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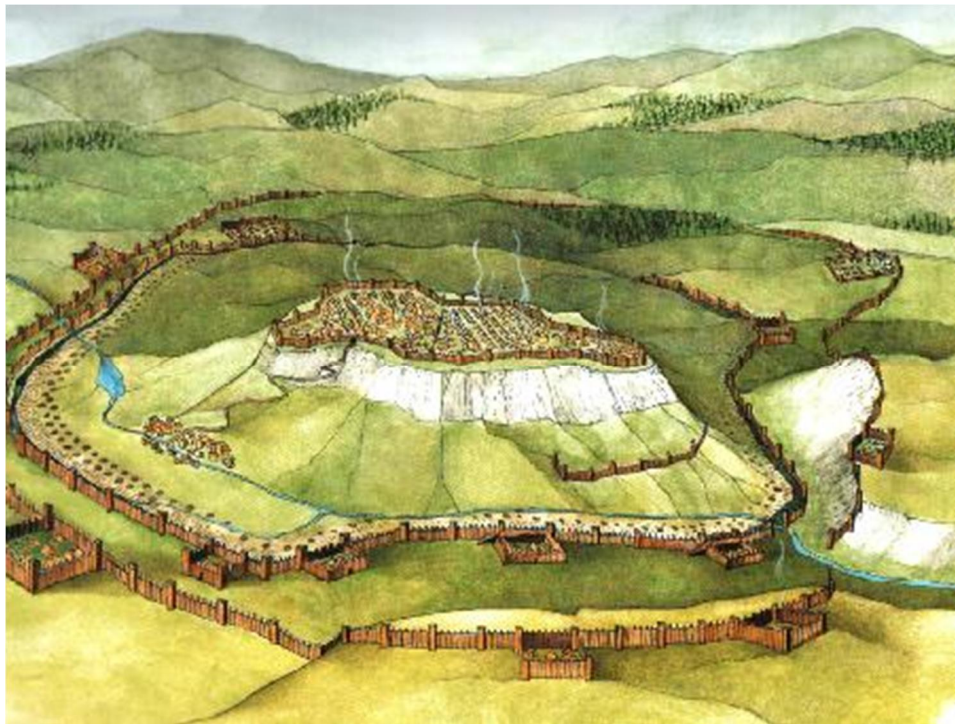
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The *Oppida* of Western France

an archaeological and proto-historical approach

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Abstract

Oppida are mostly commonly defined as large (measuring c. 15ha or more) hillfort settlements dating to the late La Tène which can be found across temperate Europe. They are often discussed as a single, relatively homogenous site-type, though more recent research has recognised greater variation between *oppida* at the regional and even local level. *Oppida* have been described as central places, as urban or proto-urban settlements, and as indicators of state formation. This thesis will examine the archaeological evidence from two regions of western France (Brittany and Aquitaine) during the late La Tène in order to assess how well the large enclosed sites in these areas fit with our definitions of *oppida*.

The name *oppidum* itself is a Latin word meaning 'town' and was used throughout ancient texts such as Julius Caesar's *De Bello Gallico* to describe the settlements that he encountered during his military campaigns in Gaul. These texts have inspired generations of archaeologists to search for the physical reality behind the historical documents. As such, this thesis also investigates the Greek and Roman sources in order to determine what settlement descriptors such as *oppidum*, *vicus*, and *aedificium* would have meant to the authors and audiences of the time and how that information provides a helpful context for archaeological investigation.

This cumulated evidence is then gathered together in order to explore the role and significance of the *oppida* of western France within their contemporary social structures.

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1. Introduction

1.1 What are the *oppida*?

The Latin word *oppidum* (plural: *oppida*) is translated into English most simply as 'town'. Roman writers used the word *oppidum* to refer to a variety of settlements throughout the Roman world and beyond (see below, chapter 2). It is Caesar, however, who most influenced the way that archaeologists use the term *oppidum* today. By designating a number of indigenous settlements in modern-day Europe north of the Alps as *oppida* in his *De Bello Gallico* (*The Gallic Wars*), he inspired early archaeologists and many successive generations to search for these sites on the ground.

1.1.1 Archaeological characteristics of the *oppida*

The archaeological definition of *oppida* has developed over the course of the last 150 years. Napoleon III was the first to explicitly attempt to discover the *oppida* from the texts on the ground through archaeological excavations, which he financed at three pivotal sites from the Gallic Wars: Bibracte, Alesia and Gergovia (Napoleon III 1865, 1866; Goudineau & Peyre 1993: 5). Joseph Déchelette, who excavated Bibracte beginning in 1897 after his uncle Jacques Gabriel Bulliot retired, went on to compare the finds at Bibracte to those from Manching (Germany), Stradonice (Czech Republic) and Velem-Szent-Vid (Hungary) (fig 1.1) and created the idea of a '*civilisation des oppida*' stretching across Europe, implying that these sites shared other characteristics and functioned as part of a wider Celtic identity (Déchelette 1914: 969–73). Though Déchelette didn't create a specific list of attributes that *oppida* shared, these are implied in his writing (see Guillaumet *et al* 1998: 4–5); he contrasts the small workshops of Côte Chaudron to the large houses of Parc aux Chevaux (Déchelette 1914: 953) at Bibracte to indicate social differentiation, mentions that the *oppida* worked both as

fortified villages and as industrial centres (Déchelette 1914: 958) and discusses the 'urban life' (Déchelette 1914: 942, 947). Dehn (1962) built upon this work when he created his own set of characteristics for the *oppida* (based primarily on German examples), including size, location, ramparts, gates, and dating. Successive authors have followed Déchelette and Dehn in identifying commonalities between *oppida* and listing characteristics of ideal *oppida* by which archaeological sites can be measured. However, there is no single widely accepted set of criteria for the *oppida*. I have summarised the most commonly used criteria, as well as various researchers' opinions on them, below.

Size, generally expressed as a minimum threshold, is one of the most common criteria given to identify an *oppidum*. There is some variation in the numbers given, however, and no clear consensus between researchers. Reinecke (1930) saw an explicit parallel between the major Bavarian sites of Manching and Kelheim and classical Mediterranean cities, and that similarity was based largely on size. He felt there was a substantial difference between the major sites, measuring hundreds of hectares, and the smaller sites of less than 20ha. Dehn (1962) suggested 30ha as an appropriate minimum size for *oppida*, while Collis (1984a: 8) has given 20–25ha as the 'rough dividing point between hill-fort and oppida, though there are exceptions' (he offers Oberleiserberg in Austria at just 6.5ha as an exceptional example, given that it was 'obviously industrialised in the Late La Tène'). Both Fichtl (2000: 16) and Waldhauser (1984: 266) propose a 15ha lower size limit, while Duval (1984: 280) goes as low as 10ha. In contrast, Guillaumet (1984: 278) suggests that the minimum size for inclusion as an *oppidum* should be 50ha.

Even with a lower limit for the size at which we consider a hillfort to become a potential *oppidum*, there is a huge variation in the size of *oppida* across Europe. Heidengraben bei Grabenstetten (Germany) is generally considered to be the largest *oppidum* at 1,662ha – more than 10 times larger than Mont Beuvray at 135ha (fig 1.2). Buchsenschutz (2000b: 62) points out that the larger *oppida* are 'gigantic' when compared with Roman and even medieval towns.

Enclosure is possibly the most agreed-upon criteria for inclusion as an *oppida* (though see also section 1.5 for a consideration of unenclosed *oppida*). Collis (2000: 229) points out that all of the *oppida* mentioned by Caesar apparently had some form of defences, and notes that the linguistic origin of the word itself implies a barrier (Collis 1984a: 5). Dehn (1962) mentions walls in his criteria for *oppida*, as does Waldhauser (1984). Ramparts are considered to be a critical component by Collis (1984a: 6), who states ‘any definition we employ must include the defensive element’, and Wells (1995: 88) refers to *oppida* as ‘walled settlements’ and goes on to state that ‘the great enclosing walls’ were one of the features that differentiate *oppida* from other settlements of the period (Wells 1995: 91). Fichtl (2000: 68–71) considered ramparts to be an essential component to the *oppida* as well. *Oppida* walls can generally be divided into several different types based on their internal construction (fig 1.3), with construction based on vertical posts more common in the east and constructed based on horizontal beams more common in the west (Collis 1984a: 6; Fichtl 2000: 43).

Not every researcher agrees that enclosure should be a necessary condition for *oppida*. Woolf (1993: 232) points out that fortification was only one point in the life-cycle for many settlements, and that there is little functional difference between the *oppida* and open settlements like Aulnat (Puy-de-Dôme) (Woolf 1993: 228). Kaenel (2006: 31–32) makes the same argument for Berching-Pollanten (Bavaria) and Acy-Romance (Ardennes), two open settlements that display many of the same features of a typical oppidum, including evidence for artisanal production, trade and internal spatial organisation. However, as we will see below (see sections 1.4.4 and 1.5) there are often temporal and spatial elements to the distinction between open and enclosed Iron Age settlements as well; most open settlements were located on lower lying agricultural land compared with the upland *oppida*, and the open settlements flourished earlier than the enclosed *oppida* (see also Collis *et al* 2000; Buchsensschutz 2000b, 2004; Salač 2011).

Population density and permanence is somewhat related to size, though one should not assume that all areas of an *oppidum* are settled (Fichtl 2000: 72; fig 1.4) or that all *oppida* supported an equal density of settlement. In other words, larger *oppida* did not necessarily house a larger population than smaller *oppida*, though of course they possess the capacity to do so. However, most archaeologists consider that an *oppidum* should support a permanent, relatively dense population. Audouze & Buchsenschutz (1992: 236) state 'the evidence of settlement inside the [*oppida*] enclosures corresponds with permanent occupation'. Brun (1995b: 124) points out that while the *oppida* are less densely settled than many contemporary Mediterranean settlements, their population is much more dense and more permanent than the populations in earlier forms of settlement in the Iron Age. Woolf (1993: 226), however, notes that there is an absence of firm evidence for the size of populations that inhabited the *oppida*.

However, evidence suggests that not all sites which would otherwise be considered *oppida* based on their size, location and the presence of ramparts housed a dense population, or even a permanent one. Both Wheeler (Wheeler & Richardson 1957: 2) and Wells (1995: 90) point out that sometimes *oppida* like Huelgoat (Finistère), Donnersberg (Rhineland) and Zarten-Tarodunum (south-west Germany) produce only sparse traces of occupation and may be considered temporary refuges rather than permanent settlements.

Internal organisation is an essential feature for *oppida* in that it is linked to our ideas about urbanisation (see section 1.4 below). Collis (1984a: 105-136) has devoted an entire chapter to 'town layout', including both public works (public buildings, public amenities and defences) and private buildings (houses, palisade enclosures and other structures like kilns and cisterns), concluding that *oppida* 'conform to a pattern of layout comparable to that of the classical Mediterranean town' (Collis 1984a: 136). Audouze and Buchsenschutz (1992: 237) considered 'spatial distribution of activities' to be the defining difference between villages and *oppida*. Though admittedly based on the sparse

data available at the time, they see the ideal *oppidum* (based on Mont Beuvray) as having specialised areas for religious activities, communal meetings, craftsmen's areas, a variety of houses including richer dwellings away from the axes of traffic (Audouze & Buchsenschutz 1992: 238; fig 1.5). Fifteen years later, Buchsenschutz (1995: 61) had somewhat revised this position, stating that 'the street network, the planning of sanctuaries, the appearance of districts with specialised activities are suggested more than they are demonstrated by excavations' and noting that evidence for town planning is most obvious in the post-conquest period. Wells (1995: 89) has suggested that many *oppida* follow something like Sjoberg's (1960) idea of a pre-industrial city, giving examples like Manching, Kelheim, Villeneuve-Saint-Germain, Závist, Staré Hradisko for sites with a densely occupied centre and a much less densely occupied periphery.

I have briefly touched on **topography** already, but it is worth considering separately as an important – if not always explicitly stated – criterion for status as an *oppidum*. Upland locations are common, as are walls that follow or take advantage of the local topography, as with contour forts, where the walls follow the contour of a hill to enclose the topmost area, or barred spurs (*eperon barré*), where the walls cut across the neck of a promontory of land to efficiently cut off the surrounding landscape. Rivers can also create natural boundaries for *oppida*, with walls often only delineating the areas that offer the least difficult access. *Oppida* can be found in a variety of locations, but most are defined by their local topography in one form or another (fig 1.6).

Buchsenschutz (Audouze & Buchsenschutz 1992: 235) in particular sees topography as an essential element of the *oppida*: 'the founders of the *oppida* were clearly seeking to re-establish the tradition of fortified upland settlements... It should be recalled at this point that during the two millennia that cover the Bronze and Iron Ages it was the upland defended sites, the hillforts, that represented the acme of construction and symbolised the power of social groups'. The conscious decision to leave the farming lowlands and water routes for less convenient and accessible upland locations indicates

that these places had special meaning for the people who founded the *oppida*, and that an *oppidum's* place in the landscape was an essential component in its creation. Buchsenschutz (2000b: 62) went on to suggest that there may have even been a ritual element to the choice of remarkable locations within the landscape.

Economic activity, mostly defined as evidence for production and trade, is another very commonly mentioned attribute of *oppida* and is often linked to **administrative functions**. Wells (1995:91) in particular focuses on the economic dimension of many *oppida*, stating that most *oppida* have given us evidence for on-site production and even suggesting that manufacturing may have been the primary reason for the founding of some *oppida*, as was the case with Kelheim, which was conveniently located to take advantage of iron age and riverine transport links. Fichtl (2000: 31) posits that *oppida* are the main form of both economic and administrative concentration in the late Iron Age. Buchsenschutz (200b: 62) sees the *oppida* as central to the evolution of the economy by allowing for an intensification of the artisanal and commercial functions which first had appeared in the open settlements of the 2nd century BC. The *oppida* allowed for mass production on a much larger scale than had been possible previously, as seen in the workshops at Bibracte (fig 1.7), and the appearance of coinage, scales and inscriptions on some *oppida* indicates careful administration of economic activity (*ibid*).

Chronology: Fichtl (2000: 31) gives the date of the walls at Závist, known to have been built *c* 175 BC, as the earliest date for *oppida*. (Again, note the importance of enclosure to the definition of *oppida*; Manching was settled as early as La Tène C or even La Tène B but is not commonly considered to be an *oppidum* until its ramparts were constructed in *c* 140 BC.) For French *oppida*, a firmly La Tène D (*c* 130 BC–AD 30) date is commonly accepted (Fichtl 2000: 32; Kaenel 2006: 26; fig 1.8).

1.2 Central Place Theory

Christaller's (1966) central place theory seeks to explain the distribution of settlements across a landscape. In this model, a settlement gains a relative surplus of importance by providing goods and services to the surrounding hinterlands (Christaller 1966: 27). A hierarchy of settlements based on size is implied, in which some central places are more important than others; larger, more important cities form the economic centre of a region in which less important towns and villages exist and are distributed around the cities in a uniform pattern. Each of these towns and villages (sometimes also referred to as auxiliary or secondary central places) is the centre of its own, smaller region.

As Collis (2010: 77) points out, classic central place theory is founded on modern market-based economics. This can be seen in the way that the relative importance of a central place is determined by its central-place functions (or simply central functions), the goods and services provided by a settlement which are used by those outside of the settlement itself (Getis & Getis 1966: 221). These can be classed as 'higher order' and 'lower order' based on the principle that the more rare a good or service is, the more important it is and the further people will travel to access it. This can be expressed spatially as a radius, with the modern examples of universities (a higher order function) attracting students from a very large radius, while grocery stores (a lower order function) attract customers from a relatively limited radius.

One of the principles of this model of central place theory is that the larger settlements are in size, the fewer of them there will be. Thus there will be fewer cities than towns, and fewer towns than villages. Similarly, as settlements grow in size, so too does the distance between them, with villages being relatively close together and cities being spaced further apart. Larger settlements will also offer a wider range of goods and services, and more higher-order services with increased specialisation (Herbert & Thomas 1997: 70).

1.2.1 The marketing principle

Central place theory allowed Christaller to predict how settlement patterns would likely develop (given even distribution of settlements across a flat landscape, equidistant spacing between same-order settlements and hexagonal market areas). He made different predictions based on the K-value of the largest settlements, where K equals the number of settlements within a given settlement's sphere of influence (Getis & Getis 1966: 223). In the *marketing principle*, $K=3$, meaning that the highest order place exerts influence over itself and two lower-order places. Expressed differently, the market area of a highest order place in a $K=3$ model occupies $1/3$ of the market area of each of the 6 consecutive neighbouring lower-order places, so that $K= 1 + (6 \times 1/3) = 3$. This can be more easily visualised in a diagram (fig 1.9) showing the relative market areas of major and minor centres within the same area.

1.2.1 Solar vs dendritic central places

Johnson (1970) noted that developing countries generally have a much higher ratio of villages to towns and cities when compared to developed countries. Smith (1976) went on to build upon this work to develop several alternative central place frameworks. To Smith, Christaller's model could only apply to fully commercialized countries; for less developed societies, where exchange is generally controlled, Smith devised two alternatives: *solar* and *dendritic* central place theory. Solar central places are characterised by exchange systems which are controlled by elites who are locally resident in major settlements. Low-order settlements are focussed around the major settlement like a sun (fig 1.10). In contrast, dendritic systems are depicted as tree branches, and according to Smith these generally represent external control by an ethnically distinct elite,

1.2.2 Oppida as central places

The first question to ask of any society is what evidence is there for centralisations of any sort – concentrations of wealth, population, industry, trade, ritual, ceremonial and cultural activity, anything that can be termed central-place activities (Collis 1984b: 20).

The concept of central places and urbanism have been closely linked, and a number of archaeologists have discussed whether the *oppida* qualify as central places. Collis (1984b: 21) identifies the *oppida* as part of a solar central place system. Solar central places are, generally speaking, major administrative centres which have a monopoly over markets, trade and sometimes industrial production for their surrounding area.

Buchsenschutz (1995: 61) listed a number of traits commonly found in *oppida* which demonstrate their status as central places as well as their urban nature. These include:

1. Continuous fortifications and monumental gates which define and separate the settlement from the surrounding countryside. Buchsenschutz and Ralston (1987) have further suggested that tolls were charged at these monumental gates and that the inhabitants were controlled by laws and by the presence of the elite (Buchsenschutz and Ralston 2012).
2. An enlargement of habitation area compared with previous periods.
3. A move from the lowlands to hilltops and away from trade networks, where Middle La Tène settlements had been located. This indicates a return to earlier traditions, possibly related to ritual spaces, in order to legitimate the introduction of new things in these places.
4. Spatial organisation, including things like a street network, separate sanctuaries or ritual spaces, discrete districts for specialized craftworking and industrial activities (as at Manching, Bibracte and Moulay, among others).

Brun (1995a: 18) looked at the *oppida* as 'the seat of political and economic power', a central settlement explicitly controlling its surrounding territory. He went on to further explore themes of settlement centralisation, linking *oppida* to the development of a state system of organisation (Brun 1995b). Similarly, Fichtl (2000) has seen the *oppida* as playing a central role in the late Iron Age settlement hierarchy.

Some archaeologists have disagreed that *oppida* acted as central places. Woolf (1993: 228) has suggested that there is simply not enough evidence for *oppida* fulfilling a central place role and that what evidence does exist for central place functions, particularly in terms of producing goods like coins or glass and iron objects, is not restricted to the *oppida* but can also be found on other sites. Haselgrove (1995: 84) cautioned against viewing the *oppida* as the apex of a developing settlement hierarchy, instead favouring Collis' (1984a) crisis model, which would suggest that the *oppida* were not permanent central places. In looking at the *oppida* of Bohemia and Moravia, Cumberpatch (1995: 83–4) found that *oppida* did not represent a new economic organisation or the centralisation of economic activity, and that *oppida* essentially contained no more central place functions than the smaller open industrial villages.

1.3 Hierarchy and heterarchy

Some archaeologists have rejected the idea that purely hierarchical models are useful for interpreting the Iron Age. Carol Crumley (1974; 1976; 1995) has used the idea of heterarchy, first coined by W S McCulloch (1945) to describe the organisation of cognitive structures within the human brain, to Iron Age archaeology as a way to critique studies which use central place theory models to indicate state formation within societies. Crumley (1976: 61) rejected the idea that a link exists between social and spatial hierarchies. While hierarchy as a concept has often been used synonymously with the idea of order, McCulloch's heterarchy explained how systems and pathways in the brain could be organised and orderly without relying on hierarchical patterns. In archaeology, heterarchy can be defined as the relationship between elements of a system when they are either unranked, or when they possess the potential to be ranked in a number of different ways (Crumley 1995: 3).

In a heterarchical model, for example, three cities could be the same size but all derive their importance from different elements: a military base, a manufacturing centre, or an elite university. The relative importance of these elements within society may vary depending on the context, as well as on changing values and re-ranking of priorities. It is important to remember that the idea of heterarchy does not indicate a particular type of social organization (i.e., it is not synonymous with egalitarian societies) but rather it conceived as a type of relationship that can be found to some degree in all societies regardless of inequality. As Brumfiel (1995: 128) states, 'we should probably not use heterarchy to replace the tribes-chiefdoms-states terminology with which we are familiar, instead we should use heterarchy to look at these constructions differently'. In complex societies, the hierarchy-heterarchy relationship allows both temporal and spatial flexibility (Crumley 1995: 4).

Expanding further on this work, Hill (2006) states that heterarchical models are more useful for our understanding of the Iron Age than a traditional hierarchical model. He argues against a society ruled by an elite (Hill 2006: 169). Contrary to the common depiction of Iron Age society as warrior aristocracies or chiefdoms based on redistribution, Hill suggests a more 'top-heavy' alternative with a larger proportion of society occupying the 'top' social strata (Hill 2006: 172). These contrasting models can be depicted as triangles, with the traditional hierarchical society visualised as a triangle and his more heterarchical societies shown as various types of flatted triangles (fig 1.3). Hill makes the point that many different types of society, ranging from fairly centralized systems to '*acephalus*' (headless) societies on the other, likely existed at different times and places during the Iron Age (Hill 2006: 172).

1.4 *Oppida* and urbanisation

The questions "what is a town?" and "what differentiates a town from other settlements?" have been explored by many historians, sociologists and archaeologists.

Often they have attempted to answer these questions by laying out a set of criteria that allow a settlement to be defined as urban. Here I examine the three theories of early urbanisation which have (arguably) most influenced archaeologists over the years.

1.4.1 Max Weber and The City

Weber's (1958) extensive work on the city was published posthumously in 1921. He starts off with a fairly simplistic depiction of the city: 'the many definitions of the city have only one element in common: namely that the city consists simply of a collection of one or more separate dwellings but is a relatively closed settlement' (Weber 1958: 65). However, he goes on to describe the 'full urban community' (Weber 1958: 80–1), where he gives a more lengthy list of criteria, including:

- 1) presence of fortifications
- 2) presence of markets
- 3) court system and laws
- 4) a sense of citizenship
- 5) some level of political autonomy

1.4.2 Gordon Childe and the Urban Revolution

Childe (1950: 9–16) took a more archaeological approach by looking at some of the well-known early cities (that is, settlements which he had already deemed 'urban') in various areas of the world and trying to determine what distinguished these sites, and the cultures that built them, from earlier settlements and societies. He also came up with an extensive list of criteria:

- 1) Size: 'early cities must have been more extensive and more densely populated than previous settlement, though considerably smaller than many villages today' (Childe 1950: 9)

- 2) Labour diversity: 'full-time specialist craftsmen, transport workers, merchants, officials and priests... of course supported by the surplus produced by the peasants living in the city and in dependent villages' (Childe 1950: 10)
- 3) Taxation: a tithe or tax would be paid to a deity or divine king, who would then concentrate and control the surplus
- 4) Monumental public buildings: these would distinguish cities from villages and also symbolize the concentration of the social surplus
- 5) A ruling class: this would be made up of priests, civil and military leaders and officials, all exempt from manual labour and focused on planning and organisation
- 6) Writing and numerical notation: for record-keeping and administrative purposes
- 7) Arithmetic, geometry and astronomy: for administrative purposes and calendar creation
- 8) Artists and 'naturalistic' art: the social surplus would allow (painters, sculptors, seal-engravers, etc) to flourish
- 9) Long distance trade: raw materials were imported over long distances
- 10) State organisation based on residence rather than kinship: a craftsman would belong to a city politically as well as economically

Childe's criteria deliberately stay away from absolutes. He doesn't mention town planning or fortification, noting that the early Mayan and Egyptian cities had at that point not been excavated in order to determine any similarities, and that settlements which he considered non-urban, like Skara Brae and the pre-Columbian *pueblos*, could be elaborate and well-planned (Childe 1950: 16).

Childe's approach has been criticized by many different archaeologists, most notably in Wheatley's (1972) paper on the concept of urbanism. Wheatley points out that writing, one of Childe's criteria, doesn't exist in the early urbanised societies of the Inca and the Yoruba, while another of his criteria, monumental architecture, is found in many pre-urban and non-urban contexts. He further notes that Childe's criteria do not offer a

functional explanation for the genesis of urbanisation, nor do they provide a historical link to later urban settlements and ideas of urbanity (Wheatley 1972: 612).

Morgan and Coulton (1997) compared Childe's list of characteristics against archaeologically known Greek *poleis* (which are generally accepted to have been urban) to see how the *poleis* compared. Even with criteria as seemingly simple as size and density, Morgan and Coulton (1997: 91–92) found it difficult to determine the absolute size or likely population of a *polis*. Furthermore, density was not common, as many settlements (including Sparta and Corinth) included open land between residential areas. Monumental architecture was rare, with public buildings being difficult to identify and generally lacking before the 6th century BC (Morgan & Coulton 1997: 103–110). Zoning and internal spatial organisation was also generally unknown (Morgan & Coulton 1997: 116–117). Towns could gain and lose the status of *polis* very easily, and overall a list of criteria like Childe's was felt to be too restrictive and too static for a very fluid and changing archaeological reality (Morgan & Coulton 1997: 128–129). Robin Osborne (2005) has also looked at the *polis* towns in relation to Childe's work and came to similar conclusions. In his words, "urban' becomes an accolade that is awarded or withheld, not a problem to be investigated' (Osborne 2005: 7).

It is difficult to apply all of Childe's criteria to the *oppida*, numbers 3 and 7 are both heavily influenced by Childe's research into ancient societies that had written records, for example, and applying those in particular to Iron Age societies where evidence of taxation and arithmetic must be indirect at best would not be helpful. However, several of the other criteria clearly have impacted on the way many archaeologists see pre-Industrial Revolution cities: monumental public buildings, for example, impact the way we see the physical *oppida*, while the idea of a ruling class still influences the way we understand the social order of the people who occupied the *oppida*.

1.4.3 Sjoberg's Preindustrial City

Sjoberg's research into 'preindustrial' cities was largely based on data from social scientists conducting field studies in a number of relatively non-Westernized cities (Sjoberg 1955: 438), mostly in northern Africa and parts of Asia. He felt that these cities were more similar to those of medieval Europe than to contemporary cities in the western world. Sjoberg came to the conclusion that 'preindustrial cities everywhere display strikingly similar social and ecological structures, not necessarily in specific cultural content, but certainly in basic form' (Sjoberg 1960: 5).

The characteristics of Sjoberg's preindustrial society include: limited production based on craftsmanship rather than mass production; a primarily agricultural economy; limited division of labour; limited differentiation between social classes; parochialism and limited communication; largely rural rather than urban communities. Collis (1984a: 2) has noted that the strength of Sjoberg's analysis of the pre-industrial city is that he was able to identify features shared by towns across many cultures, and highlighted the complexity of towns in both social and economic terms. At the same time, Collis (*ibid*) and others (Herbert & Thomas 1997: 24; see also Smith 2010 for a further discussion of ways that Sjoberg's model has been visualised) have criticized Sjoberg's overly rigid spatial model, which included a temple, market and local elite concentrated in the centre of preindustrial cities, with social status decreasing as distance from the centre increases. Sjoberg (1960: 97–9), based on research at Ur and Knossos as well as other ancient sites, suggested that the large, prestigious residences and buildings would cluster in the middle of a preindustrial city, while workers in 'malodorous occupations' – often those in outcaste groups – would be relegated to the outskirts and suburbs. While we can see some evidence of separate production areas in many *oppida*, including Bibracte and Moulay, it is less common to see the kind of simple radial spatial organisation that Sjoberg describes.

1.4.4 *Oppida* and urbanisation

Were the *oppida* urban? These sites have been called the ‘first towns north of the Alps’ by Collis (1984a), a sentiment that has been repeated by Fichtl (2000, 2012) who calls them ‘the first towns of Gaul’. *Oppida* have also been seen as ‘the beginnings of urbanism in barbarian Europe’ (Cunliffe & Rowley 1976).

In section 1.1.1 we have seen many versions of the different characteristics that constitute an *oppidum*. Several of these, like internal layout, population density and economic activity relate to the *oppida*’s status as urban. Internal layout in particular is often used to mean both the spatial separation of activities, with industrial production and workshops located away from the bulk of housing, and the presence of elites, indicated by larger, high-status dwellings on site. Public and ritual spaces are another element which are sometimes mentioned in relation to *oppida*. Much of the criteria for *oppida* as urban spaces is similar or the same as those given for *oppida* as central places. For example, Buchsenschutz’ features listed above in section 1.2.2 that identify *oppida* as central places (especially enlargement of habitation from previous eras and spatial organisation) are part of his view of the *oppida* as an intensification of urban processes during the late La Tène, as we will see below.

Perhaps unsurprisingly, Woolf (1993: 223–4) does not see the *oppida* as urban:

Nor is it useful to describe the oppida as ‘urban’: to some extent this is a matter of definition, but late Iron Age settlement does lack many features normally associated with urbanisation, such as a differentiated settlement hierarchy, large scale intra-site zoning of activities and clear evidence of central place functions on the highest order settlements. Worse, by focusing on urbanisation, researchers have tended to concentrate on the slight similarities with mediaeval towns and classical cities, while neglecting those features of La Tène settlement that are unique and important.

1.4.5 The origins of the *oppida*

Olivier Buchsenschutz's work at Levroux (Buchsenschutz 2000a) and elsewhere has allowed him to create a model for the development of many *oppida*. He has noted (Buchsenschutz 2004) that open (ie, unenclosed) villages covering several hectares multiplied in number from the 2nd century BC onwards. They are often located on axes of communication, like the valleys of the Rhine, the Elbe, the Danube, or in rich areas like Berry. These sites have been argued to have an urban character, with an emphasis on economic activity (Fichtl 2012: 11) and particularly craft production.

The open site at Levroux ('les Arenes') itself was approximately 10ha in size in the middle 2nd century BC. There is good evidence for on-site iron- and bronze-working and butchery, as well as wider commercial activity through the presence of imported goods and coin production (Buchsenschutz 2000a: 147). The settlement flourished until the first half of the 1st century BC when it was abandoned and activity moved to the nearby hilltop ('colline des Tours'), an *oppidum* 23ha in size with a *murus gallicus* rampart.

A similar pattern has been observed at several other sites, including Basel (Switzerland) where the population moved an open settlement (Basel-Gasfabrik) into an *oppidum* (Basel-Münsterhügel) 2km away in the second half of the 1st century BC (Deschler-Erb 2009). Buchsenschutz (2004: 342) sees the movement from lowland open sites with an intense focus on trade and production (like Levroux les Arenes, Aulnat, Basel-Gasfabrik, etc) to the upland enclosed *oppida* as an expression of control by the elites over the artisans, and an attempt to expand trade and production – hence the large size of many *oppida*. In this model, the *oppida* are both the top of a settlement hierarchy and the pinnacle of settlement evolution into true urban spaces (Buchsenschutz 2004: 338).

1.4.6 A wrong step in urbanisation?

Salač (2000) has provided one of the most detailed arguments against the *oppida* as urbanised central places. In direct contrast to Buchsenschutz's model above, he posits that the creation of *oppida* was a failure in settlement evolution, a 'wrong step in urbanisation' (Salač 2000: 152) which led to settlements located in inconvenient places, usually on hilltops which were far from the rich agricultural soils of the lowlands as well as from the rivers, roads and other communication routes across the landscape. According to Salač, these uplands were never settled either before or after the *oppida*, suggesting that their presence was something of a historical anomaly. Rather than being the apex of a settlement hierarchy, Salač sees the *oppida* as the weakest link. Being located away from food production meant that when the population of the *oppida* expanded and long-distance trade declined, there weren't enough food supplies to cope with demand and these isolated settlements had to be abandoned (Salač 2000: 155).

While Salač has based his argument on the evidence from Bohemia, he also points out that many *oppida* across temperate Europe are located in similarly remote or inconvenient areas (including even Bibracte), and it may be possible to apply his model to areas beyond central Europe. However, his model fails to take into account some of the French evidence, where open settlements do not always survive beyond Caesar's invasion and upland *oppida* sometimes do continue to be successful settlements throughout the Roman era and even into the present day. Bensaçon (Barral & Vaxelaire 2003), *oppidum Ubiorum* (present-day Cologne), Orléans (Massat 2008) and present-day Paris (Busson 1998) are all upland *oppida* that have remained occupied in one form or another for more than 2,000 years. In contrast, Aulnat (Puy-de-Dôme), a semi-industrial village in the style of Salač's lowland *oppida*, was abandoned in 30 BC when the population moved to the upland *oppida* of Gergovia, which itself was later abandoned in favour of Augustonemetum (modern-day Clermont-Ferrand) less than a generation later (Collis 1975, 1980). For comparison, the open settlement at Bobigny (Seine-Saint-Denis) grew during the 3rd–2nd centuries BC but then began shrinking

during the La Tène D1 and into the Gallo-Roman period when it was gradually abandoned (Marion *et al* 2007). Clearly there is a great deal of variation in the ways that both upland and lowland *oppida* develop across Europe, so while Salač's model may indeed be useful in examining sites in his area it may not be equally applicable in all regions.

1.4.7 Lowland and upland *oppida*

Salač (2011) has gone on to expand on this theme and develop a new system of classification for *oppida*, dividing them into lowland *oppida* (based on the 'extraordinary' settlements of Němčice nad Hanou, Czech Republic and Roseldorf, Austria) and upland *oppida*.

In this model, lowland *oppida* have the following characteristics (Salač 2011: 62–3):

- they lie in fertile and agriculturally developed lowlands, in an area that is often densely settled
- there is some element of settlement continuity in that they are located on a site that has been previously settled, or which was later settled
- they are located on long-distance routes, often on crossroads or waterways
- they are large in size (dozens of hectares), are densely populated and show signs of a high concentration of manufacture and trade activities
- there is evidence for spatial organisation and 'town-like' development
- distinct fortification is either lacking or in only built at a later period of development
- development is gradual, growing from small settlements to major/large settlements
- they are older than upland *oppida*, with origins going back into the early/mid 3rd century BC, and by the later 3rd century BC they were already important central settlements

Lowland *oppida* are also referred to as NRC, *centrum typu Němčice–Roseldorf*, after the two type sites mentioned above.

By contrast, the upland *oppida* are characterised by the following

- they are built on hilltops on the outskirts of previously settled regions, or completely separate from these regions
- they lack fertile agricultural land
- they are new foundations, located in areas where there were no immediately preceding settlements
- most cannot show extensive, dense settlement
- nor can they show an unusual concentration of economic activity
- they are internally organised, with buildings being structured into discrete areas
- all feature wide open spaces
- all are well-fortified
- construction occurred in a single, well-organised phase
- they were all established after 150 BC

In this classification system, it is the lowland *oppida* rather than the traditional upland *oppida* that are the peak of the urbanisation process. Salač (2011: 62) sees Manching as a lowland *oppida* which had reached its peak before it was fortified during its later phases; after fortification the site stagnated and declined. Other examples of this type include the above-mentioned Němčice nad Hanou and Roseldorf but also Lovosice, a settlement measuring c 40–60ha which began in the 4th century BC and thrived through extensive production and trade until the end of the La Tène. Contrastingly, Salač sees the move from open, lowland agglomerations at sites like Levroux les Arenes and Basel-Gasfabrik to upland *oppida* as a step backwards, a move from successful towns with a variety of activities to sites with a primarily strategic and/or symbolic role (*ibid*).

1.5 Aims and Methods

The aim of this research is to examine what is known about the *oppida* and potential *oppida* sites in Brittany and Aquitaine and to see how well these fit into the traditional definition of *oppida*. To do so, I will look at these sites against the list of criteria set out in section 1.1.1 and examine the evidence to see whether they operated as central places and/or urban centres.

1.5.1 Geography

The original aim of this research was to examine the *oppida* of western France (in particular, Brittany and Aquitaine) compared with those of Central France with the hopes of further comparisons in southern Britain and northern Italy. For several reasons, this scope had to be pulled back and the focus restricted to just Brittany and Aquitaine. These two regions were always intended to be the core of the research, in part because they have been among the least well-known regions in terms of French *oppida*. However, research over the past 15 years has revealed a number of new sites and a wealth of new information about existing sites in these areas, as can be clearly seen by comparing Fichtl's distribution maps from 2000 (fig 1.12a, from Fichtl 2000: 18) and 2012 (fig 1.12b, from Fichtl 2012: 20).

Brittany and Aquitaine were also chosen because they are at the western edge of the '*oppida* civilisation'. Caesar visited western France during the Gallic Wars, but he mentioned only Uxellodunum and the *oppidum Sotatium* (Sos), both in Aquitaine, by name; he refers indirectly to the existence of many *oppida* in Brittany, mostly along the coast, but doesn't mention specific sites or their names. The density of easily recognisable *oppida* in these areas is also somewhat lower than the *oppida* 'heartland' of central France and southern Germany, which led me to question the reasons behind this somewhat different settlement pattern in Brittany and Aquitaine.

1.5.2 Selection of sites

As we saw above in section 1.1.1, there are a number of ways to define and identify *oppida*. Because several of the sites I am considering have not been excavated, and even fewer have been comprehensively excavated, I have chosen to include sites that could potentially be *oppida* based on their morphology, topography and enclosed status as well as dating evidence where possible. In many cases, it is not possible to comment on the internal organisation, economic activity, population density and even chronology of a particular site. In general, I have followed the 15ha lower size limit suggested by Fichtl (2000: 16) and Waldhauser (1984: 266).

In order to make this examination more comprehensive, I have also included some sites which do not fit the traditional criteria for *oppida*. I have looked at some smaller sites which do provide evidence for occupation, economic activity and internal occupation (including Le Yaudet (Côtes-d'Armor) in Brittany and Bordeaux (Gironde) in Aquitaine) for the sake of comparison and to give a better idea of the overall settlement patterns in the later Iron Age. I have also looked at some sites which are situated in the lowlands or which are unenclosed (including Paule (Côtes-d'Armor) in Brittany and Lacoste (Gironde) in Aquitaine) in order to explore the idea of lowland *oppida* and to see whether these sites may fit Salač's (2011) model.

1.5.3 Site visits and excavations

While it was not possible for me to visit all of the sites mentioned in this text, I have visited several sites in central France (Cordes-Chateloi, Hérisson (Allier); Levroux (Indre); Bibracte, Glux-en-Glenne (Nièvre); Bourges (Cher); Gergovia, Clermont-Ferrand (Puy-de-Dôme); Corent, Veyre-Monton (Puy-de-Dôme); Gondole, le Cendre (Puy-de-Dôme)) and Brittany (Le Yaudet (Côtes-d'Armor); Cité de Alet, St Malo (Ille-et-Vilaine); Camp d'Artus, Huelgoat (Finistère)). In addition to visiting these sites, I also participated in excavations at Bourges, Le Yaudet and Cordes-Chateloi and visited excavations at Gondole.

2. *Oppida* in Julius Caesar's *De Bello Gallico*

2.1 Introduction

Of the available Classical texts used in the study of Gallic society and settlement, Caesar's *De Bello Gallico* has certainly been the most influential. His eye-witness accounts, written in a simple narrative style, have an immediacy that is attractive and accessible to modern readers. Caesar's descriptions, though largely focused on the military events of the Gallic War, offer a relatively detailed picture of life and culture in Gaul that is not available elsewhere. At the same time, his depictions can appear frustratingly limited and lacking in objectivity to modern scholars; as Riggsby (1999: 1) notes, 'no other author so clearly part of (or even central to) the Greco-Roman canon in theory has been held in such contempt in practice, especially in the Anglophone world'.

Most modern analysis of Caesar's commentaries falls, broadly speaking, into two categories. The first is essentially literary critique, seeking to understand the political motivations that may have coloured Caesar's accounts, his use of older sources for his ethnographic observations, and the like. The literary critique has been extensively covered elsewhere (cf Stevens 1952, Rambaud 1953, Tierney 1960, Nash 1976, Welch and Powell 1998, Riggsby 2006, amongst others) and we need not return to it in depth here. The other line of investigation centres on the comparison between the literary and archaeological evidence, and the potential utility of ancient sources in helping us to interpret the archaeological record. It is this second which concerns us more, and as such I will briefly summarise some of the major contributions so far.

2.2 The Influence of Caesar's Texts on Archaeological Research

Napoleon III

Napoleon III was the first to combine his study of the ancient texts with large-scale archaeological excavations of selected French sites. As part of a monumental biography of Julius Caesar (1865–6), he commissioned – at an estimated cost of 8 million gold francs from his personal treasury (Griffin 2009: 418) – archaeological investigations at Alesia, Gergovia and Bibracte, three sites that acted as 'privileged place[s] in the French collective imagination' which anchored 'an evolving national mythology of identity' (Dietler 1994: 73). Napoleon's work was instrumental in linking fixed, physical sites in the modern world to the events recorded in Caesar's history. The idea wasn't entirely new; the locations of each of these three sites had been debated decades and even centuries before this time (indeed, there are still occasional arguments made for alternative locations even today) but for the first time, systematic excavations were designed with the explicit purpose of locating conclusively the places mentioned in Caesar's text.

Accordingly, excavations at all three sites focused on those features described most comprehensively in Caesar's texts. The excavations at Alesia and Gergovia concentrated on the Roman fortifications outside the *oppida* themselves. At Bibracte, the intent was to discover the location of Vercingetorix' *concilium* of all Gaul, assembled to unite against the Romans (Dietler 1998: 81). Although Bibracte was not as important to Napoleon's nationalist mythology as either Alesia and Gergovia (Dietler 1994, 1998), excavations at the site ran nearly continuously from 1865 to 1907 under J Gabriel Bulliot (until 1895) and Joseph Déchelette (1895–1907) (Guillaumet 1996) and Bibracte continued to be a focus of major archaeological research throughout the twentieth century and into the twenty-first (see Guillaumet 1996, Romero & Mailler 2007, amongst many others).

Alésia (Reddé and Schnurbein 2001, Reddé 2003) and Gergovia (Guichard *et al* 2000) have attracted broadly similar, if somewhat lower, levels of attention. Napoleon's early investigations into the *oppida* discussed in *De Bello Gallico* have continued to influence archaeologists for more than 150 years.

T Rice Holmes

Rice Holmes' massive tome, *Caesar's Conquest of Gaul* (1899, reprinted 1911), began to put the individual sites mentioned by Caesar (many of which had already been located on the ground) into their wider context through a systematic and wide-ranging investigation of Gallic society as a whole. Roughly a quarter of his 872-page study is a distillation of Caesar's text, although Holmes avoided a strict translation in the fear that 'such a narrative... would inevitably weary a modern reader, and where it wearied, it would also fail to instruct' (Holmes 1911: xii). Instead, the majority of his text focused on 'questions of Gallic and Gallo-Roman history relating to the foregoing narrative' (*ibid.*: xxxiv), including the political and social development of the Gauls (Holmes 1899: vii).

This collection of essays covered various topics, including entries on the sites and tribes mentioned by Caesar and the social, political and religious customs of the Gauls. Nearly 200 pages (328–514) in the 1899 volume and more than 150 pages (344–503) in the 1911 edition are devoted to Section 3, titled 'Purely Geographical', the part most explicitly concerned with marrying the physical reality with Caesar's texts. It includes a gazetteer of the peoples and places mentioned in *De Bello Gallico*, though Holmes intentionally passes over 'places like Avaricum and Lutecia, the sites of which have either never been disputed or have been finally identified with such certainty that they are no longer disputed even by charlatans' (1911:351). He discusses the boundaries of various tribes or states and concludes that these cannot be placed with the certainty behind Napoleon's maps, which he refers to as 'conjectural' (*ibid.*: 346). He also gives us a

general overview of the settlement pattern in Gaul as described by Caesar, a picture that has continued to influence archaeologists in one way or another for a century:

Walled towns or large villages, the strongholds of the various tribes, were conspicuous on numerous hills. The plains were dotted by scores of open hamlets. The houses, built of timber and wickerwork, were large and well-thatched. The fields in summer were yellow with corn. Roads ran from town to town (1899:10).

