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"Challenging models of Late Iron Age urbanism and state formation in Gaul:

The Segusiavi territory between 600 BC and AD50"

Presented by:

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Thesis

Submitted in fulfilment for the degree of MA by Research

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Pour ma famille Roannaise et Forézienne

Abstract

Since Déchelette's contribution to the discipline, Late Iron Age Europe has been defined as a somewhat culturally unified entity characterized by the rise of a new form of settlement: the *oppida*. After having first refused to see any evidence supporting the case for the presence of urban characteristics in such settlements (Goudineau 1980), archaeologists now fully acknowledge the development of proto-urbanism within an Iron Age context. Based on the thorough study of important sites such as *Alésia*, *Gergovia*, *Bibracte*, *Manching*, *Stradonice* or *Kelheim* (Collis 1984, Fichtl 2005). A certain emphasis on spectacular sites heavily influenced the way archaeologists have come to understand the nature of *oppida* as a whole, despite sometimes a lack of tangible data to support their theory. Due to a certain interpretation of the *Gallic Wars*, the influence of Déchelette's *civilisation des oppida* and a somewhat outdated concept of urbanism based on classical perspectives, attention was, until relatively recently, only given to *oppida* – or at least settlements which fitted the typological definition created by archaeologists to characterize this term used by Caesar (e.g. Dehn 1962). And because of their lack of fortifications, and therefore clear evidence of an urban design, open settlements have usually been marginalised and considered as secondary forms of settlements solely characterized by a union of craftsmen (Büschenschutz and Ralston 2012).

The discovery of sites such as Acy-Romance, Sources de l'Yonne in France or Braughing in the UK, has accentuated the complexity within which the rise of proto-urban forms took place. This study aimed to further highlight the need to redefine our terminology regarding urbanisation in order to attempt to fully grasp the way in which the landscape of Late Iron Age Europe dramatically evolved in the second and first centuries BC. The regional study of the Segusiavi territory, via a full catalogue of sites recorded in this region, produced interesting results which could potentially challenge our current models. The study of both the urban and rural trajectories of the Upper Loire Valley confirmed the importance of the La Tène D1/D2 transition as an intense period of instability but reinforced the need to first undertake regional approaches when attempting to discuss the rise of proto-urban forms.

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Part I: Text

"For I suppose that if Sparta were to become desolate, and only the temples and the foundations of the public buildings were left, that as time went on there would be a strong disposition with posterity to refuse to accept her fame as a true exponent of her power. And yet they occupy two-fifths of the Peloponnese and lead the whole, not to speak of their numerous allies outside. Still, as the city is neither built in a compact form nor adorned with magnificent temples and public edifices, but composed of villages after the old fashion of Hellas, there would be an impression of inadequacy. Whereas, if Athens were to suffer the same misfortune, I suppose that any inference from the appearance presented to the eye would make her power to have been twice as great as it is."

Thucydides, *The Peloponnesian War*, I.10.2

Introduction

Understanding the processes by which larger social centres emerged and whether these can be defined as urban, is a fundamental question for archaeological research, from Eastern Europe to Mesopotamia, and has been a key focus of research here at Durham. The Late Iron Age has been central to such debates, examining the emergence of urbanism and the rise of complex societies in Temperate Europe. Key sites, such as Bibracte (France), Manching (Germany), Stradonice (Czech Republic) and Verulamium (England) which appeared in the Late La Tène (2nd century BC-1st century AD) have long been grouped under the term '*oppida'* and regarded as the beginnings of urbanism in Europe (e.g. Fichtl 2005). Recent research, however, has indicated the complexity of settlement development in this period; the increasing discovery of major open settlements across Gaul and other parts of Europe, for example, undermining concepts of enclosed *oppida* as unique central places (Kaenel 2006; Moore *et al.* 2013). Previously, the dominance of classical texts in reconstructing these societies had led to simplistic hierarchical models which increasingly do not correspond with the complex archaeological record. Despite this, the implications for this new evidence have yet to be fully integrated in to new social models and there is an increasing call for alternatives to current outdated models (e.g. Woolf 1993; Salač 2012). Focusing on the region in

which the original models of *oppida* and urbanism were first devised, this project aims to re-evaluate the processes of social development in Gaul and reassess the unique nature of experimentations in urbanism in temperate Europe prior to Roman expansion. This research potentially has broader implications not just for examining the proto-urbanism in Late Iron Age Europe, but for how we understand the varied ways in which urbanism developed across the world.

This study aims to:

(1) Assess the nature of settlement and social change in Late Iron Age Gaul via the study of a key regional case study
(2) Assess the processes behind the emergence and role of *oppida* in the Late Iron Age Europe and their impact on their surrounding landscapes
(3) Develop alternative models for the development of proto-urban forms and state development in Late La Tène Europe

Objectives:

(1) To undertake a detailed reconstruction of the landscape of the Upper Loire Valley via an in depth analysis of both published and grey literature sources
(2) To explore the evolution of settlement patterns and social systems through the establishment of a new chronological framework
(3) To evaluate the impact of pre-existing land use and settlement patterns on the emergence of the so-called *oppida*
(4) To understand the context and nature of interaction between enclosed *oppida*, unenclosed agglomerations and other assembly sites (such as sanctuaries) their role and impact on social and settlement systems
(5) To provide alternative ways to approach the concept of proto-urbanism in Late Iron Age Europe in terms of nature, terminology and definition
(6) To explore alternatives to traditional centralised models of urban and social systems

"A ce jour la communauté scientifique peine à définir la ville pour la société celtique de l'Âge du Fer car le mot – tant son contenu sémantique intrinsèque que le référentiel utilisé – et la chose telle qu'elle peut être appréhendée par les données de terrain, peinent à se rencontrer"

(Vaginay 2009: 365)

Chapter 1

Characterizing the emergence of urbanization in the Late La Tène: a long and ongoing process

This chapter aims to quickly outline the history of research related to Late Iron Age urbanism, to present the importance of terminology when characterizing social and cultural processes and to introduce a more nuanced picture which heavily influenced the way this research was undertaken.

Recognising the potential of the Late Iron Age as a possible platform to discuss the rise of proto-urban forms has been the result of a relatively long process. Joseph Déchelette (Fig. 1). was the first to really recognise a possible cultural unity north of the Alps in the Late Iron Age – a unity that was expressed by the presence of the large enclosed sites that came to be known as *oppida.* Born within a rich industrial family of the Forez, Joseph Déchelette developed an early passion for archaeology alongside his uncle Jacques-Gabriel Bulliot, the wine merchant of Autun who, under Napoléon III, discovered and excavated Mont Beuvray (Binétruy 1994: 83-98). Despite being at the head of a big textile industry, he was able to run various excavations in the Gorges of the Loire and to acquire a solid knowledge of Gallo-Roman pottery when curator of the Roanne museum. And in 1897, called by his uncle, he continued the extensive excavation programme started at Bibracte. It was his methodological classification of material culture, remarkable understanding of stratigraphy and multiple visits to various *oppida* in both France and Central Europe that led him to establish a clear parallel between these sites (Fig. 2). Most importantly, the *civilisation of the oppida* were not solely characterized as an indication of the existence of a unified and clearly distinctive identity on the fringes of the Mediterranean world, but as the clear representation of an early urban process – "*Il y eut donc en Gaule, vers le début du premier siècle avant J.-C., un développement considérable de la*

vie urbaine et sans doute aussi d'importants progrès dans l'art de la fortification permanente" (Déchelette 1927: 448).

However, despite his impact on later generations of archaeologists, after Déchelette's death in 1914 Late Iron Age studies somewhat failed to truly recognise the potential of this period when examining the emergence of urbanism and the rise of complex societies. The lack of excavations after the Great War and perhaps the vast influence of scholars such as Camille Jullian who only used the term 'town' as a commodity and encouraged a very colonial and classical approach to describe the settlements mentioned in the Caesar's *Gallic Wars* may have been partly to blame. Rather than associating their emergence with the hypothetical emergence of a form of urbanism, only their 'potential' to develop into cities in the Gallo-Roman period was recognised (Jullian 1908: chapter 7; Vaginay 2008: 171-3). In 1980 for example, when asked if it could be envisaged that the term '*ville'* be associated with settlements that pre-dated the Roman Conquest, Christian Goudineau clearly responded negatively – "*La notion de réseau urbain implique un vaste champ géographique se prêtant à l'enquête. Mais encore faut-il que ce champ présente une relative homogénéité. Ce stade, la Gaule ne l'a pas atteint avant la fin du Ier ou du IIe siècle de notre ère, ou plus exactement, certaines régions de Gaule, d'autres demeurant en retrait*" (Goudineau & Kruta 1980: 72).

It was not until 1984 that the presence of a proto-urbanisation process in Temperate Europe prior to the Roman expansion started to be acknowledged. John Collis' excellent assessment of *oppida*, by concentrating on signs of an industrial activity, the presence of public works and the role played by such sites in trade networks, aimed to demonstrate that these sites were not solely a first major step in the spread of urbanisation but also laid the first foundations for the development and pattern of modern west European society as Paris, Besançon, Bourges or Geneva continue to be thriving urban centres today – "*With the appearance of the Late Iron Age sites in the second and first centuries BC almost all the features of Sjoberg's pre-industrial town are present*" (Collis 1984: 5). This early assessment had major repercussions on the general research agenda and key sites such as Bibracte (Goudineau & Peyre 1993; Dhennequin *et al*. 2008), Villeneuve-Saint-Germain (Constantin *et al.* 1982; Debord *et al.* 1988; Debord 1993) and Corent (Poux 2012) in France, the Titelberg in Luxemburg (Metzler 1984; 1991), Manching in Germany (Schubert 1994) or Stradonice in the Czech Republic (Drda & Rybova 1995; 1997; Waldhauser 2001) witnessed renewed intense excavation programmes leading to some great successes, an important international co-operation (e.g. Glux-en-Glenne's Centre Archéologique Européen) and a better understanding of the phenomenon.

The issue of the urban nature of these sites, however, continued to raise significant concerns due to a methodological framework primarily based on morphological variations and because of the

potential for low density urbanism within their respective enclosures: "*Were the oppida urban? (…) either they were not towns or they represent a local variation on urbanism peculiar to Iron Age Europe*" (Woolf 1993: 231). Stephan Fichtl, taking advantage of a growing data set, aimed to finally end this debate. Following John Collis's methodological framework, the presence or absence of each fundamental urban characteristic derived from the current modern definition of 'town' was assessed (2005). His conclusions were unequivocal: "*En résumé, l'oppidum mérite sans peine l'appellation de ville, non pas comme une pâle copie des sites urbains du monde méditerranéen, mais comme une émanation propre au monde celtique. C'est une réponse celtique au besoin de grands sites centraux, témoins d'une stabilisation du territoire et d'une évolution interne de la société nord-alpine*" (Fichtl 2005 : 201). By going beyond the simple recognition of an urban phenomenon, this study primarily aimed to demonstrate the central place of *oppida* in almost every aspect of Late Iron Age life. The presence of towns has been interpreted as a sign of a centralisation of production, trade, religion, people and therefore power. The emergence of towns, and therefore potential capitals, has since primarily been interpreted as the consolidation of tribal power structures and a gradual emergence of possible states (Fichtl 2004 and Fig.3). This particular enthusiasm, shared by many (e.g. Audouze & Buchsenschutz 1989; Rieckhoff 2002; Kaenel 2006) , to finally be recognised by the rest of the archaeological community, and especially classists, was somewhat justified and had the merit to finally fully introduce the Late Iron Age in the current debates related to the rise of urbanism and state formation. Today *Oppida* are no longer side-lined and feature fully in discussions related to the trajectories of mega-sites in particular (e.g. Fletcher 1995: 203; or see the next EAA 2014 Istanbul Conference T05S001: 'Re-assessing urbanism in pre-Roman Europe').

This particularly strong determination to constantly attempt to prove the urban character of these sites, however, has potentially led to a problematic data set. In addition to a particular focus primarily given to spectacular sites (e.g. Bibracte and Manching), it could be argued that, until relatively recently, the excavation of *oppida* has drained most of the available resources. It must be noted that the urban character of these sites has not been the only focus of research when investigated – for other concepts such as cultural change, 'romanisation' in particular, have also heavily featured in discussion (e.g. Lafon 2006; Barrier 2012) – but their intensive study has potentially led to their over representation in the archaeological record. Such an emphasis led to a very good assessment of the activity inside their respective enclosures, but to a relatively poor understanding of their respective regional, if not local, landscape. The remarkable excavations of open settlements at Aulnat-Gandaillat (Collis 1984), Levroux (Buchsenschutz 1982) and Acy-Romance (Lambot 2000) were exceptions and not the norm. Late Iron Age studies had to wait for the emergence of commercial archaeology to fully grasp the importance of open settlements for both

the 2nd and the 1st c. BC. To solely study *oppida* when attempting to characterize the emergence of a new type of urbanism is thus potentially in danger of isolating these sites from the very context they emerged from. Interestingly this problem was recognised from the start – "*The major research problems however relate not to the oppida themselves but to the surrounding countryside – indeed it could be argued that there should be a moratorium on oppidum excavations in most areas in favour of systematic survey of rural settlements*" (Collis 1984: 31). This call to shift our focus to landscape studies has had a very limited response, especially in the French community. Landscape surveys had to primarily rely on both British and German scholars (Haselgrove 1996; Haupt *et al*. 2007; Creighton *et al.* 2008). However, their encouraging results, and the benefits of the growing data set of commercial archaeology, has since encouraged a new generation of researchers to continue in their footsteps especially in Eastern France (Kaenel 2006; Nouvel 2011; Barral & Nouvel 2012).

The recent discoveries of open settlements enabled a better categorization of the context within which the emergence of proto-urban forms occurred. A close study of the material evidence generally pointed towards the emergence of a structured occupation in La Tène C (Late 3rd and 2nd c. BC), especially in Western Europe (e.g. Levroux, Feurs, Roanne, Acy-Romance, Aulnat-Gandaillat, Berching-Pollanten or Bâle-Gasfabrik). Such a dating range clearly suggested that the lowland settlements pre-dated the emergence of *oppida*. These settlements were mainly characterized by artisanal activity (e.g. metal working, pottery or cloth production) and were, most importantly, the first evidence for a clustered occupation since the Late Hallstatt. When attempting to characterize their relationship with the later *oppida*, Levroux became central as the analysis of the ceramic evidence suggested that the rapid decline of the open settlement's occupation at Les Arènes chronologically coincided with the emergence of the nearby *oppidum* (Audouze & Buschenchutz 1992; Buchsenschutz 2004 and Fig.4). The rapid abandonment of the open settlement for the new enclosed town in the upland was interpreted as a clear sign of a centralisation process reflecting the natural evolution of urbanization. And this particular pattern of evolution, far from being limited to the Berry, started to be identified across Gaul. The most used examples to support this model have usually been Aulnat-Gandaillat in the Auvergne, which appears to have been abandoned before La Tène D1b (Collis *et al*. 2000: 78), and the open settlement of Gastafabrik in Basle (Switzerland) that was also abandoned for a nearby hilltop and enclosed site – Münsterhügel (Kaenel 2006: 31). Unsurprisingly, this significant chronological and geographical relationship led to a very evolutionary conception of proto-urbanism in which morphology played an important role because of the systematic presence of a *murus gallicus* in later *oppida*. This approach ultimately led to a very hierarchical understanding of the nature of the relationships shared by open settlements and *oppida*, even when the problematic nature of applying a universal model was recognised: "*Les relations entre*

les habitats ouverts et les oppida doivent se concevoir chronologiquement et hiérarchiquement. Si le modèle, proposé à travers le site de Levroux, du transfert d'un site ouvert à un site fortifié demande à être fortement nuancé, il n'en demeure pas moins que les villages ouverts sont la première forme de regroupement de population et d'activité dans le monde celtique (…) L'oppidum apparait comme l'aboutissement de l'évolution interne de la civilisation de La Tène" (Fichtl 2005: 176-7 and 199).

The elaboration of a broad and standardized model of development for the evolution of settlement patterns has therefore been a key component of Iron Age studies and a general consensus has come to be shared by most of the continental academic community. Within this methodological framework, urbanization had to correspond with a project that led to a significant construction programme and a population move in a very short period of time. The term 'proto-urbanisation' was thus abandoned because of its connotations. The rise of the first urban centres north of the Alps has generally been understood as the result of a deliberate political initiative and not as a result of organic growth: "*C'est un système du type 'top down', c'est à dire une initiative prise par une élite, aristocratique, royale, oligarchique selon les régions, par opposition par exemple, à une contrainte sécuritaire, ou aux agglomérations d'artisans, qui correspondraient plutôt au 'bottom up', l'initiative d'une nouvelle couche sociale fondée uniquement sur son pouvoir économique*" (Buchsenschutz & Ralston 2012 : 347 and Fig.5 and 6). When approaching the issue from such an angle, open settlements were generally disregarded because they seemed to lack a clear urban design that would have required the elaboration of an extensive collective project. These settlements have generally been defined as a first attempt of centralisation, or concentration, mainly led by a collection of craftsmen independent from the rest of society (Buchsenschutz & Ralston 2012: 358-9). Hence, this La Tène C development could not be characterized as urbanization because it lacked the involvement of all strata of Late La Tène society. The emergence of urbanism in the Iron Age has thus been primarily summarised in four distinct periods of development:

(1) Emergence of Hallstatt Princely complexes (e.g. Mont Lassois, Heuneburg or Breisach) associated with rich aristocratic tombs (e.g. Vix or Hochdorf) (6th and 5th c. BC)

(2) A sovereign rural world represented by a dispersed settlement pattern, yet complemented by a rich and elaborate craft production (4th and 3rd c. BC)

(3) Emergence of open settlements, a phenomenon characterized by an organic growth resulting from a centralisation of production organised solely by craftsmen, which thus excluded the rest of society. These centres declined or were abandoned when *oppida* emerged – it is excluded to even refer to proto-urbanisation at this stage (3rd and 2nd c. BC)

(4) The reign of *oppida*, the urbanisation *par excellence* reflected by a centralisation of production, trade, population and ritual, therefore representing all different forms of society (end of 2nd and 1st c. BC)

The issue of terminology

The choice of language is always symbolically charged and it is fundamental to understand the origin of any specific terminology in order to go beyond the bias of our own linguistic barrier and especially when attempting to discuss the emergence of complex societies. One of the most striking examples, perhaps, is the clear etymological differences between the French and the English language when attempting to characterize the status of settlements. The use of two different terms, 'city' and 'town', to establish a clear distinction in settlement hierarchies shows that English as a language has retained a very classical understanding of urbanism. Whilst, before the emergence of the concept of megalopolis, at least, the potential for settlement hierarchies had not been semantically materialised in the French language as only one term characterized an urban reality: the word '*ville'*. These linguistic particularities may well have had important repercussions when elaborating models. The strong reticence of the French community, at first, to acknowledge an urban development in the Late Iron Age may perhaps partly be explained by the intrinsic meaning of the term '*ville'* due to its Mediterranean origin (*villa*). Whereas, it could be argued that being able to choose the term 'town', instead of 'city', enabled John Collis to better accept the emergence of urbanism within an Iron Age context. This choice of terminology enabled the author to partly avoid the complicated debate related to city-states, but also to be more precise when characterizing the nature of these settlements by preventing a parallel with classical cities. As previously discussed, the recognition of an early form of urbanization prior to Roman expansion has primarily been discussed via the prism of *oppida*. The role of these sites has therefore been fundamental for our understanding of the rise of complex societies and settlement hierarchies. The extensive use of the term in archaeology has led to a very precise typology of sites in which size, fortification types and chronology played a fundamental part (e.g. Fichtl 2005: 17-20). This methodological framework – especially when requiring the systematic presence of fortifications – appears to be relatively rigid, which could lead to a rather problematic understanding of Late Iron Age society. In order to critically assess both the benefits and the problems derived from using such a term when discussing urbanism, it is particularly important to analyse both its linguistic and historical origins.

Oppidum is a Latin word that was essentially derived from Caesar who used it to identify some of the settlements he encountered during his campaigns in Gaul. Caesar did not feel the need to provide a clear definition of the term, a fact which therefore strongly suggests a use of a Mediterranean reality to describe a northern Iron Age phenomenon. Caesar may not have thought it necessary to provide his readers with the indigenous term since his memoirs were primarily intended for the Roman Senate as evidence against his political enemies who considered his campaigns illegal. But the term was also used by Livy when describing various sites of the Italian peninsula (e.g. Clastidium in Liguria – Livy, *Ab Urbe Condita*, XXXII 29.7) – thus confirming its Mediterranean origin – and by Suetonius when re-counting Vespasian's campaign in Britain (Suetonius *Life of Vespasian* 4.1). Identifying the primary functions, layout and characteristics of the sites mentioned by these authors has therefore always been problematic. A close attention to the text nevertheless suggested that, according to Caesar at least, *oppida* were clearly at the top of the settlement hierarchy which may partly explain why modern archaeologists have associated *oppida* with central places: "*When they* (the Helveti) *thought that they were at length prepared for this undertaking, they set fire to all their towns* (oppida) – *in number about twelve – to their villages* (vici) – *about four hundred – and to the private dwellings* (aedeficia) *that remained*" (Caesar, *De Bello Gallico*, I 5). The fact that Alésia (*De Bello Gallico* VII 68-70, 75-80, 84; VIII 14, 34), Avaricum (*De Bello Gallico* VII 13-18, 29-32, 47, 52) and Gergovia (*De Bello Gallico* VII 34, 36-8, 40-3, 45, 59) were also identified both as *oppida* and *urbes* also reinforced the idea that some of these sites may well have been recognised as towns by the Romans themselves.

Caesar's extensive description of the Gallic *murus gallicus* (*De Bello Gallico* VII 23), the belief that the term *oppidum* was derived from the Latin *quod pedi obest* (Kornemann 1942) and the fact that sites such as Cenabum, Avaricum or Vesontio – to name just a few – were all characterized by this imposing form of fortification unsurprisingly led archaeologists to see enclosure as the defining feature of *oppida* whilst the lack of fortifications automatically led sites to be defined as *vici* (e.g. Dhen 1962; Collis 1984; Fichtl 2005). However, when undertaking a closer examination of the textual evidence it becomes apparent that to categorically associate *oppida* with enclosure is highly problematic. For example, whilst Caesar identified Geneva as an *oppidum* (*De Bello Gallico* I 6-7), archaeology has yet to uncover the presence of any form of fortifications (Fichtl 2005: 13). If Geneva had not been mentioned in the *Gallic Wars* the site would have most probably been characterized as an open settlement. A similar conclusion may be drawn for Agedincum (modern Sens in Burgundy) which was characterized as an *oppidum* by Caesar (*De Bello Gallico* VI 44; VII 10, 57, 59, 62) but has yet to reveal the presence of a hypothetical *murus gallicus*. Following Hannibal's arrival in Italy, the publication of an edict by Fabius in 217 BC, which ordered the evacuation of all *oppida* and *castella*

that lacked a rampart (*Ab Urbe Condita* XXII 11), appears to further highlight the fact that open settlements may well have been characterized as *oppida* in the Roman world. It would therefore appear that the current definition of *oppida* shared by most archaeologists may be somewhat arbitrary for it omits the potentially complex meaning of the term as the presence of fortifications may not have been a necessity. From a Roman perspective, it becomes apparent that the term *oppidum* was more closely associated with a political reality rather than the urban nature of the place. This would partly explain the high number of *oppida*, once interpreted as exaggerations, mentioned by Caesar in the Helveti territory or by Suetonius in Dorset, for this term may well have included sites of a different nature such as open settlements in Gaul and hill forts in Britain. Michel Tarpin rightly concluded that "*La prudence recommanderait donc ne pas envisager l'oppidum seulement comme phénomène d'urbanisation, mais comme un élément marquant de l'organisation territoriale d'un groupe humain*" (Tarpin 2009 : 185).

The emergence of a more complex picture

"Le penchant naturel de tout spécialiste ayant affaire avec l'espace étant de s'enfermer dans la nomenclature et le classement de ce qui se trouve dans l'espace"

(Lefèbvre 2000: 114)

The emergence of commercial archaeology has contributed to an explosion of archaeological knowledge. As previously discussed, planned archaeology had led to a potential bias data set because of a particular emphasis on spectacular sites (Collis 1984: 189) but the arbitrary nature of developer funded archaeology contributed to the discovery of new sites and open settlements in particular. The discovery and full excavation of Acy-Romance in the 1990's is very symbolic in that respect and may be considered as the first site that truly started to question the pre-existing model. The evidence of a well-structured settlement and the presence of communal spaces which clearly impacted the overall layout of the site already indicated the potential presence of some urban design in open settlements (Lambot 2000; Fichtl 2005: 173-4). But the size of the settlement (25ha), the importance of agriculture for the community as a whole and its apparent decline before the Augustan period led archaeologists to still characterize the site as a secondary form of settlement.

In Britain, inspired by Greg Woolf who argued that the current definition of *oppida* was too general to be archaeologically useful (1993), Stewart Bryant re-evaluated the pertinence of this definition for

the potentially nucleated sites of Hertfordshire. Whilst St Albans, Baldock or even Welwyn appeared to somewhat confirm the importance of earthworks for the emergence of proto-urban centres, the open settlement of Braughing appeared to have shared many characteristics usually found on *oppida* despite the lack of fortifications. In addition to a high level of imported pottery from both Italy and Gaul and an unusually high concentration of pig bones, excavations at Skeleton Green indicated a relatively dense occupation (Bryant 2007: 66). The fact that Braughing became a Roman town after the conquest further supported the idea that the site likely served as a magnet for the local population and may well have functioned as a market potentially as early as the 1st c. BC. However, the evidence from Weathampstead, a site which has usually been interpreted as an *oppidum* because of its dyke system, suggested a very different function for there was no indications of an extensive Late Iron Age settlement. None of the functions usually associated with 'central places' such as mortuary, domestic or industrial activity could truly be associated with this site (Bryant 2007: 73). The complex, however, may well have been associated with a ritual or a ceremonial function associated with the role of Devil's dyke (Bryant 2007: 74). This raised significant concern in regards to a terminology based on morphology. The dykes by which the sites are defined often occur in situations with little evidence of industry or high status activity or of a nearby settlement whilst the definition also excludes some obviously major settlements which lack dykes. Stewart Bryant successfully showed that in focusing in earthwork morphology, the English definition of *oppida* has been of little use for understanding the key aspects of these sites and their role in Late Iron Age social and economic systems. With its evidence of exchange, nucleation and industry, Braughing was probably the closest of the six analysed sites in functional terms to the continental definition. But perhaps most importantly the suggested origins and functions of the six clusters were sufficiently distinct to conclude that they did not fall within a single settlement class and that the term oppidum may not always be a useful functional label.

The recent discovery of a large La Tène D2b/ Augustan open settlement (115ha) close to Bibracte in the Morvan located around the source of the river Yonne may perhaps indicate that this conclusion should not be solely restricted to Britain (Fig.7 and 8). Its remarkable size and peculiar geographical relationship with Mont Beuvray enabled to provide a new perspective on the chronology and role of Late La Tène and early Roman unenclosed settlements, adding further complexity to the story of the development of *oppida* (Moore et al. 2013; Moore & Ponroy 2014). Recent excavations have shown that the open settlement at Sources de l'Yonne witnessed an intense and well organised occupation via a vast system of terraces. Evidence for industrial activity has yet to be confirmed but the presence of slag on the surface would suggest that this is only a matter of time. The ceramic assemblage has proved to be remarkably similar to that of Bibracte which could, in appearance, indicate a similar

status. The most striking conclusion, however, was the chronological sequence of the site. Open settlements usually emerged in La Tène C, but the ceramic evidence found at Sources de l'Yonne suggested a La Tène D2 date for the erection of the terraces indicating that the settlement did not precede Bibracte. The existence of this settlement emphasised that the heyday of Bibracte led to extremely large numbers of people congregating around these focal places with an impact beyond the immediate limits of Mont Beuvray. The possibility that large *suburbia* may have existed beyond the bounds of other *oppida* thus clearly indicated that these agglomerations followed remarkably varied chronological trajectories, raising important issues concerning the nature of landscape and social change at the end of the Iron Age. Investigations at Sources de l'Yonne added to the increasingly complex picture being drawn for settlement development in Gaul. The model of movement from lowland open settlement to upland *oppidum* no longer reflects the increasingly diverse and complex patterns of unenclosed agglomerations and hill-top sites.

The emergence of commercial archaeology and the recent re-evaluations of landscapes that were previously thought to be well understood therefore potentially radically changed the way one should interpret the emergence of urbanism in Western Europe. Recent studies in Eastern Europe also suggest a more complex pattern of development in which open settlements played a greater role than previously thought (Salač 2012). If following a purely functional understanding of the definition of *oppida* should open settlements be characterized as such despite their lack of fortifications?

Chapter 2

Reinterpreting the Upper Loire Valley

Undertaking a detailed assessment of the archaeological evidence of the Upper Loire valley, an area which could roughly be compared with the modern department of the Loire (Fig.9 and 10), will provide a platform to explore alternatives to current models of urbanization. This region has an excellent but largely untapped data set of settlement evidence for examining the roles and interaction of enclosed and unenclosed Late La Tène settlement. The area of study is also located on the edge of the expanding Roman Empire and at a key crossroads between the two most powerful Late Iron Age socio-political entities in Gaul (the Arverni and the Aedui) which are often regarded as the epitome of the model of centralised proto-states (e.g. Cunliffe 1988) . Since the work of one of the key founders of modern Iron Age studies in the early 20th century (Joseph Déchelette), the region has been central to developing models of Late Iron Age social change, yet has remained largely overshadowed by studies elsewhere. Re-examining current social models in the regions where they were first established ensure that revised models will have much wider implications and impact than those currently being established for areas often dismissed as marginal to the 'Celtic world' (e.g. Bryant 2007; Salač 2012).

Since the development of rescue archaeology in France, Roanne has started to feature in the academic discussions related to open settlements. The *Editions de la Maison des Sciences de l'Homme* issued two very important publications in 1997 which aimed to summarise the state of research for this agglomeration and to evaluate its significance for wider debates (Lavendhomme & Guichard 1997; Genin & Lavendhomme 1997). In these publications, the open agglomeration of *Rodumna* was not necessarily treated as a secondary form of settlement in comparison to the nearby *oppidum* of *Joeuvres* (Saint-Jean-St-Maurice, Loire) and therefore provided an extremely significant step. However, because of a lack of tangible data, due to the nature of both urban and rescue archaeology at the time, the derived conclusions of this study concerning the settlement's relationship with its hinterland and the nearby *oppidum* had to remain evasive and hypothetical (Lavendhomme & Guichard 1997: 47-48) – perhaps explaining why they did not necessarily have the impact they could, or should, have had. This subsequently led to Roanne being characterized as a *vicus* (Kaenel 2006: 31), to be considered as part of a settlement hierarchy and to have suffered from the emergence of *oppida*: "*A Roanne et à Feurs, la taille du site n'a diminué qu'à la fondation de*

*l'*oppidum *de Joeuvres, pour reprendre de l'ampleur, une fois l'*oppidum *abandonné*" (Collis 2012: p.5). Roanne and Feurs have therefore primarily been studied in relation to open settlements such as *Aulnat*, *Tonnerre* or *Levroux* which all appear to have been abandoned due to the rise of an *oppidum* in the vicinity (Deberge *et al.* 2007; Buchsenschutz *et al.* 2000). The way in which Roanne has been discussed has therefore sometimes participated in reinforcing the model elaborated by Olivier Buchsenschutz which aims to characterize the evolution of settlements and Iron Age society (Buchsenschutz & Ralston 2012).

Stephan Fichtl, however, was the first to see the potential of the Segusiavi territory as an exception to the Levroux model (Fichtl 2005: 175 and Fig.11). Rather than associating the emergence of Joeuvre, Le-Crêt-Châtelard and Essalois with the decline of the open settlements of Feurs, Goincet and Roanne, Stephan Fichtl recognised their longevity whilst the presence of Mediterranean imports and a specialised craft production confirmed their potential as 'central places': "*les trois villages Ségusiaves sont confrontés à l'apparition d'oppida. Pourtant cette nouveauté dans l'habitat ne semble pas avoir de répercussions majeures sur les sites. L'étude de cette région est intéressante car elle permet de relativiser la théorie de déplacement de l'habitat d'un site de plaine vers un habitat de hauteur*" (Fichtl 2005 : 175). In this region, open settlements and *oppida* could therefore have had a similar importance in the settlement hierarchy and considered as central places. This study intents to assess this potential by intensely analysing local trajectories in order to see if Stephan Fichtl's model truly reflects Late Iron Age settlement patterns.

Methodology

This study aimed to primarily assess the potential of the Segusiavi territory as an alternative model by providing a detailed understanding of both urban and rural trajectories. A GIS data base provided a platform from which the nature of settlements distribution could be analysed within their respective landscapes. This study primarily concentrated on the northern part of the Upper Loire Valley as the Plaine du Forez was recently re-evaluated by Marie-Caroline Kurzaj. The archaeological evidence for the open settlement of Roanne was re-examined in the light of recent archaeological discoveries before attention was given to its hinterland. A similar approach was then undertaken for the two *oppida* of Joeuvre and Le-Crêt-Châtelard.

The chronological framework within which this study was undertaken primarily followed the German system first established by Reinecke (Fig. 12). In order to construct models of settlement dynamics

important chronological markers such as imported tableware, Dressel 1 amphorae, brooches, glass beads or coins were taken into account when refining the chronological sequence. The concepts of memory and sense of place was explored by examining evidence for the longue durée of use, evidence for settlement and society from the late Halstatt to the early Roman period drawing parallels from previous studies which explored the impact of previous settlement patterns and social activity in defining both location and forms of practice for emergent central places.

The Aisne Valley has been fundamental to the nucleation-model (Haselgrove 1996 and Fig. 13) as an alternative to settlement hierarchic model. The establishment of various distribution maps enabled to test the hypothesis of nucleation as an explanation for *oppida* emergence in the Upper Loire Valley. A particular attention was also given to the impact of open settlements on local settlement patterns in order to determine their importance. The nature of social networks has primarily been assessed by compiling data on Mediterranean imports, ritual activity, evidence of exchange and production as well as using faunal evidence and other materials to assess the different role and status of settlements. The results from the Northern part of the Segusiavi territory were then compared with Marie-Odile Lavendhomme (1997) and Marie-Caroline Kurzaj's conclusions (2012) in order to truly compare local trajectories within a regional perspective. A comparison with the well-examined adjacent regions (Auvergne and Burgundy) and the well-studied Aisne Valley then enabled to assess the overall significance of the results in regards to the creation of models of settlement and social change in Late Iron Age Gaul.

Accepting and endorsing the subjective nature of archaeological interpretation

Archaeological evidence from both rescue and planned archaeology may appear objective at first glance and therefore reliable when constructing social and cultural models of change. But, the methodology chosen, the ways in which site reports are written, the classification of material culture, despite appearing scientific, are never truly neutral instruments due to the fact that they originate from the archaeologist's own social and cultural context (Shanks and Tilley 1987: 22-3). When analysing a landscape it is essential to be able to distance ourselves from our contemporary understanding of land as a financial resource and to acknowledge that prehistoric societies were influenced by different meanings and symbolism which remain alien to the archaeologists' social context (Parker-Pearson 1999: 139). It is equally important to recognise the difficulty of this task and

to stress the fact that the realisation of one's subjectivity may allow the archaeologist to go beyond his own understanding of the world and society through endorsing new concepts and ideas, but that his interpretation will remain also remain subjective and will always reflect in one way or another his time and socio-cultural background. It is fundamental to realise that archaeologists are not necessarily producing a better and better or more complete account of the past for the past is truly gone and only exists in the present's practice of interpretation. Archaeologists can therefore only offer their own perspectives, drawn from their own historical, social and cultural understanding, of the past: "*So it is not the objects of the past and their preservation which matter so much as the relations revealed and created between them in the historical act of interpretation*" (Shanks and Tilley 1987: 26).

Viewing archaeological theory in such a way allows a broader field of action when interpreting the past and the inclusion of other disciplines such as ethnography, anthropology or sociology. Different concepts or different lenses can then be used when studying the data in order to offer theoretical alternatives which can potentially offer new lights on the reasons behind the development of social links and networks.

Distinguishing a social system from a social structure

This study does not only intend to characterize and analyse the different evolutions of the cultural and social entities encountered but rather aims to go beyond relatively static and simplistic interpretations based essentially on functional criteria and the establishment of clearly defined categorizations and typologies of practice: "*Categories are never adequate to the past (…) Theorizing a cultural entity as adaptive or functional simply affirms its existence and provides little comprehension of its specific form of articulation*" (Shanks and Tilley 1987b: 26 and 34).

Without undermining the importance of understanding the evolving nature of a social system, this work also aims to provide further evidence concerning the need of accentuating the study of the social structure without which the social system cannot exist. Ian Hodder, who first drew attention to the importance of distinguishing the two notions of *system* and *structure* (Hodder 1982; 1985; 1986), has stressed this necessity of considering the context and the meaning within which every social act is performed if one wished to avoid falling into simplistic and misleading narratives. Considering the reasons behind the choice of the application of certain strategies concerning subsistence, trade, occupation, control or ritual over others which could be considered as equally *adaptive* may only be possible after attempting to understand the rules which generate any particular social action.

Attempting to characterize structure rather than simply limiting our attention to its associated social system offers a more in depth understanding of social behaviour and most importantly change: "*In social practice the individual agent is always already positioned in relation to structure (…) but every manifestation of structure in an action is a concretization of structure through its effects on social practice and on the object world*" (Shanks and Tilley 1987: 71)

In effect meanings and principles of behaviour are being constantly re-evaluated when a social act is performed due to the nature of the practice itself, the interaction between the different social agents, the historical or conjectural circumstances associated with every specific social act or the unintended consequences of practice. Viewing and characterizing structure in such a way enables the observer to realise the fluid nature of this concept and therefore the associated possibility of it being re-ordered or transformed: "*Action, in other words, is in dialectical relation to structure and social context. It begins in structure, is mediated by structure, and ends in structure, but its realization in the world may result in the re-articulation of transformation of structure*" (Shanks and Tilley 1987: 72).

Viewing landscapes as records of social history

In order to offer different theoretical alternatives concerning the nature of the various social interactions and their related structure the way one approaches landscape archaeology is essential. Landscapes are considered by most archaeologists as a product of human interaction with the environment but the issue relies primarily on how one analyses the nature of that interaction (Ashmore 2004: 259). Rather than taking a traditional and positivist view on the matter by concentrating solely on economic and ecological explanations to provide answers in terms of land-use strategies, this study will also aim to follow a different theoretical narrative. Landscape should not solely be conceived as an abstract dimension resulting in space being neutral and not affecting the individual and therefore lacking any depth (Tilley 1994: 9). Tilley has stressed the importance of seeing spaces as more than just "a distribution of dots on a map" (1994: 54-67) and conceptualising landscape as a record of social history enables a broader range of interpretations. Within such a theoretical framework the incorporation of all aspects of social interaction can be studied through the exploration of how landscape features are socialised and how cultural features become naturalised: "*The spirit of a place may be held to reside in a landscape*" (Tilley 1994: 26).

The construction of memory for example is therefore an important tool when trying to understand the reasons behind the evolution of settlement patterns. A particular emphasis is always given to special monuments or places in their contemporary evolution and usually focuses on when they were

built and the time of their occupation. But it is essential not to forget that these monuments continued to form an essential part of the landscape even after they were abandoned (Ashmore and Khepp 1999: 18). Therefore, a special emphasis must also be given to the "afterlife of monuments" as they remained integral "to understanding landscape as social history" (Ashmore 2004: 262). Bradley suggested that élites of the later periods may have used such markers on the landscape to claim a certain "timeless" authority on the populations by spatially associating themselves with the ruins (Bradley 1987). This may prove to be of a particular interest when studying the emergence of *oppida* either in terms of location or in terms of morphological structure and activity.

Filling a vacuum: the application of post-processual theory in the study of social and culture change in Late Iron Age Gaul

By analysing the data under such a perspective this study aims to fill a vacuum for the Late Iron Age and Roman transition in this particular region of Gaul. The different attempts in characterizing social practices have been primarily relying on functionalist criteria when analysing landscapes whilst classical text remained essential to provide evidence and an explanation of structure (*De Bello Gallico*: VI. 11-20). Models were constructed and aimed to characterize the hierarchical nature of society and the way in which power was expressed through the consideration of certain morphological or typological features regardless of their regional context by putting in place generalised models of development (Fig. 14, 15 and 16). Power has therefore been perceived and explained in terms of ranking and control. Because some sections of society possessed more than others, a different status was then defined for the different parts of society and power was conceived to flow from the top to the bottom of society.

Such an approach reflects most certainly the absence of a processualist and post-processualist debate outside the English speaking world rather than a clear processualist view. Gardin noticed that for certain sectors of archaeological research this paradigmatic debate held a relatively minor place (Gardin 1998: 68) whilst Chapman argued that it "remained largely a British form of intellectual inquiry" (Chapman 2000: 494). This theoretical situation for the period and geographical area studied perhaps gives further importance to this study in opening a dialogue between French research and a more Anglo-Saxon approach already initiated by Woolf (1998) or Moore and Armada (2011) as this study aims to go further than the characterization of hierarchies and the control of resources.

In this study different conceptions of the order and structure of society will be discussed, power will not be studied in terms of an "*all-important essence in society residing at a specific place, something which may be possessed, taken-up and exercised*" but rather as a "*feature of society which is irreducible to individuals or groups or specific areas of the social field such as the economic or the political*", and relations of power will thus be considered as "*interwoven and networked with respect to the specific conditions of existence and effects of social practices*" (Shanks and Tilley 1987: 72-3).

Chapter 3

Late La Tène Rodumna: village or town?

The aim of this analysis of the Late Iron Age open settlement found at Roanne (Fig. 34) is primarily to go further than the study of Stephan Fichtl – who only aimed to propose a general and concise view on the matter due to the nature of his study – in order to attempt to grasp the complexity of the processes within which early forms of urbanism were first established in this part of Gaul. A particular attention will be given to the presence or absence of characteristics usually found on *oppida,* and the chronological trajectory of the site, in order to critically assess the validity of Olivier Buschenchutz' approach when discussing the relationship between *oppida* and open settlements. Until the 1970s, there was no evidence for Iron Age occupation under the modern towns of Roanne, Feurs or Poncins explaining why attention was only given to the enclosed sites of Joeuvres (Saint-Jean-Saint-Maurice) and Le-Crêt-Châtelard (Saint-Marcel-de-Félines) located in the gorge of the Loire. The rise of commercial archaeology, and the solid establishment of firms such as INRAP or ARCHEODUNUM, has enabled an extensive review of previous analyses which were essentially based on excavations dating from the first rescue missions in the 1960's to the 1980's (some even directed by local groups of pioneering amateur archaeologists – e.g. GRAHR and FRAL). None of the results from these recent excavations have officially been published and I therefore wish to thank the DRAC (Direction Régionale des Affaires Culturelles) in Lyon for allowing me to consult and use their preliminary reports in order to conduct this study.

The Archaeological Evidence

It was under the Catholic school of St Paul that the earliest traces of occupation were recorded in the form of a vast layer (140m2), potential remains of part of a workshop (evidence of a worn and reddened surface – 1m2) and an eroded hearth. These archaeological features were all found stratigraphically under the Late La Tène levels of occupation (Lavendhomme 1997: 164; Lavendhomme & Guichard 1997: 23). These remains dating from the 4th and 3rd century BC are located in the vicinity of the most densely occupied area in the Late La Tène, the rue Gilbertès. It is therefore tempting to speculate whether or not these early traces of occupation could be used as evidence concerning the date of the emergence of the open settlement. However, no real

stratigraphic relationship with the later occupation in the Late La Tène could be significantly determined and Marie-Odile Lavendhomme rightly mentioned in her narrative that the sporadic diffusion of these remains and their important erosion led to a high potential for a discontinuity between these layers of occupation (Lavendhomme 1997: 165). The official emergence of the open settlement of *Rodumna* has therefore been dated to the early 2nd century BC (175-150BC) and relate to the first clear signs of an organized occupation alongside a main road which was roughly following the same alignment as the modern rue Gilbertès (Thévenin 2005: 17).

The presence of earlier features may indicate a potential to challenge the model of development for such sites in terms of chronology. But until new excavations are conducted in the immediate vicinity, which is highly unlikely due to the nature of the urban development in this area, this can only remain a hypothesis.

The central role played by the road in the early stages of development concerning the organisation of space is extremely significant and could thus potentially be used as evidence to confirm, or at least reinforce, the importance of trade routes when discussing the emergence of such settlements (Buchsenschutz & Ralston 2012 and Fig.17). Roanne appears to have been in a very favourable position in relation to communication networks. Being at the crossroads of both fluvial and terrestrial routes which linked the Rhône, Loire and Allier valleys with the Auvergne and Burgundy (which were respectively controlled by the Arverni and the Aedui), Roanne may have therefore primarily developed because of its geographical location (Lavendhomme 1997: 163; Thévenin 2005: 16). Iron Age navigation on the Loire has yet to be confirmed via archaeological evidence (e.g. harbour, shipwrecks) but should be viewed as highly probable as navigation on the Loire was no longer dangerous from this point[1] – in the 19th century an industry of flat-bottomed vessels flourished in Roanne for that particular reason. Despite describing a later Gallo-Roman reality, the existence of Roman sources, which mention Roanne as a necessary stop when travelling from Lyon to Clermont-Ferrand, Nevers or the Arroux valley (Autun), has usually been used to reinforce that perception as these landscapes were already major centres of trade in the Iron Age (Ptolemy *Geo*. II.8.11 and "*La Table de Peutinger*").

One may fall into an overly simplistic narrative, however, when solely presenting the geographical location of the settlement in relation to other Iron Age landscapes when proposing an explanation for the emergence of this grouped and structured occupation. This factor may rather provide a more satisfactory reason for the rapid expansion of the settlement from the Augustan to the Vespasian

[1] « (Roanne) est en effet un point de rupture de charge de la navigation sur la Loire » (Lavendhomme 1997 : 163)

period at a time when Lyon (*Lugdunum*) became the capital of Gaul. The topography and the geology of the area may perhaps have played as important a role in this process.

In general terms, Roanne's location offered a sheltered environment with large areas of marshland in the west and the presence of the river Loire on the east both protecting the settlement. And, despite the proximity of the river, it seems that the settlement never suffered from flooding. The river Loire is well known for regularly bursting out of its river bed but it appears that Roanne was potentially never flooded neither in the Iron Age, nor in Antiquity, thanks to the protection of an imposing natural terrace (Bocquet 2005). The advantages of the topographical terrain must therefore also have played a major role in the choice of location.

