



Oppida and Celtic society in western Spain

Jesús R. Álvarez-Sanchís, Departamento de Prehistoria, Universidad Complutense de Madrid

Abstract

The emergence of large fortified settlements, known as *oppida*, in "Celtic" Iberia during the Late Iron Age is a process which we are just beginning to understand. As in other areas of temperate Europe, there were probably substantial differences between these settlements in terms of their geographical setting, size, form, function and chronology. The exploration of the relationships between *oppida*, material culture and ethnicity is considered for the Vettones, one of the most famous pre-Roman peoples of western Spain. It is argued that the configuration of the settlements and communities, the sociological interpretation of the cemeteries and the regional patterns of settlement offer interesting insights into social organization of the indigenous world in Iberia between the fourth and first centuries BC.

Keywords

Oppidum, Vettones, Identity, Meseta, Iron Age, Roman conquest

Europe, prior to the arrival of the Romans, was not an urban society. Most of the people still lived in hamlets and worked the adjacent land. However, large fortified centers began to emerge at the beginning of the second century BC. These exceptional sites have been considered the first cities in these continental regions, from western France and the Iberian Peninsula in the west to Serbia, and from the Alps to the Sudeten Mountains. They were known as *oppida*, a Latin term used by Julius Caesar in his descriptions of the Gaulish settlements (Büchsenschütz 1988). Some of these *oppida*, with populations of several hundred or even thousands, had neighborhoods, workshops, markets and public buildings, following a relatively well-planned street layout. It has been assumed that the *oppida* were centers of political organization, industry and trade. Furthermore, the development of these communities was seen as a response to Rome's growing need for metals, raw materials and slaves.

We know that in this period a considerable part of what is now Spain was intensely exploited and that large expanses of woodland were being cleared for grazing land and cultivation. These strategies enabled people to remain for longer periods in the same place, made longer-lasting and larger settlements possible, led to a noteworthy population increase and produced marked signs of social stratification (Ruiz-Gálvez 1991, 1998). It was also a period in which the population systematically protected itself against war by building walls, towers and ditches, fortifications that were common in many regions. We know very little about how much inter-*oppida* contact took place at that time, but the communities of the western Meseta, that is, the territory where the provinces of Avila and Salamanca are today as well as parts of Zamora, Toledo and Cáceres (Fig. 1), certainly shared a number of features - social and economic organization, material elements, language, and probably also ideas and religious beliefs - to the extent that these shared characteristics were recognized by the Roman authors and given the name of *Vettonia* or region of the Vetton peoples (Álvarez-Sanchís 1999; Sánchez Moreno 2000).

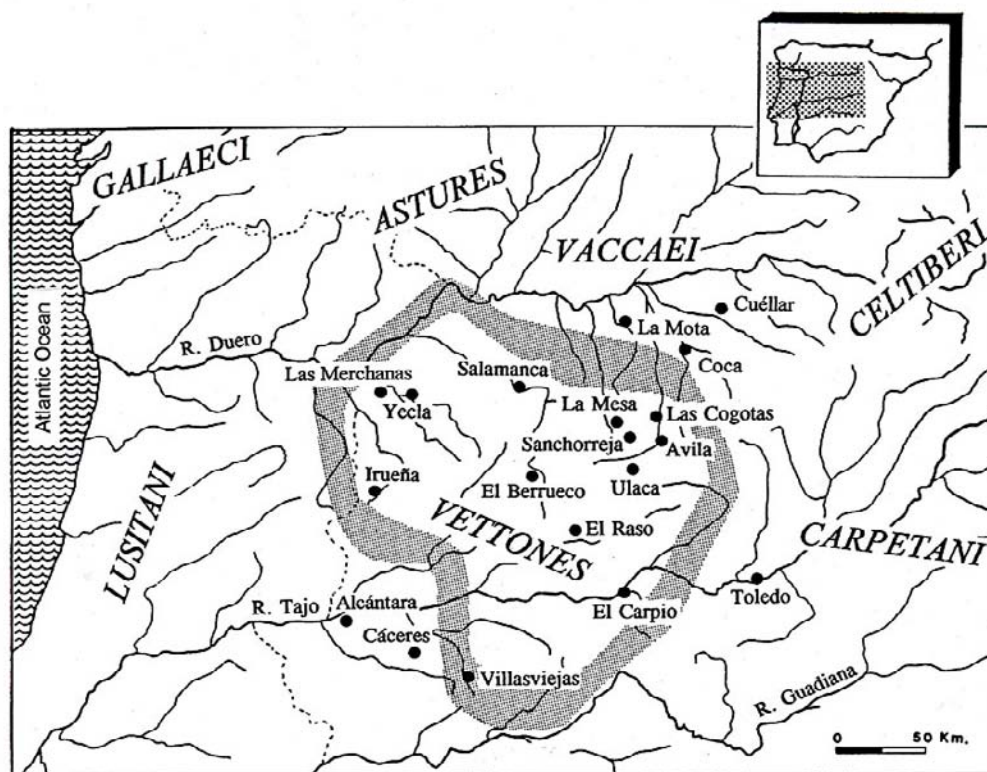


Figure 1. Map of western and central Iberia showing the location of the Iron Age and Roman Republican sites cited in the text, and the nucleus of the Vettonian Culture with the names of the principal Celtic tribes - in larger capitals - according to written sources (After Álvarez-Sanchís 2000).

That Iron Age world was the demographic base from which the *oppida* emerged. Among other reasons, this subject is of great interest, since the growth of these centers coincided with the first complex organization of the territory. However, does that mean that there were no Vetton cities before this time? We know when some small settlements were founded, but the evolution of these communities into others that were somewhat larger and more complex is not clear. A basic question is whether these cities grew in response to an internal process of evolution or to a changed model of society imposed by Rome. Were the Vetton cities founded at the time of the Roman conquest (second to first centuries BC), or were they the outcome of the long-term growth of small farms and hamlets, and the capacity of some of these communities to control a larger and more hierarchical territory?

Between the end of the sixth century BC and the fourth century BC, the system of settlement evolved towards more complex forms (Ruiz Zapatero and Lorrio 1999; Álvarez-Sanchís 2000). The most important phenomenon was the emergence of new fortified villages that spread over much of the Meseta. Their inhabitants were buried in cremation cemeteries and were accompanied by grave goods that included a small but significant percentage of iron weapons (Ruiz Zapatero and Lorrio 1995). These fortified villages dominated the settlement pattern of this period until the systems of settlement broke up after the Roman conquest. It is difficult to know whether the custom of cremating the dead spread from displaced populations that arrived from the high ranges of the eastern Meseta, the nucleus of the Celtiberian people where the oldest cemeteries are located, or if it was simply the result of a process of acculturation (Almagro-Gorbea 1993, 2001; Lorrio 1997). In any event, the influence of the peoples who spoke Celtic languages over the remaining groups is undeniable (de Hoz 1993).

The process of transformation of these communities into more complex ones still raises a number of questions (Collis 1984, 1995; Cunliffe 1994, 1997, 1998). Not all the *oppida* were founded at the time of the Roman conquest. The Classical sources mention the existence of large indigenous towns in the second century BC, and this gives us a *terminus antequem* for their construction (Almagro-Gorbea and Lorrio 1991). Thus, it is possible to trace their origins to an earlier date. The archaeological evidence demonstrates the existence of settlements that were already important centers in the fourth and third centuries BC, which means that inter-regional trade had already become established in this period.

A number of scholars have emphasized the urban character of these settlements by

searching the *oppida* for typical elements of Mediterranean cities: a regular street layout, monumental buildings, public *fora*, etc. However, they have failed to bear in mind that, as in the Mediterranean, a different ideological concept of "city" might have existed in this culture (Woolf 1993). Recognizing the internal organization of these centers and evaluating to what extent the resources of a territory might have conditioned their patterns of distribution and specialization can tell us much about the kind of society that lived in the *oppida*, and whether the society was urbanized or not. We shall start with an evaluation of the evidence that is currently available.

Towards the formation of the *oppida* (400-200 BC): the internal stimuli

The most archaic remains in Salamanca are found on a hill near the Tormes River. At the beginning of the Iron Age, a settlement covering 1.5 hectares existed there. However, by the third century BC the inhabited area had spread to the neighbouring hill, as the finds of decorated pottery and several iron objects attest; the settlement had grown by then to an area of around 20 hectares (Martín Valls et al. 1991). We know that the city was conquered by Hannibal the Carthaginian in the spring of 220 BC. The Classical sources refer to this event on various occasions and a number of commentaries deserve attention. Initially, this settlement is described as a "large city" or a "large city in Iberia" (Polyaenus, 7, 48; Plutarch, *mul. uirt.*); then the situation during its conquest is mentioned, in particular Plutarch's reference to a district separated from the main center, which suggests it was a large and differentiated site; and finally, Livy's reference (21, 5) in which he reports that the city was taken by assault and that the whole site was fortified. This is partially borne out by the fact that on one of the hills the foundations of a wall built of large blocks of granite have been found (Martín Valls 1999: 215) that supported an archaeological deposit with materials dated to the third and second centuries BC.