This fairly simple and orderly settlement pattern is a very familiar one, implying a hierarchy of dominant, hill-top strongholds with a support system of smaller settlements, roads and fields.

Holmes believed strongly, although not completely without reservation, in the veracity and purity of Caesar's narrative. He included an essay on this topic in the first edition of *Caesar's Conquest of Gaul* (1899) which was expanded for the second edition (1911: 211–56). The subject also arose in a rather heated scholarly debate between Holmes and Ferrero (Holmes 1909, 1910; Ferrero 1907, 1910), which examined the motives behind Caesar's actions in the first book of *De Bello Gallico*. Holmes admits that Caesar may have exaggerated the numbers of his enemies, that he was not the 'disinterested historian' he would like to appear, and that he likely have withheld information where he thought it prudent to do so (1911: 254). But Holmes maintains that this does not make Caesar's account wholly without merit, and it does not mean that we cannot accept any of Caesar's words at face value; essentially, he argues, Caesar generally tells the truth because he can afford to (256) and therefore *De Bello Gallico* is a useful and even essential resource for scholars.

Wheeler and Richardson

Wheeler and Richardson devoted a short section in their seminal work *Hill-forts of Northern France* to 'Julius Caesar and Archaeology in Northern Gaul' (1957: 15–22). Like Holmes, they held that Caesar's texts were both reliable and useful for the archaeologist. Wheeler explicitly stated that 'earthworks and episodes in this Report will

in a number of instances be related to the campaigns of Julius Caesar between 57 and 51 BC' (*ibid.* 15). He used Caesar's texts to provide an historical background for the archaeological evidence, to explain the genesis and destruction of the hill-forts that he and Richardson were exploring; in the absence of radiocarbon dating, the events of Caesar's commentaries provided a timescale for the archaeological record.

Wheeler's central argument is that the *oppida* were built as a defensive response to Caesar's activities in Gaul (Wheeler & Richardson 1957: 18–9). He points out that the Veneti, said by Caesar to take refuge in their fleet rather than on land, had relatively small 'cliff-castles' and therefore didn't require the larger and better-defended tribal *oppida* such as Petit Celland and Huelgoat of the Osismi. As an additional argument, he noted that Gallia Narbonensis, which had already become a Roman province in 121 BC, contained no examples of the *murus gallicus*, the common Gallic wall described in *De Bello Gallico*.¹ Those areas which didn't need to defend themselves against Caesar lacked *oppida* and/or *muri gallici*; therefore they were demonstrated to be a direct response to the Roman military threat.

Carole Crumley

Rather than looking specifically at individual sites on the ground, Carole Crumley's 1974 study centred on creating broad anthropological hypotheses, intended to be tested archaeologically, and improving methodological rigour (Crumley 1974: v). Crumley was quick to point out that Celtic social structure was changing rapidly during the first centuries BC and AD, and that many of the apparent discrepancies in the textual evidence were related to the time at which different accounts were written (*ibid.* 4). She agreed (*ibid.* 7) with Chadwick (1966) and Tierney (1960) that Caesar, Strabo and Diodorus all borrowed extensively from Posidonius, and further concurred with Tierney and Rambaud (1953) that Caesar manipulated his information on the Celts to fit his own political ends.

¹ Caesar. *De Bello Gallico*. vii.23.

Crumley looked at settlement evidence primarily as an archaeological indicator of social organisation rather than as an end to itself. She noted that the major contrast between the archaeological and literary evidence was that the ancient sources pointed to only two classes in Celtic society (an aristocracy, responsible for administrative and military functions, and a lower class of plebs), while her examination of the archaeology suggested a more highly stratified society (1974: 75). This hierarchical society is shown in the settlement evidence at *oppida* like as Mont Beuvray, which Crumley suggested provides evidence for a middle class of merchants and artisans (ibid: 70). That this middle class is invisible in Caesar's accounts highlights the danger of relying on his texts to illuminate the archaeology.

Daphne Nash

Nash (1976) wrote a response to Tierney's (1960) article, arguing that Caesar's eight years in Gaul allowed him to reach conclusions about Gallic society based on his own observations rather than Posidonius' ethnography. She follows Thompson in his assertion that 'the explicit assertions of Caesar and Tacitus are credible unless they are self-evidently erroneous (which they rarely are) or unless there is archaeological or other evidence (and there rarely is) with which they cannot be reasonably reconciled' (Thompson 1965: vii in Nash 1976: 121). Nash suggests that any differences between the texts of Caesar and Posidonius are related to the 30 year gap that lay between their accounts, and corroborates the veracity of Caesar's account with the evidence from early Irish texts (ibid: 124).

Her belief in the reliability of Caesar's narrative was essential to her investigation of the settlement and society of Central Gaul. Daphne Nash's archaeological research largely focused on Central Gaul and particularly the *civitates* of the Arverni, Bituriges Cubi, Pictones, and Lemovices (Nash 1978, 1981). Her theory of early state formation in

Central Gaul during the last century BC was based largely on the ancient texts, combined with the late La Tène settlement and numismatic evidence.

Nash did, however, admit to an occasional manipulation of truth in Caesar's observations, as at Gergovia, where she suggests that it is 'not improbable' that he used 'slightly misleading language' (1978 vol 2: 127) when using the word *urbs* to describe the site where Caesar came closest to defeat.

Colin Haselgrove

In his research on complexity in Belgic Gaul, Haselgrove looked at the ancient texts, and Caesar in particular, in a somewhat different manner. He pointed out that while Crumley and Nash read the available texts very differently, they agreed on two points: that there was a more complex socio-political organisation in Gaul than had existed previously, and that the formation period of these emergent states was short and directly linked to Roman political and economic expansion (1987: 108, 1988: 77). He also suggested that their conclusions were based on an over-reliance on the textual evidence and an over-belief in the acceptance of the vocabulary that Caesar used to describe social and political institutions to his audience in Rome (1988: 77).

Haselgrove's own approach was slightly more cautionary. For him, three factors were most relevant in the consideration of ancient texts: interpretation through our current, ethnocentric view of the world; the ethnocentricity of the contemporary observers, and 'a frequent lack of geographical and temporal specificity, or sometimes the converse: generalisation founded on specific observations of economic and social practices drawn from different, perhaps unconnected cultural contexts' (ibid: 77). The examples given for the latter are Caesar and Strabo's descriptions of Gallic socio-political organisation, which were largely based on those of just one *civitas*, the Aedui. Haselgrove rightly points out that these cannot be safely extrapolated to all of Gaul, or even to the entirety

of Central Gaul, as the Aedui were Rome's closest Gallic allies and one of the oldest paramount *civitates* in Gaul (*BG* vi.13, Haselgrove 1988: 77).

2.3 Caesar's Commentaries and Late La Tène Settlement

As we have seen, Caesar's texts have long influenced archaeologists and their interpretations of the archaeological evidence, and many discussions on the usefulness and limitations of these accounts have already been had. I hope to use these past explorations of Caesar's utility on a large scale to inform my investigation of Caesar's texts at a more granular level. In essence, my goal here is to return to the text of *De Bello Gallico* and look at what specific information it provides regarding *oppida* and other late La Tène settlements in the context of how those words would be understood by a contemporary Roman audience. I will then see what, if anything, this specific information can tell us about *oppida* in general and attempt to identify the common characteristics of *oppida* as described by Caesar.

I have chosen this approach for two reasons. The first is a wish to begin a new dialogue regarding methodology in this area, one that may eventually close the gap between our understanding Caesar on an abstract level and our use of his texts at the regional or site level. The second is that very nearly all of Caesar's direct observations regarding settlement come from his personal experience or from the reports of his lieutenants, as opposed to his general ethnographic statements about the nature and culture of the Gauls, which seem to have been highly coloured by earlier accounts. So while the vocabulary Caesar uses may be subject to older linguistic conventions and subtle political manipulation, the details he leaves us are likely to be relatively accurate (particularly given the military context in which his accounts were written) and potentially very useful to archaeologists.

Defence: Natural and Artificial

The most plentiful details of Caesar's descriptions of *oppida* focus on defence, generally by noting either the natural position of an individual *oppidum* or its artificial fortifications (such as walls, towers, gates, and troops). This is not at all surprising, considering that Caesar's main purpose was to relay the events of battles rather than to give a detailed description of Gallic life and settlements.

Caesar observed how landscape was used to create naturally defended settlements; rivers are noted at several sites,² as are cliffs and particularly high hills.³ He also notes the general defensive position enjoyed by many *oppida*.⁴ Comments on the surrounding landscape further relate to defensive strategy in almost every case; marshes are mentioned most often,⁵ followed by forests,⁶ both of which have obvious implications for an attacking army. All other mentions of landscape centre on the fertility and size of surrounding plains,⁷ which correlate to the military considerations – whether burning fields to cut off the enemy food supply or calculating tributes.

Riggsby (2006) points out that these topographic challenges often seem exaggerated, so that areas which are easily accessible to the Gauls, Germans and Britons are difficult or impossible for the Romans to traverse. It is clear throughout the commentaries that “one party is always in an advantageous position, and it is never the Romans” (Riggsby 2006: 26). To an extent, of course, this is due to differences between the military tactics of the Gauls when compared to that of the Romans with their formations and heavy equipment. However, there is also an element of triumph over adversity, of Roman *virtus* defeating both the barbarian threat and the natural world (Erickson 2002: 603).

² Caes. BG. i.38 (Vesontio), vii.15 (Avaricum), vii.55(Noviodunum), vii.65, vii.69 (Alesia). An exception to the idea of rivers as defensive boundaries is shown at Octodurus, where a river flows through the middle of the *vicus* (BG. iii.1).

³ Caes. BG. i.38 (Vesontio), ii.28, vii.36 (Gergovia), vii.42, vii.45, vii.69 (Alesia), viii.40

⁴ Caes. BG. ii.28, iii.21, v.21, vii.15 (Avaricum), vii.36 (Gergovia), vii.55 (Noviodunum), vii.69 (Alesia)

⁵ Caes. BG. v.21, vii.15 (Avaricum), vii.17 (Avaricum), vii.26, vii.57 (Noviodunum)

⁶ Caes. BG. iv.19, v.21, vii.44, viii.35.

⁷ Caes. BG. i.28, ii.9, vii.13.

As for man-made defences, Caesar mentions *muri gallici* specifically only once in his text, when describing the siege at Avaricum,⁸ although he states that ‘nearly all Gallic walls are built to this pattern’. He later discusses a few minor variations in wall construction; Noviodunum, an *oppidum* of the Suessiones, for example, is said to have an exceptionally high wall and very wide ditch.⁹ An *oppidum* of the Aduatuci is described as possessing a *murus duplex*,¹⁰ to which the Aduatuci affixed large boulders and sharpened stakes even as Caesar’s troops arrived.

This concept of change over time within Caesar’s text is another interesting factor of wall construction. He tells of several instances where walls are being built or improved almost at the last minute. The Veneti, for example, began to defend their *oppida* as they realised the seriousness of the Roman threat.¹¹ In the example of the Aduatuci given above, Caesar tells us that at a later date the walls were increased to 12 feet high and 15,000 feet long, with *castella* at close intervals,¹² and that with this development the townspeople stayed locked up in their *oppidum* rather than sending out small parties to skirmish with the Roman troops. At Alesia¹³ troops had built a rough second wall, six feet high, across the eastern side of the *oppida* in order to slow down the Romans. Caesar describes a similar wall at Gergovia,¹⁴ again six feet high and following the contour of the hill, which was built to slow down the Roman attack.

Caesar also notes that some *oppida* are either entirely undefended or not defensive enough. The latter is often given as an impetus for the population of a *civitas* to move into the best-defended *oppidum* within their territory. This occurs at sites like Alesia,¹⁵

⁸ Caes. BG. vii.23.

⁹ Caes. BG. ii.12.

¹⁰ Caes. BG. ii.28, ii.29.

¹¹ Caes. BG. iii.9.

¹² Caes. BG. ii.29.

¹³ Caes. BG. vii.69.

¹⁴ Caes. BG. vii.46.

¹⁵ Caes. BG. vii.71.

Avaricum,¹⁶ and Bratuspantium,¹⁷ as well as in the tribes of the Ubii¹⁸ and the Aduatuci.¹⁹ This shows not only that it was common for one *civitas* to encompass more than one *oppidum* but also that Caesar did not see defence (either in terms of a naturally defensive location or through man-made structures and *muri gallici*) as an essential element of an *oppidum*.

Internal Layout

Avaricum (Bourges) is the only *oppidum* for which Caesar gives specific details of internal layout, telling us that there is a market-place (*forum*) and open spaces (*locis patentioribus*) as well as narrow passages (*angusto exitu*) near the gate.²⁰ Caesar also speaks of the farthest parts of the town (*ultimas oppidi partes*), which could suggest some form of internal division within the settlement; however, it seems more plausible given the limited context that he is speaking only of Gauls escaping to the furthest possible distance within the *oppidum*.²¹

At other sites, no such details are given. Instead, we are told what an *oppidum* can hold in terms of the storage of food or the temporary refuge of people. Corn supplies stored in the *oppida* are mentioned quite often,²² as are horses²³ and cattle.²⁴ Sometimes these supplies are referred to more generally, as at Vesontio, where the town is simply said to have an abundance of the resources needed for warfare.²⁵ Caesar also implies a substantial proportion of what we might think of as 'unused' space; he mentions the

¹⁶ Caes. BG. vii.15.

¹⁷ Caes. BG. ii.13.

¹⁸ Caes. BG. vi.10.

¹⁹ Caes. BG. ii.28.

²⁰ Caes. BG. vii.28

²¹ The passage is best read as a whole : *Hostes re nova perterriti muro turribusque delecti in foro ac locis patentioribus cuneatim constiterunt, hoc animo ut si qua ex parte obviam contra veniretur acie instructa depugnarent. Vbi neminem in aequum locum sese demittere, sed toto undique muro circumfundi viderunt, veriti ne omnino spes fugae tolleretur, abiectis armis ultimas oppidi partes continenti impetu petiverunt, parsque ibi, cum angusto exitu portarum se ipsi premerent, a militibus, pars iam egressa portis ab equitibus est interfecta.*

²² Caes. BG. iii.09, vii.03, vii.11, vii.55, viii.32

²³ Caes. BG. vii.12, vii.55, vii.70.

²⁴ Caes. BG. v.21, vi.10, v.21, vii.71, viii.41.

²⁵ Caes. BG. i.38.

Romans storing their own supplies at Noviodunum where he took all of his hostages, horses, corn supplies, gold, and most of the Roman army's equipment.²⁶ That storage was a common feature in *oppida* can also be seen by the fact that Caesar explicitly points out that the Veneti were said to have had no storage on land, and instead preferred to keep their possessions on ships.²⁷ Here again we see the essential influence of military considerations in the information that Caesar gives us: Caesar shows tendency to define the interior of an *oppidum* by its contents, the available resources and supplies, rather than by the structures and amenities that we see as being essential to the nature of cities.

Additional information regarding the internal layout of *oppida* is given, again indirectly, through population figures. While these are notoriously difficult in ancient texts and are probably not useful in terms of determining a permanent population, we can get a broad idea of the space within an *oppidum* available for the temporary housing of the surrounding population and/or an army. Several *oppida* are listed as accommodating the population of an entire *civitas*²⁸ as well as, on occasion, their property or crops.²⁹ Avaricum is listed as housing 40,000 people,³⁰ of which at least 10,000 were stationed there purely for the defence of the *oppidum*.³¹ At Alesia, the temporary population is twice that (and includes thirty days' short rations as well as cattle and horses), although this figure includes a larger number of Gauls from outside the *civitas* of the Mandubii.³² After the battle at an unnamed *oppidum* of the Aduatuci, 53,000 people were sold into slavery by Caesar (and a further 4,000 men had been killed in the battle).³³ However, while these numbers are large, they seem modest in comparison to the population given for the *civitas* of the Helvetii (263,000), taken from their own records.³⁴ These figures,

²⁶ Caes. BG. vii.55.

²⁷ Caes. BG. iii.12-14.

²⁸ Caes. BG. v.21, vi.04, vii.77

²⁹ Caes. BG. ii.13, ii.28.

³⁰ Caes. BG. vii.28.

³¹ Caes. BG. vii.21.

³² Caes. BG. vii.71.

³³ Caes. BG. ii.31.

³⁴ Caes. BG. i.29.

while probably neither precise nor very accurate, may at least give an idea of the scale of some *oppida*.

Caesar rarely discusses the physical presence of many elements that the modern mind would consider important in a town, such as governmental, administrative or religious institutions, housing, etc. In fact, if we could make one generalisation about the internal layout of *oppida* from Caesar's texts, it would be that they tend to have a fairly substantial amount of available space, which could be used for temporary storage of supplies and livestock or even people (either refugees from the surrounding countryside or hostages). But even this scant information should not be extrapolated too far; it must also be noted that for nearly half of the named *oppida* (Bibrax, Cabillonum, Lutetia, Genava, Lemonum, Metiosedum, Gergovia) we are given no information at all regarding the space inside the walls. In sum, we are left with disappointingly little information about the internal layout of the *oppida*.

Politics and Leadership

Today, we tend to expect our political leaders and governmental and social institutions to be located in towns and cities. It is difficult to tell whether this was also the case for the Gallic *oppida*, as Caesar rarely connects political leadership to a particular *oppidum*. The Aedui, the Ubii, and the Remi, among others, are all said to possess senates,³⁵ but there is no mention of these being held in a particular settlement. A *concilium* (general councils, often of more than one *civitas*, which tend to be held on an ad hoc basis in order to deal with significant events) was conducted at Bibracte, and many people from all quarters were said to have attended.³⁶ Still, there is disappointingly little explicit evidence that regular political structures, like senates, were directly linked to the *oppida*.

³⁵ Caes. BG. ii.5, iv.11, vi.54, vii.55

³⁶ Caes. BG. 7.63.

We are only a little better off when it comes to individual leadership. Caesar also tells us that Bibracte houses a chief magistrate³⁷ in one of the few passages where leadership is specifically linked to a settlement. At Noviodunum, an *oppidum* of the Bituriges, legates (*legati*) came out from the *oppidum* to seek pardon before Caesar could attack.³⁸ After the defeat of many of the *oppida*, hostages are requested; these are often listed as *principes*, or leading men of the *civitas*. Caesar also gives us the names of ten individual kings, but these are never linked physically to specific *oppida*. So Galba, king of the Bellovaci, is supposed to have held 12 *oppida*³⁹ but we aren't told whether he has fixed seat of power.

It would seem logical that the complex political structures and leadership chain of command would be associated with the *oppida*, but we must be careful not to let preconceptions affect interpretations. Political leadership is a particularly difficult aspect of settlement because the historical sources are the only evidence that we have, and it is necessary to ensure that ideas of *oppida* as central places and protourban centres don't lead us towards an inaccurate reading of the text. As is the case with internal layout, we have very little real information regarding politics and leadership in specific settlements.

Other Settlement Types

Although Caesar uses the term *oppida* to refer to Gallic settlements far more often than any other word, a closer look at some of the other settlement descriptors he uses may be useful in understanding the variety of settlements in Gaul and how the *oppida* function within a wider settlement system. Most commonly, Caesar refers to *vici* (villages or hamlets) and *aedificia* (the word denotes 'building' but is often used to mean 'farmstead') along with *oppida* to describe the devastation of scorched-earth campaigns.⁴⁰ It has been suggested (Ralston 1988, Dunham 1996) that this is a formulaic expression,

³⁷ Caes. BG. 7.55.

³⁸ Caes. BG. vii.12.

³⁹ Caes. BG. ii.4.

⁴⁰ Caes. BG. i.5, ii.7, iii.6, iii.27, iv.9, vi.6, vi.43, vii.14, vii.64.

used to emphasize the totality of destruction, and this may be supported by Livy's use of similar vocabulary (*oppida, vici, villae*) in reference to military activities among the Sabines and Etruscans.⁴¹ However, there are a few instances where the terms *vici* and *aedificia* are used independently, and here we may find some insight.

Aedificia are found in a variety of contexts, which suggests a rather flexible use of the word. Most typically, the context suggests a rural farmstead; they are often linked to the corn-supply⁴² or to the burning of lands;⁴³ the Gauls often burn *aedificia* themselves to prevent supplies getting into Roman hands.⁴⁴ However, the word *aedificium* is also sometimes used by Caesar simply to mean 'building,' as there are two mentions of *aedificia* situated within *vici*⁴⁵ or *oppida*.⁴⁶ Caesar also tells us that in Britain, as in Gaul, the *aedificia* are situated close together.⁴⁷ Later he states that the *aedificia* of the Germans, which he again compares to those of the Gauls, are surrounded by trees⁴⁸ and that in some areas the Roman soldiers have to split up to get forage from *aedificia* which are few and far between.⁴⁹ Given that Caesar uses *aedificia* in his formulaic expression where Livy uses *villae*, we may speculate whether Caesar is inferring a barbarian, Gallic equivalent to the *urbanitas* of the Roman republican villa (see below). It would seem, then, that the common translation of *aedificia* as 'farmsteads' is serviceable in most instances, but it should be remembered that this usage may hide a certain degree of variability among these settlements.

The *vici* are a somewhat simpler class of settlements. *Vicus* is only used four times without reference to burning, and each of these instances occur in Books 1-3.⁵⁰ The first

⁴¹ Livy. *Ab Urbe Condita*. ii.62, vi.12, x.11.

⁴² Caes. BG. iv.19, iv.38, vii.14, viii.3, viii.7, viii.10.

⁴³ Caes. BG. ii.7, iii.27, iv.4, iv.38, viii.3, viii.7, viii.10.

⁴⁴ Caes. BG. vii.14, vii.64.

⁴⁵ Caes. BG. iii.6.

⁴⁶ Caes. BG. viii.3.

⁴⁷ Caes. BG. v.12.

⁴⁸ Caes. BG. vi.30. Caesar also uses the word *domicilia* here, giving a definite settlement function.

⁴⁹ Caes. Bg. viii.10.

⁵⁰ Caes. BG. i.11, i.28, iii.1, iii.2.

two mention the Allobroges, who possessed *vici* on both sides of the Rhône, which were burnt down by the Helvetii. The other passages tell us about the Cisalpine *vicus* of Octodurus, where Galba and several Roman legions settled for the winter.⁵¹ The *vicus* was situated in a mountain valley, surrounded by rocky cliffs and divided in two by a river. The Gauls stayed on one side of the river and the Romans camped on the other side. Later, Caesar tells us that Galba burned all the *private aedificia* of the *vicus* after the villagers attempted to attack the Romans in their sleep.⁵²

Caesar also uses the term *sedes*, which translates simply as 'settlement.' In book 1, Ariovistus (the king of the Germans) had already taken over a third of the lands of the Sequani and had asked for an additional third in order to provide *sedes* for 24,000 Harudes. Ariovistus replied to this charge by stating that he crossed over the Rhine at the request of the Gauls and was given *sedes* by them.⁵³ The term is used again later to refer generally to German and Menapii settlements on both sides of the Rhine.⁵⁴ In each instance, *sedes* is employed in the same general manner that we use the word 'settlement' today. It is surprising that Caesar used *sedes* so rarely; he specifically mentions burning *vici* and *aedificia* (and sometimes *oppida*) rather than simply burning all the *sedes* in a *civitas*. This further supports the suggestion that the phrase *oppida vici et aedificia* is a formulaic one.

Caesar also uses the word *castellum* (fort or stronghold) with some frequency, but the majority of these instances refer to Roman forts.⁵⁵ From the remainder it is difficult to get a coherent picture. The Aduatuci are said to have moved from their various *oppida* and *castella* into a single, well-defended *oppidum*,⁵⁶ but in the next passage they begin constructing *castella* along the strengthened and heightened wall of the *oppidum*. More

⁵¹ Caes. BG. iii.1-2.

⁵² Caes. iii.6.

⁵³ Caes. BG. i.44.

⁵⁴ Caes. BG. iv.4.

⁵⁵ Caes. BG. i.8, ii.8, ii.9, ii.32, vii.69, vii.81, vii.87, viii.34, viii.35.

⁵⁶ Caes. BG. ii.29.

castella are listed among the *civitates* of the Nantuates, Verabri, and Seduni in eastern and Alpine Gaul, although no details are given.⁵⁷ However, we do have some limited information regarding one *castellum*, called Aduatuca and situated in the centre of the *civitas* of the Eburones.⁵⁸ Caesar tells us that this *castellum* was built only in the previous year (54 BC) and that the Romans chose to store the heavy baggage of all the legions there, as the walls were sturdy and whole and would not require any additional work on the part of Roman soldiers.

Two more settlement descriptors occur in *De Bello Gallico*, but their use is very limited. Hirtius mentions *municipia* three times in Book VIII, but each of these instances refer to Italian cities and Caesar's activities nearer to Rome.⁵⁹ Caesar uses the word *colonia* once, to relate the former power of the Gauls over the Germans. He states that the Gauls had previously waged war on the Germans offensively, and sent *coloniae* over the Rhine.⁶⁰

Settlement Hierarchy

Caesar's text frequently mentions multiple *oppida* within a single *civitas* and from this we can glean some information about the relative importance of certain sites. Avaricum was noted particularly for being the fairest and most important *oppida* in the land of the Bituriges,⁶¹ and Hirtius later tells us that the *civitas* held many *oppida*.⁶² Caesar believed Avaricum to be so important to the Bituriges that by taking the *oppidum* he would take the whole of the *civitas*.⁶³ As for the Aedui, Bibracte is called the greatest and best-supplied of all Aeduan *oppida*, and the *oppidum* of most supreme influence.⁶⁴ Caesar often points out that the most politically important *oppida* are often also the best-

⁵⁷ Caes. BG. iii.1.

⁵⁸ Caes. BG. vi.33.

⁵⁹ Caes. BG. viii.50, viii.51.

⁶⁰ Caes. BG. vi.24.

⁶¹ Caes. BG. vii.13, vii.15, vii.21.

⁶² Caes. BG. viii.02

⁶³ Caes. BG. vii. 13.

⁶⁴ Caes. BG. i.23, vii.55

defended, and these are the sites that the population moves into during Roman campaigns (as is the case not only with the Aeduans and the Bituriges, but also with the Mandubii⁶⁵ and the Aduatuci⁶⁶).

Caesar can also give us glimpses of larger settlement systems and hierarchies, although the relationship between *oppida*, *vici*, and *aedificia* is never stated explicitly. The Helvetii, for example, were said to possess a dozen *oppida*, 400 *vici*, and an undisclosed number of *privata aedificia*.⁶⁷ *Vici* and *aedificia* were burned near Bibrax, the *oppidum* of the Remi.⁶⁸ The Carnutes abandoned most of their *oppida* and *vici* after their defeat and lived in makeshift *aedificia* within a few *oppida*.⁶⁹ In another passage, the Bituriges are caught by surprise, dispersed among the countryside and tilling their fields, and don't have time to run for their *oppida* because Caesar didn't burn the *aedificia* on his march towards them, which would have warned them of his presence.⁷⁰

From these passages we can see that *aedificia* and *vici* certainly existed in the same landscape as the *oppida*, and all three settlement types seem to be differentiated from each other – in that, for example, a named settlement is never referred to as *vicus* and *oppidum* interchangeably.⁷¹ However, it would be misleading to suggest that this indicates a three-tiered hierarchy of settlements (cf Roymans 1990) based on *oppida*, *vici*, and *aedificia*. No matter how limited the textual information is for the *oppida*, it is even more limited for the *vici* and *aedificia*⁷² and when one takes away the 11 references to burning *vici* and *aedificia* together (where no other information is given about the settlements), we are left with even less.

⁶⁵ Caes. BG. vii.78.

⁶⁶ Caes. BG. ii.28.

⁶⁷ Caes. i.5.

⁶⁸ Caes. ii.7.

⁶⁹ Caes. viii.10.

⁷⁰ Caes. viii.3.

⁷¹ Of course, some settlements are referred to as both *oppidum* and *urbs*, a special case that we will return to below.

⁷² As a crude measure, the word *oppidum* (and variations thereof) occurs 88 times in *De Bello Gallico*, compared with 15 mentions of *vicus* and 20 of *aedificium*.

Regional Considerations and Caesar's Oppida

The very first line of *de Bello Gallico* tells us that all Gaul is divided into three parts: one inhabited by the Belgae, one by the Aquitani, and a third by a people who call themselves Celtae, but are called Galli by the Romans.⁷³ Caesar further tells us that each of these nations is distinct one from another in language, institutions, and laws. There may be a political aspect to this; by repeated reference to a divided Gaul, Caesar was telling the Romans that Gaul was a nation so deeply at odds that unified resistance was unthinkable (Torrigan 1998). On the other hand, Riggsby (2006: 30) suggests that a united Gaul (the opening words, *Gallia omnia*, being translated as “all Gaul” or “Gaul as a whole”) makes conquering the entire area a political necessity, as pacifying only one part within the whole would bring rebellion from other areas.

While Caesar consistently asserts ethnic divisions between these three areas, few details are given as to the physical differences between the regions. The focus is on differences in character rather than changing geographical features and landscape. However, there are some differences in the settlements described by Caesar in various regions. The Veneti, for example, move from one *oppidum* to another, store their belongings on boats rather than in their settlements, and their *oppida* were largely undefended until Caesar began to threaten their security.⁷⁴ This is quite a different picture from the descriptions we have of several other *oppida*, mostly located in modern-day central France, with their substantial natural and/or artificial fortifications and generous amounts of space available for storage and large numbers of people.

Somewhat more subtly, Caesar's vocabulary of settlement seems to change in certain regions. Certainly among the tribes of the Alps (the Nantuates, Veragri, and Seduni), there are numerous *castella* and at least one *vicus*, Octodurus, but no mention of

⁷³ i.i *Gallia est omnis divisa in partes tres, quarum unam incolunt belgae, aliam aquitani, tertiam qui ipsorum lingua Celtae, nostra Galli appellantur.*

⁷⁴ Caes. BG. iii.11-17.

oppida.⁷⁵ Additionally, the description given for Octodurus implies a fairly large settlement: Galba and most of his legion were posted in one half of the *vicus* for the winter, and there is ample storage space for corn and supplies. The *vicus* is not defended (Galba's legion begin building a rampart and ditch when they arrive) and is situated in a valley, surrounded by mountains. Does Caesar use the word *vicus* and not *oppidum* because of these last two facts? Why does he not ignore these differences, as he ignores similar differences in Armorica with the Veneti, and call Octodurus an *oppidum*?

We could speculate that there may be a political motivation behind this vocabulary; in the case of Octodurus, Caesar is attempting to create a safe passageway for goods and people through the Alps and may have been expedient for him to describe the subjugation of that area as defeating a mere *vicus* and a few *castella*. Contrastingly, the conquest of the Veneti is central to his conquest of Armorica (and therefore all Gaul) and there is no need to de-emphasize the scale of this endeavour; if anything, the opposite would be true. Or perhaps instead this usage is influenced by Roman stereotypes of mountain-dwelling peoples as being particularly backwards and barbaric and therefore further from the Roman ideal of *urbanitas* (Dench 1995: 111; see below). However, given the limited amount of information we have at our disposal, it is difficult to give a conclusive answer.

Regional analysis of Caesar's descriptions is made more difficult by the geographic distribution not only of the sites themselves but also in the quantity of information offered about them. More than half of the instances of the word *oppidum* refer to locations in Central France. These are also the sites for which we have the most detailed information: Avaricum, Alesia, Gergovia, Cenabum, and Bibracte are all repeatedly mentioned in the commentaries. This is not difficult to understand, as these were the sites of the most pivotal battles of the campaign (detailed throughout Book 7, which contains nearly half of the mentions of the word *oppidum* and is focused on Central

⁷⁵ Caes. BG. iii.1-3.

France). The only other site to have been granted anywhere near this much coverage is Uxellodunum, an *oppidum* in Aquitania,⁷⁶ which was besieged by Hirtius. However, it is essential to remember that the majority of our information about *oppida* comes from a small handful of sites in Central France. It may not be possible to extrapolate this information when looking at the settlement of other regions.

2.4 The use of *urbs* in Caesar's Commentaries

The fact that Caesar uses the word *urbs* to describe the sites of several important Roman victories in Gaul (Alesia, Avaricum, Gergovia, and 20 sites of the Bituriges which were burned by Vercingetorix) has led to interesting questions for the archaeologist. Was Caesar picking these sites for particular consideration, indicating that they were substantially different from other Gallic settlements? Is the fact that he uses the words *urbs* and *oppida* interchangeably for these sites suggest that all *oppida* should be thought of as developed towns or proto-urban centres?

Ralston (1988) makes the important point that each use of the word *urbs* not only described a militarily important victory but also was used after the Roman conquest in Gaul had been achieved. Thus, Caesar had everything to gain from using impressive vocabulary to discuss his triumphs. Tarpin (1999: 289) points out that it is not uncommon in the ancient literature to exaggerate the importance of captured settlements by referring to even small settlements as *oppida* or *urbs*. The vocabulary of triumph does not include *vicus*, except in reference to the disordered destruction of fields and rural settlements and the formulaic phrase *oppida, vici et aedificia*.

The city, the *urbs* or *polis*, was to the classical mind a symbol of civilisation and progress (Owens 1991: 1). The term *urbanitas*, possibly coined by Cicero to define a notion already broadly familiar in the mid-first century BC (Ramage 1963), held connotations

⁷⁶ Caes. BG. viii.31-43.

of sophistication, polish, refined wit, and *savoir-vivre*. Urbanity and settled city dwelling were contrasted with barbarian populations or those of the primitive past, distinguished by rude habits and a nomadic lifestyle (Lomas 1997: 21).

Thucydides shows this view of the past in his account of the early Greeks. He states that the early cities of Greece were occupied only intermittently and lacked walls.⁷⁷ The population was nomadic and this pre-sedentary period was characterised by instability and unrest.⁷⁸ Tacitus, six centuries later, describes a similar situation in Germany, where he connects the lack of permanent settlements to a lack of civilisation and refinement.⁷⁹

Cicero himself sums up the distinction between *urbanitas* and barbarity nicely, in a passage that describes succinctly his own feelings toward the Gallic War in 56 B.C.:

‘For, as for Caesar himself, what reason can there be why he should wish any longer to remain in the province...? It is the delightful nature of the country, I suppose, and the beauty of the cities (*urbium pulchritudo*), and the civilisation and accomplished habits of those nations and natives. No! It is a desire for victory, it is a wish to extend the boundaries of our empire, that detains him there. What is there anywhere more severe than those countries? What more barbarous than their towns (*oppida*)?’⁸⁰

This passage certainly makes it clear that some of Caesar’s contemporaries did not consider Gallic settlements in any way comparable to Roman cities.

We can see the way that the concept of *urbanitas* influenced the Roman mind in *De Bello Gallico*. Caesar uses the word *aedificium* to replace the more common *villa* to

⁷⁷ Thucydides. i.5.

⁷⁸ Thucydides. i.2.

⁷⁹ Tacitus. *Agricola* 21, *Germania* 16, *Historiae* 4.64.

⁸⁰ Cicero. Orations on the Consular Provinces XIII.29

describe the burning and destruction of country dwellings. As Lomas notes (1997: 23), the *villa* was a small centre of *urbanitas* located in the rural landscape. While the attribute of *urbanitas* could be withheld from anyone originating outside the city of Rome, it could, at the same time, be exported to the countryside (Dench 1995: 130). The masters of a *villa* lived in comfortable, sometimes luxurious, quarters, very similar to the higher-status dwellings of Rome (Rich & Wallace-Hadrill 1992); often the only distinction between the *villae* and the houses of rich city-dwellers was location. We can assume that Caesar would not have considered the rural Gallic *aedificia* as having the same sophistication or status within Gallic society.

Although we can understand now the basic sense of the word *urbs* in Republican society, the question remains: for a Roman or Greek observer, what were the vital elements of the *urbs* or *polis*? It is certainly an entity that has changed radically over the past millennia, and it is a difficult ancient concept for the modern observer to grasp. Even in the ancient world, opinions on this matter varied and changed over time.

The Greeks believed that the polis was a 'community of citizens, sharing common political, religious, and social traditions' (Owens 1991: 1). Alcaeus tells us that it is not the physical manifestations of a city (the houses, walls, docks and harbours) but its people, able to use their potential, that make up a polis.⁸¹ Plato gives an origin for the *polis* in mythical form, in which the people gather together to protect themselves, but are unable to live in harmony. It is only when Zeus intervenes and gives them the correct behaviour and social graces that they become a *polis*.⁸² A very similar story is given by Cicero's evocation of the spirit of Scipio, which tells us that a 'multitude of individuals' came together under a social contract to found a city.⁸³

⁸¹ Alcaeus. *Frag.* 28.

⁸² Plato. *Protagoras* 321d-322d.

⁸³ Cicero. *De re publica, Dream of Scipio.* 25.

This idea of the *polis* or *urbs* as a social unity rather than a simple agglomeration begins to change somewhat during the later Republican period and substantially so in the Augustan era. The focus shifts from the social to the physical features of a city. Vitruvius' *De Architectura*, written c 25 BC, exemplifies this trend by describing in detail the public buildings needed in any *urbs* – temples, *fora*, basilica, theatres, *palaestra*, baths, harbours, aqueducts. Nearly two hundred years later, Pausanias relates a very similar shopping list; a city must have an agora, a fountain house, a water-supply and several other amenities.⁸⁴

This change can be seen not only in the literature of the period but also in Roman cities themselves. Lomas (1997) completed a study of Italian *urbs* in the Republican and Augustan periods in which she looked at different categories of public buildings in different regions. The Republican period was dominated by the building or refurbishing of existing fortifications and, to a lesser extent, temples and religious buildings (Lomas 1997: 26). Within Italy, large-scale public works such as road-building, harbours, and water-supplies were 'almost entirely concentrated in Latium and Campania and were under close Roman control' (Lomas 1997: 27). Civic buildings were comparatively rare and irregularly distributed. The general pattern was one of relatively limited public architecture concentrated in central Italy, with very few amenities available elsewhere; the public buildings that have been found dating to that time period are mostly of wooden construction, temporary structures built for specific events and then dismantled afterwards. It is not until the Augustan era that many of these *urbs* get a full complement of permanent public architecture and begin to resemble our modern concept of a city (Lomas 1997: 29).

In this context, it seems that Caesar's use of the word *urbs* was considerably more flexible than our current use of the word *city*. In addition to being politically motivated, Caesar's use of *urbs* was acceptable in the traditional sense of the city as a community

⁸⁴ Pausanias. *Phocis*. 10.4.1.

rather than the Augustan idea of the *urbs* as a city in the sense of an urban space with its associated physical amenities and infrastructure. The three *urbs* listed by name (Avaricum, Alesia, and Gergovia) in Book 7 all had a greatly extended temporary population, and, perhaps crucially, that population was united by a single goal. Until this point, Caesar had often mentioned the divisions that he felt lay at the heart of Gallic society; his use of the word *urbs* may be a way of emphasising the combined strength of the Gallic people, not the physical attributes that we expect in a modern city.

2.5 Settlement Descriptions in Other Classical Authors

It would be impossible to include here every mention of Celtic settlements in Greek and Roman literature; instead, I have attempted to include an illustrative sample of a whole that is simply too large to explore fully. The texts discussed here range from the 3rd century BC to the end of the 2nd century AD, with the majority dating to the Republican and Augustan periods. There are virtually no texts which make more than a passing reference to the Celts before the 3rd century due to the fact that the Greeks, who had a long tradition of exploring the customs of foreign people and places, focused their conquests (and therefore attention) towards the south and east. The Romans, who had much closer contact with the Gauls, lacked an equivalent ethnographic interest at this early stage (Williams 2001: 18). Similarly, ancient historians largely stop discussing Celts and their native settlements by the end of the second century AD, with just a few scattered mentions of place names after this time.

Although the following is arranged geographically, I have also tried to emphasize the chronological element. The word *oppidum*, as we have seen above, changes meaning in the Roman mind over time. Other words in the Greek and Roman vocabulary of settlement are likely to have seen similar changes over these five centuries. In the Roman world, new types of settlements (colonies, municipal towns, etc) emerge as the Roman empire expands; the very names of these settlements are based upon their relation to

Rome (see Tarpin 1999, 2000). However, while there are many changes over time, the word *oppidum* continues to be used in a fairly general way to describe settlements from Asia Minor to Africa to Spain and Italy throughout the whole of this period.

Gallia Cisalpina

Due to its relative proximity to Rome, and the continuously tense relationship between the Cisalpine Gauls and the Romans, we have a relative abundance of sources detailing the Celts in Northern Italy. Most of the commentary regarding Cisalpine Gaul – meaning Gaul on this side of the Alps (closer to Rome) – discusses the migration of the Gauls from the north, who moved into the area of present-day northern Italy bordered by the Alps, the Apennines and the Po River in the 4th century BC. In the Roman mind, this barbarian invasion culminated in the Gallic sack of Rome in c 386 BC.

The Greek historian Polybius (c 200–120 BC) is our earliest source for the Celts in Northern Italy. He wrote his history of early Roman imperial interests as an object lesson; it was 'intended to teach the reader how to bear the vicissitudes of Fortune. This lesson was to be inculcated by a description of the disasters that had befallen others. Thus the detailed description of the Gallic invasions of Italy demonstrates to Greek statesmen how such an attack can be met' (Walbank 1979: 19). The Gauls were not just a threat to Rome but also a threat to Greece; they had sacked Delphi in 279 BC and, although the Cisalpine Gauls had been subdued by the Romans in 222 BC, Polybius points out that conquest was possible only after the Romans 'had grown accustomed to suffering great losses at the hands of the Gauls' and realised 'there was no more terrifying experience than this which they need expect either to undergo or to fear' that they began to 'crush the aggressive spirit of the Gauls.'⁸⁵

Polybius describes the migration of the Gauls into Italy, telling us that first the Laevi and Lebici, then the Insubres (the largest tribe), and finally the Cenomani forced the

⁸⁵ Polybius. *History*. II.28.

Etruscans out of their homes and settled in the Po valley.⁸⁶ The Veneti, who lived in the region near the Adriatic, had customs and dress like the Celts, but a different language. He described the settlements of the Cisalpine Gauls thus:

They lived in unwalled villages (κώμη ἀτείχιστος, broadly equivalent to the Latin *vicus*) and had no knowledge of the refinements of civilisation. As they slept on straw and leaves, ate meat and practiced no other pursuits but war and agriculture, their lives were very simple and they were completely unacquainted with any art or science. Their possessions consisted of cattle and gold, since these were the only objects which they could easily take with them whatever their circumstances and transport wherever they chose.⁸⁷

For Polybius, the rough and barbaric nature of Celtic settlements in Cisalpine Gaul are a complement to the fierceness of the tribes who 'subjugated the neighbouring people and terrified them by their audacity'⁸⁸ and would go on to terrify even Rome itself.

Livy tells a story of an even earlier migration into Cisalpine Gaul, 200 years before the sack of Rome. He talks of a time when the area was controlled by the 'great power' of the Etruscans, who founded twenty-four *urbes*, twelve on each side of the Apennine mountains.⁸⁹ None of these are named, and no details are given. (Diodorus Siculus also states that when the Celts seized the area between the Apennine mountains and the Alps, they expelled the Tyrrhenians, colonists from the twelve cities of Tyrrhenia, who lived there.⁹⁰) The Gauls at that time crossed the Alps and defeated the Etruscans near the river Ticinus; 'having learnt that they were in what was known as the territory of the Insubres, the same name as one of the cantons of the Aedui, took it as another favourable omen and founded the town (*urbis*) of Mediolanum.'⁹¹ Interestingly, Livy uses the term *urbes* to describe the settlements of both the Etruscans, who were generally

⁸⁶ Polybius. *History*. II.17.

⁸⁷ Polybius. *History*. II.17.

⁸⁸ Polybius. *History*. II.18.

⁸⁹ Livy, *Ab Urbe Condita*. v.33

⁹⁰ Diodorus Siculus. XIV.113.

⁹¹ Livy. *Ab Urbe Condita*. v.35

regarded by the Romans to be both powerful and civilized, and the Gauls, who had a very different reputation.