Compared to the large quantities of clay in the north, which still lead to difficult drainage and poor agricultural soils (explaining why the countryside has now been turned into pasture), a mountainous terrain in the west and the reality of a volcanic geology combined with a relatively arid climate in the south (Seuil de Neulise), Roanne's surrounding flood plain was remarkably rich and was blessed with an excellent soil quality – especially in terms of drainage thanks to a large quantity of sand in the bedrock (Thévenin 2005: 16). This factor may well explain a relatively intense occupation of the area which has been dated as far back as the Neolithic (Blin 1991: 163; Lavendhomme & Guichard 1997: 21). The emergence of Roanne thus seems to reinforce Buchsenschutz' model in terms of its geographic location and the nature of its immediate hinterland:

« *(Ces nouvelles agglomérations) sont situées sur des carrefours de voies ou des axes navigables, à proximité de ressources agricoles ou minières* » (Buchsenschutz & Ralston 2012 : 358)

In Olivier Buchsenschutz and Ian Ralston's model, however, the inhabitants of such settlements were not farmers but were in their vast majority craftsmen who benefitted from the presence of raw material in the area to exercise their trade:

« *On a l'impression que ces agglomérations se sont développées à l'initiative des artisans, sans que le reste de la société participe à ce phénomène et l'inscrive dans une tradition collective* » (Buchsenschutz & Ralston 2012 : 359)

In order to support this claim, the declining amount of storage pits and granaries in open settlements, compared to the hamlets of the early La Tène, are usually put forward and illustrated by case studies such as Levroux (Buchsenschutz *et al.* 1993; Buchsenschutz & Ralston: 359). However, the recently discovered open settlement of Acy-Romance in the Aisne Valley, and the presence of storage pits and granaries in large numbers and systematically attached to houses, radically contradicts this particular narrative (Lambot 1998: 76; Lambot 2003: 45). This settlement, which also

emerged in the 2nd century BC (Lambot & Friboulet 1996), and was therefore contemporary to the type of settlements discussed, seems to have experienced a cohabitation of both craftsmen (evidence of two ironsmithing locations and cloth production) and a large population of farmers (both involved in livestock and crop production). Acy-Romance represents one of the very few examples of an Iron Age settlement which has practically been entirely excavated, and, perhaps, should therefore probably feature more in the various discussions regarding the type of population which was both responsible for the emergence of such settlements and which inhabited such sites. A very diverse population may have lived in open settlements and therefore participated in the emergence of a wider collective community. Should this lead such sites to be regarded as the first step towards a form of urbanization specific to the Temperate Europe of La Tène? If urbanization corresponds to a project which leads to construction and to the movement of a wide range of population in a short period of time, the concept defended by Olivier Buchsenschutz and Ian Ralston (2012: 347), why should the open settlement of Acy-Romance not be considered as such?

The importance of a rich agricultural back-drop could therefore also potentially indicate that the early settlers of Roanne may not have all been craftsmen but that the population also comprised of farmers – even in the early stages of development of the settlement. In addition to the discovery of a potential granary attached to the houses in the Chantier St Paul, the presence of numerous pits around the various houses may well indicate an important activity dedicated to the storage of grain. Only one of these features was firmly identified as a storage pit, but whilst the study emphasized a typological analysis of these pits, no soil sampling analysis was undertaken (Lavendhomme& Guichard 1997: 65-75). Determining critically the primary function of these pits therefore becomes almost impossible. The various rubbish pits could well have primarily been used for storage at an early stage before their function changed with time.

The way in which one interprets the level of diversity within the population of Roanne in the 2nd century BC should therefore be subject to caution, especially due to the nature of the archaeological investigations in an urban context. Using Roanne to reinforce the accepted model of development would therefore not be based on any real concrete archaeological evidence but merely be the result of seeing absence of evidence as evidence of absence. A more nuanced interpretation regarding the emergence of open settlements must therefore be portrayed and a parallel with similar sites in Central Europe developed as this issue has also been recognised by scholars such as Vladimir Salač (2012: 334-337 and Fig.18).

Only emphasizing the practical and the economic factors may, on the other hand, reinforce the issues of an interpretation based entirely from a processual perspective, and thus contribute to provide an

overly simplistic narrative of a complex phenomenon. When studying the trajectory of this settlement, one has to attempt to understand *both* the natural and the cultural antecedents involved in this process. Therefore, a different approach may be needed when attempting to understand the various reasons behind the establishment of a grouped habitat in this floodplain. A close study of this part of the Loire Valley has revealed that every settlement located near the river was mirrored by another on the opposite bank. A detailed interpretation of the chronology, the nature and the relationship between these settlements is thematically presented and discussed elsewhere in this study because of the potential significance of this phenomenon when approaching the evolution of settlement patterns for the Segusiavi territory as a whole.

A dispersed occupation?

One of the major arguments for the confirmation of urbanism is a move from a dispersed to a more clustered occupation which can be regarded as being the consequence of a large centralization or nucleation. However, the essence of urban archaeology makes it extremely difficult to reach conclusions when approaching the issue of the level of density of an occupation. On the other hand, the geographical position of various *oppida*, and more importantly their trajectory, has enabled a detailed study of their internal organization and an appreciation of the presence of relatively densely occupied districts within their respective precincts thanks to international and inter-disciplinary projects on a large scale. Their abandonment since the Late Iron Age made it possible to study the phenomenon as a whole. In Corent, the excavations have, for example, enabled a reconstruction of the central role played by the sanctuary in the organization of the domestic activity as the excavated houses, which formed a dense cluster, seem to have gravitated around the structure (Fig. 19).The discovery of the butcher's district in the same *oppidum* participates in the formation of a global picture regarding the density of occupation experienced on such sites (Fig. 20), and seems to confirm the initial discoveries of the *Côme Chaudron* and the *Champlain* made by Jean-Gabriel Bulliot and Joseph Déchelette during their excavations of Mont Beuvray (Fig. 21).

In the case of Roanne, despite the irregularities of a data collection due to the sporadic nature of the intervention of rescue archaeology, a few important conclusions may nevertheless be reached. The Chantier St Paul directed by Michel Vaginay in 1987 revealed some of the most striking evidence regarding both the internal organization and the density of the settlement in its early stages (160-80BC) thanks to the excavation of an unusually large area (25x15m) for an urban context where most projects can only investigate narrow streets because of the nature of urban development. In what

has been characterized as phase 1, various houses all built on the same alignment and separated by a passage way (which was parallel to the flow of the river) were unearthed (Lavendhomme & Guichard 1997: 35-39 and Fig.22). The various households all appear to be placed very close to one another and form a remarkably organized cluster of occupation similar to those found in Corent or Mont Beuvray. The contrast with Olivier Buchsenschutz and Ian Ralston's vision (2012: 358) of open settlements is therefore striking. Far from lacking any form of organization the settlement appears to be following a strict model which could be associated with an early form of town planning. The relative proximity of the various households, the presence of a well, two hearths and various rubbish pits located outside may well have also have favoured the practice of domestic activities within a collective framework (Lavendhomme & Guichard 1997: 47). The domestic nature of the activities attributed by the authors to the well and the hearths will be later challenged in this study in the light of more recent discoveries, but the evidence nevertheless points towards a complexification of social links and the formation of a bigger social unit occurring for the first time in this part of the Loire Valley. Despite the collection of more data, thanks to the rise of commercial archaeology, the Chantier St Paul remains the most striking example of this process. The discovery of more Iron Age features in the vicinity which all roughly follow the same alignment and organisation around the presence of a road (Monnoyeur-Roussel 2002) should be taken into account when discussing the extent to which this form of occupation spread, and a relatively homogenous structure may be envisaged. The difficult nature of urban archaeology when discussing the internal organization and the density of occupation of Roanne should not therefore eradicate any attempt to approach the issue.

A centre of a specialised production and trade

One of the major particularities of the rise of proto-urban forms is the experience of a centralisation of production and trade. Concerning open settlements, the vast majority of the scientific community now accepts this important characteristic as part of the process of their emergence. As has already been discussed previously, part of the model of development, which culminates with the rise of *oppida*, has even characterized their emergence by an association of craftsmen. It may therefore not be necessary to dedicate a major part of this study to providing evidence of a specialized industry in the Late La Tène settlement of *Rodumna*. A brief summary of the state of research on this topic should nevertheless feature.

Before 1997, very little evidence existed concerning the exact location, and nature, of the various forms of production. Very important clues, however, enabled the formation of firm hypothesises. One of the major activities appeared to have been cloth production as four spindles and sixty-two weights, which would have been attached to weaving looms, were discovered in rubbish pits near the various households of the rue Gilbertès (Lavendhomme & Guichard 1997:162 and Fig. 23). When analysing this assemblage, the authors concluded that the activity was mainly concentrated around weaving rather than spinning, a conclusion which would correlate well with the very sparse presence of sheep in the bone assemblage (ibid: 206). This activity may have primarily been operating within a domestic context, due to the proximity of the scatter of finds with the households, but may well have also corresponded with a craft specialisation as this assemblage can be considered as unusually large compared to different studies relating to the same period. The fact that this type of production appears to cease in the Roman period may strengthen that hypothesis as the specialization of trade reached new heights when Gaul was incorporated in the Roman Empire – Roanne mainly dedicated its industrial effort to production of pottery after the conquest.

Evidence concerning metal work is sparse in terms of features indicating working surfaces but the discovery of various iron slag, a currency bar, an unfinished bronze stem and numerous fragments of moulds (wax and *alveoli*) all pointed towards the presence of metal production in the vicinity (ibid: 163). Various remains may also point towards the production of antler tools on site.

In 1991, a study of the chemical composition of the paste of the painted pottery (Fig. 24) discovered in Roanne linked the clay used in the production with the local geology and therefore confirmed the presence of a pottery industry in Roanne (Guichard et al. 1991). This industry which continued to flourish in the Roman period as show the significant and numerous discoveries of Gallo-Roman kilns (Dumoulin 1997: 79-97). But it wasn't until 2001 and the discovery of the first kiln dating to La Tène D2, during a rescue project linked with the transformation of the historic city-centre, that pottery production was finally attested for the Iron Age (Thévenin 2001). The vast proportions of the painted vessels produced in Roanne found during rescue excavations locally, regionally or even nationally (e.g. Orléans – Soyer 1991) points towards a relatively intense production in the Late Iron Age, perhaps even on an industrial scale. Envisaging this factor would help to explain the prominent position of Roanne in this particular industry after the Roman conquest, especially when considering the Iron Age influence in the Gallo-Roman decoration (Grand 1995), a subject recently studied in detail (Dumoulin 2008: 310-326). Roanne should therefore be seen as a centre of a relatively diverse production.

Regarding the place of *Rodumna* in trade networks from the emergence of the settlement onwards, the study of the ceramics assemblage alone confirms its importance. In the first phases of occupation, the spread of Mediterranean imports is relatively sparse but nevertheless present and diverse including flagons and coins from *Massalia*, *Terra Nigra*, isolated fragments of Greco-Italic amphorae, *mortaria* or flagons produced in *Ampurias* (Lavendhomme & Guichard 1997: 204). At the end of the second century BC, the volume of imports started to grow exponentially with numerous amounts of Dressel 1 amphorae both found in situ or in the form of building material to stabilise the foundations of buildings. Resting on top of the alluvial terrace, an almost complete specimen was, for example, discovered on its own in 2001 (Thévenin 2001). Dressel 1 Amphorae usually constitute half of the ceramics assemblage from this period onwards. The ceramics evidence therefore points towards the establishment of very strong commercial links with the Mediterranean world. Mathieu Poux, in his comparative study of the use of wine in Late La Tène Gaul based on the number of individuals of such vessels, even included Roanne in his discussion of central places because of the sheer numbers of wine imports consumed by its population (Poux 2004: 138-141). The important number of *'urnes de Besançon'* may also be regarded as significant as it also shows the importance of trade with both the south and the north as such vessels (and what they contained) originated from the Morvan – recognisable by their feldspath inclusions (Dumoulin 2008: 104).

The issue of public buildings

The presence of public works has been interpreted as the main type of evidence when discussing the sophistication of collective interaction (Buchsenschutz & Ralston 2012: 360). Fortifications and sanctuary sites have been interpreted as the prime expression of the intervention of a ruling élite which has been seen as responsible for the erection of an urban centre. The erection of fortifications, especially, has been interpreted as a foundation act that further embodies a "top-down" vision of the development of proto-urban forms. Stephan Fichtl went as far as to envisage the application of the Classical concept of the *pomerium* to understand the significance of the *murus gallicus* in the Late La Tène (Fichtl 2006). The presence of what has been characterized as sanctuary sites in *oppida* such as Corent, the Titelberg or Bibracte has contributed to reinforce a vision that *oppida* should be interpreted as the major assembly sites where both collective and ritual practices were centralised (Fichtl 2005: 120-130). The presence of such collective monuments has firmly been denied to open settlements in order to support a certain conception of a hierarchical society expressed through a hierarchy of sites:

"*Les plans de ces habitats ne révèlent aucune traces d'organisation, de planification, de monuments collectifs*" (Buchsenschutz & Ralston 2012 : 358)

A very recent discovery under the Hospital of Roanne may radically rock the foundations of such a model. In 2004, the excavations of the rue de Charlieu, adjacent to the Hospital, revealed an unexpected Iron Age and Gallo-Roman occupation dating from La Tène D1 to the 2nd century AD, which appeared to be relatively dense and intense, and thus contributed to enlarge our conception of Iron Age *Rodumna* (Bouvier 2004). These discoveries also contributed to enhance the archaeological potential of the Hospital site and led to renewed efforts the following year in the framework of the modernization of the structure of the local medical facilities. During the next season, Sylvie Bocquet and her team from INRAP made a remarkable discovery as an Augustan temple was excavated: Gallo-Roman *Rodumna* now had its official first public building (Fig. 25).

This radically changed the way in which Roanne, and open settlements in general, was to be studied in relation to cultural change – the implications of this discovery will be discussed in detail in the section dedicated to the issue of 'romanisation' – but, this discovery also considerably helped to interpret an imposing Iron Age feature located right next to the *fanum*.

The rescue excavations enabled the discovery of a large ditch (between 1,90m and 2,60m wide) following an east-west orientation for approximately 12m before turning towards the south-west at a perpendicular angle (round shape) before going on for another 4m. The nature of urban archaeology (the Hospital had to remain open and therefore the size of the excavated area could not enable a large understanding of the occupation) and major development in the Roman period and in the Middle Ages may have prevented the discovery of other linear features which would have thus completed this potentially rectangular ditched-enclosure (Bocquet 2005: 60). Typologically both ditches [589] and [607] radically differ from the rest of the excavated features discovered on the site, especially in terms of size. And due to its angular nature, a function related to drainage must be excluded. The surviving linear features may therefore have been part of a larger rectangular enclosure of approximately 400m2 (Bocquet 2005: 60). If one envisaged such a shape, the pit [376] would therefore be exactly at the centre of the structure and play a pivotal role in its use.

The close presence of a Gallo-Roman *fanum* orientated in the same alignment and the unusual nature of the deposition of the pit [376] may suggest a structure dedicated to a collective use (Fig. 26). The pit appeared to have had very steep vertical edges and a circular form with a surface of 1,42m x 1,52m (Bocquet 2005: 62). The first fill, which was made of sand originating from the erosion of its edges, supported a series of upper fills of a black colour full of organic waste and charcoal all separated by thin layers of sand indicating a sporadic or at least seasonal use of the pit. These layers

make up two thirds of the fill, therefore indicating a relatively long period of activity (*ibid*.). Various bone fragments (sheep, cow, pig, dog, cockerel and hare), ceramics and amphorae make up the assemblage whilst the third tier of the fill is radically different (irregular stratigraphy, dark brown layers and fading quantities of amphorae). Interestingly the spread of amphorae also seems to respect the same alignment of the surrounding structures (east-west).

Despite a lack of explicit marks on amphorae which could specifically associate them with ritual (decapitation of amphorae or a dominance of certain typological parts of the vessel) as has been witnessed at Corent in the same period, such an important concentration of amphorae associated with a relative isolation from domestic occupation has traditionally been associated with collective feasting and the consumption of wine on a large scale (Poux & Feugère 2002; Bocquet 2005: 69). In addition, a close study of the rest of the ceramics assemblage has shown certain unusual characteristics with a potentially high symbolic significance: (1) presence of several traces of attempted reparations on various vessels (2) evidence of small holes (for suspension?) on the superior edges of an un-wheeled large dish (3) presence of burning inside a bowl of a globular shape (4) evidence of a fragment deformed by fire (Bocquet 2005: 70). The rest of the assemblage is comprised of a Sequani coin (80-50BC), various iron nails, a thin bronze plaque (broken) and various stones which all appear to have been polished (even ribbed) on part of their surface. The deposition should not therefore be regarded as exceptional and not be associated with a domestic use

The presence of a Gallo-Roman *fanum*, which appears to provide signs of a direct continuity in terms of use of space, combined with clear structured deposition in a pit that would have featured at the centre of the rectangular-shaped enclosure should be considered as enough evidence for the potential existence of a monument dedicated to a collective, and even ritualistic, use in Roanne. The excavators have rightly typologically compared their feature with the Late La Tène sanctuary of Bennecourt (Yvelines) which was also made of a rectangular enclosure which delimited a closed space around a circular pit (Bourgeois 1999 and Fig. 27). The two enclosures slightly differ in date (Roanne: 80-50BC / Bennecourt: 125-100BC) but both were backfilled in order to allow the construction of *fana* either directly on top of the Iron Age structure or immediately next to it. However, in terms of use it may be difficult to relate the two as the sanctuary in Bennecourt seems to have been centred on a ritual associated with a martial activity (various weapons and coin hoards were discovered) whilst only evidence of feasting exists in Roanne. Despite the authors from INRAP claiming a similarity in terms of an almost absent deposition in the ditches, after a closer study of the various reports, the ditches at Bennecourt appear to have been, on the contrary, full of material (especially ceramics and organic remains). We should therefore be extremely cautious when

attempting to characterize the exact nature of the activity which occurred in this monument due to a lack of data related to occupation surfaces due to the intensity of the ulterior phases.

The discovery of such a monument radically changes our perception of the type of activity occurring in Roanne in the Late La Tène and confirms the need to be very cautious when applying relatively static models of development when trying to understand the nature of the evolution of social networks in the Late Iron Age. The Segusiavi territory may therefore have witnessed the presence of sanctuaries both within and outside settlements (e.g. Cleppé or Le Terrail). In the light of this discovery it may prove interesting to reinterpret some of the features previously analysed by scholars who did not have this kind of information in their possession.

Mathieu Poux was the first to explicitly establish a connection between a wider collective practice, detached from the domestic occupation, and the pit [SP11-Fosse 12] which he associated with the wide ditches of the Chantier St Paul (Poux 2004: 138). However, perhaps due to a lack of parallels in the same settlement at the time (his study was published a year before the discovery), his re-interpretation of this part of the rue Gilbertès has not had any major impact whether it be on local (Sylvie Bocquet never envisaged a possible parallel between these two districts in her report) or international research. The lack of official publications concerning the recent discoveries may also be partly to blame as only local academics have incorporated this new element into their narrative (e.g. Georges 2007: 207). This study is therefore the first to explicitly compare the collective and ritual activity of both districts.

Adjacent to the households, and yet clearly isolated from them, a ditch [SP15197], runs along a north-west / south-east alignment for at least 13m (fig. 28). Stratigraphically posterior to various rubbish pits, the ditch has previously been interpreted as a feature supporting a fence in order to delimit the urban development of the district (Lavendhomme & Guichard 1997: 37). A small and irregular building (S7), which has previously been characterized as a granary, seems to be directly attached to the ditch in the south-east of the structure (Lavendhomme & Guichard 1997: 35). The various contemporary pits (120-80BC) were dug outside this area further west, thus creating an empty space at the back of the various households. Again, because of the nature of urban archaeology the remains of the ditch may not be complete and is difficult to characterize. However, a rectangular angle is still clearly visible despite later phases of occupation and may provide evidence for yet another rectangular ditched enclosure in Roanne. The presence of a well/pit [SP11 – fosse 12] right in the middle of the enclosure may further reinforce that impression, especially in the light of the material deposited. The fill of the pit seem to share the same character as the one discovered under the hospital with a series of thin layers of sand, coming from its eroded edges, in between

layers of organic waste and charcoal indicate a long period of use. However, the typology of the pit is radically different. This time, the feature is of a rectangular (square) shape (1,1m x 1,1m) and went as deep as 9m, and may therefore have been used as a well at some point as it reached groundwater. The element of water, whatever the use of this excavated feature, would have been of a primary importance, even in terms of deposition, when knowing the prominence of stagnant water in the deposition of various votive offerings.

The most interesting aspect of this potential sanctuary is its associated assemblage whether it be in terms of ceramics, bones or metal. First of all, more than 2500 shards of amphorae (67% of the ceramics assemblage), a minimum of 60 individuals (each between 12 and 15 hl), filled this pit (Dumoulin 2008: 104). For one pit, this represents more than a substantial amount, especially when considering the numerous remains of cups also found in this fill making it plausible to assume that the wine was consumed on site. The ceramics assemblage represents an unusually large and diverse range of Mediterranean imports, thus both reflecting the status of the settlement and the importance of this 'open space' for this particular district of *Rodumna*. An observation, alone, of the ceramics assemblage could be used to reinforce the potential for the collective use of this space in regards to feasting. This perception is somewhat confirmed when studying the bones assemblage. At least 10 skulls (mainly cattle and dog) were deposited whilst evidence of burning and cut marks feature on most bones of the assemblage, both indicating perhaps slaughtering in the vicinity, rather than at a butcher's shop, and most importantly the consumption of food on site (Lavendhomme & Guichard 1997: 190 and Fig. 29). The hypothesis of a consumption of large quantities of food on the site may be reinforced by the presence of two hearths located inside the precinct of the enclosure and which may represent the remains of repeated bond fires. In terms of symbolic significance, the large proportion of deposited skulls in this particular well forms a striking contrast with the rest of the pits.

The sacred, or at least symbolic, character of this deposition is reinforced by the presence of human remains. Fragments from a thoracic cage and a coccyx were accompanied by a tibia and a femur (both adult specimens). More importantly the femur presented evidence of a cut mark, making this site a potential witness to human excarnation (Fig. 30). Considering the state of the human remains, potential comparisons may be made with the evidence excavated at Gournay-sur-Aronde (Brunaux *et al.* 1985: 157), especially when considering the amount of other human remains in various other pits around this potential rectangular enclosure. A parallel with Gournay may potentially be wise due to the remains of various weapons (all damaged before being deposited) in pits from the vicinity (Fig. 31), the presence of Gallic coins and the deposition of a currency bar. One of the deepest regrets archaeologists may feel when re-analysing this study is the non-excavation of a large and heavy flat

stone at the bottom of the well for safety reasons (Lavendhomme & Guichard 1997: 63). The well may therefore have been deeper than 9m and the most important part of the structured deposition may have laid under that stone.

A comparison with the previously discussed sanctuary of Bennecourt may be extremely relevant due to similarities of chronology, typology and perhaps even activity. However, the open settlement of Saumeray may also be an excellent parallel to Roanne overall when discussing the importance of open settlements in the rise of proto-urban in relation to ritual activity. Like Roanne, Saumeray, flourished in the middle of the 2nd century BC, experienced an intense level of occupation, a centralisation of production and a continued occupation all the way until the Roman conquest, and, most importantly, like Roanne, had two sanctuaries experiencing a similar activity (amphorae, organic remains, deposition of damaged martial equipment), the main difference being the typological nature of one of the sanctuaries (Hamon *et al.* 2002). This study therefore participates in the creation of a wider and more complex picture of evolution regarding the essence of ritual and collective activity in this period and should contribute to further enhance the place of the Segusiavi territory in academic discussions related to this subject (Fig. 32).

An urban design?

The presence of an urban design has been traditionally characterized as an intervention of a ruling élite in the urban development of a settlement reflecting a higher level of social interaction and has usually been highlighted by putting forward the presence of fortifications, an internal organization around a street system and a degree of a specialisation of space. Such a characteristic for open settlements continues to be excluded by some, despite the remarkable discoveries of Acy-Romance (Kaenel 2006), by using examples such as Levroux (Buchsenschutz & Ralston 2012). However, when discussing the internal organisation of open settlements, one major issue with using Levroux as the main case study is the restrictive nature of its excavations which never involved large areas. An elaborate reconstruction of the spatial organization of the settlement was therefore impossible to undertake whereas such a study was possible for Acy-Romance.

At this point of the study it seems unnecessary to go into great depths regarding the importance of the road in the internal organization of *Rodumna*, especially in the light of the previous discussions. However, the chronological development of the two sanctuaries may prove essential.

As has already been mentioned, the rectangular ditched enclosure located in the district near the Chantier St Paul may be dated to the second part of first phase of occupation of the settlement (120-90/80BC). The end of the activity was not characterized by a slow and gradual abandonment but by a rapid, and somewhat brutal, destruction (Lavendhomme & Guichard 1997: 40-41). The second phase of this part of Roanne was characterized by the presence of a major levelling layer (20 cm) which covered all the various structures (the sanctuary and the households located in the vicinity). Previously, this has been interpreted by some as a clear sign of decline occurring at the time of the emergence of Joeuvre which thus caused the decline (Collis 2012). However, the presence of La Tène D2 occupation on top of this layer (Lavendhomme & Guichard 1997: 41-48) and, most importantly, evidence for another sanctuary only 500/700m in direction of the north-east should radically alter that interpretation. When analysing the emergence of the ditched enclosure near the Hospital it is essential to see the impact it has on the organization of space in that district. The La Tène D1 occupation appears to be less organised that its counterpart in St Paul, perhaps indicating a phase of development and expansion (Bocquet 2005: 64), however the emergence of the enclosure radically changes this perspective as the occupation becomes more structured and an alignment similar to that of the sanctuary can be recognised. This alignment also continues in the later Gallo-Roman period, indicating its importance in creating a precedent in the urban landscape. This important change occurred around 90/80BC, corresponding exactly with the date of the destruction of the previous enclosure, a cohabitation of these two collective monuments should thus be excluded. However, in terms of appreciating early urban planning this association of both occupations in two radically different parts of the site is essential. Far from experiencing a decline, *Rodumna* experienced a major period of change in which the internal organisation of the settlement radically evolved (the alignment of houses in St Paul completely changed – Fig. 33). The fact that this change occurred at the time of the emergence of Joeuvre may not be a coincidence but rather reflect the degree of *crisis* within this regional context. Rather than seeing *oppida* as the cause for a crisis, their emergence should perhaps be interpreted as a consequence of a major political change in the region such as a possible change of political faction or a political division as Roanne did not decline with the rise of a new settlement.

Regarding the issue of a specialisation of space, the nature of urban archaeology makes it almost impossible to conduct a rigorous study of the phenomenon, but it appears that the discovery of craft production is almost systematically at the periphery of the occupation (Monnoyeur-Roussel 2003; Bocquet 2009). Eric Thévenin in one of his reports for INRAP went as far as to speculate on the existence of a district dedicated to craft production and commerce (Place-Maréchal-de-Lattres-de-Tassigny) and another with domestic occupation (St Paul/ St Joseph) explained perhaps by the

danger of fire for domestic occupation (Thévenin 2005: 18). Considering that the few elements of industrial activity discovered have always been found in relation to a post conquest activity which can be characterized as relatively similar, this would be perfectly logical as the Gallo-Roman occupation followed a similar trend. The Iron Age organisation of the settlement would therefore have created a precedent in the urban landscape similar to the choice of location of the necropolis in rue St Antoine. The now acknowledged presence of sanctuaries may also participate in the creation of a complex picture of a specialisation of space. These conclusions remain hypothetical but can be seen as plausible.

The issue of size

The size of the settlement remains an important factor when assessing its urban nature of a settlement, especially when compared with the size of *oppida* (e.g. Bibracte 130ha and Joeuvre 70ha). The settlement of Roanne has traditionally been defined as relatively small (Fichtl even went as far as proposing 3ha – 2005: 175) but evidence for a larger settlement grows every year. The cluster of occupation was initially thought to have gravitated solely around the rue Gilbertès, thus creating a vision of a relatively small village or *vicus*, especially when compared to the southern settlements of Goincet and Feurs. However, in addition to an extension in the north-east (rue de Charlieu – Hospital), today elements point towards an occupation stretching all the way to the medieval centre:

- Five pits and numerous post holes discovered at the foot of the medieval keep (12th century) (Le Barrier & Lavendhomme 1999)
- One pit ad one post hole discovered rue des Fossés (Ayala & Horry 2001) Discovery of a kiln dedicated to pottery production in the vicinity of the sacristy of the church St Etienne (Thévenin 2001
- 2nd century BC amphorae (whole) found in the alluvial sands of the rue Alexandre Roche (Thévenin 2001)
- Late La Tène pit discovered in the Avenue de Lyon (Monnoyeur & Thévenin 2003)
- Evidence for an intense occupation over a long period in the vicinity of the historic centre – most probably associated with activities related with craftsmanship and commerce (Le Nézet-Célestin 2005).

The original hypothesis of a large scale occupation in Roanne initiated by Marie-Odile Lavendhomme in 1999 has therefore gradually been confirmed, and today a size around 10 to 15ha is usually given (Fig. 34). This remains radically smaller than the size of various *oppida* and may continue to have

negative consequences when considering the importance of such agglomerations in their respective cultural landscapes, but one has to remember that most *oppida* contain large empty spaces (e.g. Titelberg, Manching, Mont Beuvray or Eindengraben bei Grabenstetten).

The occupation of such sites was largely dispersed before the arrival of the Romans and their relative size only reflected the size of the fortified precinct rather the real extent of occupation (Fichtl 2005: 72-75). In this light the open settlements which did not suffer from the rise of *oppida* in their vicinity such as Roanne, Saumeray or Acy-Romance (25ha) should therefore feature as much as *oppida* in the various debates concerning the development of proto-urban forms.

Conclusion

Systematically using the model proposed by Olivier Buchsenschutz and Ian Ralston has proved extremely useful as it has been demonstrated that every single characteristic associated with *oppida* and refused to open settlements in fact existed for the agglomeration of Roanne - the only feature lacking remained fortifications (Fig. 5). This rigorous approach shows the limits of establishing strict models and the inadequacy of the characteristics chosen to discuss proto-urban forms. Despite the fact that archaeological research has stepped away from a classical understanding of the city, the notions chosen to illustrate the urban nature of Late Iron Age settlements still primarily come from the Mediterranean world. The presence of public buildings is continuously used to prove the urban character of such centres and yet this characteristic can directly be related to Pausanias' understanding of the city (Pausanias *Description of Greece* X) whilst the importance of characterizing the presence of an urban design can be traced back to Varro's conception (Varro *Of the Latin Language* V.8). The aim of this chapter was not to defend the urban character of Roanne, but to show the major issues attached to our understanding of this phenomenon, perhaps, due to a persistent dichotomous understanding of the world.

Chapter 4

The Plaine du Roannais: a stable hinterland?

In order to confirm the potentially significant nature of Roanne as an urban centre a landscape study was needed to assess the settlement's regional importance. Located just north of the high plateaus of the Seuil de Neulise, this tertiary basin crossed by the river Loire is bordered by the Massif Central in the west and the semi-mountainous range of the Mont du Lyonnais in the east. The presence of the Brionnais hills in the north gives the impression of an enclosed floodplain. Because of its dramatic natural features, it is tempting to associate a particularly strong symbolic connotation to this particular landscape as the contrast between this significantly flat plain and its surrounding relief is omnipresent and visually dominating (Fig. 35). This perhaps explains why scholars have always argued that the Late Iron Age population who lived in this landscape would probably have shared a common identity often drawing on parallel with the *Pagus Rodanensis* of the 10th century AD (Longnon 1885: Fig.2; Fournial 1964: 13-14; Lavendhomme & Guichard 1997: 18-19).

Before examining the archaeological evidence from the region, it is important to explore current perceptions of its social organisation. The classical authors have frequently emphasised the importance of natural boundaries when attempting to describe the territories of the various social groups they encountered. It thus explains why the territorial boundaries of the Sequani have been defined by the presence of the river Saône in the west (Caesar, *Gallic Wars* 1.12.1 and Strabo, *Geography* 4.1.11), the mountainous range of the Jura and the Rhine in the east (Caesar, *Gallic Wars* 1.2.3 and 1.1.5; Strabo, *Geography* 4.3.4) and of the river Rhône in the south (Caesar, *Gallic Wars* 1.33.4). Despite recognising the need to not associate the concept of culture and to only consider these unified groups as political factions (Fichtl 2013: 297-8), viewing the concept of boundary in such a way considerably limits our understanding of the evolution of social groups in the Late Iron Age. If only considering natural features when defining territorial entities, it would appear that this socio-political group may have been relatively stable, if not static, in the Late Iron Age. Yet, the very classical text that has been used to justify the use of medieval dioceses and *pagi* to characterise an Iron Age phenomenon, ironically, could potentially hint towards a very different reality. The Saône (*Arar* in Latin) provides a very good example in this respect as it clearly was the object of bitter disputes between the Sequani and the Aedui with each entity exerting control over this important

trade route at different, and sometimes very short, periods of time (Strabo, Geography 4.3.2). A more fluid conception of political or social boundaries must therefore be taken into account even when approaching this landscape study of the Plaine du Forez despite its remarkable natural features.

Endorsing the concept of a fluid border has significant implications when analysing settlement patterns. A profound political and social change is rarely accompanied by stability, even when the territories in question are centrally organised by a very sophisticated, and potentially hierarchical, system. To assume only one standardized form of occupation would thus be hazardous, consequently it is crucial to undertake a systematic study of all traces of occupation in this micro-region when attempting to characterize one, or multiple, settlement patterns.

The previous chapter aimed to characterize and understand the trajectory of the settlement of *Rodumna*. The conclusions clearly showed the need to rethink our definition of 'town' and our conception of Late Iron Age urbanism. The recent landscape studies around the *oppidum* of Bibracte (Fig. 36) appear to point towards a very rapid increase in the number of rural settlements in the vicinity of the proto-urban centre. If the Late La Tène open settlement of Roanne was more than a mere village of farmers and specialised craftsmen it would be right to assume the potential existence of a hinterland that would reflect the need for an agricultural supply. The first aim of this study is therefore to assess the importance of Roanne in the overall trajectory of settlement dynamics in its surrounding landscape. If a process of nucleation could be observed, the implications would be very significant. The impact of the rise of settlement without fortifications could thus potentially be compared to the other well-known dynamics of some enclosed *oppida*.

The second objective of this study is to assess the impact of the emergence of the *oppidum* of Joeuvres on the regional settlement dynamic. If an abandonment of rural settlements of the Plaine du Roannais can be observed, it would be tempting to interpret this sudden transition as a transfer of the rural population from the lowland to the high plateaus of the Seuil de Neulise. This could then potentially provide further evidence in favour of the original model of development of proto-urbanism as Joeuvres could be arguably the new central focus of resources both in terms of production and trade. This pattern has already been witnessed in other regions (e.g. the Arverni with the gradual abandonment of Aulnat and its hinterland in favour of Corent's landscape or the sudden rise of the occupation in the immediate vicinity of Bibracte in a previously uninhabited landscape). However, if no hiatus were to be detected this would have profound implications in the way we should interpret the trajectory of *Rodumna* itself. Despite the fact that Roanne did not appear to suffer from the emergence of Joeuvres, the overall trajectory of the open settlement itself was far

from linear with a very significant change in the town's layout in the La Tène D1/D2 transition. A relatively stable rural hinterland in comparison could be an interesting element when discussing the nature of the open settlement as it would perhaps show that gradually a clear distinction was being made between the rural and the proto-urban populations. If the deep social, political and cultural changes, that radically affected the urban population, perhaps no longer really affected those living in the countryside, it would have major repercussions as it would contribute to further establish the growing existence of a real dichotomy between a rural and urban landscape, a factor which has always been used to define the rise of urbanism.

The archaeological evidence

Compared to the high plateaus and slopes of the Seuil de Neulise which, until relatively recently, were primarily used for the production of wine, the Plaine du Roannais has mainly been used as pasture for the last three hundred years. This can partly be explained by its relatively poor sandy soils, which prevent the modern and very intense production of cereals, and perhaps most importantly by the significant success of the Charolais cattle which originated from the nearby hills of the Brionnais. Recently, this landscape has, therefore, formed a considerable contrast with the southern part of the territory usually associated with the *Segusiavi*. In the 19th century, the farmers from de Seuil de Neulise and the Plaine du Forez were frequently discovering Iron Age and Roman artefacts when managing their vineyards – the vine's roots can be extremely deep – or their crops. This subsequently led to the discoveries of various sites thanks to the interest of local scholars such as Joseph Déchelette or Vincent Durand. By contrast, the archaeological potential of the Plaine du Roannais had to wait for modern archaeology to be fully recognised. It is extremely important to have this in mind when attempting to study this region as the development of research has not followed the same trajectories. It should also be noted, that this type of land use still has a significant effect on the discovery of archaeological material today as the lack of ploughing makes field-walking impossible.

Consequently, more than 75% of the archaeological sites discussed in this chapter have been excavated by developer funded archaeologists (See Table). This has significant implications regarding our understanding of the Iron Age and Early Gallo-Roman occupation in this micro-region – especially in terms of characterizing their nature and their dating range. Compared to the other regions covered by this study, most of the archaeological evidence has been found in secure contexts and has been recorded via the use of modern methods. In addition, despite the loss of most of the

artefacts excavated in the early 19th century, these few discoveries have proved to be reasonably well documented and recorded thus enabling modern archaeologists to undertake major reinvestigations. In that respect, the records of the Gallo-Roman villa at Les Varennes in Saint-Nizier-Sous-Charlieu left by the engineer who worked on the construction of a new railway line (Petit 1885; Chopelin 1967) have been instrumental for the later discoveries of mosaics, a very rich material culture and most importantly the presence of Dressel 1 amphorae potentially linked to earlier features found under the Gallo-Roman phases (Chopelin & Guey 1973).

When studying the spread of archaeological sites (Fig. 37), regardless of their dating range, it becomes particularly apparent that they form a cluster around the modern city of Roanne. The rise of commercial archaeology is always linked to the spread of the economic activity. Roanne and its suburbs (Mably, Riorges or Perreux) have been subject to major urban redevelopments recently ranging from road works to the renovation of historic districts or the establishment of new industrial zones. Despite several road or housing projects, the surrounding countryside did not witness a comparable rise of activity which would have required extensive rescue missions. The spread of the archaeological material in this region should not therefore be seen as a real representation of the Late Iron Age landscape. One other major issue in that respect is the various techniques used by INRAP or ARCHEODUNUM in this region. Geophysical surveying is never considered and this prevents a real spatial understanding. This is particularly problematic due to the nature of the land use, if geophysical surveying was undertaken in the surrounding countryside it would truly enable a more accurate depiction of the nature of settlement patterns in this region.

However, the economic development of Roanne and the increase of activity in its immediate vicinity are extremely significant when attempting to answer the original research questions of this study. The way in which the immediate hinterland was articulated is a fundamental issue. The significant amount of sites discovered in that perimeter will make it possible to draw objective conclusions as all these sites would have been part of Roanne's rural backdrop in the Late Iron Age and Early Gallo-Roman period. Being able to analyse the trajectory of such sites will allow the assessment of both, the way in which this potential hinterland was organised in the 2nd century BC, and, perhaps most importantly, the impact the emergence of Joeuvres had on the surrounding country side of *Rodumna*. Due to the significant amount of Hallstatt and Early La Tène discoveries this study also aims to assess their importance, spread and significance in the hope that these results could potentially further enlighten the appearance of new patterns in the Late La Tène.

Table 1: List of sites gravitating around the open settlement of Roanne

Site n°	Site Name	Commune (village)	Nature of the activity	Dating range and chronological markers	Nature of the investigation
1	Les Verchères	Saint-Alban-Les-Eaux	Iron Age *aedificium* and early Gallo-Roman villa	Late La Tène 120-50 BC (Dressel 1a, indigenous ceramics, copies of Lamb. 5/7 etc) and early Gallo-Roman (Gallic Samian, glass vessel, *terra nigra*, Bol de Roanne etc)	Commercial Archaeology
2	Saint-Alban (springs)	Saint-Alban-Les-Eaux	Monumentalised springs of sparkling water (wells etc)	Continuous activity from 30BC (Augustan coinage) to Late Antiquity (Valentinian 1) [all finds have since been lost but moulds survived]	19th century discovery (1859, 1866 and 1896) when the spa was being renovated
3	Déviation RN7	Saint-Germain-Lespinasse	Large agricultural buildings	La Tène Finale (Dressel 1) and early Gallo-Roman (Samian and *Terra Nigra*)	Commercial Archaeology
4	Fultière	Saint-Romain-La Motte	Pits and ditches (domestic activity)	Hallstatt D (Ceramics based evidence)	Commercial Archaeology
5	Les Etangs	Riorges	Domestic activity?	Hallstatt D (very significant amount of indigenous ceramics) and Late La Tène (Dressel 1 found at the bottom of a ditch)	Commercial Archaeology
6	La Villette	Riorges	Large agricultural buildings and enclosure	Hallstatt D (residual ceramics), continuous occupation from the 1st century BC to the 3rd century AD	Commercial Archaeology
7	La Demie Lieue	Mably	Ditches (related to field systems?) post holes and pits (rural activity)	La Tène Finale (Dressel 1) and Early Gallo-Roman (*tegulae*, Samian etc)	Commercial Archaeology
8	ZAC du Pontet	Riorges	Agricultural building – part of a wider complex?	70BC – 70AD (Dressel 1, *Terra Nigra*, Samian, Bol de Roanne etc)	Commercial Archaeology
9	Roanne (necropolis)	Roanne	Cremation and inhumations remains (cemetery)	Continuous occupation from the 2nd century BC to the 2nd century AD (Dressel 1, *imbrices*, *tegulae*, Bol de Roanne, grave goods etc)	19th century excavations and Commercial Archaeology
10	Zac de Bonvert	Mably	Various rural buildings within a large rectangular enclosure (*aedeficium*?) not far from a large cemetery	Hallstatt D, Late La Tène enclosure 80/70BC (Dressel 1a, Graeco-Italic amphorae, Campanian ware, Early painted Roanne ware) and the Julio-Claudian cemetery (Bol de Roanne, Early Gallic Samian, *Terra Nigra* etc)	Commercial Archaeology

11	Aiguilly and RN7 deviation	Vougy	Rural occupation [Parallel ditches, complete profile of a rectangular building (RN7)]	Dressel 1, Early painted wares from Roanne, Campanian ware (RN7) and residual Hallstatt and Late La Tène shards (Indigenous and Dressel 1) discovered amongst Late Gallo-Roman remains (Aiguilly)	Commercial Archaeology
12	Chambons	Vougy	Unidentified	La Tène? (Un-wheeled pottery and bronze bracelet – the assemblage has since been lost)	19th century discovery
13	Les Varennes	Saint-Nizier-Sous-Charlieu	Early Gallo-Roman villa (two basins and one mosaic discovered)	Late La Tène (Dressel 1) Early Gallo-Roman (Bol peint de Roanne, Samian, coinage, Bronze vessel, ring etc)	First discovery in 1884 (with further planned investigations in 1959 and 1968)
14	Eglise Saint Fortuné	Charlieu	Sporadic finds found during the renovation of the church	Early Gallo-Roman (*tegulae*, Italic and Gallic Samian, Tiberian coinage minted in Lugdunum in 10AD – the assemblage has since been lost)	Renovation repairs in 1926
15	Les Heures	Perreux	Hillfort of the 'éperon barré' type	Undated site (never excavated) but *tegulae* and a significant amount of ceramics (undated) were found in the vicinity in the early 20th century (now all lost)	First surveyed in 1912 by S. Bouttet
16	Le Pont de Rhins	Perreux	Rural/ smithing activity (Hallstatt), Unidentified activity (Late La Tène), Domestic activity – villa? (Early Gallo-Roman)	Hallstatt D (Lithics, Indigenous ceramics [1000 shards], various metallic objects, scories, hearths etc), Late La Tène (Dressel 1 and ceramics of the early Roanne and Feurs type - residual), Early Gallo-Roman (*Terra Nigra*, Early Gallic Samian from Lezoux, Bol peint de Roanne etc)	Commercial Archaeology
17	Chez Ruelle	Saint-Vincent-de-Boisset	Domestic occupation?	Hallstatt D (indigenous ceramics found in the alluvium – no clear features could be linked to this assemblage)	Commercial Archaeology
18	Lespinasse	Notre-Dame-de-Boisset	Rural activity?	Early Gallo-Roman (1st century AD) – *tegulae*, Samian and Bol peint de Roanne	Commercial Archaeology
19	Château Noir	Notre-Dame-de-Boisset	Rural occupation (farm building, storage pits etc)	Hallstatt C (indigenous ceramics)	Commercial Archaeology
20	Pont Mordon	Parigny	Circular building (badly preserved)	Hallstatt C (indigenous ceramics)	Commercial Archaeology

The Plaine du Roannais: a main centre of activity in the Late Hallstatt?

The potential for an Early La Tène occupation (4th and 3rd century BC) in Roanne has already been mentioned (Chapter 3). Under the La Tène C levels, various pits and postholes potentially forming coherent buildings, as well as a hearth, were excavated in the Chantier Saint Paul and the Chantier Saint Joseph. These features contained ceramics in very abraded conditions that could all be dated to La Tène B. More ceramics were found sporadically in the deepest contexts of the Chantier Gilbertès and most famously various fragments of a scabbard and two copper bracelets dating to La Tène B were excavated in contexts attached to later periods (Lavendhomme & Guichard 1997:26-7). Rather than identifying these levels as the first evidence for a grouped occupation in the heart of the Late La Tène open settlement, the lack of a clear stratigraphic connection between this occupation and the La Tène C structures has led Vincent Guichard and Mari-Odile Lavendhomme to characterize this activity as rural.

The presence of an undated hill fort at Les Heures in Perreux (site n°15) is well established since the beginning of the 20th century, but the lack of any detailed archaeological investigations since has always prevented local scholars from drawing any serious conclusions on this particular site, apart from categorizing it as an 'éperon barré' (Bouttet 1912; Lavendhomme 1997: 151).These discoveries made in the 1970's were therefore the first real sign of a potentially rich and diverse occupation in the Early Iron Age. Since, the rise of commercial archaeology has been able to reveal a wide spread occupation in this period in the immediate vicinity of Roanne (Fig. 38). Far from being isolated, these traces of occupation were potentially part of a wider rural settlement dynamic before the emergence of grouped settlements.

In 1982, Michel Vaginay undertook rescue excavations in Perreux at Le Pont de Rhins (site n°16) in order to assess the archaeological potential of this zone before the construction of a new road. Under the Late Iron Age and Early Gallo-Roman levels, evidence for a potentially very significant Hallstatt D occupation was discovered. Amongst the discoveries of various postholes (potentially reflected the presence of more than two buildings) and storage pits, the remains of two hearths (diam. 2.5m, depth 15cm) placed within a layer of large pebbles (20m2), probably picked from the nearby river Loire, reflect the presence of a very large and sophisticated household. The material culture excavated was rich and varied (hundreds of flints, more than a thousand sherds of pottery), and the added discovery in another building of hearths associated with the remains of burned

moulds (clayonnage), iron working slag (culots de forge) and numerous fragments of metal confirmed the potentially important status of this site where both an agricultural and a metal working activity seems to have been undertaken (Vaginay 1983; Lavendhomme 1997: 152).

During rescue excavations in advance of yet another road project in the alluvial terraces of the Rhins, Vincent Guichard in 1989 and 1990 clearly showed that this occupation, far from being isolated, could be integrated within a larger settled landscape which generally followed the course of the river Rhins. At Le Pont Mordon (Parigny – site n°20) in addition to various pits, the negative profile of a very abraded circular building (round house?) were discovered and dated to the Hallstatt C (6th century BC). Located on a top of the alluvial terrace and relatively close to the river, the people living in this structure, which perhaps was far from being isolated, were able to benefit from a far richer soil due to the alluvium deposits (Lavendhomme & Guichard 1997: 20; Lavendhomme 1997: 151). A similar pattern could be observed slightly northward at Le Château Noir (Notre-Dame-de-Boisset – site n°19). Again the occupation could be dated to the Hallstatt C and was located on top of the alluvial terrace, but this time the level of preservation was far superior: a plan of potentially two separate buildings and, more importantly, the presence of convincing storage pits could be established (Lavendhomme & Guichard 1997: 20; Lavendhomme 1997: 149). Following the Rhins, another site was discovered at Chez Ruelle (Saint-Vincent-de-Boisset – site n°17). This time only traces of a potential occupation were excavated. Found in the colluvium at the bottom of the terrace, this significant amount of ceramics was most probably related to a rural occupation located on top of the alluvial terrace (Lavendhomme & Guichard 1997:20; Lavendhomme 1997: 228). This hypothesis, however, could not be verified as the road did not damage this part of the valley.