It is likely that by that time some settlements in the province of Ávila were undergoing considerable reconstruction. La Mesa de Miranda (Chamartín de la Sierra) is an *oppidum* consisting of three walled enclosures that cover an area of 30 hectares (Figs. 2, 3). The first two (19 hectares), with ditches and *chevaux-de-frise* in front of the entrances, were interpreted as residential areas (Cabré et al. 1950: 15-17), but it must be admitted that most of the remains are known from the first enclosure. The third part of the site was reinforced with large square towers. However, the buildings have practically no foundations, something that suggests that the settlement was more than just an agglomeration of houses and stables. In keeping with the

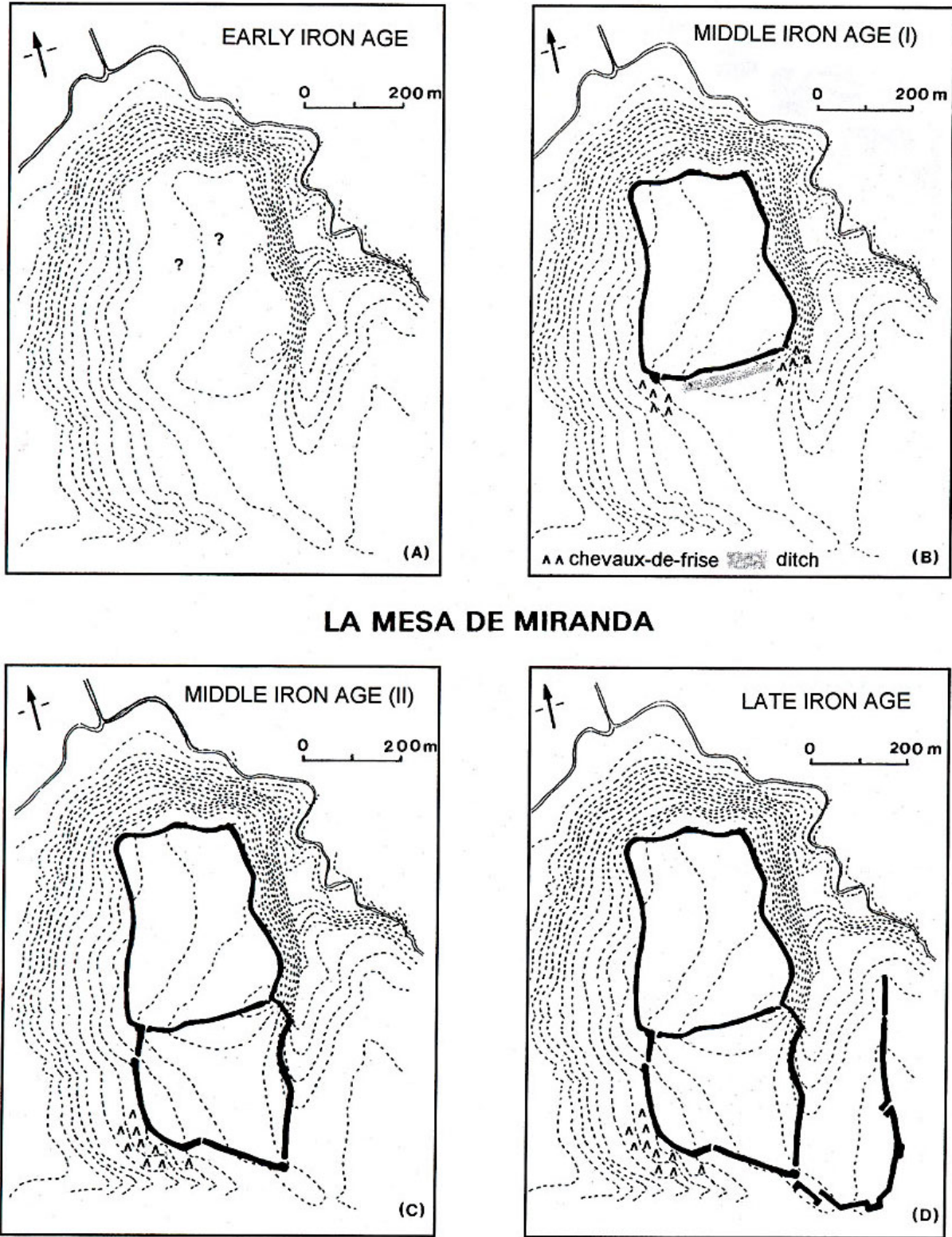


Figure 2. Plan of the *oppidum* of la Mesa de Miranda, Chamartín de la Sierra, Ávila, and phases of occupation. The last rampart was protected with stone walls and towers based on Mediterranean models. Fourth to late second centuries BC. (After Álvarez-Sanchís 1999).

chronology furnished by the grave goods from the associated cemetery, the first two enclosures were built in the course of the fourth and third centuries BC. The third enclosure disturbed part of the cemetery, and is associated with the wars of the Roman conquest.

Las Cogotas (Cardeñosa) is another large site (15 hectares), defended by two walled enclosures (Cabré 1930). The last excavations carried out in the southwest of the second enclosure (Ruiz Zapatero and Álvarez-Sanchís 1995) have revealed an area with abundant archaeological material and various specialized areas; a large communal midden, a stone pavement of complex interpretation connected with the fortification wall, and a potter's workshop (Figs. 4, 5). The wheel-made pots with painted decoration found at the site are dated to the second century BC. The observed stratigraphy is also important: the existence of a midden under the wall demonstrates that before the potter's workshop and the fortifications were built, artisanal activities were already being carried out in this area. Thus, in the sequence of the oppidum's occupation, there was an early period (fourth to third centuries BC) when only the upper part was walled and secondary activities were carried out in a flat area occupied by a poor quarter to the southwest, followed by a second period (second century BC) when it was decided to build a wall around this sector. It is thus interesting to observe that a decision was taken to establish a series of specialized activity areas and include them within the city's boundaries.



Figure 3. A barrier of closely spaced angular rocks placed to hinder the approach of men or horses to the *oppidum* of La Mesa de Miranda, Ávila. This defensive device known as *chevaux-de-frise* is found in western Europe from the Iberian Peninsula to the British Isles (Photo: J.R. Álvarez-Sanchís).



Figure 4. The *oppidum* of Las Cogotas, Cardeñosa, Ávila was first occupied in the Late Bronze Age but was first fortified in the fourth century BC. It was defended with stone walls and bastions beside the main gates (Photo: J.R. Álvarez-Sanchís).

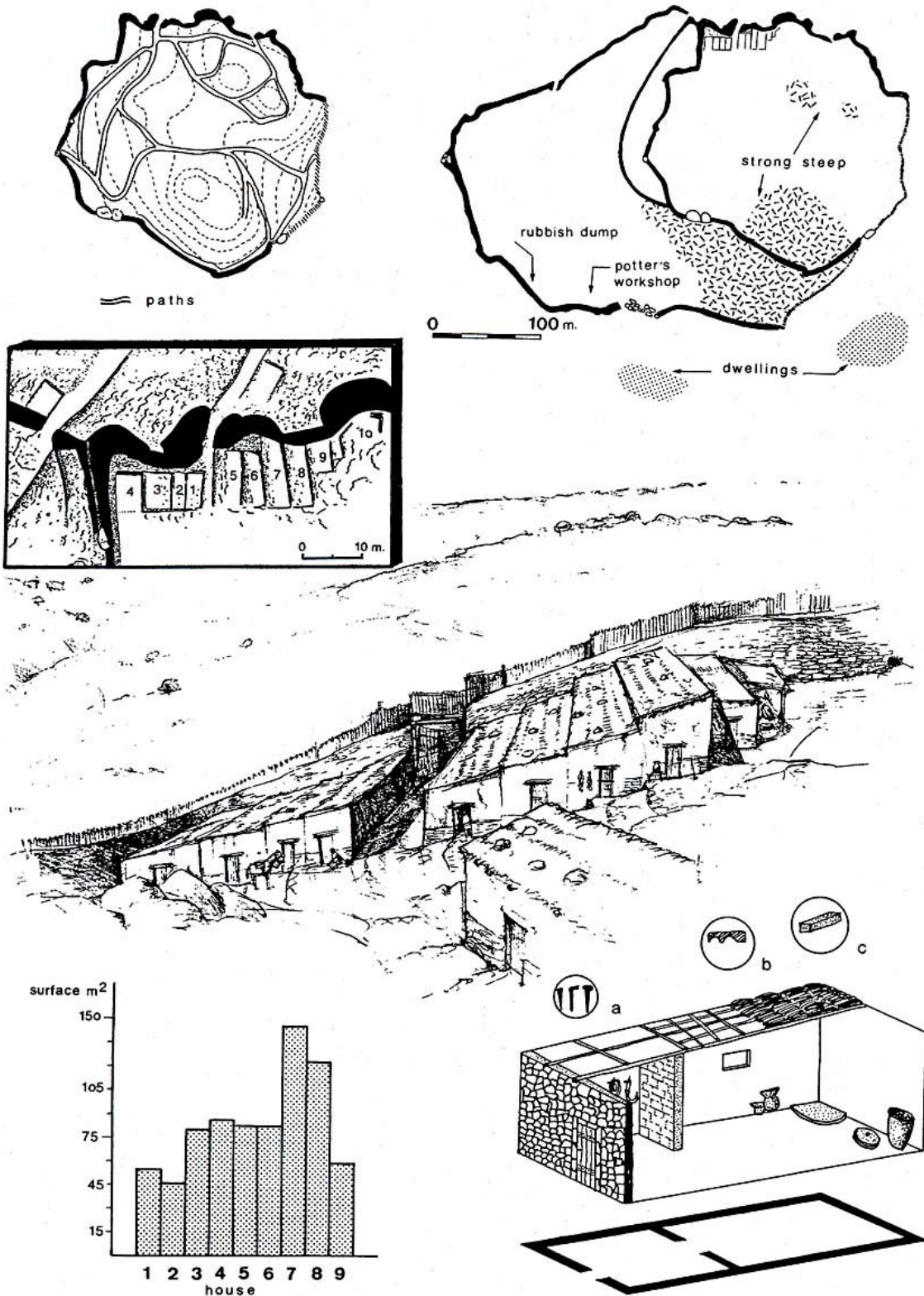


Figure 5. Plan of the *oppidum* of Las Cogotas, Ávila. Internal structure, plan of the houses beside the main gate and an attempted reconstruction. The histogram indicates surface areas within the houses (After Ruiz Zapatero and Álvarez-Sanchís 1995).

From the fourth century BC onwards, these and other settlements provide evidence of agricultural and industrial production that demonstrates that manufacturing and food production had reached unprecedented levels (Martín Valls and Esparza 1992; Álvarez-Sanchís 2003). Inter-regional trade would have played a very important role in this intensification, explaining the transportation of products over great distances and the presence of specialized workers. The grave goods recovered from the Vetton cemeteries of Las Cogotas (Cabré 1932), El Raso (Fernández Gómez 1986, 1997), La Mesa de Miranda (Cabré et al. 1950) and Alcántara (Esteban Ortega et al. 1988) have provided various types of swords, spears and daggers of iron as well as shields, fibulae, belt buckles, bronze cauldrons, Greek ceramics, Campanian ceramics and other vessels, which demonstrate the existence of close contact with eastern and southern Spain. The production and exchange of manufactured goods became quite complex and, although the available evidence does not permit this to be confirmed, there are signs that suggest that basic food production increased considerably at this time (Esparza 1999; Ruiz Zapatero 1999). Obtaining a food surplus in order to penetrate the trading networks would have led to an expansion of agriculture and stock raising. This surplus would also have encouraged production in the workshops of the *oppida* and some degree of specialization. Let us look at some examples.