In 223 BC, the Romans hoped to drive the Celts from northern Italy, bolstered by the decisive Roman victory against the Celts at the battle of Telamon in the previous year. The consuls Publius Furius and Gaius Flaminius led troops into the territory of the Insubres, and, after suffering some initial losses, regrouped in the territory of the Cenomani (allies of Rome). They then returned to the Insubrian territory and ravaged the country and plundered some of the Insubrian settlements.⁹²

The next year, the Romans again attacked Cisalpine Gaul. They camped near the city of Acerrae, which lay between the river Po and the Alps, and laid siege to it.⁹³ The Insubres could not offer direct help because the Romans had cut off every access point, so they led a force to the town of Clastidium (in the territory of the Anares, and allied with Rome) in order to distract the Roman army. They were defeated, and the Romans went on to capture Acerrae which had large supplies of corn. The rest of the Gauls fell back on Mediolanum, the most important settlement in the territory of the Insubres.⁹⁴

The final section discussing Cisalpine Gaul occurs when Hannibal leads his troops through northern Italy during the first Punic War. Hannibal tried to gain the favour of the Taurini, who lived at the foot of the Alps. The Taurini were suspicious of the Carthaginians and had recently fallen out with the Insubres (who had allied themselves with the Carthaginians) and so refused to side with Hannibal. The Carthaginians then camped outside the principal city (*polis*) of the Taurini, probably modern Turin.⁹⁵ Livy also mentions the chief *urbs* (*unam urbem, caput gentis eius*) of the Taurini.⁹⁶ When Scipio heard of these events, Polybius tells us he was surprised that Hannibal was already

⁹² Polybius. *History*. II.32.

⁹³ Polybius. *History*. II.34.

⁹⁴ This is also mentioned in Livy, *Ab Urbe Condita* v.34.

⁹⁵ Polybius. *History*. III.60.

⁹⁶ Livy. xxi.39.

laying siege to cities in northern Italy,⁹⁷ although there is no mention of any specific settlement other than that of the Taurini at this time.

The Alpine Gauls

Livy gives us an excellent description of how the Alpine region was considered by most Classical sources: to the south lived the 'hill-dwelling' Salussi and the Libuan Gauls; the north (the Pennine Alps, supposedly named after the Hannibal's Punic crossing) was inhabited by half-German tribes including the Boii and Lingones, while the middle section was inhabited by the Taurini.⁹⁸ He tells us that Hannibal's crossing opened up a desolate, isolated region: 'formerly trackless mountain country... had been rendered practicable by Hannibal's crossing, and had been used regularly for 12 years. The native tribes had lost some of their wildness and savagery. In former times they had never seen strangers, and had no contact with the outside world.'⁹⁹

Polybius provides a somewhat more measured approach, but his account also tells us that many did not agree with him. Of previous ethnographers and historians, he says 'their description of the desolation of that country and the extreme steepness and inaccessibility is glaringly inaccurate. They have failed to bring to light the fact that the Celts, who live near the Rhône, have not once or twice before Hannibal's arrival, but many times... marched large armies across the Alps and fought side-by-side with the Celts of the Po valley against the Romans.... They have not even discovered that there is a considerable population which inhabits the Alps themselves.'¹⁰⁰ Earlier in his narrative he states that 'those parts of the Alps that are not too rocky and possess a certain depth of soil are inhabited on both sides.'¹⁰¹

⁹⁷ Polybius. *History*. III.61.

⁹⁸ Livy. *Ab Urbe Condita*. XXI, 38-39.

⁹⁹ Livy. *Ab Urbe Condita*. XXI, 40.

¹⁰⁰ Polybius. *History*. III.48.

¹⁰¹ Polybius. *History*. II.15.

The Alpine Gauls are probably best known for their ambush on Hannibal's troops as he was crossing the Alps. Both Livy and Polybius discuss this event, but they seem to be using different sources here: according to Scott-Kilvert (1979: 223), 'Livy's description can most plausibly be interpreted as bringing the army over by a more southerly route across the Mont Genève pass, Polybius' by a more northerly across the Mont Cénis.'

Polybius tells us that the Allobroges waited in commanding positions along the pass. Hannibal learned of their plans to ambush the Carthaginian army, and soon realised that it was their tactic to wait by the pass during the day and return to a neighboring town at night.¹⁰² A small group of Carthaginians snuck out of the camp at night and blocked the route between the pass and the town. When the Gauls realised what had happened, they attacked the Carthaginian army at several different points along the line, causing chaos among the horses and baggage mules – potentially cutting off the army from its supplies. Hannibal managed to cause heavy damage to the Allobroges, and afterwards attacked the town. 'He found it almost empty, as all the inhabitants had been lured out by the prospect of easy plunder, and he at once took possession of it... he recovered a number of his baggage mules and horses, and many of the men who had been captured with them, and found a supply of corn and cattle to last him for two to three days.'¹⁰³

Livy's account is similar in many ways, but it may be useful to consider some of the minor differences – most noticeable is the vocabulary. In his discussions of Cisalpine Gaul, Livy talks of *urbes*, but uses *vici* and *castella* to describe the settlements of the Alpine tribes. In the first passage, he discusses the capture of the chief *castellum* as well as the surrounding *vici*.¹⁰⁴ As he moved on to the territory of another mountain tribe, the elders of the *castella* came to him and gave a false surrender before ordering a surprise

¹⁰² Polybius. *History*. III.50.

¹⁰³ Polybius. *History*. III.51.

¹⁰⁴ Livy. xxi.33.

attack on Hannibal's group.¹⁰⁵ It is especially interesting to note that Caesar uses the same vocabulary of *castella* and *vici* for the Alpine areas – does this reflect a genuine difference in settlement types, or is it a reflection of Roman attitudes towards mountain-dwelling barbarians?

Gallia Comata

We have already seen how Cicero felt about the people of Gaul and their settlements, and how Caesar and Cicero both used different vocabulary to describe Gallic settlements for political purposes. Over the centuries, many other Greek and Latin texts have described the *oppida*, *vici*, and *aedificia* of Gaul in various ways.

A historical perspective on Gallic settlement can be seen in various descriptions of Hannibal's movements from Spain to Italy in 218 BC. Ruscino (Chateau-Roussillon) and Iliberis (variously spelled Illiberis and Illisberris, modern Elne), in far southwestern Gaul at the base of the Pyrenees, are mentioned by Livy in his account.¹⁰⁶ Iliberis and Ruscino are both described as *oppida*. Strabo calls these sites *poleis*, still present during his time, but says only that they are situated on rivers of the same name.¹⁰⁷ These are practically the only settlements in southwestern Gaul, apart from Uxellodunum in Caesar, mentioned by classical authors.

Livy then describes Hannibal's movements through southern Gaul and into the territory of the Volcae, 'powerful people with settlements on both sides of the Rhône.'¹⁰⁸ Polybius tells of the next stage of Hannibal's journey eastward through the landscape of 'The Island,' a triangle of land formed by the Rhône and Isère rivers and populated by the Allobroges. He calls it a 'thickly populated district which produces large quantities of corn,' although there are no references to specific settlements.

¹⁰⁵ Livy. xxi.34. It is not clear whether these *castella* can be related to a passage just previous to their discussion, where the local tribesmen protect a mountain pass by day and return to their homes at night.

¹⁰⁶ Livy. xxi.24.

¹⁰⁷ Strabo. 4.1.6-7.

¹⁰⁸ Livy. xxi.26.

Strabo gives us a perspective on how *oppida* changed during the Gallo-Roman era. He tells us that Gergovia and Alesia are cities (*poleis*) located on high hills, an unusual choice by that time.¹⁰⁹ In the same passage he describes Cenabum as an *emporion* (trading centre rather than a town) that by this time was peopled by both natives and Romans. Strabo also emphasises the idea of a metropolis, a capital city, and he uses this word often in central Gaul. Generally he is referring to contemporary Gallo-Roman settlements, but in the case of the Allobroges he gives us an interesting glimpse into the past: 'Formerly the Allobroges kept up warfare with many myriads of men, whereas now they till the plains and the glens that are in the Alps, and all of them live in villages (*komes*), except that the most notable of them, inhabitants of Vienna – formerly a village, but called, nevertheless, the metropolis of the tribe – have built it up into a city.'¹¹⁰ Here Strabo shows both a disdain for barbarian settlements (a warlike people is incapable of building cities) and a belief in the civilising influence of the Romans.

We can see the changes over time even more clearly when we look at the words of Tacitus regarding Gaul, written two generations after Caesar. He describes Lucus,¹¹¹ a settlement of the Vocontii, as a *municipium*, a free town of Roman citizens (but not ethnically Roman), governed by its own laws and magistrates. The same term is used for Mediolanum, Novaria, Eporedia, and Vercellae.¹¹² He mentions other Gallic settlements, such as Vienna,¹¹³ Rigodulum,¹¹⁴ Mogontiacum,¹¹⁵ and several others without using any sort of settlement descriptor at all, which implies that these settlements were known well enough to make elaboration unnecessary. Here we can see the effect that Roman provincial expansion has had on the vocabulary of settlement; towns that were once *oppida* or *urbes* have been transformed into *municipia* or are

¹⁰⁹ Strabo. 4.2.3.

¹¹⁰ Strabo. 4.1.11.

¹¹¹ *Historiae*. 1.66.

¹¹² *Historiae*. 1.70.

¹¹³ *Historiae*. 1.66.

¹¹⁴ *Historiae*. 4.71.

¹¹⁵ *Historiae*. 4.15-71.

simply identified by their names, while those settlements still on the edge of the Roman frontier receive the more traditional settlement descriptors.

Germania

Our most abundant source for Germany is Tacitus, who again allows us to see changes in settlement over time. One often quoted extract from the *Germania* states that 'the Germanic peoples never inhabit cities (*urbes*),' but that 'they dwell apart, dotted about here and there, wherever a spring, plain, or grove takes their fancy.'¹¹⁶ This would seem to suggest a more dispersed settlement pattern in Germany than in Gaul, but both Tacitus and Caesar contradict themselves when discussing German settlements. In the *Annales*, Tacitus tells us that the Ubii have an *oppidum* named for Agrippina¹¹⁷ (present-day Cologne, which was the home of the Ubii after they were resettled into Roman-occupied lands following Marcus Vipsanius Agrippa's defeat of the Eburones in 38 BC; the settlement became the Roman colony *Colonia Claudia Ara Agrippensium* in AD 50) and another, unnamed, Ubiian *oppidum* is mentioned earlier on.¹¹⁸ The Batavi, a German tribe living in Gaul, also had an *oppidum*,¹¹⁹ mentioned in the *Historiae*. It is possible that these contradictions arise due to the differences in Tacitus' works: generalities and preferences are discussed in the *Germania*, the more ethnographic work, while the *Annales* and *Historiae* focus on historical detail and specific locations.

We can also see historic depth in Tacitus' works. He tells us that in the ancestral lands of the Cimbri 'widespread traces of their ancient fame may still be seen: huge encampments on both sides of the Rhine which, by their enormous circuits, one can judge the size and strength of the nation.'¹²⁰ Collis (1984a: 21) has suggested that that statement refers to *oppida* in that region which had been abandoned during the migrations of the Cimbri and Teutones.

¹¹⁶ *Germania* 16.1-16.2.

¹¹⁷ *Annales*. 12.27

¹¹⁸ *Annales*. 1.36.

¹¹⁹ *Historiae*. 5.19.

¹²⁰ *Germania* 37.2.

Pliny the Elder also gives us some interesting perspectives on the German frontier. He was present in Germany as a cavalry-commander in AD 47 and fought against the Chatti and Chauci. However, Pliny's interests were not purely military, and his 'inquisitive mind as a researcher' led him to many close observations of the region (Sallmann 1987:110). He described the Chauci, who lived along the shores of the North Sea, sandwiched between the sea and solid ground, as living in humble dwellings situated just above the height of the tide.¹²¹ Their fate was fairly bleak; the weather was cold and stormy, and they had no fields to raise corn, no trees to hunt game in, and no fresh water except rainwater, which they collected in cisterns in their houses.

Pliny's words contrast with other accounts. Velleius tells us of fortified settlements and a tribe full of youth and vitality.¹²² Tacitus refers to the Chauci as peaceable and full of humanity, deserving of the title 'Noblest People among the Germans' (*populus inter Germanos nobilissimus*),¹²³ although this may be a result of Tacitus' tendency to over-romanticise the Germans. Sallmann (1987: 120) has suggested that Pliny's negativity regarding the Chauci, a position that seems to be opposed to his Stoic philosophy, is linked to their refusal of Roman culture, which he praises several times in his *Natural History*.

2.6 Conclusions

For many Iron Age archaeologists, close discussion and analysis of Caesar's text tends to begin and end with the ethnographic section in book 6 (see Tierney 1960, Nash 1976). But the information regarding *oppida* lies outside this section, largely in fragments and indirect allusions. There are no broad statements about Gallic *oppida* as a whole; instead,

¹²¹ Pliny. *Natural History*. 25.21.

¹²² Velleius. 2.106.

¹²³ Tacitus. *Germania*. 35.

we have glimpses of market places,¹²⁴ narrow passages,¹²⁵ walls¹²⁶ and senates.¹²⁷ These features, among other characteristics mentioned by Caesar, have been used to illustrate the assertion that *oppida* functioned as proto-urban centres (Cunliffe & Rowley 1976; Wells 1984).

However, there has been little critical analysis of Caesar's statements about *oppida*. The tendency is to apply features of a single site described by Caesar – particularly Avaricum, for which we have the most detailed description – to all *oppida* (see Wells 1987: 399, among others). More subtly, authors often to conflate Caesar's accounts of central Gallic sites, which creates a general impression of what *oppida* are. Alongside our modern perception of agglomerations and urban spaces, this image is used to create an idealised set of criteria, which are then used to determine whether an archaeological site is an *oppidum* or not (Collis 1975, 1984).

It is necessary that archaeologists remember the primacy of context. In Caesar's commentaries, even the descriptions of settlements may have political, social, temporal, and geographical contexts. It is not enough to assume that Caesar's comments regarding one *oppidum* can be extended to all sites from this period, nor is it enough to hope that by using the same word to describe sites in Armorica and Belgic or Central Gaul that the two are equivalent. This is particularly important in terms of the internal features of *oppida*, where the data set provided by classical sources is painfully small.

This is not in any way to diminish the importance of literary evidence in the study of *oppida*. Indeed, Caesar's commentaries are a very valuable (and still in many ways under-utilised) resource for the archaeologist. A further study of topographical details and defensive measures in Caesar may prove useful on a large scale, but the real value of

¹²⁴ Caesar. *De Bello Gallico*. vii.28.

¹²⁵ Caes. BG. vii.28.

¹²⁶ Caes. BG. ii.12, ii.28, ii.29, vii.23

¹²⁷ Caes. BG. ii.4, ii.27, vii.32.

Caesar's narrative is at the site or regional level and cannot be extrapolated. The use of the word *oppidum* as a blanket descriptor hides myriad differences in the details.

This can be seen even more clearly when looking at other Greek and Latin texts. Direct descriptions of Celtic or Gallic settlements are quite rare; generally speaking, we are lucky to get a simple mention of a settlement name and/or a brief descriptor (eg, *oppidum*). When we consider the differences in terminology between various authors and over a wide geographical and chronological spectrum, it becomes even more difficult to glean useful contextual information from these fleeting glimpses. Taken as a whole, we can see how contemporary attitudes and politics shaped even the most mundane aspects of ethnographic descriptions; the very vocabulary of settlement, which on the surface seems so straightforward, is fraught with nuance and subtle meaning.

3. Case Study: Armorica

3.1 Introduction

Armorica is perhaps best defined here as a geographical area encompassing the Breton peninsula (the largest in France) and beyond, roughly bounded by the Loire river to the south and the Seine river to the east. Pliny the Elder (*Natural History* 4.17) claimed that Armorica was the older name for Aquitania, and that the boundaries of this area extended to the Pyrenees in the south. This seems to have been a linguistic blunder on his part, possibly deriving from the fact that the name Armorica comes from the Celtic roots *ar-* (meaning 'near') and *-mor* (meaning 'the sea'), as he mentions none of the Armorican *civitates* that Caesar discusses in the *De Bello Gallico*. Caesar (*BG* VII: 75) himself makes reference to the *Armoricae* as comprising those people which border on the Atlantic, including the Coriosolites, Redones, Ambibari, Caltes, Osismii, Lemovices, Veneti, and Unelli. He also mentions the Ambibari, whose geographic location isn't certain, and the Lemovices, but since the latter are recorded as having been located in Limousin and Poitou it seems more likely that he intended the Lexovii, who were situated just to the west of the mouth of the Seine.

Archaeologically speaking, by looking at the Armorican coinage one could delimit a vast area of western Gaul from the Pays de Caux to the Vendée, encompassing current Normandy, Brittany, Maine, Anjou and the Vendée (fig. 3.1a), while others would include the entire littoral fringe of the English Channel and along the Atlantic from Pas-de-Calais to the northern bank of the Gironde, though this seems excessive (Giot 1995: 371). However, no matter how broadly one might define the territory of Armorica, the area occupied by the five *civitates* of the Breton peninsula (fig. 3.2b) – the Osismii to the west, the Coriosolites in the northern central area, the Veneti to the south, the Redones

in the east and the Namnetes to the south-east, bordering the river Loire – is often considered to be the Armorican heartland and will be the main focus of this chapter, with occasional reference to the nearby surrounding areas.

The geography of Brittany is traditionally discussed in terms of the Armor (the land by the sea) and the Argoat (the inland areas, characterised by the *bocage* – a mixed landscape of small agricultural fields separated by hedgerows). As for the Armor, Brittany has nearly 3,000km of coastline – nearly a third of the total coast of France. Generally speaking, the coastline is indented by rias and estuaries, providing many headlands for potential settlement, and although high cliffs appear frequently there are equally plentiful areas where the approach to the sea is more gentle and tidal mooring (*échouage*) is possible. Moving inland, the Armorican massif, comprised of metamorphic and magmatic rock now largely eroded into a plateau-like peneplain, forms the uplands of Brittany, Normandy and the Pays de Loire. In western Brittany, the Monts d'Arrée create a series of peaks and rocky outcrops running roughly north-east throughout the department of Finistère, which are largely covered in a moorland covered in gorse, heather and broom. While the highest peak of the Monts d'Arrée (Roc'h Ruz in the commune of Plounéour-Ménez) is just 385m high, the windy conditions means that very few trees grow in the upper reaches of the mountain chain without human intervention. Further to the east, the slightly lower Montagnes Noires rise between the departments of Finistère and Morbihan. As a whole, Brittany encompasses a highly varied geography.

3.2 Inland *oppida* and large enclosed sites

Discussions of *oppida* in Armorica have been heavily influenced by Mortimer Wheeler's discussion of the sites of what he termed the 'tribal *oppida* of the Petit-Celland type' (Wheeler 1939; Wheeler & Richardson 1957). Wheeler included amongst this type the large enclosed sites of Le Camp d'Artus, Huelgoat in Finistère and Camp de Lescouais, Guégon in Morbihan, both measuring roughly 30ha in size, and both acting in

Wheeler's eyes as temporary refuges for the *civitas* in which they were located during the Gallic Wars.

In order to identify potential *oppida* in this region, I will be examining enclosed sites which are larger than 15ha and which have either direct evidence for or (for unexcavated sites) an indication of potential late La Tène occupation.

3.2.1 Huelgoat (*Le Camp d'Artus*), Finistère

The Camp d'Artus (fig. 3.3) is a *c* 30ha enclosure situated on top of a granite spur within the Armorican massif. The site benefits from a naturally defensive location, with impeded access on all sides apart from the north. First investigated by du Chatellier (1907) in the early 1900s, it was excavated a generation later by Mortimer Wheeler (1939; Wheeler & Richardson 1957) in his survey of northern French hill-forts across Normandy and Brittany and has become one of the most well-known sites of the Breton Iron Age.

The outer enclosure is delimited by ramparts, standing to a maximum height of *c* 4–5m high, constructed in the *murus gallicus* style (fig. 3.4a) though lacking an internal masonry revetment wall. Wheeler (Wheeler & Richardson 1957: 27) describes their construction as 'rougher in character than that familiar at Murcens or Mont Beuvray'. The walls generally follow the contours of the hill, in some places incorporating the huge granite boulders that have eroded out of the hillside. The walls have been carried down the slope on the western side to increase the overall enclosed area, although this appears to have weakened an otherwise naturally defensive position. There is evidence in one trench (section E) that an additional 2m of material was later added to the top of the rampart (Wheeler & Richardson 1957: 37). A smaller (*c* 4ha), pear-shaped enclosure at the northern end of the site is surrounded by a rampart of dump construction (fig. 3.4b). This enclosure lies just inside the outer ramparts, and the main entrance was extended to make this internal area directly accessible.

The site appears to have four entrances, two of which were excavated by Wheeler (Wheeler & Richardson 1957: 28–30). The north-east entrance, flanked by the in-turned ramparts and a 6-post gate, allowed a path (c 3m wide) straight into the inner enclosure. The south-east entrance is similar but of simpler construction, and a burnt beam indicates that some kind of fire occurred here.

It is difficult to fully clarify the absolute chronology of the site without further archaeological investigation. Few postholes and posthole structures could be identified (at least in part due to the extent of tree-root damage within the subsoil), but two of the eleven trenches did produce fairly solid occupation evidence (Wheeler & Richardson 1957: 30). A 'roughly metallated' area, c 12 x 9m, delimited by a straight line of stones was thought to be a 'threshing floor' (*ibia*), though interpretation is difficult due to the lack of any structural details. An even less certain structure was formed by a rough circle of loose stones, which Wheeler interpreted as a dwelling. Despite the lack of structural evidence on site, the pottery, coinage and amphorae discovered here all suggest a consistent La Tène D date.

A significant amount of pottery was found on site, including bowls and jars, pots with countersunk handles, rilled wares, and some sherds with graphite slip (Daire 1992: 250). Wheeler discovered an Osismian coin with an androcephalous prancing horse with a wild boar and eaglet in the background (type LT 6555) dating to the first half of the first century BC (Gruel *et al*/1990) associated with a fragment of Dressel 1 amphora and late La Tène pottery in the same context.

Wheeler believed that the Huelgoat could not have sustained a permanent population, given the lack of evidence for habitation structures and thin occupation levels, the poverty of the agricultural land surrounding the site, and the much larger size of the site compared to others in the region. For these reasons, and citing the evidence for burning

at one of the entrances, he suggested instead that the site was used as ‘the central rallying-point of the Osismi against Caesar’s armies in that fateful year’ (56 BC), with the smaller northern enclosure representing the ‘last stand’ of the Osismi in 51 BC (Wheeler & Richardson 1957: 31). While it may be that the site was occupied only sporadically and used as an occasional meeting place for a population spread more widely over the landscape and housed permanently elsewhere, it is untenable to link the *oppidum* so closely to the events described by Caesar. Based on the archaeological evidence, we should content ourselves with assigning a La Tène D date to the site.

3.2.2 Fougères, Landéan (*Oppidum du Poulailier*), Ille-et-Vilaine

Though never excavated, the site of Poulailier (fig. 3.5) at the edge of the Fougères forest near Landéan has been a topic of archaeological discussion since the 1920s (Pautrel 1921; 1927; Banéat 1928a, 1928b). Walls delineate a c 20–25ha area atop a high ridge rising 130–140m above the surrounding landscape and the two rivers (the Nançon and St Francis) that flow on either side. To the north there are two earthen ramparts, set widely apart and suggesting the possibility of two separate construction phrases. To the south lies a single rampart, with stones having been noted in a pile at the end of the bank (Pautrel 1921: 73). To some (Duval 1959; Leroux & Provost 1990), this has suggested an interrupted *murus gallicus*, built for defence of the Redones but then abandoned during the events of 56 BC. No associated artefactual evidence has been found to support this theory, however.

3.2.3 Guégon, Josselin (*Camp de Lescouais*), Morbihan

The Camp de Lescouais (or Lescouet) is sited on a low schist ridge with gentle slopes overlooking the marshy valley around it. The ramparts were already barely visible across much of the ridge in the 19th century (Cayot-Délandre 1847), though some remains, nearly 10m high in places, can still be seen to the east and the north. The northern part of the enclosure had been cut off with a cross dyke and the northern ramparts appear to have been doubled with a second bank and ditch to their interior. While the

morphology of the enclosure is not completely clear due to the absence of large portions of the ramparts, Patrick Naas (1998) has used cartographic interpretation to estimate the size of the site at 32ha.

Like the *oppidum* at Poulailier, Camp de Lescouais has never seen significant excavation. Only the presence of amphorae can give us a chronological reference, suggesting that occupation on the site likely did occur in the late La Tène (Galliou 2009: 235).

3.2.5 Oppidum d'Orange, Vieux-Vy-sur-Couesnon, Ille-et-Vilaine

Situated on a promontory 60m above the confluence of the Couësnon and Aleron waterways, the site of Oppidum d'Orange (fig. 3.6) encloses an 18ha area with a roughly trapezoidal shape, 500m long by 300m wide. Much of the north and east of the site is naturally defended by steep slopes and natural boulders, but the south-west area is barred by two embankments and ditches stretching 150m across the gentler terrain. The outer embankment survives to a height of approximately 5m and a width of 10m, while the inner measures 10m high and 20m wide. Abbé Millon (1911: IX) reported the presence of vitrified stones at the base of this inner wall.

It is difficult to speculate on the construction and chronology of the ramparts or the nature of any potential internal occupation without further investigation and excavation. However, twenty Gallic coins were discovered near the medieval chapel which was later built on site; of these, only two – a gold stater of the Redones and one of the Coriosolite – were conserved (Goulpeau 1990: 53). Based on these finds and on the morphology of the site and its enclosing walls, we can suggest a potential late La Tène occupation. This likely continued after the Conquest, as Roman artefacts, including roof tiles, pottery and quern stones, were discovered on site.

3.2.4 Le Châtellier, Petit-Celland, Manche

Because Le Châtellier lies outside of the Breton peninsula and the territories of the main Breton *civitates*, I will include only a brief description for the sake of comparison. Located on a c 19ha headland overlooking a valley, Le Châtellier (fig. 3.7) slopes steeply to the west towards a small river (the Orceil) and to the north where the landscape opens up into a low plain. To the south and east, however, where the relief is gentler and access is easier, the site is bordered by a *muris gallicus* and for a short stretch in the west a second wall was placed outside the first. The existence of at least three entrances has been postulated, but only one (at the eastern side of the site) has been affirmed through excavation (Wheeler & Richardson 1957: 41). This entrance appears to have had a wooden superstructure forming an inturned gate (*ibid*). Though excavations inside the enclosure did not produce any artefactual or structural material, the presence of Gallic coins and pottery at the gate combined with the evidence for burning and the unfinished nature of the gate led Wheeler to suggest that the site had a primarily 'political or military' role and was destroyed in 56 BC (Wheeler & Richardson 1957: 43).

3.2.7 Paule, Saint-Symphorien (Côtes d'Armor)

Situated at the end of a ridge among the Montagnes Noires, the site at Paule has excellent visibility over the surrounding terrain. The settlement here survives over several centuries and six successive phases of development:

- Phase I – end of 6th century BC

Three enclosures are built, with the largest measuring c 9000m². This includes a dwelling, estimated to have been 410m² and nearly 11m tall, built against the west wall facing the entrance to the enclosure. Another enclosure, approximately 4000m², surrounds a livestock shelter and quarry. The third enclosure encompasses a hillock, 18m in diameter, in which were placed two inhumations and 18 cremations dating to the late 6th-5th centuries BC. In July 2010, excavators found another cemetery a few

hundred meters to the south, with another 18 cremations and a single inhumation. During the fourth century BC, the site slowly declines as the dwelling deteriorates, the annexes are demolished and cemeteries are abandoned.

- Phase II – beginning of 3rd century BC (fig. 3.8a)

The outer enclosure is maintained along the north, west and south during this phase, but otherwise the site undergoes a complete redevelopment. Two contiguous rectilinear enclosures are built inside the old embankments; the first, western area houses the residential area ('courtyard') and the second, eastern area houses the annexes ('forecourt') (Menez 2009: 94). Together, these enclosures will form the focus of development and building phases across the site until its abandonment. The courtyard is surrounded by a bank rampart and ditch 2.5m deep, broken by four gates. A house, 22m x 8m, was built along the west side of the courtyard, and two souterrains were also found in this area.

- Phase III – end of 3rd century BC (fig. 3.8b)

The general form of the courtyard and forecourt are maintained in this period, but an additional wall and ditches 4.5m deep are created to surround the residential courtyard. In addition, all but one of the entrances into this area is blocked, making this section of the settlement accessible through a single point of entry and giving the settlement the feeling of a fortress.

- Phase IV – *c* 175 BC (figs. 3.9–3.11)

Large quantities of burnt material found in the ditches point to a disastrous fire on site at around *c* 175–150 BC. Reconstruction seems to have occurred shortly afterwards with the demolition of the interior courtyard wall and construction of a new house (to replace the one that had burned down) approximately 50m long and perfectly centred on the only entrance to this enclosure. The rest of this area is open, apart from a well more than 19m deep built just to the northwest of the entrance and protected by a structure

measuring 10.5m x 6m (*ibid.* 160). The alignment of this enormous building and the fact that the dwelling could only be approached through a gate opening into the forecourt and travelling along a long, straight path through to a second gate and finally into the heart of the settlement, highlights the emphasis that was put on monumentality and display here.

A new, vastly larger, outer enclosure was built at around this same time, judging by the similarities in pottery forms found in the burnt layers and within the construction fills of the rampart (*ibid.* 141). While the exact extent of these walls could not be determined, they must have measured at least 180m x 560m, or the equivalent of 1.5km in length and enclosing *c* 12ha of space. The previous house, which had been destroyed in the fire, was replaced by a much larger structure 50m long and perfectly centred on the only entrance to the courtyard. The rest of this inner courtyard is open, apart from a well more than 18m deep enclosed by a structure measuring 10.5m x 6m (*ibid.* 160). The alignment of this enormous building and the fact that the dwelling could only be approached through a gate opening into the forecourt and travelling along a long, straight path through to a second gate and finally into the heart of the settlement, highlights the monumentality and emphasis on display involved here.

Other enclosures and buildings are built outside of the central area of the settlement during this phase. Excavators discovered a large building measuring 17m x 23m formed along three wings surrounding a courtyard, which was interpreted as a stables based on phosphate analysis as well as phytoliths in the soil pointing to the presence of straw (*ibid.* 144). A four-post structure nearby, measuring 4.36m x 3.5m, was likely used for the dry storage of grain. In a separate area approximately 90m to the east of the forecourt was another enclosure, 40m x 50m, surrounded by a ditch and bank. Inside this area was a granary, measuring 42m², and a huge structure, 243m², similar in scale to those found at Bibracte or Manching, which may have been a warehouse used for treating crops stored in the granary next door as well as for storing goods, materials and

equipment (*ibid.* 161). The overall pattern in Phase IV is a move toward increased specialisation, with different areas of the site being assigned very specific functions.

This trend is intensified during Phase V (figs. 3.9, 3.10 and 3.12) with the construction of a gold-, iron- and bronze-working area, approximately 67m², located at the northeast corner of the enclosure at the entrance of the road that runs along the north side of the forecourt. Though there is evidence for earlier metalworking on site (*ibid.* 298), this phase has produced many more crucible fragments (55) and larger amounts of slag than previous periods. This forge seems to have been rebuilt three successive times in a relatively short period of time (*ibid.* 166), likely starting around c 150 BC based on the discovery of associated pottery and amphorae.

Also in this phase, the outer wall was expanded to nearly 30ha and 'can be compared in morphology and size to the major enclosures, identified as *oppida*, in western France' (Menez 2009: 383, translation mine). In the central courtyard/forecourt area, a new wall is built surrounding the existing wall, returning to a double quadrangular enclosure as was seen in Phase III. This enclosure seems to emphasise defence through its sheer size, despite the addition of two new entrances into the residential area sometime in the third quarter of the first century BC. The entrances themselves are highly elaborate, suggesting an emphasis on defence and controlling access as well as display and even intimidation (*ibid.* 216). Within the yard, a large building was constructed at the southeast corner, facing the house and partially blocking the entrance between the yard and the forecourt.

Paule shares some important features with traditional definitions of *oppida* (size, ramparts, internal spatial organisation, and late La Tène date) but it also differs from the general model as well. Menez (2009) refers to the site as an aristocratic residence and fortress and it fits well within that description. Unlike many sites of its size, the settlement at Paule seems to revolve around a single large building which is rebuilt and

modified over successive generations and overlooks an increasingly large site – all of which strongly supports the suggestion of a powerful aristocratic family being the focus of activity at Paule.

In addition, here we see can the transformation of a site from a relatively simple (though substantial) farm in the early phases, like those seen at Le Braden or Boissanne, into a more strongly fortified and more densely occupied site. A display of status comes to the fore in the mid-3rd century BC, with the walls becoming more monumental and the entrances becoming more elaborate. From this point, the settlement expands outwards, though its essential functions seem to intensify rather than diversify. Livestock rearing, metal-working, and craft production all increase in volume and we can see the buildings devoted to these activities grow larger or multiply, but new types of industries aren't introduced. The settlement grows larger but doesn't display more typically urban characteristics over time; in many ways it seems to resemble a feudal hamlet or small village.

3.2.6 Moulay, Mayenne

The *oppidum* at Moulay (fig. 3.13), in Mayenne, is not located on the Breton peninsula. However, it does lie within the area of the Armorican alliance of Caesar's time and it offers a fascinating potential comparison for those large enclosed sites located within the territories of the five major Armorican *civitates*. Located at the confluence of the Mayenne and Aron rivers, the site was recently discovered to be much larger previously thought, and indeed much larger than others known within northwest France. An *oppidum* at the site has been known since the 19th century, and excavations in the 1970s (Boissel et al 1972; Naveau 1973, 1974, 1975) revealed a *c* 12ha enclosure, with the headland of the confluence delimited by a *mur* *gallicus* 380m long, 6–8m high and 20m wide. Several structures that appeared to be dwellings were found inside the walls, along with nearly 200 quern stones (dating to the late La Tène) discovered 800m from

the rampart. Finds of slag, moulds and bronze bracelets on site all point to metal-working within this smaller enclosure (fig. 4.14).

In 2004, a planned diversion of the RN162 passing within 300m of the previously known site led to an INRAP survey which produced many traces of late Iron Age occupation over a much wider area than previously suspected. The surveyors discovered a second wall, 1000m from the first and stretching at least 12000m long – making the total enclosed space \approx 135ha, the largest known site on the Armorican massif. In one of the biggest excavations of its kind, 29 archaeologists worked over 16 months (October 2009–April 2011) to uncover nearly 11ha of the site, focusing on a swathe of land running N/S for 1400m, as well as a 5000m² study area north of the outer wall and surveys in the Aron valley south of the *oppidum* itself. While full publication of the site was not yet available at the time of writing, initial reports have suggested that the site was likely extensively occupied over a large area, with small banks and ditches running N/S and E/W indicating an orthogonal organisation of the internal space. Le Goff (2011: 45) has indicated that the site included a residential area, incorporating both private and (likely) communal/sanctuary spaces, and an artisanal area with craft workshops (fig. 3.14).

Moulay is particularly remarkable not only for its sheer size (the size of the larger enclosure makes it one of the ten largest *oppida* in France) but also for the fact that the discovery of the site's full scale was such a surprise for archaeologists. It had been thought to be a fairly unassuming enclosed site, and at 12ha it would not have appeared on many lists of *oppida*, which often use a 15–25 lower size limit. The modest finds from within the smaller enclosure did not provide any indication of the diversity, complexity and organisation that seems to be displayed in the larger enclosure, which more closely resembles the classic ideal of an *oppidum* as a proto-urban settlement than the known *oppida* located on the Breton peninsula.

3.2.8 Kergolvez, Quimper (Finistère)

Discovered in advance of the construction of the ring road north-east of modern-day Quimper and excavated throughout 2004–05, the site of Kergolvez looks to have been an important settlement situated in a bend in the Steir river in the 2nd–1st centuries BC. It has not been possible to define the exact extent of the settlement, but based on the topography of the site, where the meander of the river is located in the centre of a valley extending to a size of 15ha, the site may well have reached a near equal extent. Pre-Roman levels were preserved across more than 2ha of the site (3.5ha in total were explored) so that floors of dwellings, traces of chariot tracks, and objects that were simply abandoned on the ground were visible.

The settlement appears to have been organised along a river crossing which connected two important roads on either side of the river. The presence of large quantities of amphorae, along with a set of chariot wheels and stone tools used in craft production suggest the site was the focus of major economic activity with both trading and manufacturing occurring on site. Le Goff (2007: 13) indicates a 1st century BC date for the abandonment of the site, but Le Bihan (2007: 43) believes that it is more likely that the site continued on into the Augustan period, citing the general continuity of occupation in the Armorican countryside during this time and the evidence for Augustan destruction layers on site (*ibid*: 39). Following this model, the population would have simply shifted to nearby Locmaria on the Odet river around AD 30.

3.3 Littoral *oppida* and large enclosed sites

Barry Cunliffe has suggested that sites such as Alet and Le Yaudet might be considered 'maritime *oppida*' – larger than the 'cliff castles' described by Wheeler, but different in location and purpose from the inland *oppida* described above. In this section, I will examine coastal sites which a) have some form of rampart and b) have either a confirmed late La Tène date or seem likely to produce late La Tène occupation evidence.

As with the inland *oppida*, these are sites which are larger than 15ha with the exception of Le Yaudet, which measures just 6ha and is included here for comparison purposes.

3.3.1 *Cité d'Alet, Saint-Symphorien (Ille-et-Vilaine)*

The peninsula on which Alet sits is nearly an island, connected to the mainland by an isthmus just 100m wide (fig. 4.15). Its situation on the mouth of the Rance and the coast of the English Channel offered excellent opportunity for exploiting both maritime and riverine trade routes. Underwater excavations (Langouët 1987) revealed a tidal port, similar to that at Le Yaudet, approximately 8m below the current high tide level and connected to the south-western area of the peninsula by an alluvial bar. A storage basin for holding fresh water, presumably for the use of boats coming into port, was discovered nearby.

The Table of Peutinger shows Alet (Reginca in Roman times) as an important centre during in the 5th century AD, but it wasn't until Loïc Langouët (1973, 1974, 1978a, 1978b, 1980, 1987, 1996) undertook excavations throughout the 1970s that evidence for it also having been an important pre-Roman centre was found. He discovered Iron Age occupation evidence – including post-holes, storage pits, ditches and hearths – scattered among the later walls and ditches, making relationships between different areas of the site difficult to establish (Langouët 1984: 67). Rotary querns and grain-storage pits hewn into the bedrock, plentiful sherds of local and imported pottery and amphorae, animal bones and shells, as well as spindle-whorls and stone pestles all indicate a strong domestic component at the site. Jewellery, coins and iron objects were also discovered on site.

There is evidence as well for craft production on site - bronze and iron working indicated by slag finds, pottery production is suggested by the presence of a stone smoothing tool, and carpentry tools have been discovered as well. But one of the most impressive discoveries at Alet is a metallurgical installation (forge), likely used to produce

Coriosolite coinage from silver- and copper-bearing lead ores (Maréchal 1979: 27; Langouët 1996: 32) using the 'raffinage archaïque' technique, where the residues are crushed and washed in order to retrieve copper nodules containing silver. This is indicated by the low quantities of calcium phosphate at Alet (8%) compared to the 27-30% found at Hengistbury where cupellation was done in shallow bone-ash cupels (de Jersey 1993).

That the metallurgical installation was used to produce coinage on site is supported by the 27 Coriosolite staters and quarter-staters found on site and nearby, some of which were discovered in the 19th century (Colbert de Beaulieu 1974). The coinage gives us a *terminus post quem* of 80 BC (Nash 1987: 106; Langouët 1988: 52) and fits with the ceramic evidence from the site, which indicates a date range of 80–20 BC (Langouët 1996: 39). Philip de Jersey (1993) has disputed this early date on the basis of the high ratio of Dressel 1b to Dressel 1a amphorae on site compared with other pre-Conquest sites in southern Britain and Armorica (*ibid.* 325), a reassessment of the c 80s BC date often given to class V Coriosolite staters (*ibid.* 324) and the fact that the stratigraphy is discontinuous across the site and that no metallurgical correlation has been demonstrated between the slag materials and the staters (*ibid.* 324). He suggests instead that the site grew following the conquest and explaining its development as a response to new Roman control and economic impetus. However, the late La Tène date seems more likely given the presence of Dressel 1a amphorae and that the only silver objects discovered in the pre-Roman levels on site are Coriosolite coins (Langouët 1996: 37), which strongly suggests that the coins were minted at the forge on site. This suggested chronology is also supported by comparisons with Le Yaudet (Galliou & Cunliffe 2005: 371) which follows a similar development throughout the Iron Age and Roman periods.

Alet appears to have undergone a massive destruction phase sometime around AD 15–25, with the wooden dwellings having been burnt and many valuable goods (including jewellery and coinage) having been left behind. Patrick Galliou and Barry Cunliffe

(2004: 46) suggested a possible link between this destruction on site and the revolt led by Julius Florus and Julius Sacrovir, a leader of the Aedui, in AD 21, though this link is tenuous. It would seem that the inhabitants of Alet largely relocated to Corseul, although indications of occupation begin to occur again on site around AD 40 with new structures being built.

3.3.2 Pointe du Meinga, Saint-Columbe (Ille-et-Vilaine)

Pointe du Meinga (fig. 3.16) is located on a spur of land that juts northward into the English Channel. Like Alet and Le Yaudet it has access to a nearby tidal basin, which may have provided a port for the site. However, unlike the other two locations, it does not have easy access to a river providing a transport route inland from the coast. This suggests (in the absence of excavation evidence) that the site may not have been as well placed to take advantage of the full network of trade routes.

A bank and ditch delineate the 15ha site, stretching 250m across the neck of the headland. The stone wall (7m thick and surviving to a height of 2.7m) produced surface traces of burnt wood, suggesting a potential *murus gallicus* (Duval 1959: 43). Evidence for internal occupation is scarce, even considering the lack of excavation on site, but Iron Age querns were found near the site (Provost & Leroux 1990). Without further investigation, it is impossible to speculate on the purpose and chronology of the site.

3.3.3 Le Conquet, Presqu'île de Kermorvan, Ploumoguier (Finistère)

This large peninsula, 24.7ha in size, occupies an ideal position for monitoring sea travel as it stretches far out into the water and marks the transition between the English Channel and the Atlantic Ocean (fig. 3.17). Mortimer Wheeler made some observations on the site which he recorded in an unpublished report (Wheeler 1939). Patrick Maguer (1996: 115) has summarized these comments, stating that Wheeler noted that the narrow strip of land that connects the peninsula and the mainland was cut by a series of embankments. The rampart farthest to the east measured 60m long, 3.3m high and

varied between 3.5m and 11m wide. Another rampart was built 18–45m west of the first, which stood at 10m high when surveyed. Wheeler observed a mound intersecting this rampart, with the substructure of a stone tower still being visible in 1938. Another embankment created a square enclosure, most of which seems to have dated to the Middle Ages. The northern part of the peninsula also has four successive embankments crossing the constricted neck of land that connects it to the larger, southern area. Finds from the site date from the Neolithic to the medieval periods, including some La Tène ceramics (Galliou 1989: 188). It is likely that at least a portion of the defences were constructed during the Iron Age; however, most of the earlier constructions were destroyed by the building of the Atlantic Wall during World War II, so further examination would be very difficult.

3.3.4 Le Yaudet, Ploulec'h, Côtes d'Armor

The 6ha granite promontory of Le Yaudet (fig. 3.18) looks over the mouth of the Léguer River and the Baie de Lannion, which opens out into the English Channel. This area shows evidence of human use during the Neolithic, with five polished stone axes having been recovered from the site (Leroux 1999), and has been occupied (at least sporadically) ever since. It appears that a move towards intensive occupation began here in the Late Bronze Age, with stratified deposits producing diagnostic pottery and even a possible Bronze Age rampart (Galliou & Cunliffe 2005: 25).