In the space of 10 years, this small valley at the very fringe of the Plaine du Roannais has proved to be a potentially very important hub of Hallstatt activity for these sites were most probably integrated within a wider network and should not be seen as an exhaustive representation of the activity in this period. When put into perspective these discoveries are remarkable. In 1989 and 1990, during the same project, various other archaeological sites from all periods were discovered by Vincent Guichard, but none were Late Iron Age and only one could potentially be assigned to the mid-1st century AD. This pattern therefore seems to corroborate the general hypothesis of a radical shift in the settlement dynamic of the Late Hallstatt/ Early La Tène transition. It potentially was not until the Gallo-Roman period – a time when Gaul experienced a major population increase (Haselgrove & Guichard 2013) – that this river valley witnessed a relatively intense human activity again.

In the vicinity of Roanne itself, various traces of Hallstatt occupation have also been identified but due to the nature of urban archaeology they were rarely associated with tangible features and were

usually found as residual material in later layers. The site of Les Etangs (Riorges – site n°5), for example, perfectly reflects the nature of these remains. In 1996, at the bottom of the Combray paleo-channel, more than 400 shards dating to the Hallstatt D were discovered amongst Late Gallo-Roman material which most probably originated from a nearby rural farmstead found in 1989 (Grand & Corompt 1996). In 2011, new developments at the ZAC de la Villette (Riorges – site n°6) have enabled Fanny Granier to confirm the presence of a potentially significant Hallstatt D occupation in the vicinity with yet more residual ceramics amongst Late La Tène layers of occupation (Granier 2011). Again at Aiguilly (Vougy – site n°11) more Halstatt D ceramics were discovered but without any associated features (Georges 2007). And the site of Fultière in Saint-Romain-la-Motte (site n°4), despite being potentially isolated from the river Loire and the main centre of occupation, provided yet again further evidence of an intense Late Hallstatt occupation in the Plaine du Roannais via the discoveries of pits and ditches and a rich ceramic assemblage dating to Hallstatt D (Eval 1999).

This rapid summary of these recent discoveries has shown that the evidence for the Late Hallstatt has steadily grown as was expected due to the rise of commercial archaeology. However, we are faced with a radically different situation for the Early La Tène. The only site which potentially produced an archaic La Tène ceramic has been found at the bottom of a large rectangular ditched enclosure in Mably (Zac de Bonvert – site n°10). This rim could not be accurately dated but may found parallels at sites such as the Châtelard de Lijay (La Tène A/B). On the other hand, because this rectangular ditched enclosure was primarily occupied in the Late La Tène, the diagnostic should be taken with care and perhaps at least be considered as residual (Georges 2011). Therefore, despite multiple archaeological investigations, there has not been any new evidence for an Early La Tène occupation in the region and, consequently, the 1970's discoveries (most of them found out of context) remain the only tangible evidence for a human presence in this period.

This raises significant questions when attempting to understand the context within which the open settlement of Roanne emerged. Should this lack of data be interpreted as a real absence, or at the very least a significant decrease, of human occupation in the Plaine du Roannais in the 4th and 3rd centuries BC? The Chantier Saint Paul, Saint Joseph and Gilbertès sites have all clearly shown that there was some degree of occupation before the first phases of this well organised settlement, however sparse, but is this evidence really enough to suggest that a settlement may have organically grown in this precise location in La Tène C2 as a result? This extremely significant hiatus must raise the possibility of a planned settlement, perhaps similar to that of the *oppida*. The lack of a tangible hinterland before the emergence of Roanne must indicate a possible movement of population in what may well have been a very fluid socio-political landscape. As has already been established in the previous chapter, Roanne was at the crossroads of two very important trade routes thus linking the

southern territories of the Loire, from which wine was most probably transiting (Kurzaj 2012), with the Arverni in the west and the Rhône valley in the east. The establishment of a centre of production, most probably accompanied by a market, in this location must not have been a neutral decision and may well reflect signs of the rise of a more complex society within which a potential *élite* or popular assembly was able to concentrate large human and physical resources in one place in order to answer particular needs. The fact that the landscape was previously uninhabited may have been a strong factor for new social entities that wished to settle a new order of control for example. The traditional model of development usually associated with these types of settlements has usually been centred solely on an initiative of artisans, which excluded the rest of the population:

> "*On a l'impression que ces agglomérations se sont développées à l'initiative des artisans, sans que le reste de la société participe à ce phénomène et l'inscrive dans un projet ou une tradition collective*" (Buchsenschutz & Ralston 2012 : 359)

The issues of undertaking such an approach have already been partly discussed in the previous chapter. The discovery of multiple sanctuary sites, the presence of both farmers and artisans in Acy-Romance or the presence of very sophisticated layouts in open settlements have already challenged this view. However, without undertaking a systematic landscape analysis in the vicinity of such settlements it is impossible to assess their impact on their surrounding landscape. In order to show that the emergence of such settlements were not solely due to the initiative of artisans, but were part of a wider collective project, being able to identify a sudden rise in the number of settlements in the Late La Tène will prove essential.

Rodumna: a regional centre?

When analysing the results from the last 30 years of commercial archaeology, the evidence for a relatively structured rural occupation only appears to have potentially emerged in the early 1st century BC (Fig. 39). Despite the considerable rise of archaeological investigations in the recent years, concrete evidence for an occupation emerging as early as the 2nd century BC could only be found at Les Verchères (Saint-Alban-les-Eaux, site n°1). During a rescue excavation in 1996, one granary and two pits were discovered within what appears to have been a large rectangular ditched-enclosure from which three sides of the ditch have survived (Fig. 40). These features all revealed the presence of early painted zoomorphic painted wares (most probably manufactured at Roanne), Campanian ware and a significant amount of Dressel 1a amphorae thus enabling this site to be dated to the very

first horizons of *Rodumna* (Lavendhomme & Gauthier 1996: 10). The exceptional nature of some of the finds which are not usually found in rural contexts and the fact that the site developed into a large Early Gallo-Roman villa should perhaps indicate that these agricultural features may well have been integrated within a larger structure. It must also be added that this discovery was somewhat miraculous as most of the site had already been destroyed before the arrival of the archaeologists due to the developers starting construction, thus reinforcing the possibility that a potentially significant *aedeficium* was established less than a kilometre away from the naturally carbonated springs of Saint-Alban.

This very significant site thus merely only provides a glimpse of the extent of the occupation in the 2nd century BC. New investigations will most probably reveal more sites, but the significant absence of La Tène C2 settlements, especially within a 3km radius of Roanne, may perhaps reinforce our previous assumption that the landscape within which *Rodumna* developed was perhaps not a densely populated one. On the other hand, the settlement dynamic in La Tène D1 appears to have undergone a radical shift with the sudden emergence of multiple and well organised rural sites.

Due to the nature of urban archaeology it has sometimes been extremely difficult to precisely characterize this activity, but the emergence of La Tène D1 material alone in what would have been the surrounding landscape of Roanne is extremely significant. At La Demie Lieue (Mably – site n°7) the discovery of numerous ditches all containing Dressel 1 amphorae and Late La Tène coarse ware indicates the presence of potentially multiple rural settlements in the vicinity (Grand & Corompt 1996) whilst the presence of such a complex system of ditches has also been used as evidence for a potentially well organised field system less than a kilometre away from the open settlement (Lavendhomme 1997: 128). In 2011, Archéodunum when investigating the ZAC de la Villette (Riorges – site n°6) discovered similar ditches which, in addition to again revealing an extensive field system, were most probably used to drain an area which could easily have turned into a marshland. The material found in the ditches were dated to La Tène D2a but their construction may well have been under taken earlier for such a field system would have required constant repairs due to the very close presence of the river Oudan which was known to flood this area until the 19th century (Granier 2011). Similarly, the recent investigations in 2008 and 2010 at the ZAC du Pontet in Riorges (site n°8) have shown the presence of comparable ditches which this time could also be associated to various post holes and storage pits confirming the agricultural nature of this occupation. The ceramic evidence again clearly indicates a La Tène D2 date (Lurol 2008-9-10). In the light of these new discoveries, the ditch excavated in 1989 by François Dumoulin at Les Etangs (Riorges – site n°5) should probably be integrated within this dense and well-structured rural landscape. The discovery of

a very thick layer of Dressel 1 amphorae at the bottom of the ditch indicates a Late La Tène date (Dumoulin 1989; Lavendhomme 1997:159).

The discovery of yet another La Tène D1 rural structure (15 post-holes, 9x6m) in Vougy (site n°11) (Rémy 2002) or the erection of a major *aedeficium* in the ZAC de Bonvert (Mably – site n°10), just 3km north of Roanne, reinforce this pattern. This imposing complex may well have played a significant role for such remains have usually been associated with the homes of 'aristocrats'. Within this large rectangular-ditched enclosure (65m in length, 3m in width and 1m in depth) numerous pits and postholes were discovered, and, despite severe flooding, it was possible to unearth Campanian ware, early painted fine wares (Roanne type), Dressel 1a amphorae as well as large storage vessels with parallels found in Roanne. In addition to confirming once again a dating range close to the La Tène D1/D2 transition, this type of material culture could potentially reflect an activity not solely dedicated to farming (Georges 2011: 68-81). The discovery of a small necropolis dating to La Tène D2 in the vicinity could potentially be associated with the family who lived in this enclosure. The presence of Dressel 1 amphorae and Late Iron Age coarse ware, despite their residual nature, at Le Pont de Rhins (site n°16), or at Saint-Germain-Lespinasse (site n°3) amongst significant Early Gallo-Roman remains contribute to further provide a more complex and diverse picture of the rural landscape in the 1st century BC (Vaginay 1982; Hénon 1993).

Despite the very fragmentary nature of these remains, a very complex picture of *Rodumna*'s hinterland may therefore be starting to emerge, especially in the west via the emergence of field systems on a large scale. Interestingly, this major, and potentially well planned, rural development did not emerge in the 2nd but in the 1st century BC. One site could be safely dated to La Tène D1b but the others most probably emerged in La Tène D2a. This chronological sequence thus appears to coincide with the major layout re-organisation of *Rodumna* and the emergence of the Joeuvres *oppidum* in the south. This period of transition (La Tène D1/D2) therefore appears to have been fundamental for the wider socio-political landscape as a whole. However, far from suffering from the emergence of Joeuvres in the south, *Rodumna*'s landscape appears to have largely experienced a period of prosperity. This rapid emergence of an extensive and structured rural landscape appears to coincide with the depvelopment of *Rodumna*. It would be tempting to argue that the emergence of this new market proved heavily attractive in very much the same way that the emergence of Bibracte heavily impacted its surrounding landscape. In addition, the original hypothesis that the open settlements were abandoned in favour of the more advanced *oppida* appears, once more, to be at odds with the archaeological evidence (Fig. 41).

A Gallo-Roman landscape: a period of transition?

The Early Gallo-Roman period has been a major period of transition for many socio-political landscapes in Gaul. The trajectories of the Aedui territory with the abandonment of Bibracte in the Late Augustan/ Early Tiberian period in favour of the new settlement of Augustodunum (modern Autun) or the emergence of Clermont-Ferrand in the Arverni territory have been well documented in that respect. The lack of a clear hiatus in the occupation of Rodumna has already provided evidence that this landscape may not have followed a similar trajectory. The aim of this short study is to assess if whether or not that urban phenomenon was merely the reflection of a wider pattern which affected the Plaine du Roannais as a whole.

The fact that most of the Late La Tène material was discovered close to or amongst Gallo-Roman features has already been noted. The potential for continuity is thus very strong. Some of the Late La Tène sites discussed in the previous section could not be associated to any tangible features for the ceramics evidence was not only sporadic but residual. This makes it extremely hard to suggest any strong evidence for a continuous occupation. The Pont du Rhins (site n°16) is a very good example in that respect. The Dressel 1 amphorae or the zoomorphic painted wares were only found amongst the remains of a Gallo-Roman stone building. Despite the sporadic residual presence of potentially Augustan material, both the floor levels of the structure and the ceramic evidence found in nearby pits only yielded *Terra Nigra*, early Gallic Samian of the Lezoux type or the Bol peint de Roanne (Vaginay 1982). This building could therefore only be safely dated to the first half of the 1St century AD, thus, despite the potential for a continuous occupation, the evidence should not be regarded as conclusive. Similar conclusions were drawn in Saint-Germain-Lespinasse (site n°3) where whilst the Augustan building was easily identified, it was more difficult to characterize the Iron Age features (Hénon 1993). The luxurious villa of Les Varennes in Saint-Nizier-Sous-Charlieu (site n°13) provides a very similar profile. The Dressel 1 amphorae excavated in 1968 could not be linked to any Late La Tène features, but, especially when considering that more than half the site was destroyed in the 19th century, their presence may well provide hints of an occupation before the 1st century AD in the vicinity (Chopelin & Guey 1973). The discovery of Early Gallo-Roman occupation where Late La Tène material was previously found thus appears to be a regular occurrence. And the major villa complex at Les Verchères (site n°1), one of the only sites extensively excavated on a large scale, should perhaps reinforce this possibility as, in addition to showing clear signs of a continuous occupation after the study of the ceramics assemblage, the Late La Tène and Early Gallo-Roman features appear to have been aligned on a relatively similar orientation (Lavendhomme 1996).

The activity linked to the Late Iron Age field systems appears to also have largely been continuous. In addition to the fact that those ditches were still in use in the Gallo-Roman period, very solid evidence of a well-structured agricultural activity could be established at the sites of La Villette or the Zac du Pontet where large agricultural buildings were recorded (Thévenin 2010; Lurol 2008). In both cases the Gallo-Roman buildings were not necessarily located on top of the Iron Age remains but their proximity still led their excavators to support the idea of a continuous occupation. When comparing the distribution maps of both periods the stability of the occupation becomes particularly apparent. The only area previously occupied in the Late Iron Age that appears to have been abandoned is perhaps Vougy (sites n°11 and 12) but the presence of Late Gallo-Roman remains should remind us of the need to be cautious for more archaeological investigations may well change that perspective in the future.

The major difference in the Early Gallo-Roman landscape is the emergence of a large necropolis near the Late La Tène *aedeficium* of the Zac de Bonvert, a structure which itself appears to have been abandoned by this time. A very important ditch, probably originating in the open settlement itself, led to a pier where the bodies of the dead would have been cremated before being buried in the vicinity (Georges, *personal information*). The emergence of such a large necropolis outside Roanne in the Augustan period was unexpected and the site has yet to be fully excavated. Interestingly, this did not heavily impact the southern necropolis, which had already started being used in the Late La Tène, for its use in the Gallo-Roman periods has been well established in the recent years. It would therefore be tempting to suggest that a different part of the population used this new necropolis. The presence of the abandoned *aedeficium* and its small La Tène family cemetery in the vicinity may well have served as a catalyst.

The study of the Early Gallo-Roman remains has therefore revealed a dramatic form of continuity for, apart from at a few sites, there appears to have always been a Late Iron Age occupation under the Augustan or Tiberian remains. This impacts the way we should characterize this period of intense cultural change for such stability is remarkable. It therefore appears that, once again, the most significant change did not occur after the colonization of Gaul but during the La Tène D1/D2 transition.

Chapter 5

Joeuvre: the birth of a capital?

The *oppidum* of Joeuvre has traditionally been characterized as the most important settlement of the Segusiavi territory both economically and politically due to its size (70ha). Despite stressing the need to view this process as a more complex phenomenon, this interpretation is still put forward today by some of the most influential archaeologists working on *oppida* and settlement patterns (Fichtl 2012b:227). Joeuvre was indeed far larger than the other two *oppida*, Le-Crêt-Châtelard being only 22ha and Essalois 21ha. However, Stephan Fichtl himself stressed that it was extremely difficult to speculate on the actual size of a settlement without extensive excavations when only the size of the precinct formed by the fortifications was available as most *oppida* contained vast empty areas (e.g. Kelheim). Despite the work of Fabienne Olmer in the Aedui territory, which aimed to show the emergence of a middle class through the consumption of wine (Olmer 1997), the presence of large quantities of Italic amphorae in the Late La Tène has been traditionally associated with status both within the individual sphere and for assessing the importance of a settlement in relation to trade networks (Collis 1984; Arnold 1999; Poux & Feugère 2002; Fichtl 2005). Amongst other regions of Gaul, Mathieu Poux, in the framework of his PhD, extensively studied the distribution of amphorae in the Segusiavi territory and the results clearly showed similar amounts in all *oppida* and even potential parallels with the open settlements which may therefore already indicate that a clear settlement hierarchy may never have existed amongst settlements (Poux 2004: 139 and Fig. 42). Size therefore should not be the only determining factor when approaching this issue. The primary aim of this particular study is to investigate the impact of Joeuvre both from a local perspective, through the re-analysis of the social landscape associated with the *oppidum*, and through a more regional framework which aimed to compare the place of Joeuvre in the landscape with that of Le-Crêt-Châtelard and via an analysis of the trajectories of the open settlements.

Joeuvre: a promontory on the *Seuil de Neulise*

The *Seuil de Neulise* acts as a frontier between the *Plaine du Forez* and the *Plaine du Roannais*, this strong rocky barrage is made of primary geology (granite, iron schist) and is divided by the Loire through deep gorges (Bellon 1980: 112-123). Joeuvre is located at the northern end of this plateau, at the precise point where the river Loire reaches the *Plaine du Roannais* and is no longer as dangerous for navigation. The *oppidum* was erected on an extraordinary natural backdrop as the vast plateau both dominated the Loire from 100 to 200 metres and was surrounded on most sides by its last meander before it reached the flat plains (Fig. 43). The plateau culminates at an altitude of 411 metres and falls abruptly into the river with either wooded or rocky slopes. The landscape of the plateau may be described as desolate and dry, or even arid, with the natural bedrock revealed in places due to the poor quality of the soil, a harsh continental weather (very hot summers and rigorous winters) and an exposure to strong winds both from the north and the south ensuring the plateau has its own micro-climate (Gachon 1946: 33-54). It has also been observed that due to its altitude the plateau does not receive the rain originating from the low clouds thereby suffering from time to time prolonged periods of droughts. When analysing the land from the *Plaine du Roannais*, which may be regarded as extremely rich due to its sandy soils providing excellent drainage, the landscape around Joeuvre somewhat suffers from the comparison. Agriculture can be traced back to antiquity, and was still practised until relatively recently for the production of wine, but the production must have been relatively poor due to relatively extreme environmental conditions for the region and the notion of an agricultural surplus to explain the emergence of a settlement in this area must be abandoned.

The reasons behind the emergence of such a complex must therefore be found in its position in the landscape whether it be in terms of natural or cultural antecedents. The relatively close mountainous position of Joeuvre in relation to the lowland settlement of *Rodumna* has been identified in the past as a defensive movement in the landscape – for Joeuvre as an *oppidum* did not emerge before 70BC, a hundred years after the emergence of the open settlement (Grosbellet & Périchon 1965). In such an understanding the surrounding landscape would thus not have been heavily populated as the agricultural production would still have been located in the lowland (Périchon & Caboste 1965: 283). Robert Périchon's first extensive analysis of the social landscape of Joeuvre intended to provide evidence for such a model. This new analysis aimed to assess the evidence in the light of new discoveries and various reassessments of the ceramic assemblages.

Site n°	Site Name	Commune (Village)	Dating range
1	Le Ménard	St-Jean-Le Puy	1st century AD
2	Marcenet	St-Jean-St-Maurice	1st century AD (fibula)
3	Saint Maurice	St-Jean-St-Maurice	1st century AD (fibula)
4	Chateaubillon	St-Jean-St-Maurice	Hallstatt – 2nd century AD
5	Le Lourdon	Villerest	Bronze Age? Hallstatt ? Early Iron Age ?
6	La Goutte Claire	Villerest	Amphorae/cremation – Dressel 1 ? Lost
7	Pilon	Villerest	1st century AD
8	Saint-Sulpice/ prospections	Villerest	La Tène Finale – 1st century AD
9	Eglise Saint-Sulpice	Villerest	Gallo-Roman
10	Sous-la-Ville	Villerest	La Tène Finale + Gallo-Roman hoard
11	Grézelou	Commelle-Vernay	1st century AD
12	Ponterre	Commelle-Vernay	La Tène Finale – 1st century AD
13	La Côte de Roanne	Cordelle	La Tène Finale – 1st century AD
14	Rilly	Cordelle	La Tène Finale
15	Chevenay	Cordelle	La Tène Finale (coin hoard)
16	Les Garioux	Cordelle	1st century AD
17	La Sablonnerie	Cordelle	1st century AD
18	La Rochette	Villemontais	La Tène Finale – 1st century AD

Table 2: List of sites gravitating around the *oppidum* of Joeuvre

Joeuvre: a rich social and cultural landscape

The analysis was conducted in relation to Joeuvre itself and to the 18 other discovered sites which gravitated around this major promontory (Table 2 and Fig. 44). The significant number of sites already point towards the relative importance of this landscape both in the Iron Age and the early Gallo-Roman period. The sites appear to concentrate around the promontory and the *oppidum* already appears at this early stage of the analysis to be the main driving force behind the human

occupation of the area, especially when analysing the location of 'La Rochette' which may be regarded as the closest site in terms of distance to this cluster of occupation (Fig. 45). The landscape of Joeuvre therefore appears to have constituted an independent unit over a relatively long period which may be explained by its exceptional location in the landscape being at the crossroads between a semi-mountainous range and the plain. However, only three of these sites have been excavated (Joeuvre, the church of Saint-Sulpice and Chateaubillon) and only two to modern standards (Saint-Sulpice was excavated at the end of the 19th century). All the other sites were either found during prospections (field walking) or discovered fortuitously during the plantation of vineyards or other domestic work. The aridity of the land and the fact that most of the landscape was extensively used for the production of wine enabled extensive prospections first in the 1970's under the direction of Michel Vaginay (Vaginay 1978)) and secondly in the 1980's, the time of the construction of the dam, under Bruno Marchand (Marchand 1988; 1990; 1991). The number of discoveries must therefore be put into perspective when comparing the hinterlands of Joeuvre and Roanne, for example, as the *Plaine du Roannais* has mainly been used for pastoralism due to the quality of its pastures, making it extremely difficult to undertake field walking projects. The well-known presence of Joeuvre in the area also served as a catalyst for the various landscape studies which led this area to be extensively studied in comparison to the rest of the region explaining perhaps this potential nucleation of settlements around this particular promontory.

A thorough analysis of this landscape therefore relied primarily on the study of scattered remains which could not be linked to archaeological contexts and which were subject to movement due to a relatively intense agricultural production over the last 2000 years despite the poor quality of the soil. The chronological range attached to any particular occupation must therefore be treated with care, especially when regarding the Iron Age, the relatively high frequency with which the Gallo-Roman pottery production evolved enabling a more precise dating. The relatively poor quality of some Late Iron Age pottery and the continuity of forms of coarse wares has made the discovery of authentic Late La Tène pottery relatively rare and it must be stressed that for various sites what enabled to provide evidence of a potential Iron Age occupation was the presence of Dressel 1 amphorae (mainly Dressel 1a) which were in circulation from the end of the 2nd century until the time of the Gallic Wars (Lamboglia 1955; Benoit 1957 and Fig. 46). The location and chronology of a particular site must therefore be assessed with care when Dressel 1 amphorae constitute the only chronological marker for this type of material, remembering that this material was extensively recycled for domestic purposes. The particular status associated with the site due to the presence of Italic wine must therefore also analysed in this light. Their presence nevertheless provides evidence of Late Iron Age

occupation within the vicinity of their discovery and potentially a crucial hindsight regarding the organization of settlements for this period around this particular landscape.

A significant Hallstatt occupation

The strategic geographical location of the area has led to a relatively intense human occupation dating as far back as the Palaeolithic. Occupation dating to this period has, however, only occurred on the left bank of the Loire and potentially not at Joeuvre itself (despite various lithic finds). No fewer than five Palaeolithic sites were discovered in Villerest and St-Jean-St-Maurice (within a 2km radius) all showing regular seasonal periods of use and one rare example of rock art (Combier 1982; Peronnet 1987: 57-9). Whilst the stones of the area were particularly good for the production of flints as various workshops were found adjacent to the temporary sites (Popier 1981), the high number of fish bones (trout) found in these rescue excavations (before the erection of the dam of Villerest) potentially provide an explanation for such a high density of occupation in this period as the meander bend of the river in this particular location appeared to have trapped the fish from their progression upstream providing an easy provision of food for nomadic groups (Vincent Georges [INRAP]: personal comment). Again, therefore, the primary explanation when attempting to analyse the trajectory of this landscape appears to be its natural antecedents.

The vicinity also gives the impression that it was occupied in the Early Iron Age (Hallstatt), meaning that a Late Iron Age settlement may have been a return to a previously culturally important location. On the *oppidum* of Joeuvre itself, it appears that a significant amount of residual material dating from this period was found during the 1950's excavations (Périchon 1958; 1961). Amongst the local Early Iron Age handmade coarse ware (Peronnet 1987: 60 and Planche n°14), three potentially very significant fragments may provide an invaluable insight to the type of activity Joeuvre witnessed before becoming an *oppidum*. Robert Périchon and Patrick Peronnet argued that it was possible to identify two Ionian and one Phoenician sherds in one of the rubbish pits. Such evidence would confirm the presence of Hallstatt activity in the area and indicate that Joeuvre was engaged in long distance trade, enabling parallels with sites like Mont Lassois in Northern Burgundy. Patrick Peronnet went as far as using this as a type of evidence for an early trade route following the Rhône at first before moving into the Ardèche and the Upper Loire Valley (1987:60-1). Michel Vaginay (1986) and Vincent Guichard (Lavendhomme 1997: 197) later disputed such an interpretation and identified the shards as grey wares dating from the early 1st century BC due to the presence of Late La Tène material in the same pit. The site of Joeuvre has always been heavily abraded and a large

construction programme in the Late Iron Age (in this case a large early *aedeficium*/villa) may have obliterated earlier features and as a result residual material may have been mixed with the rubbish derived from the new activity. It should be added that the identification of the coarse ware has not been disputed and that such a dating range must therefore be considered for Joeuvre. Despite various recent works attempting to characterize the nature of the fortifications, the ramparts around the promontory have never been properly excavated since the work of Vincent Durand who only concentrated around the potential entrance (Besset & Périchon 1964; Vaginay 1986). No absolute date can therefore be provided for the whole complex. When on site, the complexity of the structure is immediately striking and a sequence of multiple phases should be regarded as highly probable. A project around this issue is starting to emerge between local archaeologists, the Musée Déchelette and the land owners as this hypothesis appears more and more plausible (Vincent Georges (INRAP): personal comment). In addition, it must be stressed that apart from the excavation of the villa, Joeuvre has witnessed no large scale excavations since Joseph Déchelette (all records and finds have been lost due to the start of the First World War). The fact that the only excavation provided such results must therefore be taken into consideration when approaching the issue. The various field walking projects would not have been able to identify an activity dating to the Hallstatt due to the poor quality of the ceramics and the intense occupation in the Late La Tène. Only excavations to modern standards would be able to solve this chronological issue. Recent results from extremely well studied sites such as Gergovie and Bourges (Avaricum) show that, despite an important hiatus between the two periods, a very similar sequence may be observed with a significant Hallstatt hill fort preceding the Late La Tène *oppidum*. This possibility must therefore be taken extremely seriously.

The site of Chateaubillon may provide further evidence to support such a claim. It has already been stated that it is extremely difficult to identify Hallstatt activity without excavating a site. The investigations at Chateaubillon in advance of road construction can be regarded as the only modern rescue excavation in the area (the Palaeolithic sites were discovered after an intense landscape survey and not during the opening of trenches). It is therefore remarkable that, under a Gallo-Roman farm dating in its earliest phases to the 2nd century AD, Jean Poncet and his team came across Hallstatt material related to domestic features in the north west of the excavated zone (Poncet 1981). The ceramic sherds recovered were relatively small and were therefore impossible to date precisely but definitely belonged to the Early Iron Age. The features appeared to continue northwards and beyond the restricted area of the rescue excavation suggesting this was much larger. The site is located just opposite Joeuvre across the river (Fig. 47) and attests to the presence of a

potentially significant occupation of the area in this period for the only modern rescue excavation produced Hallstatt material.

Le Lourdon, a plateau located just across the river from Joeuvre was also fortified (vitrified walls). The typology of the site may be compared to that of Joeuvre, albeit of a smaller size (2ha), as the plateau was surrounded by two rivers and formed what French scholars have identified as an '*éperon barré'* (Durand 1886; Périchon & Grosbellet 1965: 320; Peronnet 1987:39-40 and Fig. 48). Despite being recognised as a national monument as early as 1913, thanks to the influence of Joseph Déchelette, only scarce finds were found during prospections and no definite date could be assigned to the hill fort (Bouttet 1912). Only new excavations would be able to provide a decent chronological sequence in order to understand the relationship between the hill fort and its larger twin across the river. However, despite the presence of Roman material close to the site (discussed below), the size and typology of the structure may indicate an early date (Late Bronze Age/ Early Iron Age) which could have coincided with the early occupation of Joeuvre. If both sites were contemporary, the group which potentially controlled both structures would have had absolute control over any movement along the river at an extremely strategic location. The choice of site regarding the establishment of the *oppidum* may therefore have been heavily influenced by an earlier social, cultural and political significance associated with this landscape.

This brief study of this landscape in the Early Iron Age showed that the choice of location concerning the *oppidum* of Joeuvre must have been influenced both by its natural and its cultural antecedents. Apart from the modern excavation at Chateaubillon, no definite answers may be provided regarding this period. But this landscape should be regarded as extremely significant in terms of the issue of the emergence of *oppida*. The lack of economic growth of the area due to its rural character implies that this landscape will not be subject to major housing or other building projects in the near future making it extremely hard to rely on the prospect of potential results from commercial archaeologists to solve this issue. This landscape would therefore deserve an intense landscape survey in the long run leading to potential excavations in order to provide a solid chronological sequence.

An *oppidum*

Joeuvre was identified as significant as early as the 19th century due to the remains of its ramparts and to the discovery of numerous finds and features (whole amphorae, pits, Iron Age and Roman coins, etc.) by the local farmers when ploughing their vineyards (Jeannez 1889). Joseph Déchelette

famously undertook excavations in the early 20th century but apart from two brief articles on two exceptional zoomorphic amulets (a horse and a boar: Fig. 49 – Déchelette 1910; 1911) all data and material has since been lost due to the outbreak of the First World War. Various small sondages were opened during the excavation of a Gallo-Roman villa in the 1960's confirming the presence of scattered Late La Tène activity and eventually the potential presence of a small necropolis in La Bachelarde (Périchon 1961: 206).But it was not until the intense landscape surveys led by Michel Vaginay in the 1980's that it could be confirmed that the vast majority of the promontory of Joeuvre witnessed an intense activity from the early first century BC, until potentially the beginning of the Augustan period (Vaginay 1986: 59-60). According to the field walking results, Late La Tène pottery (Dressel 1 and coarse ware in particular) was found in all the relatively flat areas of the plateau where human activity could develop making Joeuvre an *oppidum* within which potentially 50ha were occupied (Fig. 50 and 51). This was seen as extremely striking as Gallo-Roman material dating from the 1st century AD onwards only appeared to have been concentrated in the upper part of the plateau covering a much smaller area indicating most probably a sudden abandonment.

The settlement has therefore since been viewed as having experienced an intense urban development, within which very few areas would have remained empty of occupation. Joeuvre fitted perfectly into the model of *oppida* emergence because of its typology, size, chronology and intense occupation and could now proudly feature in the two most recent volumes on *oppida* (Pierrevelcin 2012; Fichtl 2012b).

The results from the 1960's excavations of the Roman villa may perhaps even reinforce such an impression. The upper layers of the villa belonged to various phases dating between the 3rd and the 5th century AD at a time when cities like Roanne and Feurs were abandoned and a general depopulation of the region could be observed (Peronnet 1987: 74-82). However, it was later discovered that under these levels there had previously been an Augustan villa (or most probably a *domus* if within an urban context) which was itself preceded by a large Late Iron Age structure which has been identified by the excavators as an *aedeficium* (Peronnet 1987: 93-4). The previous studies never linked this discovery with similar structures elsewhere such as the PC1 house of Bibracte (Paunier & Luginbühl 2004) – intense studies relating to the nature of the occupation in Joeuvre have not been undertaken since 1987 which may therefore explain this. In terms of both chronology and typology, both Bibracte and Joeuvre the two sites may be regarded as extremely similar as in both cases a large wooden structure preceded the Romanised building providing an invaluable insight into a complex process of cultural change which may have been actively promoted by the élite (Woolf 1998). At Bibracte the PC1 house was not isolated but was part of a relatively large district of aristocratic houses located away from the main areas of metal production and the potential forum.

The existence of such a structure at Joeuvre could potentially lead to the hypothesis that a similar pattern may have existed. Joeuvre may therefore have experienced a similar type of urban planning as Bibracte and could potentially be regarded as equivalent in terms of status – a claim which could be supported by the relatively large number of Mediterranean imports found on the site both in terms of amphorae and domestic ceramics (Peronnet 1987: 60-72). The discovery of various slag and two moulds for the production of bronze objects may perhaps also indicate the presence of a type of specialised industry, or craft working at least, similar to sites such as Bibracte. Was Joeuvre in control of regional trade networks and industrial production in the same way that Bibracte was?

This has traditionally been the way the settlement has been characterized:

> "*Joeuvre pourrait alors correspondre à une place de marché, élément de première importance caractérisant pour une part les* oppida *de cette pério*de" (Peronnet 1987: 86-7)

However, such an analysis can only be based on extremely weak evidence due to the lack of large scale excavations on the plateau. The excavations of the villa were undertaken solely because it was still a visible feature in the landscape, a fact which may perhaps imply that such a structure was isolated rather than being part of a larger district. The survey results must also be put into perspective. The fact that Late La Tène and Augustan material was found in most of the *oppidum* may not reflect a high density of occupation revealing a large proto-urban phenomenon but rather more represent the results of nearly 2000 years of continuous agricultural activity spreading material across large areas. The *oppidum* may have been made of relatively large empty areas like the Titelberg or Manching and therefore a dense occupation of 50ha must be questioned. When compared to the agglomeration of Roanne the only remarkable difference between the two forms of settlement remains the presence of walls providing a large precinct to Joeuvre. The fact that the open settlement of Roanne appears not to have suffered from the emergence of Joeuvre constitutes another issue when attempting to characterize the nature of this site. Where would such a large population have come from? The analysis of the *Plaine du Roannais* earlier in this chapter has shown no clear signs of an abandonment of rural settlements but rather more clear signs of continuity between the Late La Tène and the Augustan period. Apart from a large movement of population from another region, it appears almost impossible for Joeuvre to have contained such a large population, as a population boom alone would not be enough to explain this process due to the rapid emergence of such a phenomenon. One may therefore question the extent to which Joeuvre could, or should, be characterized as the first town in the region. Nevertheless, the potential of this landscape and of this site in particular must be appreciated when attempting to understand this phenomenon as future excavations may prove crucial to answer the issues raised in this section.

Meanwhile, a detailed analysis of the environs may provide new angles of research when approaching the issue.

The Late La Tène landscape

The previous studies which attempted to characterize the reasons behind the emergence of Joeuvre have primarily concentrated on the defensive aspect of the site. Bernard Grosbellet and Robert Périchon argued that this function must have been due to the fact that the activity around the *oppidum* appeared to only be of a Gallo-Roman date (Grosbellet & Périchon 1965: 324). The only Late Iron Age activity outside Joeuvre appeared to have been the hoard discovered in 1831 by a farmer at Chevenay. The vase contained more than 900 coins (most of them in gold) which have since been lost apart from a few surviving pieces stored in the Musée de Lyon which were of Arverni origin. The fact that the only discovery dating before the conquest was a hoard found outside an occupied site encouraged the authors to reinforce their theory. The results of the landscape study therefore seemed to suggest an extreme nucleation in response to what has been characterized as a rising level of insecurity. Despite new theoretical advances regarding the emergence of *oppida* and our understanding of structured deposition no attention has been given to the questioning of such a model and especially in regards to chronology – Patrick Peronnet included this study in his volume without bringing new perspectives on the matter (1987: 36-42). This study therefore aims to bring in new results in order to dispute such an understanding.

Most of the material discovered either during the prospections or thanks to fortuitous discoveries linked to agricultural activity before the 1980's has been lost. It is therefore extremely hard to reinterpret the chronological range of each site. However, Marie-Odile Lavendhomme when studying Robert Périchon's drawings noticed the presence of at least one Dressel 1 amphorae which had not been previously identified at the site of Ponterre (Lavendhomme 1997: 89). The sole presence of Dressel 1 may not allow the certain identification of a Late Iron Age rural settlement in this precise location but does indicate the potential for earlier activity in the vicinity before the early Gallo-Roman occupation. The chronological interpretation of the other sites based on a study of the ceramic assemblage dating from this period must therefore also be taken with care as there may have been a high potential for the misidentification of amphorae. This is especially the case for La-Goutte-Claire in Villerest, as the cremation remains, discovered in the 19th century just metres away from the hill fort of Le Lourdon, were all found in amphorae containers (De Girardier 1882; Grosbellet & Périchon 1987: 320). A similar practice has already been recorded just opposite the river

in Joeuvre, and the amphorae were identified as Dressel 1 (Jeannez 1889). There is therefore the possibility that the vessels used to contain these cremation burials dated from the same period.

In addition to Michel Vaginay's surveys, another local scholar must be mentioned regarding field walking projects. Benoit Marchand discovered no less than four new sites dating to the Late La Tène within a 3km radius of Joeuvre. Two of these discoveries were made solely by going back to previously studied fields were material had already been found. By going back to sites where early Gallo-Roman activity had already been recorded such as Saint-Sulpice and Sous-la-Ville, both in the commune of Villerest, Benoit Marchand signalled the presence of Dressel 1 amphorae (1991) indicating a high potential for La Tène Finale occupation. The two most spectacular new discoveries were perhaps made in the commune of Cordelle as this time the discovery of Dressel 1 amphorae was also associated with a rich assemblage of domestic ceramics dating from the same period making the existence of an Iron Age site in the location almost certain in Rilly and La Côte de Roanne (Marchand 1987; 1990). It must also be mentioned that, despite being relatively far away from Joeuvre, Michel Vaginay found a significant amount of Dressel 1 amphorae, Late La Tène coarse ware as well as Mediterranean imports (Campanian wares) in the lieu-dit of La Rochette (Vaginay 1978).

Regarding the theory of a potential nucleation of settlements, only one of these sites may support the theory. At Rilly no Gallo-Roman continuation was observed and the poor quality of the coarse ware (handmade) may indicate a relatively earlier date than the oppidum. Could the site have been abandoned as a result of the emergence of Joeuvre? The close location of La Côte de Roanne, may on the other hand perhaps suggest a small move slightly northwards. All the other sites where Late Iron Age activity was recorded appear to have never been abandoned as early Gallo-Roman occupation appears to have continued. The emergence of Joeuvre therefore appears to have rather played a different role than the abandonment of the country side for the safety of its walls.

On the other hand, a nucleation of settlements may still potentially be observed as Joeuvre appears to have perhaps acted as a magnet around which activity spread (Fig. 52). Indeed, there appears to have been a buffer zone between Joeuvre and Roanne (see Fig. 41) in terms of human activity as no sites were recorded northwards either on the left or right bank of the Loire. The presence of a potentially very ancient place name with etymological links to the concept of border (*randa*) between the two settlements in Villerest (Mirandolles) may hypothetically provide further evidence for the existence of two separate dynamics both linked with their respective settlements. However, when the distribution of the various sites is closely studied, it appears very clearly that all these sites were potentially located in connection to Roanne, especially if Chevenay is omitted due to its special nature. This may be an indication that both settlements only existed in relation to one another and

that close social, cultural and economic links were formed during this time of radical change. Work has been done in relation to the consumption of goods on both sites in the past and no radical difference was spotted, instead, rather homogenous assemblages were identified, especially in terms of trade networks and the consumption of both local and Mediterranean ceramics. It must also be remembered that after Joeuvre, the land turns into pasture making it impossible to conduct field walking. The area being still quite rural between Joeuvre and Roanne, no rescue missions related to construction works were ever really conducted on these plains – as the construction of the dam only really affected the banks of the river – the potential for finding Late Iron Age sites in this area in the future is thus high. Geophysical surveys may provide a solution if the geology proved compatible. The initial theory of insecurity to provide an explanation to the rise of Joeuvre must therefore be dismissed whilst still seeing a form of nucleation remains a tantalising prospect.

The early Gallo-Roman transition: rupture or continuation?

As discussed above, there appears to have been an important pattern of continuation of activity between the Late Iron Age and the early Gallo-Roman period, however it may also be possible to detect an expansion of settlements in the direction of the south and the new capital of Feurs. The location of Le Ménard, Les Garioux and La Sablonnerie seem to indicate a change of dynamic as the open settlement of Feurs gradually gained more economic and political power (Fig. 53). In that respect it is also interesting to notice that, in the current stage of our knowledge, the zone between Joeuvre and Roanne still seems to remain devoid of human occupation. Meanwhile, the position of Joeuvre as the centre of the rural activity remains striking despite the abandonment of the site for either Roanne or Feurs. The erection of a villa on the promontory makes it tempting to suggest that the surrounding landscape may still have been controlled from this location despite the abandonment of the settlement. The establishment of rural settlements in more precarious terrain with a poorer quality of soil may also potentially be attributed to a population increase.

Chapter 6

Le Crêt-Châtelard: Joeuvre's southern twin?

Discovered and first excavated in the late 19th century by Vincent Durand and Auguste Chaverondier (Durand 1900), the *oppidum* of Le-Crêt-Châtelard has since been regarded as one of the most significant sites within the *Segusiavi* landscape. Located in the southern part of the *Seuil de Neulise*, right on the edge of the *Plaine du Forez*, Le-Crêt-Châtelard protected, symbolically at least, the southern entrance to the gorge from the lowlands in a spectacular fashion. Positioned on a high plateau on the edge of the gorge, the site became a dominant feature in the landscape and shared remarkably similar characteristics with the northern site of Joeuvre (Fig. 54). Similarities may be found not only in their geographical settings but also in their morphological nature for both *oppida* had ramparts which appear to have followed the natural edges of their respective plateaus thereby dramatically isolating them from the rest of the *Seuil de Neulise*. If following the contemporary approach to *oppida*, despite a significant difference in size – the enclosed precinct of Le-Crêt-Châtelard did not exceed 22ha whereas Joeuvres was potentially 70ha – it would be logical to expect similar settlement dynamics in the immediate environs of both *oppida*.

Their emergence around a similar date (80/70 BC) and their remarkable parallels makes this comparative study of their associated hinterland remarkably relevant when attempting to characterize the reasons behind the emergence of such sites and their impact on local settlement patterns. If major differences were to be found regarding both the nature of these sites and their respective social landscapes it would once again reinforce the need to re-assess our understanding of proto-urbanism as a relatively standardized process.

An isolated site despite the positive impact of commercial archaeology

The data collection around Joeuvre relied heavily on relatively old field walking results which, despite providing valuable information regarding the hinterland of the *oppidum*, limited a clear understanding regarding the nature of the settlements in this particular landscape for the discovery of Dressel 1 amphorae cannot allow a clear chronological sequence due to their long period of use

and re-use as building material. Until relatively recently, very little information could be presented when studying the landscape of Le-Crêt-Châtelard apart from stray finds either coming from similar field walking projects or agricultural activity. The construction of the A72 led to one of the first rescue missions on a large scale in the Loire, supervised by Michel Vaginay it provided new significant data for the Late Iron Age at the site of Les Rochats (Pommiers) in 1981 and 1982 (Vaginay 1982; 1983). Until the last five years this was the only site excavated to modern standards within our area of study. However, the recent construction of the A89, which now links Lyon and Bordeaux via Clermont-Ferrand, enabled vast and unprecedented rescue missions enabling the discovery of various clusters of occupation in an area which was previously believed to be empty of Late Iron Age occupation (e.g. Georges 2008)

Table 3 : List of sites gravitating around Le-Crêt-Châtelard

Site n°	Site name	Commune (Village)	Dating Range
1	Les Crevants	Pommiers	La Tène Finale (Dressel 1)
2	Le Châtelard de Pommiers	Pommiers	La Tène Finale (Dressel 1) – 1st century AD
3	Les Rochats	Pommiers	La Tène D2b – 1st century AD
4	Le Bois Marguerite	Nervieux	1st century AD (flagon)
5	Chazy	St-Georges-de-Baroilles	Early Iron Age? Late La Tène? (Hill fort)
6	Chassenay	St-Marcel-de-Félines	1st century AD (incinerations)
7	Salois	St-Priest-La-Roche	La Tène C/D1 – 1st century AD
8	La Moissonière	Balbigny	La Tène D2 – 1st century AD
9	Félines	St-Marcel-de-Félines	Hallstatt D (pit)
10	Les Dérompés	Néronde	Hallstatt D – La Tène B1 (*fibula*) – La Tène D1 – 1st century AD
11	Le Rieu	Néronde	Hallstatt C/D – La Tène Finale (sparse)
12	Chazelle	Néronde	La Tène D1

Despite a much safer data set, as half of the sites were discovered in modern rescue missions leading to only a marginal number of sites to be labelled as unidentified activity, it must be stressed that the assemblage must still be regarded as extremely small for only 12 sites were identified within a 6km radius of Le-Crêt-Châtelard. Evidently, the spread of settlements should not be seen as a clear reflection of the Iron Age landscape but rather as the image of the presence of the new motorway

(Fig. 55, 56, 57 and 58). Despite these issues, the unexpected results of the recent rescue projects and the fact that this landscape was as intensely studied as Joeuvre in terms of field walking projects have enabled to raise important questions and to provide a clearer picture of the socio-cultural landscape associated with Le-Crêt-Châtelard.

The main difference with the Joeuvre landscape at this stage is the near absence of sites around Le-Crêt-Châtelard within a 3km radius regardless of their date range. In addition to Chassenay – which should probably be associated to the activity on top of the plateau due to its particular nature – the undated hill fort of Chazy and the occupation at La Moissonière must be considered as the only sites which could be characterized as the immediate periphery of the *oppidum* (Table 3). As previously mentioned, this could simply reflect a lack of fieldwork (and especially excavations) rather than a real pattern but various elements may potentially support this theory. The attested presence of a site of such importance combined with the known interest of respected local scholars in artefacts and the excavation of pits, led farmers and wine makers in the late 19th century to make public the presence of either Roman or Iron Age material in their land knowing they would be rewarded. This is particularly the case for the people of St-Marcel-de-Félines as Le-Crêt-Châtelard's excavations were located where the farmers had previously found material, and the site of Chassenay was discovered in a similar fashion in 1884 (Lavendhomme 1997: 213). The lack of discoveries in the 19th century within a 3km radius of the *oppidum* in what was at the time a heavily farmed area must, therefore, be regarded as significant. It should also be added that more recently, field walking projects were undertaken by local scholars and the amount of ground covered was similar to the landscape studies around Joeuvre's hinterland. The landscape was at times very hard to deal with due to the increasing extent of pastures and some relatively intensely wooded areas but discoveries were none the less made in the immediate vicinity but no sites could be associated with our particular period of study. The sites of Chézeaux (Vaginay 1978) in Pinay, Truchard (Vaginay 1978) and Fessieux (Peyvel 1978) in Saint-Jodard, Château (Durand 1900; Vaginay 1978) and Les Roches (Vaginay 1978) in Saint-Georges-de-Baroille or Ferrière (Marchand 1988) in St-Marcel-de-Félines were all discovered during these investigations but all dated to the 2nd and 3rd centuries AD. It therefore appears that Le-Crêt-Châtelard may have been totally isolated. Despite the lack of modern excavations in the immediate vicinity of Le-Crêt-Châtelard, it may be assumed that the potential hinterland of Le-Crêt-Châtelard was not as heavily occupied as the hinterland of Joeuvre for the methods of acquiring data were similar in both landscapes. This comparison may either potentially provide supporting evidence regarding the theory of intense nucleation and deliver clues regarding a possible settlement hierarchy or question the very nature of Le-Crêt-Châtelard as a proto-urban centre.

