Las Cogotas: Oppida and the Roots of Urbanism in the Spanish Meseta

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The emergence of large fortified settlements, known as oppida, in temperate Europe at the beginning of the second century BC has traditionally been regarded as the first appearance of cities in the parts of the continent where they appear (Cunliffe and Rowley 1976; Collis 1984; Wells 1984; Audouze and Buchsenschutz 1989). Theoretically, the concept of oppidum (Buchsenschutz 1988) should be based on Julius Caesar's references to Gaulish settlements in The Gallic War (58–50 BC) (Kornemann 1942), but unfortunately, Caesar's references are imprecise (Noché 1973; Boos 1989), and it must also be remembered that the author's political purposes may well have distorted his account (Buchsenschutz and Ralston 1988). Furthermore we should recognize that it is sometimes difficult to identify the theoretical concept of oppida in the archaeological record (Ralston 1992). These problems are compounded by the ad hoc nature of the excavations, which rarely succeed in revealing a large area in this type of site.

In terms of function, the oppida of the Late La Tène societies have been interpreted as administrative centres (Crumley 1974; Nash 1976), industrial centres with specialized occupations (Henderson 1991) and trading centres (Frey 1984). They have always been assumed to have certain uniform features in common. But, as Woolf (1993) has clearly shown, oppida do not constitute a useful analytical category since they differ vastly in size, form, function and chronology, and to begin a study of them by emphasizing their urban character is the wrong way to approach the subject. The origins of urban life cannot be discussed on the basis of general and universal categories, with uniform patterns into which the empirical cases may or may not fit. In fact, the internal organization of the oppida can tell us far more about the different types of society that

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existed in the Late Iron Age than whether or not they were urban in character (Woolf 1993, 229). We think this is a much more productive approach and it is no exaggeration to say that developing useful models for studying the social organization of different European communities is the great challenge facing the archaeology of the Iron Age (Wells 1990, 452). It is symptomatic, in this respect, that many of the most important works of recent years study social structure and organization (Arnold 1991; Bietti Sestieri 1992; Hedeager 1992; Daubigney 1993).

The definition of urbanism in prehistoric contexts is extremely complex (Cunliffe 1985; Jacobsen 1984–85). Urban character has frequently been emphasized by identifying elements of the Mediterranean urban world in the oppida — a regular street plan, internal division into neighbourhoods, public buildings, etc. But the possibility that an ideological concept of the 'city' might exist, as it does in the Mediterranean, has not been considered. In this respect, Almagro-Gorbea's recent suggestion with regard to Mont Beuvray deserves serious consideration (Almagro-Gorbea and Gran-Aymerich 1991), opening up, as it does, an unusual perspective for the interpretation of 'Celtic' settlement in Europe.

In this paper we shall present the most significant results of the work undertaken at Las Cogotas (Cardeñosa, Avila). In doing so we shall look at three aspects: the configuration of the settlement; the sociological interpretation of its cemetery; and the regional pattern of settlement of which the site forms part. We shall try to show:

- that the settlement has an internal organization, with different activities taking place in different areas. This spatial distribution displays significant 'zoning' of activities (residential, industrial and livestock enclosure) and very probably also of social class (elite and non-elite residence).
- that the hierarchical social organization revealed by the settlement is reflected in the sociological analysis of the burials of its inhabitants.
- that a hierarchical system of regional settlement can be detected with apparent functional differentiation and specialization between sites. However, the limitations of the archaeological data should be underlined, especially with regard to small open settlements on the plain.

These three aspects — internal organization with differentiated areas within the settlement and its possible role as a 'Central Place', the hierarchical social structure suggested by the funerary data and the pattern of hierarchically organized settlement at a regional level — point towards a new model of social and settlement organization of the indigenous world of the Late Iron Age in the Meseta. This model was the result of internal economic, social and political processes operating within the Iron Age communities of the Meseta, and it is a completely new phenomenon in

the recent prehistory of the region, representing a break from the traditional ways of life of the Bronze Age farming communities.

Las Cogotas: anatomy of an oppidum in the Spanish Meseta

The fortified settlement of the Late Iron Age lies on the southern edge of the northern Meseta, in the central part of the province of Avila. It is situated some 6 km to the south-east of the town of Cardeñosa, close to the Adaja river and at the most easterly end of the Avila mountains at a maximum height of 1,156 m above sea-level (about 140 m above the river bed). The settlement is organized around two rocky outcrops of rounded granite that look like heads — hence its name (the word 'cogota' in Spanish refers to the shape of the head). There are two walled enclosures, a high one, or acropolis, and a lower one which is regarded as an enclosure for livestock. At its widest points, the settlement measures about 455 m by slightly more than 310 m. The area enclosed by the walls is 14.5 ha (Figure 1).

Although the fortified settlement belongs to the Late Iron Age, some of the pottery from the acropolis indicates an earlier occupation during the Late Bronze Age.

There are records and references to the site from the end of the nineteenth century, but it was between 1927 and 1929 that excavation was undertaken by Juan Cabré (1930). He also excavated the necropolis, situated some 240 m to the north of the settlement, in 1930 and 1931, and recorded over 1450 tombs, of which 224 had grave goods (Cabré 1932).