The evidence for later Iron Age enclosure is much stronger. Ramparts run across the neck of the peninsula in typical *éperon barré* style (referred to as the 'cross-ridge rampart') but also extend, somewhat unusually, around the border of the 6ha cut-off headland (the 'contour rampart'). If we accept Cunliffe's (2005: 367) interpretation of the chronology on site, which suggests that the phases of construction at the north-east area of the site are contemporary with those found along the cross-ridge rampart, then we can see three broad stages of development across the walls on the site as a whole. In this model, the first rampart phase consists of both a contour and a cross-ridge rampart,

the latter measuring approximately 5–8m wide and 3–4m high with drystone facing. The stones here do not seem to form regular courses, and there are gaps at regular intervals, indicating the presence of a timber framework. This combined with 'high depositions of iron salts', thought to be the eroded remains of nails, for Cunliffe indicates a *murus gallicus* (*ibid.*: 51). Two large quarries (F870 and F871) were discovered in trench 41 to the rear of where it seems the wall would have been during this time (*ibid.*: 65), though no trace of the wall itself was found in this area.

The second phase of enclosure shows a doubling of the contour rampart and a total reconstruction of the cross-ridge rampart, including digging up the occupation layers located just behind the first rampart (particularly in trenches 6, 9 and 41) and reusing the material for building (Galliou & Cunliffe 2005: 58–67). This second phase of the cross-ridge rampart was constructed in a *glacis* style, with a massive dump of material backing what seems to have been a much taller rampart (fig. 3.19). A third, final, phase of rampart construction along the cross-ridge rampart thickened and partially realigned the existing wall (fig. 3.20), presumably with defence in mind (*ibid.*: 89). This third wall contains a small amount of occupation debris as well, but the material is not significantly different from that found in phase 2 – suggesting that only a short time elapsed between the two periods of construction. Based on the pottery found within the ramparts, all of which was redeposited and can offer only a *terminus post quem*, all three phases of rampart were constructed during or after the first century BC (*ibid.*: 369).

Cunliffe (2005: 368) suggests that the most likely chronology would see the first phase of ramparts being built in the early first century BC, with the second and third phases occurring as a reaction to the Gallic Wars and subsequent political events in the 50s BC. This argument is supported by the sheer size of the second and third phases of the ramparts stretching across the neck of the headland, and strengthened by the fact that the rampart was realigned in the third phase, which appears to have been done in order to reduce the potential for breaching the walls near the Rochers de Beaumanoir.

Habitation on site is well attested, with a primary phase of occupation occurring at the north-east corner, a sheltered area with easy access to the shore. This phase, which preceded the construction of ramparts on site, included rectangular drystone buildings associated with thick occupation levels. The pottery from these levels is not significantly different from that found in other areas on site, but 19th century finds of Mediterranean coins (one of Ptolemy I (325–285 BC) and two of Micipsa, king of Numidia (148–118 BC)) indicate that a date as early as the late second century BC date may be possible (Galliou & Cunliffe 2005: 2; Bizien-Jaglin *et al*/2003 : 250). The finds from Le Yaudet include a range of iron tools, personal ornaments (bronze and iron brooches, bronze bracelets and four glass beads) and domestic accoutrements (querns, whetstones and ceramic spindle whorls). Pottery from across Armorica and southern Britain and a minimum of 17 Dressel 1a and 1b amphorae attest to extensive trade contacts.

3.4 Smaller enclosed sites, farmsteads and salt production sites

While the focus of this study is on the *oppida* and larger enclosed sites, Brittany has such an interesting diversity of occupation during the Iron Age that a brief look at some of the other contemporary settlement types seems to be in order. Much recent excavation has tended to focus, either intentionally as part of research interests or inadvertently through excavation in advance of development, on these sites. It is also helpful when considering the role of *oppida* in the *civitas* and wider settlement systems to look at smaller sites as they allow us to get a better impression of how the population was distributed amongst settlements.

3.4.1 Smaller inland enclosed sites

Situated on a rocky hilltop, 93m above a tributary of the Odet river and approximately 3km from modern-day Quimper, **Kercaradec (Finistère)** is a 2.2ha site enclosed by

three walls. The two outer ramparts are simple dump ramparts, approximately 5–6m wide at the base, while the innermost rampart is a stone-built stepped rampart, some 6m wide, which is faced on both sides. Several sling-stones were found along the line of this inner wall. The wide gap between the outer ramparts may have served as an area for keeping livestock (Wheeler & Richardson 1957: 57) or perhaps as a specialised area for craft production (Maguer 1996: 119).

The western entrance to the site was examined, revealing two phases of development: in the earlier, two postholes suggest the presence of a wooden gate to restrict access, and in the later phase, the entrance was flanked by a stone wall. A break in the northern ramparts probably suggests another entrance, though that was not examined. Within the interior of the site, a depression in the rock was associated with pottery, traces of charcoal and sling-stones; this was interpreted as a dwelling (Wheeler & Richardson 1957: 59).

Le Men (1876) reported finding a clay spindle whorl, a rotary quern and sling stones on site. Pottery from the site indicates some final Hallstatt activity (Le Bihan 1984) but the majority of the sherds date to the first century BC (Daire 1992: 274). The absence of amphorae fragments on site is slightly surprising, as it seems likely that occupation at Kercardec continued until the Roman conquest (Maguer 1996: 119), but this can be explained by the fact that the excavations undertaken on site have been fairly limited in size.

Castels-Finans, Saint-Aignan, Morbihan (Giot 1995: 274) has not yet been excavated, but a loose stone rampart surrounds this *c* 4ha enclosure and an elaborate inturned stone structure flanks its entranceway. Once thought to have been a Gallo-Roman camp, Guyot-Jomard (1871: 10, translation mine) describes the site thus: ‘the summit of the hill is surrounded by a barrow-shaped enclosure, forming a circular wall. The stones were torn from the upper slopes of the mountain and covered with a layer of

soil which eventually disappeared over time... There are traces of habitation...a granite millstone, similar to those of Beg-en-Aud.'

3.4.2 'Cliff castles' and promontory forts

The 1.2ha granite promontory at **Castel Coz, Cleden-Cap-Sizun (Finistère)** looks out over the sea, with a low but rocky slope towards the water. In the Iron Age it was separated from the mainland by three substantial ramparts: the northernmost wall (which was later topped by a medieval rampart) with an external dry-stone revetment, the middle survives to nearly 10m high and the southern wall is approximately 6m high and is faced on both sides. In front of these walls, a rough double slope incorporating the nearby orthostats and boulders eroding naturally out of the soil may have been a Neolithic embankment (Wheeler 1939; Maguer 1996: 117), though a low wall surrounding the perimeter of the site on the northern and eastern sides, which appears to be of Iron Age date, runs past both the Iron Age and Neolithic embankments on the eastern side – perhaps suggesting that the Iron Age occupation extended further than thought.

The promontory fort at **Castel Meur, Cléden-Cap-Sizun (Finistère)** was occupied over a similarly long span of time (from the Neolithic through the Iron Age) in a similar coastal location, though the walls enclose a larger area (*c* 2ha) and the cliffs here are much steeper, offering a more restricted access to the sea. Again, the site is delineated from the mainland by three ramparts with a single line of entry through all three.

Both Castel Coz and Castel Meur were excavated in the 19th century, the former by Le Men (1874) and the latter by du Châtellier (1890). At both sites, level platforms were carved into the surface of the promontory to create the floors of dwellings. Le Men excavated dozens out of what he estimated to be 150–200 dwellings at Castel Coz, which generally measured *c* 3m x 5m, while du Châtellier excavated 95 rectangular structures at Castel Meur, each measuring between 3m x 2.5m and 10m x 3.6m. The

artefacts (sling stones, spears, swords, helmets, tools, spindle whorls, ceramics, etc) from Castel Meur indicate a later La Tène settlement, and while it isn't possible to pinpoint the date of occupation at Castel Coz too closely due to the age of the excavations, the ceramics (Daire 1992: 297) and other artefacts do suggest that the site may have been inhabited from the end of the Hallstatt period through the La Tène D.

Though **Île Guennoc, Landéda (Finistère)** is primarily known for its megalithic remains, the site was later re-inhabited during the Iron Age. While it is now an island, at the time it was a promontory accessible at least during low tide, indicated by an embankment to the east of the site which cut off an area 5.6ha in size. At least 8 buildings (30–40m² each) were discovered inside the site. These dwellings were in part constructed from stones and slabs taken from the earlier megalithic monuments, and the dolmens were re-used either as housing or for storage, judging by the large quantities of Gallic pottery found inside (Daire & Quesnel 2008: 103). The presence of spindle-whorls and rotary querns, along with a midden measuring 10m³, supports the suggestion that occupation on site was both 'extensive and intensive' (*ibid.* 95). The Dressel 1 amphorae on site can give us a date of the late 2nd and early 1st centuries BC, and the site was likely abandoned sometime in the 1st century AD due to rising sea level.

3.4.3 Farmsteads and rural settlements

The site at **Le Boisanne, Plouër-sur-Rance, Côtes-d'Armor** was particularly long-lived, with occupation dating from the late 6th/early 5th century BC to the 3rd century AD. Six phases of occupation were identified by Yves Menez (Menez & Arramond 1996):

- Phase I (6th to 5th century BC) – c 900m²
One enclosure (240m²) surrounding a single post-built dwelling and two annexe enclosures were built, along with a second enclosure (570m²) related to agriculture and/or grazing animals.
- Phase II (first half of 5th to end of 4th century BC) –1280m²

A new enclosure is added to the south.

- Phase III (early 3rd to mid-2nd century BC)

The farm expands with the addition of faced embankments.

- Phase IV (mid-2nd to end of 1st century BC) – 6000m²

Construction expands westwards and the original enclosure (at the north of the site) is demolished. The site is divided into areas for livestock and agricultural activity by palisade fences and distinct fields, separated by small embankments, are seen for the first time in this phase. A fragment of Greco-Italic amphora and 79 fragments of Dressel 1a and 1b amphorae (the latter entirely from the fills of ditches) indicate strong trade at the site, as do the decorated pottery and glass and lignite bracelets. (Menez & Arramond 1996; Le Bihan 1990)

- Phase V (late 1st century BC to early 2nd century AD)

The farm is abandoned and the remaining building is interpreted as a place of worship.

The large farmstead at **Laniscat (Côtes d'Armor)** was discovered and excavated by INRAP starting in 2007. The site seems to have originated in the 3rd century BC, when a ditch and bank enclosing 7500m² and broken by 6 gated entrances was built. The interior included some modest houses, a small enclosure for livestock and separate areas for drying grain. The site was occupied continuously over successive generations until the 1st century AD.

Laniscat would have been a fairly common type of farmstead within Armorica, with the exception of a remarkable find of 545 coins – the largest known to date in western France. This hoard of electrum coins, consisting of 58 staters and 487 quarter-staters, were all of the Osismii type. On the basis of the ternary alloy used (a combination of gold and silver with a high quantity of copper), these staters date to *c.* 75–50 BC (Pigeaud 2008). This hoard also helps us to define the eastern border of the pre-Roman Osismii *civitas*.

3.4.4 Salt production sites

The salt production centre at **Ebihens** on the island of **Saint-Jacut-de-la-Mer (Côtes d-Armor)** is located 12km west of Alet and situated approximately 900m off of the coastline. Pollen and charcoal analysis points to a site situated in an open, herbaceous landscape with very little evidence for cultivation. A salt production workshop was housed here, with a large rectangular building protecting a long furnace and associated installations. Domestic structures were also found, with House B (a larger, more complex structure consisting of a central area 24m² with two 6m² additions) producing the most impressive artefacts on site, including glass bracelets, stele and iron daggers. Pollen evidence indicates that cultivated fields were located within approximately 100 metres of the farm, divided by low banks (likely with hedges planted on top) and shallow ditches stretching for hundreds of metres.

The pottery on site has been comprehensively studied, showing that 29% of the sherds from the oldest part of the site (probably second century BC) have the internally grooved rim, while for the most recent area - a small isolated habitat - the figure is between 41% and 44% (Daire in Langouët 1989: 52–3). The abandonment of this site has been archaeomagnetically dated to not earlier than AD 55, and probably between AD 70 and 100 (Langouët 1989: 167). It therefore seems possible that there may have been social or political factors involved in the distribution and use of internally grooved pottery which cannot be defined at present. Interestingly, the ile des Ebihens site was completely devoid of Gallo-Roman pottery and Dressel amphorae (thus complicating the dating of the site; no more precise estimate for the later phase can be offered than late first century BC or early first century AD), again suggesting a clear social or functional dissimilarity from sites such as Alet, reflected in the constitution of the ceramic assemblage. However, the site does share some common pottery forms with Alet, including rilled ware and cordoned ware (Daire 1987: 213).

Landrellec, Pleurmeur-Bodou (Cotes d'Armor) is another late La Tene salt workshop comprised of a quadrangular building constructed from thick slabs on concrete, with walls up to 1.7m high and enclosing an area of 50m². A large furnace (2.8m x 0.9m) was discovered in the centre of the building, faced by bulky flagstones of granite which had been coated in clay. A total of nine storage tanks, which would have each held between 120 and 1000 litres of saltwater, were also discovered. Each of these were also surrounded by granite flagstones. It is estimated that this site would have produced 70kg of salt per batch (Daire *et al* 2001: 91).

The state of preservation at **Goulvars, Quiberon (Morbihan)**, as with a few other coastal sites in Brittany, is exceptional due to the dune sands which preserved the structural remains after they were abandoned. This sand, containing high levels of shells and therefore being alkaline, is more favourable to the preservation of organic matter (such as the carbonised seeds and charcoal that were discovered here) than the more acidic soils of inland Brittany. The site had a relatively gentle approach to the sea on one side and a marsh and brook, providing fresh spring water, on the other.

Twenty-seven structures were found at Goulvars, twenty-two of which were excavated thoroughly. Of these, nine were very likely domestic while ten were associated with workshops or storerooms. Hearths have been found both within and outside the structures, with the largest hearths appearing outside – possibly indicating that craft production was occurring in these areas.

3.6 Discussion

While very few *oppida* across the whole of France and Europe have been comprehensively excavated, those in Brittany are perhaps even less well studied than in other regions. None of Wheeler's 'tribal *oppida*' of the Breton peninsula, the hill-top contour enclosures of Huelgoat, Guégon and Fougères, have seen significant excavation

in the past 70 years, and of the three, two have never been systematically investigated. However, they are all included as *oppida* in most commonly used distribution maps (see Collis 1984a; Fichtl 2000, 2012; illus 1.11 and 1.12 but also www.oppida.org).

Mortimer Wheeler's influence can be seen indirectly elsewhere as well. The site at Orange (Vieux-Vy-sur-Couesnon) was left out of Wheeler's *Hill-forts of Northern France*, presumably because it had been thought to be of Roman construction. The presence of Gallic coins points to a potential later Iron Age occupation, and the morphology of the ramparts and their topographic setting supports that possibility. At 18ha it is slightly smaller than the c 30ha sites at Huelgoat, Fougères and Guégon – but it is broadly the same size as Petit Celland, and yet it is rarely discussed in terms of a potential *oppidum* (though the site is included in Collis' *Defended Sites of the Late La Tène* (1975: 200)).

In contrast, new excavations across Brittany have proved to be very revealing, particularly those undertaken in advance of development by INRAP. The remarkable excavation at Moulay provided the unique opportunity to cut a linear cross-section through an oppidum, and while the site itself does not lie within Brittany it does offer some parallels in terms of how we might approach the survey and excavation of other sites in the area (see below). The discovery of the late Iron Age settlement at Kergolvez may be able to give us insight into the development of the *oppida* and in the region; occupation at this unenclosed site begins somewhat earlier than the La Tène D date assigned to many of the *oppida*. The focus at Kergolvez seems to be very firmly on trade and production, similar to many of the middle La Tène unenclosed sites in other areas of France like Aulnat-Le Grande Borne or Les Arenès at Levroux (Buchsenschutz *et al* 1993, 1994, 2000), which had an urban component and acted as antecedents to the *oppida* that developed near them. The hoard at Laniscat, the largest of its type yet known in Brittany, affords us both the opportunity to learn about coinage and distribution but also provides clues as to the extent of the *Osismii civitas*. And

excavations undertaken by Oxford Archaeology at St Brieuc have led us to a greater understanding of larger farms in the late La Tène.

We will likely continue to discover new large later Iron Age settlements in Brittany in unexpected places, like at Paule, Saint-Symphorien, or find that the sites we already know are larger or of a much different character than we thought, as at Moulay. It can be difficult to make generalisations about the *oppida* of Brittany, since there are so few candidates and since so few of the candidates have been excavated, but some observations can be attempted.

Despite the age of the excavations, based on the evidence we have now it does appear that the 'tribal oppida' of Petit-Celland, Huelgoat, Guégon and Fougères were occupied for relatively short time periods. At Petit-Celland, the outer ramparts and entrance were never finished, and the entranceway appeared to have been violently destroyed. Nineteen coins were found in the thin occupation layer, which Colbert de Beaulieu (1955) dated to the last phase of Gallic independence and confirmed that they were of a type circulating during the Gallic Wars (Hawkes 1958: 155). Similarly, there is evidence of burning in one of the entranceways at Huelgoat and at Guégon, construction on the walls appears to have been interrupted. Although it would be preferable to confirm this through modern excavation, it does seem possible that these sites were acting as temporary refuges for a population that was not permanently based within their ramparts during the Gallic Wars.

3.6.1 Future research

It is difficult to see how additional insight into the 'tribal oppida' can be gained without excavation. One primary goal should be to establish (as closely as possible) the chronology of these sites and, by extension, the extent of their link to Caesar's campaigns in the area. This could be approached by focusing on relatively small, targeted excavations of the ramparts and (ideally) at least one entrance at each site.

While it may not be possible to establish an exact date for the building of the ramparts, this should help to at least determine a sequence of works at Fougères and Guégon where there are multiple lines of enclosure, and a *terminus post quem* might be established from any artefacts discovered within the fill material. At Fougères, particular attention should be paid to the 'interrupted *murus gallicus*'; here in particular it would be particularly helpful to examine whether the wall was indeed a *murus gallicus*, whether it was interrupted, and if so when that interruption occurred.

While defining a chronology for these sites is undeniably important, gleaning information about the life and activities of those who lived within the walls is equally essential to our understanding of these sites. Testing Wheeler's hypothesis of these sites as military refuges, only occupied for a short space of time due to external pressure, is difficult in the sense that it is largely looking for an *absence* of activity rather than its presence. It may be that these sites were indeed largely unoccupied, in which case it would be particularly helpful to carefully target excavation in areas where there is potential to reveal the most information. One way to achieve this would be through careful survey in advance of excavation, using magnetometry, ground-penetrating radar or LiDAR techniques. Potential features or structures could be identified and excavated with an eye to revealing the structures and features themselves as well as any surrounding occupation layers, which should help us to determine whether the occupation was as brief as has been thought.

4. Case Study: Aquitania

4.1 Introduction

4.1.1 The Geography of the Aquitaine Basin

The Aquitaine Basin is a roughly triangular sedimentary basin, approximately 60,000km², bounded by the Armorican Massif to the north, the Massif Central to the east and north-east, the Pyrenees to the south, and the Atlantic Ocean to the west. It is connected to Languedoc via the Carcassonne gap, and to the Paris Basin via the gate of Poitou.

Aquitaine features a varied geology. Upper Tertiary deposits are more common in Aquitaine than in any other area of France, with *molasses* – soft sandstones, limestones, and clay that have eroded from the surrounding mountains – being particularly prevalent. Secondary deposits appear more frequently in the north and north-east, in the Causses and plateaus of Quercy, while quaternary deposits compose the greatest proportion of the coastal plain.

The Garonne (*Garuma*) river cuts through the Aquitaine basin, rising in the Val d'Aran (Spanish Pyrenees) and running via Toulouse and Bordeaux to empty into the Atlantic Ocean. Its principal tributaries, the Tarn and Lot rivers (which originate in the hydrological system of the Massif Central), flow from the north and east into the Garonne between Bordeaux and Toulouse. The Dordogne river also joins the Garonne just west of Bordeaux and forms the Gironde estuary, which reaches 3.21km across at its mouth.

While the Aude river (also called *Narbon* by Polybius and *Atax* by Strabo, Pliny the Elder, and Pomponius Mela) does not directly connect to the Garonne, it flows near both the Ariège and Agout tributaries. The Garonne-Aude axis was a vital route in later prehistory (Gruat 1994), and even today the Garonne has an important place in inland shipping, as it forms part of the *Canal des Deux Mers*, which connects the Mediterranean Sea to the Atlantic Ocean.

Gascony, which lies south of the Garonne and north of foothills of the Pyrenees, is characterised by a relatively low relief. The elevation does not rise above 130m, with many of the highest points being sand dunes rather than 'firm' geology. In the interior, the subsoil is made up of siliceous sandstone and *garluche*, an iron-rich sandstone. It is possible to extract the iron ore from the *garluche*, and it seems likely that this was done in the Iron Age (Vigneaux 1975: 174-175).

To the north and east of the Garonne, the Causses provide a relief of higher contrasts. The Great Causses of Gévaudan and Larzac (Aveyron) are deeply cut by the river Tarn, creating dramatic landscapes and gorges 500 metres deep. The Causses of Quercy (Lot) are somewhat more gentle, providing an excellent situation for growing wheat. Most of the population in this area is situated along the Dordogne and Lot rivers, a pattern which follows that of later prehistory.

The study area will focus mainly on the area covered by the modern departments of Gironde, Landes, Gers, Lot-et-Garonne, but will also include parts of Charente-Maritime, Dordogne, Lot, and Tarn-et-Garonne.

4.1.2 Ancient Texts

Caesar's *De Bello Gallico* (1.1) contains the first, most famous, description of Aquitania as forming one third of Gaul, implying differences in language, habits, and laws. Strabo

(4.2.1) adds that the Aquitani are 'different from the Gallic race as well by their physical constitution as by their language, and they resemble Iberians'.

The physical boundaries of Aquitania are also described by the classical authors. Caesar mentions the Garonne river as the geographical division between the Aquitani and the Celts, and Strabo (4.2.1) follows this: 'Their country is bounded by the Garumna River, since they live between this and the Pyrenees.' Pliny the Elder (*Natural History* 2.17.105) mentions that the older name for Aquitaine is Aremorica, and that the southern boundary of Aremorica was actually the Pyrenees. This last information was probably based on the accounts of Pytheas.

That the Aquitani excelled at mining and metalwork is confirmed by both Caesar and Strabo. Caesar (3.21) describes an Aquitani attack where they 'took mines up to the earthworks and shelters; they are particularly skilful at mining, since they have mines and quarries at a number of sites.' Strabo mentions (4.2.2) that the Petrocorii have excellent iron-works, that the Ruteni and Gabales have silver mines. He goes on to discuss the Tarbelli, 'in whose land the gold mines are most important of all; for in pits dug only to a slight depth they find slabs of gold as big as the hand can hold, which at times require but little refining; but the rest is gold dust and nuggets, the nuggets too requiring no great amount of working.'

4.1.3 The Question of Uxellodunum

The battle at Uxellodunum is one of the best-described battles of the Gallic Wars (VIII.32–VIII.44). The leaders of the Cadurci and the Senones, along with their people, occupied Uxellodunum, which according to Caesar was extremely well-defended by both its natural position and by its ramparts. According to Hirtius, they intended to wait out Caesar's campaign in order to rebel at a later date. The high, craggy cliffs and the river running around nearly the entirety of the hill meant that the Roman forces knew Uxellodunum would be extremely difficult to subdue – particularly when the

legate in charge, Gaius Cainius Rebilus, had only two legions at his disposal. He split his troops into three groups, located on ground high enough to prevent a clandestine evacuation of the *oppidum* and to ensure that the inhabitants would not be able to refresh their supplies.

The creation of a Roman rampart, completely encircling the base of the hill, successfully prevented an attempt to increase corn supplies at Uxellodunum and resulted in two military successes. However, when Caesar arrived, determined to put down the revolt quickly, he realised that a stockade would not be sufficient for his purposes. He ordered that the water supply be interrupted – a difficult task as one of the springs that supplied the *oppidum* was located just below the high ramparts, an area that was nearly impossible to access from the ground. Caesar launched a highly visible attack on the spring, attracting the attention of the people holed up in Uxellodunum, while at the same time some of his men were busy tunnelling to the source of the spring. They succeeded in diverting the source of the spring, thus securing victory over the people within the *oppidum*.

Interest in identifying the location of Uxellodunum has led to decades of archaeological activity in the area thought to have been occupied by the Cadurci (modern day Quercy, which includes the department of Lot and the northern half of Tarn-et-Garonne). Until the early eighteenth century, Uxellodunum was most often associated with Puy d'Issolud. This association was based (at least in-part) on a disputed charter of King Raoul, dating to AD935, which gave the mountain or fortress of Uxelladuno to St. Martin's abbey at Tulle. Uxelladuno is described as being located near Vayrac and was a city known to have been besieged by the Romans (*Cart. De Tulle* no. 14).

In 1819, Jacques-Joseph Champollion carried out investigations at Capdenac and declared that site to be Uxellodunum (Champollion 1820). This judgement was accepted by the archaeological community until Jean-Baptiste Cessac (1862, 1864,

1865, 1866, 1867) excavated the spring of Loulié at the base of the Puy d'Issolud. He discovered traces of fire, sling stones, arrowheads, javelin heads, and even a 40 metre long gallery with some beams still in place. This last discovery fitted nicely the descriptions of Caesar cutting off the water supply at Uxellodunum. Cessac was able to convince Napoleon III, who had previously located Uxellodunum at Pistoule (opposite Luzech). In his *Histoire de Jules César* (1865-6), Napoleon listed Uxellodunum at Puy d'Issolud, and it has been the generally – though not universally – agreed location since.

In the late nineteenth and early twentieth century, it was A. Viré and E. Castagné that continued the search for the location of Uxellodunum, which led to further investigations at sites including Murcens, Luzech, Capdenac, and Puy d'Issolud. A result of their investigations was that our understanding of enclosed sites, particularly in the department of Lot, was greatly enhanced. Castagné (1874) conducted excavations at Puy d'Issolud, Murcens, and L'Impernal, and his work showed a strong analysis of structures and artefacts. He was the first to connect the structure of the wall at Murcens with Caesar's descriptions of a *murus gallicus*. Viré, who was president of the *Commission des Enceintes de la Société Préhistorique Française* from 1909–25, investigated many fortified sites within the department of Lot and, when possible, ascribed dates based on artefactual evidence (Viré 1908, 1910, 1936).

Since that era, researchers have continued to work towards being able to assign definitively a location for Uxellodunum. Lorblanchet & Genot's 1972 study, for example, had that goal in mind, and though they were not able to link Caesar's description of Uxellodunum to any particular site on the ground, their research did help to expand knowledge of later Iron Age settlements, highlighting not just the enclosed sites but also open settlements and cave sites dating from this time period. More recently, J-P Girault's (2007, 2013; Girault & Gasco 2012) excavations on the spring of Loulié resulted in Puy d'Issolud being officially recognised as the site of Uxellodunum by the Minister of Culture in 2001.

4.1.4 *Civitates and settlements mentioned in the ancient texts*

Strabo (*Geography* 4.2.1) mentions *civitates* on both sides of the Garonne river as being administratively part of the Aquitani. However, he differentiates between the fourteen 'Galatic' tribes, all of which are located between the Garonne and Liger (Loire) rivers and those of the Aquitani proper, which are located to the south of the Garonne. To Strabo, the Garonne was an ethnic and linguistic border between two distinct peoples: 'the Aquitani differ from the Galatic race in the build of their bodies as well as in their speech'.

Strabo (*Geography* 4.2.2) goes on to specify that fourteen tribes existed north of the Garonne and names twelve of them, as well as offering a small amount of geographical or cultural information for some: the Elui, whose territory begins at the Rhodanus; the Vellavii, who were once included within the boundaries of the Arverni but are 'now autonomous'; the Arverni, located on the Liger [note: the Liger is now known as the Loire, though the homeland of the Arverni is actually thought to have been in central France in the Auvergne region] (main city is Nemossus); the Lemovices; the Petrocorii (known for their iron works); the Nitiobriges; the Cadurci (known for their cloth production); Bituriges Cubi [note: this may be a confusion with the Bituriges Vivisci] (known for their iron works); the Santoni, along the Garonne and next to the Ocean; the Pictones, along the Loire and next to the Ocean; the Ruteni and the Gabales, both near *Gallia Narbonensis* (and both known for their silver mines).

Strabo also notes that 'there are more than twenty tribes of the Aquitani (ie, what he saw as the ethnically Aquitani tribes south of the Garonne), but they are small and lacking in repute; the majority of the tribes live along the ocean, while the others reach up into the interior and to the summits of the Cemmenus Mountains, as far as the Tectosages'

(*Geography* 4.2.1). Pliny gives a more complete list of the tribes of the region. Leaving out those already mentioned above, Pliny (*Nat Hist* 4.33) includes the following *civitates* in Aquitania: the Ambilatri, Anagnutes, Bituriges Vivisci, Aquitani, Sediboniatas, Bergerri, Tarbelli, Cocossati, Venami, Onobrisates, Belendi, Monesi, Osquidiales, Mountainers, Sibyllates, Camponi, Bercorates, Bipedimui, Sassumini, Vellates, Vornates, Consoranni, Ausci, Elusates, Sotiates, Osquidates, Succasses, Latusates, Basabocates, Vassei, Sennates, Cambolectri, and the Agesinales.

The location of the tribes to the north and east of the Garonne (ie, the lands bordering the area occupied by the supposedly ethnically distinct Aquitani people) are fairly well attested in the ancient texts. The Volcae Tectosages are described as being bordered by the Narbonenses to the south and the Garonne to the west. Strabo (*Geography* 4.1.12) states that their territory stretches to the Cevennes Mountains. Pliny gives us a location for the Nitiobriges, who are found just north of the Garonne and have as neighbours the Bituriges Vivisci to the west and the Petrocorii and the Cadurci to the north (Fages & Maurin 1991: 14). Strabo (*Geography* 4.2.2) also notes that the Garonne divides the territories of the Bituriges Vivisci to the south and the Santones to the north. Strabo considered the Bituriges 'the only foreign people who dwell among the Aquitani without forming a part of them', despite the fact that their territory was almost entirely surrounded by Aquitani *civitates*, and tells us that 'their emporium is Burdegala [Bordeaux] situated on a creek formed by the outlets of the river' (*Geography* 4.2.2).

The location the 20 *civitates* of the Aquitani to the south and west of the Garonne river is less clearly defined in the ancient texts. Strabo goes on to note that the Tarbelli controlled the coast as well as the gold mines which were located there due to the abundant gold deposits in the area (*Geography* 4.2.1). Caesar mentions the Sotiates in his *Gallic Wars*, and their *oppidum* has been identified with Sos (Lot-et-Garonne) (Lambert 1990, 1992; Fages 1995); the settlement is also mentioned in the *Jerusalem Itinerary* (p 550) as Scittium, which is likely a scribal error for Sotium (Holmes 1911:

808). Other modern scholars have attempted to reconstruct the geographical location of Aquitani *civitates* such as the Vocates and Tarusates, of which we know very little from the textual evidence apart from the fact that their territories are adjacent to that of the Sotiates. Gardes (2002:51) argues that, based on the direction in which Crassus must have travelled from Sos, these two *civitates* were located in the valley of the Adour. One possible interpretation of the locations of the *civitates* south of the Garonne can be found in fig. 4.2. Duval (1989: 723) was more cautious about assigning geographical locations to specific Aquitani tribes south of the Garonne, as can be seen in fig. 4.2a.

4.2 The Oppida and larger sites in late La Tène Aquitaine

4.2.1 *l'Ermitage, Agen (Lot-et-Garonne)*

Located near modern-day Agen, the oppidum of *l'Ermitage* has been the object of interest since the nineteenth century. Situated on a high plateau overlooking the Garonne river, it has long been suggested as the capital city of the Nitiobriges. The 60ha terrace is bordered on the east and west by small tributaries and steep slopes, offering a naturally defensive location (fig. 4.3). A rampart (which today stands 7m high and runs 800m long) was built along the northern edge of the site, where the relief is gentler, near the end of the 2nd century BC. The rampart was constructed almost entirely of earth; no internal timbers or stone facing was found. Geomorphological analysis indicates that the soil which makes up the rampart was taken from the northern part of the settlement (Boudet 1994: 85). No pedogenesis was detected, suggesting that the entire rampart was constructed at more or less the same time (*ibid*). A flat-bottomed ditch, 14m wide and 4.5 metres deep, ran in front of the rampart. A second embankment (dating to the mid-1st century BC) runs alongside the first for approximately 300m; here, the combined width of the two walls and ditch in between reaches nearly 60m.

In the first half of the 1st century BC, a system of large terraces was built in the northern-central area of the site in order to raise the ground level and create an even

surface (Boudet 1992: 137). There is no trace of buttressing or internal construction for these structures; the terraces were created by simply dumping massive amounts of soil which were probably stabilised by hedges (Boudet 1994: 39). Based on the distribution of surface finds combined with excavation evidence, Boudet (1994: 67) estimates that the settlement at Agen reached up to fifteen hectares on the northern part of the plateau at Agen, with the highest concentration of occupation occurring within the terraced area.

Excavations in the early 1990s revealed a posthole structure and two wells located close together. The structure was formed by nine irregularly spaced postholes, some of which still held the calcified remains of the original posts and fragments of Dressel 1 amphorae and Lamboglia B ceramics. The structure measured 6m x 6m in size and was oriented northeast/southwest, with an open space for a door on the northeast side. Modern agricultural work had destroyed the Iron Age floor of this structure, so it is not possible to properly identify its purpose. However, Boudet (1992: 4; 1994: 91) suggests that the structure may have had a ritual rather than domestic function, given the close proximity to the two wells, which included offerings of the Toulouse type normally associated with burials in this region (Fouet 1958). Although the wells at Agen did not include human remains, they both contained a range of artefacts, all carefully structured.

Both wells include offerings of the Toulouse type (Boudet 1992: 5, Boudet *et al.* 1994: 84) as well as more unusual finds. Well ST41 (fig. 4.4) measures 1m in diameter and 4m deep. The fill includes nearly-complete Dressel 1 amphorae, an assortment of local and imported ceramics, animal bones and metal objects (including a key, nails, rings, and bronze wires). At the bottom, a locally produced vase that had been crushed on the spot was found with objects organised around it. In the south corner was a Mannheim bronze helmet with the cap pointed downward. In the west corner, a wooden box held three iron sickles, one of which had been broken and then repaired. In the east corner

was a bronze jug (*oenochoe*) of the Kelheim type with two complete local vases (Boudet *et al.* 1994: 85).

The second well is 2m in diameter and much deeper than the first; the excavators stopped digging eight metres below the current water line. Approximately four metres down the width of the well reduces to one metre square. Below this point were found more than fifty individual amphorae (in fragments), interspersed with fauna, local and imported ceramics, several iron nails, bronze and glass beads, fibulae, and a glass bracelet (*ibid.*).

Additional wells on site were mentioned by Momméja when he investigated Agen in the early 1900s (Momméja 1904). The prevalence of wells here may well have indicated a ritual function for all or a part of the site, or a change of use over time, from a domestic to a ritual space.

The oppidum was deserted just before the Roman period and the inhabitants likely moved to Aginnum, modern day Agen, which was situated on lower ground and nearer to the river.

4.2.2 Sos, Sos-en-Albrect (*Lot-et-Garonne*)

Sos, the site of the *oppidum Sotiatum* mentioned in Caesar, is located in a loop in the river Gélise on a high, isolated plateau 16ha in size (fig. 4.5). To the west, south and east it is protected by steep slopes, while to the north, where the approach is easier, a large embankment (*c* 6m high and 10m wide) was constructed. This wall was badly damaged by the construction of a railway in the 19th century, and its internal composition is unknown.

The headland of Sos itself has not been investigated to any great extent, but the adjacent Peyroutet plateau has seen some excavation. In 1968, a rescue excavation in advance of

construction in that area revealed two potters' workshops and eight well-preserved kilns (fig. 4.6) associated with dumps of La Tène D ceramic material. This was then covered in a layer of soil containing Dressel 1a amphorae and other scattered finds (Coupry 1969: 367–8).

4.2.3 La Curade, Coulounieix-Chamiers (Dordogne)

La Curade is located on a plateau overlooking the Isle river (fig. 4.7). La Noë (1897) mentions the existence of a *murus gallicus* in the commune of Coulounieix, but excavations on site in the 1990s have shown that La Curade's enclosure was not constructed in the *murus gallicus* style. While the core of the rampart was not revealed, the excavators did find successive layers of soil, suggesting a cumulative dumping and packing down process (Chevillot *et al* 1995: 12). The rampart likely dates to between 80–60 BC, as the northern section covers an area of habitation which produced artefacts of this date (Chevillot 1983). It was built along the northern and western edges of the settlement, as the eastern and southern sides provided steep cliffs which did not require defensive strengthening. The lines of the enclosure do not follow the contour of the plateau, however; the wall, measuring 875m x 375m, partially encloses an area approximately 32ha in size, though it cuts off the northern section of the plateau which is nearly as large as the enclosed area (fig. 4.7).

Based on the fragments of thousands of wine amphorae found on the site, occupation began here sometime around the late 2nd century BC, but the high proportion of Dressel 1b sherds suggests that occupation – or at least consumption – intensified *c* 80–50 BC. The absence of Spanish Pascual 1 types indicate that the site was most likely abandoned *c* 40 BC.

Approximately 300m to the east of La Curade is a smaller headland, La Boissiere, which is cut off by a short wall. Excavations in advance of construction were undertaken here in the 1990s, revealing a cobbled area made up of flint nodules (*c* 10–15cm in diameter)

laid out in roughly concentric zones with smaller stones and pebbled used to loosely fill the spaces in between (fig. 4.8). As the soil in this area is a sticky clay (Chevillot *et al* 1995: 23), this paving was likely installed to make traffic easier. A six posthole structure (possibly a raised granary) was also uncovered in this area. Fragments of amphorae in two of the postholes (TP3 and TP 14) give us a *terminus post quem* of *c* 60 BC (Chevillot *et al* 1995: 30).

4.2.4 Lacoste, Mouliets-et-Villemartin (Gironde)

This unenclosed site is located on a slightly elevated alluvial terrace of the Dordogne valley (fig. 4.9), less than 2km south of the river and very close to the Pas de Rauzan, a shallow ford that was used as a crossing until the late 19th century when bridges were first built in the area. That the site might have some archaeological importance was suggested by the landowner in 1954 and since that time a number of excavations and fieldwalking investigations have taken place. In total, the site may have reached as great an extent as 20–30ha based on the distribution of finds recovered from fieldwalking (Mistrot & Siriex 2012: 112).

Two small-scale excavations were undertaken in the early 1980s in order to understand the complex stratigraphy at the site. They revealed an occupation chronology beginning in the late 3rd century BC and continuing until the mid-1st century BC. Ten pottery kilns, along with more than a tonne of pottery, were also excavated at this time. These kilns are formed in the same manner as those found at Sos, with a wheel-shaped hearth supported on a central pillar (fig. 4.10).

The 2007–2008 excavations undertaken by INRAP explored an area 700m long and 10m wide, providing an unusual opportunity to transect the site. From this, excavators have estimated that the 'residential' area of the site may have extended over 4–5ha with a separate area for workshops and artisanal activities divided by a system of rectilinear ditches (*ibid*).

Much of our information about Lacoste comes from the artefacts rather than the very few intact structures that have been revealed. Four thousand metal objects (more than 90% of which were made of iron) were recovered during the 2007–2008 excavations, to which can be added the 10,000 metal objects that had been found during earlier surface surveys. More than 60% of these metal objects are related to metal-working: they include broken objects, fragments, unfinished items and offcuts.

Fragments of amphorae were also abundant on site, though the sherds had most often been repurposed as construction material for hearths or paths. The large number of amphorae fragments found at Lacoste have led to several discussions and analyses of the material (Couprey 1959: 384; Boudet 1987). Boudet (1987:110) identified Greco-Italic, Dressel 1a (by far the most common) and Dressel 1b types. Benquet and Piot (2000) were later able to more closely identify 40 vessels as Lamboglia 2 type, which is distributed predominantly along the Garonne and Rhône-Saône rivers. This is the largest known assemblage of Lamboglia 2 amphorae from a single site (Loughton 2003: 201).

The combination of excavation evidence and surface finds suggests that occupation at Lacoste begins in the 4th century BC, with economic activity intensifying gradually throughout the 3rd and 2nd centuries. The quantity of imported material on site reaches a peak at *c* 150 BC and then begins to taper off from *c* 130–70 BC (Mistrot & Sireix 2012: 114).

4.2.6 Murcens, Cras (Lot)

The oppidum at Murcens sits on a promontory in the middle of the Causse du Quercy, a large plateau of secondary deposits (fig. 4.11). The site is bounded in the north by the valley of the Dordogne and in the south by the valley of Aveyron, and lies at the interface between the primary deposits of the Massif Central to the east and the tertiary

and quaternary deposits of the Aquitaine Basin to the west. The Lot river runs through this area, and Murcens overlooks its tributary of Vers, which cuts deeply into the geology.

A *murus gallicus*, surviving to 5m high and 10m wide, was built along the west and north of the plateau over a length of 2km (fig. 4.12). The presence of Dressel 1a amphorae within the fill of the rampart gives us a date for construction between the end of the 2nd century and the beginning of the 1st century BC. To the east and south of the plateau lie steep cliffs, tens of meters high. Geophysical investigations and metal detecting along the ridge on this side of the site revealed only four nails, indicating that this side of the site was probably left unenclosed due to the excellent natural defences here (Büchenschutz & Mercadier 1990: 39).

The rampart was constructed using fairly typical *murus gallicus* construction, with the exception of one vertical beam. This beam rests on the bedrock, easily visible as a negative in the gravel, in the centre of one of the boxes created by the horizontal beams. This seems to be a feature unique to this site; the only other known vertical beams are at Bâle, although they're located on the facing rather than inside the rampart itself (*ibid.*: 39). It may be that this post had some as-yet unknown structural purpose.

Büchenschutz and Mercadier conducted a survey at Murcens in order to determine the areas of the site which seemed most densely occupied and which had no traces of occupation. The western dome (the highest point on the site), the central area, and the tabular area of the north-east fall into the latter category. Several areas were identified which seemed likely to be fairly densely occupied: the north, along the internal edge of the *murus gallicus*; the north-west, at the beginning of a dry valley which leads down to the valley of the Rauze; the east, in a slight depression and in the zone of terraces; the south-west, again in a depression and on its northern periphery; the south, on the plateau which overlooks the valley of the Vers. These areas were connected to each other

through a star-shaped network of paths – five tracks which start in the middle of the site and branch outwards.

Apart from the southern area, none of these are located in a dominant position; most are located in areas where it would not be possible to see over the rampart. The western areas are all near water sources, are all located in areas with the thickest soil, and are near to the most obvious points of contact with the outside world. In contrast, the eastern sites are not located in areas focused towards the outside and are not located within 250m of water (*ibid.* 31).

Three zones were chosen for further investigation and excavation. Zone 3 was opened up with an excavation area of 40m² in 1986. The southern third of this excavated area produced evidence for occupation during the later Iron Age. The bedrock here is made up of calcareous rock, with a small dip in the south-east corner. The first occupants in this area seem to have levelled the ground in preparation for laying two unworked limestone flagstones, approximately five centimetres thick. They form a floor roughly sixty centimetres wide and 4.5 metres long, with no mortar between or under the stones. A posthole, surrounded by limestone blocks, was found just to the east of this structure. The packing material measures approximately 16 centimetres deep, with space for a post of 15 centimetres in diameter.

For at least three metres to the south-east of this structure lies a surface that seems to have been created by heavy foot traffic. The brown soil in this area contains many highly eroded stones, and the rare finds (small sherds of amphorae and local pottery) are equally degraded. This layer varies between 5 and 10 centimetres in thickness, and is covered in another 10 centimetres of natural sedimentation. Nothing here suggests habitation, especially when compared to other areas on site which have produced better-preserved occupation levels. Nevertheless, circulation appears to have been intense in this area.

Zone 4, the central point from which five tracks branch out across the site, was also investigated. The excavators wanted to determine the intensity of the occupation, and also see if they could identify path(s). Only slight traces of Gallic occupation were found just above the bedrock, and they were also unable to determine the exact nature of the trackways in this area.

A survey was undertaken in Zone 5 in order to define the path leading from the centre of the site towards the valley of the Rauze. The team were not able to find enough evidence to determine the nature of occupation in this area and whether it belongs to the Gallic period. They concluded that this was not an area of intense traffic.