Le-Crêt-Châtelard: an issue of size

Le-Crêt-Châtelard has always been characterized as an *oppidum* (Besset & Périchon 1964; Vaginay 1986; Lavendhomme & Guichard 1997; Colin 1998; Fichtl 2005; Pierrevelcin 2012) due to its *murus gallicus*. However, as it has already been discussed elsewhere in this study, the presence of fortifications alone should not be considered as a valid argument when characterizing the proto-urban nature of a site.

The size of these enclosed sites has been a major issue and the origin of many heated debates in the past when attempting to establish a clear typological definition in order to have standardized data sets which could be objectively compared to one another. The precinct of Le-Crêt-Châtelard did not exceed 22ha. The site must therefore be regarded as relatively small when compared to sites like Bibracte (120ha), Manching (380ha) or Kelheim (650ha). In 1962, Wolfgang Dehn, when studying the German *oppida*, was the first to specify that a minimum size should be introduced when attempting to characterize an *oppidum*, thereby proposing a minimum of 30ha (Dehn 1962). Whilst John Collis later followed him and supported a minimum size comprised between 25 and 30ha (Collis 1984), Jean-Paul Guillaumet went as far as proposing a threshold of 50ha for a site to be considered as a political centre arguing that only from this point would the sheer size of the rampart have required a concentration of power on a regional scale, a power which, arguably, could have symbolically been transferred to the settlement itself (Guillaumet 1984). Stephen Fichtl, however, following in Alain Duval's footsteps, argued that imposing a strict typology was arbitrary and led to the creation of superficial and bias data sets, especially when considering that the occupied areas in such sites was by far inferior to the size of the precinct itself (Fichtl 2005: 16). His aim was to first analyse the primary function of those enclosed sites rather than follow a rigid typology. This led him to lower the minimum size to 15ha when undertaking his influential synthesis.

The nature of Le-Crêt-Châtelard defined by archaeologists may therefore differ according to which school of thought one belonged. Stephan Fichtl's view has since largely been accepted and Le-Crêt-Châtelard featured in his study. Yet the site has been characterized as such since the post-war era. This can only be explained either due to a certain detachment from the theoretical debate from local scholars or because of a size (22ha) which was not far off John Collis' suggestion – this may be especially relevant when considering Robert Périchon's work for they worked together at Aulnat. The presence of large amounts of Mediterranean imports (mainly Dressel 1 amphorae) and, perhaps most importantly, the existence of a *murus gallicus* have always been considered as enough when characterizing the site as most studies concentrated mainly on the analysis of pottery and of the

ramparts (Durand 1900; Besset & Périchon 1964; Peyvel A. & Pionnier C. 1974; Périchon & Péronnet 1984; Vaginay 1986; Lavendhomme & Guichard 1997). The structural and the spatial understanding of the activity within the precinct was either disregarded or not mentioned due to insufficient data. Stephan Fichtl's proposal had the merit of attempting to go beyond the rigidity of typologies. However, despite a clear attempt to concentrate on functional criteria and even, to a certain extent, social and cultural processes, it may be argued that by lowering the threshold to 15ha it only resulted in extending the original issue. The issue surrounding *oppida* studies continues to be the lack of tangible data regarding the less spectacular sites. The two criteria generally used therefore remain size and fortifications. The conclusions resulting from exceptional sites are therefore still imposed on sites like Le-Crêt-Châtelard. The currently accepted typology, despite clear benefits when the quality of the data set allows a tangible comparison, therefore remains unsatisfactory. Jean-Paul Guillaumet's suggestion of 50ha, despite an obvious rigidity, could perhaps be a better tool when discussing the urbanization process of Central Gaul. Should sites like Le-Crêt-Châtelard really be considered as proto-urban and compared to the mega-sites that are Kelheim or Stradonice? The various past excavation projects and prospections on this particular site – despite suffering from the comparison with better investigated sites like Bibracte, Corent or Manching – may offer enough data to further highlight this issue.

Le-Crêt-Châtelard: a centre of trade and production?

Oppida have been characterized as the culmination of a centralisation of storage, production and trade (Fichtl 2005: 91-106). For Le-Crêt-Châtelard to be considered as a proto-urban centre, evidence supporting these phenomena must therefore be put forward. In the 19th century the investigations mainly concentrated around the excavation of pits. The discovery of more than thirty of those features (Durand 1900) therefore would appear to encourage the theory that the site may have been used to store grain from the nearby hinterland. However, thanks to exceptional quality of recordings for the period, none of these pits may be characterized as storage pits due to their exceptional depth (systematically around 5 or 6m). Vincent Durand and his labourers often hit the water table while digging and had to use pumps in order to continue excavating (e.g. Puits n°3 – Périchon & Péronnet 1984: 33). In addition, multiple vessels dedicated to the collection of water, easily recognisable by their rounded base which made them unstable (e.g. Puits 19A – Dumoulin 2008: 132-134), were

discovered. The primary function of these pits, a least in their original phase, must have been related to water collection. According to François Dumoulin, storage pits have been an absent feature from *Segusiavi* sites, an absence which could indicate a local cultural practice (2008: 128). The proposed hypothesis would be a systematic use of the large *dolia* which could have stored a volume of up to a 100L (Dumoulin 2008: 126-8). However, it must be stressed that such an explanation perhaps suffered from an insufficient environmental analysis concerning the various layers from the numerous pits discovered in the Loire department. For example, a rapid look at the section of Fosse SP6 excavated in Roanne at the Chantier St Paul heavily implies, typologically at least, the presence of a storage pit even without the support of the study of environmental samples (Lavendhomme & Guichard 1997: 67 and Fig. 59). Despite many seasons in the 19th century leading to the discovery of an extremely large ceramics assemblage, an excavation on a relatively large scale in the 1970's (50,000 ceramics shards from all periods were found) and multiple sondages around the ramparts in the 1980's, only one *dolium* of a potential La Tène D2a could be identified (Dumoulin 2008: 128). Combined with the absence of storage pits, this single discovery, coming from an abandonment layer and not from a securely dated context, must therefore be seen as extremely weak evidence for characterizing Le-Crêt-Châtelard as a site dedicated to storage capable of sustaining a large population before the conquest.

The multiple amounts of imported ceramics (either from the Mediterranean or other regions) have traditionally been put forward when describing Le-Crêt-Châtelard as a central place for commerce. The vast amounts of Dressel 1 amphorae, Campanian wares, Terra Rubra and *urnes de Besançon*, must have been consumed on site due to their sheer quantity (Dumoulin 2008: 329-345). However, viewing Le-Crêt-Châtelard as pivotal for the organization of trade within the region must remain hypothetical for their consumption on site may not necessarily imply that the plateau was pivotal to the wider redistribution of such goods for they have also been found in the southern open settlements of Goincet and Feurs or the northern agglomeration of Roanne. As for the presence of multiple slags, metal residue from the production of fibula and the hypothetical presence of a pottery kiln (Peyvel & Pionnier 1974; Legley 1971: 415 and 1973: 521) at the Bois du Cimetière, these discoveries could not be dated satisfactorily and could well only be linked to the post-conquest occupation and not the Late Iron Age phases of Le-Crêt-Châtelard.

During the 1970's excavations, various features were identified amongst the abandonment layers but it has been remarkably difficult to precisely date them. The discovery of the angle of a dry-stoned wall, which has been identified as domestic occupation, and a circular stoned feature which could not be characterized, were only dated thanks to the stratigraphic relationship of the wall with one of the two shallow rubbish pits. The ceramics material from the pit could be safely dated and produced

a La Tène D2b date. Stratigraphically the wall was later than the pit (Peyvel & Pionnier 1973), the only secure signs of domestic activity ever recorded on the site therefore date to the second half of the 1st century BC. The presence of potentially domestic material from one of the rubbish pits could indicate a slightly earlier domestic activity despite the lack of contempory features like postholes but this occupation cannot be associated with a pre-conquest date. Therefore, the earliest evidence which could potentially support the presence of a permanent occupation, and the presence of proto-urban forms, only date from La Tène D2b and the early Augustan period (Peyvel & Pionnier 1970 and 1973).

Vincent Durand mentioned the presence of stone walls without providing records or a hypothetical date for them and could therefore indicate the permanent occupation of a relatively large area at the centre of the plateau. In this region Late Iron Age occupation has been characterized by rectangular wooden structures supported by post holes. The fact that the only one of these walls that was properly studied produced a post conquest date, combined with the knowledge that the site was re-occupied in the late 1st century AD, must therefore lead us to heavily question the proto-urban nature of the site in the Late Iron Age. Viewing Le-Crêt-Châtelard as an *oppidum*, with all the attributes that this terminology implies, may therefore rather reflect a desire to impose an early Gallo-Roman reality to a Late Iron Age phenomenon. Robert Périchon and Patrick Péronnet in 1984 rightly questioned this hypothesis:

> « *Le-Crêt-Châtelard fut-il vraiment un marché? Rien ne vient infirmer cette hypothèse. Il semble qu'au Crêt-Châtelard l'habitat soit devenu permanent à partir de la conquête. Quand-était-il avant ? Nous ne disposons pas d'observations permettant de le savoir* » (Périchon & Péronnet 1984 : 24)

This relatively safe conclusion regarding the nature of the occupation must still be seen as valid today. Proposing a permanent occupation prior to the conquest can only remain hypothetical and is based on comparative studies with other spectacular and well-studied sites rather than concrete evidence. Another large scale excavation near some of the Late Iron Age wells discovered by Vincent Durand would enable to confirm this theory. However, despite the decline of the site in the Augustan period, the premises of an urban phenomenon shortly after the conquest, combined with the re-occupation of the site in the late 1st century AD, reflect a real symbolic attraction to this particular site or landscape and therefore indicate its potential significance in the Late Iron Age.

Le Crêt-Châtelard: a special and symbolic landscape?

In terms of fortifications, the main difference between the Joeuvre and Le-Crêt-Châtelard resided in the large earthwork (100m long, 20m large and potentially up to 10m high) at the eastern end of the plateau at Saint-Marcel-de-Félines (Durand 1900; Vaginay 1986: 57). The earthwork cannot typologically be linked with the rest of the *murus gallicus* and the relationship between the two ramparts, which was studied by Michel Vaginay during rescue operations when a quarry project emerged, clearly showed that the earthwork was earlier, structurally at least. The lack of material coming from the excavated earthwork made the establishment of a chronological sequence impossible. The presence of Neolithic scatters in the immediate vicinity has even been put forward in order to provide a possible dating range (Vaginay 1986: 58). The discovery of Early La Tène ceramics at the other end of the plateau (Vaginay 1986: 52-53) may also potentially provide a hypothesis but dating this feature remains highly problematic. It has to be stressed, however, that the earthwork was therefore either reused or constructed in order to give a much stronger symbolic value to the entrance of this '*éperon barré*', especially when compared to other *oppida* like Joeuvre where the isolation of the *oppidum* and its plateau was not artificial but natural (Fig. 60).

The remarkable aspect of the eastern part of the fortification has already been mentioned. However, its potential symbolic significance may require more thorough attention. A general consensus has been reached regarding the chronological sequence of the emergence of Le-Crêt-Châtelard in the Late La Tène and the date of 70BC has usually been put forward (Périchon 1981; Vaginay 1986; Lavendhomme 1997; Dumoulin 2008). However, a significant amount of what has been characterized as residual material, due to an absence of secure context, has been found on various points of the plateau. In addition to various Neolithic scatters, a dozen vessels dating to the Middle La Tène (3rd century BC) were identified during the excavations in the zone of the southern rampart by Michel Vaginay (Vaginay 1986: 54). Their presence in a La Tène D2b/ early Augustan layer could not be explained, but the form of these vessels and their firing process could be paralleled to assemblages of earlier hill forts like Le-Châtelard-de-Lijay (Befort, Delporte & Guichard 1986). This type of material reinforced the hypothesis of an earlier occupation already raised during the field walking survey from which one surviving pre-Campanian ware could be identified (Vaginay 1986:54). The presence of such a fragment may be regarded as significant as this would provide evidence for the importation, or at least consumption, of Mediterranean goods at such an early date. The 1970's excavations at the Bois du Cimetière, located at the centre of the plateau, have also produced large curved platters of a

volume of up to 5L which could be dated to the middle of the 2nd century BC by both a typological comparison and the presence of a glass bangle from this period (Dumoulin 2008: 77-9). The potential for an earlier occupation at Le-Crêt-Châtelard can therefore be considered as relatively considering that all investigations, apart from the 19th century excavation of pits, produced earlier material. The emergence of this fortified site therefore echoes that of Joeuvre. The site may have been highly significant in the socio-political landscape of the region even before the emergence of Roanne or Feurs. When attempting to define a date range for the construction of the large earthwork an Early La Tène date may not be unreasonable as typologically no parallels between this structure and the *murus gallicus* can be found. The earthwork may also have been of an earlier date and could have contributed to attract a new form of occupation in the 3rd and 2nd century BC.

Viewing the problem from such an angle may prove to be crucial when comparing Le-Crêt-Châtelard's fortification system with that of Chazy. The hill fort of Chazy (commune of St-Georges-de-Baroilles – site n°5) was located between the gorge and the river Aix on the western side of the river Loire and right across Le-Crêt-Châtelard (flying distance of 2 km). Symbolically guarding the other side of the gorge, both sites must be understood as forming one landscape. Although of a much smaller size (7ha), in addition to its remarkable location, the hill fort shared many similarities with Le-Crêt-Châtelard most notably with the fortification system. During prospections, Vincent Durand discovered the remains of a wall on the northern side of the site. According to his descriptions the wall had two stone revetments externally on both side (50 cm), whilst the gap between them was filled with earth (Besset & Périchon 1964: 66). Various large iron nails, which according to the author could be compared with those found across the river, were also recovered from this structure. Such a description would lead to the potential presence of a *murus gallicus*. However, whilst modern excavations confirmed the presence of such a structure at Le-Crêt-Châtelard, no investigations have been undertaken since the 19th century in Chazy and therefore the nature of the fortification must remain hypothetical, especially when considering the size of the site which prevents it from being considered as an *oppidum*. The second similarity is the presence of another large earthwork (90m long, 20m wide and between 5 and 10m high) which would have stood out from the rest of the fortification system due to its sheer size adding a monumental aspect to the structure (Fig. 61). Again, providing an accurate date range of the earthwork is problematic. Interestingly this earthwork faced west; there may be an interesting parallel between the two sites as at Le-Crêt-Châtelard it faced east. In addition to the use of similar material (large quantities of earth and large blocks of stones dumped with no particular care), typologically both structures were remarkably similar (same length and width and of a similar height) and could have been constructed in the same period either to form an early fortification system on each plateau or to monumentalise the separation of the two

natural plateaus from the rest of the Seuil de Neulise at the only point where they were still naturally linked. The site was field walked and produced interesting results with finds of Roman *imbrices* and *tegulae* were found amongst Neolithic scatters and Bronze Age pottery (Vaginay 1978). The absence of Late La Tène material is potentially significant. Either, Vincent Durand misinterpreted the fortifications he discovered, and Chazy never had a *murus gallicus* but an earthwork of a much earlier date, or his hypothesis should be trusted and an earlier and more perishable fortification system, potentially similar to that of Le-Châtelard-de-Lijay or of a Bronze Age date, may have predated the new fortification. The lack of Late La Tène material would then potentially reinforce the theory that these sites were not permanently inhabited in the Late Iron Age. In addition, it must also be noted that the accurate dating of Le-Crêt-Châtelard's ramparts proved impossible despite multiple excavations. The only conclusions were of one phase of construction and the fact that it would have already existed between 50 and 25BC. Therefore the emergence of a fully fortified site may not have happened until the Gallic Wars themselves. The chronological sequence of such sites should therefore be regarded as potentially remarkably different to that of other *oppida*.

Despite the issue of dating both earthworks, what appears from this analysis is the extraordinary symbolic attraction of both plateaus which could be regarded as a catalyst for the presence of any activity. If these sites should not be assumed to have been permanent places of occupation in the Late La Tène, they should nevertheless be seen as dominant in the wider socio-cultural landscape of the region.

It has already been argued that the pits discovered in the 19th century should be regarded as wells. Their presence in high numbers (more than 30 – Fig. 62) within the ramparts could potentially be interpreted as the result of a high demand for water within a domestic context. However, as noted above, no real evidence for a permanent occupation could be found and Le-Crêt-Châtelard was surrounded by various water sources. In addition to the gorge of the Loire, which would have been hard to have access to from the plateau, the site was naturally delimited by two significant streams at its northern (Le Coup) and southern (Ruisseau du Châtelard) ends. The supply of water would therefore have been sufficient, even when the site would have been permanently occupied, the presence of wells may therefore indicate a different kind of activity. The symbolic importance of water in the context of both collective and individual ritual practices has already been widely witnessed whether it be on Continental Europe or Britain. In Britain numerous valuable objects were discovered in springs, streams, rivers, marshland or lakes such as Flag Fen in Norfolk, Witham River at Fiskerton and Llyn Cerrig Bach Lake on Anglesey (Megaw & Simpson 1978: 405; Cunliffe 1997: 194). On the continent the example of the site of La Tène on the Neuchâtel Lake has been so preponderant that Paul Reinecke and Joseph Déchelette named an entire period after it due to the remarkable

style of the metalwork of the objects deposited. And the Sources de la Seine in Burgundy has produced vast quantities of votive deposits and especially wooden figurines (Deyts 1983).

However, it was not until relatively recently that the importance of wells was recognised for the material recovered from their fills has been widely interpreted as rubbish originating from domestic activity, perhaps explaining why wells with exceptional deposits like at Roanne have often been overlooked. The discovery of more than 400 wells (depths ranging from 3 to 17m) in Agen, Rodez, Toulouse and Vieille-Toulouse has considerably changed the way such features and their associated contexts should be interpreted (Poux 2004: 165-174 and Fig. 63). Their associated deposits were structurally organised, even when the material could only be associated with domestic activity, and interpreting the various fills as rubbish deposits became very dubious. The exceptional character of the various deposits became apparent when analysing the material culture of these wells as a whole. The vast quantities of recorded amphorae often represented complete profiles and had been carefully laid down, the ceramics assemblage was deposited in a similar fashion and its primary function would have been associated with collective feasting (mainly Mediterranean imports). Numerous metallic artefacts were also uncovered ranging from symbols associated with feasting (flagons, sieves, buckets or cauldrons), agriculture (sickles) and war (spears, swords, helmets and broken shields). Disarticulated human remains and evidence of cremation could also be identified in a relatively significant amount of these wells. The records of sedimentation and erosion as well as the discovery of the remains of amphibians and small rodents, and ceramics vessels similar to those found at Le-Crêt-Châtelard, at the bottom of these pits suggest that their first use would have been the collection of water (Gorgues & Moret 2003: 132-138). Because most of the attested structured deposition could be found at the bottom of these wells (the upper layers contained remains of material which could have been used in a more domestic context) it may be plausible to assume that the end of these features was ritualised through the deposit of offerings perhaps to a divinity associated with water.

When analysing Le-Crêt-Châtelards' deposits a striking parallel may be observed, the most convincing equivalent being the Puits n°4. At the bottom of this well a small wooden statue of a seating human figure was discovered (Périchon & Péronnet 1984: 33-34 and Fig. 64). This statue, which has since been lost, bore three distinctive symbols: a snake crawling down the left shoulder, a large open vessel on its knees and a round object in its right hand (Renaud 1956; Petiot 1994: 99-101). Perhaps unsurprisingly identified as a god, most of the debates concentrated on defining its identity: Mercury or Cernunnos? This study does not aim to provide any answers regarding this issue, but rather aims to put this discovery into its context in order to get a glimpse of the different social and cultural processes which could have characterized the act of depositing such an object at the bottom of a

well. Associated with this object were the remains of deer and cattle skulls, significant amounts of antler, a large wicker basket, a copper-alloy cauldron, Mediterranean imports (all related to collective drinking and feasting) and various wooden objects which were disregarded in the 19th century but which could well have been the remains of votive offerings (Périchon & Péronnet 1984: 25 and 33-34; Petiot 1994: 106). This particular well is also located right at the centre of the plateau and may therefore have served a particular purpose in relation to collective activities. In such a focal location and containing such a range of material, it could be argued that such location may have participated in the construction of wider social networks either on a local or more regional scale. Characterizing the nature of this activity may prove impossible but, in a world where the dichotomy between profane activities and rituals did not exist, this type of structured deposition remains essential in understanding the symbolic importance of this plateau in the Late La Tène. Like in Roanne, the elements point towards a collective activity bringing together either an élite or different communities from the region. The material culture was either the remains of a particular feast or ceremony, therefore participating in an act of commemoration, or its presence could simply have reflected a particular offering which aimed to reflect this reality in a more symbolic way by abstaining from it. The remains of large parts of broken amphorae and the relatively poor state of the ceramics (no complete profiles) and a bone assemblage which could be considered to be the remains of a feast (bones indicating a particularly refined choice of meat) could point towards the first hypothesis thereby indicating a periodic activity.

This discovery should not be regarded as exceptional as most of the other wells also bear the signs of structured deposits perhaps indicating that no particular part of the *oppidum* was particularly important but that what was sacred was the plateau as a whole. The feasting character of the ceramics assemblage could be recognised in the wells n°7-12-13-15-19-20-23-24-28-29, whilst various complete and unbroken vessels were deposited in the Puits n°19-23-30-31 indicating a deliberate and intentional deposition of a vessel (either a local painted fine ware or a Mediterranean import) which could still have been used (Dumoulin 2008: 125-162). The skulls of deer, cattle and sheep were also found in seven other wells whilst disarticulated human remains were in the wells n°10-20 (Petiot 1994: 106). When knowing that the SP11 of Roanne contained much smaller human rib fragments damaged by fire, there may have been more human remains which could have been disregarded during the excavations for the available assemblage included relatively large and easily identifiable bones (e.g. femur). In addition to multiple quern stones, sometimes complete, and numerous tokens (*jetons)* (made from amphorae or local pottery).

Another major characteristic of these wells was a deliberate capping using large stones, thereby sealing the deposit permanently (Puits n°2-3-7-16-17-19-22-27). The excellent recordings of Vincent

Durand for his time must be acclaimed in this particular case. Most of the upper layers contained domestic material from the late 1st and 2nd century AD and should be regarded as rubbish deposits therefore reinforcing the parallel with the wells of the Aquitaine region. When viewing this type of evidence as a whole a coherent pattern may start to emerge. The wells may well have been used to collect water at an early stage (particular pottery types found at the bottom may be used as evidence) but the use of these structures dramatically evolved in perhaps a very limited amount of time (less than a generation).

The importance of water in this region has already been attested at Saint-Alban-les-Eaux, further north, where the various mineral springs of natural sparkling water were the focuses of various offerings throughout the entire Roman period (Lavendhomme 2000). Their monumentalization in the Roman period could have destroyed earlier contexts and the discovery of coins dating as far back as the early Augustan period at least (the assemblage has since been lost since its discovery in the early 19th century during the restoration of the spa) could indicate a similar activity in the Late La Tène when most offerings were perishable. According to Vincent Durand, a lot of the wells of Le-Crêt-Châtelard were actually natural springs originally, implying therefore a rudimentary monumentalization (Périchon & Péronnet 1984:25). The presence of early Roman walls near the Puits n°30 described in his Vincent Durand's notes could be a sign of a potential temple structure due to the width of the structure and thus provide more evidence regarding the significance of water when attempting to characterize human activity on this plateau (Fig. 65). If this was the case the natural antecedents of the site (prominent position in the landscape, presence of springs) should be seen as incredibly important when attempting to explain the trajectory of this landscape. The cultural and social antecedents would also have played a major role as incorporating the early earthwork within the defensive system could have been a way to reclaim a land previously occupied by ancestors on both sides of the river as Chazy created a remarkable parallel. If the activity was periodical, this landscape would nevertheless have embodied an incredible significance for both local and distant groups of people, perhaps a meeting place.

A change of settlement pattern?

Before the A89, the only Early Iron Age evidence for this landscape could be found at Le-Crêt-Châtelard itself. The evidence was extremely weak and, as it has already been mentioned, without any associated contexts. The site of Chazy may well have witnessed an early occupation, as hill forts of such a size were common in the Early La Tène, but no excavations were ever conducted and this

possibility has therefore never been verified. This landscape therefore appeared to have been largely empty during this period, perhaps due to the difficulty of the terrain and a relatively sterile landscape. However, between 2008 and 2011 a new cluster of occupation dating to the Late Hallstatt was identified 6km east of Le-Crêt-Châtelard. This discovery was a real surprise as no Iron Age discoveries had ever been made in this semi-mountainous range. The altitude (500m) was usually put forward to explain this absence of material as most Iron Age occupation, when unenclosed, can usually be found in the lowlands.

During the first prospections at Félines (site n°9) in 2008 a pit relatively rich in ceramics dating to the 6th and 5th centuries BC was discovered. The feature could have been related to a shack like structure which itself could have been part of a wider seasonal camp site for in a nearby field three different isolated post holes dating to the same period were identified. Located on a relatively high position in the landscape, such sites were quite common in the higher grounds of the Rhône and in the Ardèche when transhumance was widely practised (Motte 2008: 121). In the same sector at Les Dérompés (site n°10) various pits and tree throws produced a significant ceramics assemblage of local wares which could be dated to the Hallstatt D (Argant 2009: 100). A significant amount of colluvium in a gully provided other clues for the exploitation of this small plateau during this period. The presence of significant remains from later periods did not enable a clear spatial understanding of the area and the potential for the obliteration of other features must be considered as high. Finally in the sector of Le Rieu (site n°11), 700 metres away from the other two sites, produced the only clear signs of a permanent occupation. Within an area of 4500 m2 various post holes forming coherent structures could be observed. Two buildings could be identified as well as a granary which would have been supported by four posts.

Le-Crêt-Châtelard: an *oppidum*?

The evidence from Le-Crêt-Châtelard appears to suggest that the erection of fortifications, the adoption of a new way to interact with the landscape, may not necessarily mean that the original aim was the erection of a new town symbolised by the importance of a precinct and a sense of border. Constructing such a structure, that would have required vast quantities of raw material and human resources, necessitated a complex social order. The reasons behind this erection may have been multiple and should be seen as the reflection of the dramatic social and cultural change occurring in Central Gaul in the Late Iron Age. Instead of using the term *oppidum*, which has negative connotations due to its modern association with proto-urbanism, the term poly-focal complex may

be more appropriate at this stage as the activity on the plateau has not been clearly defined. Future investigations may well contribute to further show the ritual, or at least ceremonial, function of the site which would thus provide an interesting parallel with other well studied sites such as Weathampstead in Hertfordshire (Bryant 2007: 74).

Chapter 7

The rural landscape of the Upper Loire Valley in its wider context

The three micro-regions examined provided evidence for thought-provoking and contrasting trajectories from a local perspective. But in order to understand the trajectory of the region as a whole, the very extensive surveys from the Plaine du Forez undertaken by Marie-Odile Lavendhomme in the 1990's and Marie-Caroline Kurzaj's recent PhD have been invaluable when attempting to draw comparisons with the southern part of what has traditionally been attributed to the Segusiavi territory. The location of the Upper Loire Valley, as one of the main platforms from which trade could operate between the Roman World and two of the most important Late Iron Age entities, made it a key region when discussing the evolution of the settlement patterns as a result of proto-urbanism and in order to assess its potential impact for Iron Age studies, incorporating evidence and conclusions from other regions of Gaul is essential. Undertaking a chronological approach seemed the most appropriate option in order to appreciate how the evolution of this regional settlement pattern compared to other well-known trajectories and fitted into our overall understanding of social and cultural change in the Late Iron Age.

A flourishing Hallstatt landscape

Placing the Late La Tène development of the region in a longer term context, from the Hallstatt onwards, has proved to be extremely significant. When comparing the study areas it appears that the Plaine du Roannais witnessed the most activity in the Late Hallstatt with nearly half the modern archaeological investigations undertaken in the recent years enabled the discovery of remains dating from this period (see Chapter 4). The evidence from the Plaine du Forez also supports the theory of a dense occupation in the lowland, with no less than 10 sites dating to the same period were located on the left bank of the Loire on alluvial terraces. Most notable, is that near the later La Tène C2 settlement of Goincet (Lavendhomme 1997:37-38 and Fig. 66). However, despite a smaller collection of sites, the potential for a comparably dense population in the Seuil de Neulise might also be

envisaged. The lack of economic development in this semi-mountainous range led to a very a limited amount of rescue investigations and most of the data collection has to rely on evidence from the Late Iron Age *oppida* (which both produced Hallstatt evidence) or field walking results rather than modern archaeological excavations. Interestingly, the very limited impact of commercial archaeology has proved invaluable for the only project undertaken near Joeuvres yielded significant Hallstatt features under the remains of a Gallo-Roman stone-structure, and most importantly the extensive A89 project also revealed the presence of a relatively dense Hallstatt occupation near the alluvial terraces of modern Néronde (see Chapter 5 and 6). It is tempting to suggest that more systematic excavations would continue to reveal traces of Hallstatt activity. The only two development projects recently undertaken, therefore, contribute to the hypothesis that this landscape witnessed a high density of occupation in this period both in the upland and the lowland.

These conclusions appear to fit well with other regions where extensive surveys were undertaken. The adjacent Rhône valley witnessed a very similar phenomenon, especially on modern Lyon's right bank where it appears that the settlement density may have been far greater in the Hallstatt than in the Late La Tène (Faure-Brac 2006: 68-72). Similarly the ancient landscape of Clermont-Ferrand in the Auvergne, the lowland in particular also witnessed intense occupation both in Hallstatt C and D (Milcent 2004: 47-50 and 296-303) whilst the significant number of chariot burials from this period in the Aisne Valley also reflected a growing population (Haselgrove 1996: 138-139). The 6th and 5th c. BC occupation of this region therefore appears to follow similar trajectories to that elsewhere in Gaul; certainly from a rural perspective, with no evidence in this region, as yet, for large hill forts of the scale of Mont-Lassois, the early phases of Avaricum and the Heuneberg or even the Early La Tène A open settlements similar to those at Berry-au-Bac, Condé-sur-Suippe (Profundis) or Compiègne in the Aisne Valley. It is too early to speculate on the possibility of a move from the upland to the plain in the Late Hallstatt, as witnessed in the Auvergne, but the absence of Hallstatt B material, and the fact that the occupation from the Seuil de Neulise was not discovered in the heart of that semi-mountainous range but was mainly established close to the lowland, could potentially reflect a similar pattern. Systematic investigations in Joeuvres or Le-Crêt-Châtelard may reveal a more complex occupation in the future, but for the moment the evidence only suggests a very densely occupied rural landscape. The absence of rich burial evidence could also potentially suggest the absence of a well-structured élite in the lowland. But once more, before an extensive investigation programme near the Seuil de Neulise is undertaken, this absence should be interpreted with care.

Philippe Barral and Pierre Nouvel in their detailed assessment of the various trajectories of the early proto-urban centres in Central-Eastern Gaul have shown that most of the micro-regions where Late La Tène urbanism was to emerge were previously heavily inhabited in the Late Hallstatt. Verdun-sur-

le-Doubs emerged in a landscape where the well-structured artisanal complex of Bragny had previously flourished (Barral & Nouvel 2012:142-144), whilst the open settlements of Avrolles, Tonnerre and Nijon were all founded close to Late Hallstatt aristocratic tombs (ibid 2012: 148-153). The Bibracte landscape, whilst being relatively devoid of occupation in La Tène D1a, was also clearly inhabited in the Hallstatt (ibid 2012: 155). A very similar pattern was also observed in Central France as the density of the occupation in the Auvergne or in the Berry also preceded the very complex Late La Tène settlements. These micro-regions were then all characterized by a very significant chronological hiatus as the evidence for Early La Tène occupation was either sparse or non-existent. This fact has led Philippe Barral and Pierre Nouvel to be extremely cautious when attempting to define a potential model of urban development:

> « *On ne saurait cependant parler de filiation directe, dans la mesure où un hiatus de un à trois siècles sépare systématiquement ces occupations superposes. Il serait téméraire d'y voir uniquement la rémanence d'anciens centres de pouvoir. Ce phénomène souligne plutôt un certain déterminisme, privilégiant les zones de contact, favorables aux activités de production et de redistribution* » (Barral & Nouvel 2012 : 156)

This approach may well be a valid for this region too as this part of the Loire Valley was undoubtedly significant in terms of trade networks in the Late La Tène, especially after Rome's expansion in Southern Gaul. But, this very functional perspective may fail to really grasp Late Iron Age society. Cultural antecedents need not be a direct filiation between the old and the new world. The collective memory related to a sense of place may be re-articulated under multiple forms. The frequent presence of sanctuaries on top of *oppida* before their emergence as settlements reflects this possibility. It must also be stressed that if these landscapes had simply followed similar trajectories due to a particular geographical determinism, why did the Mont Lassois landscape not become a major centre of population in the Late La Tène?

Early La Tène: population collapse or severe nucleation?

The three micro-regions which were analysed in this study all show a major collapse in the Early La Tène for apart from faint traces occupation under the La Tène C2 settlement of Roanne, this study has been characterized by a significant lack of sites for this period both in the lowland and the

upland. A very similar situation has been observed in the Plaine du Forez (Lavendhomme 1997:38; Kurzaj 2012). Under the Late La Tène levels of Feurs, two pits containing La Tène A/B ceramics were discovered (Vaginay & Guichard 1988: 16-17), thus offering an interesting parallel with the discoveries of Roanne as no clear stratigraphic relationship could be established between both horizons. The fact that under both Late La Tène open settlements a La Tène B occupation was discovered raises interesting questions. Should this type of evidence be seen as the first precursor of a grouped occupation in La Tène C2 or, at the very least, as a cultural antecedent? The only other discovery from this period in the lowland is from a cemetery in Précieux at La Baluse in the south of the Plaine du Forez. In 1896, the remains of three cremation urns and their organic remains were found in a small stone enclosure, their unusual preservation enabled Robert Périchon to date them to the 4th or 3rd c. BC and enabled Robert Perrot to identify a twenty year old male individual (Périchon & Perrot 1969). Vincent Guichard has also indicated the presence of proto-historic ceramics discovered in 1980 (Lavendhomme 1997: 158).

Should this very restricted evidence be associated with a major population collapse? A similar situation has been observed throughout most of Gaul in this period. The clear presence of a hiatus in Burgundy and Franche-Comté has already been mentioned and similarly Colin Haselgrove's extensive re-assessment of the Aisne Valley has shown that most of the cemeteries and early open settlements went out of use after 400 BC (Haselgrove 1996: 140). This dramatic rupture has puzzled archaeologists for decades as most of the delicate La Tène artwork originated in that period, thus indicating a potentially well organised and sophisticated society. Their apparent absence from the archaeological record has thus been hard to explain and has traditionally either been associated with the historically recorded migrations of Celtic-speaking warrior groups in search of a new land to settle or with a significant break down of pre-existing social structures rather than because of economic or demographic reasons (e.g. Demoule 1993; Haselgrove 1996).

A major population movement seems unlikely but the potential for social conflict and the rise of a new society with radical consequences on the overall trajectory of settlement patterns could be an interesting hypothesis. The evidence for a well-structured occupation may be non-existent in the lowland but one site has proved to be well preserved and well recorded after a very thorough and well-orchestrated project of the CNRS in the 1980's. The small hillfort of the Châtelard de Lijay (Débats-Rivière-d'Orprat - 2ha) located at a potentially strategic position between the Allier and Loire Valleys was the only site with evidence of a dense and, most importantly, multiple phases of occupation. The site was re-organised in terraces both for domestic, metal-working and agricultural purposes and produced an exceptional assemblage of fibulae, two bronze rings and one bracelet, currency bars, the remains of a scabbard and two lances (Fig. 67) and perhaps most importantly

ceramic imports (pre-campanian wares). In addition to the ceramics evidence, the site was dated using dendrochronology (Lambert 1987) and C14 (Befort et al. 1989: 41) making a 4th c. BC date more than plausible. This significant site therefore reminds us that the local populations did not disappear but dramatically broke away from previous traditions. The site, due to its location at altitude (600m), is relatively isolated from a modern perspective and its discovery and good documentation must be credited to a very dedicated team. In this study at least another three potential hill forts were identified, two of them being exactly opposite the Late La Tène *oppida* of Joeuvres and Le-Crêt-Châtelard, but none of them have been excavated. Because the complete abandonment of this particular landscape is inconceivable, the potential for an intense nucleation of settlements articulated in radically different ways must be taken into account; investigating these three sites will prove essential to support that theory.

Oppida emergence: the result of nucleation?

Le-Crêt-Châtelard's micro-region has proved to be remarkably sparsely populated in the Late La Tène. It has proved very problematic to characterize any kind of human activity within a 6 km radius of the *oppidum* despite multiple field walking projects and a research trajectory similar to that of Joeuvres (Chapter 6). The only potentially significant occupation, discovered in recent commercial projects, was located to the south of the site and may have been part of the wider agricultural network of the Plaine du Forez, which has proved to be heavily populated (Fig. 68), rather than part of Le-Crêt-Châtelard's socio-political landscape.

Joeuvre's landscape, despite an extensive excavation programme and having to rely on field walking results, has however proved to be remarkably different. The development of the *oppidum* appears to have had a dramatic effect on its surrounding landscape. The emergence of the various rural sites around the *oppidum* appeared to have chronologically coincided with the rise of Joeuvres (Chapter 5). The trajectory of the Bibracte landscape offers perhaps the best analogy: the environs of Mont Beuvray appear to have been largely unoccupied before La Tène D1b, but witnessed an unprecedented increase in occupation in La Tène D1b and La Tène D2 (see Fig. 36). This remarkable change in the overall settlement pattern has usually been attributed to the success of Bibracte as a centre of trade and power. The recent discovery of another large open settlement (120ha) only 4km away at Sources de l'Yonne has contributed to reinforce the role of Bibracte in the centralisation of resources and populations (Moore *et al.* 2013). However, Bibracte must still be seen as an exception due to the particularly important status of the Aedui before and after the conquest due to their links

with Rome. The scale and rapidity of the urbanisation process, which has been very well documented in recent years thanks to the Centre de Recherche Archéologique Européen at Glux-en-Glenne, was most probably unique and few sites could really compare with Mont Beuvray (e.g. apart from Corent, Manching or Stradonice). This pattern nevertheless suggests a potential instability in the Gorge of the Loire: where did this new population come from? It is therefore still tempting to suggest that a similar process may have taken place around Joeuvres albeit on a very different scale.

The rapid emergence of a new socio-economic landscape implied a conscious individual or collective decision for the prospect of organic growth appears to be very unlikely. For the Aisne Valley, Colin Haselgrove, by identifying the abandonment of a significant number of rural sites in the early 1st c. BC, argued that the nucleation model first developed by John Collis (1984) may be a good approach when attempting to explain the rapid rise of *oppida* (Haselgrove 1996: 151-168 and see Fig. 13). This proposition had the merit of going beyond the concept of migration theory and the Levroux model. Viewing the issue from this angle implied a very internal conception of change characterized by a deliberate movement of populations. The development of commercial archaeology has since confirmed this pattern for the Aisne Valley (Brun *et al.* 2000) and contributed to showing that a similar abandonment of rural settlements may have also taken place in Western Gaul (Nillesse 2009).

One of the main aims of this study was to assess whether or not a similar pattern could be observed in the Segusiavi territory. The environs of Roanne are particularly important in this respect for if the emergence of a cluster of occupation in the upland was also the result of nucleation, the settlement pattern of the lowland would have been significantly affected and characterized by great discontinuity. Interestingly, the results showed the opposite, with rural occupation apparently extensively increasing in La Tène D1b and especially La Tène D2a. This potentially structured occupation in a complex field system has largely been characterized by continuation in the Early Gallo-Roman period, implying a very stable environment throughout the 1st c. BC (Chapter 4). The Plaine du Roannais, therefore, appears to form a vast contrast with the trajectories of Northern or Western Gaul and rather followed a pattern witnessed around *oppida* in general. The evidence from the Plaine du Forez appears to further strengthen the potential for stability in the Upper Loire Valley for a very similar pattern could be observed by Marie-Caroline Kurzaj (2007 & 2012 and Fig. 69). Again, most rural settlements appear to have emerged in La Tène D2 thus implying the rise of a very heavily inhabited lowland when the two *oppida* of the Seuil de Neulise were supposedly experiencing their heyday. Only one major site clearly appears to have been abandoned in La Tène D2, the large rectangular enclosure at Andrézieux-Bouthéon. Its size and assemblage finds a parallel with the enclosure discovered in Mably (ZAC de Bonvert). Interestingly, the chronological sequence of the *aedeficium* of the Plaine du Roannais is “open to discussion” and the hypothesis for a decline of the

activity in La Tène D2, before the rise of a new rural occupation in the mid-1st c. AD, is another possibility (Georges 2011:97). A possible dichotomy between the trajectories of some of the *aedeficia* and the rest of the rural activity is, therefore, potentially starting to emerge. Rather than providing evidence for a disruption of the settlement pattern, this type of evidence may rather provide evidence of the instability of the local élite within a very fluid socio-political landscape.

When analysing the settlement pattern as a whole, such stability both in the Late La Tène and the Early Gallo-Roman period is truly puzzling. Where did the population that moved to the Seuil de Neulise come from? The lack of La Tène C2 material, and even, to a certain extent, the scarcity of La Tène D1 material, appears to support the idea of a very rapid transformation of this landscape on a scale comparable to the rise of some *oppida* like Bibracte. The rise of commercial archaeology, especially in the Plaine du Forez, further strengthens this conclusion for if the lowland had also previously been heavily occupied in the 2nd c. BC, it would be right to assume that significant traces of occupation would have already been discovered. The conquest of Southern Gaul in 120 BC by Rome led this landscape to play a key role in trade networks both, because of its prime location between the powerful socio-political entities of both the Aedui and the Arverni, and because of its proximity to the Roman Empire. Could, or should, the new geo-political situation of the region in this period be used to explain such a different trajectory? The relative proximity with the Roman Empire and the demand for Italian wine in the north must have attracted resources, traders and perhaps migrants. Indeed, when analysing the evidence it would seem hazardous to support the idea of a purely internal development. It is important, however, to note that these conclusions should only be considered as temporary as the data set ultimately somewhat suffers from a certain bias as most sites, despite the presence of indigenous ceramics, were mainly identified and dated via the presence of Dressel 1 amphorae both in the Plaine du Roannais and the Plaine du Forez. The Seuil de Neulise and the Plaine du Forez were extensively surveyed via field walking techniques and whilst the presence of Dressel 1 amphorae in the La Tène D1/D2 facilitated the discovery of sites from this period, the sometimes poor quality of Late Iron Age coarse ware made the discovery of older sites more problematic. Nevertheless, because both flood plains have also been the subject of numerous rescue excavations programmes, the potential parallel between the landscape trajectories of Bibracte and this region provides a very interesting platform when approaching the emergence of proto-urban forms in the Late Iron Age, the main interest of this study.

Conclusion

An extensive survey of the rural occupation of the Loire department has proved beneficial. The abrupt transition between the Hallstatt and the Early La Tène across the whole region suggests that this region witnessed a pattern that has generally been observed throughout most of Ancient Gaul. However, rather than simply characterizing this sudden absence of archaeological evidence for both the 4th and 3rd c. BC as a clear sign of a population collapse, the conclusions from this study would appear to suggest a radical shift in settlement patterns which may well have been characterized by an early form of nucleation in favour of small hill forts in the upland. Nevertheless, despite the attraction of such a model of development, due to the lack of archaeological surveys and excavations on most of the discovered hill forts, the remarkable results of the Châtelard-de-Lijay should be taken with care. On the other hand, the Late La Tène evidence has produced fascinating results as there was no sign of a clear settlement disruption. It would be tempting to establish a possible parallel between some of the well-known landscape trajectories of *oppida* for both in the lowland and the upland, the La Tène D1/D2 transition appears to have been a major transition which witnessed a significant rise of settlement numbers in what appears to have been a previously uninhabited landscape. In order to determine the potential significance of this period of transition on the overall trajectory of the Upper Loire Valley it was essential to approach the issue of trajectory for the proto-urban centres themselves as it a dichotomy between the rural and urban landscapes would be at odds with our understanding of Late Iron Age society.

Chapter 8

The impact of the urban trajectories of the Segusiavi for our overall understanding of Late Iron Age urbanism in Gaul

The primary aim of this study was to assess the Upper Loire Valley's potential when attempting to go beyond the traditional urbanization model. These theoretical interpretations were primarily based on a very typological conception of urban space because of apparent dichotomies both on a chronological and a morphological level (Chapter 1). As previously discussed in more detail, the lack of fortifications have therefore traditionally led archaeologists to argue that open settlements could not have experienced a level of planning comparable to that of the *oppida* but rather grew organically. The Levroux model then further contributed to essentially characterize the nature of the relationship between *oppida* and open settlements as hierarchical in mainland Europe. The detailed assessment of both the ancient settlement of Rodumna and the incredible stability of its rural hinterland highlighted the various potential issues linked with this traditional view of the Late La Tène urbanization process. However, in order to determine whether or not Rodumna should be considered as the sole exception, the phenomenon of open settlement has to be approached from a much wider perspective in order to propose an alternative pattern. Similarly, the significance of the La Tène D1/D2 transition and the issue of trajectory for the various other proto-urban centres of the region will need to be assessed and put into perspective in order to attempt to both assess the relationship between these centres and their hinterland and to evaluate the fluid character of Late Iron Age urbanism. This chapter will consequently attempt to both evaluate the various ways proto-urbanism has recently been approached and to provide some elements of reflection in an attempt to move the debate forward from binary and conflicting models.

The issue of open settlements: urban centres?

Urban planning has become an essential characteristic in the current definition of *oppida* and is often used to support the description of them as urban in nature. The first site that enabled to question the general understanding of Late Iron Age urbanism was Acy-Romance. This was due to the extensive geophysical surveys which allowed a complete spatial understanding of the site. The discovery of four different squares, a clear division of space with specific areas dedicated to religious, collective, metal working or farming activities had major repercussions and for the first time scholars started to question the organic model of development for a significant degree of pre-planning clearly transpired from the elaborate division of space encountered in this settlement of the Aisne Valley (Fichtl 2005:172-5 and Fig. 70).

