

The Iron Age in South and Central Portugal and the Emergence of Urban Centres

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ONE OF THE CENTRAL PROBLEMS in the archaeology of south-west Iberia in the first millennium BC is the emergence of nucleated settlements, and at what stage, by virtue of the size of population they housed and the number of functions they centralized, they can be classified as urban.

A major factor in this debate is the sharp discontinuity in the archaeological record between the beginnings of the millennium, when no large settlements are recorded and most of the information comes from burial data, and the middle of the millennium, when a wealth of different sites are known and when a pattern of occupation based on urban-like centres can be postulated.

The Late Bronze Age

It is unclear to what extent urbanization, or merely concentration of population into large settlements, occurred during the Bronze Age. Indeed no large settlement in south central Portugal can be attributed to a date earlier than the ninth century BC (Parreira and Soares 1980; Marques and Andrade 1974). Based on the occurrence of stroke-burnished wares and Atlantic Late Bronze Age metal artefacts, a number of sites can be detected, including settlements of various sizes and characteristics that, once appropriate surveys have been carried out, will eventually enable a regular pattern of occupation to be defined. But, in the present preliminary stage of research it is seldom possible to determine occupation areas with any degree of precision. The scarcity of data makes it possible only to recognize basic differences between, on the one hand large settlements with no significant fortifications, located in places where natural defensi-

bility seems not to be the prime concern, and on the other small hamlets, occurring in large number but lacking proper recording.

Large fortified sites are best known in the plains of southern Portugal. Their chronological framework and their internal evolution is rather complex: occupation of Late Bronze Age date is known from some sites normally defined as Iron Age (Tavares da Silva *et al.* 1981; Calado 1993),¹ from others that apparently were occupied only in the Late Bronze age (Tavares da Silva 1981; Arnaud 1979), and also occurs in the upper layers of sites that are otherwise mainly Chalcolithic (Parreira 1983).

The size-range of such sites is much smaller than those of later date, although the coexistence of large fortified sites and smaller, non-fortified examples — to which a rural character is usually attributed — is a feature of both the Late Bronze and Iron Age.

Although it may in part be due to inequalities in field recording, there does seem to be a distinct contrast between occupation in the south, with a higher percentage of large sites, and the central area immediately north of the Tejo valley, where mainly small sites are known. The inadequate documentation available, however, means that at present this can be only an impression.

Further north and further east (into the mountainous interior) our knowledge becomes scarcer, and even taking into account recent research there are not enough sites recorded and excavated to permit generalization (Senna-Martinez 1993). As a whole the artefact assemblages seem to be more directly connected to those known north of the Douro (Jorge 1988), an observation which raises questions beyond the scope of this paper.

We have tried to show (Correia 1990; 1993a), that already in the Late Bronze Age, there is a quite strong sphere of contact and influence in which the maritime region was dominant; hence the relations between the coastal area and the easily accessible south are more consistent than in other areas. Such a sphere of contact can be demonstrated in the archaeological record — by the distribution of Atlantic Bronze Age bronze artefacts (Coffyn 1983; 1985, 152–9; Burgess 1991). Its historical significance lies in the fact that the orientaling period in western Iberia succeeds this period of commerce, incorporating, but not eliminating, the existing inter-regional contacts into new systems resulting from the development of Phoenician sites in the south.

The Early Iron Age

Recent research (Tavares 1993) has demonstrated that, from the eighth century onwards a large area of southern and central Portugal was in systematic contact with Phoenician colonies on the south coast of Iberia.

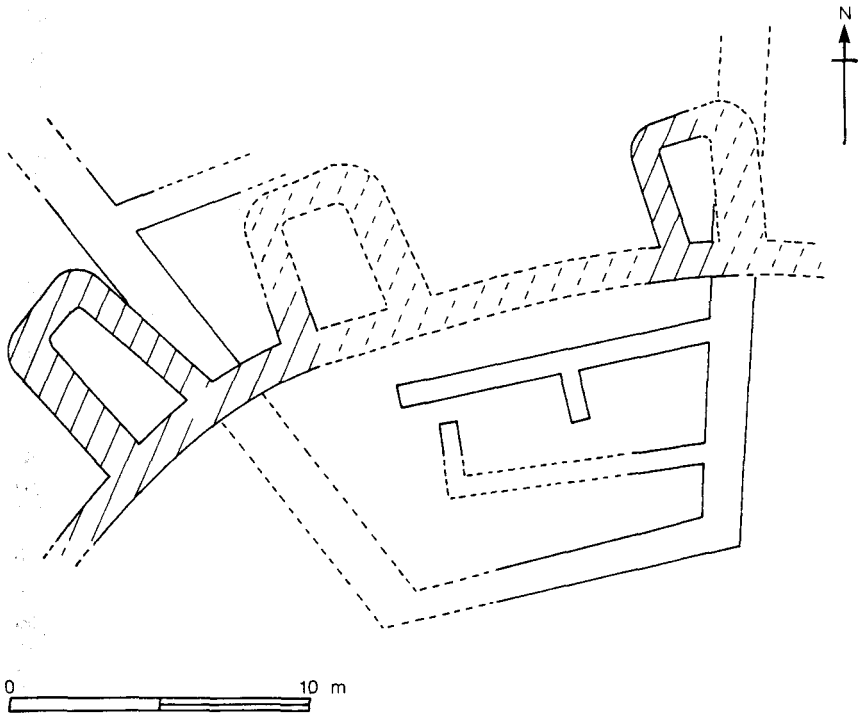


Figure 1. Cerro da Rocha Branca, Faro. Shaded: enclosing wall of phase 2. (Redrawn from Gomes 1993, fig. 3.)

This eventually led to the creation of small settlements, serving in the first instance as ports of call. Such sites can be shown to possess a particular architectural tradition, emanating directly from the Phoenician world.

Three sites are of particular significance:

1 *Cerro da Rocha Branca, Faro* (Gomes 1993) (Figure 1). This site has suffered much destruction but recent excavation has exposed a remarkable stratigraphic sequence which shows the site to have been a small Phoenician centre, with no previous occupation. The first major building phase took place probably at around the end of the eighth century and certainly not later than the first half of the seventh century. In the first phase a wall enclosed a group of rectangular buildings. The wall was set out in straight sections, with marked angles between. The structures inside the wall were elongated rectangles divided by partitions into rooms nearly square in shape. In the second phase a new defensive wall, with projecting towers, located further uphill, enclosed a roughly circular area, larger than that of phase I. For this construction there is a *terminus ante quem* of the first half of the fifth century.