Several rotary querns and abundant fragments of Dressel 1a amphorae were recovered from the *oppidum*, giving a late 2nd to mid-1st century BC date.

4.2.7 Puy d'Issolud, Vayrac (Lot)

The Puy d'Issolud, the site of Caesar's Uxellodunum, is a c 80ha calcareous plateau which rises to a height of 295 metres above the surrounding valleys (fig. 4.13). It is separated from the Causse de Martel by the valley of the Tourmente river to the west, and is bounded by the valley of the Sourdoire to the east. The south, east, and north sides of the promontory are virtually impossible to access on foot due to steep and sometimes overhanging cliffs, and the west, while slightly less imposing, is still very difficult ground. The plateau is surrounded by a rampart nearly 4.5km long, surviving to a height of between 3.2 and 5.6m high and 15m wide. A spring, known as la fontaine de Loulié, is located approximately 16m below the ramparts and it is around this area that Jean-Paul Girault (2007) began excavations in 1993 to explore the remains of the military activity at Uxellodunum during the Gallic Wars. A large number of weapons, including slingshots and Roman iron arrowheads, were recovered (fig. 4.14).

The interior of the site has seen very little in the way of modern excavation, but there have been stray finds dating from the Paleolithic to the medieval period found on site.

4.2.8 Pons, La Dague (Charente-Maritime)

Pons sits on a headland, *c* 100ha in size, overlooking the confluence of the Seugne and Soute rivers, with rocky cliffs to the east and the south (fig. 4.15 and 4.16). Along the northern side, where the approach is easier, a rampart was built which survives to a length of 1200m and 10m high (fig. 4.17). In parts of the north-east section the full width of the embankment measures 40–50m at the base, while in other areas it is much smaller at *c* 15m. Inrap excavations in 2008–9 looked at the ramparts near one of the entrances to the site (fig. 4.16 and 4.17b) and discovered a child buried at the outer base of the ramparts (fig. 4.18a) and associated bronze, lignite and glass ornaments (fig. 4.18b).

The rampart had been previously examined in 1968 following work on a local road (RN 137) which partially destroyed the wall. Though very badly preserved, a fragment of a Dressel 1 amphora was found, and enough of the stonework was uncovered to confirm that the rampart was man-made (Lassarade 1986: 125); because the wall was preserved so unevenly throughout its length, it had been earlier thought to be a natural formation. The defences were investigated again in 1976, when three parallel dry-stone walls, all subsequently covered in earth, were revealed. The full construction history of the wall is still not well understood, however, as these excavations were limited in size. Figure 4.18 shows some of the variation between the sections of the wall that have been revealed.

Also in 1968, the local archaeology conducted an excavation to explore the area underneath the modern local road to Saintes, cutting through the north-east part of the town and through the rampart, which Farerriere (1880: 157) believed covered an earlier Roman road. They discovered a medieval road surface along with an earlier road below that which was marked with U-shaped ruts, 20cm W x 25cm D, cut in the rock 1.3m apart. These ruts indicate the presence of wheeled transport on site, but no finds were

associated with these ruts so their date cannot be determined. It may be that this was an Iron Age road surface.

A dump of amphorae and local pottery, 30cm deep and containing two intact Dressel 1a amphorae as well as at least 40 rim sherds, was found within the *oppidum* (Chevillot & Colin 1999: 41).

4.2.5 *Esberous and Higat, Eauze (Gers)*

Two adjacent hilltops (Esberous and Higat) near Eauze (Gers) were both occupied during the late Iron Age. Esberous measures approximately 6ha. Amphorae, local pottery, and coinage, all dating to the late Iron Age, have been found here. Occupation continued into the Gallo-Roman period. Higat, measuring 12ha and partially enclosed on the western side by a large ditch, produced surface finds of Italic amphorae and early Iron Age sherds. Post hole structures, somewhat degraded by ploughing, were discovered. An intensive surface survey made it possible to identify areas of relatively dense occupation, measuring 3ha in the central area of Esberous and 5ha on Higat. The recovered material reveals an elementary zoning: accommodation in the centre, artisanal and agricultural activity mixed with marginal occupation in the periphery.

Gardes (2002: 55) suggests that these sites, considered together, constitute a true oppidum. Their combined defences, constructed in the second/first century BC, enclose 20ha, of which at least 8ha represents a stable and dense occupation. Recent investigations revealed a large quantity of Dressel 1 amphorae on both plateaux, indicating significant trade.

4.3 Smaller sites

Most secondary sites in Aquitaine are known only from surface finds or agricultural activity (Gardes 2002: 59). Many were discovered through investigations of the Roman sites which overlay them. Vanesia (Saint-Jean-Poudge, Gers) is both preceded by Iron Age settlements, and Mont-de-Marsan (Gardes 2001) and Salies-de-Bearn (Saule and

Gardes 2001) have produced finds which suggest a pre-Roman settlement. None of these sites have been excavated systematically, leaving us with a very incomplete knowledge of secondary settlements. Bordeaux (or Burdigala, as it was referred to by Strabo), however, provides a significant exception.

4.3.1 *Burdigala, Bordeaux (Gironde)*

Just upstream of the confluence of the Dordogne and Garonne rivers, Burdigala was located on low-lying land on the west bank of the Garonne in the area that is now the city of Bordeaux. Less than 100km from the Atlantic ocean, this was the first solid headland that one would encounter when travelling inland from the sea.

Bordeaux has produced relatively few Iron Age structures due to the success of the location as a Roman and later town, where subsequent development has likely obliterated the prehistoric levels (Barraud 1984: 71). At the Rue Port-Dijeaux the stone floor of a possible dwelling, discovered underneath a group of Roman structures, was dated to *c* 75–50 BC based on the associated Dressel 1B amphorae. Local pottery and coins of the *monnaies-a-la-croix* type were also discovered in the area. Underneath the floor lay many Dressel 1A amphorae which had been crushed on the spot. Fragments of local pottery and Campanian A and B vessels were found in this layer, along with four Gallic coins (Barraud 1988: 42).

Camille de Mensignac (1880) conducted a study at Bordeaux, mapping the locations which had produced surface finds and integrating that spatial data with the modern excavations. He estimated that the area of 'dense' settlement at Bordeaux during the later Iron Age measured approximately five to six hectares. Excavations at the Grand-Hôtel conducted by INRAP in 2003–4 uncovered an occupation area which featured successive rebuilding of dwellings from the 6th to the mid-1st century BC, as well as a limestone stele dated to the first half of the 1st century BC and significant quantities of

decorative metalwork including fibulae, bracelets and hair rings dating from the 5th–1st centuries BC (fig. 4.19).

4.3.2 Rural and farming centres

A number of rural sites have been identified through aerial photography and agricultural activity. Like the secondary sites, they are little understood and nearly all are yet to be excavated.

In Gers, these sites include Tournon, Saint-Sauvy; Carné at L'Isle-Bousson; L'Isle-Jourdain; Notaire, Ansan; Touget; Monlaur-Bernet; and En Merle. In the Middle Adour valley, they are Andres, Aurensan, and Barbazan-Debat. In eastern Chalosse, just one is known: Lac d'Agès at Monségur, Landes. These are all located on sites that had not been occupied in previous eras (Gardes 2002: 59). None have been the subject of methodological excavations, and it remains impossible to refine the classification or determine their function. Aerial photography has revealed a landscape of rural sites in the area surrounding Lectoure (Petit 1997: 449–51). The establishments are surrounded by angular ditches, very similar to rural sites elsewhere in Gaul. Activity on these sites tends to continue into the Roman period, and some of these sites even give rise to fully-fledged villas.

In western Aquitaine, small enclosures are more common than open sites. The settlements of **Estey du Large** at **Sanguinet** (Landes) is the prototype for this type of small enclosed settlement. Estey du Large is a waterlogged lake settlement. Dendrochronology revealed an Early Iron Age site (dating to the 6th through the 4th centuries) followed by a Late Iron Age settlement (dating to the 2nd and 1st centuries BC). In the latter period the site is palisaded with piles of oak and pine, marking out an enclosure nearly 3,000m². The interior of the enclosure indicates dwelling located along the inside of the palisade, with no suggestion of domestic occupation in the centre of the site.

Estey produced more than 29,000 fragments of common local ceramics, typical of coastal Aquitaine. Imported ceramics and amphorae were also found here, but in much smaller quantities. Spindle whorls have been recovered, obviously indicating the presence of spinning and perhaps weaving as well. A dozen fibulae were uncovered, dating to the middle of the first century BC (Maurin *et al* 1996, 1998).

The settlement did not survive into the Gallo-Roman period, but a new settlement, Losa, was founded approximately one kilometre away at that time (Maurin and Lalanne 1996:101). The lake at Sanguinet also revealed a long history of log boats dating from the Bronze Age to the modern period, including twelve dating to the Iron Age (Maurin *et al.* 1998).

4.4 The Development of the Oppida in Aquitaine

La Curade was most likely founded at the end of the second century B.C. (Chevillot 1983). It experienced dynamic growth during the first half of the first century B.C., with the rampart built *circa* 80-60 B.C., and then a fairly swift decline after 50 B.C. There are no finds dating to later than 40 B.C, which follows the textual evidence for the displacement of the capital of the Petrocores.

Over time, approximately 3000 square metres of **Sos** have been excavated. The site has a long stratigraphy, beginning sporadically in the early Iron Age and continuing up to modern times. The settlement expands in the late second and first centuries B.C., with occupation being seen even outside its ramparts (Gardes 2002:55) and then becomes smaller and less important during the Roman occupation (Boudet 1994:75).

At **La France (Bordeaux)**, the earliest occupation layer revealed ceramics from the Hallstatt period which were comparable to those found in levels II D-C and B at Lède du Gulp. They can be dated to roughly the sixth century B.C. Barraud (1988) estimates

that the site at 'La France' was occupied more or less without interruption from the sixth century until the Roman occupation.

The oppidum of **I'Ermitage** was deserted just before the Roman period. The settlement was moved to Aginnum, modern day Agen, on lower ground and nearer to the river, and was the chief town of the Nitiobriges during the Empire.

At **Lacoste**, occupation began in the fourth century BC on just a few hectares. Settlement developed to the north and the east and reached its greatest extent in the second and first centuries BC. The town grew to include an area as large as 30 hectares, but by the first century AD, the settlement had dwindled to less than 1 hectare.

Colin's (1998) reassessment of the chronology of Gallic oppida has further clarified the chronology of later Iron Age settlement in Aquitaine:

Phase 1 (c 180 –110 BC)

- Vayres (Gironde)
- Isle-Saint-George (Gironde)
- Aiguillon (Lot-et-Garonne)
- Moullets-et-Villemartin (Gironde)

Phase 2 (c 110–80 BC)

- Lacoste, Moullets-et-Villemartin (Gironde)
- Eynesse (Gironde)
- Cras, Murcens (Lot)
- I'Ermitage, Agen

Late Phase 2/Phase 3 (c 90–50 BC)

- Saint-Germain-d'Esteuil (until second century B.C.)

- Bordeaux (Gironde)

Aquitaine has several open settlements which survive past Phase 1 and 2. While some settlements do start off as open and are later enclosed (La Curade, for example), many more open settlements simply continue their occupation unenclosed. There are also very few examples of low-lying open villages moving upland and being fortified, as we see at Levroux and Bâle.

4.5 Urbanism in the Oppida of Aquitaine

There is very little evidence for the internal organisation of oppida in Aquitaine, which makes it difficult to assess their level of urbanism. Ideally we would see differentiated areas of habitation, with areas of larger, wealthier housing and smaller, less wealthy housing, and zones of industry and artisanal activity. Structural evidence of any kind is quite rare in the Aquitaine oppida, and virtually no individual dwellings have been identified. Habitation areas are most often identified by the density and distribution of surface finds (as at Lacoste, Pons, Sos and Bordeaux) rather than excavated structures, making it nearly impossible to understand the internal organisation of the oppida.

There are some indications of potential urbanisation, however. There is plentiful evidence for pottery production in the oppida of Aquitaine. Eight pottery kilns were discovered in the northwestern area of Sos in 1968, and sherds of La Tène III ceramics were discovered in the kilns themselves. The whole installation was covered over in a layer that produced Dressel 1a amphorae (Coupry 1969:267-8). At Bordeaux, a total of eleven pottery kilns were revealed (Mensignac 1980:62, Barraud 1986). Lacoste (Boudet 1983: 254) and Le Château at Vayres (Videau 1951) have also produced pottery kilns, again located at the edges of the settlement.

There are also some signs that spatial differentiation increases in the later Iron Age. At the early and middle Iron Age site of Chastel (Aiguillon, Lot-et-Garonne), for example,

pottery production and agricultural activity is scattered throughout the site and integrated into the occupation layers (Gardes 2002:65). The fact that later sites spatially segregate their kilns suggests a possible transition towards more differentiated settlements. This does not occur everywhere, however. The lowland site of Lafon known for its pottery kilns, which were located in the centre of the six hectare settlement and remained there throughout the later Iron Age. It was not until the Roman period that the furnaces and the associated settlement were moved closer to the Garonne river.

The oppida also produce evidence for other craft activities, particularly metalworking. This is shown particularly at Lacoste (Boudet 1986:113), where thousands of metal objects – including knives, axes, hammers, billhooks, files, keys, bits and nails – have been found. A significant quantity of slag has also been discovered, as well as a probable metallurgical installation (Gardes 2001:127). A similar range of metalworking evidence is found at Vayres.

The suggestion of fine metal craftsmanship is found in the presence of a compass, which would have been used for marking geometric designs. It is comparable to an example found at Celles (Cantal) (Boudet 1986:111). While we cannot be certain which objects were created at Lacoste and which were brought in from other sites, nor exactly where the metalworkers would have been located within the settlement, there is certainly strong evidence for metalworking being an important part of life at Lacoste. The particularly high proportion of tools intended for woodworking also indicated the presence of other craft activities. There are also indications of glass working on site.

Another piece of evidence for the variety of activities which took place at Lacoste is the discovery of iron slave chains with 27 iron links and a collar. This may have been used in a military or judicial context (detention of prisoners) or it may be an indication of involvement in slavery. Yokes are also found at San Zeno (Italy), Llyn Cerig Bach (Wales) and Chalon-sur-Saône as well as at ritual sites, and Aldhouse-Green (2004)

points out that there may have been some symbolic meaning behind the use of iron chains where more simple (and less 'expensive') solutions exist. Whether military, judicial, economic (slaves), or ritual, the yoke implies a layer of administration at the site.

There is good evidence for a range of craft activities at sites located north of the Garonne. Puy d'Issolud, for example, has produced an anvil, slag, and fragments of crucibles, along with a huge number of weapons (arrowheads, spear and lance heads, etc.) certainly implies a thriving metal industry. The existence of spindle whorls and loom weights for weaving, knives and querns for everyday domestic activities, punches and awls for leather production, and axes, adzes, shears, and billhooks for construction and agriculture certainly suggests a wide range of activities on the site.

While the other sites in Aquitaine have not produced evidence for a similar range of activities, both l'Ermitage and Sos have revealed indications of being ritual as well as domestic centres.

Finally, surveys at Lacoste, Sos, and Bordeaux have all suggested a restricted area of relatively dense habitation within the enclosures. This itself suggests a measure of internal patterning and differentiation, although this line of argument should not be taken too far. It is simply another small piece of accumulating evidence. As Garmy (1992) points out, we cannot dismiss urbanisation for the whole of the southwest. The very fact that the Romans were able to plant their cities and capitals on top of existing Iron Age settlements without significant problems indicates that most of the an existing settlement structure was well-suited to urbanism (Gardes 2002:113).

The development of trade with Rome seems to have had a significant impact on many of the settlements and particularly the oppida in Aquitaine in the later Iron Age. Gardes (2001) describes the second half of the second century BC, which corresponds to the

creation of Narbonnaise, as a phase of “consolidating and expanding” trade. The effects are clearly seen in the huge numbers of amphorae and, to a lesser extent, other Roman imported ceramics. While it is important to avoid overstating the influence of Rome on indigenous settlements, the economic stimulation provided by the burgeoning wine trade along the Garonne-Aude axis would have inevitably influenced the settlements situated along and near that route.

4.6 Settlements and the Civitates

Defining the borders of the civitates in Aquitaine is a challenging task. Twenty tribes are described as occupying the Aquitaine region around the time of the Roman conquest. Gardes (2002) indicates that even the largest tribes would have had territories of just 300 square kilometres, and defining the borders between one civitas and another is an imprecise activity.

This is due in part to the later activity and reorganisation of the territory. Early Roman rule seems to have followed the earlier political divisions fairly closely, as can be seen in the survival and expansion of many Iron Age oppida into Roman civitas capitals (Auch, Agen, Bordeaux, etc). This changed at the end of the third century AD, when Diocletian reorganized the provinces of Gaul. Aquitania was split into three provinces, Aquitania Prima, Secunda (whose capital was located at Bordeaux and whose territory included Bordelais, Poitou, Saintonge, Angoumois and western Guyenne) and Tertia or Novempopulana (the area nearest the Pyrenees and including the Basque country, and modern Gascony).

In 418 Theoderid settled a large number of Visigoths in Aquitaine as foederati, allied friends of the Imperial government, partially to protect against Saxon raiders but also to prevent an uprising like the one that had occurred in Armorica in 409 (Wolfram 1979:157). Within sixty years, the nucleus of a separate Visigoth kingdom had been created. Power structures fluctuated in Aquitaine over the next several centuries, with the area coming under the control of first the Moors, then the Carolingian empire, then

slipping in and out of alliance with the rest of France until 1453 when it became part of France for the rest of its history. While not every successive rule produced massive reorganisation, the cumulative changes mean that many of the ancient civitates are difficult to place with certainty.

However, the general location of a few civitates has been postulated, based on toponymic evidence, ancient texts, archaeological research, and coinage distributions. It has been possible to examine the something of the range of settlements that exist in these *civitates*.

4.6.1 The Ausci

Two fairly large sites are known in the territory of the Ausci: **Auch** (Gers) and **Sioutat, Roquelaure** (Gers). Auch (Elimberris) seems to have been the capital of the Ausci, although this is based primarily on toponymic evidence. While the site does command a dominant position in the landscape, no fortification has ever been detected. Several series of excavation in advance of construction didn't provide any indication of structures or stratified finds (Gardes 2002:56). However, the surface finds from this site have been abundant and impressive: Dressel 1 amphorae, local and imported pottery, and coinage, all of which date to the second/first centuries BC. Additionally, the site is located at a convenient stopping point between edge of Narbonnaise and Bordeaux.

Sioutat is a medium-sized *éperon barrée* that has been the subject of only sporadic research due to its location in an easily flooded plain. Several coins and a large quantity of italic amphorae sherds have been discovered here, which sets the site apart from the smaller settlements in this territory (Cantet & Péré 1963: 177). The size of Sioutat also distinguishes it; at approximately ten hectares it is roughly equivalent in size to Auch. Gardes (2001: 128) believes that the primary purpose of the settlement at Sioutat was to control the surrounding rural sites.

There is some limited evidence for secondary settlements in this territory; Vanesia (Colleoni 1999: 256) is a small Roman site that seems to have been preceded by an Iron Age settlement. Belsinum may also follow this pattern, although this is based primarily on linguistic and toponymic evidence (Gardes 2002: 57).

The evidence for rural occupation is just as scanty, and again these sites tend to be precursors to Gallo-Roman farms and villae. Both Roquelaure and Monlaru-Bernet are known Gallo-Roman sites, but the pre-Roman settlements are suggested only through stray finds, making their size and nature difficult to discern (*ibid*).

4.6.2 *The Elusates*

The major site of the Elusates is Eauze (comprised of the hill-forts of Esberous and Higat). At 20 hectares and situated in an excellent geographical position overlooking the middle valley of the Gelise, this site has a probable eight hectares of dense, stable settlement.

There are only two other sites located definitively within the territory of the Elusates: Saint-Jean-de-Castex, Vic-Fezensac and Lateran, Pouydraguin, both of which are less than two hectares in size. Despite this, they both produce evidence of intense occupation and abundant finds, including a plentiful quantity of amphorae. These two sites are located on the Adour and Osse rivers respectively, suggesting a management of trade routes (Colleoni 2002).

4.6.3 *The Biggeriones*

The Adour river provides a "spinal column" for the territory of the Biggeriones. Ten fortified sites are known within the area, three of which stand out in importance: Camp de César at Ossun, Castet-Crabé, and Castet-Biehl de Saint. Of these, only the last has produced enough material (including amphorae and campanian pottery) to suggest a

permanent, stable settlement (Gardes 2002:57). This site was transformed into a castrum in the Roman period.

There is also evidence to suggest an Iron Age occupation in the low-lying plains near Tarbes, possibly underneath the Roman site of Tarba/Turba (also known as Bigorra). Again, the extent and nature of the settlement can not, as yet, be determined. The intermediate settlements in this area are located on the slopes of plateaus, overlooking the many agricultural sites that have been revealed in aerial photographs and surveys (*ibid*).

4.6.4 The Boiates

Biganos, Lamothe (very near the Basin of Arcachon) may have been the primary site of the Boiates. The Boiates aren't named before the late 4th century AD *Notitia Galliarum* and their history is unclear. Biganos was a low-lying, unenclosed site primarily known for its Roman finds, which included a purse of second century AD sesterces. Excavations have also revealed several fibulae and possible earlier dwellings dating the 1st century BC (Boudet 1994: 59).

Estey du Large, at Sanguinet, revealed a palisaded enclosure 3,000m² (0.3ha). This settlement suggested a range of domestic activities, including fishing, spinning, and weaving. The number of fibulae discovered here also suggests that the settlement was not lacking in wealth.

Hastingues (Landes) is another site that seems to conform to the idea of a somewhat more agrarian and less urbanised western Aquitaine. The settlement was excavated over 2500 square metres and revealed a dwelling and several external pits and hearths. The evidence suggests that the dwelling structure was light, possibly even temporary, and linked to pastoral activity (Riune-Lacabe & Tison 1990).

4.6.5 Other civitates

The situation is more complicated elsewhere. There is evidence for secondary sites associated with the oppida of Sos, Agen, and Lacoste but these sites have not been excavated conclusively. A plateau to the north of Sos revealed a few hectares of Late Iron Age finds and several pottery furnaces (Boudet *et al* 1994: 90). Near Lacoste, several smaller settlements appear; the surface collection of finds suggests a settlement of a few hectares on a neighbouring hilltop. Others seem to be very restricted agricultural settlements.

The situation further to the north of the Garonne is somewhat different to all of the examples given above. The *civitas* of the Cadurci, for example, includes a number of quite large oppida (Murcens, Puy d'Issolud, Luzech, Capdenac). This may be due in part to the geography of the area, and the unique economic situation between central France and the Garonne-Aude axis, but the *civitas* itself is much larger than the *civitates* located to the south of the Garonne. It encompasses the modern department of Lot and some of Tarn-et-Garonne, whereas the dozen or so known tribes to the south of the Garonne are distributed over just five departments.

4.7 Cultural Divisions Within Aquitaine

The representations in Pliny, Caesar, and Strabo suggest an Aquitaine subdivided into three parts: the Pyrenees, its foothills and the oceanic borders, and the slopes of Gascony. Gardes (2002:57) follows this distinction fairly closely, with divisions between the sites of Gers, which are primarily located near the Garonne and its distributaries, and those further west in Landes and the Gironde basin. In the Aquitaine 'heartland' of Gascony the oppida tend to range in size from ten to twenty hectares, with a few larger sites, while in the west the largest sites are rarely larger than six hectares. A smaller size of settlement is also predominant in the south of Aquitaine, in the Pyrenees mountains (Boudet 1994, Larqué 1997).

To an extent, these divisions can be seen in the examples above: the territory of the Ausci and Elusates are organised on a central site(s) that exert a pre-eminent political role. One can see a loose distribution of secondary sites, which take on some of the same responsibilities but on a much smaller scale. Gardes (2002:57) suggests that this same pattern can be transported to the tribes of the Sotiates or Lactorates.

The situation with the Bigerriones is somewhat different, and may suggest less centralisation and hierarchy. The western area of Aquitaine seems to be dominated by this type of organisation. The Tarbellis, for example, follow a similar pattern (Gardes 2002:57), and the Boii also seem to have fewer and smaller sites compared to those in eastern Aquitaine.

This is mirrored in the later Iron Age economic pattern. In the east, Gers and the surrounding area suggests are closely involved with the Roman economic sphere through the Garonne-Aude axis. The finds of amphorae, campanian ware, *monnaies-a-la-croix*, and local and Roman currency in eastern Aquitaine certainly suggest a flourishing trade with the Mediterranean. In contrast, the western Aquitaine sites aren't as influenced by Mediterranean commerce. Spanish coins and ceramics are found at many sites in the Pays Basque.

Whilst these distinctions are primarily economic, they may also suggest an underlying sense of identity. The amphorae that travelled along the Garonne and out into the Atlantic could easily have been transported to the settlements of western Aquitaine, as could the accompanying Roman coins. Instead, it seems that the people in this area prefer to trade with the Iberians, with whom they had developed trade routes over successive generations and even centuries. These connections can also be seen in Caesar's account of the Gallic War (*BG*, III.27), when Crassus travels to western Aquitaine. These *civitates* come together and call for help from their allies in Spain.

At the same time, it is also important not to overstate this division, particularly in regards to the size of settlements. Investigations at several of the oppida in eastern Aquitaine (Sos, Higat, and Esberous amongst others) have suggested that the effective settlement size is much smaller than the enclosed area. The densely settled areas of the adjoining hills of Esberous and Higat combined reaches only eight hectares; not far off the six hectares given for western Aquitaine. Additionally, the size of many 'major' sites across Aquitaine is unknown or estimated based upon the distribution of finds, as at Auch. This, coupled with the general lack of understanding of secondary sites across Aquitaine, makes it very difficult to suggest different social organisations as Gardes does (2002:58). It seems dangerous to assume a more hierarchical organisation in the east based on increased trade with Rome and marginally larger sites given the relative paucity of information currently available.

4.7.1 North of the Garonne

It is perhaps not surprising that the settlements north of the Garonne are somewhat different from those south of that river, since the ancient sources do state that the Garonne is the northern boundary of Aquitania in a cultural and linguistic as well as geographical sense. However, political motives and cultural confusion may have coloured this statement (Sherwin-White 1957: 39), and a handful of civitates are thought to have had territory on either side of the river (Gardes 2002). Archaeologically, the area to the north of the Garonne is an interesting interface between Aquitaine proper and central France.

The oppida in Quercy take advantage of the high contrast of the landscape – larger plateaus, higher hills, and impressive cliffs – as can be seen at both Murcens and Puy d'Issolud. The enclosed area of these sites can be impressive in comparison to those in the south – Capdenac, Puy d'Issolud, and Murcens are all approximately eighty hectares, while the largest oppida along the Garonne measure between thirty and forty hectares. These sites are also part of a lucrative area for trading (Buchsenschutz 1990: 26) as they

are located directly between the Garonne axis and the established inland trade networks of central France.

5. Discussion

5.1 What is the nature of the *oppida* in western France?

5.1.1 Brittany

The inland or 'tribal' *oppida* in Brittany (Huelgoat, Josselin, Fougères) appear at first to conform to the *oppida* criteria set out in section 1.1.1 based on their morphology: they are larger than 15ha, enclosed by ramparts and found in upland locations. One (Huelgoat) has *murus gallicus* ramparts, confirmed through excavation, and there is some evidence that another (Fougères) may have had a *murus gallicus* as well. However, the single excavated *oppidum* in this category (Huelgoat), like Petit Celland, has produced very little in terms of occupation evidence, and even taking into consideration the relatively small scale of the excavations at these two sites it seems likely that they were not thriving settlements with an active economy and a town-like internal layout indicative of the *oppida*, but rather that they acted as temporary places of refuge, as suggested by Wheeler and Richardson (1957: 2).

These sites also contrast with the *oppidum* at Moulay, which is located just outside the Breton peninsula and the areas controlled by the four main Armorican *civitates*. Huelgoat, Josselin, and Fougères are all relatively small for *oppida*, ranging in size from *c* 20–30ha, compared with Moulay which has recently been shown to measure *c* 135ha. Moulay also conforms to many of the traits we look for in *oppida*, from a relatively dense occupation over 80ha of the site, to the orthogonal roads and ditches within the site which create internal zones for workshops and domestic use as well as a possible sanctuary, to the presence of craft production and manufacturing which indicates a developed and thriving economy. The contrast between Moulay and the three other *oppida* is striking.

The single coastal *oppidum* which has been excavated, Alet, provides better evidence for sustained occupation and economic activity compared with the inland *oppida*. Trade and production were a significant focus of the settlement here, with evidence for extensive metallurgical activity as well as minting coinage on site. However, very few structures were found on site so it is difficult to speculate on matters such as internal layout or even the density of occupation on site. Pointe du Meinga and Le Conquet, both potential *oppida* based on their size and evidence for ramparts, remain unexcavated, but they may have been similar settlements, with a particular focus on trade and production. While there is not enough evidence to suggest an entirely separate category of coastal *oppida* in Brittany as Cunliffe has suggested, smaller coastal settlements like Le Yaudet and Cleden Cap Sizun and salt production centres with associated settlements like Les Ebihens suggest a strong connection to the coast across all settlement types, particularly in present-day Côtes-d'Armor and Finistère.

At the same time, excavations over the past 10-15 years have also uncovered late Iron Age inland lowland sites like Paule and Kergolvez (which is unenclosed). While these sites are discussed further below (section 5.2), it is to be noted that thus far on the Breton peninsula itself, the best evidence for many of the traits archaeologists look for in *oppida* can be found at Paule; it is among the largest of the late La Tène settlements at c 30ha, there is evidence for a variety of activities and people on site, all operating within clearly differentiated areas. Overall, Brittany has a highly varied settlement record, with *fermes indigenes* and salt production centres, coastal villages and large open settlements, all of which may explain why the the 'tribal' or inland *oppida* seem to have little evidence for occupation.

5.1.2 Aquitaine

Many of the *oppida* discussed in Chapter 4 here better fit the list of typical *oppida* characteristics listed in section 1.1.1 than their Breton counterparts, in part because the

interiors of several of these sites are better known. Craft production is evident at Murcens, through fieldwalking and survey evidence, and Sos, where extensive pottery manufacture has been discovered. Agen, La Curade, Pons and Murcens have all produced evidence for occupation and at least some element of internal organisation within the ramparts. In general, these sites haven't been excavated to an extent where it would be possible to map different 'districts' within the sites in the same way that excavators have done for Mont Buevray, but at Agen there is evidence for a distinct ritual area with a possible communal building or sanctuary and many wells with offerings found inside. At Murcens, systematic surveys have identified several different zones of occupation and craft production.

Though these sites all have features typical of *oppida*, it is clear that a somewhat different situation is occurring within the triangle of Aquitani territory formed between the Atlantic ocean, the Garonne and the Pyrenees. Sos is the single known example of an *oppidum* in this area, and the ramparts enclose just 16ha. Interestingly, this is also one of the *oppida* with some of the best evidence for occupation and significant activity outside of the ramparts; the 10ha area on the Peyroutet plateau immediately adjacent to the site includes two pottery workshops and eight pottery kilns. The ceramic material recovered from this area dates to La Tène D and is presumably contemporary with the *oppidum*, though the area inside the ramparts and the walls themselves are poorly understood due to a lack of excavation on site.

Two unenclosed sites located within the lowlands are worth mentioning here. Lacoste, which was as large as 30ha, was situated near the Dordogne river and has produced extensive evidence for trade and production. Lacoste is discussed further below (section 5.2), but we can also compare it with Bordeaux, which seems to have followed a similar development over the 5th-1st centuries BC, albeit on a smaller scale (the late Iron Age site at Bordeaux likely measured *c* 5–6ha). Both Lacoste and Bordeaux were low-lying, open settlements, both situated on major rivers, and both have given us extensive

evidence for craft manufacturing. It seems likely that these sites are located with a view towards maximising trade along the riverine networks, which may help to explain their longevity.

5.2 Lowland *oppida*, unenclosed sites and settlement continuity

In section 1.4.6 I looked at Salač's 2011 theory of lowland *oppida*. Based on his observation of sites in Austria and Bohemia, lowland *oppida* show the following features: they are situated in lower lying, fertile land; they are located on long-distance trade routes, like crossroads or waterways; they are either unenclosed or are enclosed only at a later period of development; they are large, often dozens of hectares in size; they are older than most upland *oppida*, with origins usually in the mid-3rd century BC; they develop gradually, growing from small to much larger and more important settlements; they provide strong evidence for manufacturing and trade; and they have town-like internal spatial organisation.

While this category of sites is still not very well understood, the sites of Lacoste and Paule are very similar, at least in some aspects, to this description. Lacoste is an unenclosed settlement which grew as large as 25–30ha, situated in low-lying ground at the intersection of the territories of the Petrocorii, Nitobriges and Bituriges Vivisci near major trade routes. The settlement was founded much earlier than most *oppida*, with one of the kilns on site dating to the first half of the 4th century BC. There is abundant evidence for extensive economic activity on site, with metalworking having been particularly prevalent; finds include a currency bar, slag and an anvil and ironworker's tools. The interior of the settlement is organised into discrete functional areas, with houses being located near the middle of the site and workshops surrounding them.

The settlement at Paule began even earlier, at the end of the 6th century BC. The site grew from 1ha in its first phases, gradually expanding to reach 30ha in the 1st century

BC. It started as what appears to have been an aristocratic settlement made for a single family, but it expanded to encompass many houses, along with an separate area devoted to metalworking and stables for horses (fig. 3.12). The internal organisation at Paule is very clear, with large walls dividing up different areas of the site (fig. 3.11). However, Paule does have some features which do not fit into Salač's lowland *oppida* model; most importantly the fact that the settlement appears to revolve around a single, likely aristocratic, family for the entirety of its existence rather than growing organically as a town focused primarily on trade and industry. It also had some element of enclosure throughout the history of the site. Clearly, Paule did not develop in the same way as other lowland *oppida* did across Europe in the middle to late La Tène; the site is completely dominated by a single family in a way that is utterly unique. However, Paule is an important example of a large, densely occupied settlement situated in a relatively low-lying landscape with a long continuity of occupation and may represent a local variation on the lowland *oppida* theme.

5.3 Western French *oppida* as central, urban places

In the previous section, I examined the *oppida* and potential *oppida* sites of Brittany and Aquitaine against the criteria that is usually given for *oppida* in Europe. These criteria are related to central place functions and urban status, but it may be helpful to look at these elements more closely. In section 1.2.2, I looked at Buchsenschutz' identifiers for the *oppida* as urban central places, which included continuous fortification, an enlargement of habitation area compared to previous eras, a move from the lowlands to the uplands, and spatial organisation within the *oppida*.

Having just looked at examples of lowland *oppida*, we can perhaps discount the fortification and upland location as necessary markers. An enlargement of habitation area compared with previous eras is something found in many of the *oppida* of western France, though again with the lowland *oppida* we can also see elements of settlement

continuity where enlargement during the late La Tène is not as marked. Spatial organisation, however, is an important criterion, and as we have seen in the previous section several western French *oppida* show evidence for combining both craft activity and domestic dwellings. However, most of these sites have not yet produced evidence for the kind of dense occupation, clear zoning and differentiation between elite and non-elite houses that are expected from a truly urban *oppida*. Sites like Moulay, Lacoste, with clear evidence for intense occupation and craft production in separate areas, and Paule, with its clear distinction between the elite family at the centre of the site, are the exception.

One element not yet discussed is ritual. Fichtl (2000: 120–7) notes that many *oppida* have an explicitly religious or ritual element, which he sees as an element of their urban nature. Examples of ritual spaces in *oppida* include La Terrasse and other ritual foci at Mont Beuvray, the Viereckschanze found in Donnersberg and the sanctuaries at Titelberg and Manching, among others. In western France, we can see evidence for ritual practices at the wells in Agen, which were associated with a large structure which may have been used for ritual purposes. At Sos and at Pons, burials near the ramparts and their associated grave goods show that these sites were also foci for ritual practices and the remembrance of the dead. Similar burials associated with *oppida* have been found at Titelberg and Mont Beuvray and it seems likely that more examples could be found in western France as more excavations are undertaken.

5.4 Was there a '*civilisation des oppida*'?

The idea of a *civilisation des oppida* has existed for 100 years and it is surprising how little our concept of the ideal *oppidum* has changed in that time. Déchelette formed an image of the *oppida* as urban, industrial centres filled with a variety of people and diverse activities, all surrounded by ramparts (Déchelette 1914: 943–96). He also was the first to view the *oppida* as a uniform site type, an indication of shared Celtic culture: 'It is as if there is a uniform layer covering a vast Celtic territory, and all of its outcrops present

the same series of objects' (Déchelette 1914: 970, translation mine). Buchsenschutz (2004: 338), among others, explicitly recalls this tradition, referring to the creation of hundreds of *oppida* in the last 130 years BC as a *civilisation des oppida*.

From Déchelette we have gained both the idea of a 'laundry list' of characteristics for the *oppida* and the idea of *oppida* as a pan-European phenomenon, an expression of shared cultural processes. Are these ideas still useful to archaeologists today? Or, as Woolf (1993) suggests, is the category of *oppida* itself an unhelpful term which obstructs more than it clarifies?

While it is clear that there is significant variation between the *oppida* in western France, and that some non-typical *oppida* sites embody many of the features associated with *oppida*, it is still important to examine these sites as a single class (though perhaps with distinctions between lowland and upland *oppida* in order to highlight their different evolutions) while also recognising these variations. However, it is less helpful to view the *oppida* as a uniform response to late La Tène social processes across Europe. It is clear that morphological similarities can hide internal variations in the nature of the *oppida*, with some sites seeming to be full of activity and others being virtually empty or perhaps settled only temporarily. The *oppida* are in inherently flexible category of site, and should be examined in light of their local and regional contexts.

Note: Since this thesis was initially submitted, several relevant books and articles on the topic have been published. Although it is not possible to include a full consideration of these texts here, they are important contribution to the debate on the nature of *oppida* and as such I wanted to make a brief mention of them. In August 2013, the *European Journal of Archaeology* printed two major articles dealing with *oppida*: Wending's study of Manching, which focused on the *oppidum* as being part of a wider trend of unfortified, urbanised craft and trade centres (similar to the lowland *oppida* of Salač's model); and Moore *et al's* study of the Bribracte environs project, which revealed a dense spread of Late La Tène material over a 115ha contiguous area 3km to the north-west of Mont Beuvray at Sources de l'Yonne (dating to *c* 50 BC–AD 15), with structures and material remains similar to those found at Bibracte. Also in 2013, the proceedings of the 2011 Association Française pour l'Étude de l'Âge du Fer meeting in Bordeaux was published (Colin & Florence 2013). The volume includes a number of papers covering the recent discoveries at Lacoste, as well as contributions on pre-Augustan Bordeaux and other Iron Age settlements.