The reinterpretation of Roanne's Late Iron Age occupation in the light of new material has contributed to further highlighting the issues of undertaking a rigid typological approach when attempting to characterize early proto-urban forms in Late Iron Age Gaul. The early phases of occupation of Rodumna (La Tène C2) were clearly associated with a street network, whilst the dramatic change of orientation in the overall layout of the settlement – further highlighted by the presence of a levelling layer and the destruction of the old sanctuary site for a new rectangular ditched-enclosure in the west of the settlement – in the La Tène D1/D2 transition paints a vivid picture of a major settlement re-organisation. The nature of urban archaeology has often led archaeologists to be cautious not to extrapolate when confronted to such issues, in that respect the sites of Levroux, Saint-Gence or Quimper despite all potentially showing similar signs of an internal organization have never truly featured in the various discussions related to urban design (Buchsenschutz *et al.* 2000; Lintz 2009; Buchsenschutz 2012; Fichtl 2013). However, the very recent and ongoing investigations of the open settlement of Nanterre (20-25ha) – which emerged in La Tène C2, experienced its heyday in La Tène D1 and was abandoned in the Augustan period – may yet again contribute to add further complexity when discussing urban planning before the emergence of *oppida*. Despite the lack of a total spatial understanding of the site, due to the urban development of suburban Paris, Aristide Viand was able to uncover enough evidence to conclude that the settlement was clearly divided in very distinct districts which would have in effect separated the metal working activity from the butcher's shops or the residential quarters from the areas dedicated to collective use (Viand 2008). The settlement itself was divided by an orthogonal street layout which remained largely unchanged after the Roman conquest thus perhaps signifying once again that the real period of transition for some of these sites was an Iron Age phenomenon rather than a result of external cultural forces. In that respect, the recent excavations in the Gandaillat sector, in addition to revealing the existence of a very significant street (3m wide), have further contributed to show that, at least part of the vast La Tène C settlement of Aulnat was also meticulously organised in regular

rectangular housing lots (Deberge *et al.* 2007; Fichtl 2013). The rise of urban archaeology in France will most probably continue to reveal a far more complex picture of this important period of transition and the evidence from Roanne must therefore be placed in a much wider network of sites which may have been founded with a clear purpose which itself may partly have been reflected in their urban design.

It is also interesting to note that, when one incorporates evidence from beyond Gaul, it becomes particularly apparent that the presence of a certain degree of sophistication, in regards to urban planning and internal specialisation of space, was potentially not an exception but a real feature of open settlements. The geophysical surveys of Roseldorf and Němčice confirmed the existence of densely populated and large settlements (up to 50ha) in the lowland of Central Europe but most importantly they revealed a well organised internal occupation (Salač 2012: 327-8). In addition to, again, the existence of distinct districts, the presence of palisades in Roseldorf may indicate yet another degree of urban planning (Fig. 71). Rather than being internal structures delimiting social space within the settlement, they clearly delimited what constituted urban space from the rural world. The occupation of the site being relatively widespread (La Tène B2/C2), the erection of an enclosure may not have been part of the initial foundation of the site but may well have been included at a later stage of development and only excavations will be able to determine this chronological sequence. The lack of a *murus gallicus* or any other significant fortifications has led such sites to be defined as open settlements but these recent geophysical surveys reveal a far more complex picture (Holzer 2009). In the light of such discoveries, should the presence of ditches and palisades in Nanterre (Viand 2008) and Saint-Gence (Lintz 2009:158) or the presence of a very significant ditch in the early phases of Gandaillat (Deberge *et al.* 2007: 283) also potentially lead to similar conclusions? Should the term 'open settlement' therefore be abandoned? It would be tempting to fully exploit the potential for the presence of a real limit in some of those sites when attempting to dispute the negative impact of viewing the relationship between the *oppida* and these agglomerations within a simplistic hierarchical perspective due to their lack of fortifications. However, doing so would perhaps be as equally problematic as it would lead to yet another typological interpretation which would overlook the issue of the function of those sites for in many agglomerations no traces of palisades, or any other physical boundary, were found.

Similarly, the site of Manching in Germany may further contribute to show the complexity of the phenomenon. The settlement has often simply been characterized as an *oppidum* because of its *murus gallicus*, but the erection of fortifications was a later development, thus making Manching an open settlement before La Tène D1. Yet, this did not prevent parts of this settlement to witness a much more dramatic internal organization of space, in a physical sense, before the erection of

fortifications. Organised in vast rectangular enclosures (up to 1ha), which probably reflected households rather than larger social units (Fig. 72), and delimited by palisades accompanied by 'porticos', the physical manifestation of the internal division of space was far more spectacular than in most of the other open settlements discovered to this day. The fact that these enclosures were remarkably similar potentially highlights a very high level of standardization and a very complex shared process of inhabiting space. These enclosures have traditionally been interpreted as the residence of aristocrats for they both reflected the architecture of the *aedeficia* and found parallels in the later *oppida* (e.g. Hrazany, Variscourt/ Condé-sur-Suippe or Villeneuve-Saint-Germain – Fichtl 2005:99). If this was truly be the case, it would provide further evidence that open settlements were not solely a collection of craftsmen but an urban space that, in some regions, was also occupied by at least part of the local élite.

This particular issue has usually been intrinsically linked with the presence of sanctuaries or areas dedicated to collective use. As previously discussed, Olivier Buchsenschutz famously refused to acknowledge the existence of such features in open settlements; however this view has recently started to be disputed both in Central Europe (Salač 2012) and in Gaul itself (Fichtl 2013). Interpreting the two rectangular-ditched enclosures found in Roanne as potential sanctuaries should not be regarded as controversial but rather confirm the potential of these sites to have such features. In that respect again Acy-Romance, Roseldorf and Manching all provided spectacular examples of sanctuaries and contributed to this change of approach (Fig. 73). This reinterpretation of the archaeological record in Roanne, therefore, simply reinforces the need to associate open settlements with such practices. On the other hand, comparing both the plans and the trajectories of Roanne's sanctuaries with the other well- known examples reveals interesting parallels and contrasts.

In this study it was argued that those rectangular ditched-enclosures should be re-interpreted as sanctuaries both because of the presence of exceptional structured deposits, which could easily be compared to other well-known sanctuary sites, but also because of clear similarities on a typological level. It is therefore not surprising to see clear typological parallels between the evidence found in Roanne and the sanctuaries found in Roseldorf or Manching for even the presence of a central pit is attested in Roseldorf. However, interestingly most sanctuaries from central Europe showed clear signs of continuity with clear evidence of multiple phases. The situation in Late Iron Age Rodumna appears to have been radically different. The abandonment of the first enclosure dedicated to collective use for the new one recently found under the modern hospital may therefore reflect a completely different process. Some of these sanctuaries usually predated the settlements: at Acy-Romance it is increasingly becoming apparent that it was the presence of multiple sanctuaries, and

their associated open area dedicated to collective use, which heavily influenced the organization of the settlement (Lambot 2000). A similar pattern also appears to have taken place in some *oppida* (e.g. Corent – Poux 2012) and it has even been argued that it was their presence that may have led to the choice of location for the new settlement. Interestingly it has been shown that the sanctuaries in Roanne were both erected after the emergence of the open settlement and that the sanctuaries emerged as a consequence of an orchestrated re-planning of the urban structure, rather than the opposite. Could this factor perhaps explain this peculiar trajectory and the lack of continuity? This potentially has strong repercussions in the way one should characterize the symbolic nature of urban space. Rather than identifying the landscape within which the settlement emerged as already sacred, the urban phenomenon itself may have participated in the creation of symbolic space. The evidence from Rodumna therefore validates the need to recognise this significant dimension of open settlements and further highlights the difficulty of identifying one standardised pattern of development.

This recognition of the presence of potential spatial organisation and the existence of specific areas dedicated to collective use or even ritual purposes led Stephan Fichtl to recently reject the old paradigm:

> « *La principale différence entre ces agglomérations et les* oppida *est, à l'heure actuelle, la présence ou l'absence d'une véritable fortification de type* murus gallicus *ou rempart à poteaux frontaux. Les autres caractéristiques ont toutes, à des niveaux divers, été identifiées sur ces sites* » (Fichtl 2013)

However, despite these conclusions the old typological paradigm is not fully abandoned. To the typological classification of sites is added a more functional criteria usually linked with the artisanal nature of such settlements. It also appears that despite recognising the very significant similarities between these agglomerations and the *oppida* the primary issue of the presence or absence of fortifications continues to play a significant role when attempting to characterize their differences:

> « *Quelle différence existe-t-il alors entre agglomérations et* oppida*? Elle se situe sans doute au niveau de leur création. L'*oppidum *est un site « fondé » rituellement, au sens antique du terme, avec la fondation d'un sanctuaire et sans doute d'une limite rituelle, à l'image du* pomerium *étrusco-romain, monumentalisé par le rempart. L'*oppidum *n'est donc pas une simple agglomération munie d'un rempart, mais il possède en plus un rôle déterminant, politique et religieux. Les agglomérations ouvertes, à l'inverse, sont avant tout des centres économiques. Leur situation géographique, à proximité d'axes fluviaux ou terrestres, est d'ailleurs bien souvent meilleure que celle des* oppida *perchés en montagne* » (Fichtl 2013)

In order to measure the benefits and issues linked to this approach and most importantly assess the potential need to see beyond that original typological dichotomy, it was important to re-evaluate the different trajectories of the Upper Loire Valley as a whole for if both *oppida* and open settlements appeared to have co-existed their respective trajectories were far from being linear.

Settlement dynamics: Roanne, Feurs, Goincet and the Gorges of the Loire

The presence of four significant open settlements and three *oppida* in the upper valley of the Loire offered a significant platform when attempting to understand the nature of open settlements or to define their relationships with *oppida*. For the last ten years Roanne has therefore been a significant component of the debate over open settlements and has primarily been used as a counter example to the Levroux model (Collis *et al*. 2000: 75; Fichtl 2005a, 174-7, Kaenel 2006, 31). A continuous occupation from La Tène C2 to the first and second century AD is now well established (Lavendhomme and Guichard 1997, 48). The lack of a clear hiatus always clearly indicated that the emergence of the nearby *oppidum* of Joeuvres did not have any major impact on the trajectory of the open settlement and the results from the landscape analysis of the Plaine du Roannais clearly supported this interpretation. Rodumna's immediate 'hinterland' far from suffering from the rise of Joeuvres was potentially reorganised on a major scale with field systems which in time may find parallels to those already discovered in the Arverni territory (Trément 2012). However, should Roanne really be considered as an objective representation of an open settlement's trajectory even if only on a regional scale?

The southern settlement of Feurs, by contrast, provides evidence of a rapid decline around the second quarter of the first century BC, reflected in the near total absence of La Tène D2 material (Vaginay and Guichard 1988; Collis *et al.* 2000: 75). Roanne has, therefore, contributed to show the issues associated with the Levroux model but the settlement of Feurs, potentially located within the same socio-political landscape, did not appear to have followed a similar trajectory. This decline coincided, chronologically at least, with the rise of the nearby *oppidum* of Le-Crêt-Châtelard (Vaginay 1986; Lavendhomme 1997a, 208-9). The hiatus during this period has been interpreted as a consequence of *oppida* emergence (Collis *et al*. 2000: 81; Collis 2012: 5), thus seemingly reinforcing the accepted model.

However, a closer study of the rural landscape shows that there was no significant disruption of the settlement pattern in the Plaine du Forez but rather an increase of rural settlements in the lowland in La Tène D1/D2 (Lavendhomme 1997; Kurzaj 2012). If the settlement was abandoned and Le-Crêt-Châtelard had become the new economic centre, one would expect to see some disruption in the trajectory of this rural landscape in order to validate the theory of a population move. Interestingly, this study has shown that Late La Tène rural settlements have yet to be identified around Le-Crêt-Châtelard despite various field walking projects and ample evidence of occupation in the area from the first and second centuries AD. It therefore appears that the only evidence that would support the Levroux model in the southern part of the Segusiavi territory is a chronological parallel shared by both sites for all the other characteristics appear to be missing. It is also worth noting the relatively important distance between Le-Crêt-Châtelard and Feurs (18km). Other landscape studies have shown that distance did not necessarily have any impact, the distance between Autun and Bibracte (35km) is a good example in that respect (Woolf 1998: 113), but it could be argued that attempting to explain the decline of Feurs simply from the angle of *oppida* emergence ultimately results from the potential bias of following a somewhat rigid model. The Levroux model, in addition to not taking into account local events which could have led to a slow abandonment of settlements and resulted to a dispersion rather than a major population move, fails to recognise the potential attraction of other open settlements as economic and political centres for they were precisely the sites that were seen to automatically decline.

The open settlement of Goincet was located on the left bank of the Loire, immediately opposite Feurs (5km), and also emerged in La Tène C2. However, there is no evidence of a Late Iron Age hiatus or decline for this settlement, despite the contemporary emergence of Le-Crêt-Châtelard (Peyvel and Pionnier 1975; Vaginay and Valette 1982; Lavendhomme 1997). In addition to the proximity of both sites, the evidence from the sanctuary excavated at Cleppé, located between Feurs and Goincet heavily suggests that both settlements may have formed one socio-cultural landscape as it seems to have played the role of a meeting place when both sites were in use (Poux 2004, 523-4). Interestingly, the sanctuary quickly went out of use in La Tène D2b, precisely when Feurs was abandoned. It is tempting to suggest a strong correlation between the trajectories of both sites for it would reinforce the idea that Feurs did not emerge on its own but was part of a very sophisticated socio-political landscape that was not only urban but very fluid. Therefore, if the emergence of Le-Crêt-Châtelard had a major impact on the trajectory of Feurs, it would seem logical that it should have had a similar effect on Goincet. Due to its uninterrupted occupation, the potential rise of Goincet, in addition to possible settlement dispersion, should therefore also perhaps feature in the discussion over the possible reason for Feurs' decline in La Tène D2. Explaining this decline solely in

relation to the emergence of Le-Crêt-Châtelard is in danger of assuming that only hill-top, enclosed sites were responsible for the disruption of local settlement patterns (Fig. 74).

The discovery of a large cemetery of La Tène D2 date at Feurs, although only partially excavated (Valette 1999, 80-2), adds further complexity to this phenomenon. This discovery has usually been associated with the potential for sporadic activity in the vicinity (Collis *et al.* 2000: 75), because of the assumed pragmatic nature of Late Iron Age behaviour in relation to burial. But the size of the cemetery and the exceptional and highly visible character of some of the monumentalised burial enclosures potentially weaken such an argument. If the site was only partially occupied and on the decline, how could one really explain the exceptional nature of these remains that only appears to have emerged when the activity of the site was declining? It would thus be tempting to suggest that, despite the probable abandonment of the settlement, the site appears to have retained a symbolic status for a displaced or dispersed population who seemed to have wished to continue to be associated with their previous home in death, if not in life. The symbolic significance of a previously occupied urban landscape must be taken into account when attempting to explain this type of behaviour, far from being pragmatic social groups, the archaeological record clearly showed that Late Iron Age society did not solely react rationally as a group but was prone to decisions where symbolic behaviour prevailed over reason. The emergence of the *oppida* themselves provides a very good example in that respect, for, as Stephan Fichtl has clearly shown, the choice of location was not influenced by economic reasons but by cultural and religious ones as highlighted by the presence of early sanctuaries that predated their emergence. Sites such as Mont-Beuvray or Corent may have already played a considerable role in La Tène C, albeit a religious one, in regards to the emergence of a more unified social and cultural unit explaining their later symbolic significance. Due to the lack of evidence, the potential for such behaviour in relation to death therefore has to be considered. If this was to truly be the case, only a population that continued to live locally (e.g. Goincet) would have been responsible for the emergence of this cemetery, for this behaviour seems unlikely to have been related to the potential populace at the *oppidum* considering the significant distance and difficult terrain between the two sites making it impossible to undertake the journey and the ceremony in a single day.

When Feurs became the *civitas*, the capital of the Segusiavi, in the Late Augustan period, Goincet was rapidly abandoned whilst Le-Crêt-Châtelard continued to witness activity, despite a relative decline (Peyvel and Pionnier 1974; Dumoulin 2008, 125-131). No clear relationship can, therefore, be established between Feurs and Le-Crêt-Châtelard, whereas it seems apparent that the trajectories of both Feurs and Goincet were intrinsically linked. Despite a few recent developer-funded investigation projects at Poncins, the data set, however, remains insufficient to establish the trajectory of the

settlement as a whole, despite evidence which points towards an increase of activity in La Tène D2 (Jacquet *et al*. 2006, 73-5). The tendency to focus only on the fortified sites is thus in danger of continuing to undermine our ability to understand settlement dynamics as a whole.

By comparison, analysis of the chronological sequence of settlements within in the Auvergne indicates that the status, and the trajectories, of the various settlements also changed over time and that this may have had more to do with regional political developments than an evolutionary process related to their morphological differences (Poux 2012, 249-270 and Fig.75 and 76). The settlement dynamic of this part of the Auvergne witnessed a similar pattern of relocation in La Tène D2 to that of the Plaine du Forez, despite the significant differences in settlement form between the two regions. The significant rupture of the settlement dynamic in Feurs may, therefore, also be a reflection of internal social and political dynamics, rather than the consequence of a natural process of urbanisation.

The importance of localised political changes in influencing the trajectories of regional settlement patterns may be supported by evidence from Classical sources. A passage from Pliny and a Roman milestone inscription confirm that the *Segusiavi* held the status of *civitas libera* (most probably due to the key position of this particular region in relation to trade networks) something awarded to only fourteen of the sixty, known, Iron Age social entities (Valette 1999, 25). The choice of location for the new *Segusiavi* capital would, therefore, have been of a particular significance in the establishment of Roman rule under the Augustan administration. Regarding the choice of a lowland location for this new capital as merely driven by conceptions of classical Roman urbanism (*e.g.* Vitruvius, *De Architectura* 1.4-7) potentially underestimates the social and political realities of this crucial period of transition. It is worth noting that the classical texts indicate this period was one of potential significant turbulence (Tacitus, *Annals* III.40-46; Woolf 1998, 21); forming a strong alliance with the communities in power would have been essential to keep the order of the *Pax Romana*. A very common practice to ensure the allegiance of the local leaders was to either strengthen an existing alliance or to place a different faction in power that would have everything to lose in rebelling. Knowing that the *Segusiavi* participated in the rebellion of 52BC alongside the *Aedui* (Caesar *De Bello Gallico* VI.64.4 and VII.75.2), the decision of the Roman authorities to relocate the social-centre to Feurs may indicate the possible return of a powerful household or community to the detriment of the new order that took over in La Tène D2. The settlement at Feurs would have remained strong in living memory making a powerful statement about the changing political order. If such a possibility has to remain hypothetical, the potential for the existence of such processes related to the rise or fall of different factions should be factored in to the way we understand ruptures in settlement dynamics.

The evidence from Roanne, despite continued occupation, reinforces this possibility of settlement changes as the consequences of localised political processes rather than a broader progress towards centralization. The rescue excavations in the 1970s and 1980s of the north-eastern part of the unenclosed settlement, by revealing the presence of relatively thick (0.2m) levelling layer in three different sectors (Lavendhomme and Guichard 1997, 40-41), provided evidence for a clear chronological break and a rapid reorganisation of both the orientation and the nature of the occupation in the La Tène D1/ D2 transition (80/70 BC).

As it has already been mentioned in length in previous chapters, in order to determine the implications of such a rupture it was necessary to reinterpret the potential collective nature of the activity both at the Chantier Saint Paul and at the modern Hospital. The collective use of this area had been hinted at (Lavendhomme and Guichard 1997, 63-5, 183, 190), but no clear characterization regarding the nature of activity occurring within this enclosure was formally given. The finds from this area included multiple bovine skulls; a significant assemblage of Dressel 1 amphorae; disarticulated human remains with cut marks; the remains of a bronze cauldron or a deliberately broken *umbo*; alongside a large ceramic assemblage, mainly dedicated to drinking and collective feasting. Combined, this suggested that activities other than the 'domestic' may have taken place here. Mathieu Poux has stressed the need to be cautious when attempting to distinguish between collective/private and ritual/profane activity areas and the danger of falling into simplistic dichotomies (Poux 2004, 148). And the close presence of domestic activity near this ditched enclosure had perhaps led to the overlooking of its alternative role, despite the fact it was morphologically comparable to sanctuaries elsewhere, such as those at Saumeray or Bennecourt (Hamon *et al*. 2002; Bourgeois 1999). It was therefore argued that the abandonment of this potentially sacred space and the re-orientation of houses and streets in this particular district should be regarded as a significantly symbolically charged act, rather than the natural consequence of urban evolution.

The importance of this rupture became even more particularly evident when incorporating the very recent discovery of another rectangular ditched enclosure adjacent to an Augustan *fanum* at the eastern end of the settlement. However, what was potentially most significant was the chronological sequence of this enclosure for it emerged in early La Tène D2 before being abandoned for the new *fanum* in the Augustan period (Bocquet 2005). The eastern sanctuary was therefore erected when the western one was abandoned. This raised significant questions as it is often argued that the sacred nature of the space associated with such structures led to their long periods of use. If this was the case, to abandon or erect a sanctuary would have required a strong central authority which also enabled the reorientation of streets and houses and implies profound changes in the ruling élite.

When incorporating the abandonment of some of the *aedeficia,* the rapid re-organisation of the Roanne landscape in field systems or the sudden rise of rural settlements in the lowland, the evidence across this region, therefore, appears to point towards a radical shift in the La Tène D1/D2 transition. Whether it was social, political or religious, it profoundly changed settlement dynamics and urban planning. These major disruptions were not, however, expressed in a uniform manner but, in this region at least, differed depending on the locality. The phenomenon of *oppida* emergence appears to have had no direct consequences on the trajectory of the open settlements, yet these agglomerations also dramatically evolved around the same period. The origin of social and political change may be rooted in similar patterns but could be articulated in very different ways, resulting in different consequences. Rather than approaching the issue from an urbanisation perspective, it may be more productive to work in the context of social processes. Rather than seeing *oppida* as the catalyst for change, it may be wiser to focus on the broader social processes which drove these developments, with *oppida* (or enclosure) merely a particular tool in the hands of communities or socio-political factions.

This may be particularly relevant if future archaeological investigations on Le-Crêt-Châtelard were to confirm the absence of a structured occupation before the Roman conquest. This would imply that the foundation of such sites may not have entirely been tied with an urban design but may have been the result of a far more complex process in which symbolic behaviour may have played a far deeper role than previously expected. Because of the sheer amount of both human and material resources that had to be invested, the emergence of these sites should not be undermined because of a data set that would appear to contradict our previous conception of urbanism. Their symbolic significance in the landscape has to be acknowledged. However, approaching their emergence solely from an urbanism perspective may restrict our understanding of this peculiar phenomenon. In that respect, the theoretical framework that resulted from years of research on the territorial *oppida* of Britain may provide a very good alternative approach. Greg Woolf (1993) summarised this growing theoretical shift when promoting the concept of a dispersed urbanism and arguing that debating whether particular types of *oppida* qualify as urban was probably the wrong approach because of our Classical understanding of this phenomenon. The evidence from St Albans, Colchester and more recently Bagendon, have shown the potential for undertaking a very different method when attempting to characterize these sites (Haselgrove 2000; Moore 2012). Rather than simply approaching the issue from a typological perspective, whether it be based on morphological or functional criteria, recognising the polyfocal nature of both the sites and the landscapes they form has enabled to go beyond the simple dichotomy of the presence or absence of urban characteristics.

Recognising the different ways in which social power could be expressed by encompassing both enclosed and unenclosed sites has enabled the revival of a debate that was in danger of becoming sterile. If Le-Crêt-Châtelard was to be defined as a polyfocal complex, rather than simply as an urban centre, it would enable a wider understanding of both its nature and function. Its liminal position in the landscape should not necessarily be considered as a sign of exclusion but rather as potential meeting place between the communities of the lowland and the upland. If the apparent focus on structured deposition and the symbolic nature of the site was to be confirmed, it would suggest that, like some of the British sites or landscapes, it served to manage interaction between groups and foster senses of communal identity on a potentially regional scale. Therefore, even if the *oppida* of Joeuvres and Le-Crêt-Châtelard may not have witnessed comparable levels of occupation, for the activity at Le-Crêt-Châtelard appears to only have been seasonal, their wider significance in the Late Iron Age landscape may still have been equally important. The role of such complexes may not have solely been about the expressing of power by one individual or social group but also about the managing of power and status between communities as larger social groups formed (Moore 2012: 413). The landscape analysis revealed the rapid emergence of a large population due to both internal and external factors. The possibility that these sites may well have participated in a process of ethnogenesis as power was articulated and reworked by newly emergent groups is thus high. These sites should, however, be integrated within a larger network which must incorporate open settlements and isolated sanctuaries. This would enable to finally move beyond our modern dichotomy and offer a radically different perspective on the rise of complex social forms that ultimately resulted in the emergence of proto-urbanism in the Late Iron Age.

The trajectory of the Segusiavi territory in its wider context

This study nevertheless has showed the crucial need to analyse trajectories on a regional, if not a micro-regional, scale. Fluidity appears to have been the norm for polyfocal complexes whereas the rural occupation appears to have been relatively stable in contrast. These, sometimes dramatic changes did not appear to follow an objective evolutionary development but rather reflected deep social change within both small and large communities. This particular landscape should not, however, be seen as an exception but may rather provide a platform to understand other trajectories in Gaul. The excellent synthesis of Pierre Nouvel and Philippe Barral has showed a great degree of

regional variation when studying the various trajectories of urban development in Central-Eastern Gaul (2012). The evidence from the micro-regions of Langres and Tonnerre, for example, has shown that the open settlements were not abandoned when the upland and enclosed sites were erected but that, on the contrary, they co-existed for most of the 1st c. BC (Fig. 77 and 78). Whereas in the Yonne valley, in addition to evidence of a clear continuity at the open settlement of Sens, it was the *oppidum* of Villeneuve Château that was abandoned in the mid-1st c. BC (Barral & Nouvel 2012: 146-8). Interestingly the re-assessment of the chronological sequence of both Vesontio (Besançon) and Bibracte, based, however, mainly on the amphorae assemblage (Barral *et al.* 2005; Dhennequin *et al.* 2008: 90 sq.), has also shown that the presence of an occupation in the 2nd c. BC had been exaggerated and that the main emergence of a settled community occurred in La Tène D1b. In addition to confirming the crucial nature of this period of transition for both the Upper Loire Valley and the rest of Gaul, this dating range also corresponds with the erection of the second rampart on Mont Beuvray (90/80 BC). It would thus indicate that the first rampart was not necessarily erected in order to 'ritually' create or found a set urban space but that its construction was rather integrated in a much more complex process. It is hence tempting to draw a parallel between the British evidence of territorial *oppida* – or even the early stages of Le-Crêt-Châtelard – and this particular phase of Bibracte. Evidently the chronological dichotomy between these various phenomena must be recognised, but the similarity of the social processes involved remains remarkable.

No standardized evolution model therefore appears to have existed. Whilst the well-known and peculiar settlements dynamics of the Aedui in the Arroux Valley may potentially reflect a certain degree of nucleation and a settlement dynamic mainly centralised around Mont Beuvray and Sources de l'Yonne (Creighton *et al.* 2008; Nouvel 2012; Moore *et al.* 2013), the trajectories of northern Burgundy – despite the erection of small and ephemeral fortified settlements in the vicinity – provide an interesting parallel to the Upper Loire Valley as the study of the territories of both Sens and Avrolles established that a great continuity characterized the open settlements of the lowland (Barral & Nouvel 2012). The territory usually attributed to the Lingones adds further complexity as its urban network appears to have primarily consisted of *oppida* that, unlike most of the rest of Gaul, did not witness any rupture in the Late Augustan period as these settlements all became important urban centres in the Gallo-Roman period (e.g. Alésia, Langres or Tonnerre). This study of Eastern France therefore clearly reinforces the need to undertake multiple micro-regional analyses in order to fully appreciate the complexity of the urbanization process:« *Elles montrent d'ores et déjà la nécessité d'étudier les processus d'émergence et de transformation des agglomérations dans la longue durée, à des échelles spatiales relativement larges* » (Barral & Nouvel 2012: 160)

Conclusion

Far from being the exception to the rule, the results from the Upper Loire Valley therefore integrate well within recent surveys and legitimize the approach of this study. These results have, however, demonstrated the importance of La Tène D1b/D2a as a period of transition for radical shifts appear in the settlement pattern in that period. But this ruptures materialised in different ways. The emergence of new sites did not necessarily lead to the decline of earlier settlements, whilst even open settlements that would appear to have known continuity, such as Roanne, also experienced a deep re-organisation thus reinforcing the importance of this rupture for Late Iron Age society as a whole. The systematic assessment of regional trajectories may enable a dramatic shift in our theoretical framework for the recognition of regional differences will further show the need to change the way we have traditionally tried to interpret social change in this period and abandon the idea that this radical shift was the result of an expected urbanization process.

"*Il me parait donc vain de définir l'*oppidum *et de chercher un premier moment de la ville***"**

Tarpin (2009:185)

Conclusion

By considering that the Mediterranean cultures, who integrated monumentality precociously, must be the source of the monumentality encountered in the Late Iron Age, has led to the overlooking both the degree of uncertainty around the results of Mediterranean Archaeology and the role of social and cultural needs in the development of this monumentality. By solely focusing on enclosure, archaeologists may have given monumentality more importance than it really had in the society that generated it.

This brief assessment of Late La Tène settlement dynamics has emphasised the diverse histories of open settlements. Evidence from many of these sites implies that they cannot be seen in simple terms either as earlier precursors to enclosed *oppida* or as secondary settlements. Despite the increasing awareness of the greater existence of unenclosed agglomerations and their potentially complex trajectories (seen for example in central-eastern France: Barral and Nouvel 2012), a lack of detailed assessment of some of the new sites uncovered and continued concentration on a handful of examples to support existing models, continues to mean that the place of these sites within broader settlement patterns remains poorly understood.

Close analysis of the settlement dynamics in regions such as that of the *Segusiavi* landscape emphasises both the complex roles unenclosed sites may have had and the significance of their complex sequence of developments. The significant ruptures during the La Tène D1/ D2 transition and the various fluctuations which occurred in lowlands settlements cannot be related purely to the emergence of enclosed *oppida*. By concentrating solely on the process of enclosure, we are in danger of underestimating the complexity of cultural and social changes at this time. The settlement dynamic of the *Segusiavi* potentially reinforces Vladimir Salač's observations on the major unenclosed settlements of Central Europe with a recognition that these could be as economically and socially significant as contemporary enclosed sites. The phenomenon of *oppida* emergence, therefore, may not have always been a process of centralisation but a phenomenon emerging due to very different, regionalised social and cultural processes. Using a framework based on morphological differences may, therefore, prove unhelpful.

Elsewhere, we should be careful not to necessarily dismiss other agglomerations found near enclosed *oppida*, such as Sources des l'Yonne, as mere 'suburbs' (or '*faubourg'*) implying a lesser status to their enclosed partners and predominantly industrial role. In so doing, we are in danger of projecting modern concepts of urban planning which are not necessarily apparent at these complexes. There is little to necessarily suggest a secondary role; instead it may have been complimentary, fulfilling ritual functions or demarcating a separate social group, but one intimately linked to the centre at Bibracte.

These sites are part of a broader recognition of the more complex trajectories for both open agglomerations and enclosed sites from the Late Hallstatt and Late La Tène (*e.g.* Poux 2012; Ralston 2010; Krausse and Fernandez-Gotz 2013). Such developments potentially undermine the implicit model of evolution in settlement forms and indicate that the application of a universal model of Late La Tène urban development (even at a supra-regional scale) is problematic. Like enclosed *oppida*, unenclosed settlements can no longer be regarded as a coherent type of settlements which acted only as precursors to enclosed *oppida* but had a variety of trajectories. This regionality has been widely emphasised in studies of enclosed sites and regional settlement patterns in Britain and was clearly a facet of the Iron Age in France and it should not be regarded as a surprise that the role of *oppida* and their social context was also varied even within relatively local areas of Gaul.

The developments in this case study area were part of broader phases of rupture and re-organisation of settlement across the late second and first century BC (*e.g.* Poux 2012; Barral and Nouvel 2012; Collis *et al.* 2000; Haselgrove and Guichard 2013). Much of this can be regarded less as a sequence of evolution and instead a reaction to localised social changes. Some of these may have related to local political dynamics: the establishment of enclosed *oppida* demonstrating a new ruler or social order. The apparent reorganisation of Roanne might signify something along these lines; Feurs, Goincet, Roanne and Joeuvre may mark a complex network of sites fulfilling complementary functions, operating within the localised dynamics of elite power demonstrated by the shifting of power between unenclosed sites in the Plaine du Forez. Whereas, the large agglomeration at Sources de l'Yonne might contrastingly be seen within Collis' (2012: 2-5) vision of a 'monopolistic' *oppidum*: part of a broader Bibracte complex that served as a major regional and superregional centre which dominated politically, one that was not subject to the same shifting dynamics. Combined, this evidence emphasises a dynamic picture of enclosure and reorganisation of settlement taking place across the Late La Tène, but one which was played out in different ways. This may reflect the fluid political dynamic of Late La Tène society apparent in the classical sources, such as Caesar, and stressed more recently for example in the coinage evidence (*e.g.* Creighton 2000). Rather than stable tribal entities, the settlement record reflects the ebb and flow of power and control over smaller

social groups rising and falling in the turbulent world of the first century BC (cf. Moore 2011). Whether sites like Roanne and some other unenclosed agglomerations held the same status as enclosed *oppida* or not, as Collis (1984) suggested some time ago, understanding the role of both can only be achieved through more systematic assessments of the broader landscape context of these sites.

Any society that is changing into a more hierarchical model that integrates larger social groups needs specific locations in order to function. The use of rigid barriers based on a comparative bias when interpreting remains that most probably simply reflect a social change is thus problematic. The emergence of urbanism should be seen as a manifestation of social processes rather than the opposite. However, this should not stop archaeologists approaching the issue of urbanisation, but rather to change their methodological framework. Patrice Brun and Pascal Ruby rightly pointed out some of the limits of undertaking a purely post-processual approach: "*ce courant est souvent allé trop loin dans son retour de balancier vers une conception de l'évolution sociale à la fois aléatoire, discontinue et fragmentée en une multitude de trajectoires microsociales (…) Il est permis de s'interroger sur l'intérêt d'opter pour l'un de ces deux extrêmes: les déconstructeurs, amis du désordre et de la contingence d'un côté, les classificateurs rigides, adeptes de la permanence et du déterminisme d'une cause unique ou première de l'autre*" (Brun & Ruby 2008: 21). This study did not aim to deconstruct previous models for the sake of declassifying the Late Iron Age, but to provide a more objective picture of this intense period of cultural and social change. In order to go beyond simplistic dichotomies and the issue of terminology, it would wise to follow Michel Vaginay: "*Pour comprendre l'objet ville, le cerner au Second Âge du Fer, il convient donc de remonter de l'objet à sa genèse, de passer de la description – ou de la recherché de compréhension – de l'espace produit à l'analyse de sa production*" (Vaginay 2012: 366).

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Figure 44: Distribution of archaeological sites in relation to Joeuvre

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Figure 52: Joeuvre's Late La Tène Landscape

Figure 53: Joeuvre's landscape in the Early Gallo-Roman period

Figure 54: Aerial photograph of Le-Crêt-Châtelard and the view from the top of the oppidum (courtesy of INRAP - Roanne)

Figure 55: The distribution of archaeological sites around Le-Crêt-Châtelard depicting its relative isolation as only three sites were found within the a 3km radius of the site

Figure 56: The Early Iron Age Landscape of Le-Crêt-Châtelard showing once again a potential twin on the other side of the river (Chazy) and a potentially intense Hallstatt D occupation near Néronde

Figure 57: A Late La Tène Landscape showing activity in the lowland but also in the hills of Néronde where once again a cluster of occupation may have existed

Figure 58: Evidence of continuation in the Early Gallo-Roman period

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Figure 60: Topgraphic plan of Le-Crêt-Châtelard depicting a clear difference between the murus gallicus and the Eastern Earthwork (see cut) (after Vaginay 1989: 56-7)

Figure 61: Topographic comparison of Chazy and Le-Crêt-Châtelard. R- Earthwork; M-excavated segments of the murus gallicus

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Figure 63: The now famous wells of Toulouse with clear evidence of structured deposition and re-use (Poux 2004: 167)

Figure 64: Vincent Durand's drawing of the wooden figurine that may have depicted Cernunos found at the bottom of a well (now lost) (Petiot 1994: 100)

Figure 65: a 19th century misinterpretation? Evidence for a possible temple? Interesting position of Well n°30 (Périchon & Péronnet 1984: 67)

Figure 66: Cluster of Hallstatt occupation in the lowland of the Plaine du Forez reaffirming the spread of occupation for this period in the Segusiavi territory as a whole (Lavendhomme 1997: 38)

Figure 67: The metallic material from the Châtelard de Lijay which perhaps supports the idea of a relatively high status for the site (Beforet et al. 1989: 24)

Figure 68: Distribution maps of Late La Tène activity in the Plaine du Forez depicting an important cluster of occupation around the open settlements of Goincet and Feurs rather than the oppidum of Le-Crêt-Châtelard (Lavendhomme 1997: 43 and 137)

Figure 69: Map of the Southern part of the Segusiavi territory depicting the distribution of Dressel 1 amphorae (Kurzaj 2012: Planche 32)

Figure 70: Map of the open settlement of Acy-Romance and its 3D reconstruction (Fichtl 2005: 172)

Figure 71: Interpretation of the Geophysical results at Roseldorf showing the existence of a palisade around the open settlement (Salač 2012: 327)

Figure 72: Reconstruction of the central zone of Manching depicting isolated housing plots delimited by palisades (Kelten Römer Museum Manching)

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Figure 74: Modellisation of the settlement dynamics of the Southern part of the Segusiavi territory

Figure 75: Settlement dynamics of the Arverni landscape (Dartevelle et al. 2009: Fig 15)

Figure 76: Detailed chronological analysis of the settlement dynamics in the Arverni territory. a- La Tène C2-D1a; b- La Tène D1b; c- La Tène D2a; d- La Tène D2b; e- Augustan (Dartevelle et al. 2009: Fig 16)

Figure 77: Settlement dynamics of Tonnerre and Langres (Barral & Nouvel 2012: 150-4)

Figure 78: Chronological table for the various sites of Burgundy (in black fortified settlements) (Barral & Nouvel 2012: 157)

Figure 1: Joseph Déchelette (Musée de Roanne)

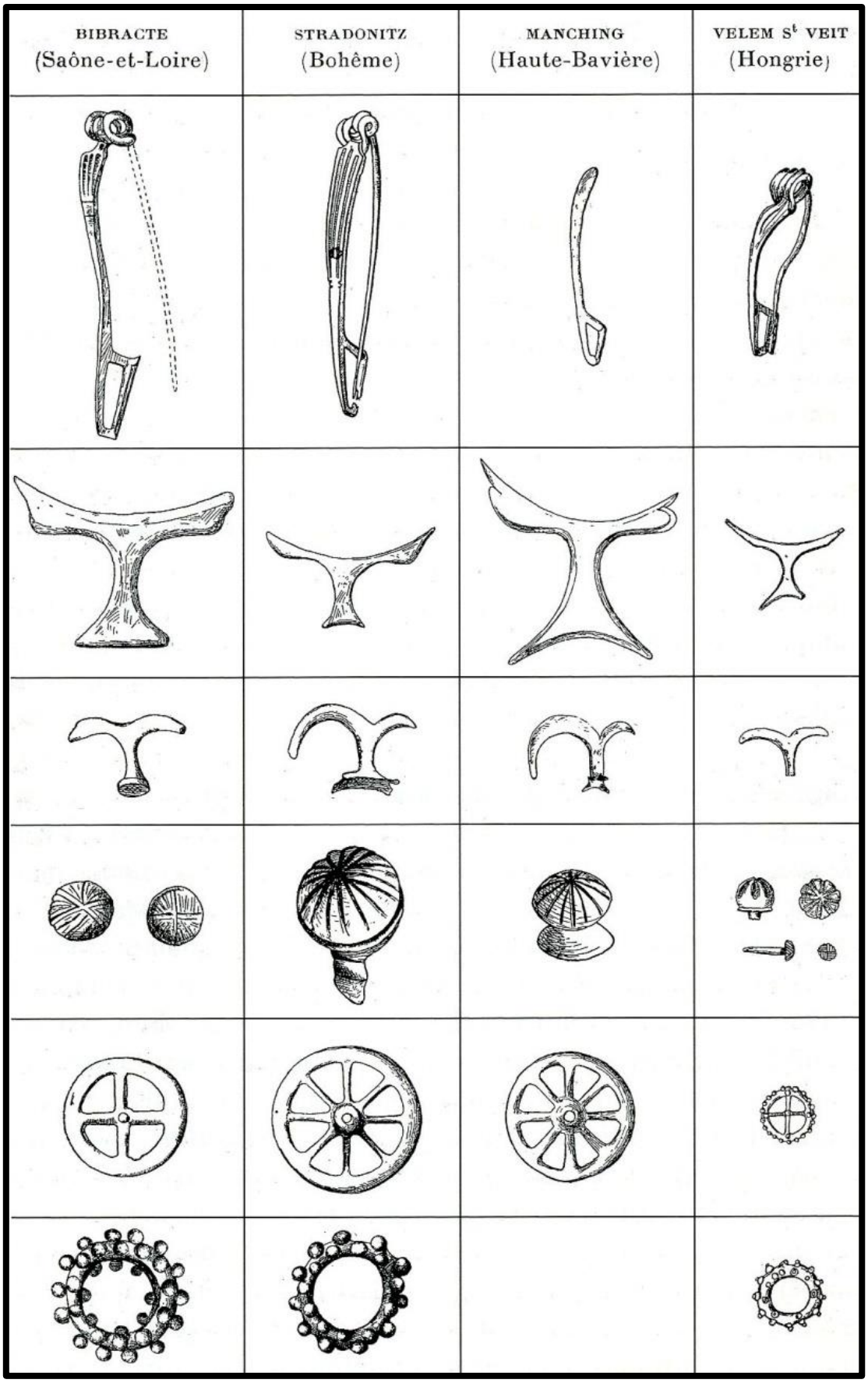


Figure 2: Joseph Déchelette's comparative study of material culture across Europe (Fichtl 2005: 13)

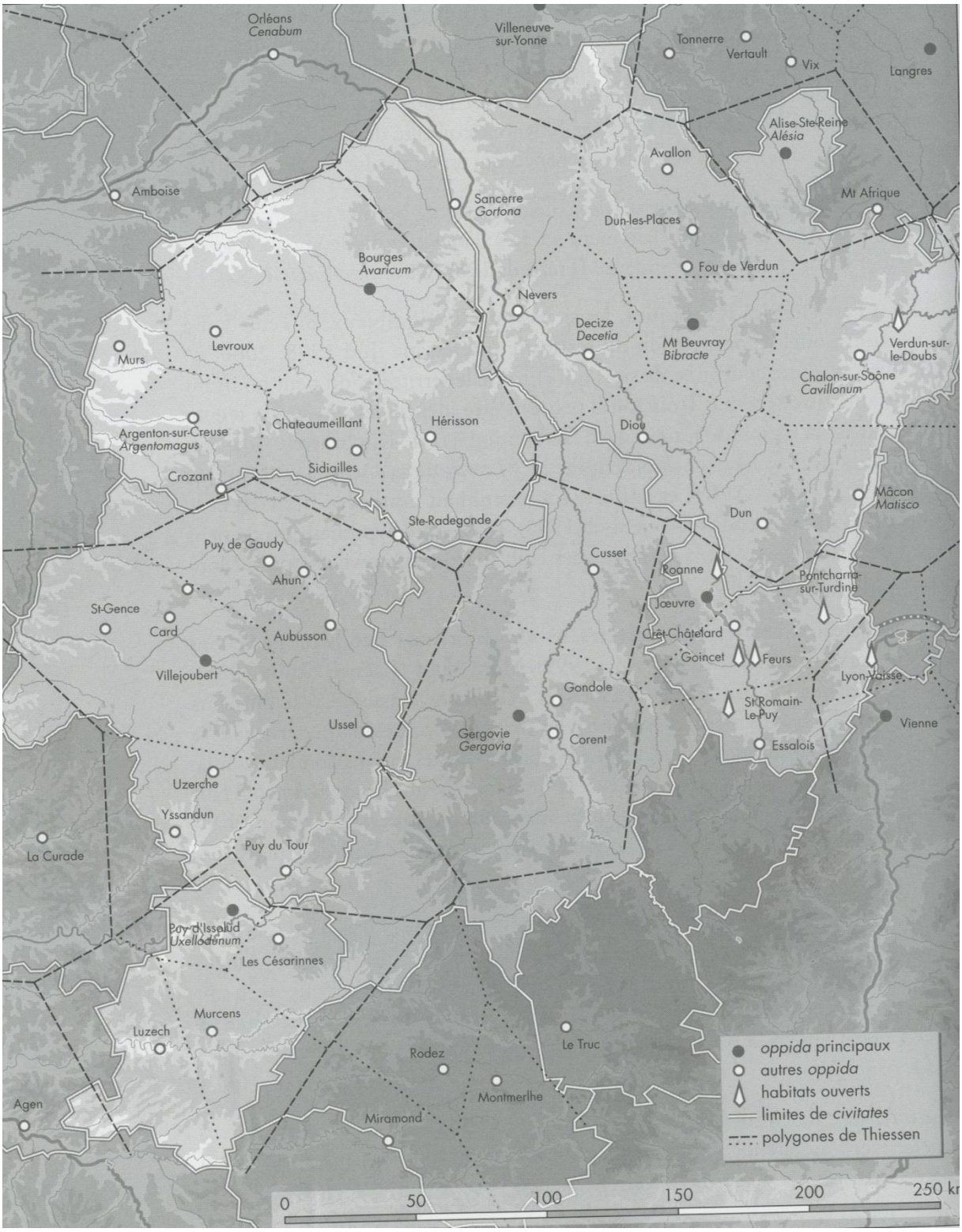


Figure 3: The application of the Thiessen polygons on *oppida*, thus placing these sites at the top of the settlement hierarchy (Fichtl 2004)

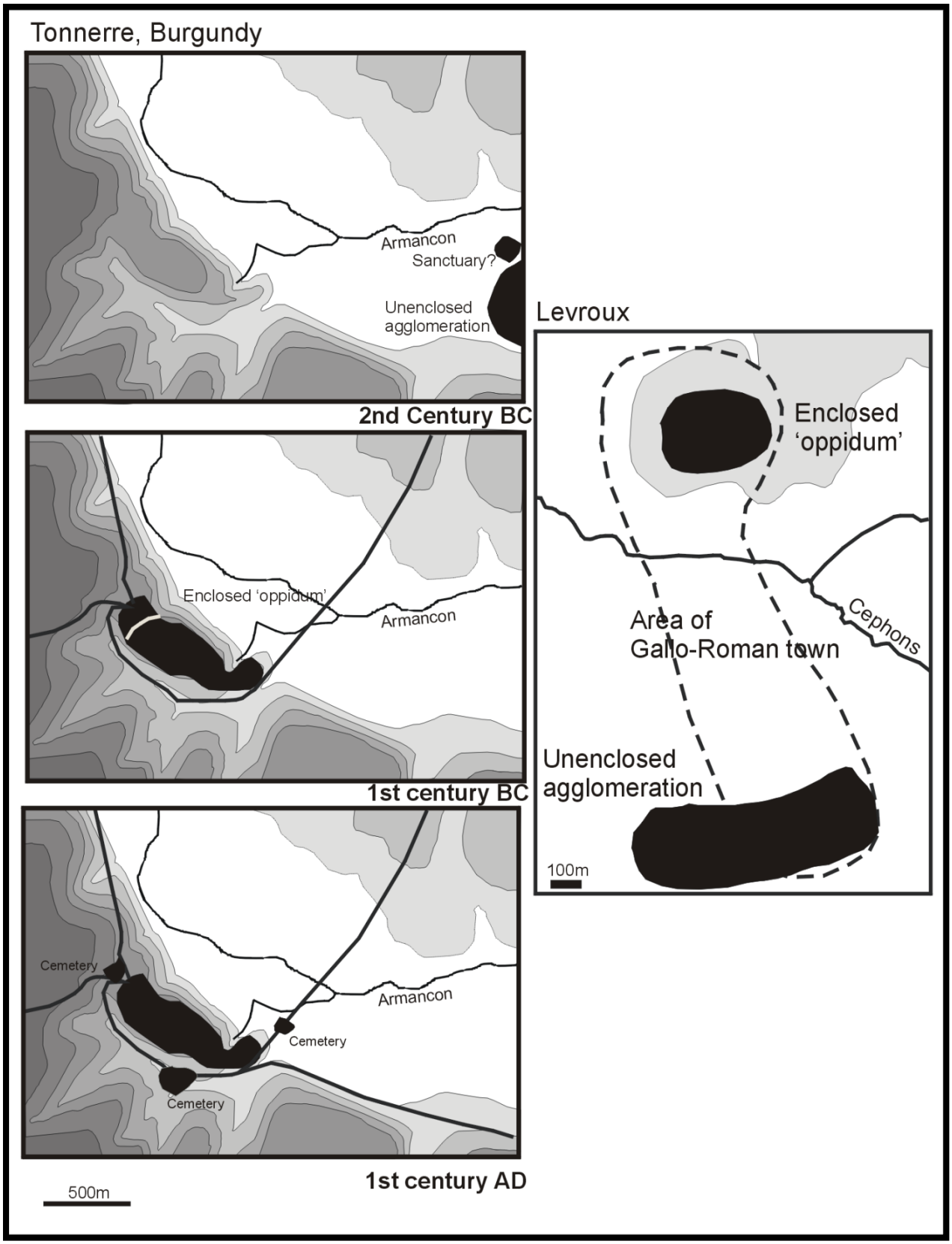


Figure 4: The representation of the Levroux model (move from the lowland to the upland) (Moore et al. 2013)