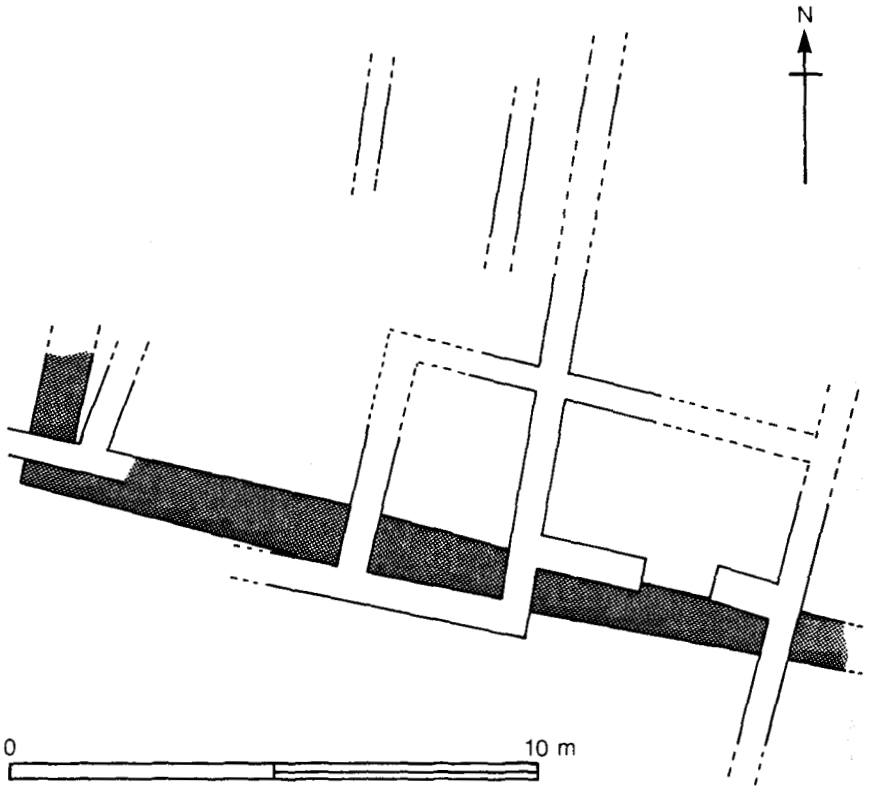


Figure 2. Abúl, Setúbal. Shaded: enclosing wall of phase 1. (Redrawn from Mayet and Tavares da Silva 1993, fig. 5.)

2 *Abúl, Setúbal* (Mayet and Tavares da Silva 1993) (Figure 2). This is one of several sites producing oriental material located at the mouth of the Sado (Soares and Tavares da Silva 1986; Tavares da Silva *et al.* 1981) but, apparently the only one that is both overwhelmingly orientaling in character and with no previous Late Bronze Age occupation. The architectural and urban evolution of the site is similar to that detected at Cerro da Rocha Branca, in that a simple defensive perimeter, consisting of a straight wall enclosing rectangular compartments, was later replaced by a larger enclosure and a new set of buildings, the characteristics of which are unknown. The chronology is uncertain but suggests that both the foundation of the site and its remodelling occurred during the sixth century, probably at the beginning and the end respectively.

3 *Santa Olaia, Coimbra* (Rocha 1908; Pereira 1993). Situated at the mouth of the Mondego, Santa Olaia was the first orientaling site identified in Portugal (in 1902), and has been for long one of the key reference

points in the study of the orientaling presence on the Atlantic coast (though typical for the time, the records are less than adequate). Only recently has modern research focused on this site, with impressive results. It can now be shown to have an unsuspected significance, for geomorphological study has revealed it to have been a fortified site dominating a bay, its fortification enclosing the area extending down to the margin of the sea. Recent research has identified a wall near the water,² associated with a mole, to which a gate gives access. Inside, a large number of rectangular structures, apparently used for metallurgical purposes (an impressive amount of iron ore has been found), show that this was a well organized site with structures erected on terraces supported by retaining walls, with streets between them climbing the steep hill.

Another river valley where current research promises important new data is the Tejo. Several small sites with rich oriental imports of an early date have been published, the larger among them, notably Santarém and Lisboa (Arruda 1993; Amaro 1993), with Late Bronze Age origins, soon becoming strongly influenced by an oriental presence (as orientaling pottery quickly becomes dominant in their ceramic assemblages). Unfortunately these sites lie beneath modern towns, but others with assemblages dominated by orientaling material, situated in good accessible, waterside locations, are now being identified in the estuary of the river (Cardoso 1990; Barros *et al.* 1993).

The crucial importance of these sites to the general problem of the urbanization of communities in the hinterland lies in the fact that all are located at the mouths of rivers along which, further upstream, there are other sites with equally important Phoenician components in their cultural assemblages (certainly in ceramic terms). These inland sites were already inhabited in the Late Bronze Age, and remained important as demographic centres for a substantially longer period. Such are the cases of Alcácer-do-Sal, Setúbal (Tavares da Silva *et al.* 1981), Santarém (Arruda 1993) and Conimbriga, Coimbra (Correia 1993a).

In the valleys of the Sado and the Mondego (and also apparently the Tejo) large, inland sites of indigenous origin, which were already major territorial centres, benefited from the trade with the orientals. Eventually, when the estuarine oriental sites were abandoned, these inland sites maintained and extended their dominance, and became the centres of *civitates* in the Roman period. This matter is considered again later, but here, the demonstration of the permanent central polities at these inland sites is relevant, in that political dominance and urbanization, so many times closely associated, are to a large extent an historic, evolutionary factor.

One important aspect that research will eventually illuminate is the political relationship between the small Phoenician sites at the mouths of

rivers (*emporiae*), established *ex nihilo*, and the indigenous sites at the inner limit of the estuaries. There is already enough data to support the theory that, whatever the relationship was, goods imported into the hinterland passed through these indigenous sites, since they present a greater range and quality of oriental goods than either the *emporiae* or any other sites deeper in the hinterland, outside the area of the estuaries.

The scarcity of oriental or other imported materials in large tracts of the hinterland would support the argument that we are not looking at a systematic redistribution of resources and goods, but at a concentration of these materials at sites that were political centres. If such a theory is substantiated, we can assume that these centres possessed an urban character at least from the middle of the eighth century. This leads to the proposition that, along with the centralized distribution of imported goods, going hand in hand with the centralized exploitation of the natural resources that were traded from them, came the assimilation of other functions and probably the adoption of oriental traits other than pottery. One might then assume that urbanization (especially from the planning and architectural point of view) might have begun at those estuarine sites. In the absence of large area excavations, however, such an assumption must be considered speculative.

This hypothesis assumes that settlement plans showing vaguely rectilinear tendencies reflect concepts emanating from oriental sites, and that this reflects the way in which economic predominance was exerted by the coast over the hinterland. Such an assumption can be disputed, of course, but even so one still has to account for the fact that Late Bronze Age building traditions were distinct from those evident at the oriental sites, with their emphasis on right angles and substantial stone foundations. Some of the early rectangular constructions in hinterland sites show a remarkable similarity to buildings in the Phoenician colonies proper. This seems to be another kind of "feed-back" to balance the transfer to the coast of resources derived from the hinterland. The oriental input clearly involved not just imported goods but architecture, settlement planning and aspects of everyday life.

One of the problems which remains to be considered by future research is the origin and nature of settlements with regular plans found in rural, non-fortified contexts, which were not urban in character. Although not immediately pertinent to this paper, these must be briefly considered.