In the province of Ávila, the fortified towns appear to occupy the pinnacle of a hierarchical settlement pattern, followed by a second tier of small hamlets and isolated farms. The latter were generally located in the vicinity of rivers, were not fortified and have produced evidence indicating that their inhabitants must have spent most of their time farming. We do not know much about these small sites. They were the most numerous type of settlement and would have accounted for a good part of the rural population's structure. However, as in many other contexts, sites in this category have rarely been excavated and the archaeologists' efforts and interest have been directed at the larger sites because they are more worthwhile in terms of research. In some cases, as in the Amblés valley, they differed from the *oppida* in two ways (Álvarez-Sanchís 1999: 115 ff.). Firstly, they differed in terms of the land worked. The small sites reveal a strong agricultural component since they are located on the valley floors that generally have rich alluvial soils, whereas the *oppida* apparently tended more to stock raising, based on the topography and the quality of the soils in their vicinity. Secondly, the functions of the *oppida* and the small settlements were different. The *oppida* acquired their individual character because they developed industrial activities - well-documented in the potter's workshop

of Las Cogotas, for example; they were involved in trading networks, as evidenced by the weapons found in the cemeteries and some imports; they were strongly fortified; and they erected monuments that had a religious function.

The *oppidum* of Ulaca (Solosancho, Ávila), the largest of the Vetton *oppida* (70 hectares) and one of the best known in Celtic Iberia, is famous for the monumental character of some of its buildings (Ruiz Zapatero and Álvarez-Sanchís 1999). Two large constructions stand out in the central-western sector of the settlement (Figs. 6, 7, 8). The first is a large rectangular space (16 x 8 m) hewn out of a rock and associated with a large crag, in which a double staircase leads to a platform with two hollows that are connected to each other. One of them comes out into a third, which communicates in turn with the lower part of the crag through a channel. The monument has been interpreted as having a religious function because of its similarities with the Portuguese sanctuary of Panoias (Vila Real), which has Latin inscriptions stating that animal sacrifices took place there



Figure 6. The *oppidum* of Ulaca, Solosancho, Ávila dominates the surrounding countryside. It was probably the Vettones' main center in west-central Spain at the time of the Roman conquest of the Iberian Peninsula (Photo: J.R. Álvarez-Sanchís).



Figure 7. The sanctuary of Ulaca, Ávila, was used during the Iron Age. Animal sacrifices took place there (Photo: J.R. Álvarez-Sanchís).



Figure 8. Partial view of the sanctuary of Ulaca, Ávila, in which a double staircase leads to a platform with two hollows that are connected to each other (Photo: J.R. Álvarez-Sanchís).

(Alföldy 1995; Rodríguez Colmenero 1999). Near the altar of Ulaca there is another structure in the rock with a rectangular plan (6.4 m), divided into three sections: ante-chamber, chamber and oven. Its layout is similar to the saunas found in a number of settlements in the northwest of the Iberian Peninsula (Silva 1986; Ríos González 2000). Strabo refers to these activities, which appear to be related to initiation rites linked to warriors and bathing (Almagro-Gorbea and Álvarez-Sanchís 1993).

It seems reasonable to suggest that Ulaca was the most important settlement in the region in view of the sanctuary, which must have served the whole area, and the size of the *oppidum*. These features contrast with what can be inferred from what we know about the small settlements on the plain where production output appears to have been limited and evidence for long-distant contacts and defensive or religious structures is absent.

The Iron Age communities in the west of Salamanca are different. The sites are smaller, always fewer than ten hectares. Iruña (Fuenteguinaldo) has an area of nine hectares, Las Merchanas (Lumbrales) and Yecla (Yecla de Yeltes) nearly five, and El Picón de la Mora (Encinasola de los Comendadores) a little over one hectare. The walls and other defences (ditches, towers, *chevaux-de-frise*) are their most striking feature and this has given them a character of their own (Figs. 9, 10), which is generally lacking in less important settlements such as farmsteads and hamlets. The most spectacular group is located on the Yeltes and Huebra Rivers; in a radius of fewer than 10 km there are six settlements of this type (Álvarez-Sanchís 1999: 120-126; Martín Valls 1999). The characteristics of the land make it clear that these



Figure 9. The Vettonian hillfort of Yecla de Yeltes, Salamanca, probably constructed in the fifth century BC and defended with stone walls, bastions and *chevaux-de-frise* (Photo: J.R. Álvarez-Sanchís).



Figure 10. Carved stone walls from the Iron Age hillfort of Yecla de Yeltes, Salamanca. The image shows a group of men riding horses (Photo: J.R. Álvarez-Sanchís).

settlements were geared to livestock breeding. There are also important iron, copper and tin mines in the surrounding area. There is no definite archaeological evidence that the mines were exploited in the pre-Roman period, but it is tempting to link the development of these settlements with mining (Salinas 1992-93: 179-180).

This diversity in the forms of settlement in the western Meseta would seem to express a wide range of social and economic organization types. The territories being worked by the *oppida*, the small rural farms, the specialized sites and their apparent activities and functions, clearly indicate that there were considerable differences between their populations.

How many people?

The demography of the cemeteries and the extrapolation of these numbers to the settlements has been recently studied (Ruiz Zapatero and Álvarez-Sanchís 1995; Álvarez-Sanchís and Ruiz Zapatero 2001) under the assumption that the excavations of some Vetton cemeteries were fairly exhaustive and that we could reasonably assume that the number of tombs was very close to that of the burials of the period. By applying the Acsádi and Neméskeri (1970) formula it is feasible to calculate the population of Las Cogotas and La Mesa de Miranda from the data provided by their cemeteries (1613 and 2230 tombs respectively). Las Cogotas was inhabited by a community that must have oscillated between 200 and 300 inhabitants, while at La Mesa de Miranda the necropolis appears to reflect a population of approximately 300 to 400 inhabitants.

The population density per unit of area is another interesting piece of data (Fig. 11). We would be talking about approximately 15 inhabitants per hectare in the first case, and about 20 inhabitants per hectare in the second. At Ulaca we know the surface area and the number of

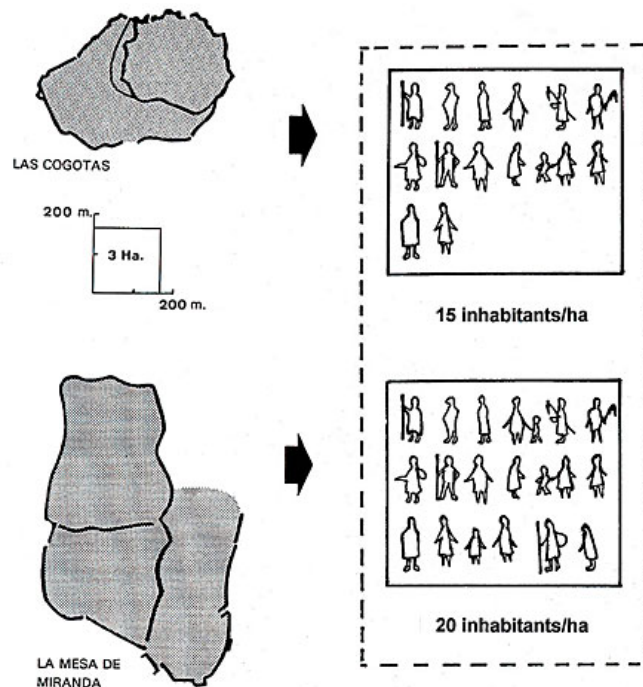


Figure 11. Population density per unit of area in the *oppida* of Las Cogotas and La Mesa de Miranda (After Álvarez-Sanchís and Ruiz Zapatero 2001).

domestic structures, with 250 houses identified by intensive survey (Ruiz Zapatero and Álvarez-Sanchís 1999). The above density of inhabitants per hectare results in a total of between 1,050 and 1,400 inhabitants. However, the population could have increased from time to time, for defensive reasons at times of social instability or armed conflict, when the resident population could almost have doubled, particularly if we take into account the ample space within the settlement that shows no signs of occupation.

We know very little about the structure of the regional population. For example, we do not know whether small farms close to the *oppida* buried their dead in the *oppida* cemeteries or had their own family necropoli that would be rather difficult to find now. In some cases there are traces of these farms but not of their tombs, and in many cases it must be assumed that neither the settlements nor the cemeteries have been detected due to a lack of intensive surveys. We would probably be talking about hamlets of five or 10 houses. In any case, the population size of the Vetton communities, according to the cemeteries and the size of the settlements, indicates that some other important aspects were involved besides demography: social organization, the subsistence economy or the cultural traditions of the people.

Social spaces and symbolic spaces

Vetton society in the fourth and third centuries BC was a stratified society led by an aristocratic elite that owned horses and sumptuous weapons that marked their position at the head of a larger group of warriors with a simpler panoply (Martín Valls 1986-87: 78; Álvarez-Sanchís 1999: 295 ff.). The weapons that have survived present different combinations that could reflect differences within the military realm, from a small number of very rich tombs with complete panoplies that included a sword, shield, a couple of spears and horse harnesses, to others that only contained spears, that is, the basic equipment of light infantry. A certain hierarchy can also be detected in the tombs that we would regard as female, a few of them having rich items of adornment (bracelets, necklaces, fibulae, brooches) and others with much poorer grave goods. There are very few burials that can be attributed to men or women devoted to industrial work (metal work, pottery, tanning, work with stone and wood, etc.), but skilled craftsmen certainly existed, as the tools found in domestic contexts of the *oppida* indicate. Many farmers could have been part-time artisans, and a few may even have been engaged in small commercial ventures in the winter months. Ultimately, a reasonable estimate is that four out of

every five tombs contained only ashes or a cremation urn; these would have belonged to humbler individuals and perhaps to servants or slaves, although this would be very difficult to prove (Balter 1995).