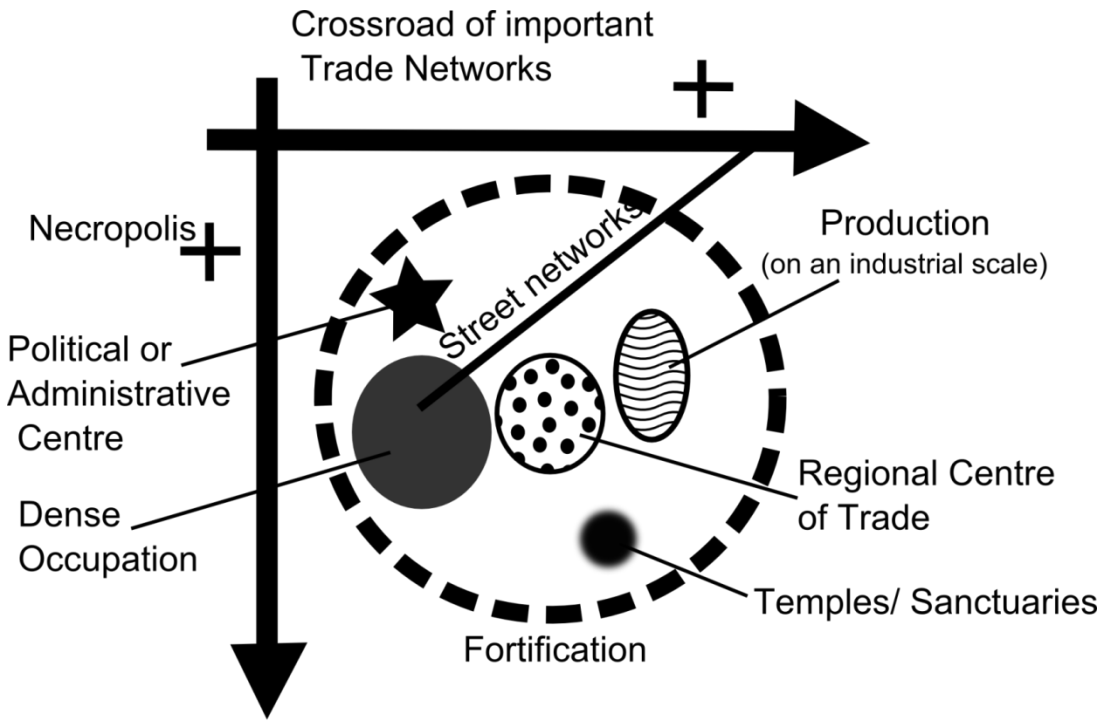


Figure 5: The schematic representation of the primary characteristics an oppidum should have (after Galinié 2009)

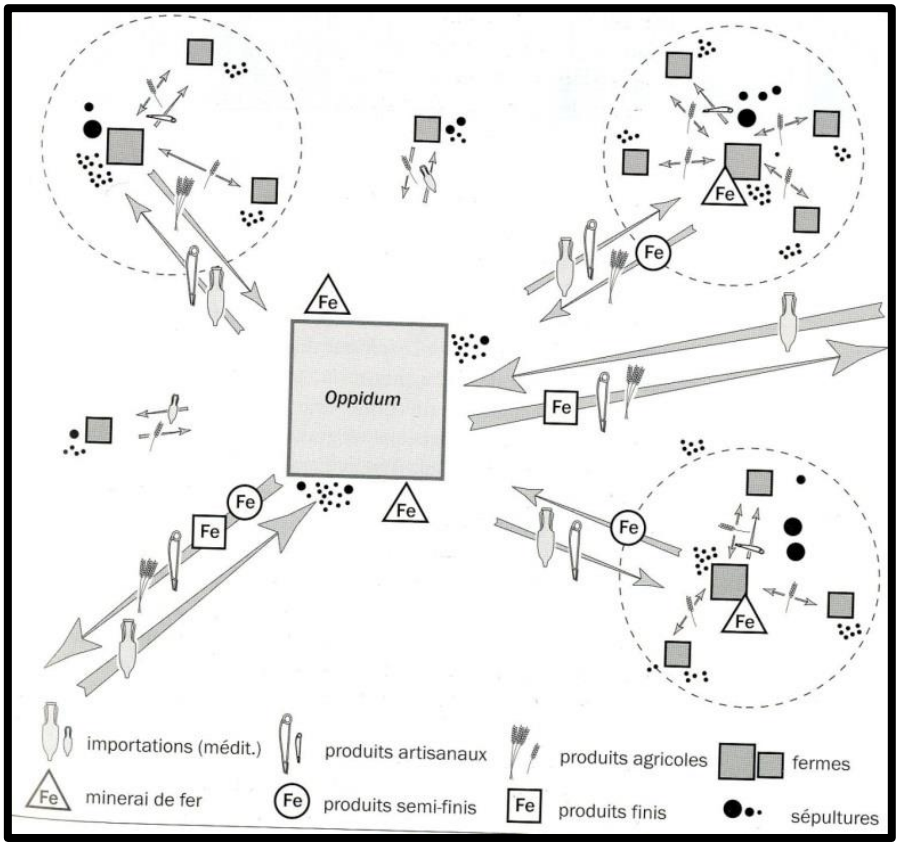


Figure 6: Schematic interpretation of relationships between oppida and their surrounding landscape - note that open settlements are considered as secondary forms of settlements and compared to the oppida which are considered to have witnessed an intense centralisation of trade networks (Fichtl 2005: 179)

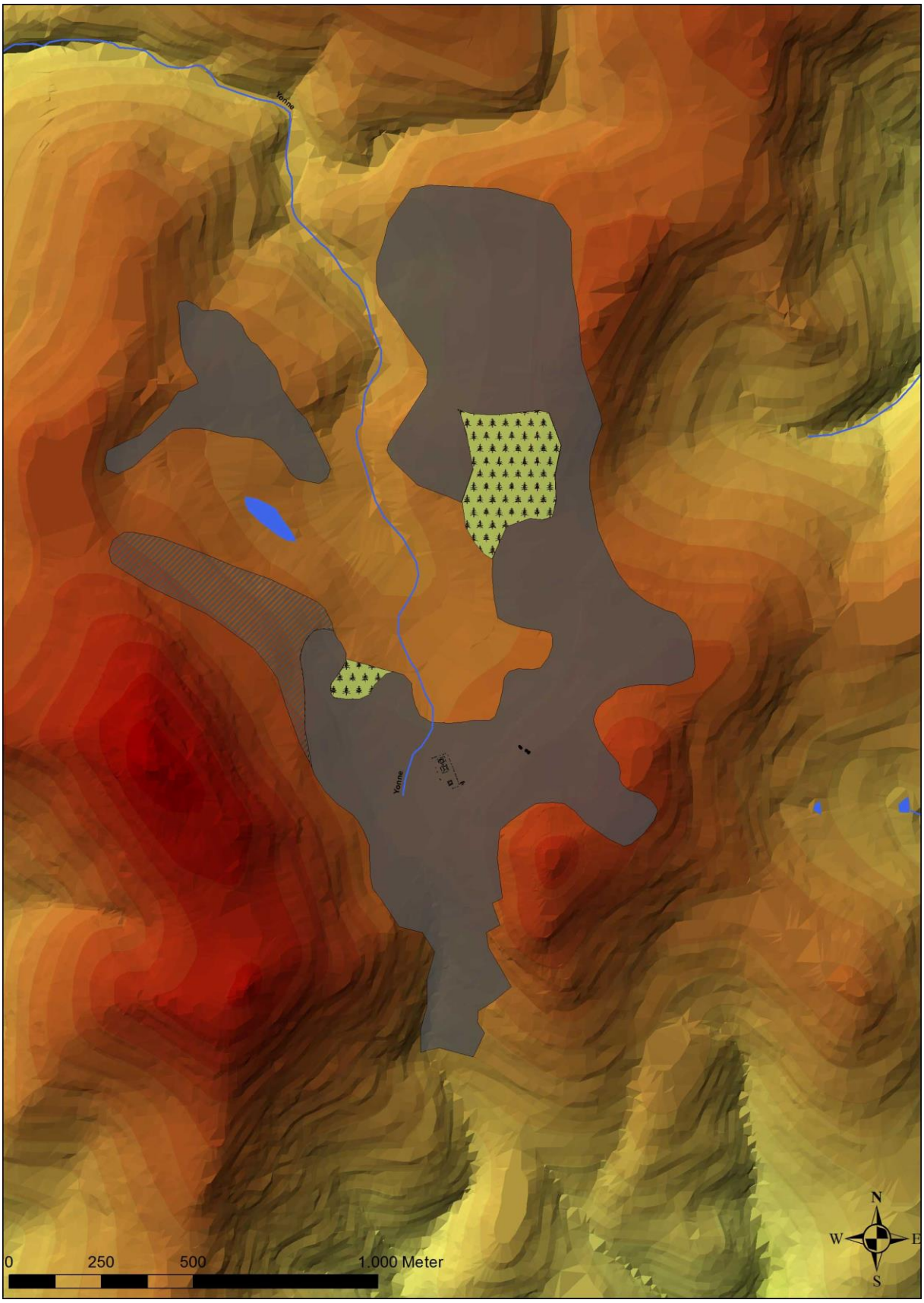


Figure 7: Map of the open settlement of Sources de l'Yonne (Burgundy, France) [key: red for higher ground; grey for the extent of the settlement; green for the areas that were too dense to survey] (Moore et al. 2013: 498)

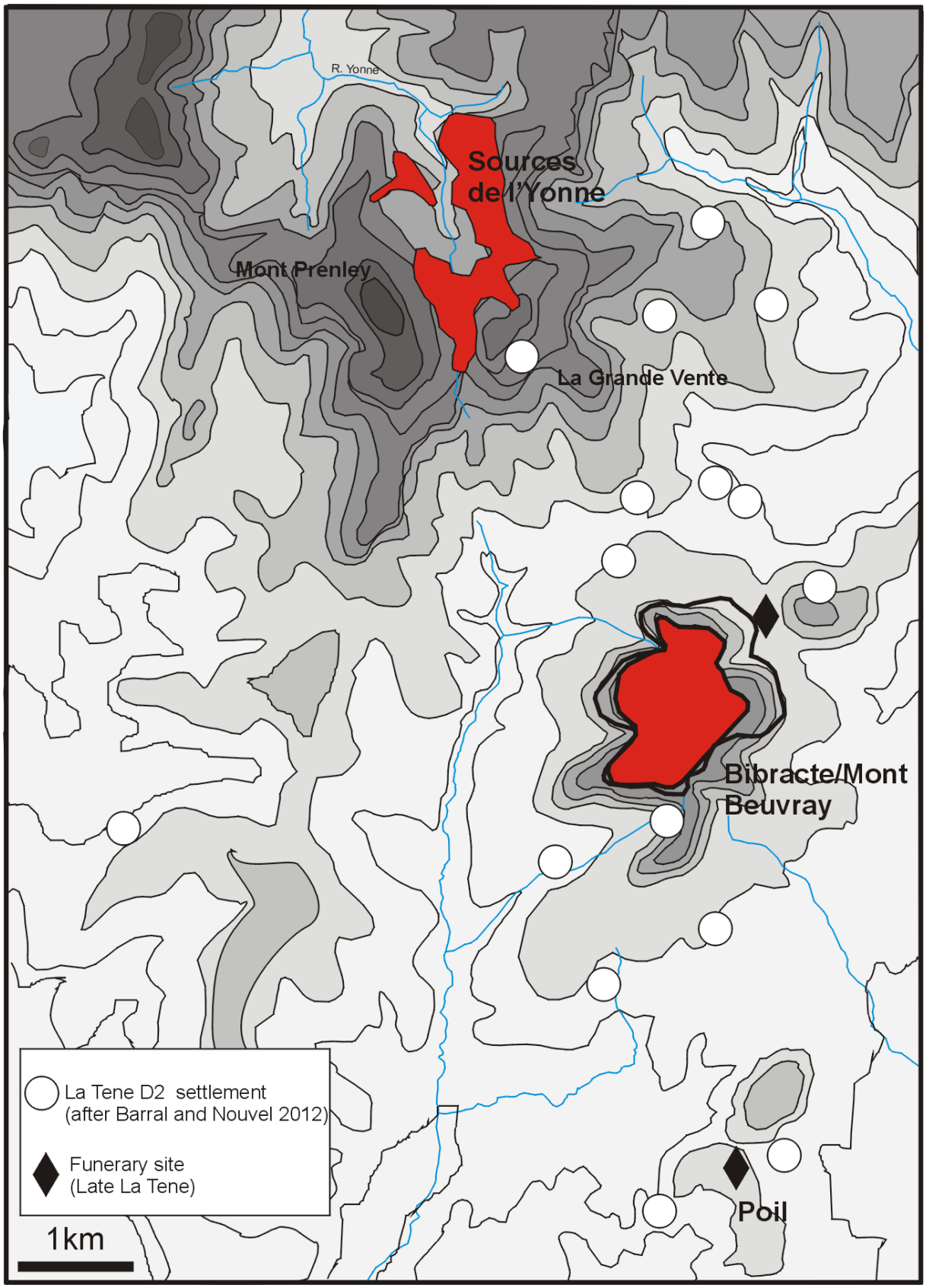


Figure 8: Mont Beuvray and Sources de l'Yonne's Late Iron Age landscape - note the similarity of size between the open settlement and the oppidum

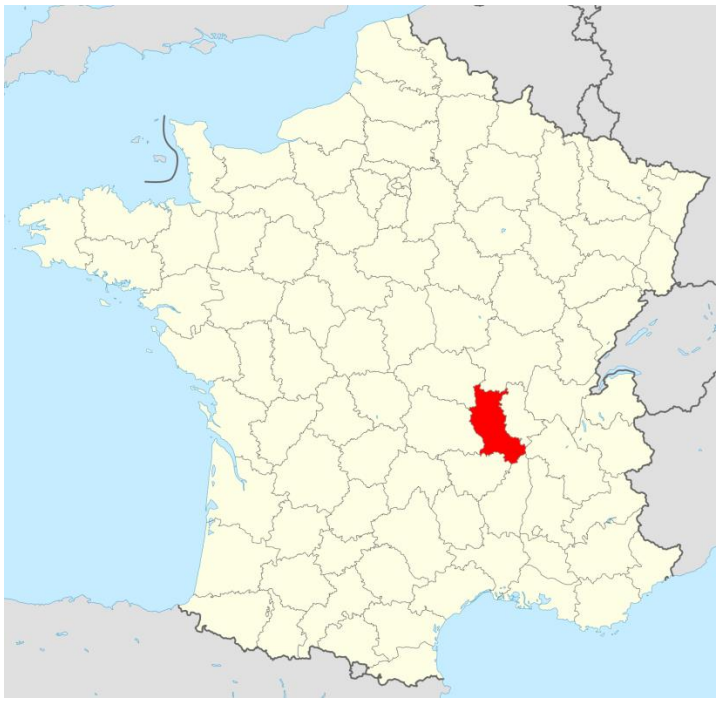


Figure 9: The Loire Department

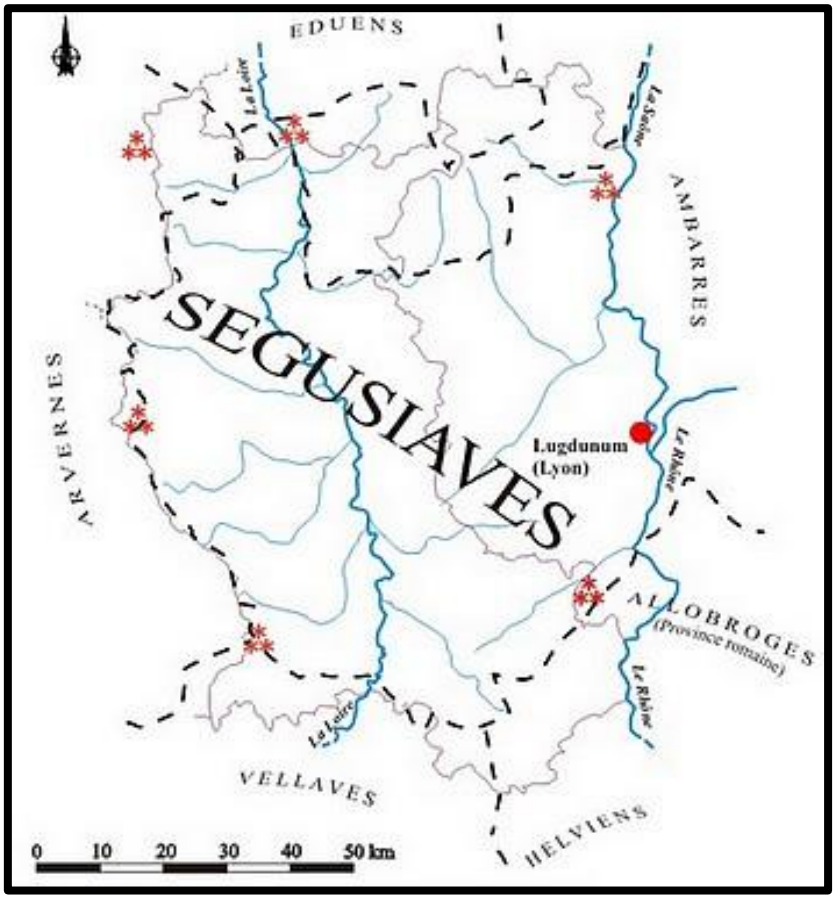


Figure 10: The traditional territory usually associated with the Segusiavi (based on Diocesan limits from the 10th c. and the toponym of *randa* (border)

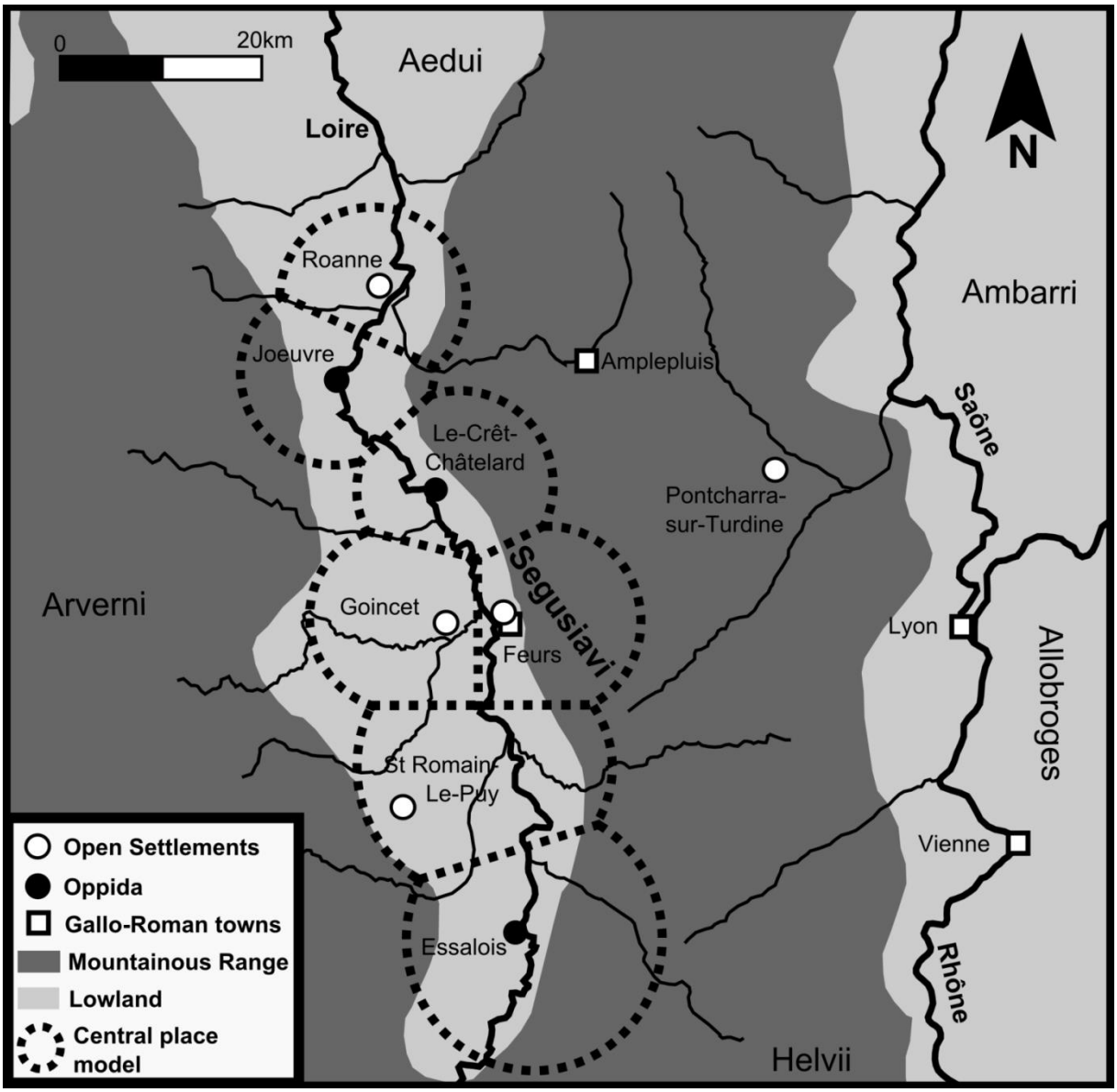


Figure 11: Stephan Fichtl's application of the central place model for the Segusiavi territory - note the equal importance given to open settlements and oppida (Fichtl 2005: 174)

	German System (Reinecke)	French System (Déchelette)	Three Age System
1250 BC			
	Hallstatt A1	Bronze Final IIa	
1150 BC			
	Hallstatt A2	Bronze Final IIb	
1020 BC			
	Hallstatt B1	Bronze Final IIIa	
930 BC			
	Hallstatt B2/3	Bronze Final IIIb	
800 BC			
	Gündlingen	Gündlingen	
730 BC			
	Hallstatt C	Hallstatt Ancien	
620 BC			
	Hallstatt D1	Hallstatt Moyen	
530 BC			
	Hallstatt D2	Hallstatt Final I	
460 BC	Hallstatt D3	Hallstatt Final II	
	La Tène A	La Tène Ia	
400 BC			
	La Tène B1	La Tène Ib	
320 BC			
	La Tène B2	La Tène Ic	
250 BC			
	La Tène C1	La Tène IIa	
180 BC			
	La Tène C2	La Tène IIb	
150 BC			
	La Tène D1	La Tène IIIa	
90 BC			
	La Tène D2	La Tène IIIb	
25 BC			

Bronze Final

1er Âge du Fer

2e Âge du Fer

Figure 12: Chronological Table - The German system is the most commonly used in Europe (after Brun & Ruby 2008: 14)

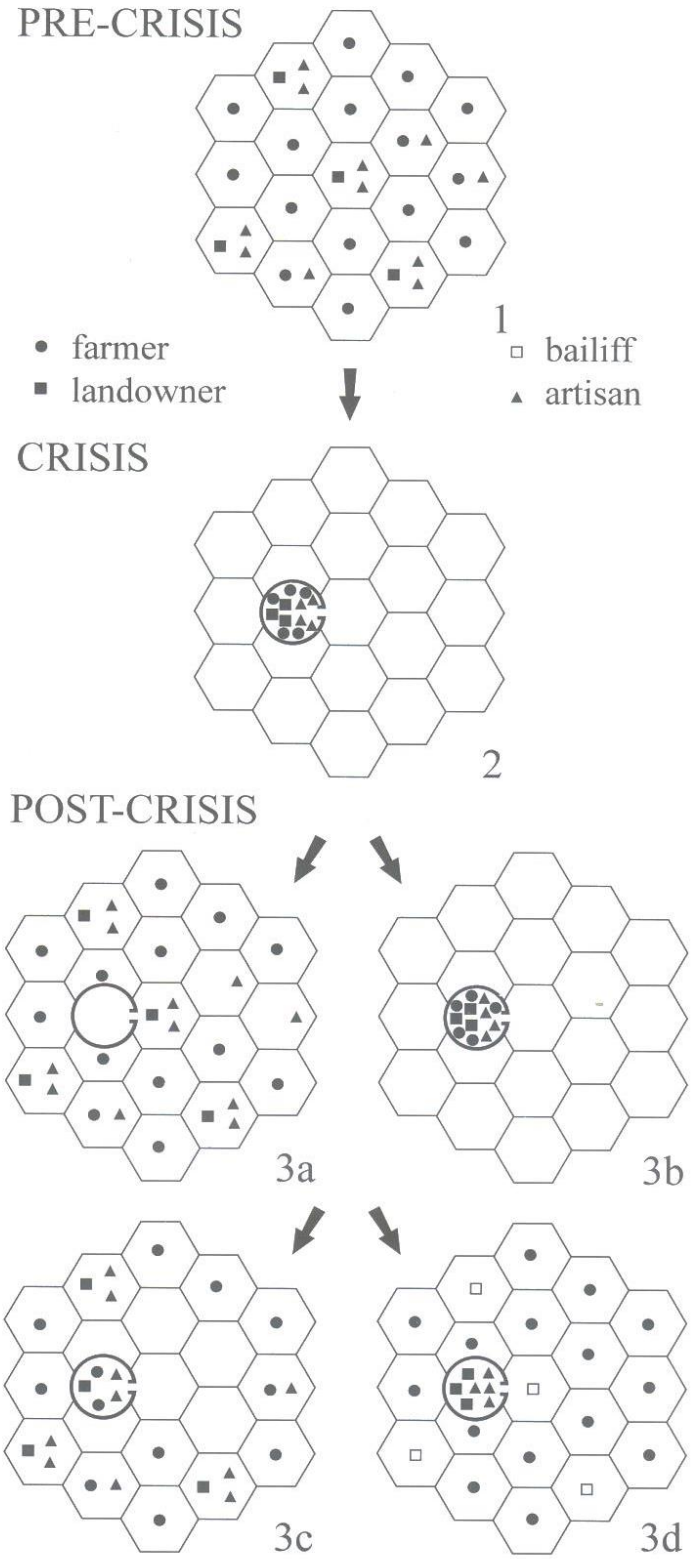


Figure 13: Nucleation, impact of *oppida* emergence (Collis 1984)

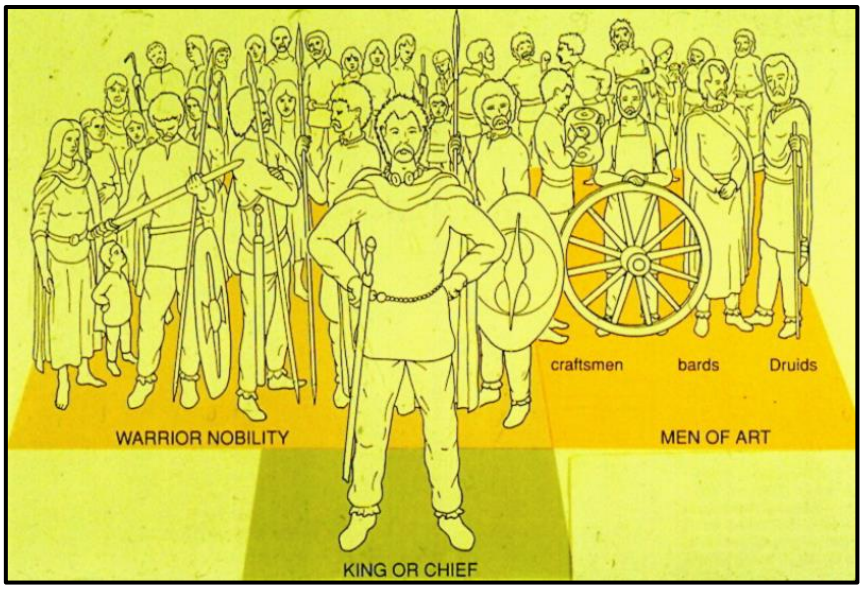


Figure 14: James' very hierarchical conception of society (1993)

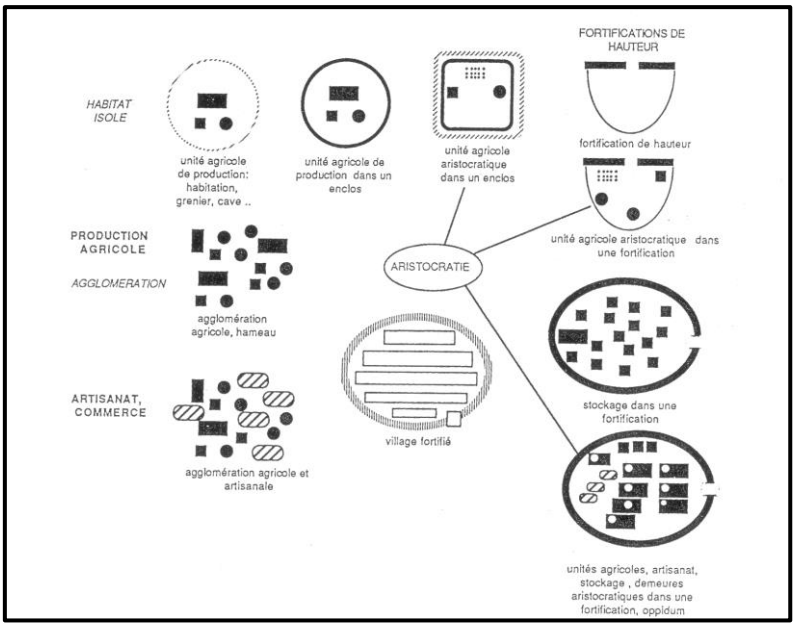


Figure 15: Büschenschutz (1998) and a conception of Iron Age society and settlements inherently controlled by an élite

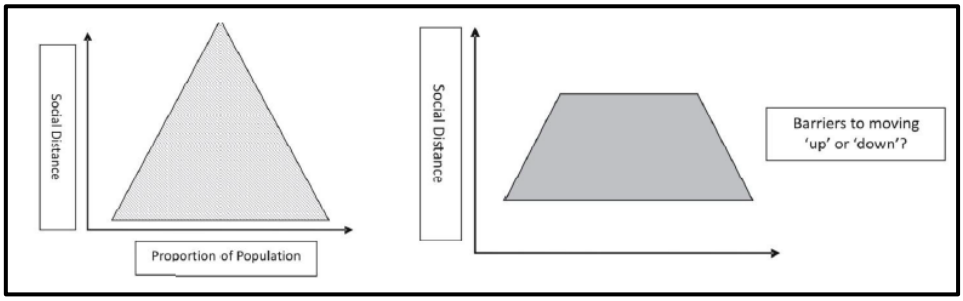


Figure 16: An alternative view of society (Hill 2006; 2011)

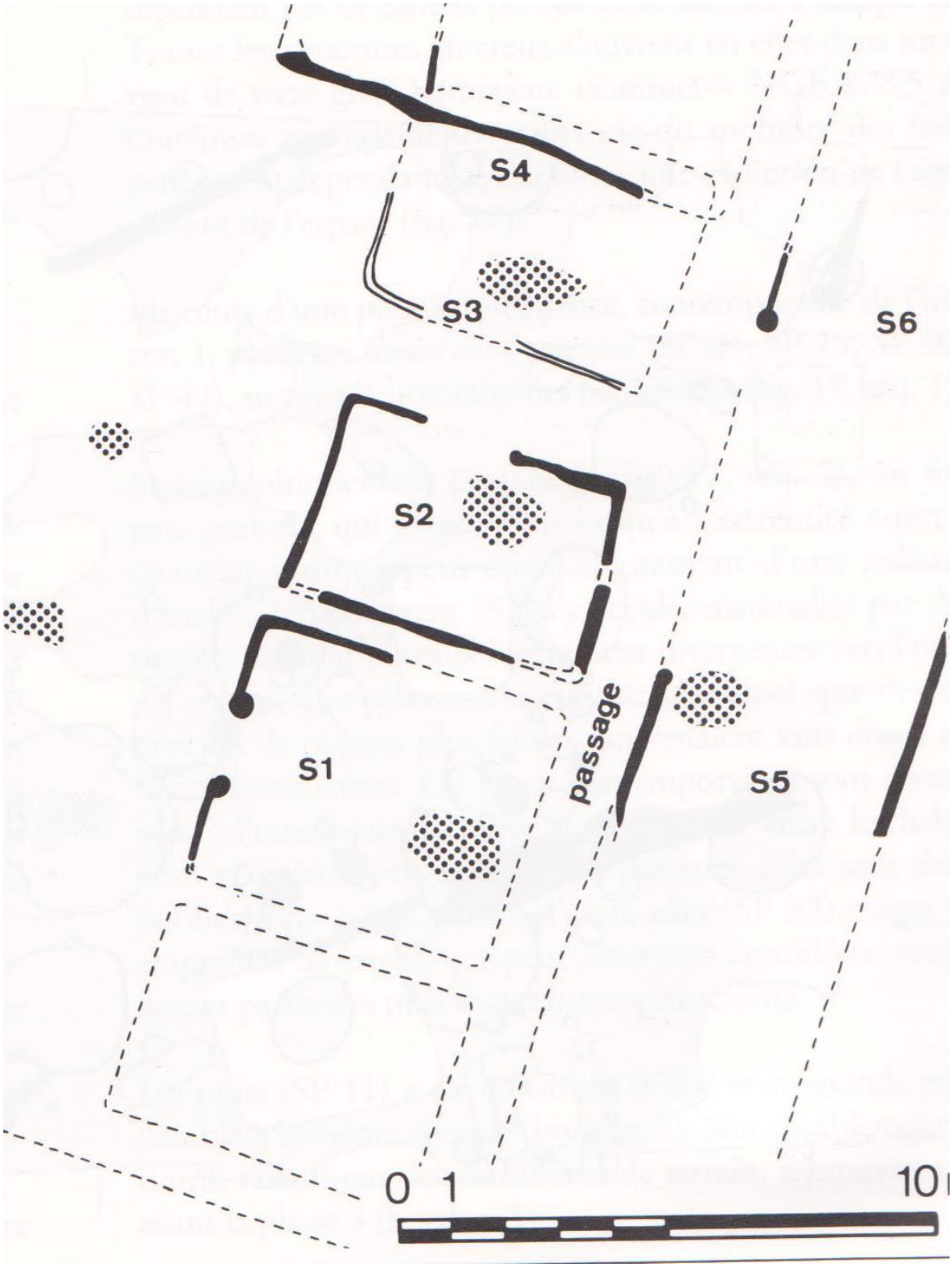


Figure 17: Plan of the excavated features showing the central role played by the road or passage way in the organization of space (Lavendhomme & Guichard 1997: 35)

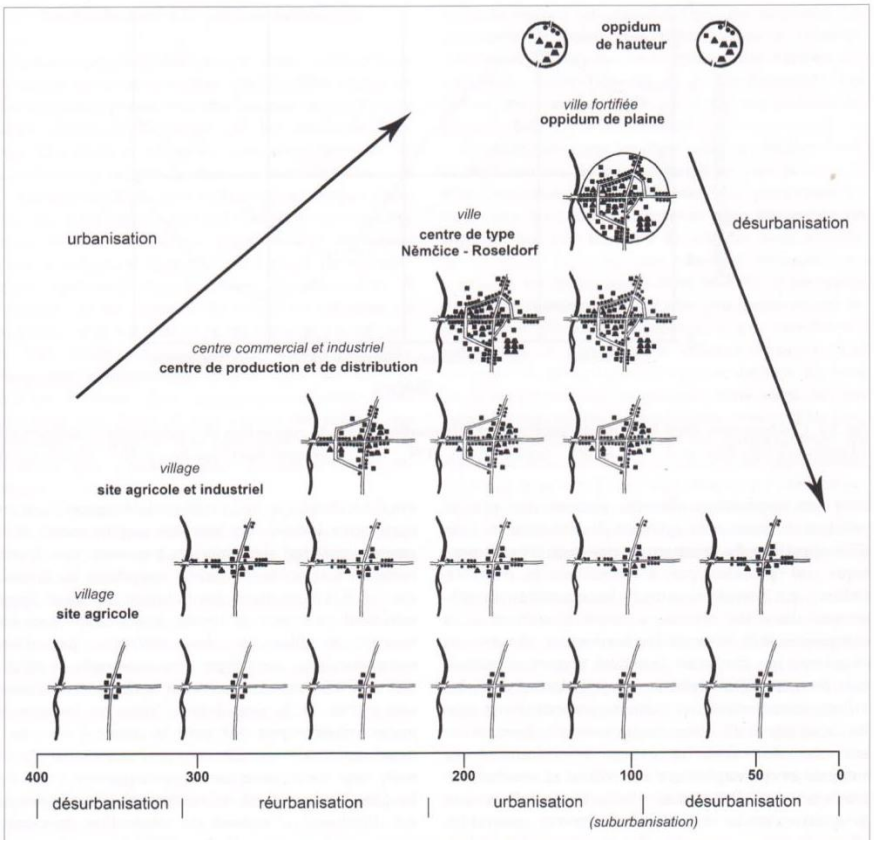


Figure 18: Vladimir Salac's model of development in Central Europe (Salač 2012: 336)

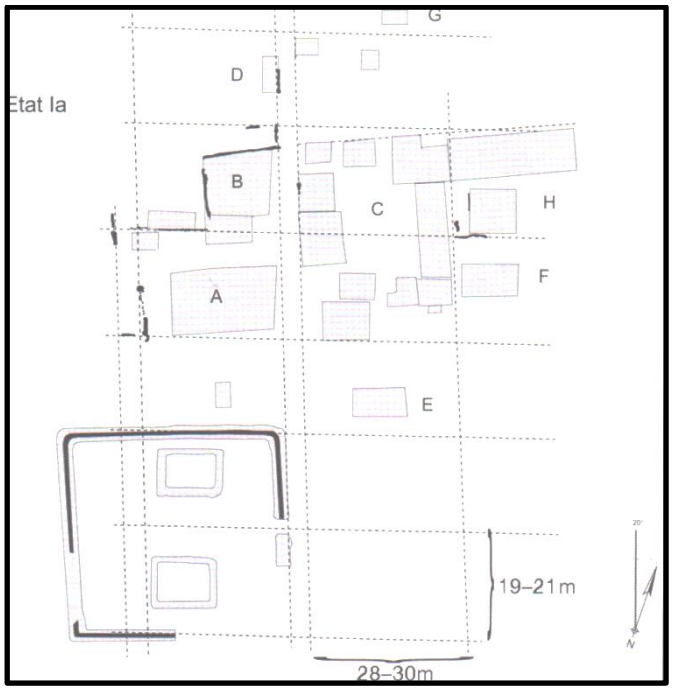


Figure 19: The organisation of space around the sanctuary of Corent (Poux et al. 2009)

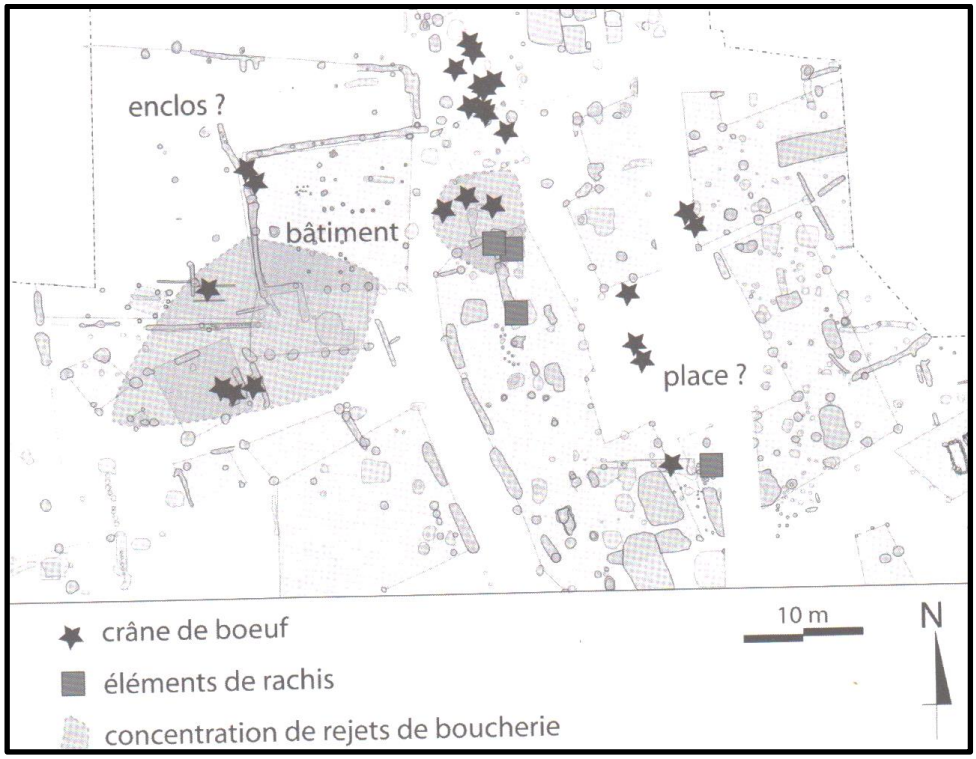


Figure 20: The Butcher's district in Corent (Poux et al. 2009)

Figure 21: The industrial districts of the Côme Chaudron and the Champlain in Bibracte (Fichtl 2005: 108)

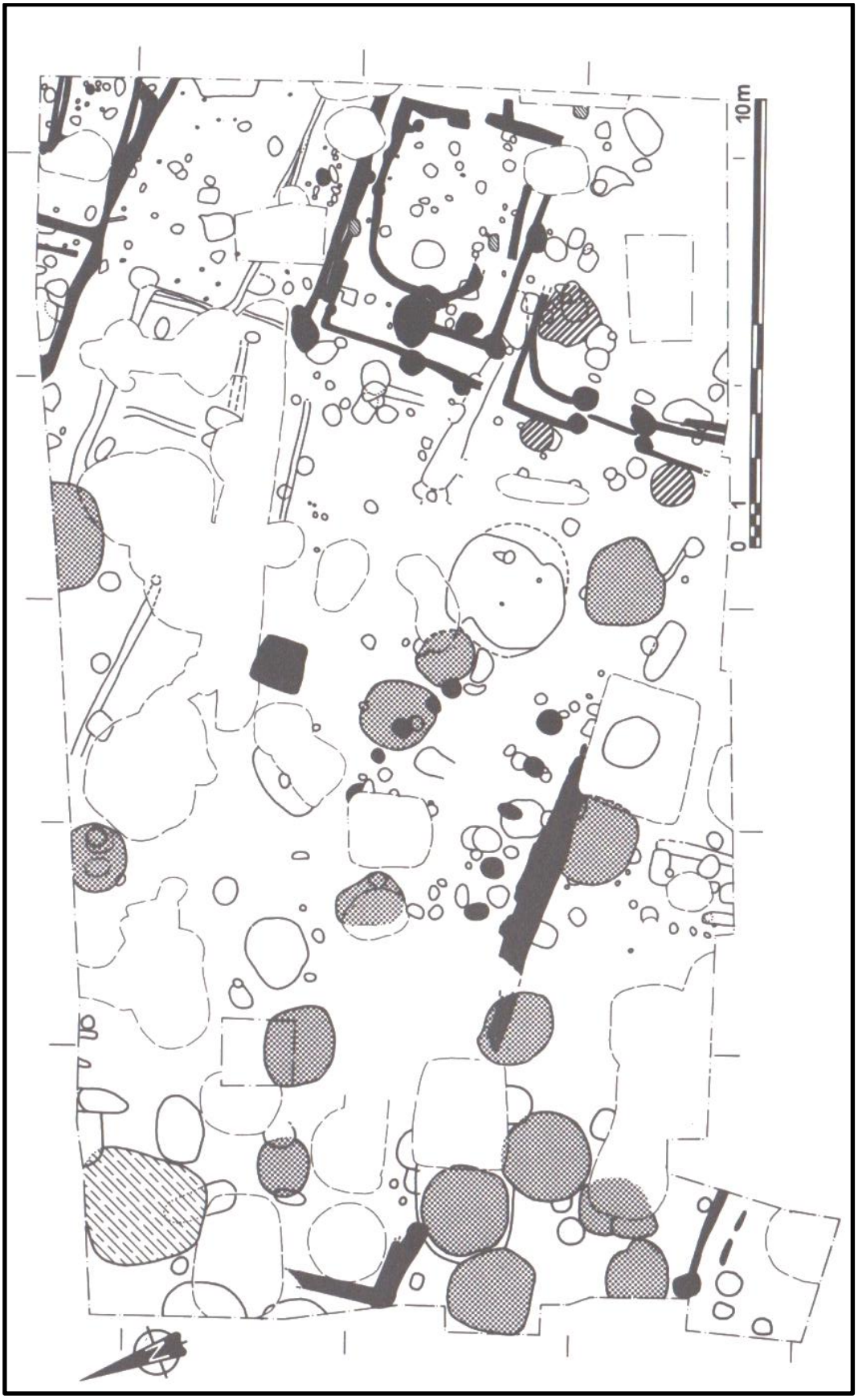


Figure 22: The Chantier St Paul in Roanne (Lavendhomme & Guichard 1997: 36)