Cabré's work demonstrated the importance of the site, with its impressive military architecture of strong walls widening into bastions and a stone 'chevaux-de-frise' in front of the entrances, its zoomorphic stone sculptures — the famous 'verracos' of the Vettonian area (Hernández 1982; Martín Valls 1974; López Monteagudo 1989; and Alvarez-Sanchís 1990) — and interesting domestic furnishings with various types of pottery and iron and bronze objects (Figure 2).

It is thus not surprising that Las Cogotas should become one of the key sites in subsequent studies of the Iron Age in the Meseta. The pottery produced during its occupation in the Late Bronze Age gave its name to a 'culture' — Cogotas I — characteristic of much of the Meseta during this period (Fernández-Posse 1986). Meanwhile, the Late Iron Age occupation has served to define an archaeological group — Cogotas II — which extends over the southern part of the central Duero basin (González-Tablas 1981; Martín Valls 1985).

Further investigation of the Las Cogotas site would have been unlikely but for the fact that at the beginning of the 1980s it was planned to build

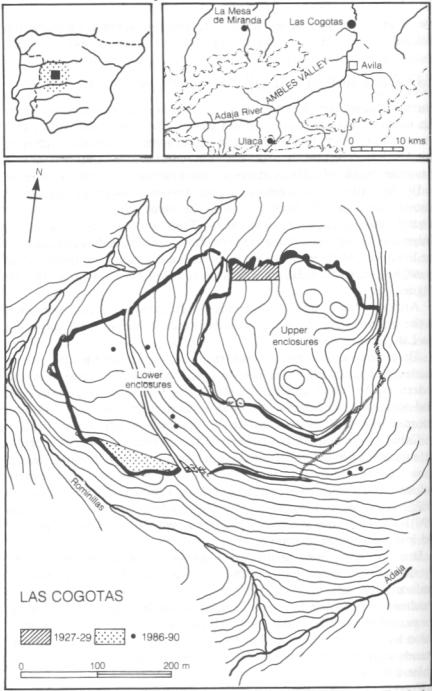


Figure 1. Maps showing the location of the site and plan of the excavations. The shaded circle marks the location of the Vettones tribe.

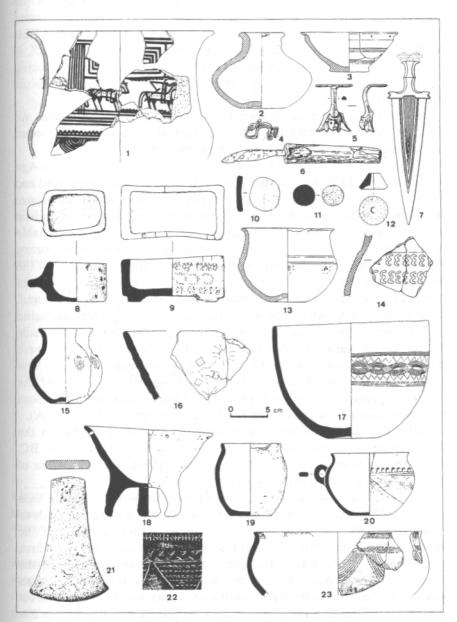


Figure 2. Late Iron Age (1–20) and Late Bronze Age (21–23) materials from Cabré's excavation of houses next to the main gate.

a dam across a nearby reservoir. Part of the dam was to rest directly on the lower part of the eastern side of the settlement, and because of the height of the dam it was calculated that approximately 30% of the second walled enclosure would be submerged by the waters of the reservoir. This is why, in 1986, almost six decades after Cabré's investigation, one of us (G.R.Z.) led the excavation project to assess the value of the area affected by the reservoir and to re-study the site as a whole (Mariné and Ruiz Zapatero 1988).

In presenting the most important data relating to the settlement we shall use information both from the first excavations and from the more recent work, in order to provide a general picture.

To begin with, it is advisable to clarify the question of Late Bronze Age occupation. Cabré insisted in his monograph that the typical impressed and 'boquique' pottery, which came to be called Cogotas I, and a flat bronze axe were associated with floors of various houses on the acropolis mixed with materials from the Late Iron Age. This interpretation is untenable because the two types of material could not have been contemporary. What must have happened, judging from the excavation techniques of the time, is that in the course of excavating the rectangular houses of the Late Iron Age, their floors were dug through and some earlier pits were found, without recognizing what they were. The fact that this pottery appeared only in some of the houses, that it was recorded in the base of and outside the settlement walls, and that only a small number of fragments were involved, is consistent with the idea that a few huts made of light materials — as is the tradition of Cogotas I — took advantage of the protection provided by the rocks on the hill situated strategically between two water courses, the Adaja and the Rominillas streams (Figure 3, A).

After this ephemeral and insubstantial occupation of the hill in the Late Bronze Age, datable to some time between 1200 and 850 BC, the place was abandoned for several centuries. There is no indication of settlement during the Early Iron Age (700–450 BC).

The settlement associated with the two enclosures relates to the Late Iron Age. The boundary of the area enclosed by the wall corresponds to a topographically well-defined site. The upper enclosure occupies the whole of the hilltop, while the lower one, to the south and west of the first, is on the side of the hill and occupies a plateau which extends to the Rominillas stream. Altogether, as previously noted, the walls enclose an area of 14.5 ha. Access from the north-east is easy, but from other directions is very difficult, providing the site with good natural defences. The difficulty of recognizing some stretches of wall along the south-east side is because this part is virtually inaccessible.