An interesting feature of the organization of the Vetton cemeteries is the possibility of recognizing differentiated family groups (Castro 1986; Kurtz 1987). The existence of concentrations of tombs separated from each other by unoccupied areas, and of tombs with very rich grave goods and other poorer ones in each sector, could represent different clans within the community that were buried separately to mark rights and obligations in a symbolic way. We could go further and relate the development of the *oppida* with important divisions in the landscape that include these power relationships. The importance that specialized economies could have in some ethnic processes has been pointed out (Burillo 1998: 139). Zoomorphic sculptures and decorative motifs used on pottery are, in this respect, very good indicators for exploring their use in the Iron Age. We know that a rather considerable number of the *verracos*, stone effigies of bulls, pigs and boars (more than 400 are known), which are found spread over the west of the Spanish Meseta and Portugal (Figs. 12, 13, 14), were sculpted between the mid-

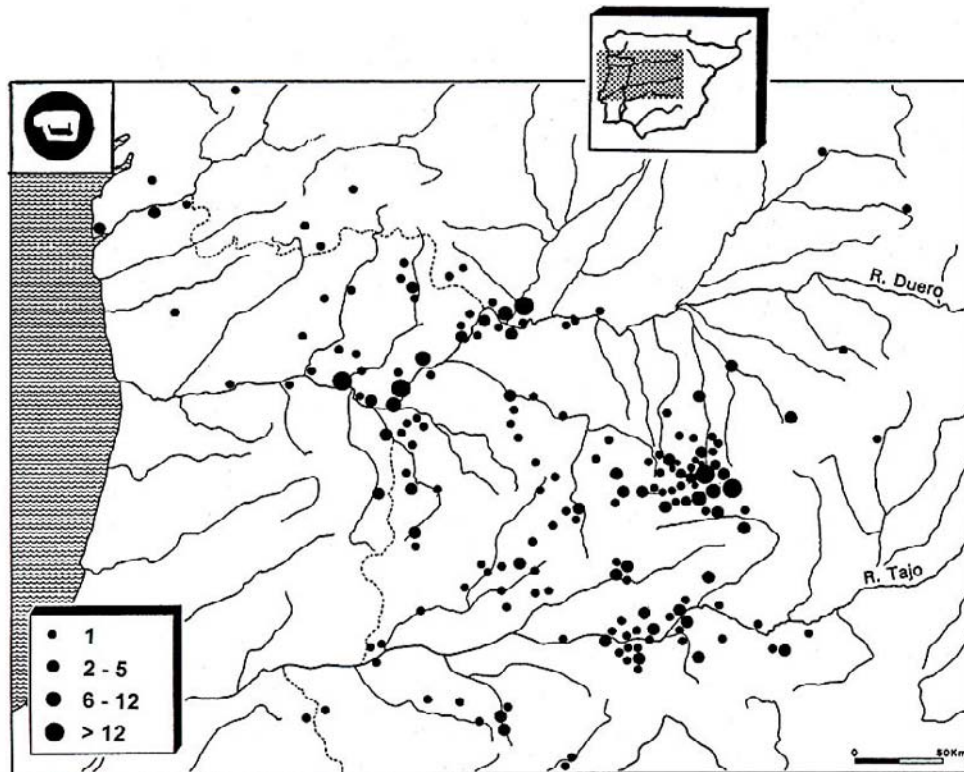


Figure 12. Map showing the distribution of zoomorphic Iron Age sculptures known as "verracos" (After Álvarez-Sanchís 1999).

fourth and first centuries BC. It was generally thought that these sculptures had religious significance related to the sacred protection of livestock, or were funerary monuments, because some of them bore Latin inscriptions to that effect (Martín Valls 1974; Martín Valls and Pérez Herrero 1976). However, there are clear indications that the best pastures in the valleys and nearby sources of water were marked in the landscape by the erection of these sculptures (Álvarez-Sanchís 1994 and 1999: 281-294). Many of them are very bulky. For instance, the bulls of Villanueva and El Tiemblo in Ávila are over two meters long, weigh three to eight tons, and were placed in areas close to the settlements.

Furthermore, these places have very high visibility over their surroundings, that is, points in the landscape were deliberately chosen that would be easily identifiable (Álvarez-Sanchís and Ruiz Zapatero 1999). The *verracos* were an essential part of the Vetton landscape, a form of organizing the land in regions where there was a high density of population. At the same time, the sculptures symbolize the wealth of a stock raising community and the strength of certain social groups, clearly attested, as we have seen, by the grave goods of the cemeteries.

A scrutiny of decorative patterns can also be a good way of discovering family traditions. In a straight line, the cemeteries of Las Cogotas and La Mesa de Miranda are barely 20 km apart, but an exhaustive analysis of the incised decoration of pottery deposited in the grave goods found there demonstrates very marked differences between them (Fig. 15). A few motifs are shared by both settlements - such as the typical incised series of zig-zag rows, but the most important series of basketwork and corded patterns



Figure 13. Vettonian sculptures of bulls, over 2.75 m. long and weighing six to eight tons each, generically known as "Toros de Guisando", El Tiemblo, Ávila. Fourth to third centuries BC. (Photo: J.R. Álvarez-Sanchís).



Figure 14. Sculpture of boar from the Iron Age hillfort of Yecla, Salamanca (Photo: A. Lorrío).

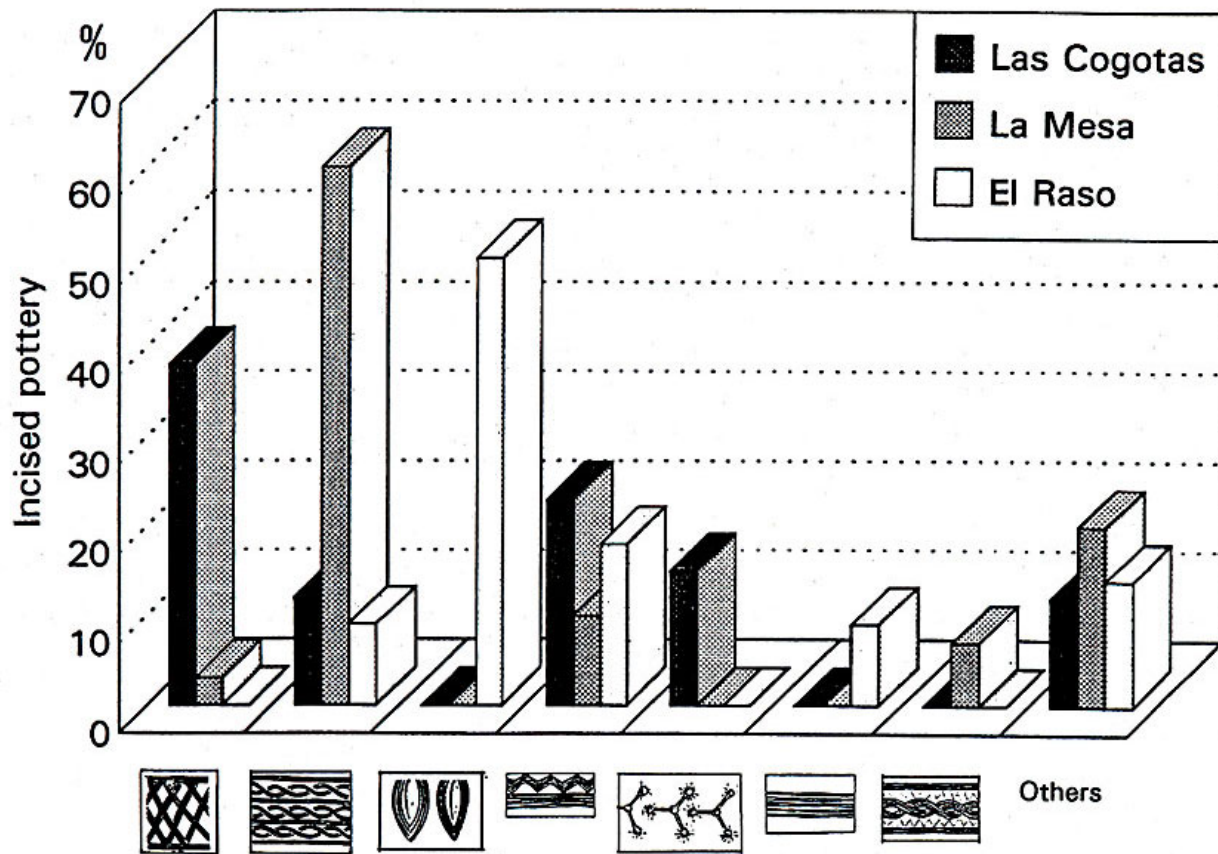


Figure 15. Diagram with a variation of motifs decorating the incised pottery found in neighbouring Vetton cemeteries. It shows marked differences at the settlement level (After Álvarez-Sanchís 1999).

are almost exclusive either to one site or to the other. They probably replicate textile designs associated with other items of clothing or weapons, but the recovery of standardized decorative motifs undoubtedly reveals that some form of intentional separation between cities that occupied the same valley existed (Álvarez-Sanchís 2000: 80, Fig. 11; Álvarez-Sanchís and Ruiz Zapatero 2002). In other words, the stylistic identities displayed by the pottery must have been an expression of social identities, of communities that differentiated themselves and recognized one another as different, but that shared the same types of pottery and the same decorative techniques.

The level of social and economic development reached would have led to conflict between neighbouring communities. The proliferation of fortified settlements in this period fits fairly well with the panorama described. The reconstruction and reworking of fortifications was common; these became more complex and reached their maximum expression in the second to first centuries BC (Martín Valls and Esparza 1992; Ruiz Zapatero 1999 and 2003). There is, as

we have seen, extensive evidence of the importance of weapons, of the individual warrior and of his status in society. The military equipment in the Vetton cemeteries coincides with the known record of the cemeteries of other peoples of the Iberian Peninsula's inland areas, such as the Lusitanians (Martín Bravo 1999), the Vaccaei (Sanz 1998) and the Celtiberians (Lorrio 1994). This suggests to some extent that the different elites of the Meseta were in contact with each other, and indicates the existence of a shared warrior identity (Fig. 16). The subsequent conflict with Rome played a fundamental role in the development of this warrior society.