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Illustrations

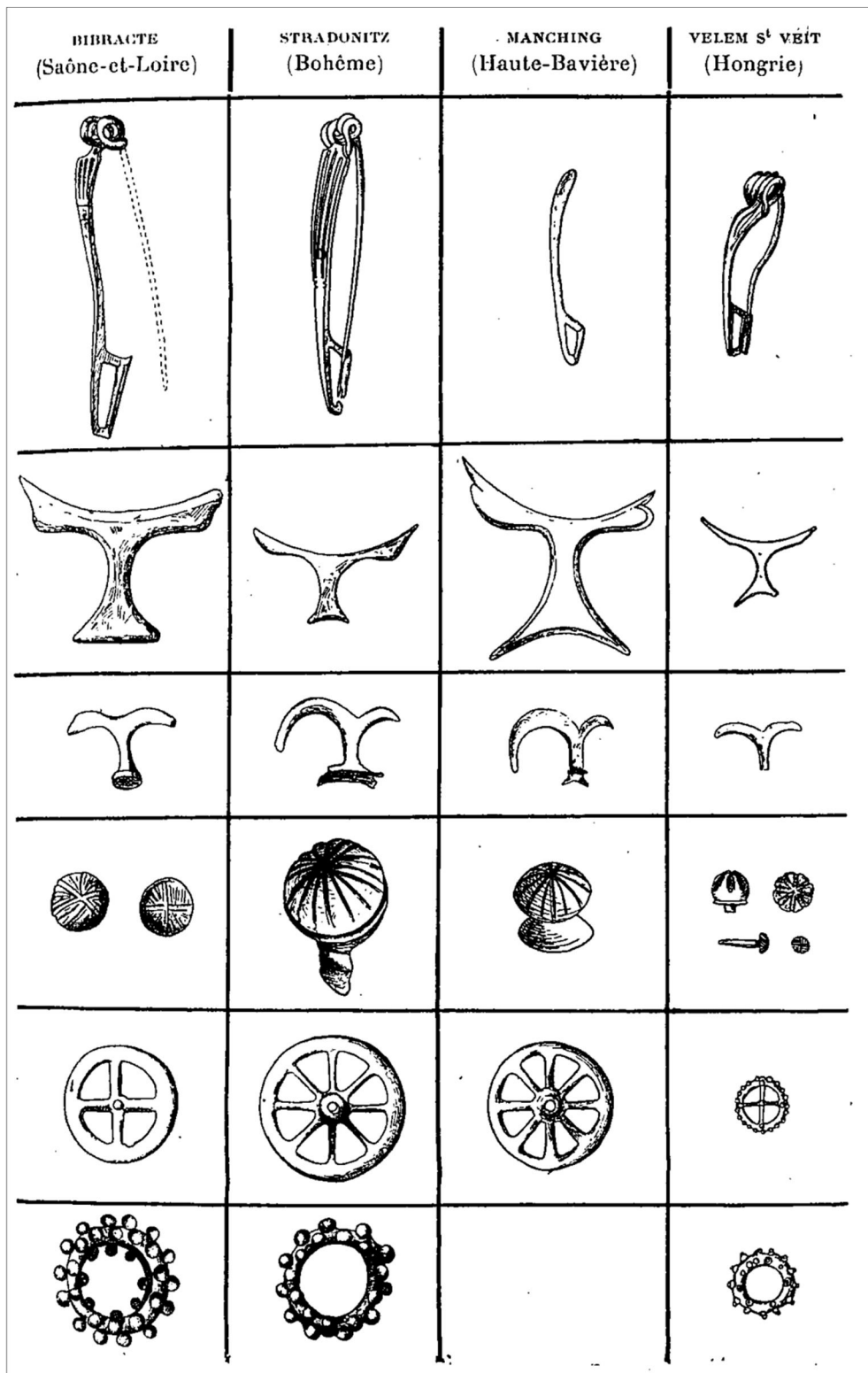


Fig. 1.1 Comparison of finds from Mont Beuvray, Manching, Stradonice and Velem-Szent-Vid (Dechelette 1914: 971)



Fig. 1.2 Relative sizes of several *oppida* across Europe. For comparison, the smaller sites here include Metz (35ha), Titelberg (50ha) and Bracquemont (52ha), while the larger sites include Heidengraben (1,662ha maximum extent) and Kelheim (630ha). All sizes are approximate (Fichtl 2012: 19)

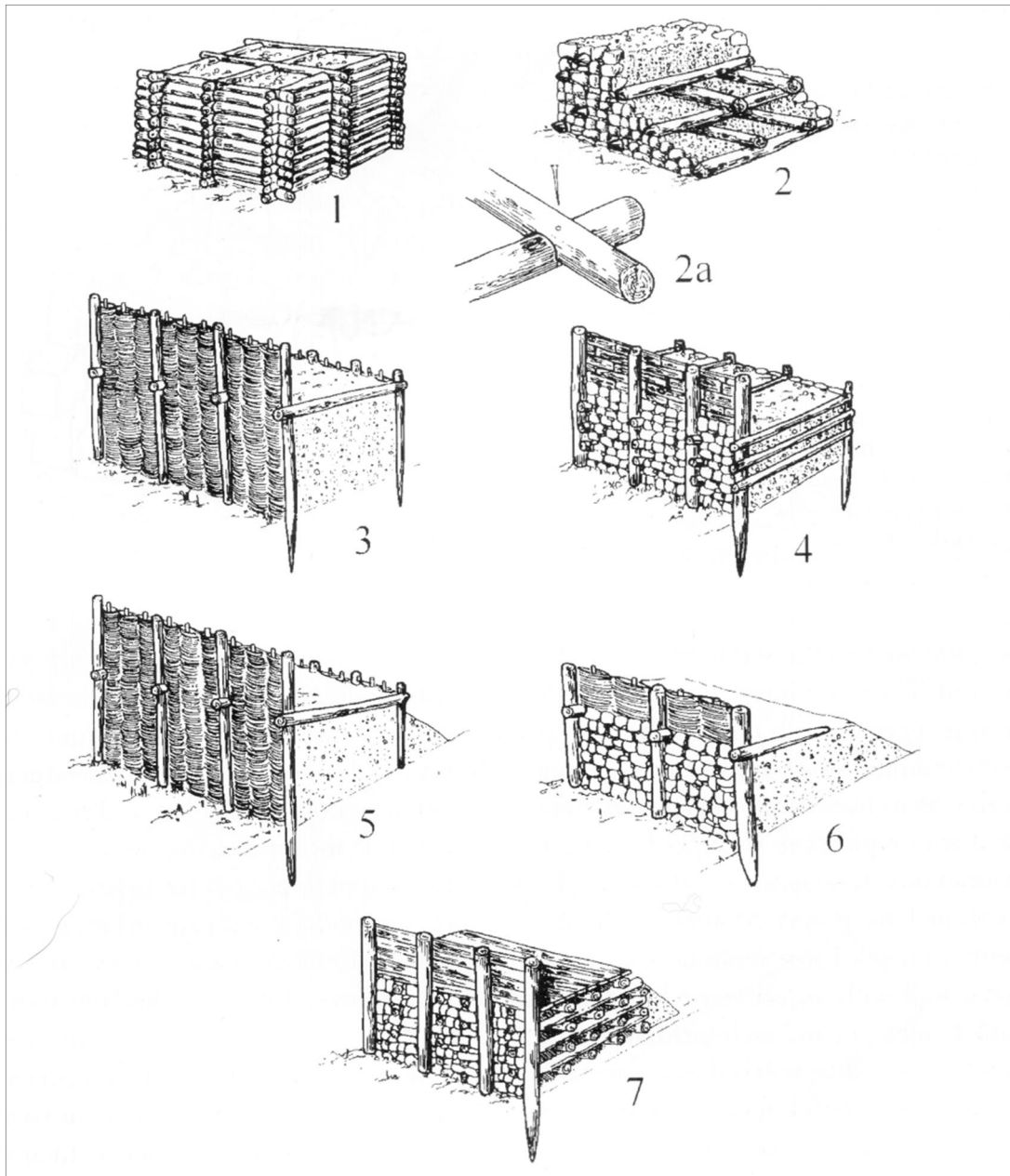


Fig. 1.3 Various construction types found in the wood, earth and dry-stone walls found in temperate Europe during the Iron Age. 1) *Kastenbau* type; 2) Ehrang type; 2a) *murus gallicus*; 3) box rampart; 4) box rampart of Altkönig-Preist type, called *Pfostenschlitzmauer* in Germany; 5) Hod Hill box rampart variant; 6) Kelheim type; 7) the wall at Cathedral Hill, Basle (Switzerland), which combines horizontal timber-lacing and vertical posts in the outer wall face (Ralston 2006: 49)

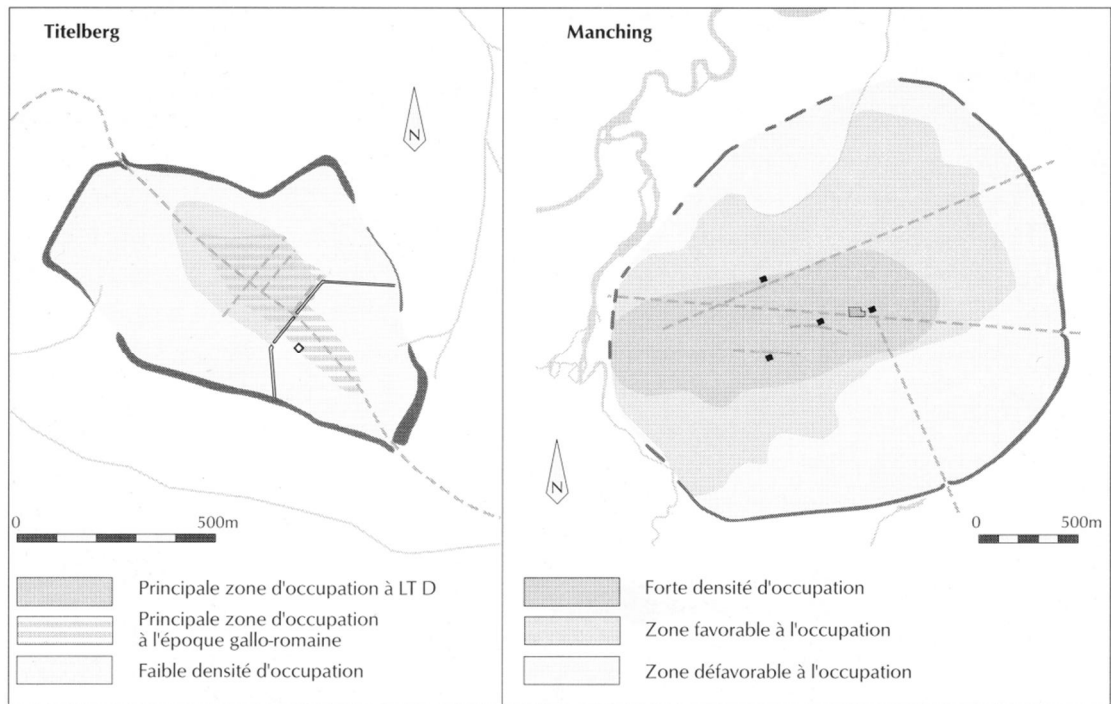


Fig. 1.4 Plans showing areas of relatively dense settlement (grey) and unoccupied or less densely occupied areas (white) at Titelberg (c. 50ha) and Manching (c. 380ha) (Fichtl 2000: 72)

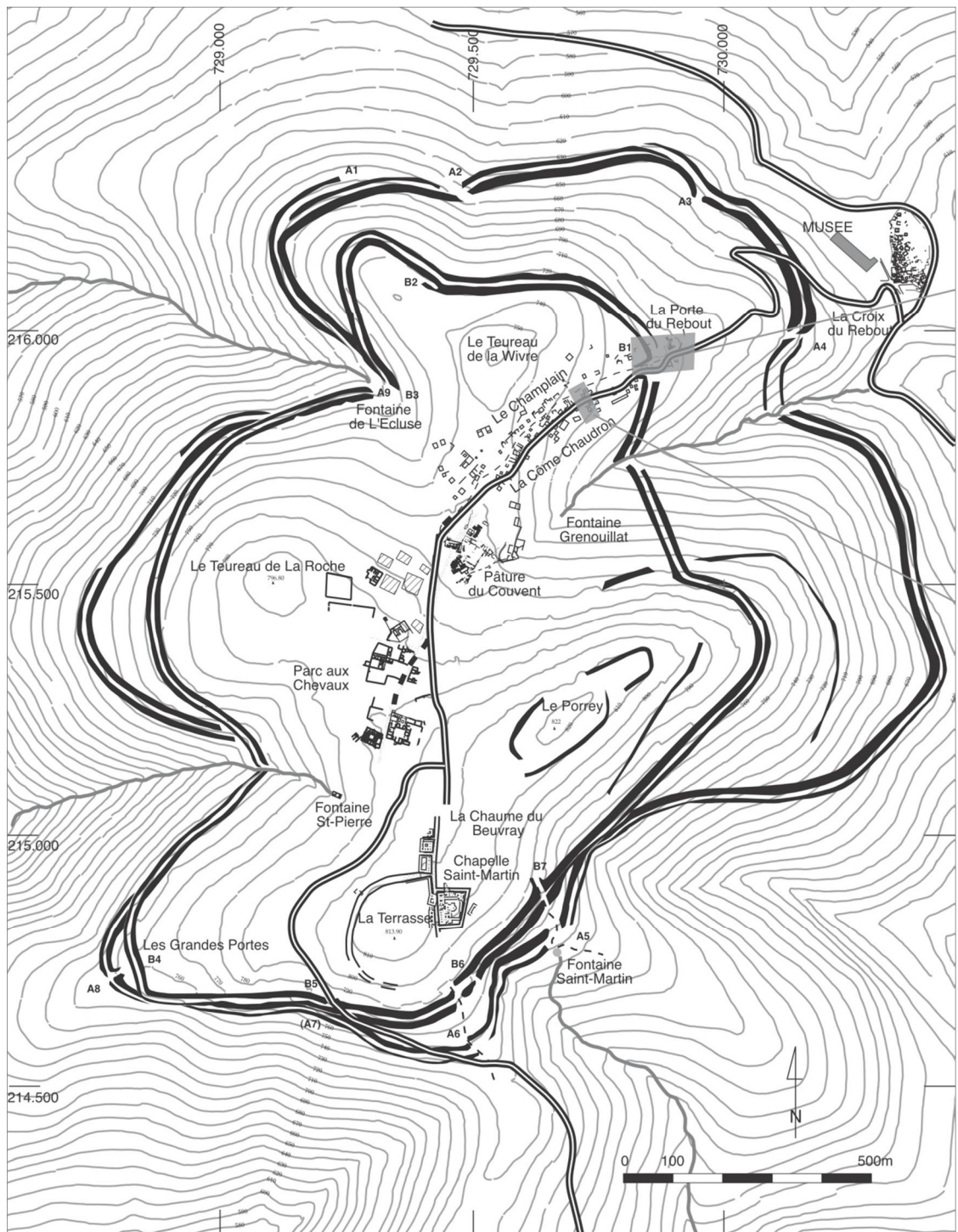


Fig. 1.5 Plan of Mont Beuvray (Bibracte) showing the workshops at La Côte Chaudron and Le Champlain, situated at the north-east of the site along the road leading into the *oppidum* from the largest gate, Porte du Rebout, and the larger dwellings at Parc aux Chevaux toward the centre of the site (Guillaumet 2011: 896)

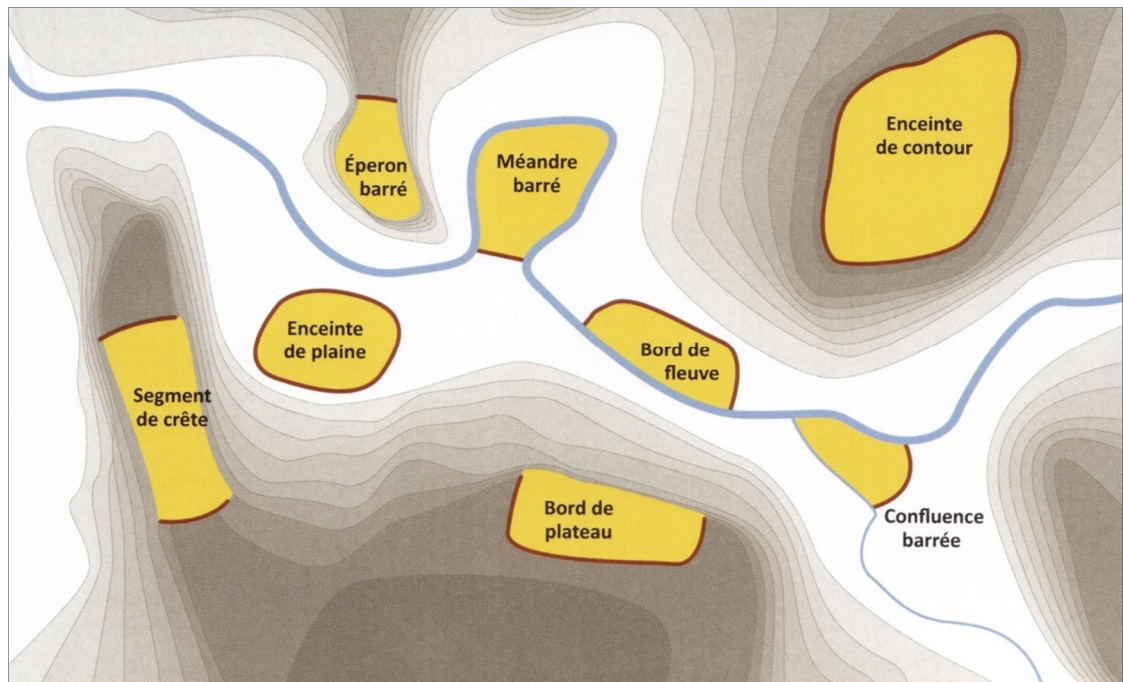


Fig. 1.6 Some of the various topographic locations in which *oppida* are commonly found (Fichtl 2012: 17)



Fig. 1.7 Plan of workshops along the Côte Chaudron/Champlain (Fichtl 2012: 47) and (inset) artist's reconstruction of the area (Goudineau & Peyre 1993: 131)

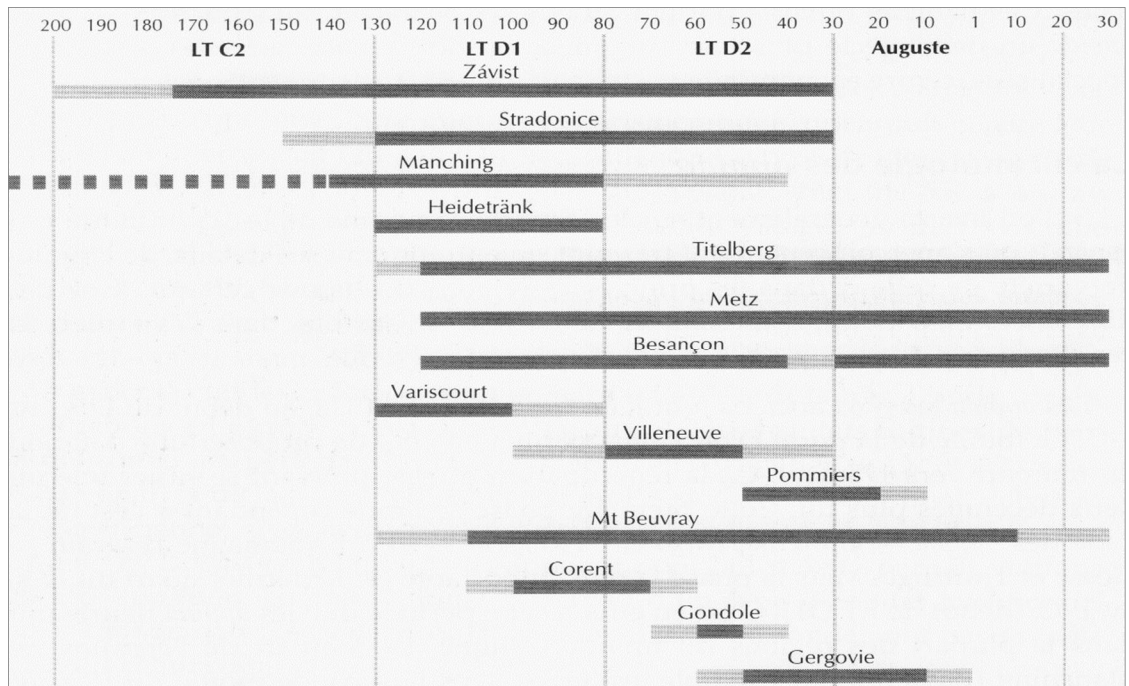


Fig. 1.8 Chronology of several well-known *oppida* (Fichtl 2000: 17)

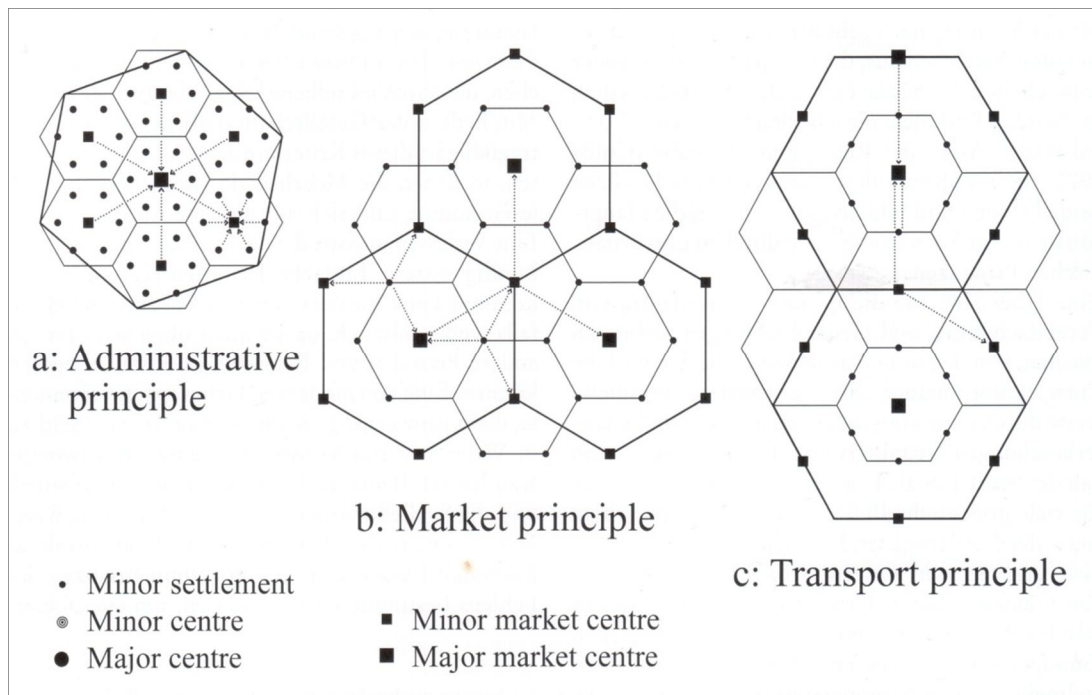


Fig. 1.9 Diagram of Christaller's administrative principle (a), market principle (b) and transport principle (c) (Collis 2010: 78)

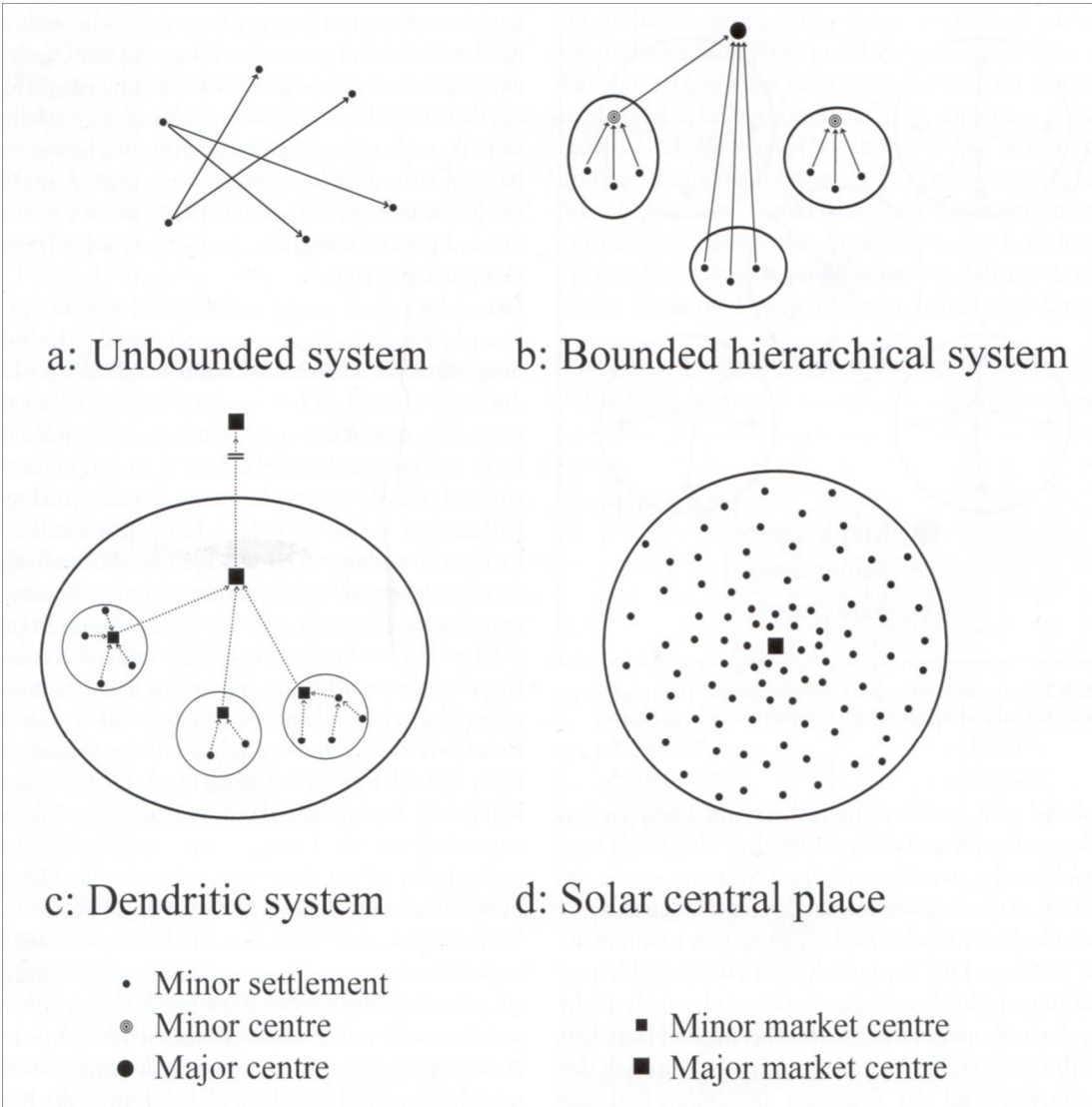


Fig. 1.10 Diagram showing the differences between unbounded and bounded systems (a & b) as well as dendritic (c) and solar central place systems (d) (Collis 2010: 79)

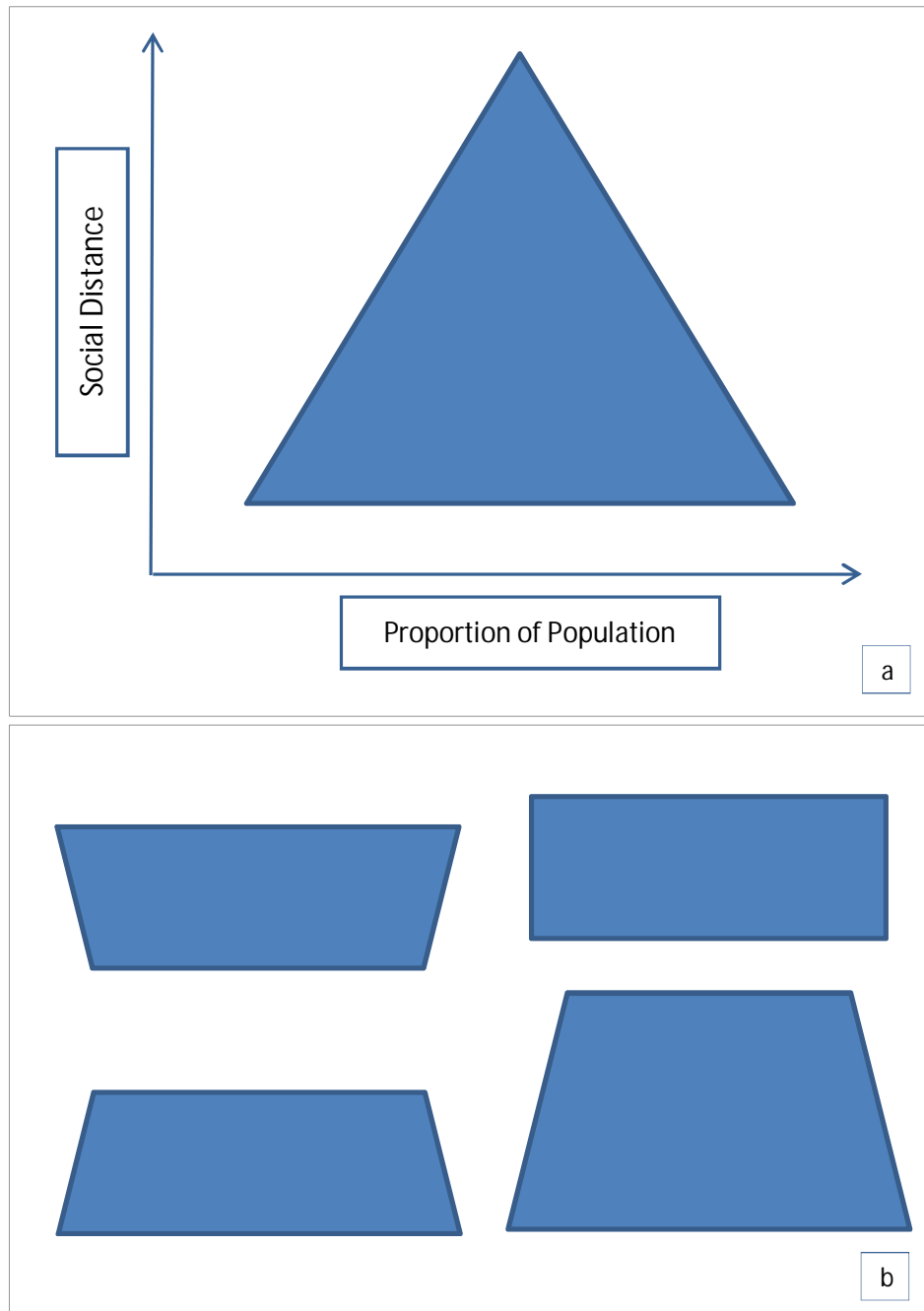


Fig. 1.11 How do we see Iron Age societies? (a) Many interpretations explicitly invoke or imply a triangular shape, where the vertical axis is the scale of social distance within a society and the horizontal axis is the proportion of the total population at different levels within society (after Hill 2011: 243) (b) Different ways to look at Iron Age societies, where there is less social distance within a society and a larger percentage of the total population is at the 'top' of society (after Hill 2011: 254)

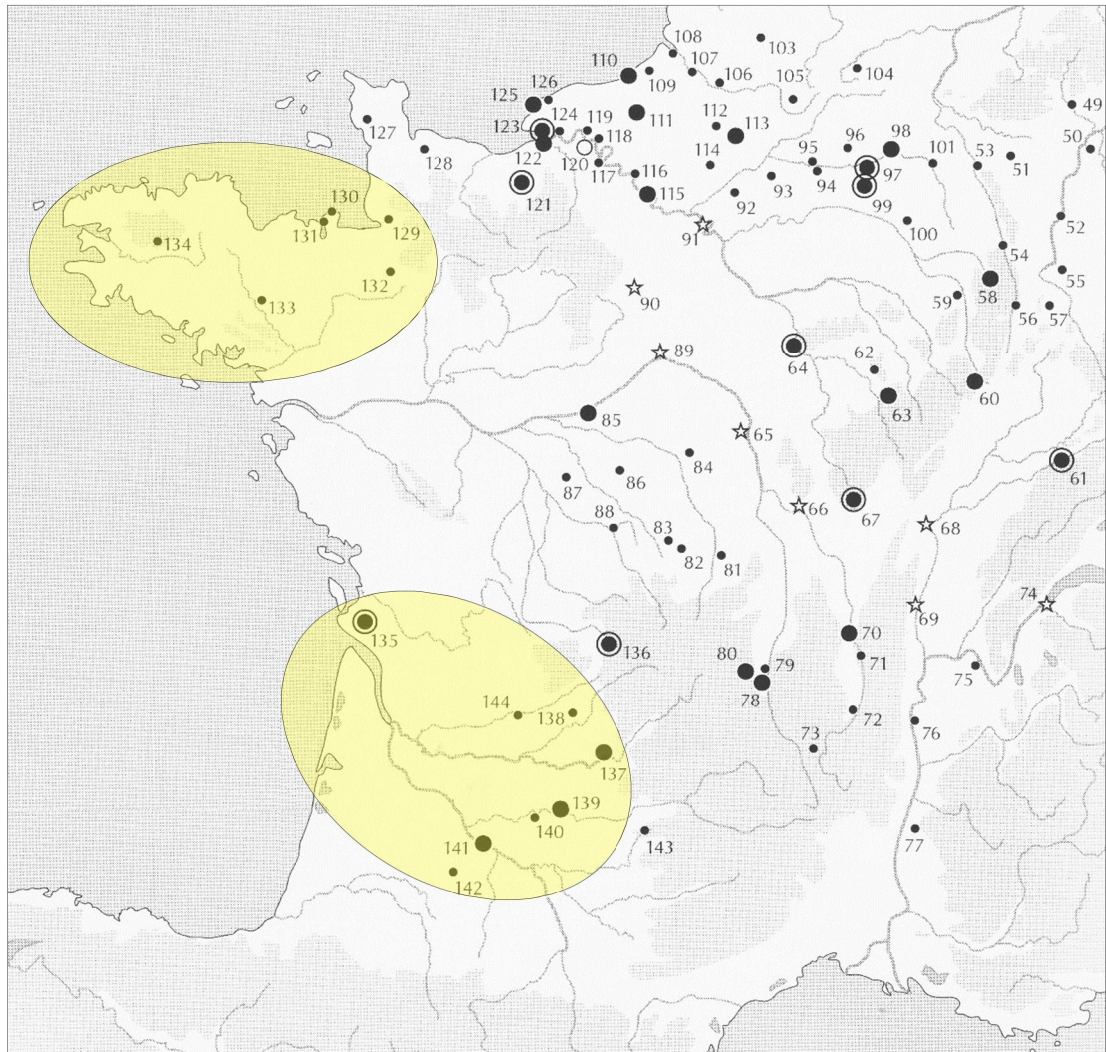


Fig. 1.12a Distribution map of known *oppida* in western Europe in 2000, with the *oppida* of Brittany and Aquitaine highlighted (Fichtl 2000: 18)

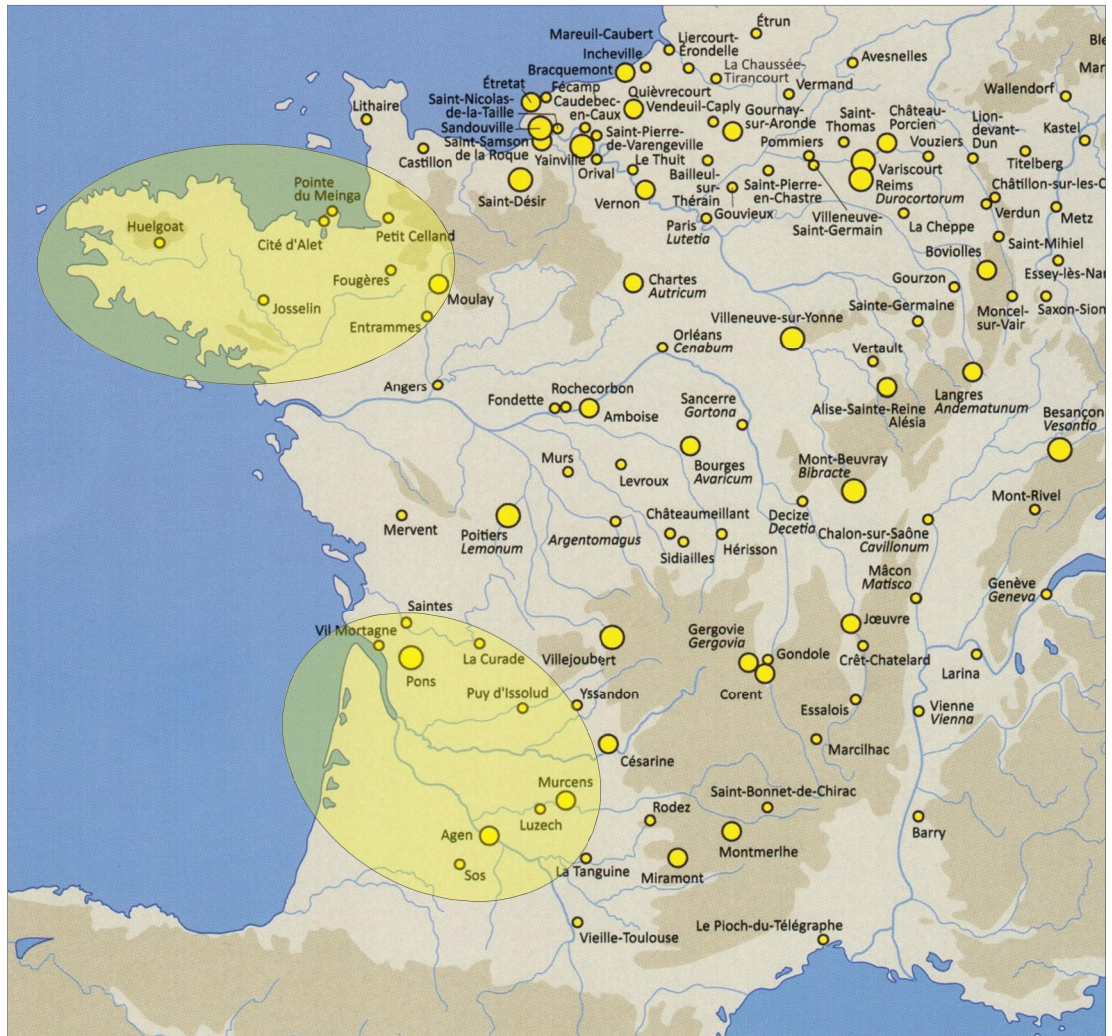


Fig. 1.12b Distribution map of known *oppida* in western Europe in 2012, with the *oppida* of Brittany and Aquitaine highlighted (Fichtl 2012: 20)



Fig. 3.1 Location of significant Armorican sites discussed in this chapter (Google Earth version 7.1.2.2041)

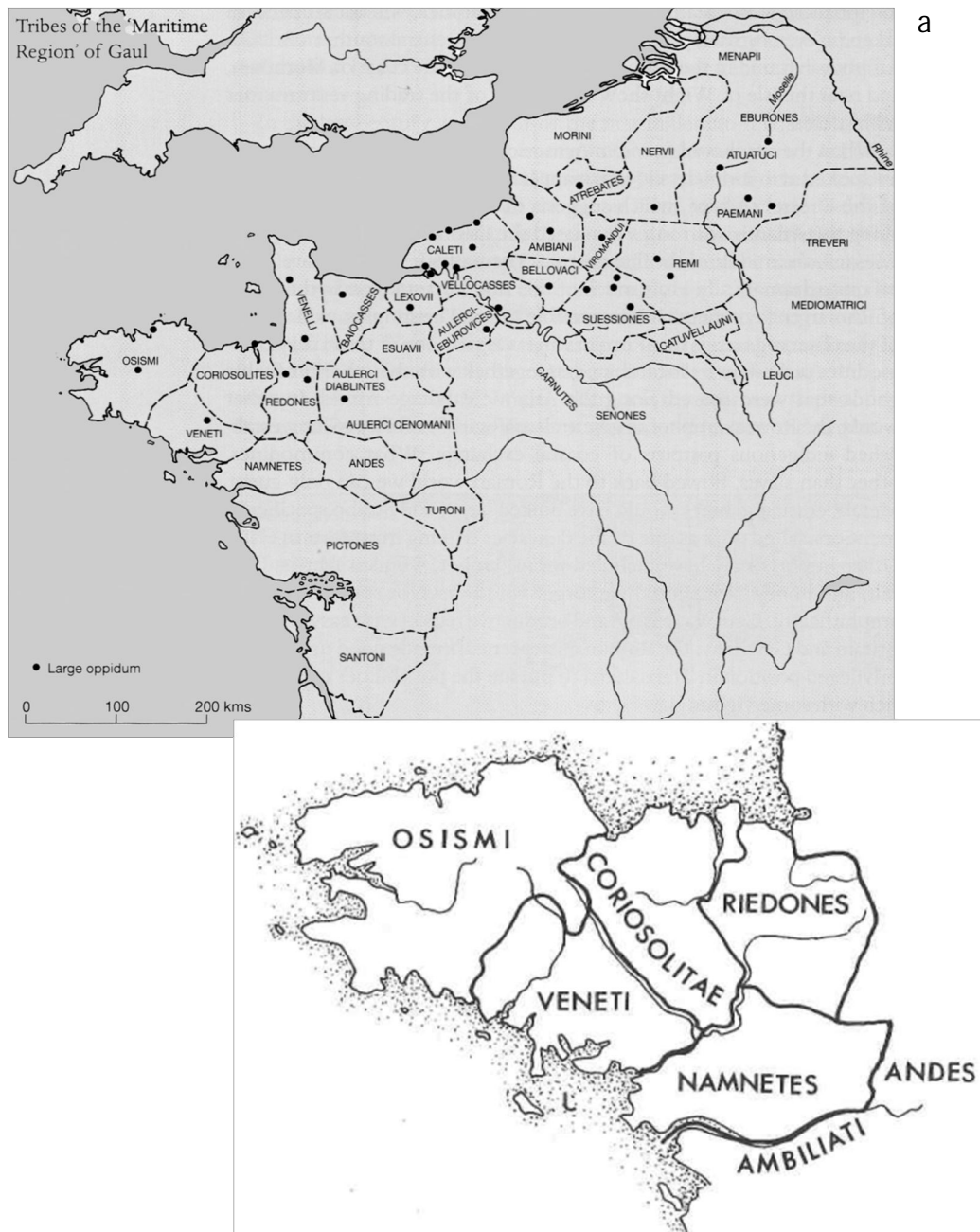


Fig. 3.2 Maps showing the *civitates* of Armorica and surrounding area: a) the 'maritime *civitates*' described by Caesar (Cunliffe 2001: Fig. 9.18) and b) the Armorican *civitates* as defined by P-R Giot (Giot *et al* 1996: 371)

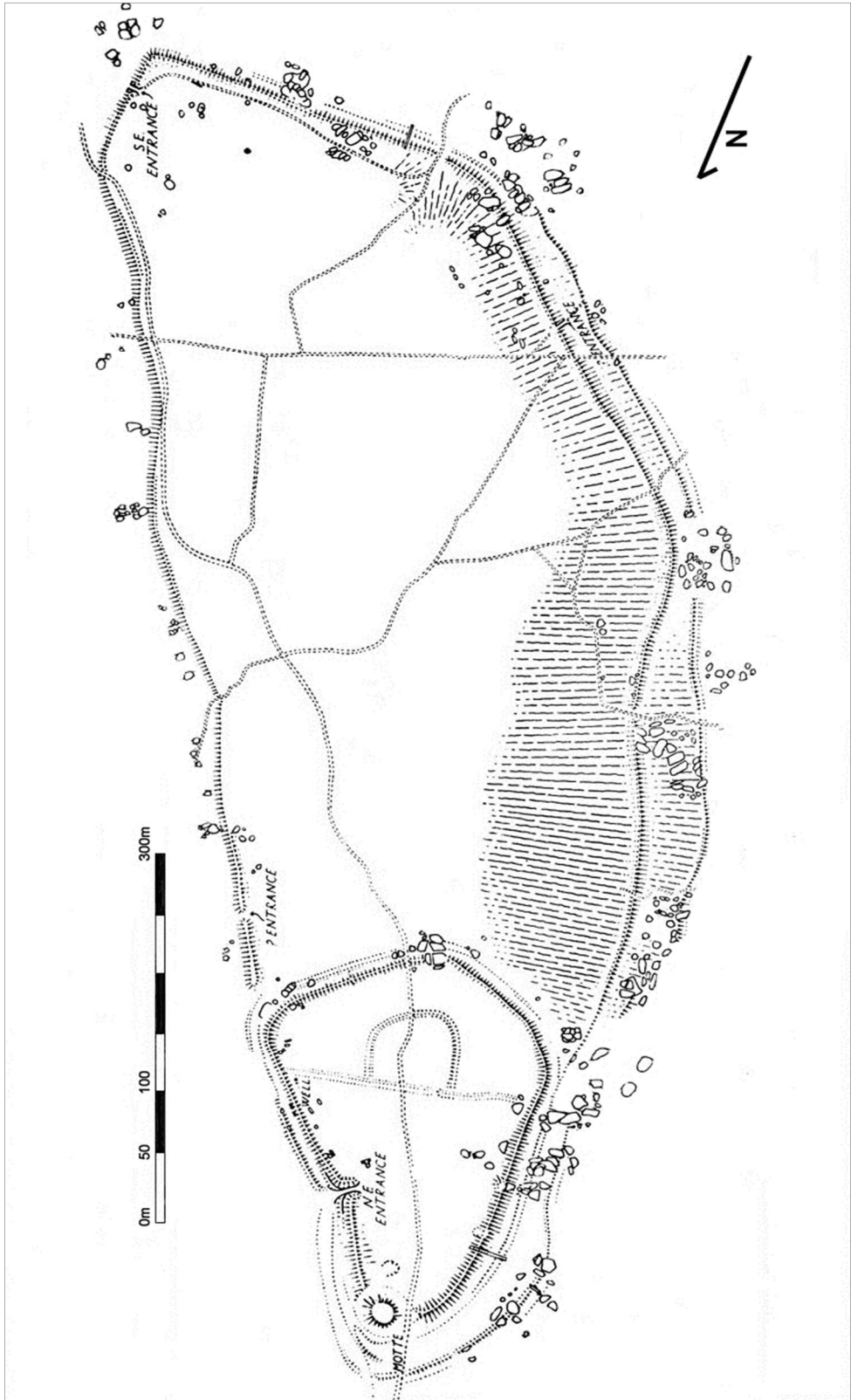
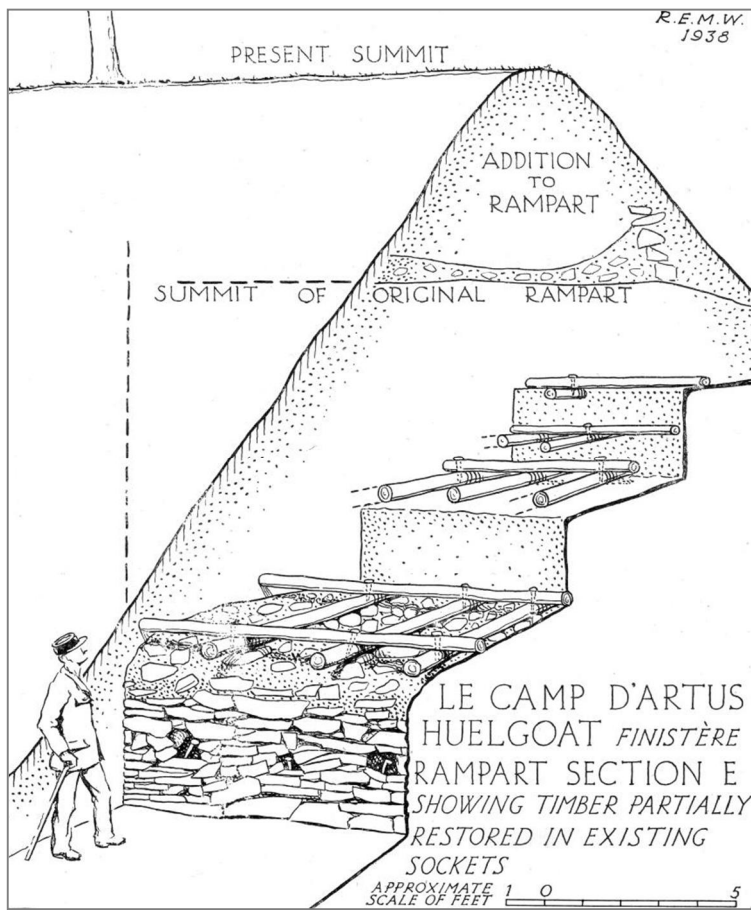
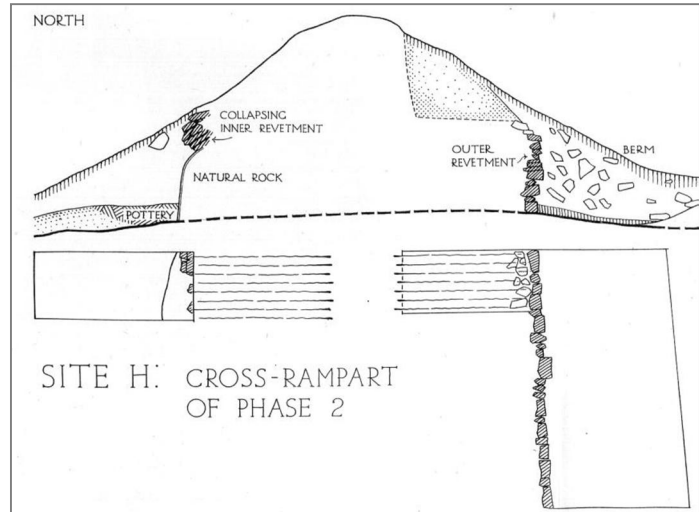