Although it is true that the wall follows the geographical features

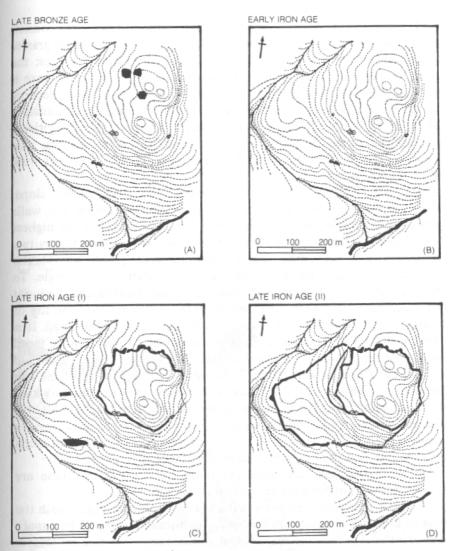


Figure 3. The phases of occupation of Las Cogotas ('pit-huts' in black, midden and light structures in grey).

exactly, exploiting rocky outcrops to join stretches and adapting to the most irregular contours (González-Tablas et al. 1986), we should accept that there was a certain margin of choice. The separate enclosures express a clear intention — that of dividing up areas within the settlement — and this is equally true whether the walls were built on one occasion or in two or more stages. Thus the defensive architecture establishes, in principle, the internal zoning of the site.

The thickness of the walls varies from 2.5 to almost 11 m. Each consists of two parallel walls, the narrower one on the outside of dry-stone granite rubblework, built with irregular rows surfaced with many wedges; the facing on the inner wall is made of similar materials. In between there is a core of large stones and slabs, although since we do not have a section, we do not know if there were other internal divisions. The undulating layout of the wall with its large bastions appears to have been defensively designed to exploit cross fire to the full, though this structure also reinforces the wall. In the most important parts there is a parapet walk along the wall.

The upper enclosure had three entrances. One on the eastern slope, now completely demolished, gave access to houses outside the walls forming a suburb on the eastern slopes. Another on the north, the highest of the acropolis, breached the walls at an angle, and is protected by two bastions. The so-called main gate is also on the north (Figure 4). It is the most complex and built in a funnel shape, or slightly at an angle. To the left, before reaching the wall, there is a small building, the 'look-out post', according to Cabré. Once within, there is a ramp over the top of houses 5 and 6 which would have led to the upper part of the wall. It is very possible that the walls, especially around the entrances, were faced with a wooden palisade or timber lacing of branches and sticks. This would explain the Pallantia wall fire in 74 BC after Pompey's siege of the city (Appianus, Civil Wars I, 112). There is no reliable evidence that any kind of murus gallicus existed in Iberia during the Iron Age (Moret 1991, 19) and the reference to Pallantia suggests that wood was the most obvious material used to face stone walls such as those of Las Cogotas, although it is possible that the facing may have been made of mud bricks.

In the lower enclosure there are three more entrances. These are simpler and do not have the protection of bastions (Figure 4).

Another defensive element was the 'chevaux-de-frise' which reach the base of the walls all along the line of the north wall leaving no free space between the wall face and the fields of stones. Like other authors (Moret 1991, 12), we think the purpose of the 'chevaux-de-frise', because of its position in relation to the walls, was not to prevent or hinder cavalry attacks. Their only logical purpose was to obstruct attackers on foot from reaching the wall. This defensive device was situated along that part of the wall which was easiest to reach.

The internal occupation of the walled space was conditioned by one factor: the irregularity of the terrain. It was not possible to build on the upper part of the main peaks or an extensive part of the south-east of the second summit because it was so steep. This discounts a considerable area (more than 1.5 ha), which had to be included within the walled

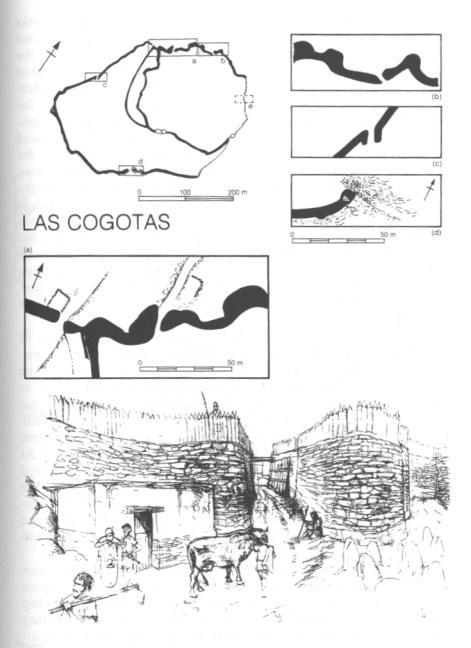


Figure 4. Plan of the oppidum and gates with an attempted reconstruction of the main gate.

enclosure so that the walls could be adapted to the irregular contours and not cross them abruptly.