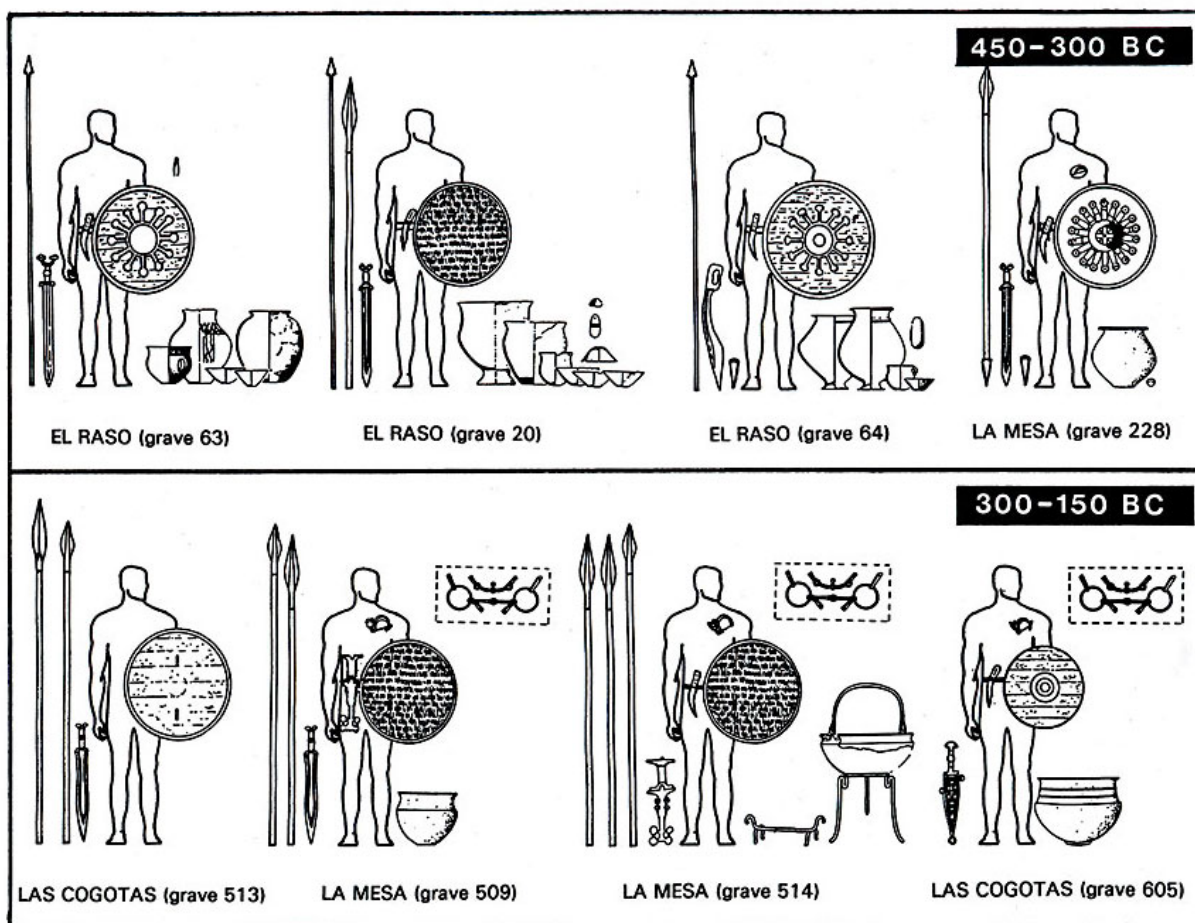


Figure 16. Grave goods of Vetton cemeteries known in Ávila province. The types of vessels and weapons used in the Late Iron Age suggest the existence of two phases in their development (After Álvarez-Sanchís 2000).

Towards the formation of the *oppida* (200-50 BC): external stimuli

Many archaeologists continue to think of the Roman conquest of most of Europe, including the Iberian Peninsula, as an isolated factor independent of the development of prehistoric societies. Traditionally, prehistoric and temperate Europe on one hand, and Roman culture and history on the other, have tended to be studied as two entirely separate disciplines

(Wells 1999 and 2002: 379). However, the study of the Iron Age peoples ought to be carried out by developing a completely integrated approach, both at a regional and settlement level.

At the beginning of the second century BC there was some instability in the central lands of the Tagus valley, a region in which Rome had begun to display special interest. An important date was 193 BC, the year of a military expedition under the command of the praetor M. Fulvius against the *oppidum* of *Toletum* - the modern city of Toledo - and its surroundings (Roldán Hervás 1968-69: 93-94), defeating a confederation of Vaccaei, Celtiberian and Vetton tribes.

The political and economic centers for many tribes were the *oppida*, where the most important commercial transactions were carried out, which is why they attracted foreign merchants. Thus, the increase in the demand for raw materials and labor by the Roman world must have provided an enormous stimulus for local production and those who organized it, something that hastened the development of these centers (Álvarez-Sanchís 2000: 77 ff.). They obtained not just bronze and silver coins in exchange for slaves, metal, cattle and agricultural products such as wheat, but also wine, oil, perfumes, cloth, ceramic wares and other Mediterranean luxury items, as well as countless trinkets and knickknacks. The first Roman imports are dated to the end of the third century BC, and throughout the second century BC Campanian pottery, *denarii* and other products began to proliferate in places such as Salamanca, Las Cogotas, La Mesa de Miranda and El Raso (Martín Valls and Esparza 1992: 272; Álvarez-Sanchís 2003: 129 ff.). The conquest of the central parts of Iberia meant a complete reorganization of traditional trading patterns. Even if the actual mechanisms of exchange used are not yet fully understood, judging from the data provided by the Classical authors, goods were obtained primarily through organized trade, diplomatic exchanges of gifts, and pillage.

The archaeological evidence of the settlements makes it possible to see two clear trends during this period: intensified production and the hierarchical organization of the territory. Small agricultural farms were established in the lowest part of the valleys. Manufactured goods were produced in the workshops of the *oppida* and the acquisition of imports encouraged the peasants to produce food surpluses. Wherever systematic surveys or excavations have been possible, for example at Las Cogotas, Ulaca, El Raso, Salamanca, Las Merchanas, Coca (Segovia) or Pintia (Padilla de Duero, Valladolid), a major concentration of the population and the evidence of specialized crafts can be observed: the use of wheel-made pottery became widespread, and iron metallurgy in the form of new tools such as the sickle and the ploughshare transformed the

economy.

A good part of the output was consumed locally and was produced by part-time craftsmen. However, the variation and large quantities of wheel-made pottery present in the sites in the second to first centuries BC reveal that some communities were involved in exchange networks. The largest Vaccean *oppida*, such as Pintia, in the Duero River valley, had potter's wheels and large ceramics kilns (Sanz and Velasco 2003). The proximity of the Roman army must have created local demand, and this would certainly have increased the value of the resources found in the area, and required the use of specialized workshops. For example, we know that in the second century BC the potter's workshop at Las Cogotas included an extensive complex of buildings and kilns that occupied more than 300 m² (Ruiz Zapatero and Álvarez-Sanchís 1995). There was a large room next to the workshop that was used as a storeroom for the finished products and as a drying area for adobe bricks for the construction of houses and other buildings. What is interesting is that the potter's workshop went beyond the scope of domestic production and, because of its size and the complexity that its maintenance and operation implied, it can be considered a full-time industrial activity. All the pottery recovered was wheel-made and includes a very varied collection of vases, cups, bowls, bottles and funnels, many of which are similar to those made by the Vetton communities to the west (Salamanca, Ledesma, Yecla, etc.), showing that the material culture in the region was becoming increasingly homogeneous.

This phenomenon must also have had important implications for the way indigenous communities transmitted information or expressed identities. Before the arrival of Rome, a very considerable proportion of the pottery was produced by hand and individually decorated. It is evident that different types of pottery and different types of motifs codified information relating to individuals, their status, gender or the family group to which they belonged. With the mass production of pottery, the typology and decoration of vessels changed radically: output was standardized and designed for broader distribution. So it should come as no surprise that the way the Vettons expressed their identities also changed. Studies on this subject or the use of items of adornment according to certain aesthetic patterns have not yet been carried out. As Gebhard (1991) has demonstrated, the mass production of very specific types of fibulae at the end of the Iron Age at central European sites, compared with the very notable variation of these pieces of jewellery in previous times, suggests that they now played a much smaller role in transmitting

information about the individuals that used and wore them.

The size of some settlements and the significance of the output make it difficult to avoid considering these *oppida* the first urban centers. Very interesting evidence is the discovery, close to these places or near the walls, of extensive accumulations of charred earth containing fragments of bone, rubble, pottery, bricks and building materials. These huge middens were formed in the course of a few generations. What is more, the fact that this phenomenon primarily appeared in settlements from the first half of the second century BC onwards also could be considered the result of industrial development in these centers in response to Roman demand. It is difficult to determine why they were there, because in many cases the earth has been ploughed over and disturbed hundreds of times since the end of the Iron Age. One possibility is that these spaces were dumps where rubble from the repair of houses and workshops was deposited (Sacristán et al. 1995: 349-350).

Many *oppida* grew in size because their wealth attracted people from the surrounding areas. As a consequence, the more people that came to dwell in these places, the more industry, more producers of food and more dwellings became necessary in order to feed and house them (Wells 2002: 365 ff.). There is another factor that also deserves to be taken into consideration. The importance of cattle means that it is not entirely implausible that cattle markets could have been held, or the inhabitants of some *oppida* could have met for commercial transactions and leisure activities (Álvarez-Sanchís 1999: 153). It is worth pointing out that the Irish texts describe precisely that kind of activity, known as a fair, or *oenach* (Raftery 1994; Arnold 1999), taking place at so-called royal sites such as Tara (Binchy 1958). Movements of herds and people within an ethnic territory or through restricted natural regions could have been a possibility (Sánchez Moreno 2001: 402-405) and these contacts would have been a spur for producing agricultural surpluses and other marketing products. Such occasions would have added to the remains of meals and other detritus, including broken pottery and animal bones, to the above-mentioned refuse dumps. The accumulation of bones in one of the middens of Las Cogotas could be evidence of this (Ruiz Zapatero and Álvarez-Sanchís 1995: 222). During the course of excavations at some of these sites hearths and postholes have been found; these remains suggest light structures rather than long and continuous occupation of the site by large numbers of people, which supports this theory.

Salamanca was another important *oppidum* where products were sold and exchanged.

The latest excavations have brought to light large middens, and an adobe building dated to the first century BC associated with various platforms believed to be workshops used by the textile industry, producing pottery or possibly milling grain (Martín Valls 1999: 215). Salamanca is special because of its advantageous situation regarding communication routes; it is located beside a ford of the Tormes River on one of the most important overland north-south routes through the western Peninsula. Goods had to cross this region to reach the northern part of the country, and this served to enrich the aristocratic elite that controlled this route. A large population lived and worked within the protection of the city's stone walls.