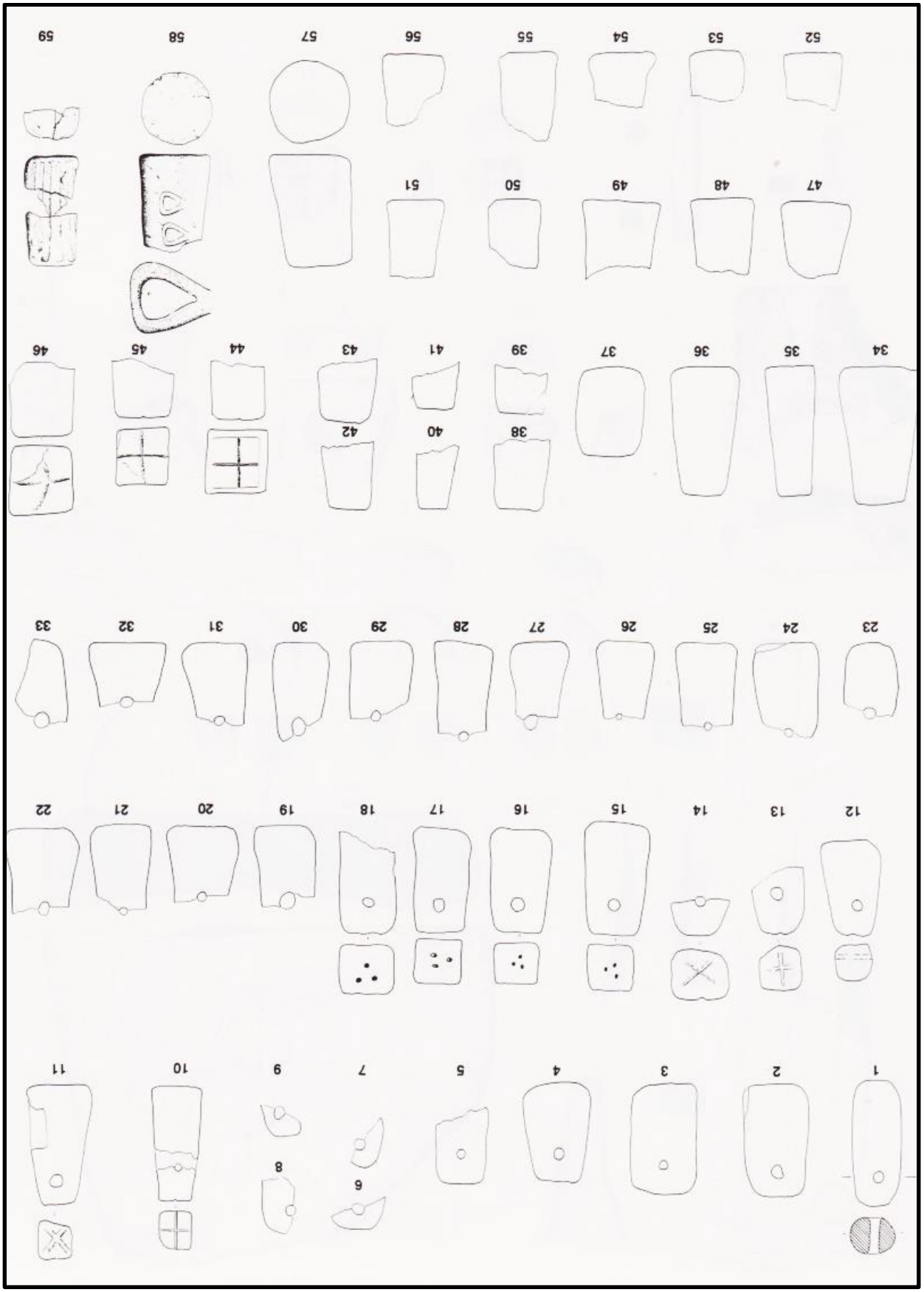


Figure 23: The various remains of the cloth industry (weaving looms) found in Roanne (Lavendhomme & Guichard 1997: 333)

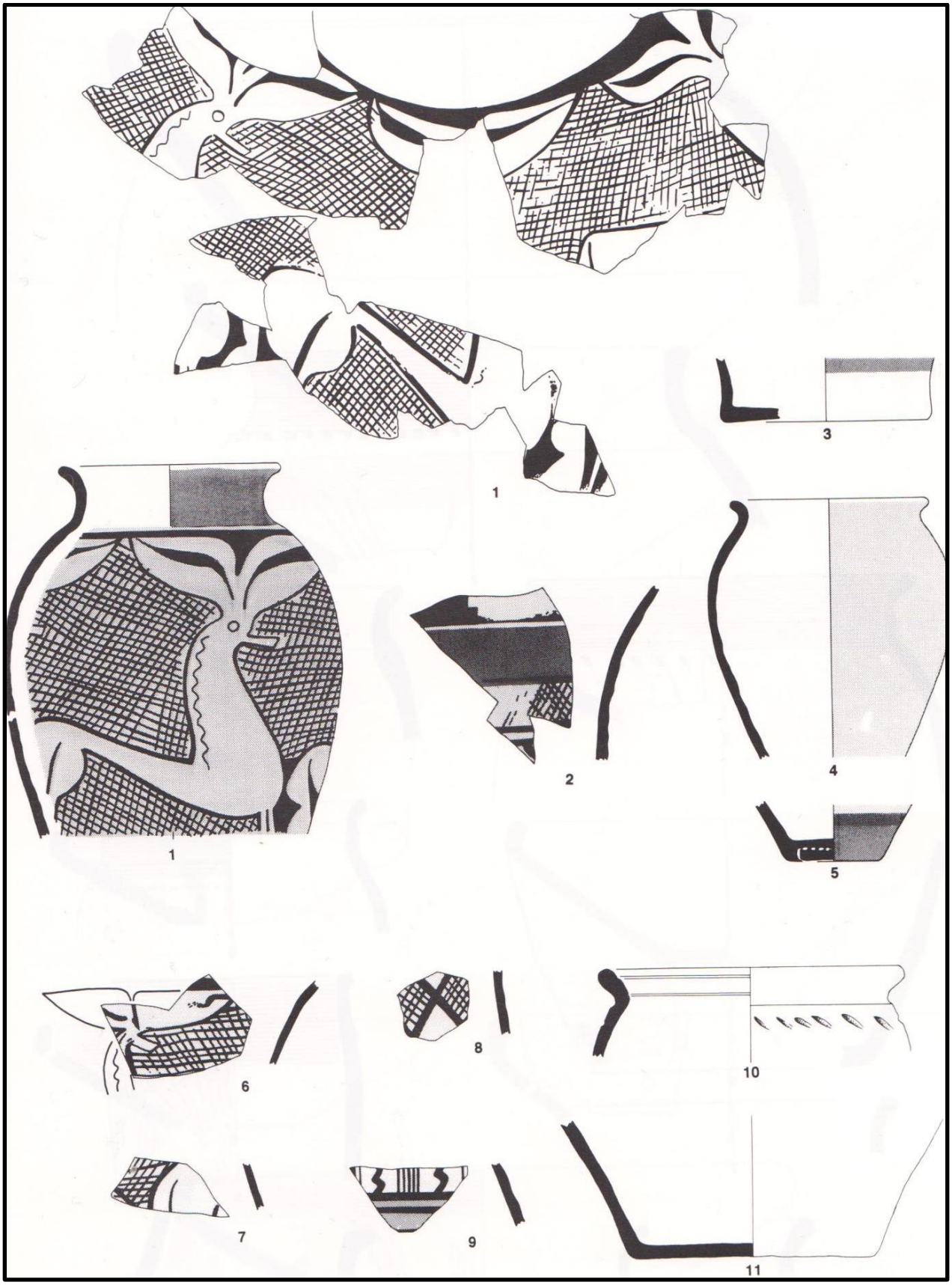


Figure 24: Various examples of the type of decoration of forms for the pottery produced in Roanne (Lavendhomme 1997: 233)

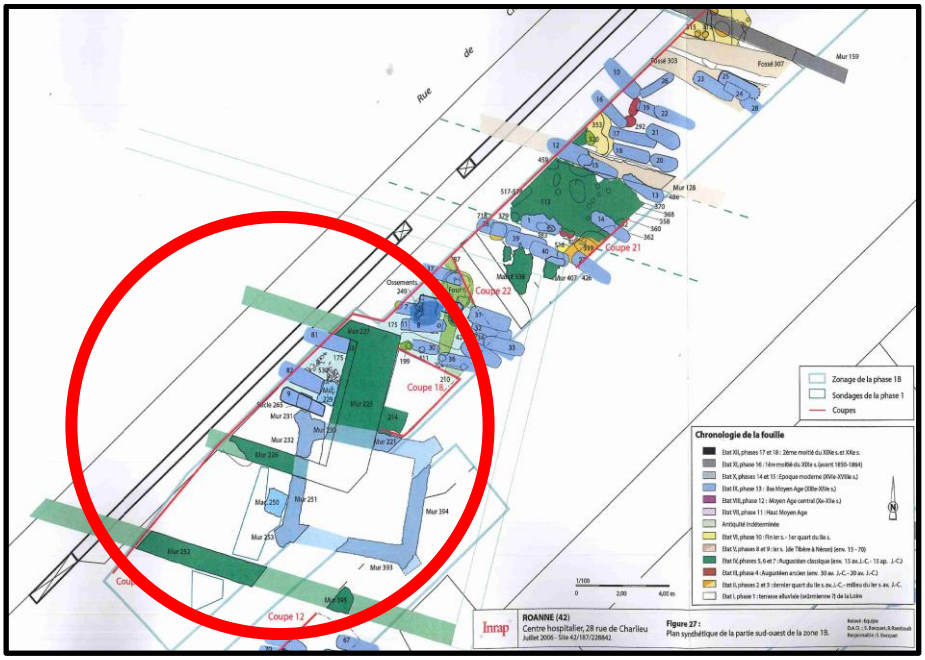
Inrap

ROANNE (42)
Centre hospitalier, 28 rue de Charlieu
Juillet 2006 - Site 42/187/228842

Figure 49 :
Vue de l'élévation M 209-M 225 et M 563 depuis l'est.
Vue de détail de l'angle nord-est du bâtiment D.

Clichés : J.-C. Sarrazin
Responsable : S. Bocquet

Figure 25: Pictures of the Augustan Temple (INRAP – Bocquet et al. 2005: Fig.49)



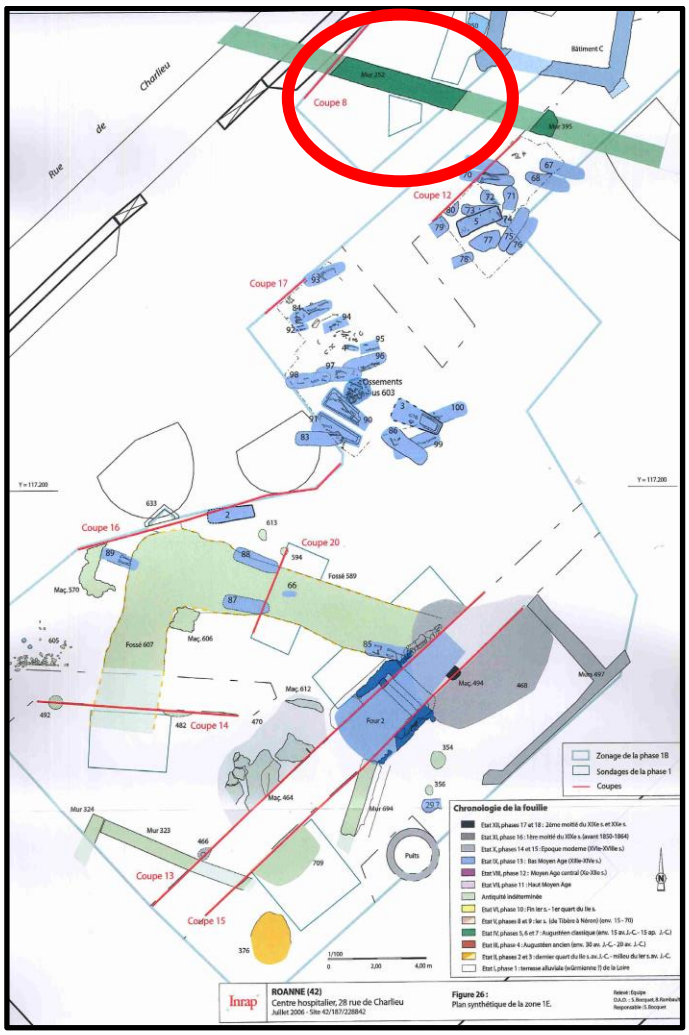


Figure 26: Proximity and alignment of both the Augustan Temple and the potential Late Iron Age sanctuary (INRAP – Bocquet et al. 2005: Fig. 26)

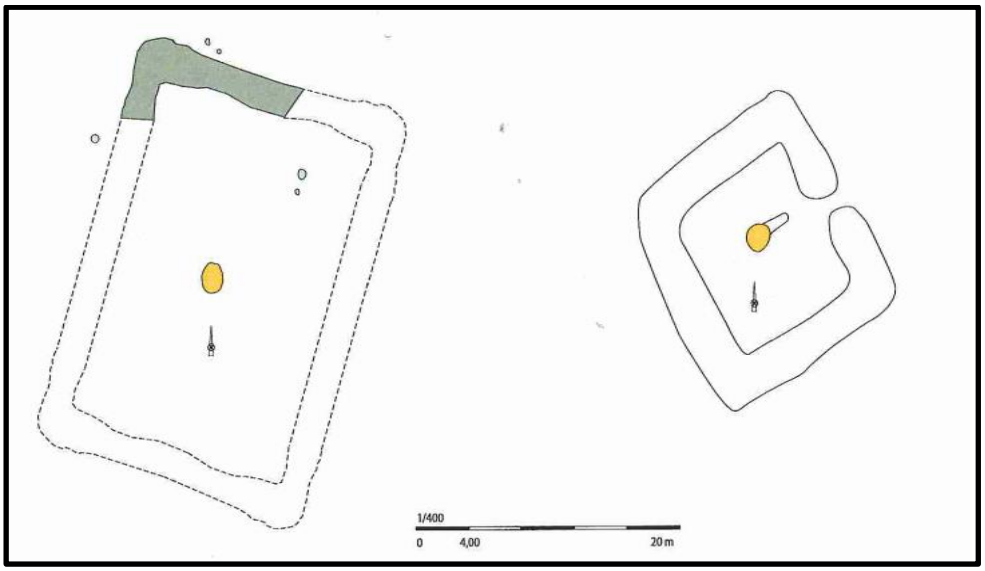


Figure 27: Typological comparison between Roanne and Bennecourt (right)

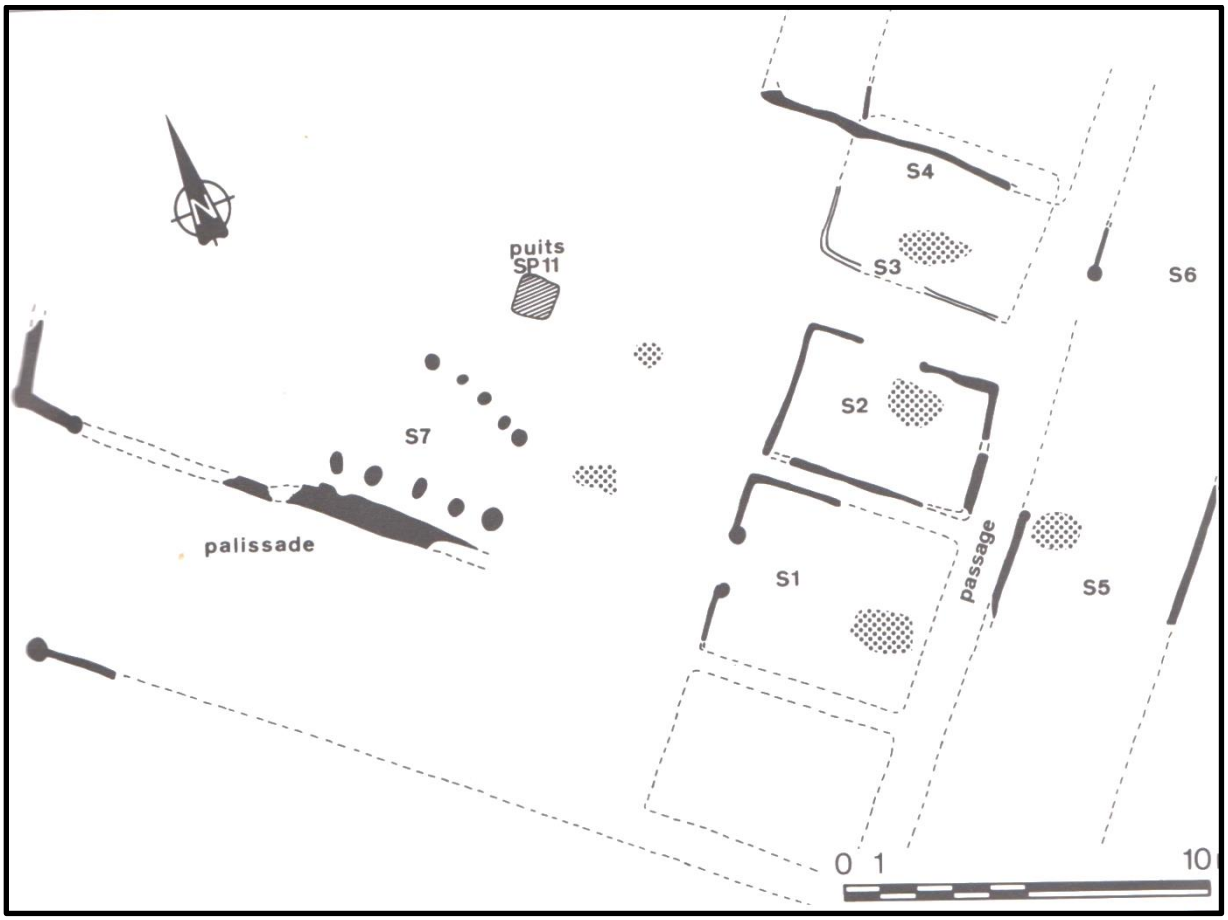


Figure 28: The ditched enclosure west of the households (Lavendhomme & Guichard 1997: 35)

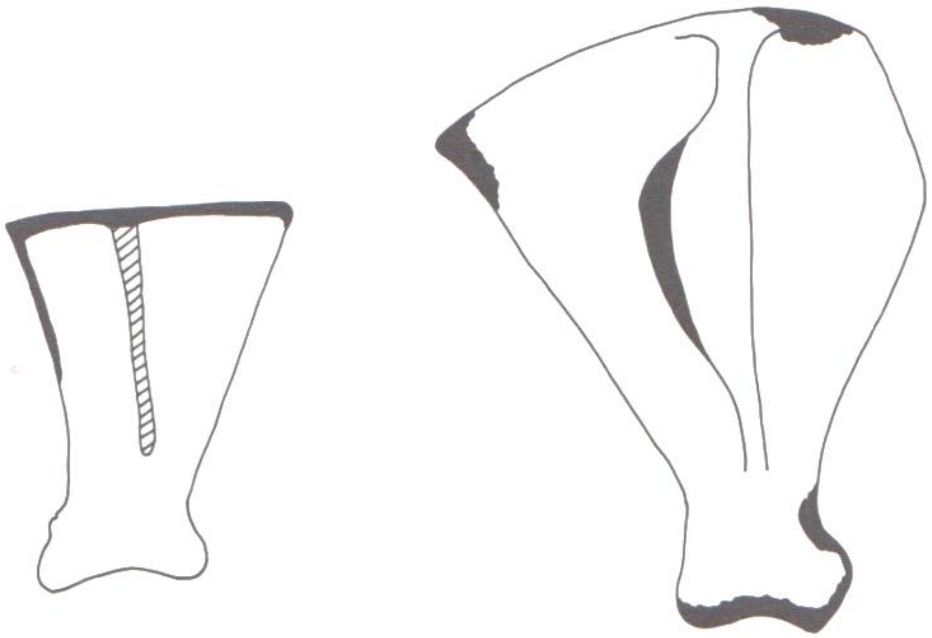


Figure 29: evidence of burning on a dog scapula found in Fosse 12 (Lavendhomme & Guichard 1997)

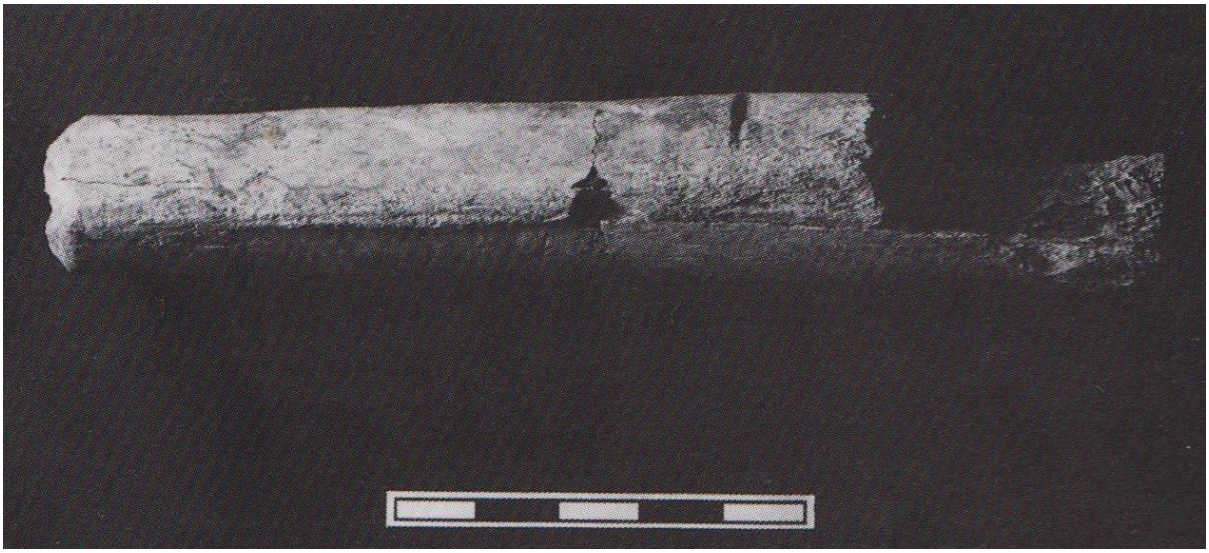


Figure 30: specimen of an adult femur showing evidence of cut marks (Lavendhomme & Guichard 1997: 183)

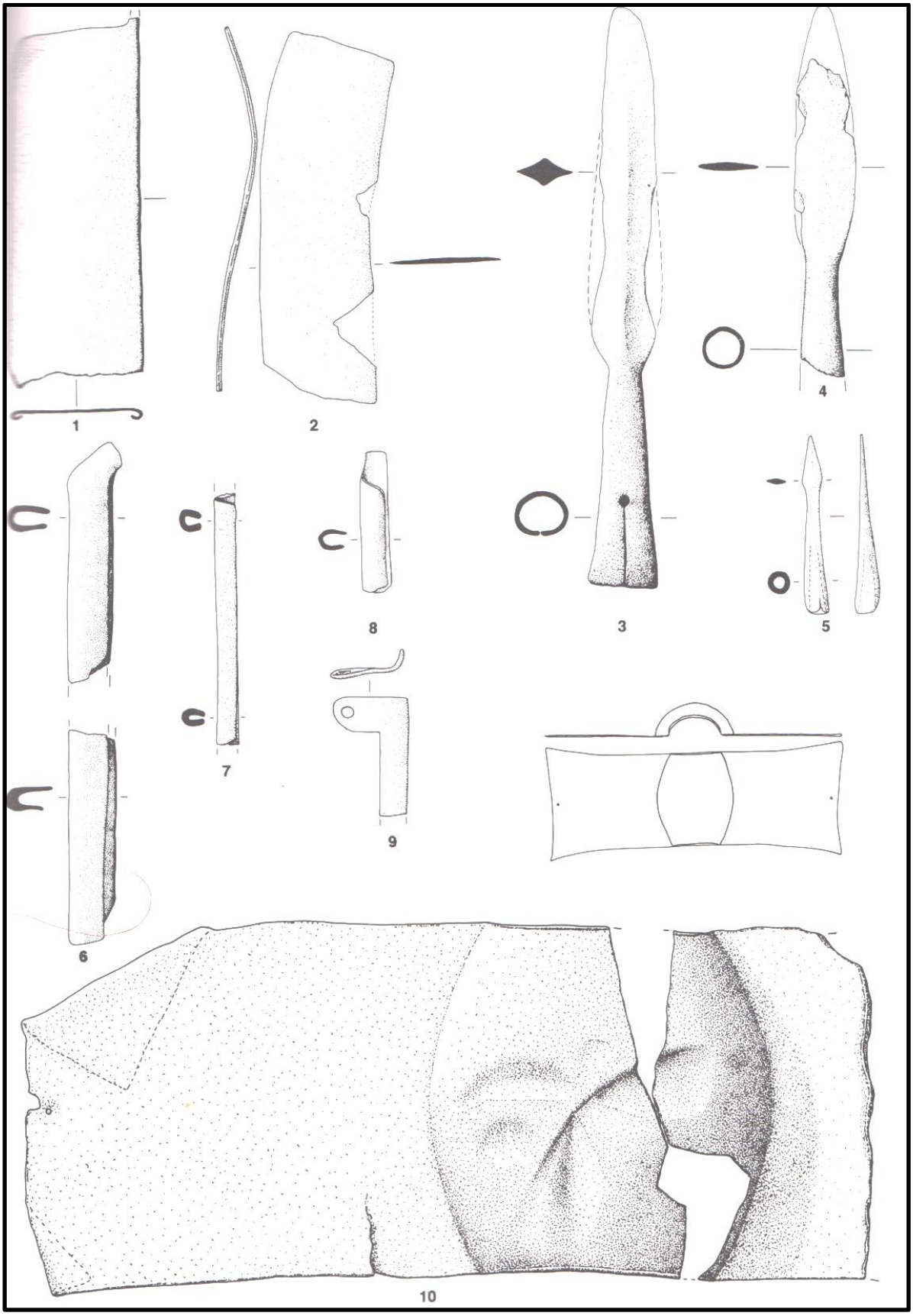


Figure 31: Martial equipement deposited on site (Lavendhomme & Guichard 1997: 331)

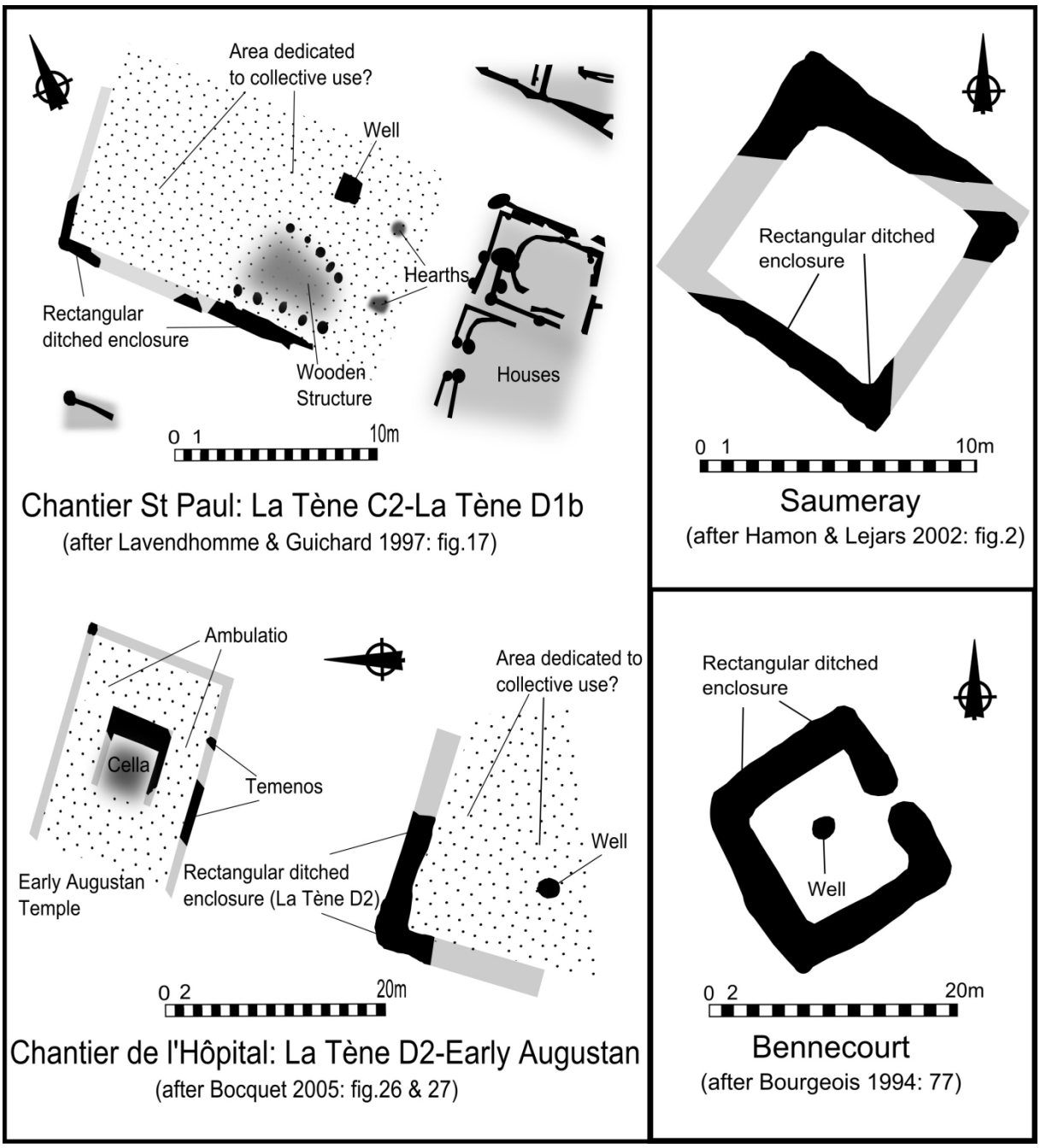


Figure 32: Comparative study of the sanctuaries found in Roanne with other well-known examples

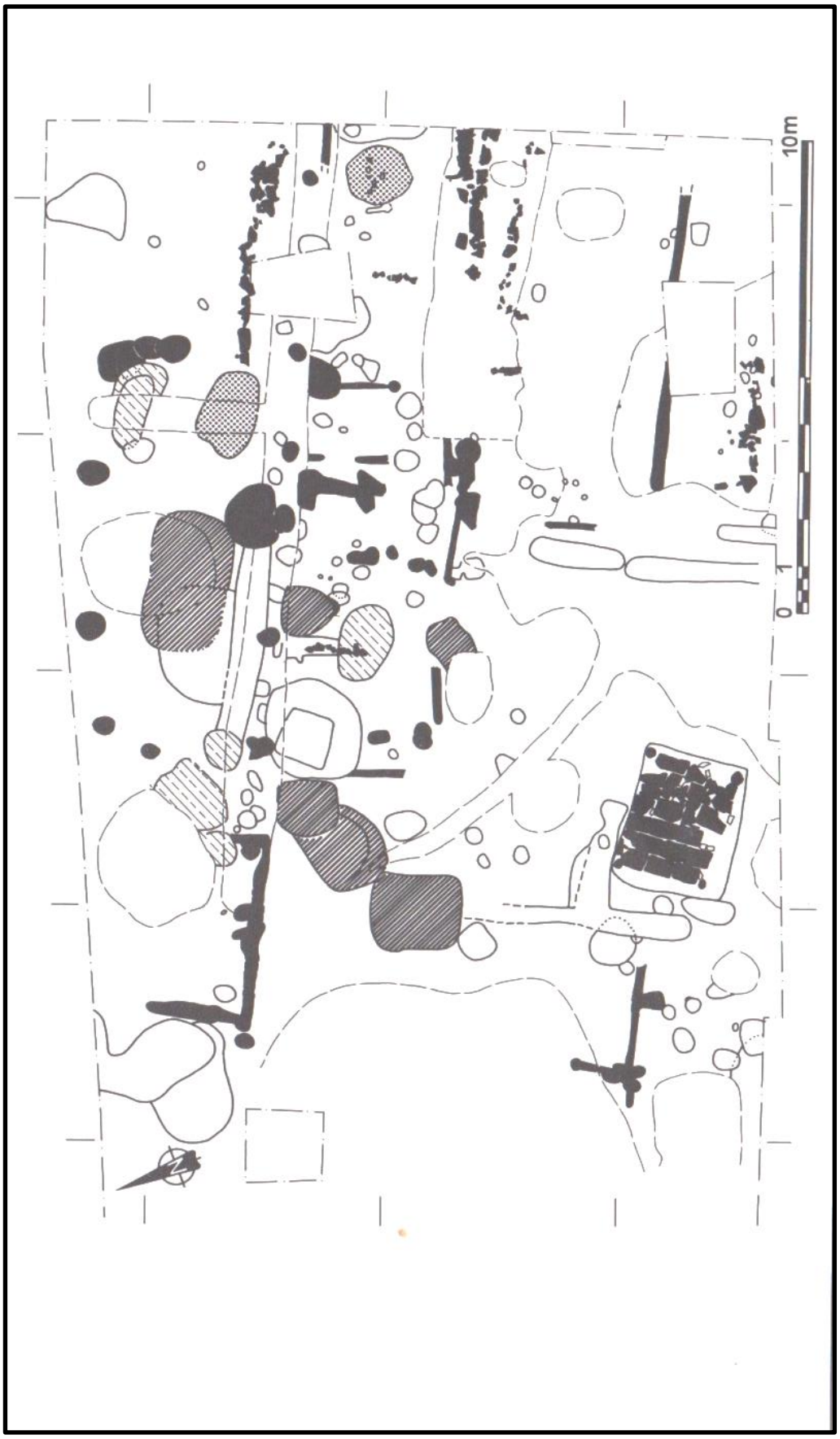


Figure 33: The plan of phase 3 depicting the new alignment at the Chantier Saint Paul (Lavendhomme & Guichard 1997: Fig.21

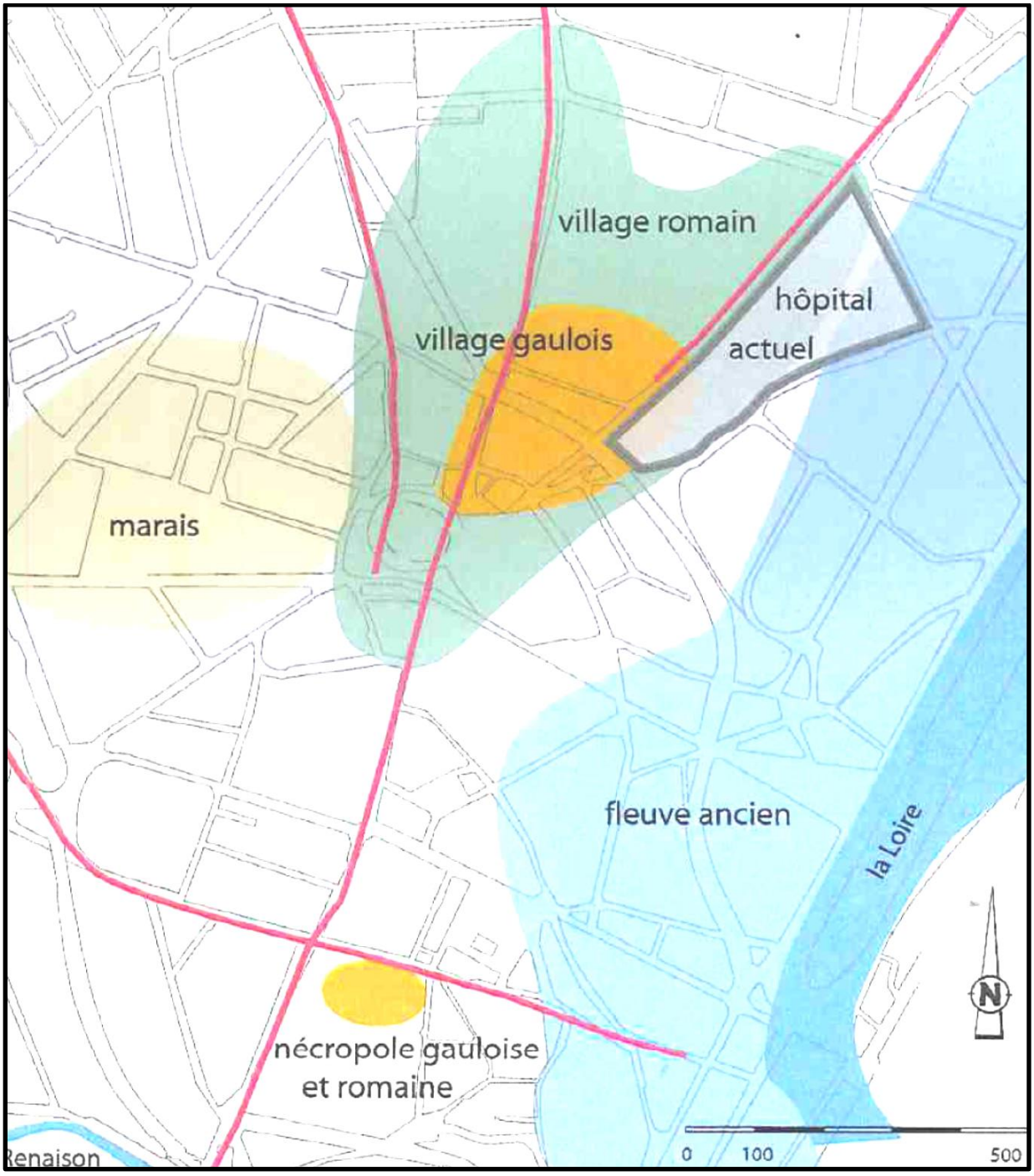


Figure 34: Map showing the hypothetical extent of the Late Iron Age and Gallo-Roman settlement at Roanne and the ancient course of the Loire (INRAP – Bocquet et al. 2005: Fig.10)

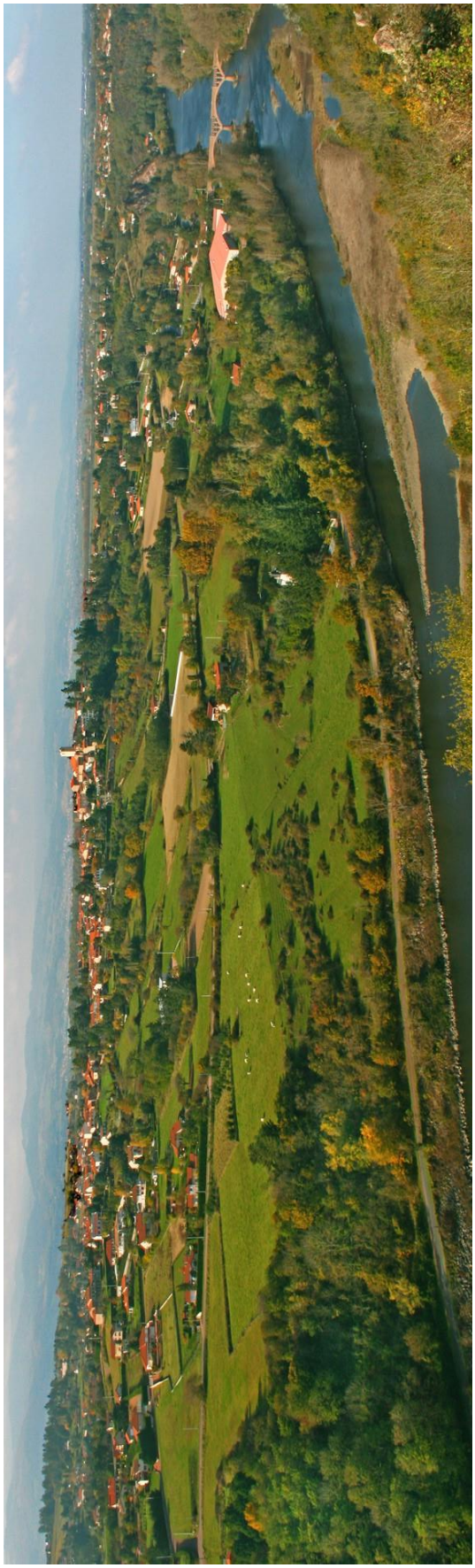


Figure 35: The Plaine du Roannais' landscape with the Massif Central as a backdrop

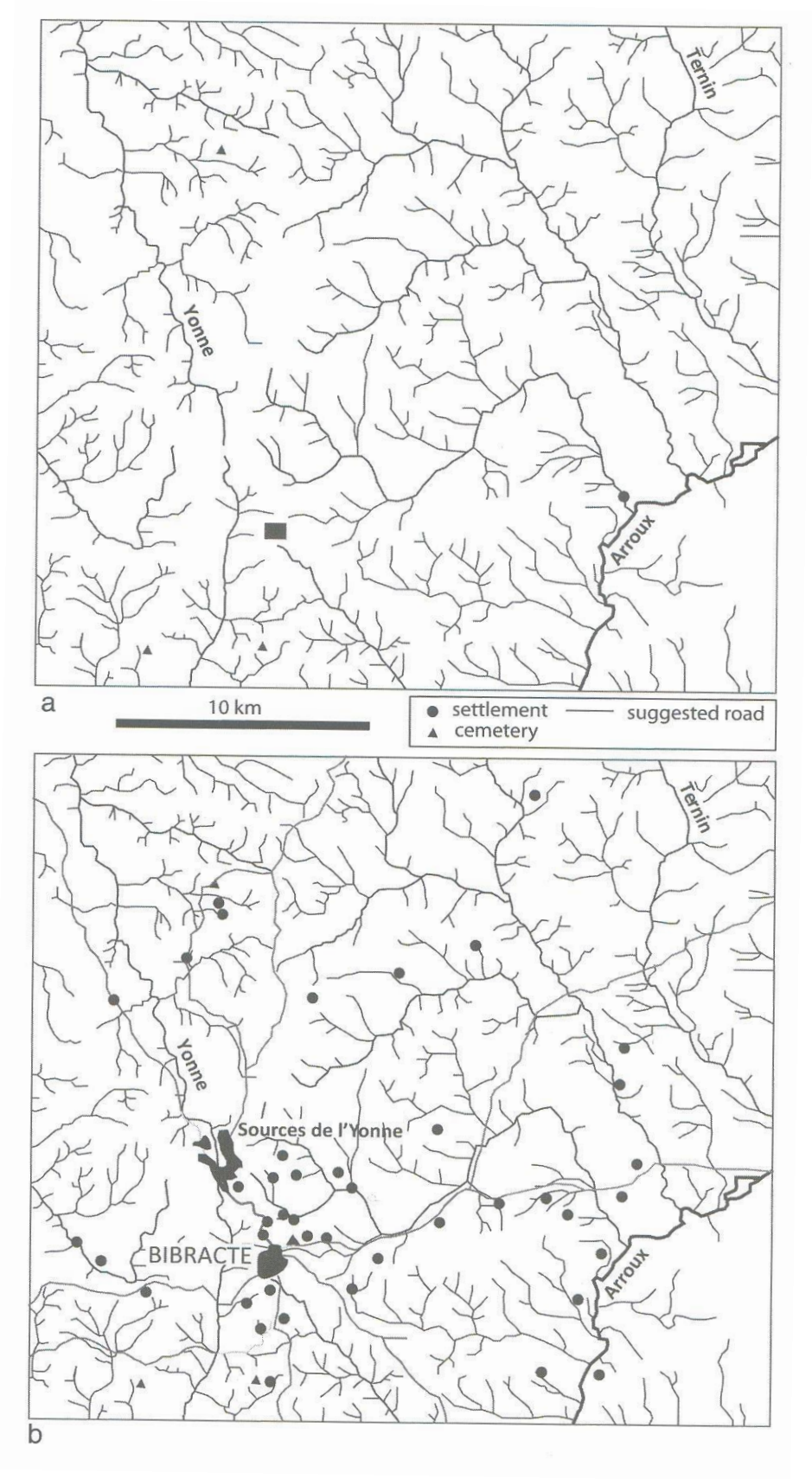


Figure 36: Comparison of evidence for (a) La tène D1a and (b) La tène D2 activity in the Bibracte environs (after Barral and Nouvel 2012: Fig. 12)

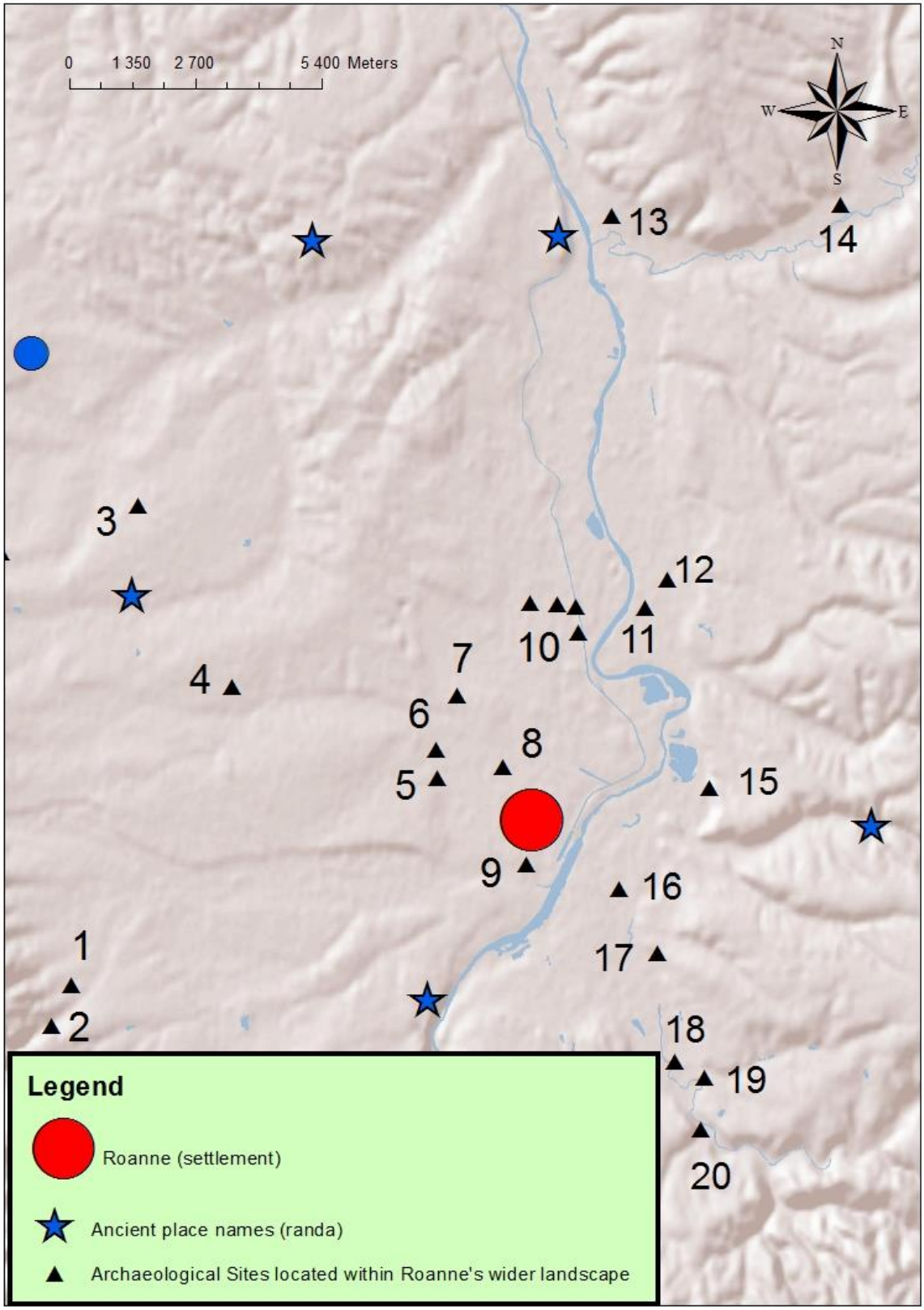


Figure 37: The spread of Archaeological activity in the Plaine du Roannais

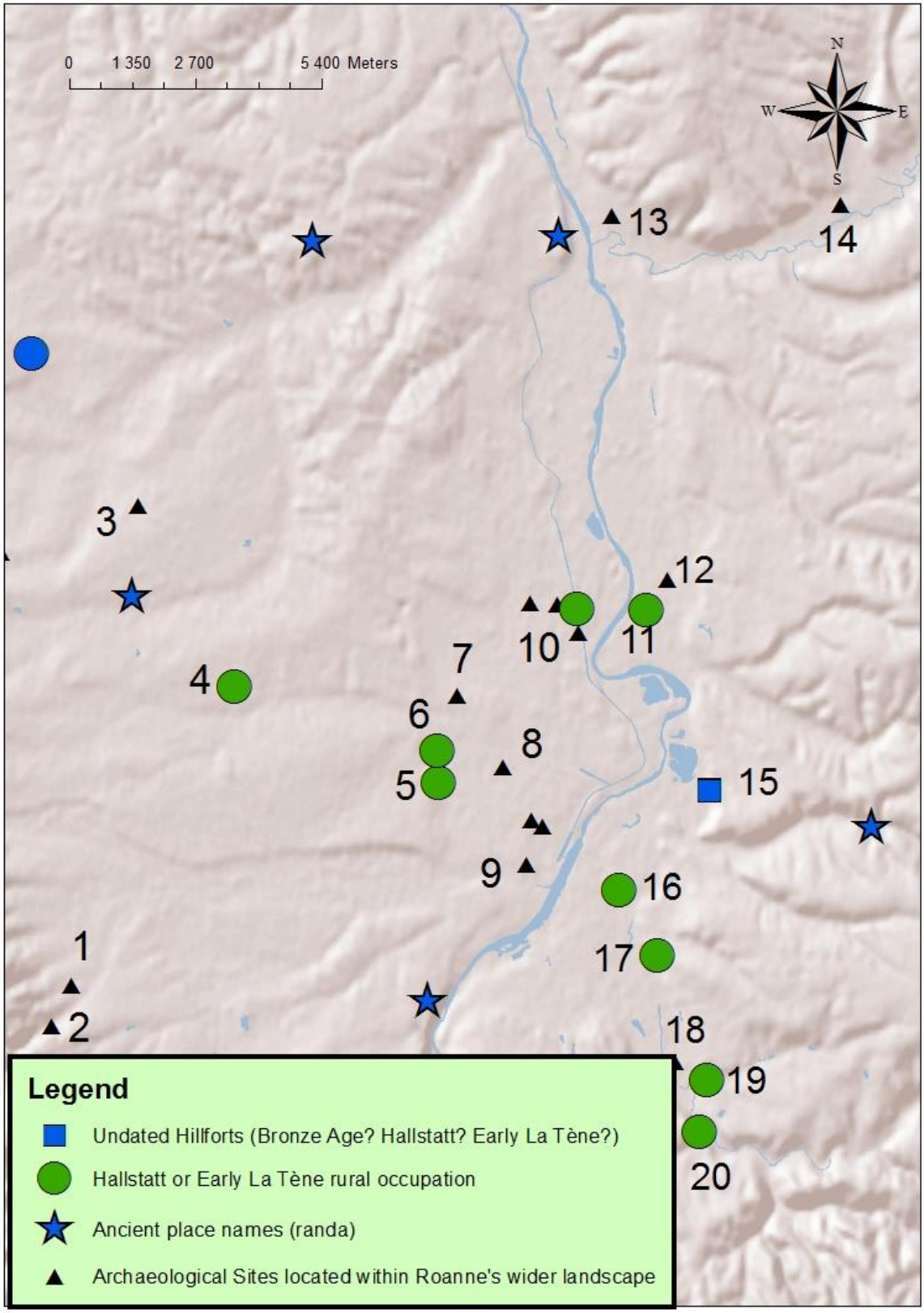


Figure 38: The spread of activity in the Early Iron Age in the Plaine du Roannais