In Las Cogotas there is, strictly speaking, no organized plan of blocks of houses or grids of streets. The houses are grouped irregularly against the wall or seek protection between large rocks, always adapting to the topography. Free spaces between houses were used as paths more than as streets. In some places these paths become steps edged with large embedded stones. The plan drawn by Cabré (1930) of these paths shows that the simplest accesses from the entrances take advantage of the gentler slopes (Figure 5). Unfortunately Cabré did not locate the houses he excavated on the plan except for the ten houses built against the wall next to the main gate, but in his monograph he refers to at least seven other houses, in different parts of the first enclosure. In addition to these there are the houses outside the walls, which we shall discuss later. In the second enclosure there were some houses on the flatter part of the hillside which extends from the rampart of the first enclosure to the path that crosses the lower enclosure. Our test-pits in this area located dwellings built on a rectangular plan with stone walls and the abundant use of mud bricks for building internal walls. These houses are smaller than those of the acropolis and, as Cabré said of the dwellings outside the walls, display poorer domestic equipment.

The existence of various groups of houses outside the walls is of particular interest. Cabré, although he says he excavated some of them, unfortunately describes neither their exact position nor their domestic furnishings, of which he says no more than that they were not as 'rich' as those of the acropolis houses. These dwellings were found outside the south gate of the second enclosure and on the south-eastern side of the hill. The existence of houses outside the walls suggests that the walled enclosure was not built because of a permanent state of instability and danger. At times of conflict the population could have taken refuge within the walled settlement, since there would have been sufficient free space. We find the same situation in other Vettonian *oppida*, such as *Salmantica* (modernday Salamanca) where we know that there was a suburb or neighbourhood outside the main centre when Hannibal took the city in 220 BC (Bejarano 1955).

There is little specific data on the organization of the houses, since Cabré's excavation did not pay much attention to this point. All the houses were of a rectangular plan and were either built against a common dividing wall, as in the case of those built next to the main gate, which implies they were constructed at the same time and in an organized fashion, or separately, trying to fit in between the outcrops of granite.

The description of the houses next to the wall indicates that these were

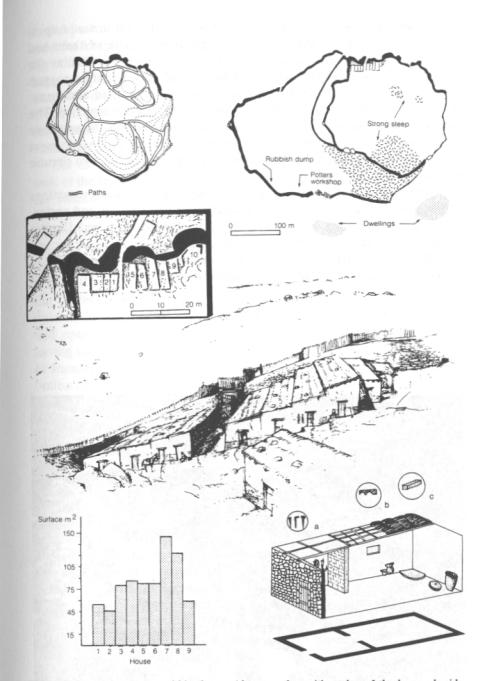


Figure 5. Internal structure within the *oppidum* together with a plan of the houses beside the main gate and an attempted reconstruction. The histogram indicates surface areas within the houses.

large, the largest being 30 m long by 7 m wide, with floor areas of up to 200 sq m. The accumulation of bricks suggests that some of them had internal divisions. A surface of packed clay in a corner was used as the hearth. Wattle-and-daub blocks with imprints of cylindrical timbers suggest that the roofs were made of tree trunks covered with mud and straw. Three different types of iron nails were used in the wooden structure. The bricks were a standard size (40 x 20 x 10 cm), which suggests the existence of a possible standard model or a proportional system of measurement for this building material. The houses usually contained one or two circular grinding stones (Figure 5).

Without doubt the most interesting results of the new excavations (1986–1990) are those obtained in the southern part of the second enclosure (Mariné and Ruiz Zapatero 1988; Alonso Hernández and Benito-López 1992). Here initial small test-pits enabled us to locate a potter's workshop, a stone pavement next to the wall and a large midden (Figure 6). This was a zone with various specialized areas of collective interest, all



Figure 6. View of the potter's workshop from the east.

in the part of the settlement that, according to Cabré, would have been used for keeping livestock. These new data do not entirely invalidate the hypothesis of the second enclosure as a livestock pen, since one could have occupied one of the areas of the northern sector which is flatter and where no dwellings have been revealed in the course of our excavations. Wooden pens, difficult to identify, may have been used. But on the whole the spatial organization of this enclosure was more complex than previously assumed.

Let us look briefly at the most significant finds. Some 100 m to the west of the second enclosure's South gate, next to the wall were discovered the remains of a potter's workshop of the third century BC. The area excavated over three years includes an extensive complex of outbuildings and pottery kilns, which occupy an area of more than 300 sq m. The kilns are of a simple type with a single chamber, and adjoining the workshop there is a large outbuilding that must have served as a store for finished products and for drying bricks. What we should emphasize here is that the potter's workshop clearly goes beyond the scope of domestic production. In view of its size and the complexity involved in its maintenance and operation, it could well be considered to be an industrial activity, having specialists, standardized production (a detailed study of the degree of standardization of the pottery is underway) and very probably distribution of ceramic products outside the settlement. We are carrying out an analysis of the clays used in this workshop and those from other settlements nearby to test this hypothesis. This is therefore quite clearly an area of specialized industrial activity. The existence of the potter's workshop helps to explain the purpose of the paved road that crosses the enclosure, which would have provided access for carts distributing ceramic products.