Many of the settlements, which were surrounded by stone, earth, adobe and wood walls, were much larger than the ones from previous times. Although only a few have been excavated, all the signs are that during the Roman conquest new walls, very different from the traditional ones, were built. Innovations included facing with large stones, sophisticated entrance gates with complex systems of protection, and square or rectangular towers. Some of these features can be seen in the more recent enclosure of La Mesa de Miranda and also at Ulaca. There is evidence of rapid growth at Las Cogotas and Salamanca, at least of occupied and defended space, and good examples of *oppida* being founded at this time (in the second century BC), such as El Raso (Candeleda, Ávila). The remains of a dozen towers are still preserved at this interesting site, which covers approximately 20 hectares (Fernández Gómez 1986, 1995:154-155). It was built on the site of an unfortified hamlet that has been associated with a major Iron Age cemetery. This necropolis demonstrates that there was already a community in the area before 200 BC, and that it experienced rapid growth rather than gradual development.

The *oppidum* of Ulaca, near the Sierra de Gredos, in the heart of Vetton territory, flourished from approximately 300 to 50 BC. The size of the walled areas, the remains of monumental buildings, the layout of the houses and the density of the materials found on the surface suggest that the settlement was divided into several sectors or districts (Álvarez-Sanchís 1999: 144; Ruiz Zapatero and Álvarez-Sanchís 1999). The surveying of this settlement revealed the existence of several quarries for extracting blocks of granite (Figs. 17, 18). Building materials for houses were clearly obtained from one of these quarries, and at least one of the others seems to have been the source of the great ashlar used for constructing the fortifications. There must have been many stone buildings in this settlement. The city covered an area (70 hectares) larger than that needed by the resident community. The adaptation to the topography

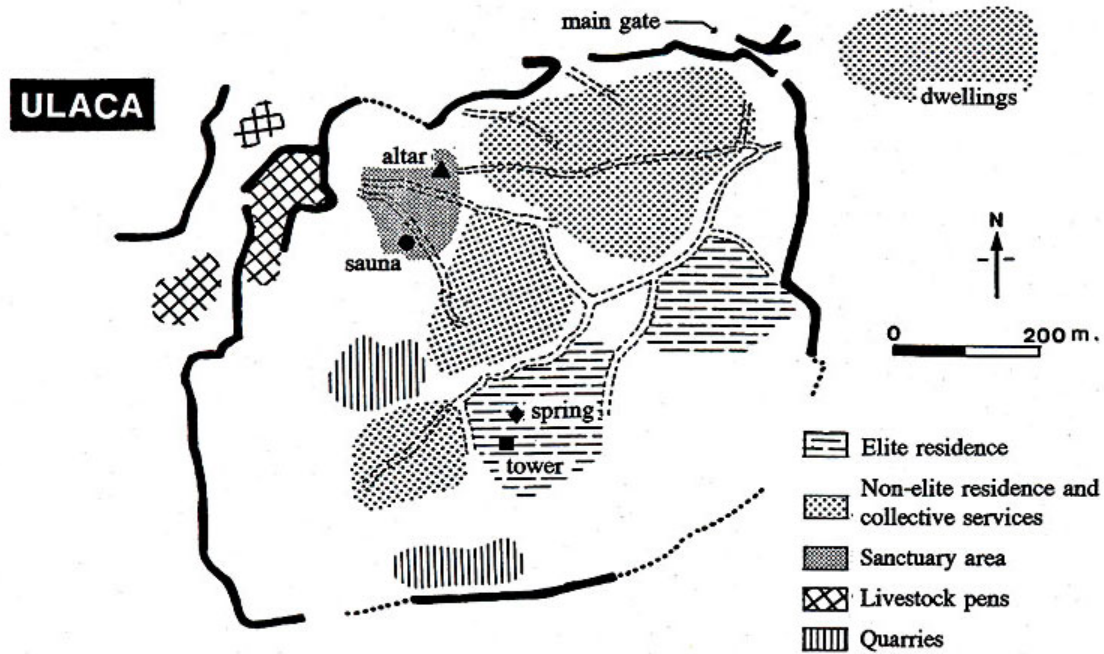
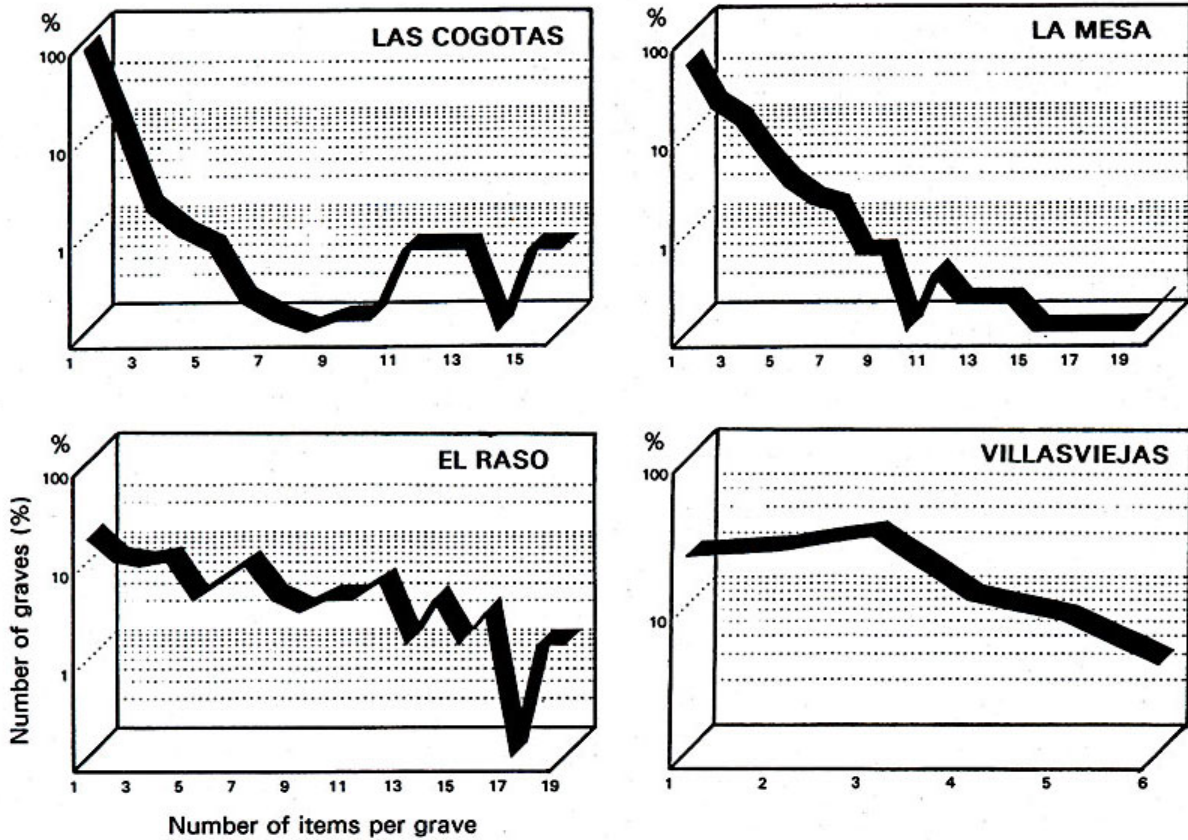


Figure 17. Distribution of grave goods in Vetton cemeteries, showing the number of items per tomb, and plan of the oppidum of Ulaca, Ávila, indicating the "zoning" of activities based on an interpretation of the structures found (After Álvarez-Sanchís 2000).

determined the area that had to be walled, thus some parts of the settlement appear to have been virtually uninhabited.

Another important reason may have been that of reserving extensive areas for grazing and holding cattle. We also should not forget that the Roman presence would have created new conditions for the organization of armed conflict and defending the fortifications (Esparza 2003; Ruiz Zapatero 2003),



Figure 18. Several quarries for extracting blocks of granite were used in the *oppidum* of Ulaca. Building materials for houses were clearly obtained from these locations (Photo: J.R. Álvarez-Sanchís).

among other reasons because the legions used artillery previously unknown in the Iberian Peninsula's inland territories. Although trade and war were two important factors in the development of these centers at the end of the Iron Age (Wells 2002: 365 ff.), the construction of some fortifications may also have been motivated, as Collis suggests (1984: 107), by internal factors, such as guarding goods traffic. The remains of a great tower are preserved within the walls at Ulaca that could have been used as a lookout tower, keeping watch over an extensive inhabited area, including the movement of chariots, people and goods.

There was a standard house type that had a square or rectangular floor plan and an internal area of between 50 and 150 m², divided into three or four rooms. The first room was the most important, with the hearth and sometimes a bench built against the wall. The other rooms would have consisted of a storeroom - where the large ceramic vessels or farming implements were kept - and a bedroom. The walls commonly had a base of stone with an upper part built of clay or adobe. On other occasions the walls must have been constructed exclusively of stone up to the roof. Blocks of clay found with cylindrical imprints of wood suggest that the roofs were built from tree trunks and were covered with mud and straw.

In describing the Vetton *oppida* it is difficult to talk about town planning in the strict sense of the word. However, when we look at their internal organization we can see that the space is arranged in a logical way: residential districts with different levels of wealth, poorer houses outside the walls, enclosures for livestock, industrial areas (potteries, metallurgical workshops, quarries), middens, places for trading and leisure, areas of worship, etc. The houses

are larger and more complex than those previously known, and this surely reflects more specialized domestic organization.

The *oppida* and Rome

In the first century BC the relationship between Roman demand, increased production and the development of the *oppida* is evident (Wells 2001: 84 ff.; Álvarez-Sanchís 2003: 141 ff.). From the Iron Age on general living conditions began to change in many ways. The population was larger than before the Roman conquest and the cities also became larger and more complex than the settlements that preceded them. The activity in these sites would have stimulated immigration from the surrounding regions. The accumulation of wealth would have attracted more and more people to the *oppida* and this must have seriously destabilized family and property relationships. Social distinctions ceased to be so marked in the cemeteries and became much more visible in the settlements.