Fig. 3.3 Plan of Huelgoat (after Wheeler & Richardson 1957, Plate II)



a. Western rampart (site E)



b. Cross-rampart (site H)

Fig. 3.4 Huelgoat. Two sections through the ramparts (Wheeler & Richardson 1957: Plate III(a) and Fig. 3 (b))

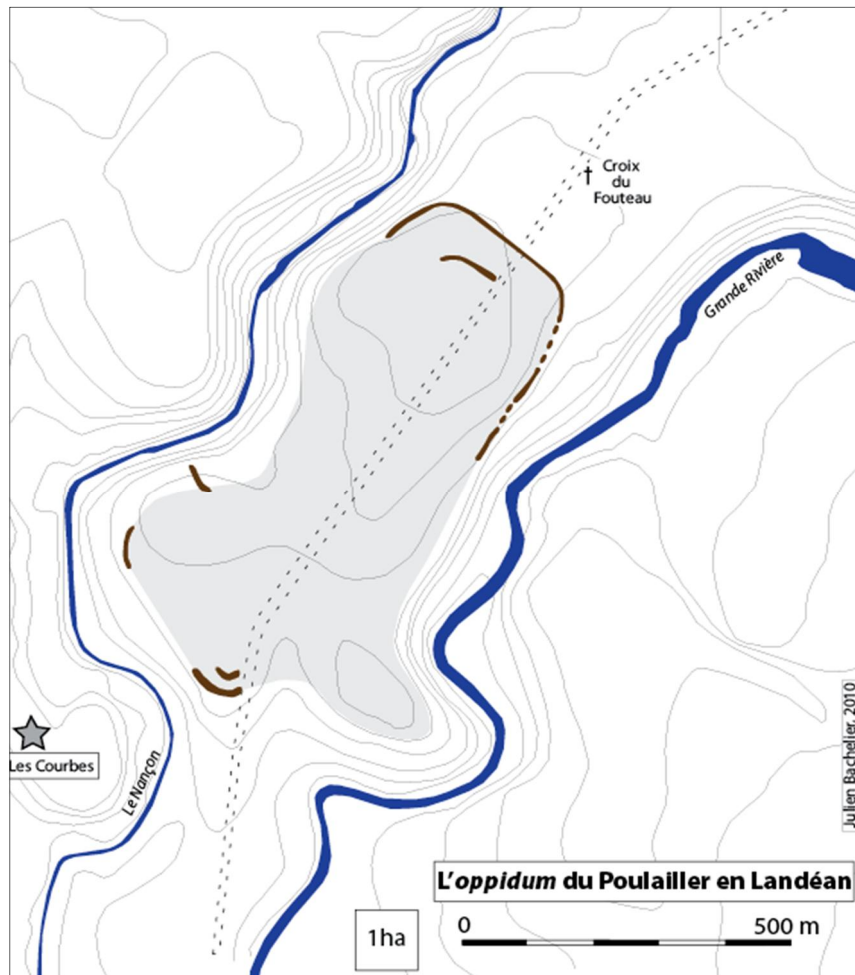


Fig. 3.5 Plan of the *oppidum* of Poulailler, Landéan (Bachelier 2010: 41)

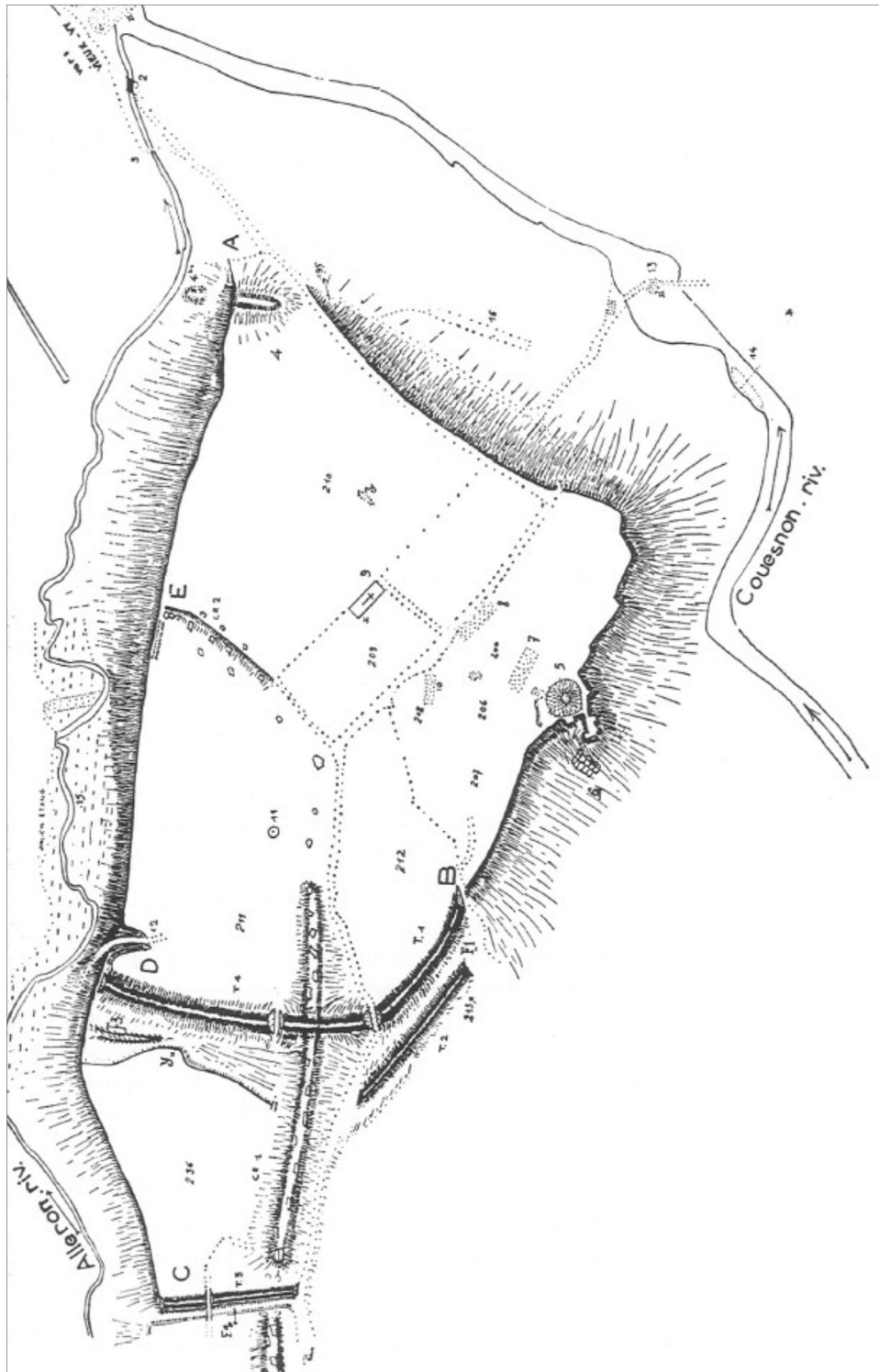


Fig. 3.6 Plan of Oppidum d'Orange (Vandenbroucq 1961: 235)

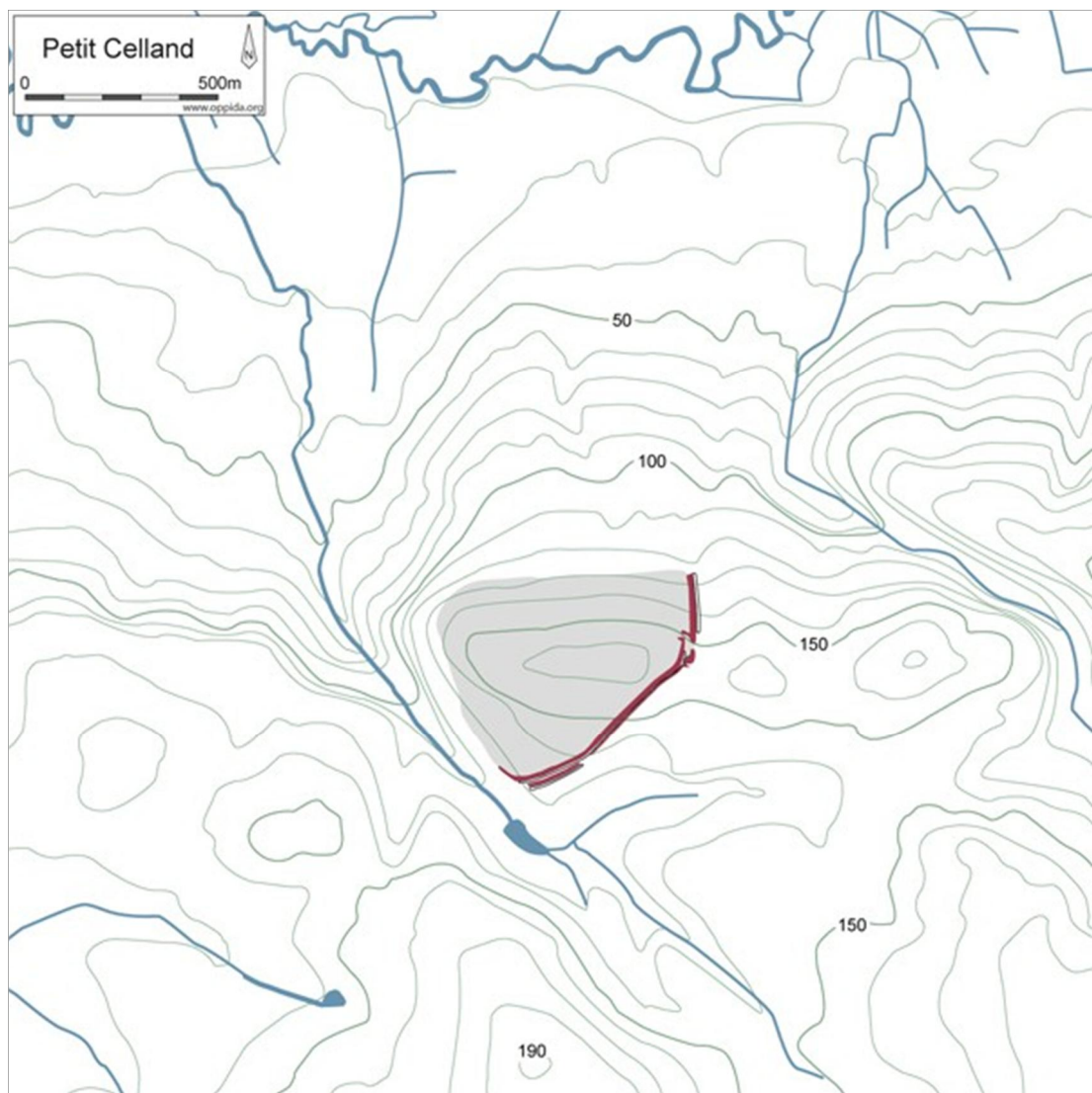
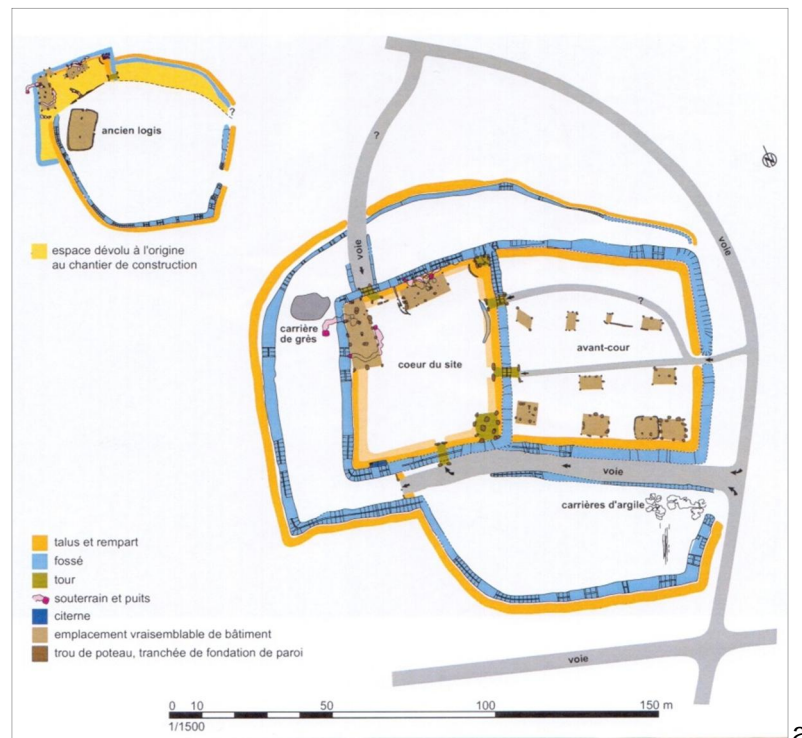
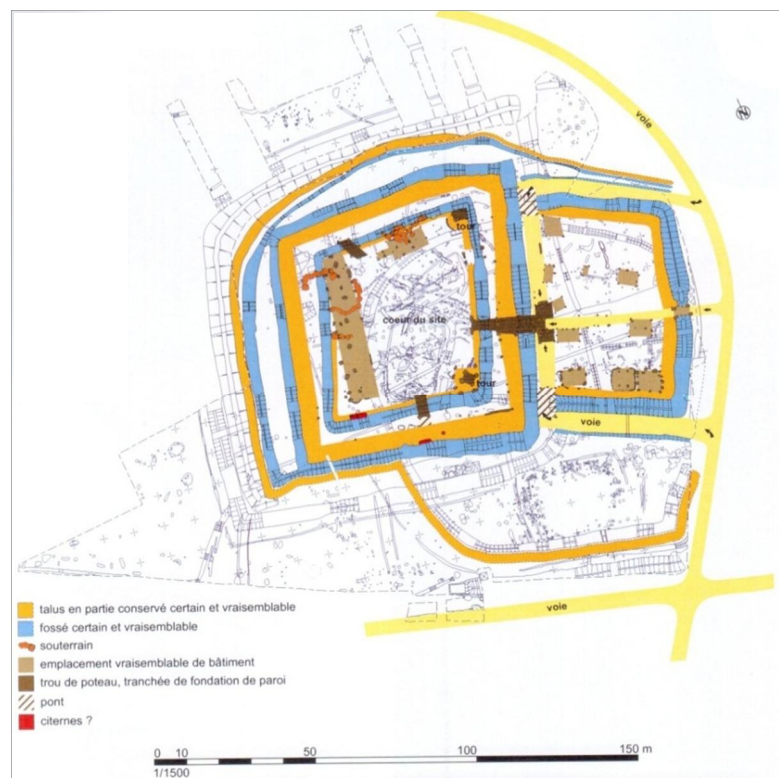


Fig. 3.7 Le Châtellier, Petit-Celland

(from: http://www.oppida.org/page.php?lg=en&rub=00&id_oppidum=59)



a



b

Fig. 3.8 Paule, Saint-Symphorien: a) Phase II (Menez 2009: fig. 123) and b) Phase III (Menez 2009: fig. 133)

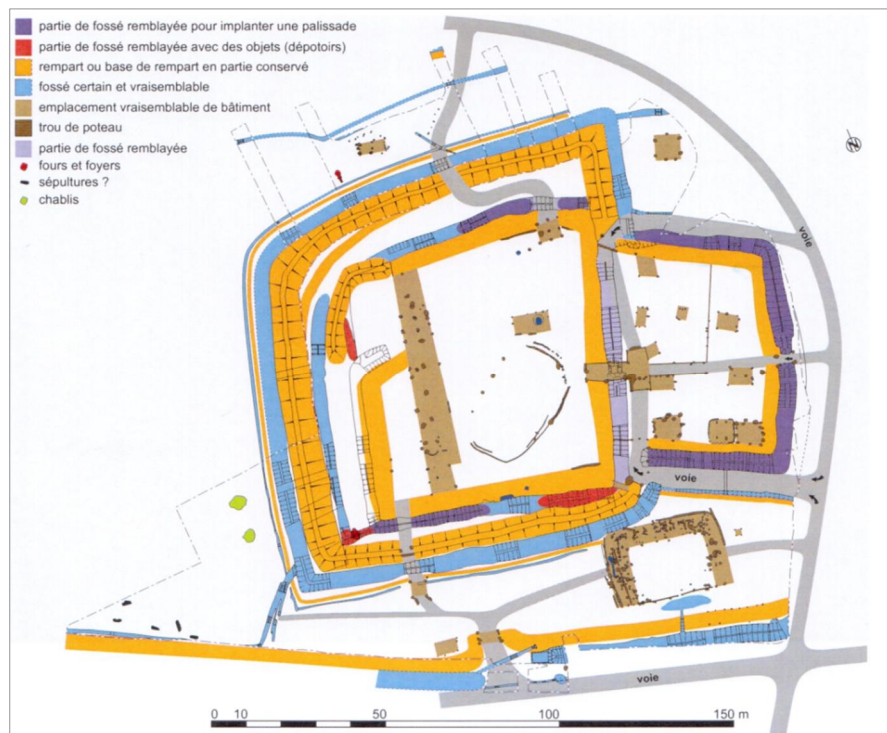
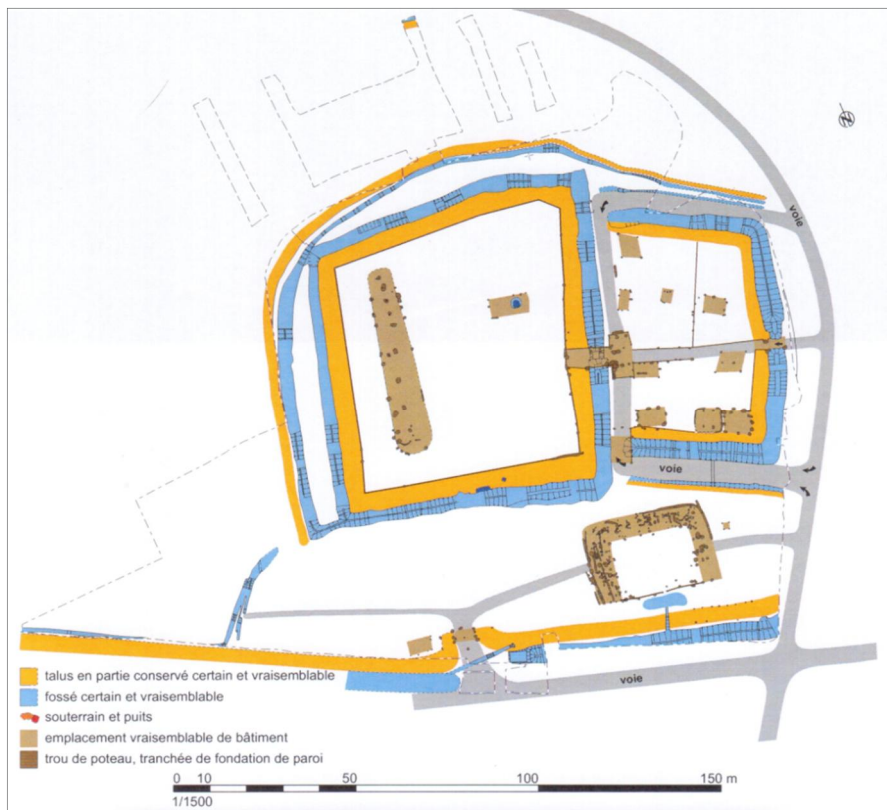


Fig. 3.9 The courtyard area at Paule, showing the foundations of buildings, gates and fences built during Phases 4 (top) and 5 (bottom) (Menez 2009: Fig. 281)



Fig. 3.10 The central courtyard area at Paule, with the foundations of buildings, gates and fences built during Phases 4 and 5 clearly visible (Menez 2009: Fig. 281)



Fig. 3.11 Reconstruction of the courtyard (top) and overall site (bottom) at Paule (Menez 2009: Fig. 189)



Fig. 3.12 Reconstruction of Phase 5 at Paule (Menez 2009: Fig. 303)

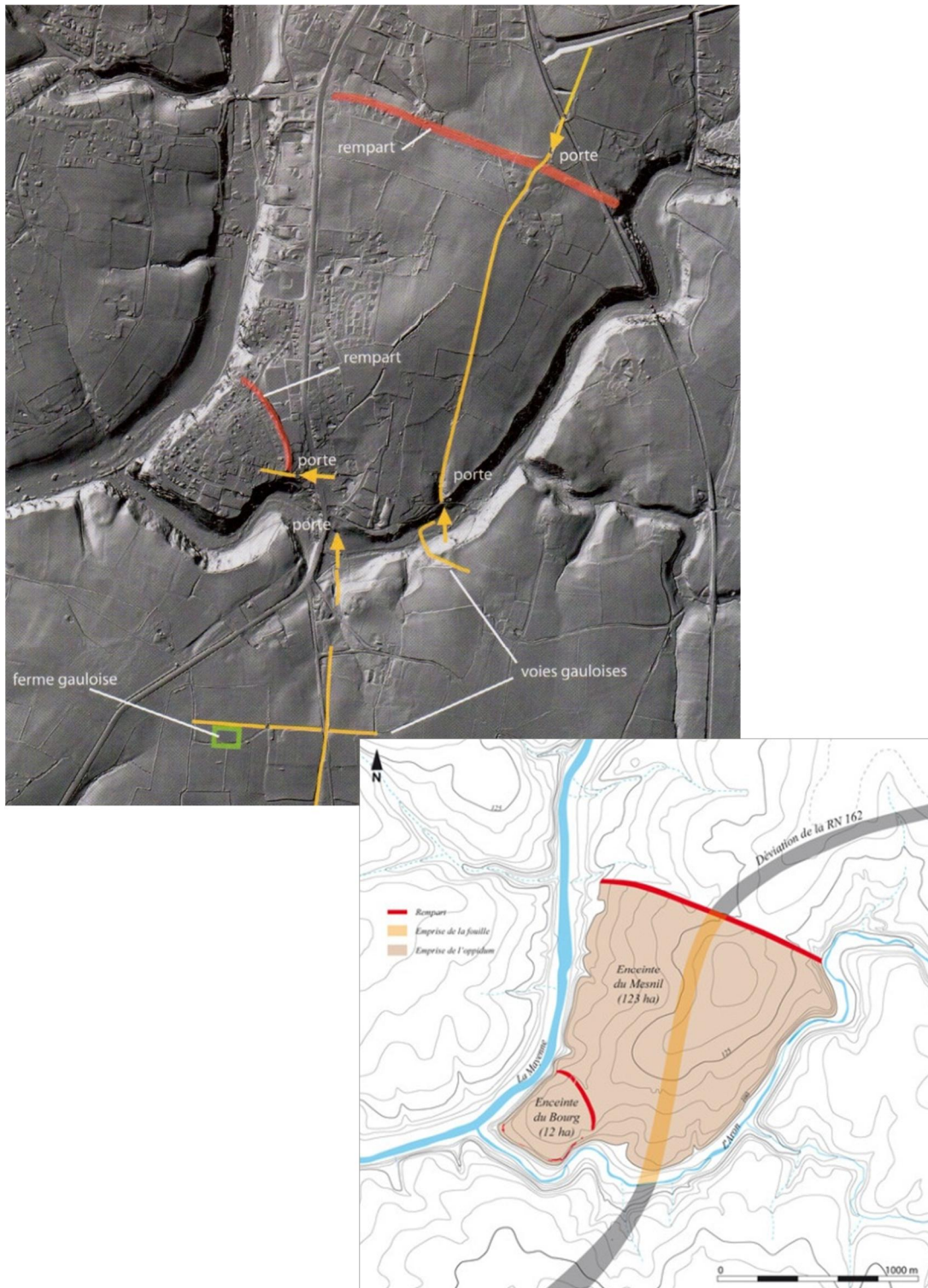


Fig. 3.13 Moulay, Mayenne. Top: LiDAR scan of oppidum and surrounding area.

Bottom: Topographic map (both from Le Goff 2011: 44)



Fig. 3.14 Moulay: aerial view of the excavation of a blacksmith's workshop in the middle of an enormous craft production zone (from Le Goff 2011: 43)



Fig. 3.15 Plan of Cité d'Alet, showing the location of the probable pre-Roman ditch and bank. Zones of 'intense occupation' within the enclosed area are shown in darker grey (from: http://www.oppida.org/page.php?lg=fr&rub=00&id_oppidum=42)

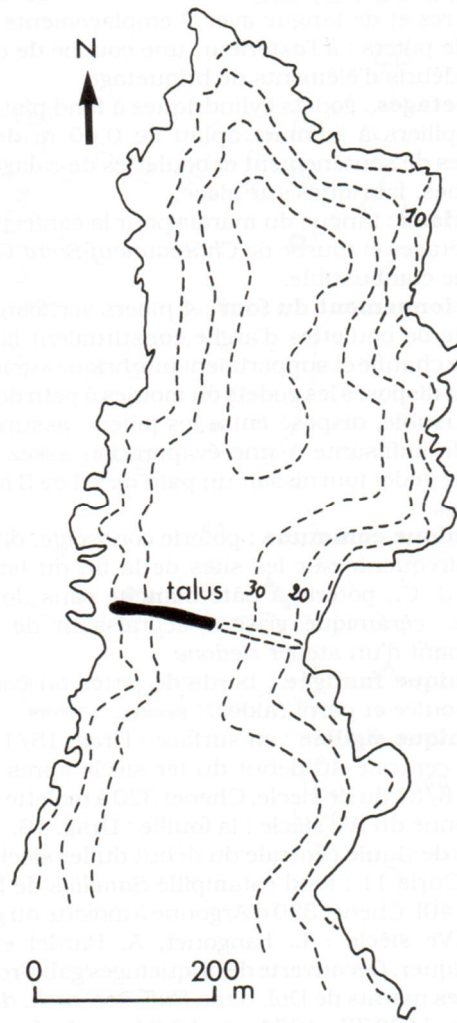


Fig. 3.16 Plan of Point du Meinga (Levroux & Provost 1990: Fig. 72)

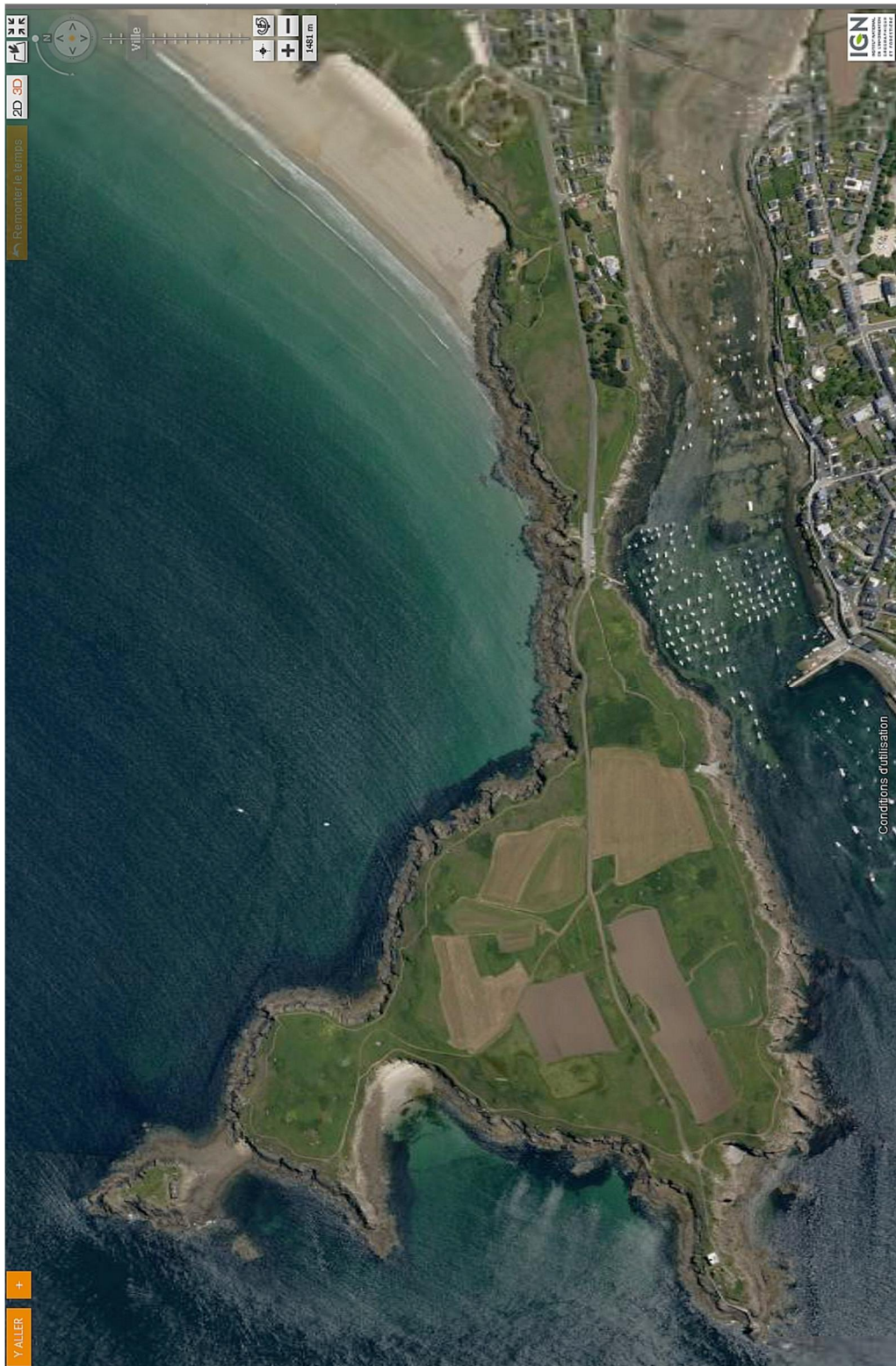


Fig. 3.17 Le Conquet (image © IGN)

LE YAUDET, PLOULEC'H
Zones fouillées de 1991 à 2002

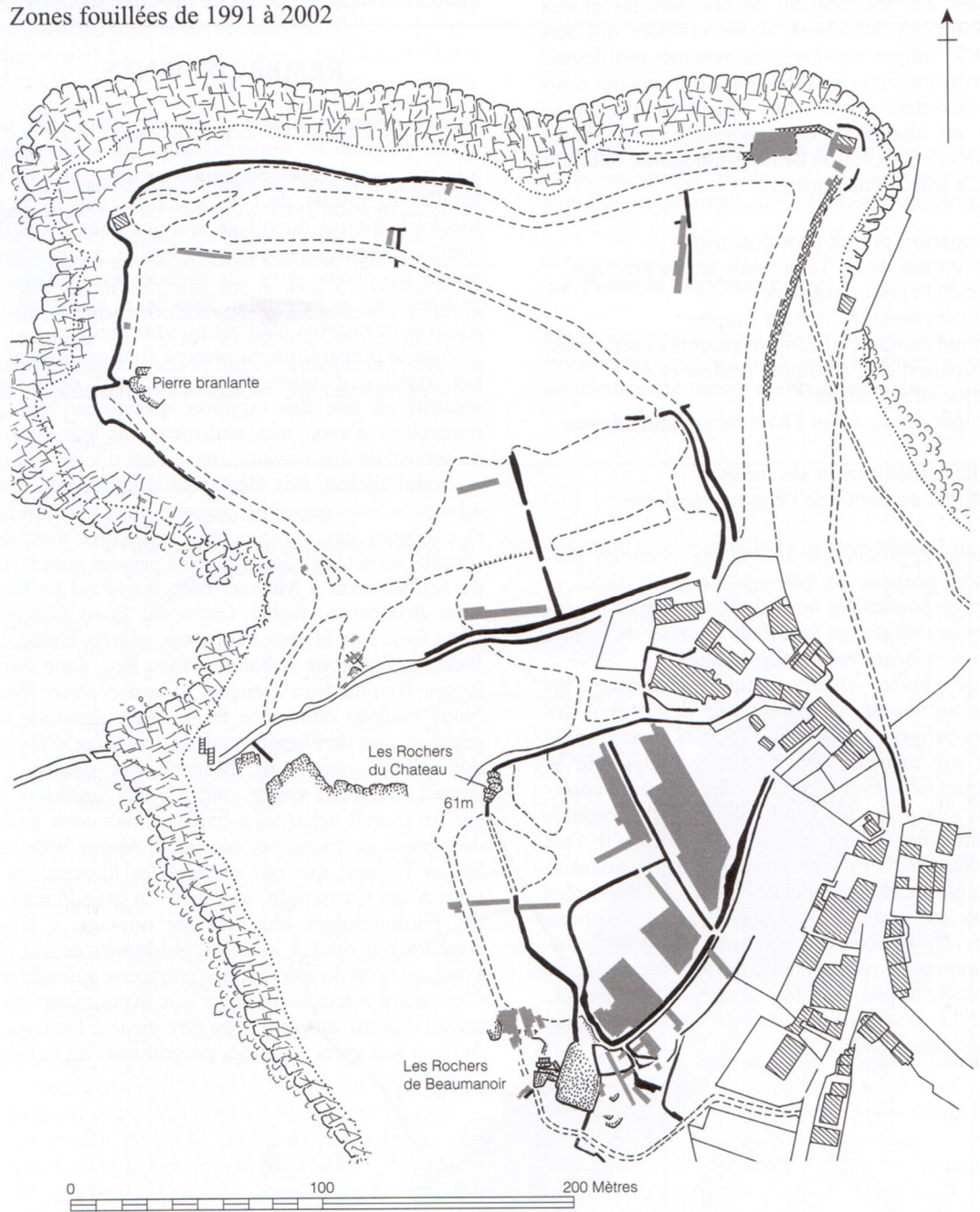
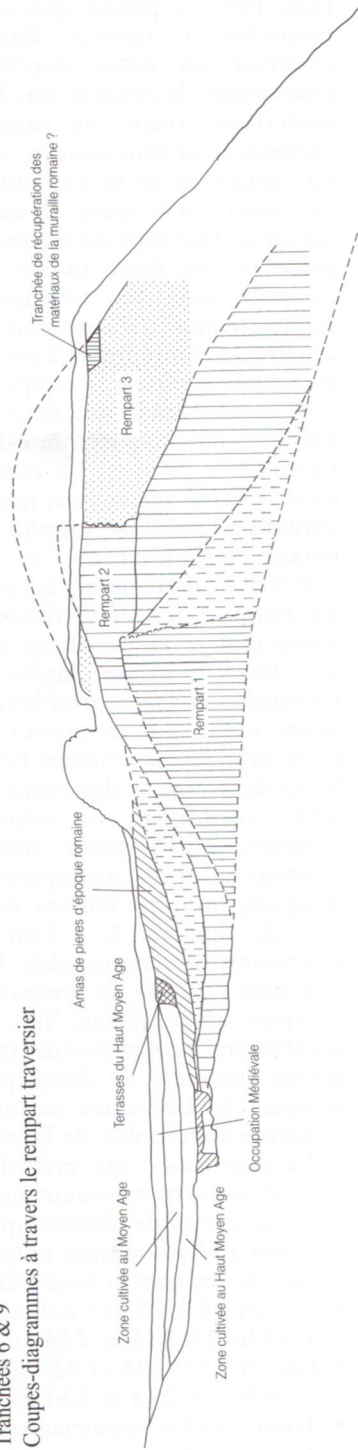


Fig. 3.18 Plan of Le Yaudet showing the location of trenches
(Galliou & Cunliffe 2005: 12)

LE YAUDET, PLOULEC'H

Tranchées 6 & 9
Coupes-diagrammes à travers le rempart traversier



Tranchées 1, 3 & 4

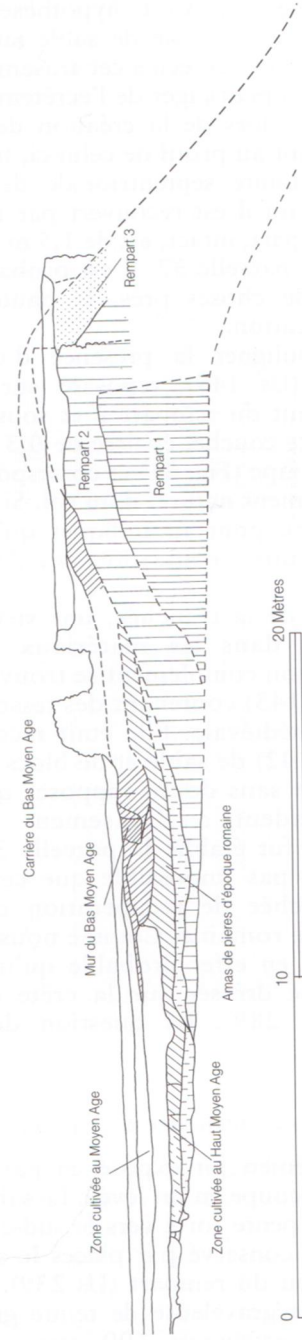


Fig. 3.19 Section of the ramparts at Le Yaudet (Galliou & Cunliffe 2005: Fig. 30)

LE YAUDET, PLOULEC'H
 Défenses de l'âge du Fer

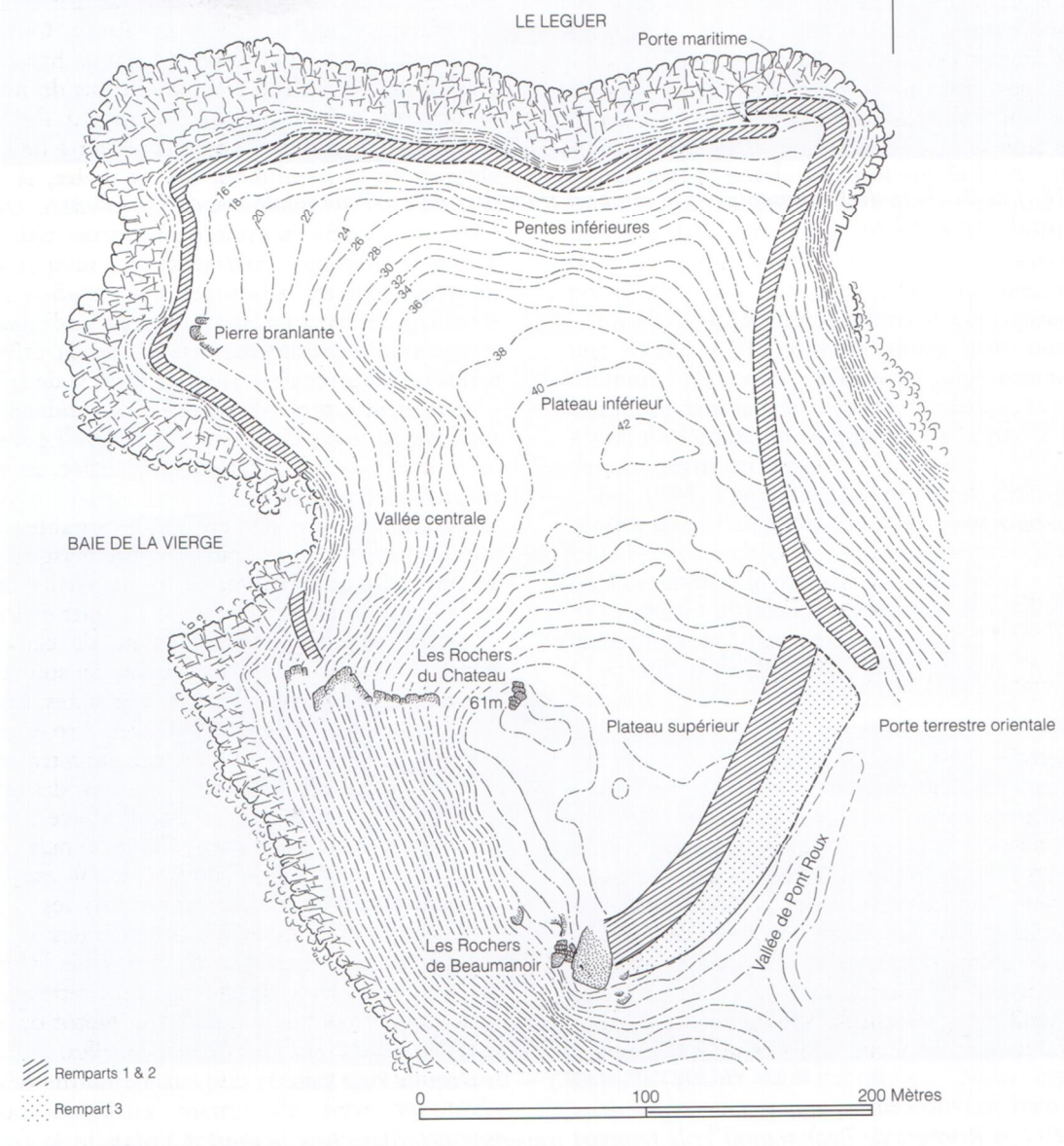


Fig. 3.20 Plan of Le Yaudet showing the location and phases of the ramparts (Galliou & Cunliffe 2005: 42, fig. 17)



Fig. 4.1 Map showing the location of significant sites discussed in this chapter (Google Earth version 7.1.1.2041)

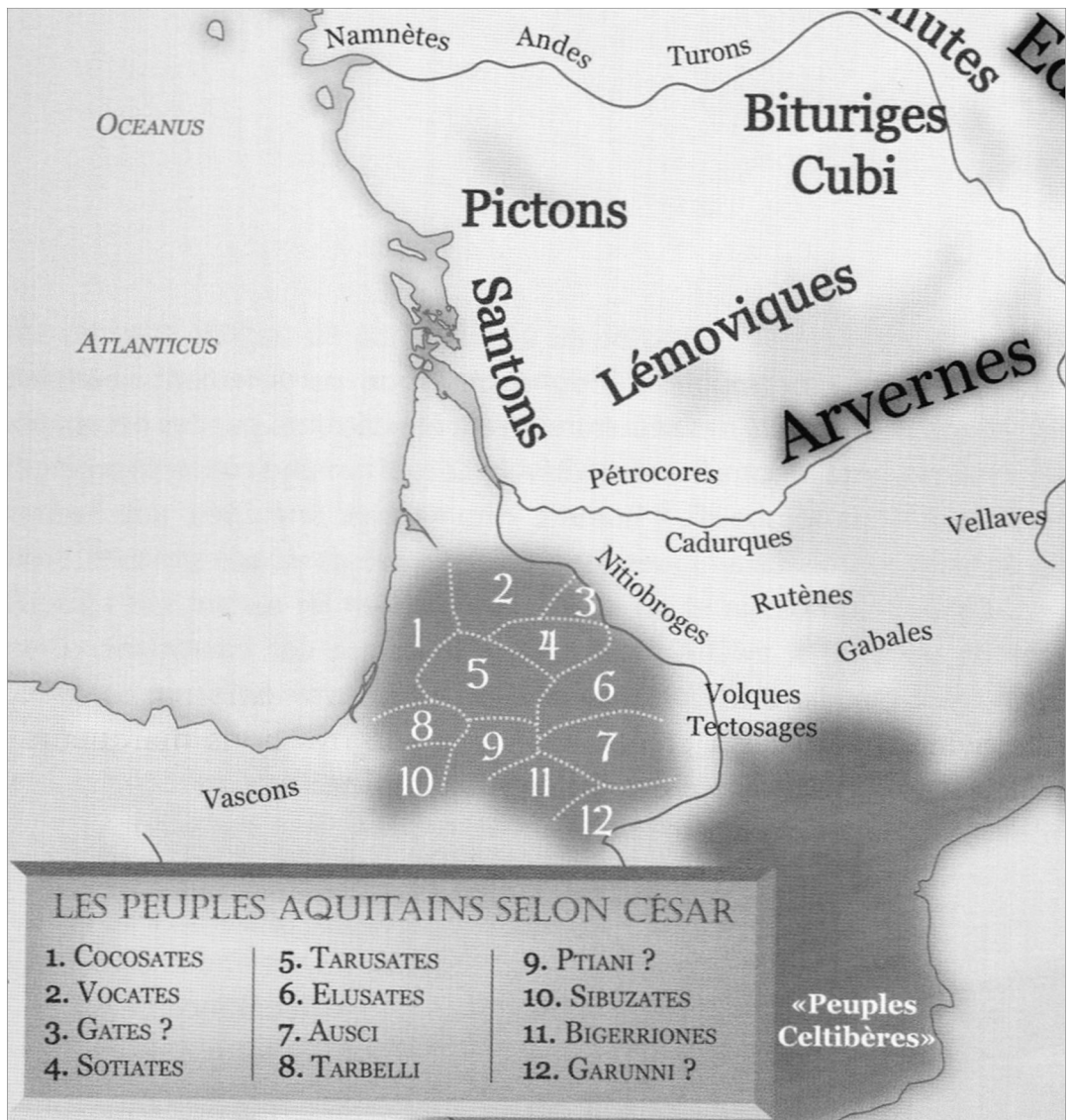


Fig. 4.2 Map showing the Aquitani *civitates* and their approximate location (Mistrot & Siriex 2012: 8)