The stratigraphic sequence obtained in this sector next to the wall is important because although the level of the wall's foundation is the same as the level on which the potter's workshop was built, the existence of an earlier midden level found under the wall demonstrates that before the ceramic workshop was established or the wall built, work was going on in this area. This leads to the suggestion that there may have been an initial period in the occupation sequence of Las Cogotas when only the upper walled enclosure existed, with secondary activities being pursued on the esplanade to the south-west, and a second period when it was decided to enclose this part. In any case, the wall which was built does not display any significant differences from the wall around the first enclosure, and the time that elapsed between building the two may have been minimal. What is interesting is the evidence that a decision was taken to establish a series of specialized activities and to include them within the walled

enclosure. The intention to organize this area within the settlement is clear.

In one of the corners of the southern sector next to the wall a section was excavated which located a midden in a stratigraphic sequence more than 3 m thick. The stratum of refuse was concentrated in the last layer, extending down to the level of the wall. Pottery of a Celtiberian type suggests a third and early second century BC date for the deposit, which is homogeneous and denotes a continuous and rapid process of sedimentation. The few fragments of brick and building material, and the great abundance of animal remains (with a great many bovine remains, although the analysis is not yet complete), suggest two possible explanations: that it represents either a refuse pit for the dwellings (not very logical in view of the distance between the midden and the dwellings, especially those of the upper enclosure); or the accumulation of refuse produced by the temporary establishment in the area of fairs or markets to which men and women would come, bringing their livestock and other products. In some of the test-pits we found hearths and post-holes which suggest light structures rather than a long and continuous occupation. These add support to the idea of a fair or market, as does the composition of the midden. The basically stock-raising economy of this region means that the possibility of livestock markets is not far-fetched. In this respect it should not be forgotten that references to Avila livestock fairs and markets go back to the eleventh century AD.

From an analysis of the internal distribution of the settlement, clearly differentiated areas can be deduced: 1) the residence of the elite in houses in the upper enclosure, 2) the residence of artisans, farmers and herdsmen in the rest of the dwellings in the second enclosure and outside the walls, 3) an area of collective services in the southern part of the second enclosure, 4) an area in which livestock were enclosed (Figure 7).

The necropolis: the social mirror of the settlement?

A rapid analysis of the Las Cogotas cemetery can serve to verify the social characteristics of the settlement's inhabitants. The cemetery extends 220 m from north to south and is some 240 m away from the upper enclosure (Cabré 1932). There are four differentiated areas of burials and nearly 1500 cremation burials (Kurtz 1987), of which only 224 contain grave goods, that is 15.5% of the total.

It is reasonable to suppose that the separate funerary areas reflect a system of lineal descent in kinship groups whose economy was based on control of various means of production, difficult to determine, and who



LAS COGOTAS

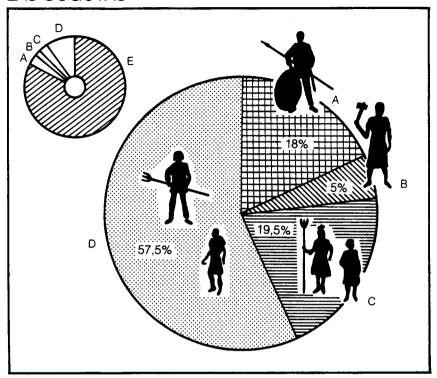


Figure 8. Distribution of categories of grave goods in Las Cogotas cemetery. A: warriors; B: artisans; C: women; D: others and E: without grave goods (redrawn from Martín Valls 1986-87, fig. 4).

were buried separately in order to reinforce their rights in ideological terms (Castro 1986, 129).

A traditional analysis of the grave goods allows a series of categories to be recognized (Martín Valls 1986–87):

- Warriors, who account for a little over 18%, and display a number of levels, two higher ones with sumptuous grave goods that include spears, shields, knives and swords decorated with silver (Kurtz 1986–87a) and others with horse trappings (Kurtz 1986–87b); the lower levels include weapons but have no sumptuous objects or horse trappings.
- Artisans, with punches and some tools, represent approximately 5%.
- Women, mainly with spindle whorls, sometimes with marbles and only exceptionally with finger rings and brooches. They account for almost 20% of the total number of tombs with grave goods.
- Others, with pottery vessels and some items of adornment (Figure 8).

A more rigorous analysis, based on a cluster analysis of grave goods (Castro 1986), produced similar results enabling us to recognize five distinct ranks.

- First rank: tombs with prestige authority elements: horse trappings, knives or swords with their scabbards, shields and ornaments with damascene work in silver. This rank especially associated with knives and richly decorated swords was identified as 'chiefs' by Cabré (1932, 146-7).
- Second rank: grave goods including weapons without symbols denoting authority: spears and iron instruments like punches and/or knives. This group would include different social positions: warriors, artisans and 'priests', probably with close kinship relationships with the members of the first rank.
- Third rank: tombs with bronze ornaments, brooches, beads and other objects. Their position is defined by important kinship relationships with members of the highest rank.
- Fourth rank: with grave goods incorporating spindle whorls, marbles and decorated urns. The sociological interpretation must be the same as for the previous category.
- Finally we must consider the majority of burials without grave goods. The social position of this group would be based on their exploitation by the other ranks. They would have been engaged in agriculture and cattle raising, and probably in the construction and maintenance of defences (González-Tablas 1985, 47).