There are a number of non-urban settlements in south central Portugal that, despite their remoteness from large sites of oriental aspect, seem to have served as central points within significant tracts of territory, performing a range of economic and ritual functions. These are comparable to the well known palace-sanctuary of Cancho Roano, Badajoz (Almagro-

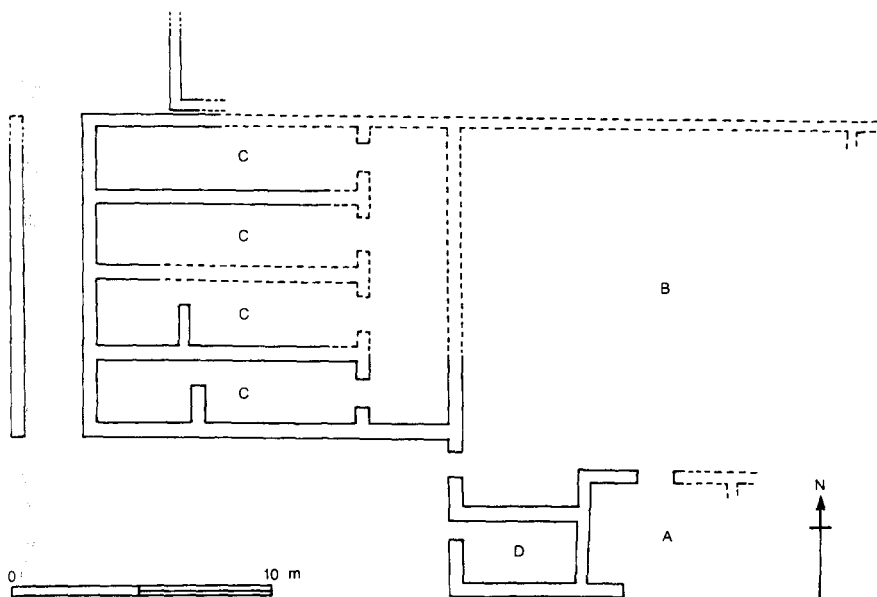


Figure 3. Fernão Vaz, Beja. A: entrance; B: courtyard; C: store-houses (?); D: sanctuary (?). (Redrawn from Beirão and Correia 1991, fig. 1.)

Gorbea 1990). The distribution of these small undefended sites, characterized by peripheral rooms devoted to religious or cult activities, is a phenomena of this period in the south of Portugal. The site where such characteristics have been best documented is Fernão Vaz, Beja (Beirão 1972; 1986; Beirão and Gomes 1985; Beirão and Correia 1991; Beirão and Correia forthcoming a). This is an edifice of distinctly regular plan (Figure 3), of which some 40% has been excavated. It comprises a group of four long rooms, internally divided, identical to the storehouses of Toscanos, Málaga (Niemeyer 1982). Access to them is provided by another long rectangular area, like a *narthex*, forming one side of a large courtyard, fronted by a monumental entrance, with a prominent hearth. To one side of this entrance, but actually opening to the side opposite, there are two other rooms, the southern one having been used as a sanctuary, or as a storeroom for ritual objects. A rare combination of an *obelos*, two *kiathoi* and a vase classified as a spouted *dinos*, all produced locally, make it likely that some kind of libation or ritual meal either took place in this room or in another in the building, for which this was the store.

At Neves, Beja (Maia and Correa 1985; Maia 1986) (Figure 4), a group of small buildings around a central area define what must have been a hamlet (of which modern *montes* may be a reminiscence). The site has at

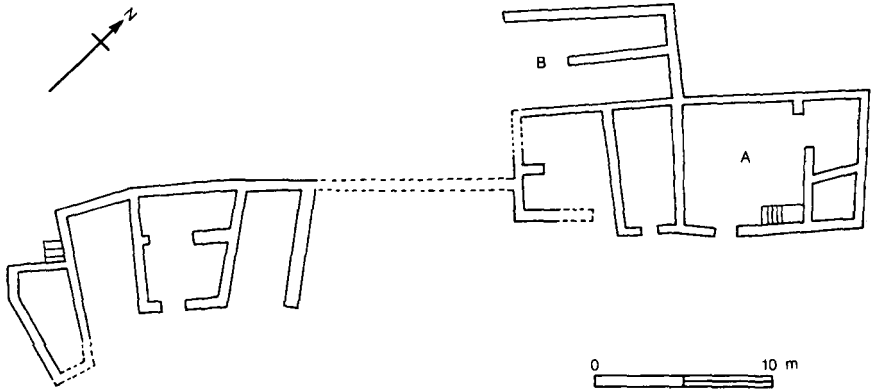


Figure 4. Neves, Beja. A: residential area; B: open rooms with the inscription. (Redrawn from Maia and Correia 1985, fig. 2.)

its back two long, open rooms, in one of which an inscribed stone was found. This stone has been interpreted as one of the few instances where the pre-Latin south-western Iberian script was used outside a funerary context: the unusual structure of the inscription would support such an interpretation. The postulated reconstruction, which suggests that the inscription was set in the back wall of the structures facing inwards, seems likely though it cannot be proved from the excavated evidence.

At Corvo, Beja (Maia 1986; 1987) (Figure 5), a somewhat similar site to that at Neves was discovered. One of the rooms must be interpreted as a small temple. An antechamber, with a side entrance, leads to a long room, with a kind of sanctuary at the end, marked by two pilasters. In the centre of the nave, two *larnakes* were found buried in the pavement. One of them had a lid of oxhide shape; the other, of which only the lid survives, may be of East Greek inspiration.

We can be reasonably certain that structures like these occurred on sites that, if they were not already urban centres, had the potential to become so. The clearest case is the pre-Roman temple at *Mirobriga Celti-corum*, Setúbal (Biers and Soren 1982, 39–42; Alarcão 1988, I 35–36 II/3 7/20) (Figure 6), a complex structure, successively rebuilt and redesigned, of which the last phase is contemporary with the building of the temple of the Flavian forum. There is no precise indication of chronology for the three previous building phases, but it is notable that the second phase of this temple is similar to the structure producing the inscription at Neves. It seems quite obvious that one of the functions of these structures, found in urban-like settlements, was religious. The recent finds of Capote, Badajoz (Berrocal 1992, 194–201; 1994), of a small urban sanctuary with an

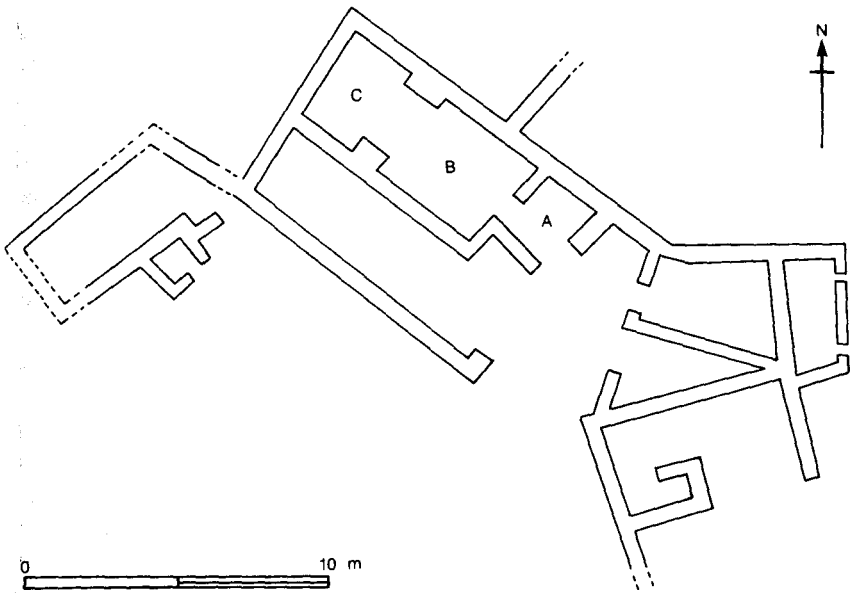


Figure 5. Corvo, Beja. A: antechamber; B: *naos*; C: sanctuary. (Redrawn from Maia 1987, lam. 7.)

oikos opening to the street, containing a central altar and a surrounding bench, appears to make just this point.