Numerous hoards of metal were buried for the first time, particularly in the form of ceramic wares, jewellery and coins (Delibes and Esparza 1989; Delibes et al. 1993), which were hidden in pots inside houses or near the settlements. For example, an important hoard that contained Iberian *denarii* was found in the *oppidum* of Salamanca, associated with the insecurity that reigned during the first quarter of the first century BC. Further south, in the *oppidum* of El Raso (Figs. 19, 20), excavations have recovered Republican *ases* and *denarii* and a small hoard that was hidden in one of the houses; their dates of minting would put the abandonment of the



Figure 19. At the *oppidum* of El Raso, Candeleda, Ávila, next to the Gredos mountain range, the remains of a dozen towers, houses and stone walls are still preserved. It was probably an important commercial center, commanding a major river route and access to extensive cattle grazing areas. Second to first centuries BC (Photo: J.R. Álvarez-Sanchís).



Figure 20. Reconstructions of Late Iron Age houses excavated at the *oppidum* of El Raso, Candeleda, Ávila (Photo: J.R. Álvarez-Sanchís).

settlement during the civil wars between Caesar and Pompey. The rich indigenous gold objects found in some hillforts in the provinces of Zamora and León (Arrabalde, Ramallas, San Martín de Torre etc.) was surely another way of displaying wealth. The gold was buried at the time of the arrival of one of the Roman legions, the *Legio X Gemina*, which must have been associated with the wars against the Cantabrian and Asturian tribes that took place between 29 and 19 BC (Peralta 2000: 259 ff.).

These treasure hoards are inevitably associated with times of war, even if other possibilities should not be discounted. Archaeologists tend to oversimplify the significance and function of archaeological contexts without taking into account that many sites and places would have functioned in several ways for the peoples of the Iron Age (Wells 2002: 377). It is true that a genuine monetary economy never existed in the cities of the Iberian Peninsula's western Meseta, but it cannot be denied that in the Late Iron Age coins became an important way of hoarding and accumulating wealth. In this way, relations between individuals changed, and it was the market that determined the value of the products, not social or family relationships.

The growth experienced by some settlements in this period has also been associated with migrations (Almagro-Gorbea 1995). A Celtiberian mint found in the Vetton hillfort of Villasviejas (Botija, Cáceres) demonstrates that people were moving to the south (Blázquez 1995). One of the cemeteries found there is dated between the second and first centuries BC and confirms the presence of iron weapons such as daggers that probably came from central-eastern Spain (Hernández and Galán 1996: 112 ff.). There is also evidence of ethnic contributions from the Meseta in the southwest (Berrocal-Rangel 1992; Almagro-Gorbea and Torres 1999: 109-116), perhaps in the form of small groups (see Lorrio and Ruiz Zapatero in this volume). But these processes took different forms in different regions. For instance, we know that the third enclosure of La Mesa de Miranda was built in the second century BC and that the new walls encroached upon part of the cemetery. This may have been a time of insecurity. Traditionally, the role of the wars at the time of the Roman conquest has been emphasized (Martín Valls 1986-87: 81-82), but the fact is that there are hardly any data on the routes followed at this time by the legions. The fact that some of the tombs are found under the walls could be interpreted differently; it shows perhaps the symbolic control of the community, organized under the legitimating power of a new king or leader. It is difficult to know with certainty to what extent the exceptional growth of some settlements is evidence of the grouping of local tribes in more

stable political configurations and the evolution towards an urban economy. Of course, the intensification of Roman commerce on the basis of the growing need for raw materials must have had a direct effect on social conflict in this period.

The system began to disintegrate in the second half of the first century BC. The Roman conquest put an end to the indigenous economy and its political organization, and imposed Roman centralization (Salinas 2001). Cities and camps were created, stone roads were built to guarantee commercial and military traffic and bridges were built over rivers. The network of communications forced the indigenous communities to move around the territory in a different way (Edmondson 1990). The troops stationed in the area required enormous amounts of food and resources. This demand did not just stimulate high levels of production by the peasant population.

One of the most outstanding aspects from the point of view of the settlement patterns is the growing importance of the cities located on land suitable for growing cereal crops, or areas where iron, tin and copper could be mined. While the equation: Roman demand for food and raw materials = intensification of agricultural and mining output is an excessively simple explanation, at least it has the virtue of emphasizing the influence of an important factor in the organization of the territory. Some *oppida* survived as Roman cities; *Salmantica* (Salamanca), *Obila* (Ávila), *Augustobriga* (Talavera la Vieja), *Bletisama* (Ledesma), *Mirobriga* (Ciudad Rodrigo), *Turgalium* (Trujillo), *Caesarobriga* (Talavera de la Reina). Others did not endure, their population declined, and so did their economic activities. Emblematic places such as Las Cogotas, La Mesa de Miranda and Ulaca were abandoned.

The problem of the origins of the *oppida* that Rome encountered in the Iberian Peninsula is currently coming to a head and, of course scholars do not always agree on the criteria for offering an integrated overview. But the fact is that, from an archaeological "long term" perspective, it is much more interesting to study the process by which small settlements became large cities on the eve of the Roman conquest than whether they belonged to the Vacceii, Celtiberian, Lusitanian peoples or the Vettons themselves.

Bibliography

Acsádi, G. and Neméskeri, J.

1970. *History of Human Life Span and Mortality*. Budapest: Akadémiai Kiadó.

Alföldy, A.

1995. Die Mysterien von Panoias (Vila Real, Portugal). *Madriдер Mitteilungen* 38: 176-246.

Almagro-Gorbea, M.

1993. Los Celtas en la Península Ibérica: origen y personalidad cultural. In M. Almagro-Gorbea and G. Ruiz Zapatero (eds), *Los Celtas: Hispania y Europa*, pp. 121-173. Madrid: Actas.

1995. From Hillforts to *Oppida* in 'Celtic' Iberia. In B. Cunliffe and S. Keay (eds), *Social Complexity and the Development of Towns in Iberia: From the Copper Age to the Second Century AD*, pp. 175-207. Oxford: Oxford University Press.

2001. Los celtas en la Península Ibérica. In M. Almagro-Gorbea, M. Mariné and J.R. Álvarez-Sanchís (eds), *Celtas y Vettones*, pp. 94-113. Institución Gran Duque de Alba. Avila: Diputación Provincial de Ávila.

Almagro-Gorbea, M. and Álvarez-Sanchís, J.

1993. La sauna de Ulaca: Saunas y baños iniciáticos en el mundo céltico. *Cuadernos de Arqueología de la Universidad de Navarra* 1:177-232.

Almagro-Gorbea, M. and Lorrio, A.

1991. Les Celtes de la Péninsule Ibérique au IIIème siècle av. J.-C. *Actes du IX Congrès International d'Études Celtiques (Paris 1991), Première Partie: Les Celtes au III siècle avant J.-C.. Études Celtiques XXVIII*: 33-46.

Almagro-Gorbea, M. and Torres, M.

1999. *Las fíbulas de jinete y de caballito. Aproximación a las élites ecuestres y su expansión en la Hispania Céltica*. Zaragoza: Institución Fernando el Católico.

Álvarez-Sanchís, J.R.

1994. Zoomorphic Iron Age sculpture in western Iberia: symbols of social and cultural identity? *Proceedings of the Prehistoric Society* 60: 403-416.

1999. *Los Vettones*. Bibliotheca Archaeologica Hispana 1. Madrid: Real Academia de la Historia.

2000. The Iron Age in Western Spain (800 BC- AD 50): an overview. *Oxford Journal of Archaeology* 19(1): 65-89.

2003. *Los Señores del Ganado. Arqueología de los pueblos prerromanos en el occidente de Iberia*. Madrid: Akal.

Álvarez-Sanchís, J.R. and Ruiz Zapatero, G.

1999. Paisajes de la Edad del Hierro: Pastos, ganado y esculturas en el valle de Amblés (Avila). In R. Balbín and P. Bueno (eds), *II Congreso de Arqueología Peninsular*, pp. 313-323. Zamora: Fundación Rei Afonso Henriques.

2001. Cementerios y asentamientos: bases para una demografía arqueológica de la Meseta en la

- Edad del Hierro. In L. Berrocal-Rangel and Ph. Gardes (eds), *Entre Celtas e Iberos. Las poblaciones protohistóricas de las Galias e Hispania*, pp. 61-75. Madrid: Bibliotheca Archaeologica Hispana 8.
2002. Vettones, etnicidad y cultura material. In M. Molinos and A. Zifferero (eds), *Primi Popoli d'Europa. Proposte e riflessioni sulle origini della civiltà nell'Europa mediterranea*, pp. 181-199. Firenze: Edizioni All'Insegna del Giglio.
- Arnold, B.
1999. 'Drinking the Feast': alcohol and the legitimation of power in Celtic Europe. *Cambridge Archaeological Journal* 9 (1): 71-93.
- Balter, M.
1995. Masters and slaves in an Iron Age Cave? *Science* 268: 1132-1133.
- Berrocal-Rangel, L.
1992. *Los pueblos célticos del Suroeste de la Península Ibérica*. Madrid: Complutum Extra 2.
- Binchy, D.A.
1958. The fair of Taltiu and the feast of Tara. *Eriu* 18:113-138.
- Blázquez, C.
1995. Sobre las cecas celtibéricas de Tamusia y Sekaisa y su relación con Extremadura. *Archivo Español de Arqueología* 68: 243-258.
- Büchschütz, O.
1988. Oppidum. In A. Leroi-Gourhan (ed.), *Dictionnaire de la Préhistoire*, p. 125. Paris: Presses Universitaires de France.
- Burillo, F.
1998. *Los celtíberos: Etnias y estados*. Barcelona: Crítica.
- Cabré, J.
1930. *Excavaciones en Las Cogotas. Cardelosa (Avila). I. El Castro*. Madrid: Memorias de la Junta Superior de Excavaciones y Antigüedades 110.
1932. *Excavaciones en Las Cogotas. Cardeñosa (Avila). II. La Necrópolis*. Madrid: Memorias de la Junta Superior de Excavaciones y Antigüedades 120.
- Cabré, J., Cabré, M.E. and Molinero, A.
1950. *El Castro y la Necrópolis del Hierro Céltico de Chamartín de La Sierra (Avila)*. Madrid: Acta Arqueológica Hispánica V.
- Castro, P.V.
1986. Organización espacial y jerarquización social en la necrópolis de Las Cogotas (Avila). *Arqueología Espacial* 9: 127-137.
- Collis, J.

1984. *Oppida: Earliest Towns North of the Alps*. Sheffield: Department of Prehistory and Archaeology, University of Sheffield.
1995. The first towns. In M.J. Green (ed.), *The Celtic World*, pp. 159-175. London and New York: Routledge.