In conclusion, the sociological assessment of the Las Cogotas burials indicates that there were marked social differences between the members of the Las Cogotas community. The society had a pyramidal structure, with an elite military caste at the top which had horses and fine weapons denoting their position at the head of a broader group of warriors with more modest military equipment. Below them would have been the group of artisans and tradesmen. And finally, the almost 85% of the burials with no grave goods, which would have been those of humbler people, perhaps close to the status of slaves. Roman writers probably interpreted the presence of similar social groups in *Salmantica* during Hannibal's siege as 'slaves', as opposed to 'free men', by imposing their own conception of society — a slave society — on the Late Iron Age communities of the western Meseta (Castro 1986, 133).

Another interesting aspect is the demography of the cemetery. Cabré's excavation was quite exhaustive, so we can be confident that the total number of tombs registered is very close to the real number of burials. The total number recorded is 1469, and we have assumed a value of 30 years as the average lifespan, giving different reasonable alternatives for

how long the cemetery was used: 300, 250 and 200 years (Kurtz 1987, 27B). So, by applying the formula:

$$P = \frac{D : e}{t}$$

where **P** is the size of the living community, **D** is the total number of individuals buried, **e** is the average lifespan and **t** the number of years the cemetery was in use, we obtain three values for **P**: 145, 175 and 220 inhabitants. By accepting the middle value and allowing about 10% for lost burials, a reasonable final figure for the Las Cogotas community — assuming a stable population — is about 200 inhabitants. If we use this figure and accept that the houses in Las Cogotas were nuclear family dwellings, and we assume that an average family had five members, this would mean there were 40 houses. With a family unit of four people, the number of houses would be 50. So although we do not know the exact internal structure of the settlement, it seems reasonable to assume that there were at least 40–50 houses on the site.

From this point of view the percentage of warrior tombs (18%) represents about 36 'warriors', in other words, nearly one per family. Thus it is tempting to assume that the presence of warrior's equipment denotes the 'heads' of families.

The regional pattern of settlement

The Amblés Valley, formed by the upper reaches of the Adaja, comprises a large triangle whose longest sides are formed by the Avila and Paramera mountain ranges. The shorter side would be the opening of the valley at the height of Las Cogotas. The valley has a strong geographical unity and occupies more than 900 sq km (Figure 10).

Settlement during the Late Iron Age (Alvarez-Sanchís 1993) is characterized by large *oppida*: Ulaca, the largest of these, covers an area of more than 60 ha (Lantier and Breuil 1930), La Mesa de Miranda, 30 ha (Cabré *et al.* 1950) and Las Cogotas 14.5 ha. It has been suggested that there is very probably another centre of this type under the modern city of Avila, the Vettonian town of *Obila* mentioned by Ptolemy (II, 5,7) although we have no clear data relating to the site before the middle of the first century BC (Martín Valls and Esparza 1992, 274–5; Alvarez-Sanchís, forthcoming a). The sizes of the *oppida* are considerable, even in comparison with the large European *oppida* (Collis 1984, 124 and fig. 8.21) (Figure 9).

Furthermore, there are some small settlements on the plain of the valley floor known only from simple surface surveys which may have been dependent on the large settlements (Figure 10). The population appears

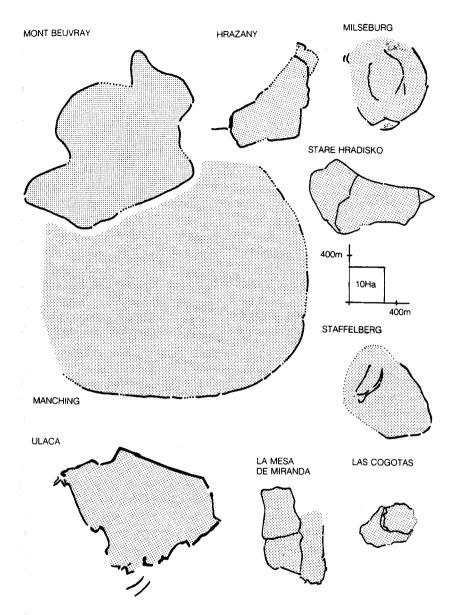


Figure 9. Surface areas of major European oppida compared with oppida in the Amblés Valley (Ulaca, La Mesa de Miranda and Las Cogotas).

