domestic structures, is clearly visible. Slaves to phallogocentric discourse might claim that 'Size isn't everything', but the central monuments, of less than 1 ha, and their surrounding domestic structures which occupied up to 3 ha, were clearly meant to be visible from some distance in this low-lying landscape. Size and monumentality vary, but where excavations have taken place, there is evidence for production and storage activities involving cereals, domesticated animals, pottery and metal goods. The copper sources are not large locally and have yet to be determined by lead isotope analysis, but we do know that ivory from north Africa was imported as a raw material and worked locally, and that there was long-distance interaction with south-east Spain during the final phase of the Argaric, c.1700–1600 BC. Not long after this, all the radiocarbon evidence suggests that settlements in La Mancha were abandoned. Once again, an area in which more complex kinds of society had emerged, witnessed large-scale abandonment, prompting questions as to whether this signified social devolution as a result of inherent instabilities.

Summary and conclusions

Now it is time to draw together the points made in this paper and offer conclusions and some suggestions for debate. Each of these three areas saw the emergence of inequalities, whether it be ranking in central Portugal or some form of stratification in south-east Spain and La Mancha. There is some evidence for organized and intensified production systems on a regional basis, but archaeologists have tended to assume that this developed more within an economic or demographic than a social or political context. 'Exotic' items, sometimes of limited numbers, were used in strategies designed to maintain or strengthen elites and symbolize their power. Each political unit was seemingly vulnerable and had limits, whether productive or technological, to its ability to survive or expand. The actual settlement units in each political system were small and population densities overall were small. Also, in all three areas political systems

flourished, and then either collapsed or devolved and were not central to the initial interaction of Greek and Phoenician colonies and the subsequent development of urban communities in the Iron Age. In the case of south-east Spain, it was not until the nineteenth century mining boom that the population density of the Vera basin approached that calculated for the Argaric Bronze Age. Coincidentally, it was the arrival of two mining engineers, Louis and Henri Siret, which led to the discovery of the area's prehistoric archaeology.

This raises the question as to the conditions that were necessary for the emergence of urbanism in southern and eastern Spain. The ability or desire to concentrate much larger numbers of people in one place clearly required not only the productive base to support such an aggregation, but also it required the technological capacity to move around larger amounts of goods as a consequence of this process. This was a more costly strategy than had been practised in the Bronze Age. A much larger percentage of the population now had to be supported by surplus production than was the case of the small numbers of élite and their attached specialists in the Bronze Age. Also the very process of population aggregation which is associated with urbanism here, and in some other areas of the world, tends to occur relatively quickly, and to have clear benefits to the people concerned. One area where this is of interest is the external source for desirable goods. By the time we get to my cut-off date of c.1200 BC, southern Spain was about to enter into the expanding Atlantic and Mediterranean trading networks. In the latter case, beginning with the increasing evidence that is emerging for Mycenaean interaction with the Far West in the Late Helladic IIIA/B periods (e.g. Martín de la Cruz and Perlines Benito 1993), Spain for the first time became part of a world system. This marked a fundamental change from the periods with which I have been concerned in this paper, and I leave it to more qualified colleagues to evaluate its effects and contribution to Iberian urbanism.

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Urbanism in Copper and Bronze Age Iberia?

Terms like 'urban' and 'proto-urban' have been used from time to time to refer to examples of fortified Copper Age settlements in Iberia. It is argued here that not only is the cross-cultural use of such terms problematic, but also that Copper and Bronze Age settlements and settlement systems in Spain and Portugal were different from those of the Iron Age, when towns like Ullastret and Castulo developed. Rather than looking for the 'roots' of such urbanism in the distant past, the approach adopted here is to compare and contrast historical sequences in three areas of Iberia (south-east Spain, southern Portugal and La Mancha) during the third and second millennia BC. Although social inequality and greater complexity are inferred from the archaeological record, it is argued that settlements and population densities overall were small, and political units were unstable, collapsing or devolving at different times. The reasons for this vulnerability are suggested, as is the importance of Iberia's entrance into a Mediterranean 'world system' for the emergence of urban society in the first millennium BC.

¿Urbanismo en la Iberia calcolítica y de la Edad del Bronze?

Términos como 'urbano' y 'proto-urbano' han sido utilizados de vez en cuando en referencia a los ejemplos de asentamientos fortificados calcolíticos en Iberia. Se argumenta aquí que no sólo es problemático el uso de estos términos interculturales, sino que los asentamientos calcolíticos y de la Edad del Bronce en España y Portugal, y sus sistemas de asentamiento eran diferentes a aquellos de la Edad del Hierro, cuando se desarrollaron ciudades como Ullastret y Cástulo. En vez de buscar las 'raíces' del urbanismo en un pasado distante, el planteamiento adoptado aquí es comparar y contrastar las secuencias históricas de tres zonas de Iberia (Sureste de España, Sur de Portugal y La Mancha) a lo largo del III-II milenio a.C. Aunque una desigualdad social y una gran complejidad se pueden inferir a partir del registro arqueológico, se debe señalar que los asentamientos y las densidades de población eran pequeñas, y las unidades políticas eran inestables, colapsándose y desarrollándose en distintos momentos. Se sugieren las razones de esta vulnerabilidad, como es la importancia de la entrada de Iberia dentro de un 'sistema mundial' Mediterráneo para la emergencia de una sociedad urbana en el primer milenio a.C.