Although lacking details of its structures, one can also be sure that some kind of temple existed at Garvão, Beja (Beirão *et al.* 1985), where an important *bothros* containing pottery was found. The considerable extent of the area covered by Iron Age remains at this site suggests that, around the sanctuary was an extensive habitation. Azougada, Beja (Schüle 1969; Berrocal 1992, no. 3a), in the Guadiana valley, was most likely a similar site to Garvão.

These examples may suggest a chronological development, beginning with the small unfortified sites. One of these, Fernão Vaz, is dated back to the seventh century, and was abandoned around the middle of the fifth century (Beirão and Correia 1991): the others are, apparently, not very different. The larger fortified sites come later, the oldest dated finds being the alleged Attic black-figure fragments of Azougada (Schüle 1969), and continue into the Roman period.

Such an evolution has an echo in, and is corroborated by, the distribution pattern of epigraphy in prestige tombs. Inscriptions and major funerary monuments are widespread in cemeteries which (in a majority of the known cases) can be associated with small unfortified settlements, rather than with large urban centres.

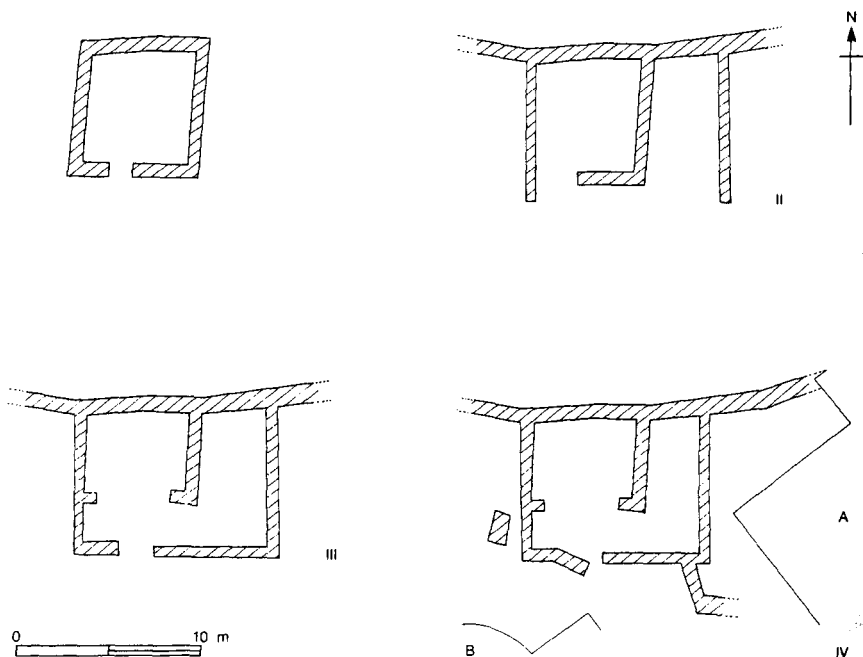


Figure 6. *Mirobriga*, Setúbal. Phases 1 to 4. A: Roman temple of the forum; B: apsidal temple. (This figure was drawn on the basis of the ground plan published in Biers and Soren 1982, 41, fig. 6; it corresponds to the present writer's personal interpretation of the structures.)

The distribution pattern of the inscriptions and associated sites reflects natural resources (Correia 1993b). In environmental terms the main area of interest for this problem — the plain of inner southern Portugal — is a heavily desiccated plateau where, in dry months, water is to be found only in a few rivers, which also provide deep fertile soils at their margins. Modern soil-use classification categorizes the rest of this plateau as poor, suitable only for forestry. These same rivers have down-cut to expose the deeper beds of mineral-rich Devonian strata that underlie the Cambrian schists (Feio 1950; Blanco and Rothenberg 1981).

If the inscribed stones can be taken as one of the main indicators of high social status in this society, one would tend to argue that such status was directly connected to units of population organized in small groups spread through the landscape, directly exploiting localized areas of particularly rich resources (Correia 1993b).

The existence of larger fortified sites with urban characteristics, would fit into this pattern if one considers them to be major centres where centralized economic functions such as the refining of metal, redistribution of imported goods and the transfer of goods for export were carried out

without a parallel centralization of social functions. These would have depended on the direct exploitation of resources on which intra-group relations and social status were still based.

Such an organization of society in relationship to soil potential does not differ significantly from that suggested for the south-west Late Bronze Age (Schubart 1975). Recent theories try to demonstrate that the orientaling impact was not felt outside the upper level of Late Bronze Age/Early Iron Age society and that, at an early date, these elites did adopt a range of oriental cultural characteristics (Aubert 1982). Nevertheless, the pattern of occupation, and probably the economic organization of society as a whole, remained mostly unchanged.

This argument tries to demonstrate that the adoption of oriental cultural features, reflected in art or, in more general aspects, such as writing or simply fashion (which we can detect through the occurrence of *fibulae*), occurred at that social level which controlled the transfer of mineral resources beyond their territories. It was only at a second stage, as the result of an internal process of evolution, that some of these features spread down to the rest of society. The use of writing and then its disappearance around the middle of the fifth century, demonstrates the vicissitudes to which some individual developments were subject in the process.

If one were to apply such a model to urbanization, this process of concentration of population and socio-economic functions in large settlements of monumental aspect could be regarded as a function of interaction with the Phoenician colonies. These were, after all, the first sites in Iberia to display full-scale urban characteristics, and also probably the first settlements where government depended not on personal leadership but on more sophisticated intra-communal relationships and socio-political systems. Interaction with the colonies would have resulted first in the adoption of building techniques and settlement layout which could be more rapidly incorporated into local political systems. Only subsequently, with more prolonged exposure, would the more subtle, less tangible novelties which characterize urbanism be emulated. Such developments would induce local leaders to concentrate at one urban centre functions which had formerly been scattered among a number of sites of rural character.

The later Iron Age

Sometime towards the end of the fifth century both the architectural tradition of large funerary monuments and the use of epigraphic markers for the tombs disappear in what has been called a 'collapse' (Beirão and Gomes 1980, 6). An alternative interpretation of this set of data is that at around the end of the fifth century there was a shift in the location of

centres of power and economic predominance, from many small, scattered *foci* to a few major urban sites. But from the fifth century onwards we have no coherent criteria for analysing social status, political predominance and economic concentration other than population size based on settlement areas.

Whether one can extrapolate from these cases to a more general model is uncertain given the scarcity of data resulting from a lack of fieldwork and excavation at sites attributed to the period from the fifth century BC onwards. In this period one has only the uncertain criterion of settlement area to go on: differences in structure and defence can often be recognized but are usually undated. All they reveal is the intrinsic variability of the archaeological record.