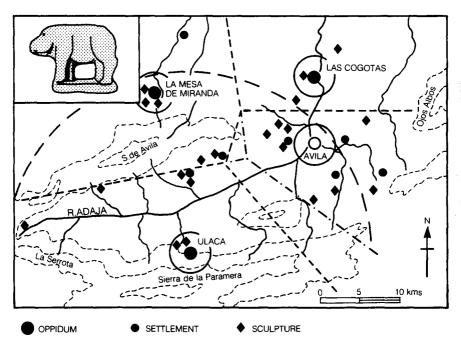


Figure 10. Map of the Amblés Valley in the Late Iron Age. The zoomorphic sculpture is from Las Cogotas.

to have established a dual economy with the oppida. Stock-raising concentrated in the mountain areas while the small settlements on the plain commanded a wider range of options, farming the fertile alluvial soils. This pattern of settlement includes the famous stone sculptures of bulls and pigs — the verracos — which were traditionally believed to provide magical protection for the livestock (Cabré 1930, 30) or to be funerary monuments, because a few are known from their Latin inscriptions to have served that purpose (Martín Valls and Pérez Herrero 1976, 76). A recent review proposes a different explanation, however, that fits the evidence better and makes sense when viewed against the regional pattern of settlement (Alvarez Sanchís 1990, forthcoming b). The revision proposed is based on the fact that most of the verracos lack an archaeological context, are very often found several kilometres from the settlements and are located in pasture lands, i.e. in grazing areas at an altitude of between 1000 and 1200 m, and close to watering places, which were never more than 1500 m away. It could be argued that the work invested in carving these large sculptures, found in the midst of the grazing lands, would only make sense if they acted as landmarks, or fixed points of reference in the landscape, to define critical resources such as winter pastures. So there is a significant relationship between the positioning of the 'verracos' and the distribution of the resources offered by the environment for sustaining the animals, resources which, moreover, are critical if we consider the seasonal conditions (Alvarez-Sanchís, forthcoming b). Thus the thesis that the verracos define areas of ownership or the right to use resources fits well with the type of hierarchical society that we have seen in Las Cogotas basing its wealth on the possession of cattle. In any case, the symbolic control of the areas where the zoomorphic sculptures were positioned, also an ideological expression of the wealth of the dominant group, contributes to reinforcing and maintaining the rights of the ruling elite.

This new interpretation of the verracos reinforces the pattern of hierarchical settlement in the Amblés Valley. It could even be ventured that Ulaca's greater importance in terms of size was due to the fact that it may have been the hierarchical centre of the region, particularly if we bear in mind its religious function, which it alone, of all the settlements in the valley, appears to have exercised (Almagro-Gorbea and Alvarez-Sanchís 1993).

To sum up, a hierarchical pattern of settlement can be recognized in the Amblés Valley during the Late Iron Age: at the top of the settlement system were the oppida — Ulaca, La Mesa de Miranda and Las Cogotas — and below them the small open settlements in the lower valley. Unfortunately we know virtually nothing about the small open settlements and thus have no knowledge of the nature of relationships between the oppida and the open settlements. Interest in Spain has always focused on the oppida, as it has everywhere else, even in this case where there have been limited excavations in the open area. The distribution pattern of the zoomorphic sculptures, close to the oppida and near the boundaries of the Thiessen polygons, suggest that the oppida exercised territorial control. So the elites of the three oppida (and perhaps also Avila) effectively controlled critical resources — pastures — although the social relationship that existed between them and the population of the small open settlements is unknown.

If we compare the economic activities and functions of the *oppida* and the small open settlements (Table 1) it is clear that the former: (1) developed a variety of craft activities, on a scale that may be called a 'craft concentration', (2) were involved in supraregional exchange, (3) were strongly defended, and (4) built, at least in Ulaca, religious structures. These features contrast with the presumed characteristics of the open settlements — only known by surface surveys — as small villages or hamlets basically involved in agriculture with limited craft production, without long distance contacts, defences or religious structures.

The picture that emerges is of intensive occupation of the Amblés

	ULACA ¹	LA MESA DE MIRANDA ²	LAS COGOTAS ³	SMALL SETTLE- MENTS ⁴
agriculture	+	+	+	+
cattle raising	+	+	+	+
metallurgy	+	+	+	?
jewellery/silver	0	+	+	-
pottery production	+	+	+	0
industrial pottery	0	0	+	_
bone elaboration	+	+	+	_
textile production	+	+	+	-
craft concentration	0	0	+	-
supraregional exch.	0	+	+	_
ramparts	+	+	+	_
chevaux-de-frise	-	+	+	-
religious structures	+	-	_	_

Table 1. Evidence of economic activities, exchange, defences and religious function from *oppida* and settlements of the Amblés Valley.

? uncertain

O probable

+ evidenced

- not evidenced

Valley in the Late Iron Age. Large communities in the order of hundreds controlled, through the elites in *oppida*, the surrounding territory with small settlements dispersed throughout the valley. As the distribution of Thiessen polygons and zoomorphic sculptures suggests, Ulaca controlled the north-east side, La Mesa de Miranda the north-west (the boundary would probably have extended as far as the Adaja river) and Las Cogotas the lowlands of the middle of the basin (Figure 10).

Concluding remarks

The information derived from Las Cogotas suggests that, although we are a long way from knowing the exact nature of *oppida* in the central Spanish Meseta, some important facts can be established:

1 We are just beginning the archaeological study of Late Iron Age oppida in 'Celtic' Iberia (Almagro-Gorbea, in this volume). As in other areas (Boos 1989; Salac 1993; Woolf 1993), there were probably substantial differences between individual oppida in terms of geographical setting,

¹ Data from Lantier and Breuil (1932), Posac (1953), Gutiérrez Palacios (1955) and consideration of unpublished materials in Avila Museum from excavations undertaken in the 1970s.

² Data from Cabré et al. (1950).

³ Data from Cabré (1930, 1932) and our own excavations at the site.