Cunliffe, B.W.

1994. After Hillforts. *Oxford Journal of Archaeology* 13 (1): 71-84.
1997. *The Ancient Celts*. Oxford: Oxford University Press.
1998. The impact of Rome on Barbarian Society, 140 BC-AD 300. In B. Cunliffe (ed.), *Prehistoric Europe. An Illustrated History*, pp. 411-446. Oxford: Oxford University Press.

Delibes, G. and Esparza, A.

1989. Los tesoros prerromanos de la Meseta Norte y la orfebrería celtibérica. In J. A. García Castro (ed.), *El Oro en la España Prerromana*, pp. 108-129. Madrid: Número monográfico de Revista de Arqueología.

Delibes, G., Esparza, A., Martín Valls, R. and Sanz, C.

1993. Tesoros celtibéricos de Padilla de Duero. In F. Romero, C. Sanz and Z. Escudero (eds), *Arqueología vaccea. Estudios sobre el mundo prerromano en la cuenca media del Duero*, pp. 397-470. Valladolid: Junta de Castilla y León.

Edmondson, J.C.

1990. Romanization and urban development in Lusitania. In T. Blagg and M. Millett (eds), *The Early Roman Empire in the West*, pp. 151-178. Oxford: Oxbow Books.

Esparza, A.

1999. Economía de la Meseta prerromana. *Studia Historica-Historia Antigua* 17: 87-123.

Esparza, A.

2003. Castros con piedras hincadas del oeste de la Meseta y sus aledaños. In N. Alonso, E. Junyent, A. Lafuente and J.B. López (eds), *Chevaux de frise i fortificació en la primera edat del ferro europea*, pp. 155-178. Lleida: Edicions de la Universitat Lleida.

Esteban Ortega, J., Sánchez Abal, J.L. and Fernández, J.M.

1988. *La necrópolis del castro del Castillejo de la Orden, Alcántara (Cáceres)*. Cáceres: Consejería de Educación y Cultura.

Fernández Gómez, F.

1986. *Excavaciones Arqueológicas en el Raso de Candeleda (I-II)*. Ávila: Institución Gran Duque de Alba.
1995. La Edad del Hierro. In M. Mariné (ed.), *Historia de Avila I. Prehistoria e Historia Antigua*, pp. 105-269. Ávila: Institución Gran Duque de Alba.

Fernández Gómez, F.

1997. *La Necrópolis de la Edad del Hierro de 'El Raso' (Candeleda. Avila). 'Las Guijas, B.'*, Memorias 4. Zamora: Arqueología en Castilla y León.

Gebhard, R.

1991. *Die Fibeln aus dem Oppidum von Manching*. Stuttgart: Franz Steiner.

Hernández, F. and Galán, E.

1996. *La necrópolis de El Mercadillo (Botija, Cáceres)*. Extremadura Arqueológica VI. Badajoz: Consejería de Cultura y Patrimonio.

Hoz, J. de

1993. Testimonios lingüísticos relativos al problema céltico en la península ibérica. In M. Almagro-Gorbea and G. Ruiz Zapatero (eds), *Los celtas: Hispania y Europa*, pp. 357-407. Madrid: Actas.

Kurtz, W.

1987. *La necrópolis de Las Cogotas. Volumen I: Ajuares. Revisión de los materiales de la necrópolis de la Segunda Edad del Hierro en la Cuenca del Duero (España)*. Oxford: BAR International Series 344.

Lorrio, A.

1994. La evolución de la panoplia celtibérica. *Madrider Mitteilungen* 35: 212-257.

1997. *Los Celtíberos*. Complutum Extra 7. Alicante: Universidad de Alicante - Universidad Complutense de Madrid.

Martín Bravo, A.M.

1999. *Los orígenes de Lusitania. El I milenio a.C. en la Alta Extremadura*. Bibliotheca Archaeologica Hispana 2. Madrid: Real Academia de la Historia.

Martín Valls, R.

1974. Variedades tipológicas en las esculturas zoomorfas de la Meseta. *Studia Archaeologica* 32: 69-92.

1986-87. La segunda Edad del Hierro: consideraciones sobre su periodización. *Zephyrus* XXXIX-XL: 59-86.

1999. La Edad del Hierro. In Martín, J.L. (ed.), *Historia de Salamanca. I. Prehistoria y Edad Antigua* (2nd ed.), pp. 123-217. Salamanca: Centro de Estudios Salmantinos.

Martin Valls, R., Benet, N. and Macarro, C.

1991. Arqueología de Salamanca. In M. Santonja (ed.), *Del Paleolítico a la Historia*, pp. 137-163. Salamanca: Junta de Castilla y León, Consejería de Cultura y Bienestar Social.

Martín Valls, R. and Esparza, A.

1992. Génesis y evolución de la Cultura Celtibérica. In M. Almagro-Gorbea and G. Ruiz Zapatero (eds), *Paleoetnología de la Península Ibérica*, pp. 259-279. Madrid: Editorial Complutense.

Martín Valls, R. and Pérez Herrero, E.

1976. Las esculturas zoomorfas de Martiherrero (Avila). *Boletín del Seminario de Arte y Arqueología* XLII: 67-88.

Peralta, E.

2000. *Los Cántabros antes de Roma*. Bibliotheca Archaeologica Hispana 5. Madrid: Real Academia de la Historia.

Raftery, B.

1994. *Pagan Celtic Ireland*. London: Thames and Hudson.

Ríos González, S.

2000. Consideraciones funcionales y tipológicas en torno a los baños castreños del NO. de la Península Ibérica. *Gallaecia* 19: 93-124.

Rodríguez Colmenero, A.

1999. *O Santuário Rupestre Galaico-Romano de Panóias (Vila Real, Portugal)*. Vila Real: Deorum Témenh (I).

Roldán Hervás, J.M.

1968-69. Fuentes antiguas para el estudio de los Vettones. *Zephyrus* XIX-XX: 73-106.

Ruiz-Gálvez, M.

1991. Songs of a Wayfaring Lad: Late Bronze Age Atlantic exchange and the building of the regional identity in the west Iberian Peninsula. *Oxford Journal of Archaeology* 10 (3): 277-306.

1998. Settlement pattern and socio-economic changes in the Bronze Age/Iron Age transition of the Spanish Meseta and Southwest. In B. Hänsel (ed.), *Mensch und Umwelt in der Bronzezeit Europas*, pp. 441-448. Kiel: Oetker-Voges Verlag.

Ruiz Zapatero, G.

1999. Los Celtíberos. Poblamiento y formas de vida. *Revista de Soria. Homenaje a Jose Luis Argente*, pp. 99-112. Soria: Diputación Provincial.

2003. Las fortificaciones de la Primera Edad del Hierro en la Europa templada. In N. Alonso, E. Junyent, A. Lafuente and J.B. López (eds), *Chevaux de frise i fortificació en la primera edat del ferro europea*, pp. 13-34. Lleida: Edicions de la Universitat Lleida.

Ruiz Zapatero, G. and Álvarez-Sanchís, J.R.

1995. Las Cogotas: Oppida and the roots of urbanism in the Spanish Meseta. In B. Cunliffe and S.J. Keay (eds), *Social complexity and the Development of Towns in Iberia: from the Copper Age to the second century AD*, pp. 209-236. Oxford: Oxford University Press.

1999. Ulaca, la 'Pompeya' vettona. *Revista de Arqueología* 216: 36-47.

Ruiz Zapatero, G. and Lorrio, A.

1995. La muerte en el norte peninsular durante el primer milenio a.C.. In R. Fábregas, F. Pérez and C. Fernández (eds), *Arqueología da Morte na Península Ibérica desde as Orixes ata o Medioevo*, pp. 223-248. Serie Cursos e Congresos 3. Xinzo de Limia: Biblioteca Arqueohistórica Limia.

1999. Las raíces prehistóricas del mundo celtibérico. In J.A. Arenas and M.V. Palacios (eds), *El origen del mundo celtibérico*, pp. 21-36. Molina de Aragón: Ilmo. Ayuntamiento.

Sacristán, J.D., San Miguel, L.C., Barrio, J. and Celis, J.

1995. El poblamiento de época celtibérica en la cuenca media del Duero. In F. Burillo (ed.), *III Simposio sobre los celtíberos: Poblamiento Celtibérico*, pp. 337-367. Zaragoza: Institución Fernando el Católico.

Salinas, M.

1992-93. El poblamiento rural antiguo de la provincia de Salamanca: Modelos e implicaciones históricas. In J.G. Gorges and M. Salinas (eds), *El medio rural en Lusitania Romana. Formas de hábitat y ocupación del suelo*, pp. 177-188. Historia Antigua X-XI. Salamanca: Studia Historica.
2001. *Los vettones. Indigenismo y romanización en el occidente de la Meseta*. Salamanca: Ediciones Universidad de Salamanca.

Sánchez Moreno, E.

2000. *Vetones: historia y arqueología de un pueblo prerromano*. Madrid: Ediciones de la Universidad Autónoma de Madrid.

2001. Cross-cultural links in ancient Iberia: socio-economic anatomy of hospitality. *Oxford Journal of Archaeology* 20 (4), 391-414.

Sanz, C.

1998. *Los Vacceos: cultura y ritos funerarios de un pueblo prerromano del valle medio del Duero. La necrópolis de Las Ruedas. Padilla de Duero (Valladolid)*. Memorias 6. Salamanca: Arqueología en Castilla y León.

Sanz, C. and Velasco, J. (eds)

2003. *Pintia. Un oppidum en los confines orientales de la región vaccea*. Valladolid: Universidad de Valladolid.

Silva, A.C.F. da

1986. *A Cultura Castreja no Noroeste de Portugal*. Paços de Ferreira: Museu Arqueológico da Citânia de Sanfins.

Wells, P.S.

1999. *The Barbarians Speak: How the Conquered Peoples Shaped Roman Europe*. Princeton: Princeton University Press.

2001. *Beyond Celts, Germans and Scythians: Archaeology and Identity in Iron Age Europe*. London: Duckworth.

2002. The Iron Age. In S. Milisauskas (ed.), *European Prehistory: A Survey*, pp. 335-384. New York – London: Kluwer Academic/Plenum Publishers.

Woolf, G.

1993. Rethinking the *oppida*. *Oxford Journal of Archaeology* 12 (2): 223-234.