Geomorphology dictates some of the major divisions apparent in the area considered in this paper. Such geographical regions, and the distinct pattern of settlement one finds in them, have been tentatively related to the pre-Roman *populi* mentioned in classical historical and geographical sources. But in view of uncertainties as to how a *populus* was designated, how one related to another, the factual bases for any distinction and identification and the way in which they should be identified in the archaeological record, this line of enquiry seems to be self-exhausting. But it is a fact that some major coincidences do exist: the peoples in the Algarve were known as *Connii*, those in the Alentejo as *Celtici*, and those north of the Tejo as *Lusitani* (García y Bellido 1968; Schulten 1925; 1952). What do we know about the settlement patterns of these areas?

The Portuguese part of the coast of the gulf of Cádiz (modern Algarve), is a narrow area, between the sea and the mountains. Some sites are known in regions where most of the communication routes were along river valleys, upon which much of the economic activity was focused. On average the sites were fairly large in size (2 to 4 ha), though some smaller sites are known. Castro Marim, Faro (Arruda 1984a and b) to the east of the area, and Alvor, Faro (Gamito 1982) to the west have been excavated, but final reports have not yet been published. The evidence for their architectural and morphological character is therefore lacking.

In the basins of the Sado and the Guadiana, in fact all the expansive plains of the Alentejo, we find a wide range of inhabited sites, from less than 1 ha to close to 10 ha. A range of fortifications was in use here, at one time or another, though the evidence from modern excavations is limited (Beirão and Correia forthcoming b). It is tempting, however, to deduce from the settlement range a deeply hierarchical society and to suggest, from the scale and visible architectural features of some of the sites, a degree of urbanization and of the centralization of social, economic and political functions (Berrocal 1992, 259–61).

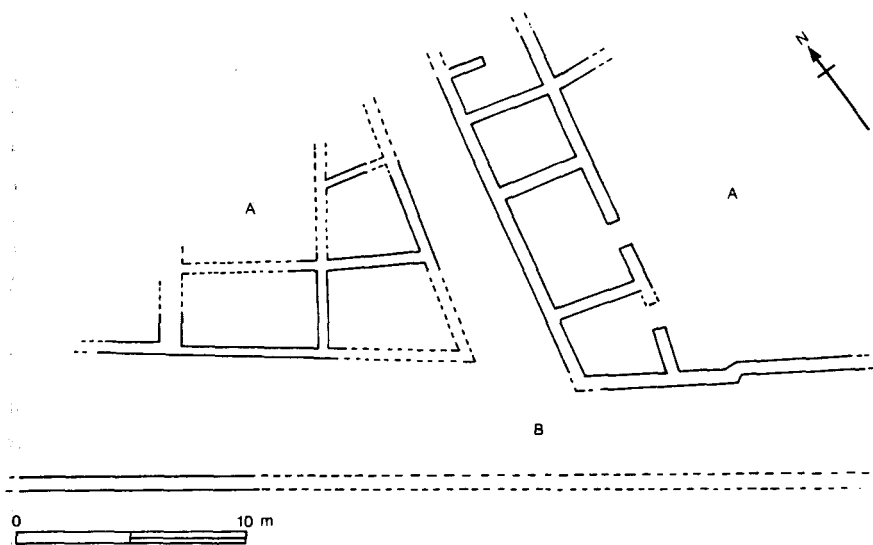


Figure 7. *Conimbriga*, Coimbra. A: courtyard; B: street. (Redrawn from Alarcão and Etienne 1977, pl. 5.)

In the area north of the Tejo, we have no evidence for very large sites, but there has been little systematic survey. Occupation seems to have been more dense than in the south (something that is still true in today's geography). A more restricted range of settlements is less helpful in evaluating the extent to which urbanization has been attained, but we know that in *Conimbriga* (Figure 7), at least from the third century BC, regular streets do exist, and that in the first century BC such streets were maintained (Alarcão and Etienne 1977; Arruda 1989), delimiting houses with central courtyards, which survive into the first Roman construction phase.

In the better-known area south of the Tejo, there is clear evidence for a distinct clustering of sites in three major size groups (Berrocal 1992, 215–19) though the area of occupation can only be estimated with any degree of precision at less than half of the total sites known (60+). The following size groups may be suggested:

- around 1 ha: we can identify 23 sites (mean area occupied, 0.88 ha). These do not normally occupy dominant positions in the landscape, but their systems of fortification are strictly adapted to natural features and contour defences are the most common type of enclosure;
- up to 5 ha: this is the most numerous class of site (particularly around 3 to 4 ha). Twenty-nine sites of measurable area can be identified. The mean area occupied is little more than 3 ha (3.12). Their location

covers a range of environments, the systems of fortification varying accordingly, though they are usually adapted to natural conditions.

- larger than 5 ha: eleven of these sites have been recorded, that most reasonably can be classified as urban sites.³ Their mean occupied area is 6.4 ha. It is in this class that the most impressive artificial fortifications are encountered, taking in large areas independently of geographical considerations. Some of the fortifications are on such a scale that one is tempted to talk of landscape engineering. It is difficult to see how such large areas could be internally managed without making use of strategies normally associated with urbanization.

From the few partial plans published one knows that streets, squares, terraces of houses and public buildings, either devoted to religious or political purposes, existed at various sites. Even though the survey and excavation evidence is slight, the one basic conclusion that can be drawn from this is that sites larger than 5 ha constitute almost 40% of the total occupied area in the Late Iron Age of the south-west. A more complete set of basic data would no doubt reduce this percentage, since large sites are much harder to miss than small ones, and this will eventually reduce their relative importance. The problems will multiply if we try to calculate population sizes from such data since non-built-up areas were probably more extensive in larger sites than in the smaller ones. Nevertheless it is clear that a large percentage of the population lived in large, potentially urbanized sites in the Late Iron Age of south central Portugal, sites that other evidence suggests incorporated a number of urban functions.

Unfortunately there is only one feature, potentially characteristic of urbanism, which can be examined at a number of these sites — fortification. The systems of fortification employed various techniques.

Dry-stone work is the dominant construction technique in the fortifications of Iron Age settlements, and the number of instances in which it was used is too large to list here. It seems to have been a function primarily of the building material that was available. While, however, this is true of defences, dry-stone appears to have been used much less for other kinds of construction at the same sites. In the first millennium BC as a whole in the south of Portugal, earthen construction (both mud-brick and *pisé-de-terre*) seems to have been much more widespread than in any period after the romanization of Iberia. In fact one may safely claim that the large majority of known structures in the pre-Roman period were earthen.