⁴ Data from personal inspection of the sites and information in the recent 'Carta Arqueológica de la provincia de Avila'.

size, form, function and chronology. We think the best approach is to study individual cases and regional settlement patterns.

- 2 During the Late Bronze Age ('Cogotas I' culture) sheep-herding communities in the Meseta lived in small, and more or less temporary camps with light wooden huts. Although there is no clear evidence, these settlements imply generally small communities with no more than 100 inhabitants. In the area we have been considering, this can be seen at Zorita de los Molinos (González-Tablas and Larrén 1986) in a small village. At the same time there is nothing to suggest any kind of hierarchical settlement pattern. In this region there is a 'black hole' in the Early Iron Age, with only a little known settlement, such as that at Sanchorreja (Maluquer 1958; González-Tablas 1983, 1989). The more complex settlement patterns and more substantial population in this site indicate a trend, with more permanent dwellings and stone defences, culminating in the emergence of oppida in the Late Iron Age.
- 3 The Las Cogotas oppidum displays a relatively complex organization with stone walls and 'chevaux-de-frise' as defensive devices and clear internal 'zoning'. Deliberate separation into enclosures and the existence of functional areas can be discerned: residence, collective services and spatially segregated craft activities and livestock pens (Figure 11). The distribution of houses against the wall or isolated between rocks and the absence of streets differs from the urban pattern of the Mediterranean style. But the settlement clearly had a set of functions political control of the territory, defensive centre and production and redistribution of crafts which justifies the term 'proto-urban' (Kurtz 1987).

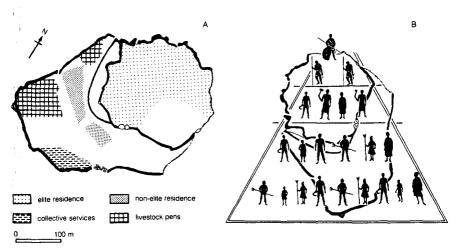


Figure 11. A. Las Cogotas indicating the 'zoning' of activities. B. The pyramidal structure of the society based on an interpretation of the burials.

- 4 The size of the Las Cogotas community, probably more than 200 inhabitants, represents a significant increase in comparison with the societies of the Late Bronze Age and Early Iron Age. The demographic estimates based on the burial data are consistent with the number of houses involved; and the existence of free space, especially in the lower enclosure, provided room for an increased population over and above the permanent community when livestock markets were held, or as a place of refuge for people living in the surrounding areas.
- 5 The sociological interpretation of the Las Cogotas burials indicates a hierarchical society with five ranks. In any event the separate funerary areas in the cemetery must be the expression of strong kinship relationships within the community. Internal social differentiation is reflected in the internal 'zoning' of the settlement.
- 6 Finally, the analysis of the regional settlement pattern hints at the structure of the 'political landscape' of the Amblés Valley. Several oppida with populations of between 200 and 500 inhabitants controlled territories for the purpose of raising livestock. The small villages or hamlets scattered through these territories were probably dependent in some way on the oppida. The possibility that Ulaca was a pre-eminent centre is suggested by its large population and religious function.

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Las Cogotas: Oppida and the roots of urbanism in the Spanish Meseta

Las Cogotas is a fortified site of Iron Age date covering 14.5 ha lying in the valley of the Adaja near Cardeñosa in the province of Ávila. Its principal characteristics are described based on the earlier excavations of Cabré and recent rescue work. The defences were substantial and encompassed several enclosed areas. Rows of houses were found in the main enclosure, the best known being against the back of the defensive wall: an industrial area was identified in the outer enclosure. From the available evidence it is possible to define different functions to the various enclosures. The evidence from the cemeteries (published in 1932) is considered. Five social classes are identified. The population is estimated at 200 representing 40 households of 5 people. The first 'rank' – the warriors – representing 18% of the cemetery population, were probably the 'heads' of families. Las Cogotas is considered in its regional setting of the Amblés valley. Several oppida with populations of 200–500 controlled large territories within which small villages and hamlets were scattered. Ulaca may have been pre-eminent among the oppida.

Las Cogotas: Oppida y las raíces del urbanismo en la Meseta española

Las Cogotas es un yacimineto fortificado de la Edad del Hierro que cubre unas 14.5 hect. y está situado en el valle de Adaja cerca de Cardeñosa en la provincia de Ávila. Sus principales características se describen a partir de las antiguas excavaciones de Cabré y las recientes excavaciones de urgencia. Las defensas son remarcables e incluyen a varios recintos cerrados. En el recinto principal se hallan alineamientos de casas, de las cuales se conocen mejor las que se sitúan apoyadas sobre el muro defensivo: una zona industrial se ha identificado en el recinto externo. A partir de la evidencia disponible, se pueden definir distintas funciones para cada uno de los recintos. Se consideran también aquí los datos del cementerio (publicado en 1932). Se han identificado 5 clases sociales. La población se estima en unos 200 que representarían 40 hogares de 5 individuos. El primer rango – los guerreros -, que representaban un 18% de la población del cementerio, eran posiblemente los cabezas de familia. Se considera Las Cogotas dentro de su entorno regional del valle Amblés. Varios oppida con poblaciones entre 200-500 controlaban grandes territorios en los cuales existían pequeños poblados y aldeas dispersas. Ulaca pudo haber gozado de un lugar preferente dentro de los oppida.