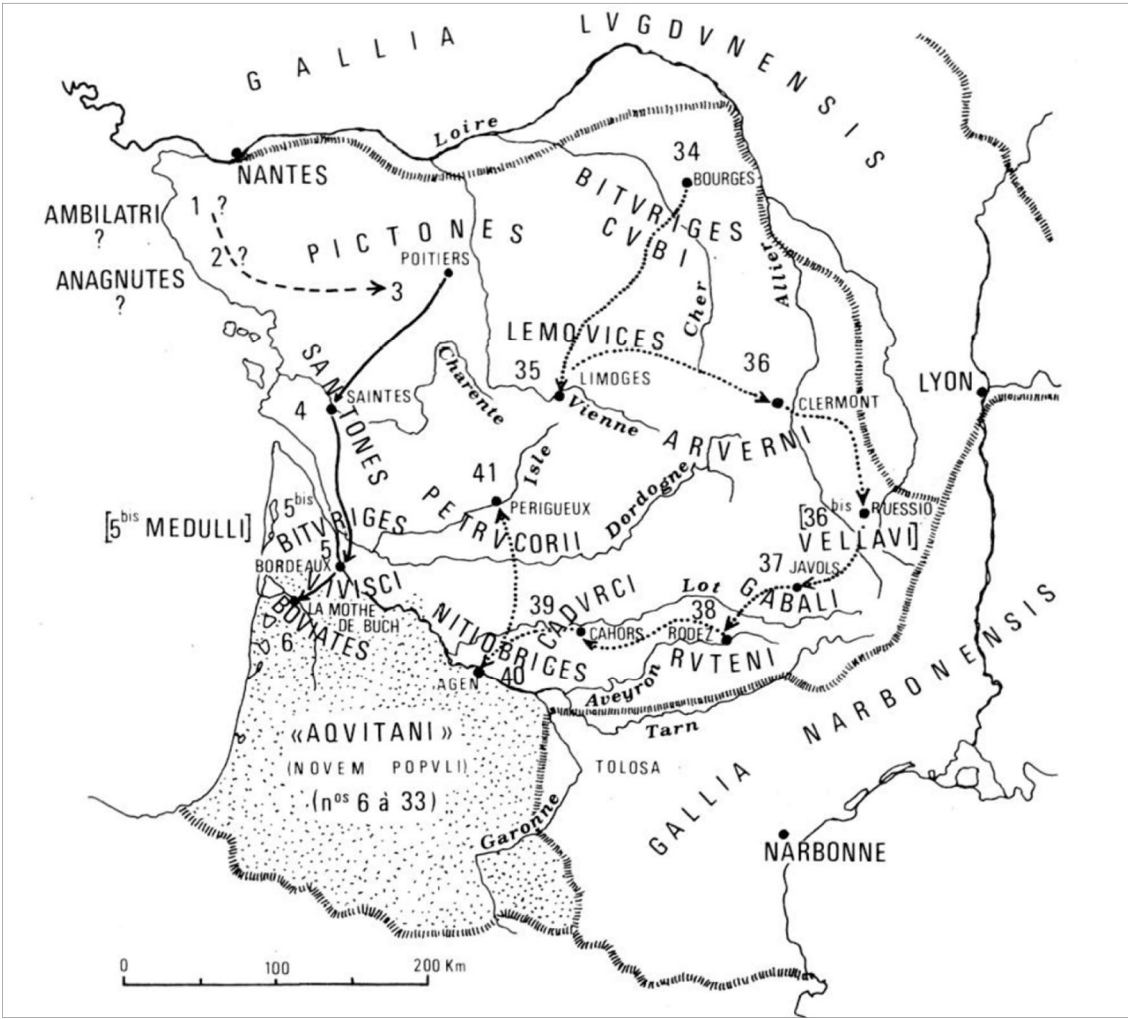


Fig. 4.2a Location of *civitates* within Aquitaine (Duval 1989: 723)

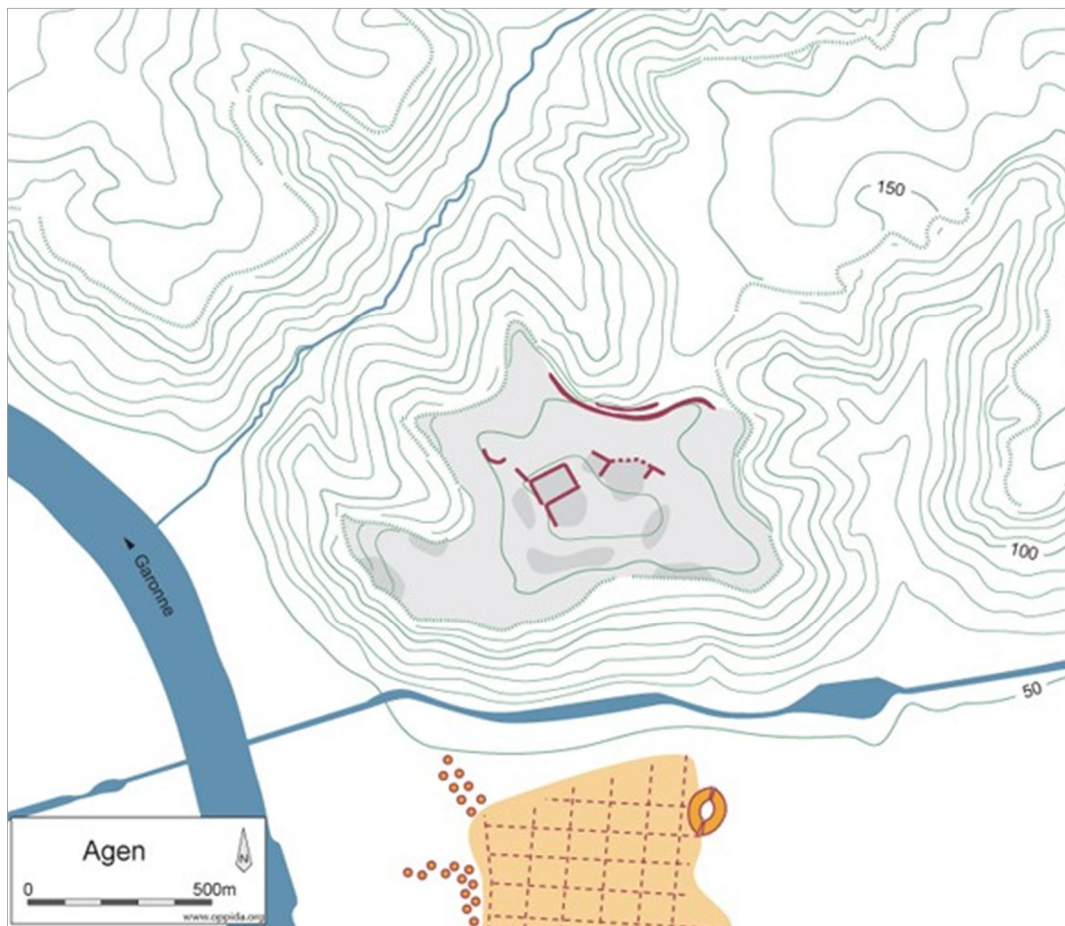


Fig. 4.3 Plan of l'Ermitage, Agen

(from: http://www.oppida.org/page.php?lg=fr&rub=00&id_oppidum=20)

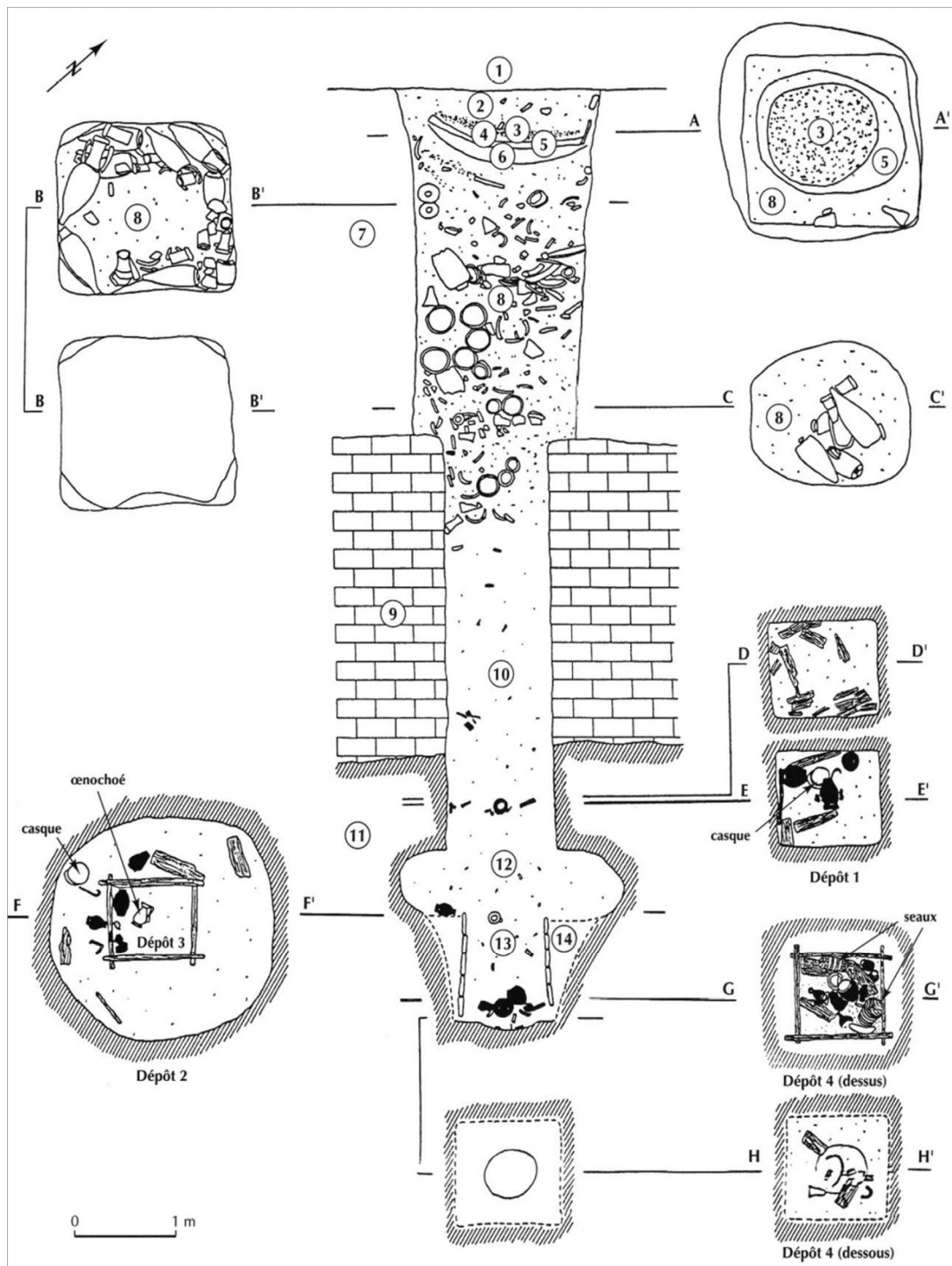


Fig. 4.4 Plan of Pit 41 at l'Ermitage, Agen (De Soto et al 2003: Fig. 68)

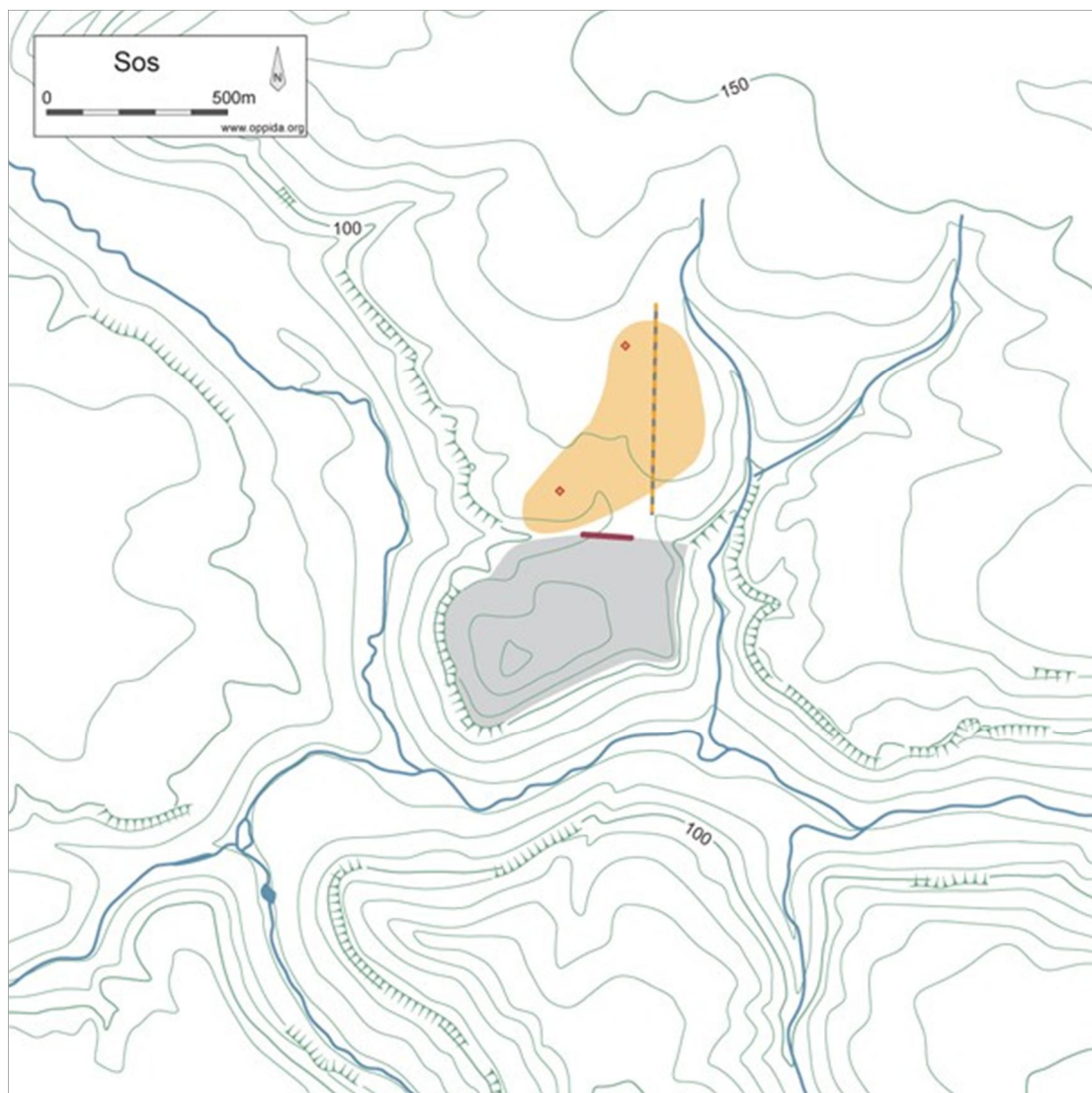


Fig. 4.5 Plan of Sos

(from http://www.oppida.org/page.php?lg=fr&rub=00&id_oppidum=88)



Fig. 4.6 a) Pottery kiln near Sos b) associated pottery (left = 7.3cm high; right = 5.5cm high) (Coupry 1969: figs 36 and 37)

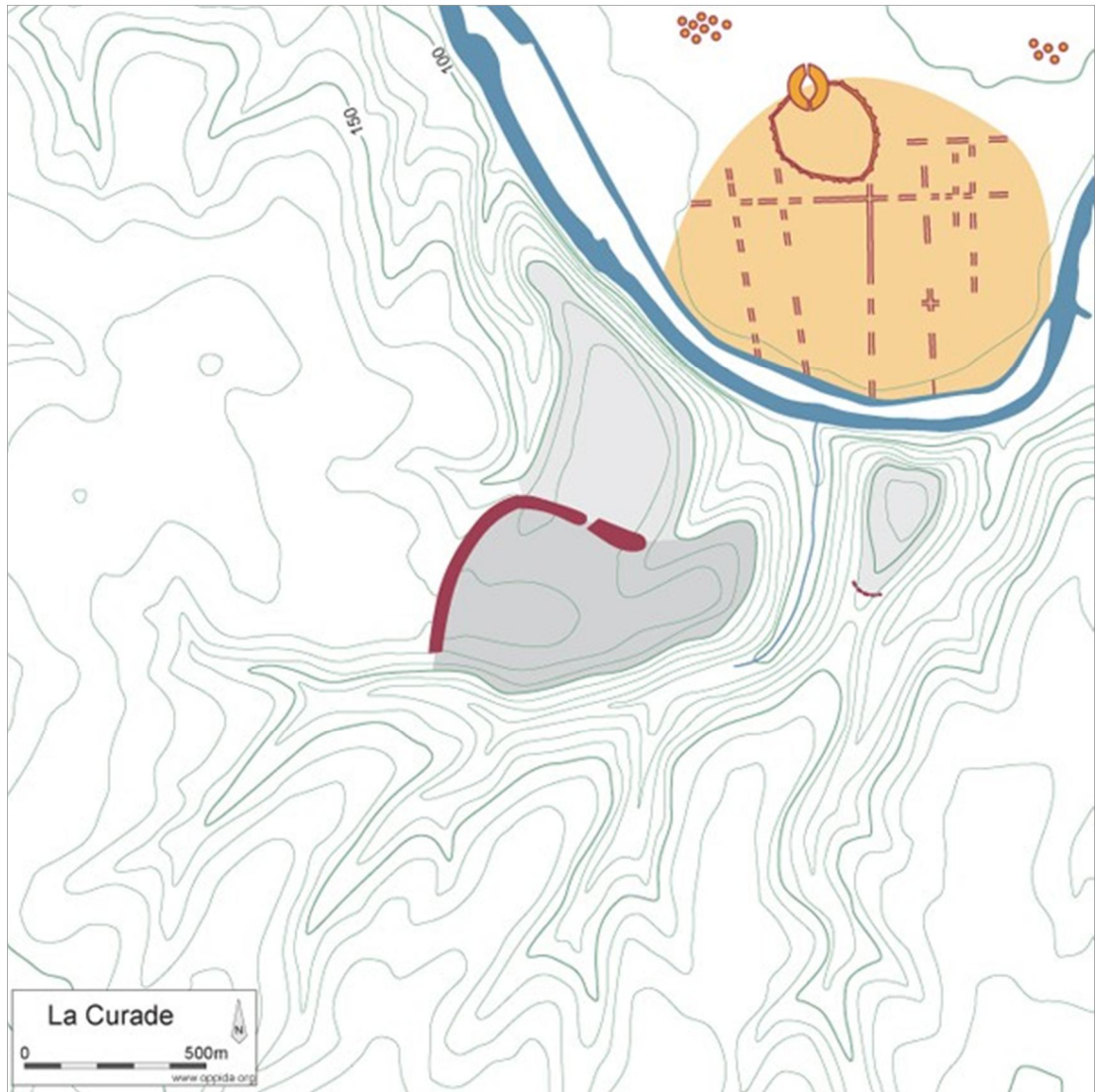


Fig. 4.7 Plan of La Curade, Colounieix-Chamiers
(from http://www.oppida.org/page.php?lg=fr&rub=00&id_oppidum=88)

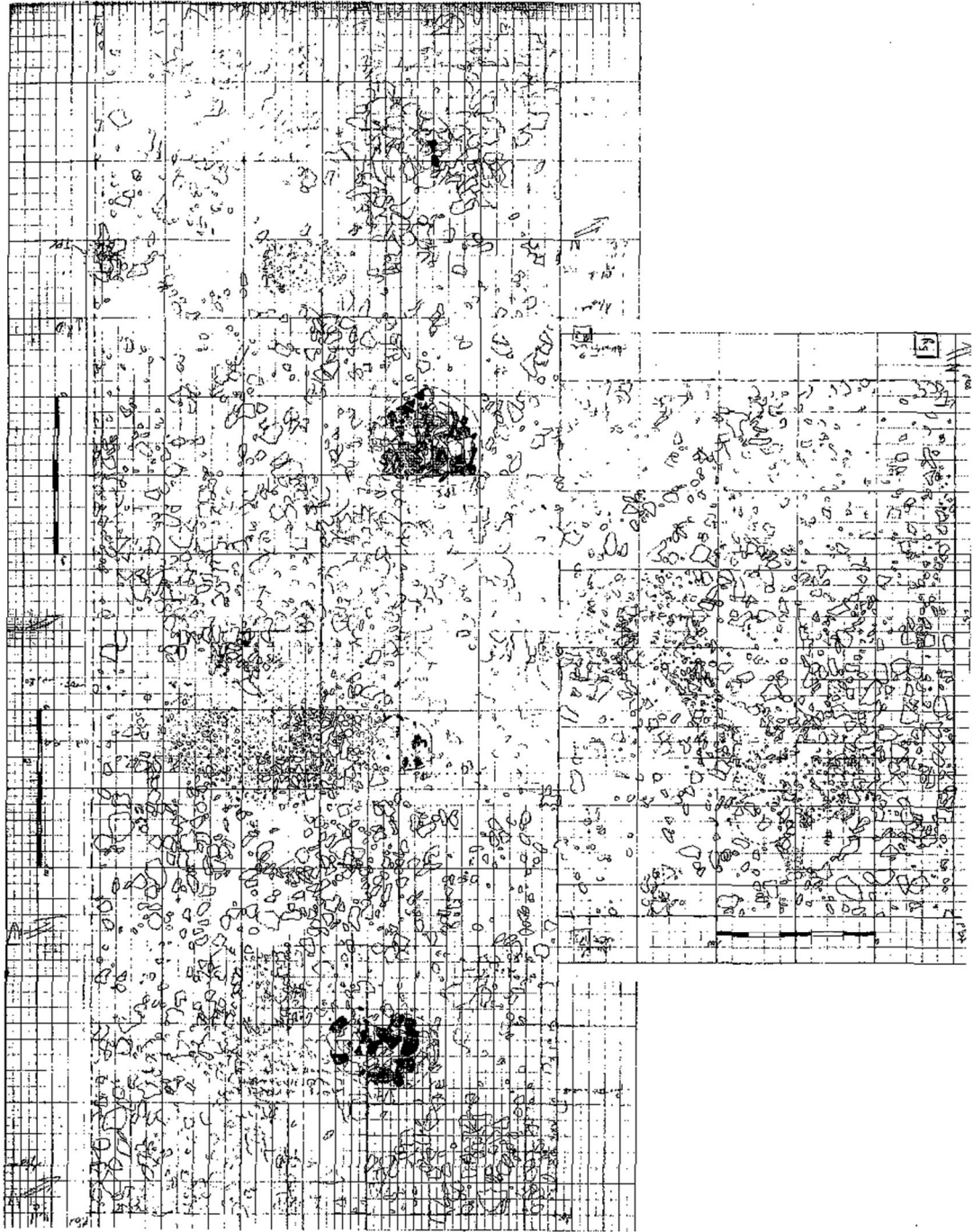


Fig. 4.8 Plan of paved area at La Curade, Colounieix-Chalmiers (Chevillot 1995: 16)



Fig. 4.9 a) Aerial view of Lacoste
(http://www.inrap.fr/userdata/c_bloc_album/1/1280/670x510_1280_vignette_Photo_1.JPG)
b) Excavations undertaken by INRAP
(http://www.inrap.fr/userdata/c_bloc_album/1/1282/670x510_1282_vignette_Photo2.jpg)



Fig. 4.10 Potters' kilns at Lacoste (Mistrot & Sirieux 2012: 32)

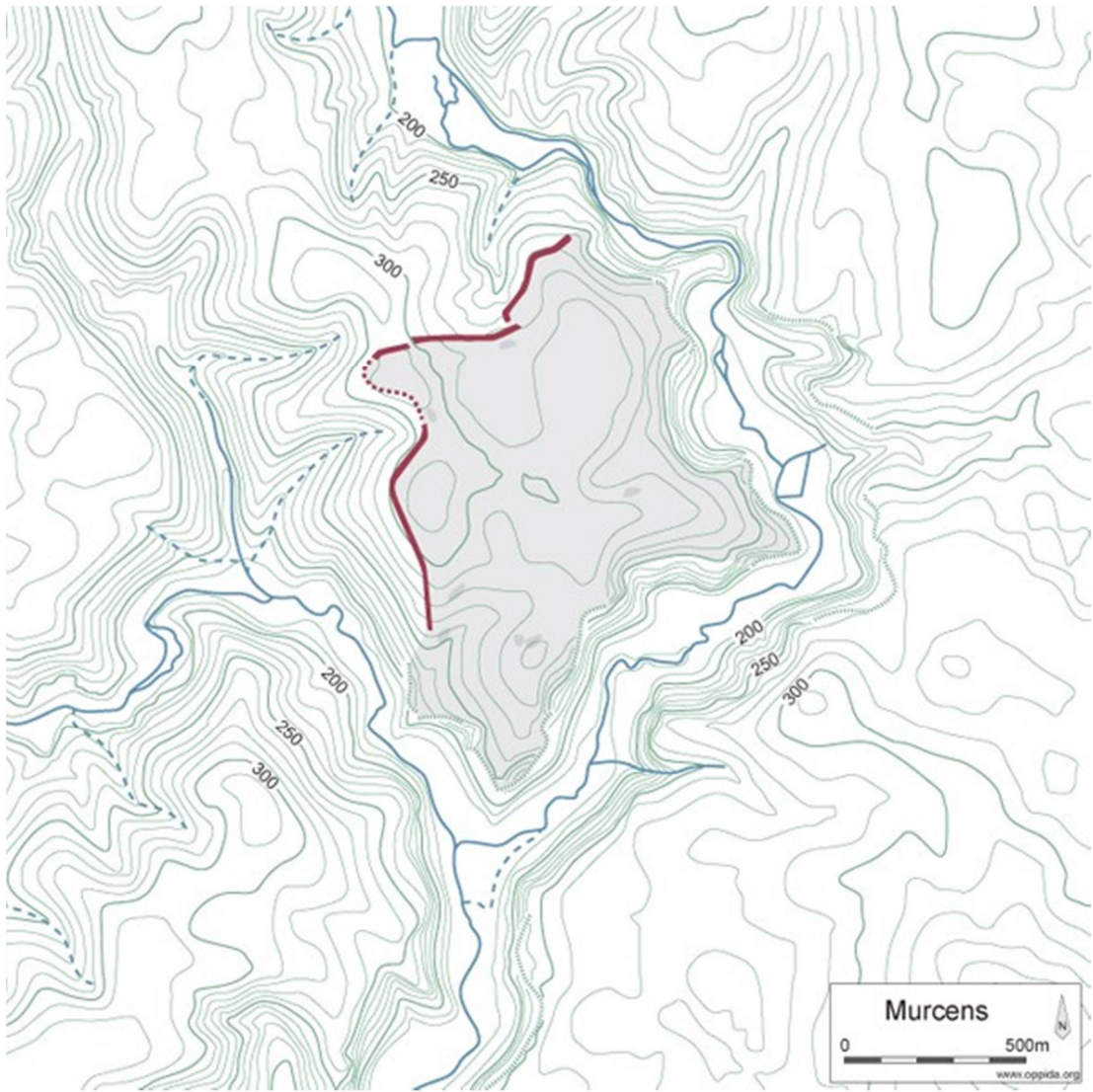


Fig. 4.11 Plan of Murcens (from oppida.org)

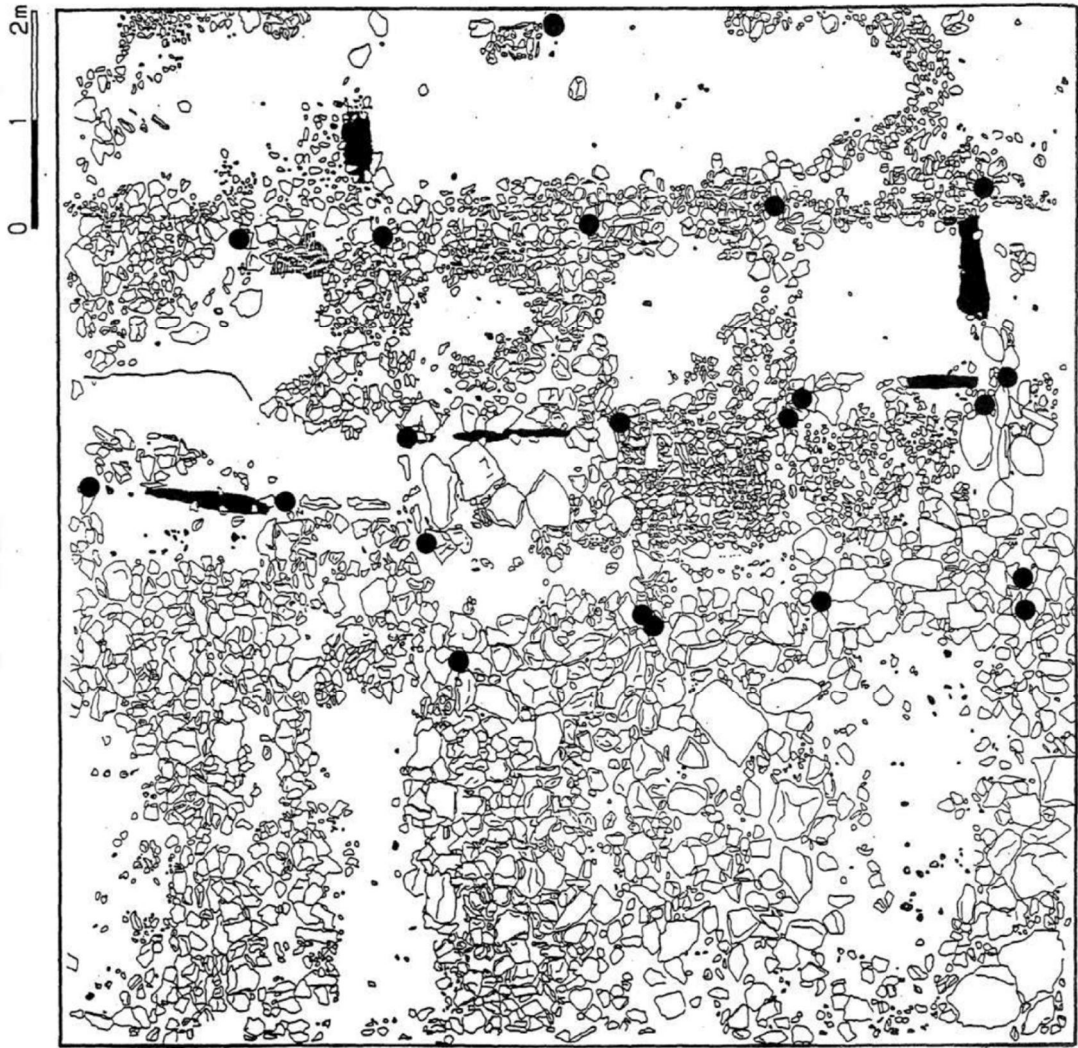


Fig. 4.12 Plan of the *muris gallicus* at Murcens (Büchsenschutz & Mercadier 1990: Fig. 21)

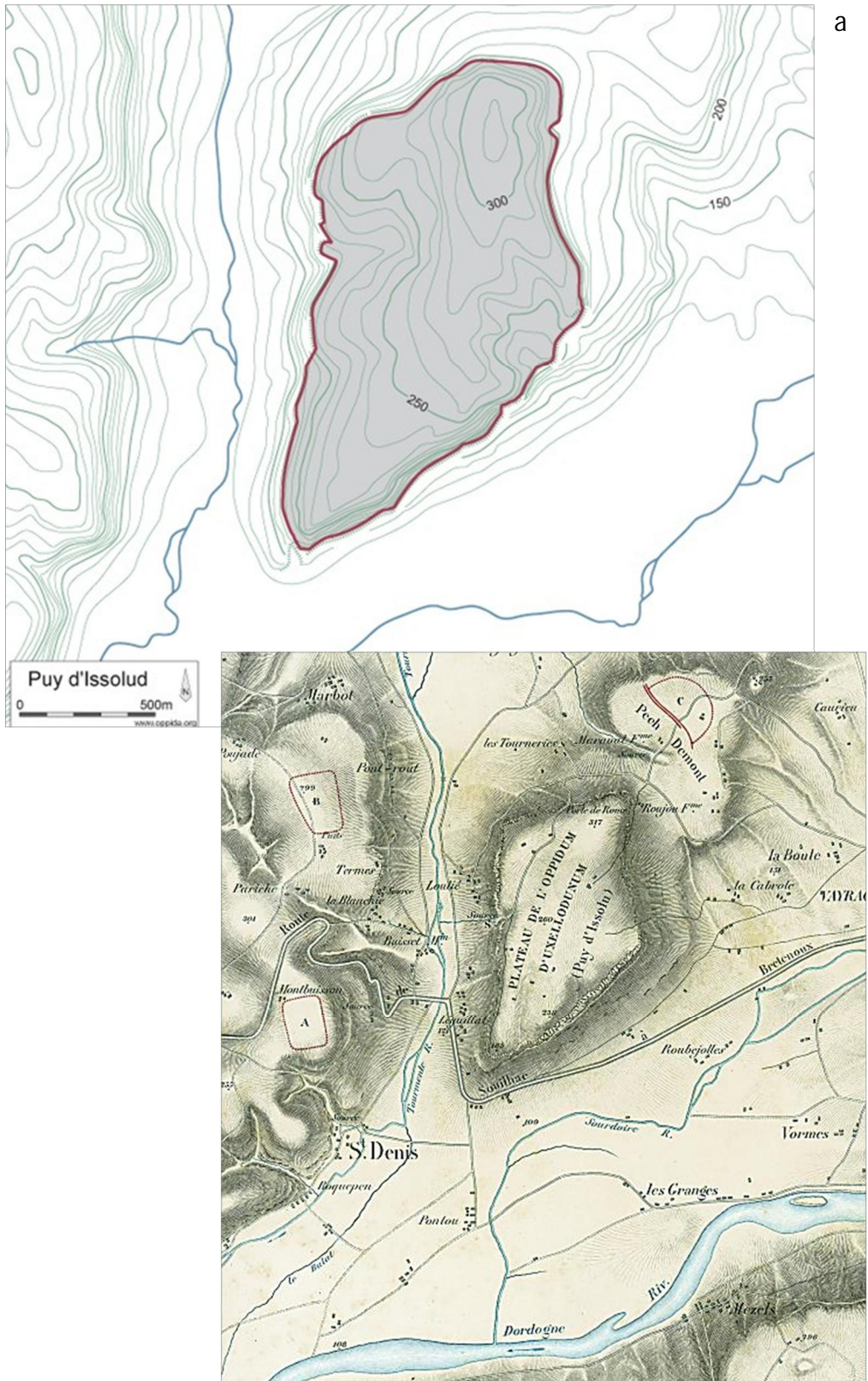


Fig. 4.13 Plans of Puy d'Issolud
 a) from http://www.oppida.org/page.php?lg=fr&rub=00&id_oppidum=141
 b) Napoleon III 1866: pl 29



Fig. 4.14 Roman weapons: Iron arrow heads, including both straight and barbed varieties (top) and (bottom) iron tips, believed to have been used in catapults (Mistrot & Siriex 2012: 82)

· L'OPPIDUM DE PONS ·

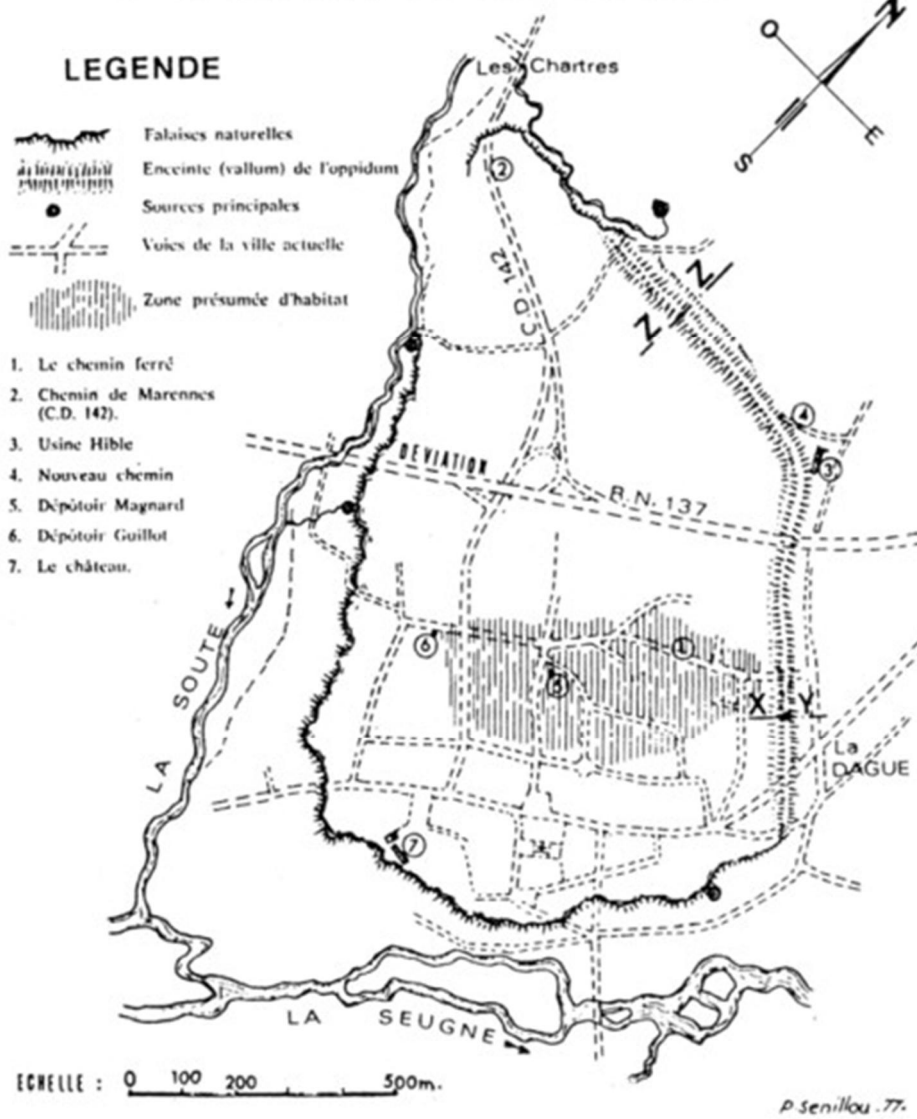


Fig. 4.15 Plan of Pons (Lassarade 1986: Fig. 3)

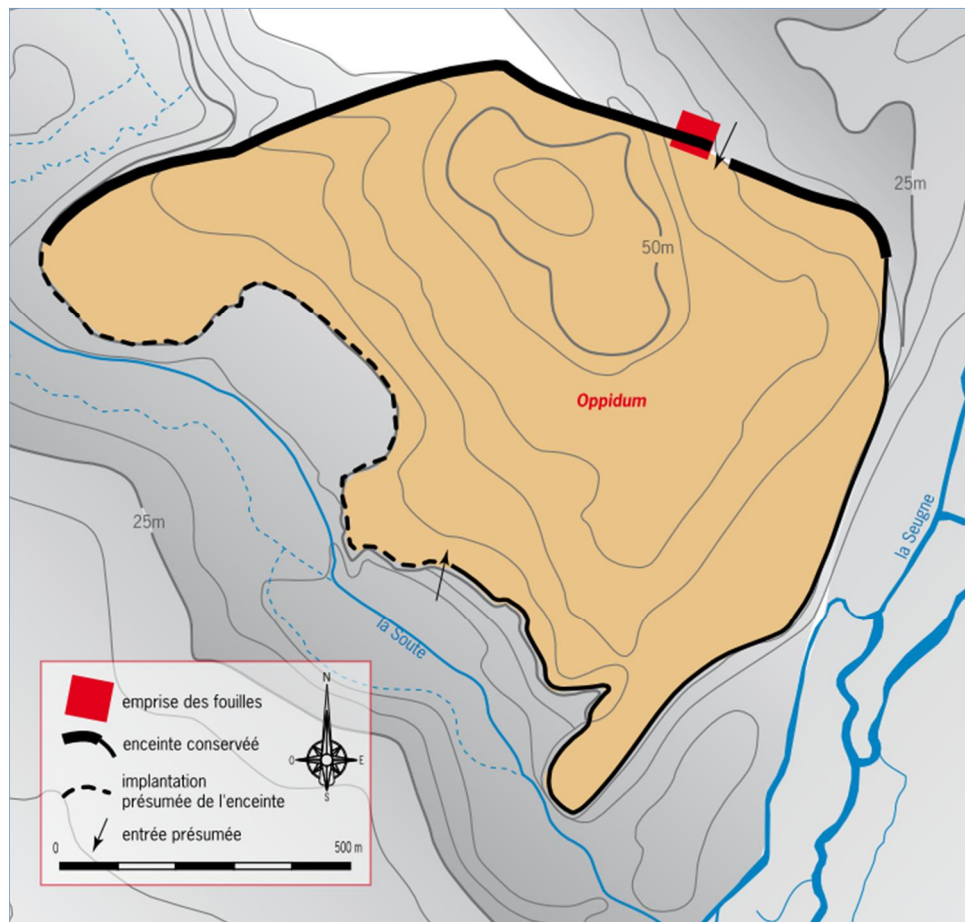


Fig. 4.16 Plan of Pons showing the location of the 2008–9 Inrap excavations
 (© G. Landreau, F. Bambagioni, Inrap)

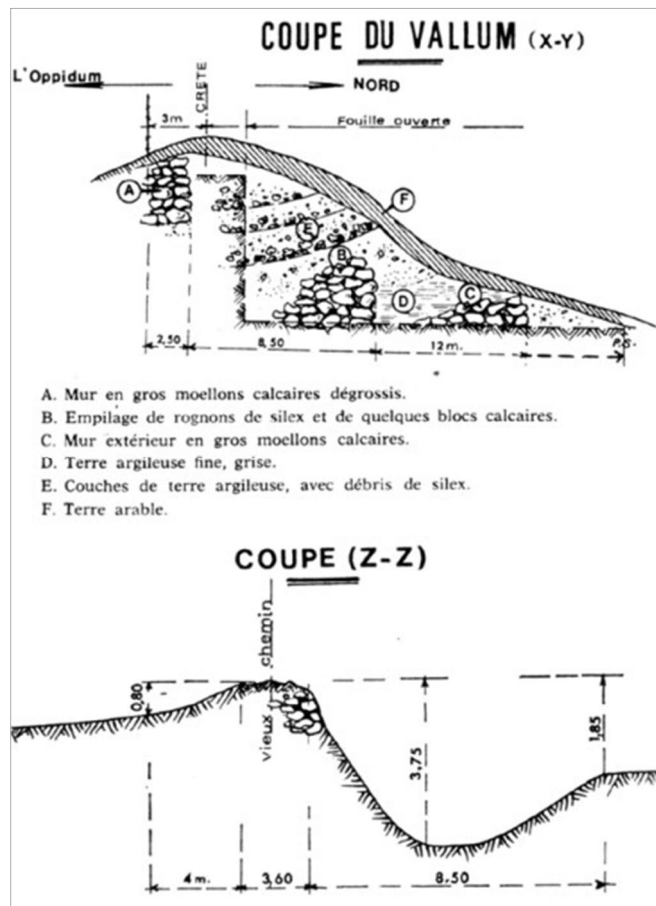


Fig. 4.17 Sections through the walls at Pons (Lassarade 1986: fig. 4)



Fig. 4.18 Excavations at Grand-Hôtel, Bordeaux revealed an area of workshops (top; Mistrot & Siriex 2012: 94) and produced several fibulae, fragments of bracelets and hair rings dating from between the 5th and 1st centuries BC (bottom; Mistrot & Siriex 2012: 96)