One of the more interesting cases of dry-stone construction is undoubtedly the site of Pedrão, Setúbal (Soares and Tavares da Silva 1973) (Figure 8), a very small fortified settlement on a prominent and easily defensible hill, of which the only accessible side has been closed by a wall with a

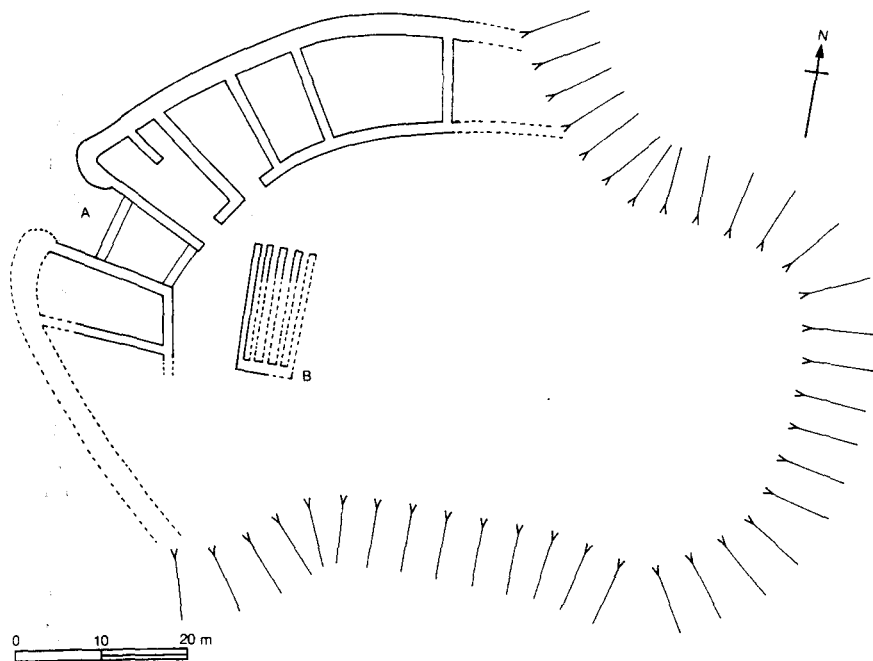
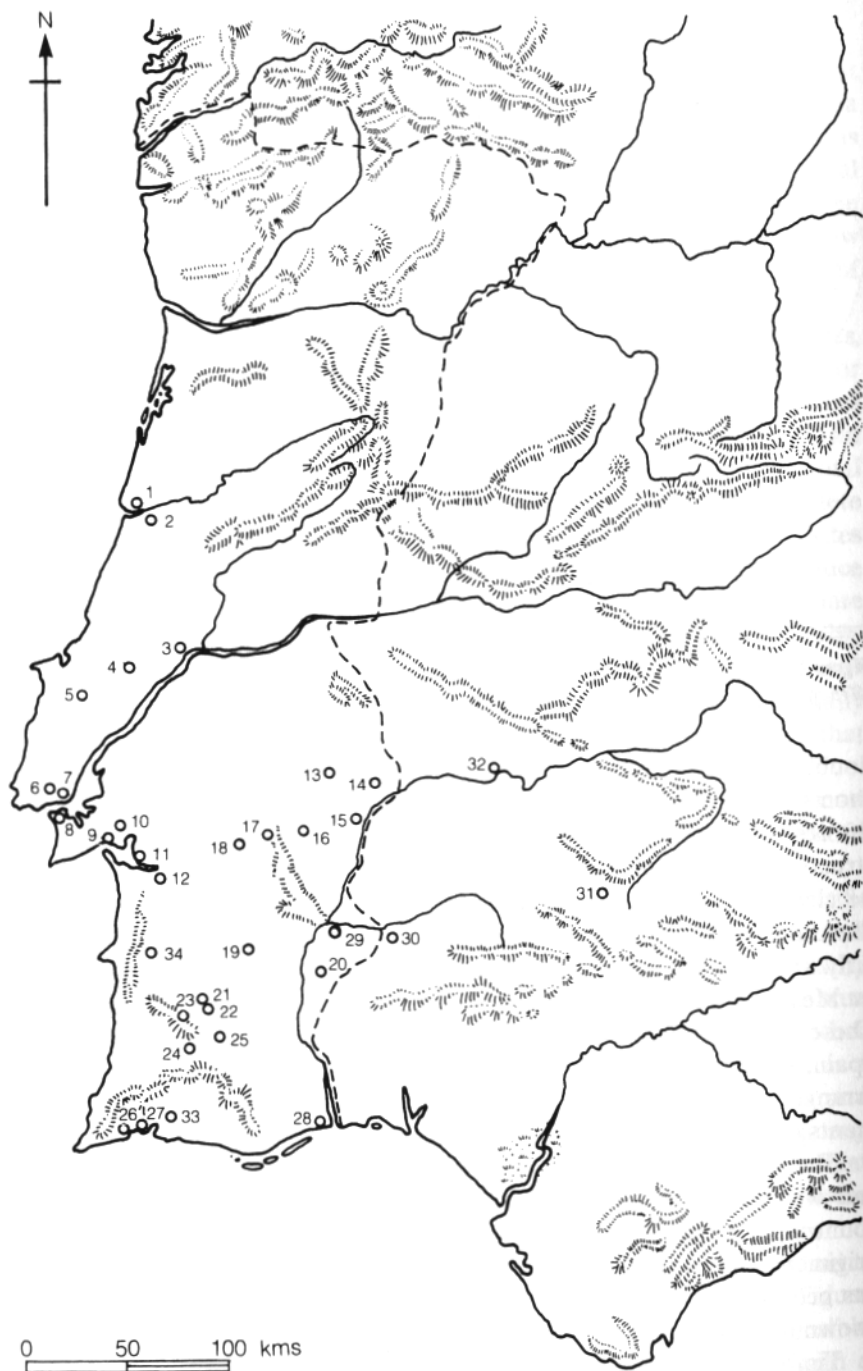


Figure 8. Pedrão, Setúbal. A: gate; B: granary. (Redrawn from Soares and Tavares da Silva 1973, pl. 1.)

double gate. The wall forms the back of seven rectangular structures or rooms facing the interior, perhaps the residential buildings of the site, for the rest of it was occupied by the foundations of a granary and by other structures of uncertain character of which little was found. This site cannot be classified as an urban centre, if only because of its small size, but it illustrates well a pattern of structural organization that is more fragmentarily known from larger, probably urban sites such as Segóvia, Portalegre or Mesas do Castelinho, Beja (Gamito 1988; Fabião and Guerra 1991). These bear some resemblance to sites well-known in the south-east of Spain, where rows of residential units back onto the perimeter wall. This arrangement forms the basis of the urban plan of Late Iron Age settlements over much of Iberia.

The use of *chevaux-de-frise* was not widespread in the south of Portugal, and we have no evidence regarding its use in the central area of the country. In Passo Alto, Beja (Soares 1986), a site of Late Bronze Age origin, which continued in use during the Iron Age, such a defensive device has been identified, although it cannot be dated. This technique is better known in northern parts of Iberia, and its use in the south-west is a rarity.

Timber-laced walls have been identified at a large site near Évora,



Castelos de Monte Novo (Beirão and Correia forthcoming b), on the basis of extensive vitrification. This has led to the identification of other possible examples, like the site of Passo Alto already mentioned.

The different ways of fortifying a settlement clearly depended on a complex permutation of local conditions, and our knowledge of the range of defences is further circumscribed by the limited fieldwork evidence.⁴ It has to be borne in mind that each of these sites, and its population, had its own individual history; and that in nearly all cases little or nothing is known at present even about such basic aspects as length and continuity of occupation, which would surely have influenced the ways in which their perimeters developed.

Apart from this historical factor, population size was influential in judging when a site had developed from being a central place in a territory to a centre with urban status. As has been mentioned, population numbers cannot be estimated through the analysis of settlement area because we do not have sufficient information about the urban structures to begin with. But the evolution of defensive perimeters provides an index of the basic demographic developments, namely expansion or contraction. The demographic evolution of each site will clearly be a significant factor in gauging its emergence as an urban centre.

Another important attribute of a territorial, even urban, centre would be the presence of large and complex exotic cultural assemblages: the evidence is, however, fragmentary.

Among the more obvious criteria for characterizing these centres are the use and/or production of prestige items, such as jewellery (Parreira 1980), bronze ritual or ornamental objects (Almagro-Gorbea 1977; Blázquez 1975), and even ceramics distinguished by their decoration or fineness (Barros *et al.* 1993; Arnaud and Gamito 1977; Beirão and Gomes 1984). The production of luxury items such as jewellery or ritual bronzes, the centralization of economic relationships through minting, and the concentration of technological activities such as pottery production, can help to

Figure 9. Sites mentioned in the text. 1: Santa Olaia, Coimbra; 2: *Conimbriga*, Coimbra; 3: Santarém (*Scallabis Praesidium Iulii*); 4: Santana da Carnota, Santarém; 5: Pragança, Santarém; 6: Moinho da Atalaia, Lisboa; 7: Lisboa (*Felicitas Iulia Olisippo*); 8: Almada, Setúbal; 9: Setúbal; 10: Pedrão, Setúbal; 11: Abúl, Setúbal; 12: Alcácer do Sal, Setúbal (*Imperatoria Salacia*); 13: Vaiamonte, Portalegre; 14: Segóvia, Portalegre; 15: São Miguel da Mota, Évora (sanctuary of *Endovellicus*); 16: Castelos de Monte Novo, Évora; 17: Évora (*Liberaltas Iulia Eborae*); 18: Alto do Castelinho da Serra, Évora; 19: Beja (*Pax Iulia*); 20: Passo Alto, Beja; 21: Neves, Beja; 22: Corvo, Beja; 23: Garvão, Beja; 24: Fernão Vaz, Beja; 25: Mesas do Castelinho, Beja; 26: Monte Molião, Faro; 27: Alvor, Faro; 28: Castro Marim, Faro; 29: Azougada, Beja; 30: Capote, Badajoz; 31: Cancho Roano, Badajoz; 32: Mérida, Badajoz (*Emerita Augusta*); 33: Cerro da Rocha Branca, Faro; 34: *Mirobriga Celticorium*, Setúbal. (The base map for this figure was produced by the CSIC, Madrid.)

define some central sites, even if it has to be admitted that there is not sufficient evidence to allow complete, or even consistent, conclusions to be reached.

It can be assumed that the production of specific types of jewellery with limited distribution areas is a positive sign of a workshop, probably at a centre that provided not only the local market (both in the sense of a large number of people being able to buy those products and in the sense of the number of people required for all the activities involved) but also one capable of centralizing the economic activity that led to the concentration of sufficient raw materials for such items to be produced.

We can identify at least three important centres of jewellery production, namely Vaiamonte, which probably produced the particular type of earring that is well known at the site itself (Parreira 1980) and from the hoard at Santana da Carnota (Viegas and Parreira 1984); Pragança, that apparently specialized in the production of *lunulae* and simple collars, which have been found in numbers there and also, in other places in the south and in the central mountains (Heleno 1935), and Monte Molião, where there is evidence for the production of a class of earring, known from a number of locations in the south-west (Parreira 1980).

We could also try to compare this field with others, like bronze-work or pottery production, but the evidence for local pottery production is far from being systematic enough for it to be possible to construct even putative distribution maps. Nevertheless it is clear that some sites, like the sanctuary at Garvão, either benefited from the existence of, or led to the creation of, local workshops that, apart from the mass production of standardized wares of no great intrinsic value, were able to produce a steady flow of highly original and artistically elaborate pieces, eventually offered to the sanctuary and deposited in a *bothros*. Other styles of pottery, like the red varnished ware of Phoenician type produced at an unknown site in the valley of the Tejo (Barros *et al.* 1993), will, no doubt, have their workshops identified as the volume of data increases. We simply have no data concerning bronze-work, apart from the probability that the concentration of zoomorphic ex-voto figures in the area east of Évora (Berrocal 1992, 127–9) is related to the proximity of the sanctuary of *Endovellicus* (Encarnação 1984; Calado 1993).

One of the more contentious criteria used in characterizing urban centres — contentious because it is so difficult to relate to the archaeological record — is the question of *populi*, those demographic and geographical entities referred to in the classical sources, and how they correlate with the potential urban centres detected by archaeology (Alarcão 1988).

Another elusive body of evidence is the linguistic field, known mainly from anthroponyms of Roman date (Lapesa 1957; Untermann 1965). The

data has a closer link to the archaeological record, given that some of the epigraphic evidence can be ascribed to certain locations (something that does not happen with the geographical location of *populi*). It is, however, difficult to coordinate the analysis of this with that of the archaeological record because of the time-lapse between the Iron Age and the Roman date of the inscriptions. There is no clear indication that the emergence of urban centres and their presumed relationship within larger units known as *populi* had either a linguistic basis or eventually led to a linguistic differentiation between geographical areas. If there was, or if research eventually determines the existence of such a reality, one may assume that linguistic differentiation was due to the centralization of political activity over a substantial period of time — something that would not have occurred without a high degree of urbanization. All the available information, however, seems to indicate that political entities able to coordinate activities of more than one large site (as in cases of war) were short-lived.

Because it is so difficult at present to relate the archaeological and historical evidence, the understanding of the socio-political processes at work in this period must remain uncertain.

There is some evidence bearing on the organization of the political control of large groups of settlements in Iberia (Baroja 1971). Classical sources speak of such settlements as 'cities' and that those who exerted actual control were kings. However these *reguli*, if they were actually representatives of a monarchic system, did not apparently establish dynasties. Large groupings of cities under single rule are mentioned only in times of war, and were probably intermittent coalitions of settlements serving strictly military purposes. Nevertheless, the organization of these coalitions meant that it was probably normal for large urban centres in the southern half of the Peninsula to be ruled by a formal institution able to establish diplomatic relations with other settlements. We do not, however, know the extent to which this happened or the size of the territory ruled from individual urban centres. At this point in the evolution of society one criterion which was certainly influential in distinguishing central (urban) settlements was political dominance. All the historical evidence suggests that at such an evolved stage the process is somewhat similar to that familiar today: urbanization was directly related to administrative rank. Likewise, in the Later Iron Age, settlements with an elaborate form of government (probably exerted over other sites) would be considered urban, and those without such a system were not.

The emergence of such politically dominant settlements and their territories is directly related to the process of urbanization itself. On the other hand, assessing urbanization makes it necessary to know how, and the

extent to which, orientalizing influences reached populations in the hinterland.

Two alternative models can be postulated. They are distinct in the emphasis they put on the different socio-political processes performing the same function:

1 urbanization occurs as a result of the growing coordination between units of exploitation of resources. Such units eventually form groups and transfer their social, and other, functions to larger urbanized sites.

2 urbanization is a result of the growing capacity of centres, that had hitherto centralized some economic activities, to take over social functions earlier performed by elites in the small units of exploitation, and these elites eventually move into central settlements.

Future research will eventually throw light on some of these questions, but in the meantime it is possible to propose a hypothetical chronological scheme for the emergence of urban centres. On the one hand, there is evidence to demonstrate that items of high social status have a widespread distribution throughout the late seventh, sixth and early fifth centuries — an observation which probably means that the process of urbanization had not occurred as yet or was not fully developed. On the other, classical sources speak of formal systems of government, a clear sign of centralization and probable urbanization, as early as the Second Punic War. Different regional developments probably existed, but it seems clear that the whole range of urban functions, in effect urban centres, emerged during the fourth century BC in the south-west of the Iberian Peninsula.

In later times, immediately before the Roman conquest, there is much more data bearing on the emergence and the definition of urban centres, including new materials such as coins and minting, which provide a direct proof of the existence of local magistrates. The inadequacies of the evidence from earlier eras make comparisons uncertain, but what is clear is that the centres of economic predominance remain in the same general areas.

The later data thus seems to confirm the earlier, suggesting that in some more or less stable geographical areas — the Algarve, the Atlantic coast, southern Alentejo, north-west Alentejo and Estremadura — there were central places that dominated in a number of activities. However, it is easier to demonstrate centralization than urbanization at these sites. So it will remain until much more fieldwork and excavation is undertaken to better characterize them. But clearly it must be among the largest sites that the progression towards urbanization will be found.

If centralizing sites did persist in this way, and this does not prove to be an illusion induced by the scarcity of data, one interesting — even if

anecdotal — instance can be offered: the origin of the toponym Conimbriga (Blondin 1977; Correia 1993a).

Abandoning the hypothesis of a linguistic origin related to the *Connii* (mentioned in Strabo and others), *Conim + briga* can be described as a place-name of redundant significance, made of two elements meaning the same thing, *con (= high place) of Mediterranean origin and *brok (= high fortified place) of Indo-European origin. This place-name must be thought of as having been formed before the seventh century because of the linguistic process of which it is the product. There is no other place in Portugal where the analysis of the toponym and the knowledge of the archaeology of the site can be matched in such a way. We have, therefore, no other example with which to compare it, either to corroborate or dismiss what could be the crucial fact of a place-name, dating as early as the beginnings of the millennium, surviving a number of vicissitudes, and still being used even after the Roman incorporation of the city. It is an indication that some urban centres survived for several centuries before and during the Roman period.

The Roman Republican and later periods

Is it possible, without such clear-cut distinctions between central and non-central sites as the divisions between Roman *civitates*, to reach a degree of precision in the classification of urban centres? Such 'precision' can be controversial, but it seems that pre-Augustan promotions of cities can be thought of as reinforcing some of the pre-Roman urban realities and evolutions. Augustan developments emphasize the trends still further, but were tempered by the requirements of an administrative rationalization that diluted the importance of some of the pre-existing sites (Alarcão 1990).

The *civitates* of the coast, like *Imperatoria Salacia*, *Scallabis Praesidium Iullii* and *Felicitas Iulia Olisippo* (Mantas 1990), are in fact located in places where the Punic presence was important and dominated the economic relationships with the hinterland. It remains to be argued whether this emphasis on already important centres in the coastal zone resulted from their economic importance, their political status, or was merely a product of geography.

The colonies in the hinterland, notably the capital of the province, *Emerita Augusta*, but also *Pax Iulia* and *Liberalitas Iulia Eboracensis* — a *municipium* with *ius latii vetus* — were not located at important pre-Roman sites (the first two are in fact foundations *ex nihilo*). But they were established in areas with important pre-Roman occupation and provided a new focus resulting in a decline of many of the indigenous sites, which

apparently lost their social elites, were quickly romanized, and tended to disappear before the beginnings of the second century AD.

After the organization of Lusitania, *civitates* were regularly created on major pre-Roman sites that were promoted to become the centres of *civitates stipendiariae*, apparently grouping what had been clusters of sites of apparently the same rank (we know little about their political relations) into larger administrative divisions. In this sense, the trend towards concentration which we can detect from the very beginning of the Iron Age was only finally realized in the Imperial period.

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NOTES

1 The continuity between Late Bronze Age and Early Iron Age occupation on some sites raises a number of questions, among others as to whether stroke-burnished ware, traditionally associated with the Late Bronze Age, was wholly of that period (Correia 1993a). A large part of the problem is uncertainty about when oriental influence, in a pre-colonial sense, began, when the switch to iron occurred in the various regions, and thus when the Iron Age began. An interesting and, as yet, unpublished site is Alto do Castelinho da Serra, Évora, currently undergoing excavation under the direction of Catriona Gibson, Colin Burgess and the writer. There is substantial evidence for a strong continuity of occupation and of a very slow evolution of most technologies available to the inhabitants of the site.

2 The recent excavations have not yet been properly published, and there is no plan available, but the wall can be considered similar to the one found around Toscanos (Schubart 1988). The site of Santa Olaia can therefore be called in full propriety a port.

3 This statement rests on the assumption that some of the Iron Age sites of south and central Portugal were in fact urban sites and is supported by the theory that urbanization was widespread even before the Roman conquest, hence the necessity to identify at least the largest sites with urban centres. But from a critical point of view that assumption is speculative, even if by any standard 6 or 7 ha is too large for an Iron Age site of non-urban character, when compared with other, certainly urban sites in the south of Iberia (Cerdá *et al.* 1989, 483–7).

4. In this context can be mentioned the probable existence of earthen ramparts suggested by contour defences around some Iron Age settlements, but which have not been confirmed by excavation.

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VIRGÍLIO HIPÓLITO CORREIA

Museu Monográfico de Conimbriga, 3150 Condeixa

The Iron Age in south and central Portugal and the emergence of urban centres

The Late Bronze Age background to settlement in south and central Portugal is outlined. From the eighth century BC systematic contact develops with Phoenician trading systems leading to the establishment of small ports of call, *ex nihilo* at river mouths. The characteristics of three of these, Cerro da Rocha Branca, Abul, and Santa Olaia are considered and the relationships between these sites and settlements of the hinterland, like Fernão Vaz, Corvo or Neves are explored. Large fortified sites with urban characteristics emerged governed by élites who controlled the exploitation of mineral resources. At the end of the fifth century BC significant social change occurs possibly associated with a shift in location of the centres of power. The sparse settlement evidence is reviewed revealing the appearance of many sites larger than 5 ha in area. All were fortified and there is evidence for the production of a range of luxury items. The status of these sites is considered in relation to the question of urbanization. The effects of romanization are briefly considered.

La Edad del Hierro en el Sur y Centro de Portugal y la emergencia de los centros urbanos

Se resumen aquí los antecedentes del poblamiento en la Edad del Bronce final. A partir del siglo VIII a.C. se desarrollan contactos sistemáticos con el sistema comercial fenicio que llevan a la fundación de pequeños puertos de escala, fundados *ex nihilo* en las desembocaduras de los ríos. Se consideran aquí las características de tres de ellos, Cerro de Roncha Branca, Abul, y Santa Olaia, así como las relaciones entre ellos y los asentamientos del hinterland, como Fernão Vaz, Corvo o Neves. Aparecieron grandes asentamientos fortificados con características urbanas, gobernados por élites, que controlaban la explotación de los recursos mineros. A finales del siglo V a.C. se produce un cambio social significativo posiblemente asociado a un cambio en la localización de los centros de poder. Se ha revisado la evidencia del poblamiento disperso que revela la aparición de bastantes centros con una extensión mayor de 5 hectáreas. Todos ellos estaban fortificados y existe evidencia de que producían objetos de lujo. El estatus de estos lugares se considera en relación con la cuestión del urbanismo. Además los efectos de la romanización son brevemente considerados.