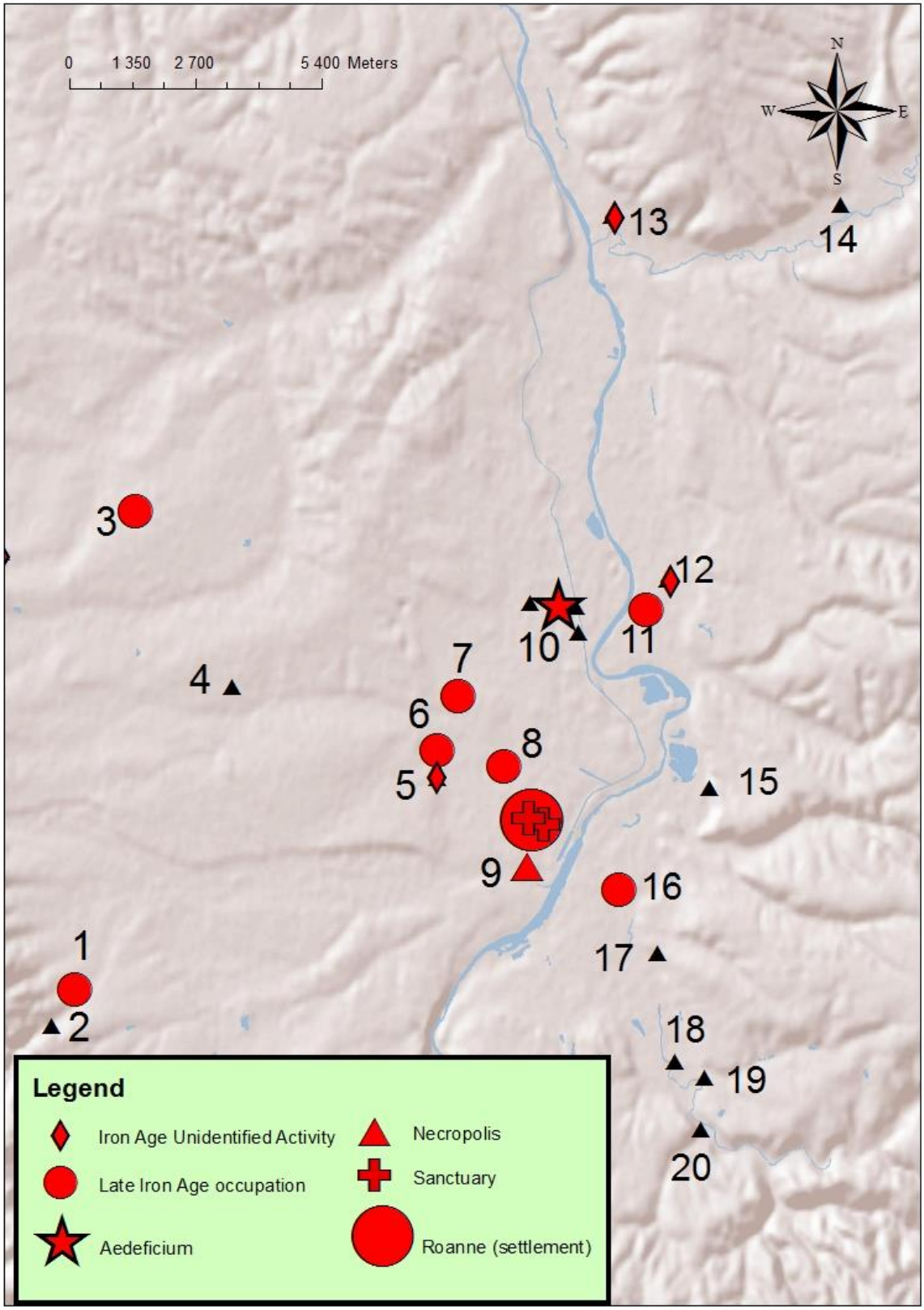


Figure 39: Spread of Late La Tène activity in the Plaine du Roannais

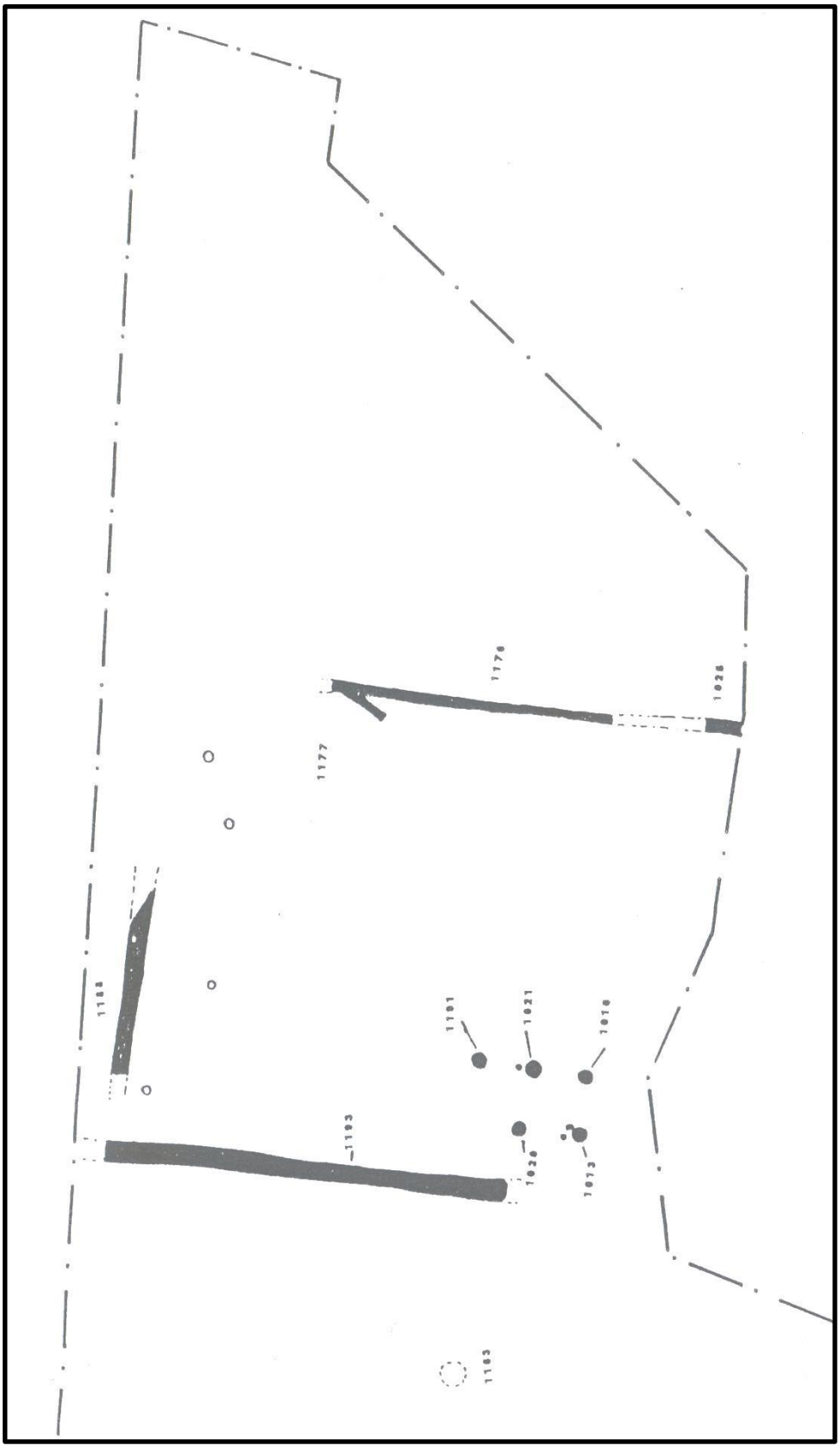


Figure 40: Plan of the Late La Tène features found at Les Verchères (Saint-Alban-les-Eaux) (Lavendhomme 1996: Fig.25)

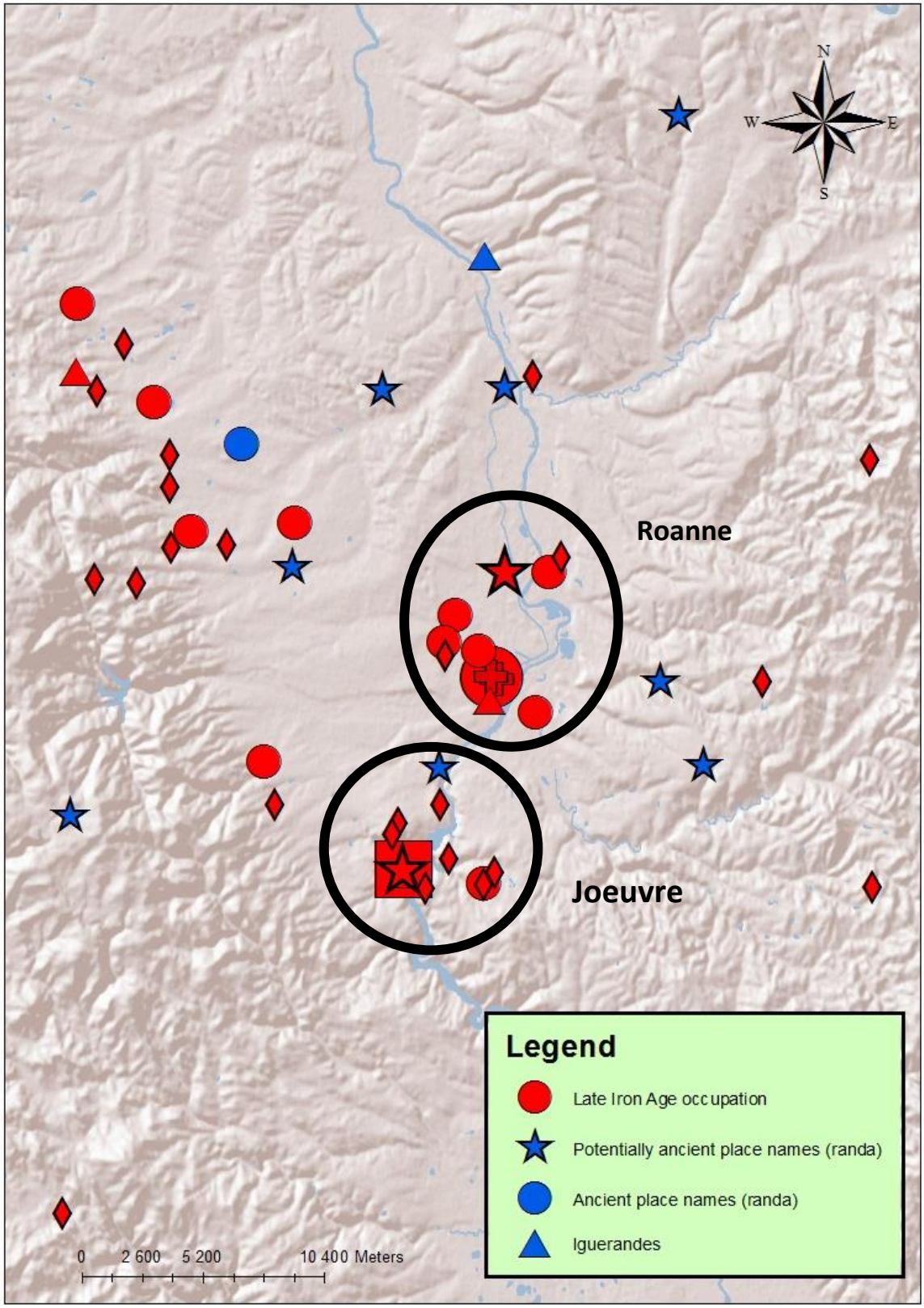


Figure 41: The existence of two distinct poles in the Northern part of the Segusiavi territory?

Figure 42: Spread of Republican Amphorae in the 'Aedui Empire' and distribution map of the most significant clusters with important associated markers (Poux 2004: 139)

Figure 43: Modern landscape of Joeuvres. The erection of a dam in the 1970's dramatically increased the level of the Loire (up to 50 m.) The gorge would have been far more dramatic in the Iron Age

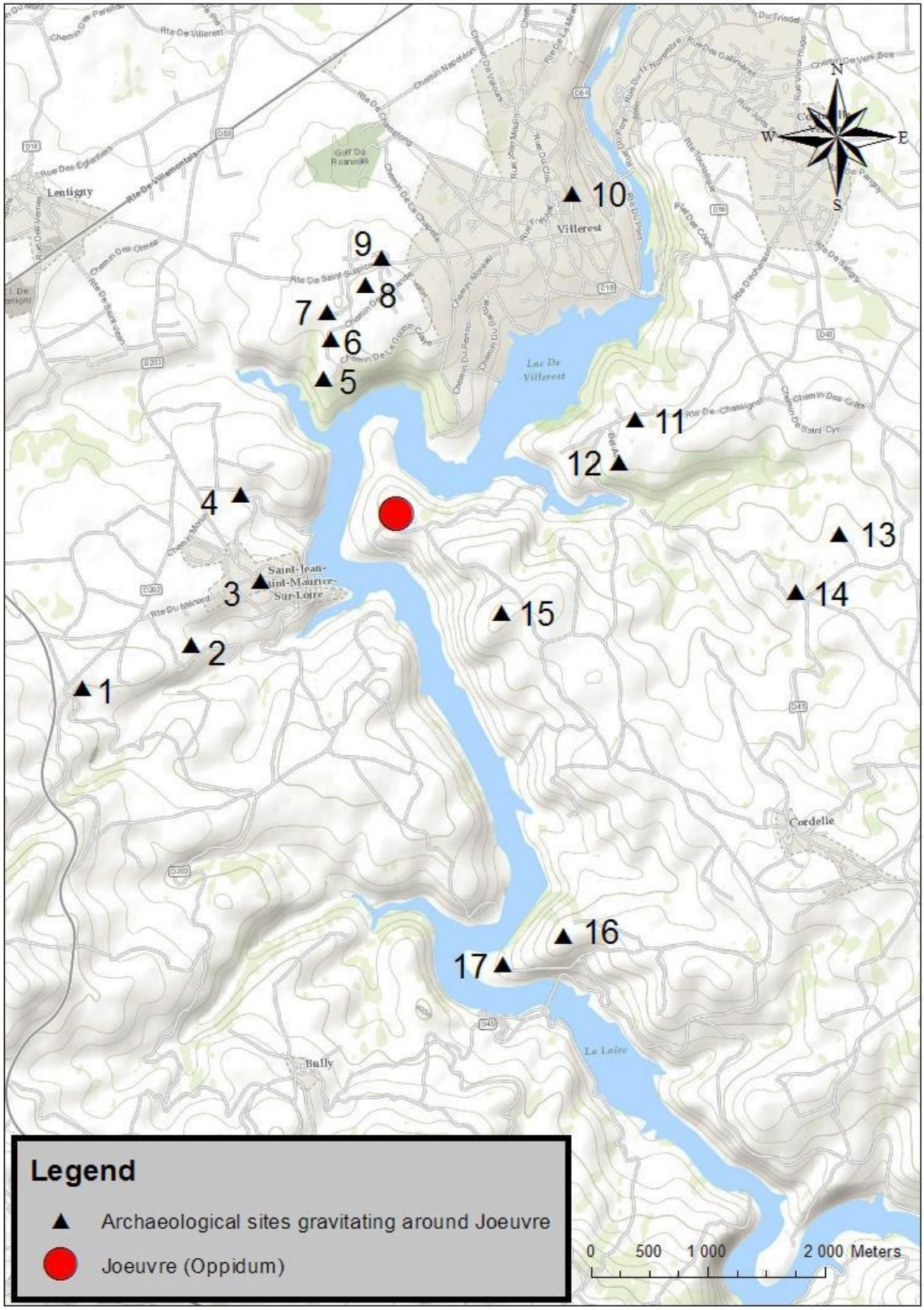


Figure 44: Distribution of archaeological sites in relation to Joeuvre

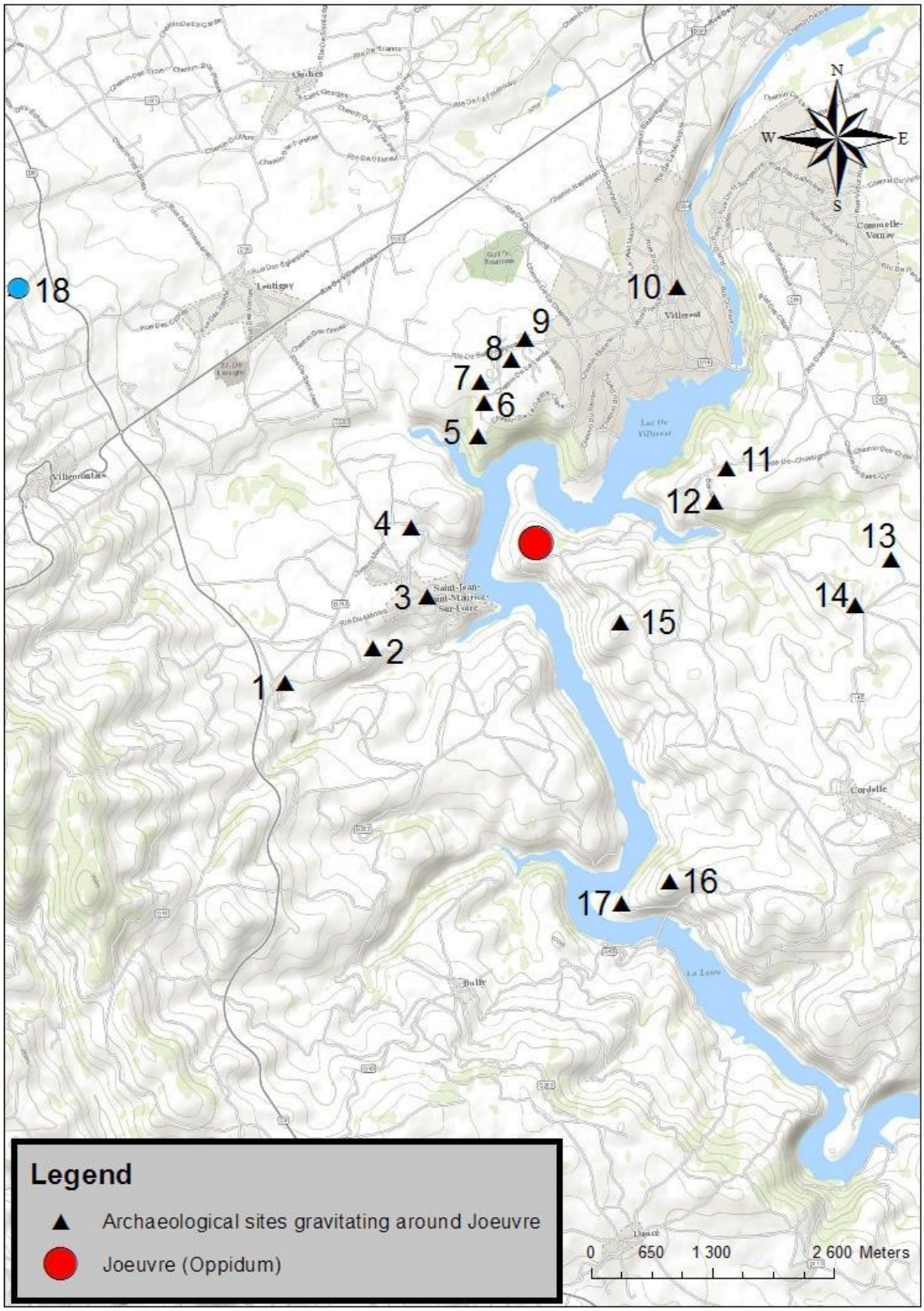


Figure 45: The location of 'La Rochette' (n°18) showing a remarkable concentration of sites around Joeuvre

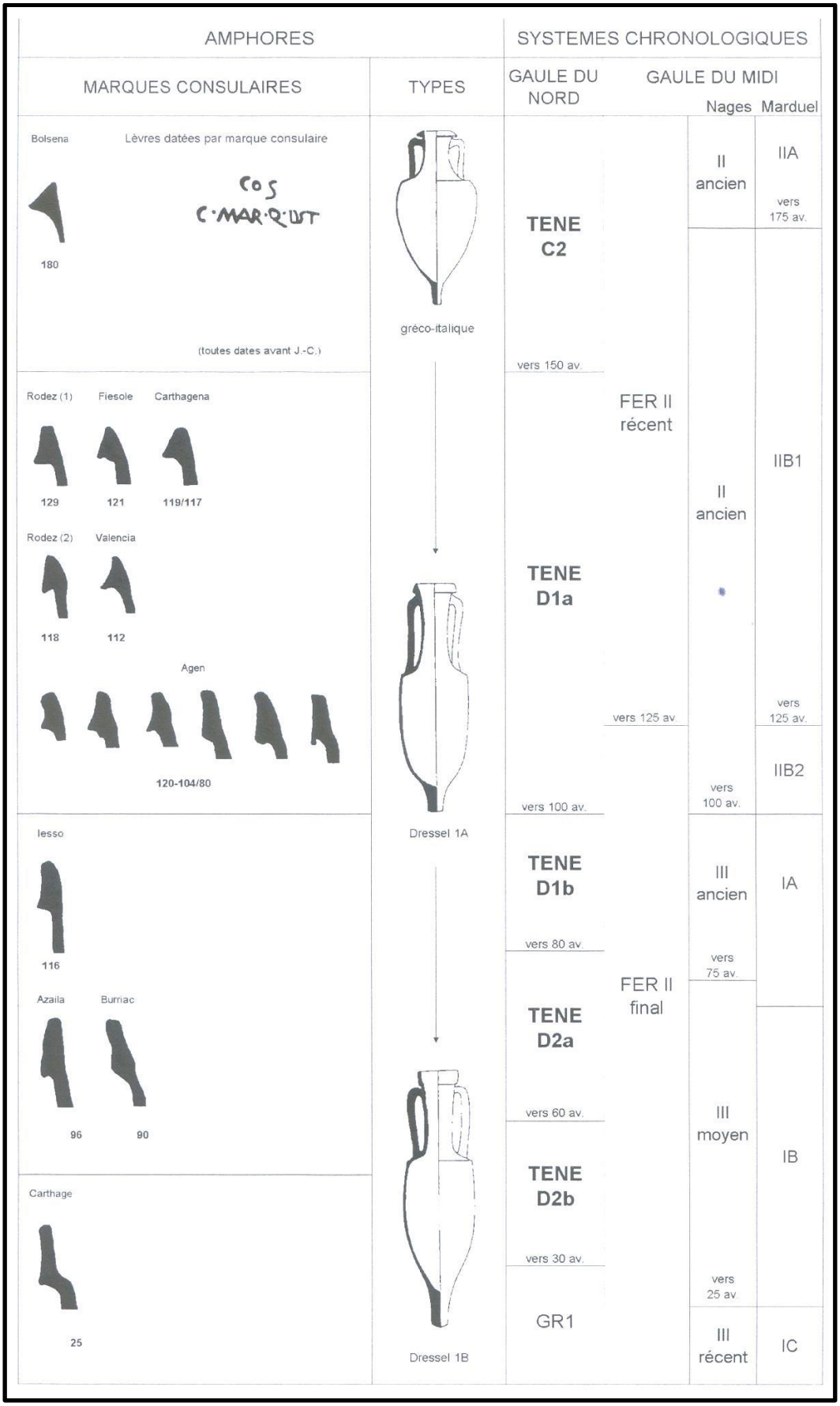


Figure 46: Typology and Dating range of Graeco-Italic and Dressel 1 amphorae (Poux 2004: 46)

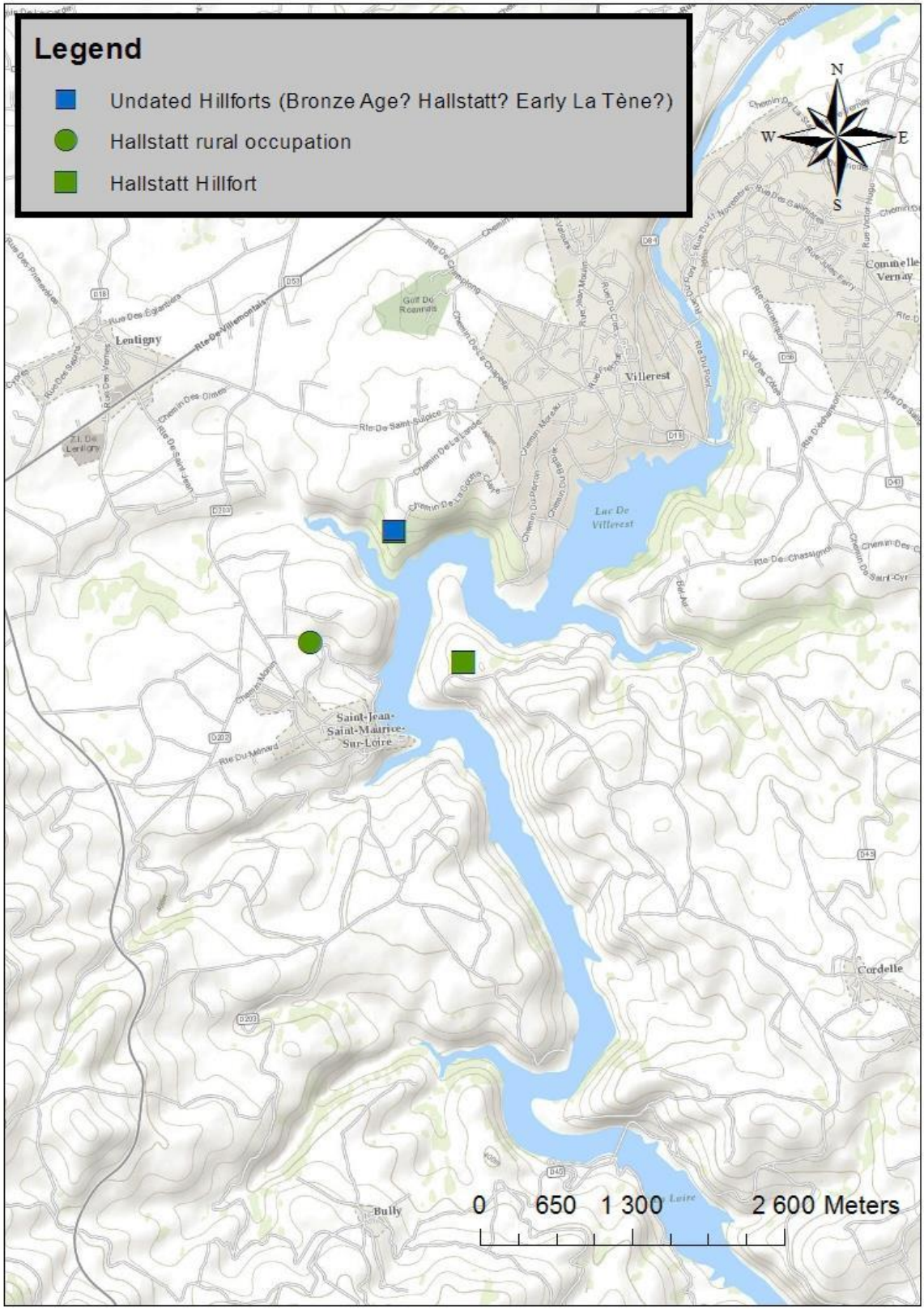


Figure 47: Early Iron age occupation around the promontory of Joeuvre

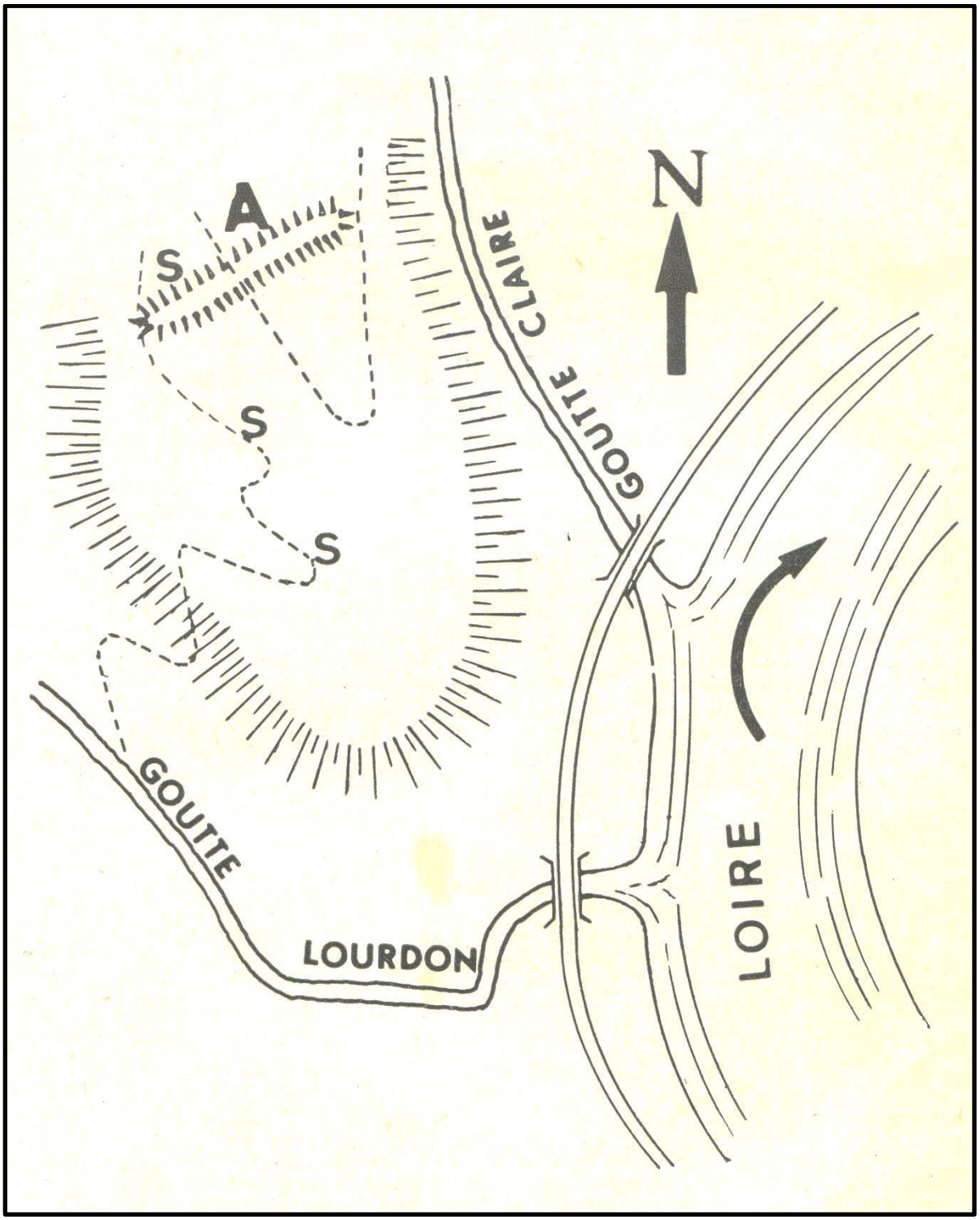
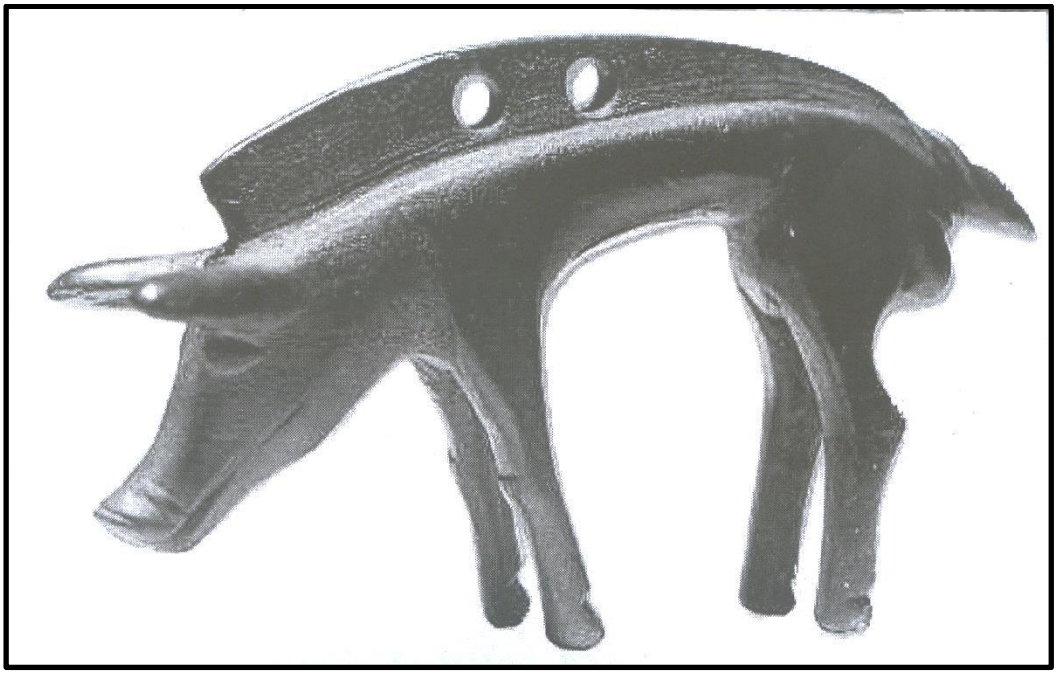


Figure 48: Plan of the éperon barré at Le Lourdon. A- Vitrified Wall; S- Late 19th/ Early 20th c. sondages (after Grosbellet & Périchon 1965: 323)



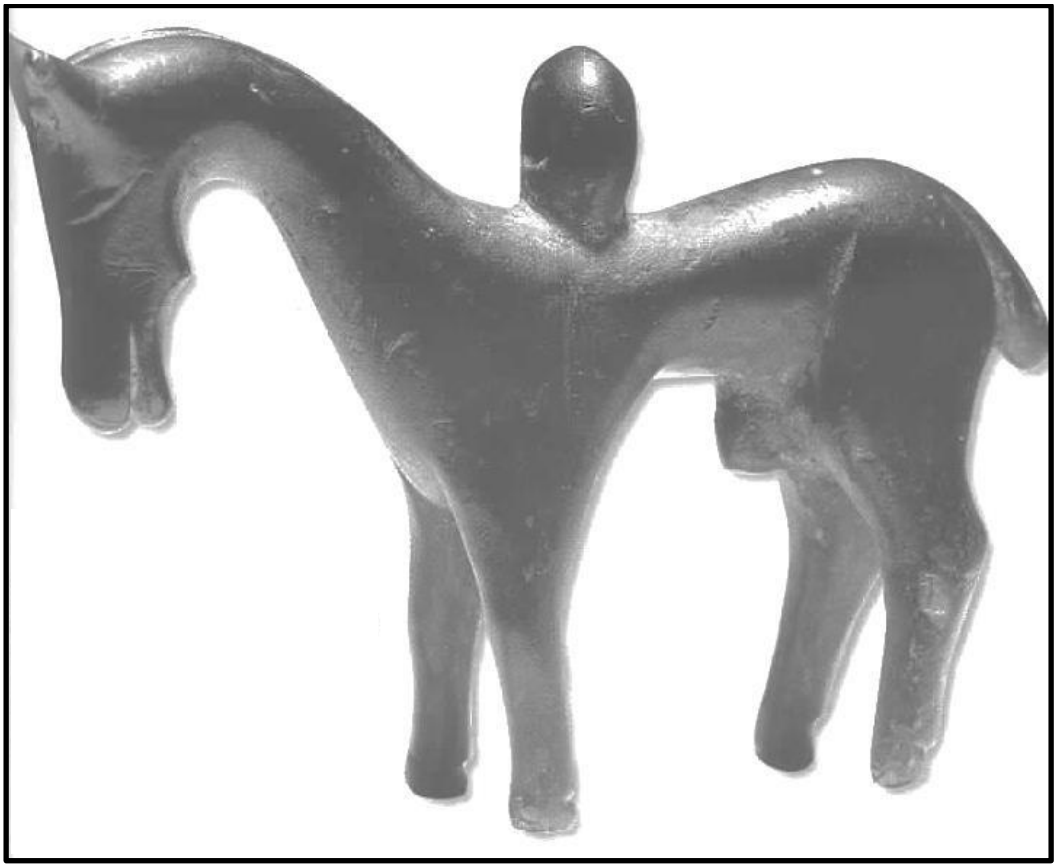


Figure 49: Bronze amulets of a horse and boar found at Joeuvre and recorded by Joseph Déchelette (1910; 1911)

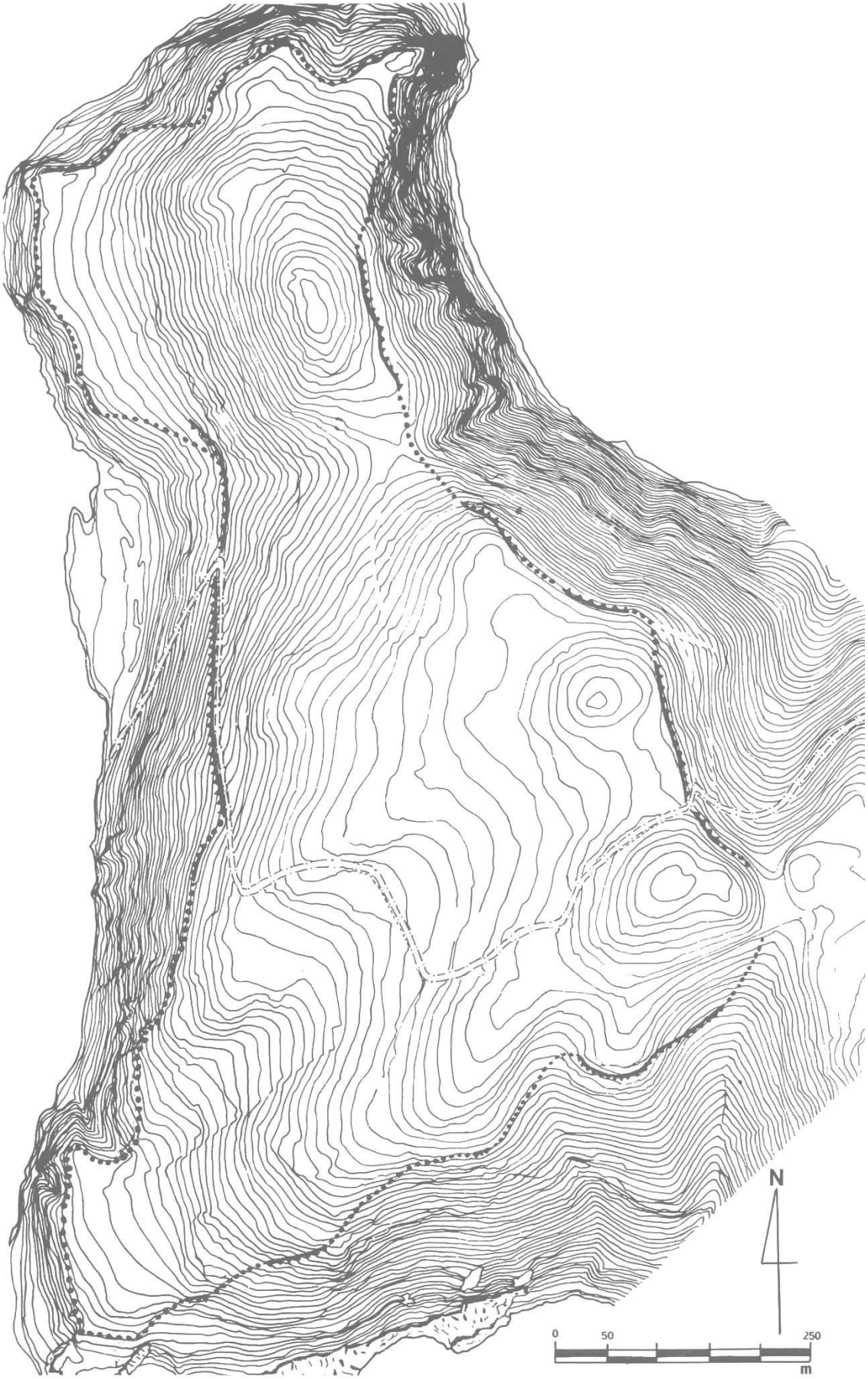


Figure 50: a topographic survey of Joeuvre and its rampart (after Vaginay 1989: 61)

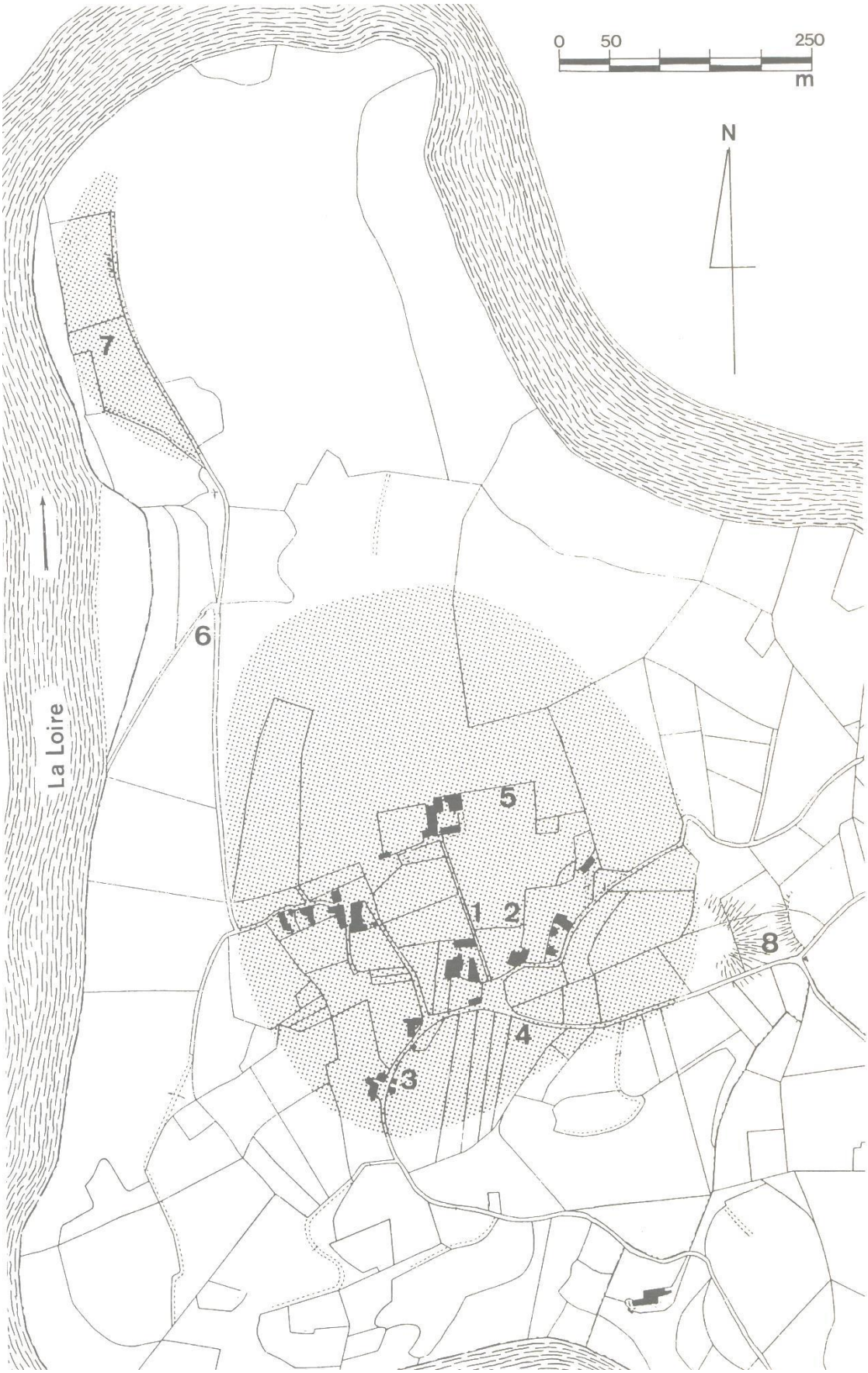


Figure 51: Plan of the oppidum of Joeuvre and the area potentially occupied in the Late La Tène based on field walking results (Vaginay 1989: 59)

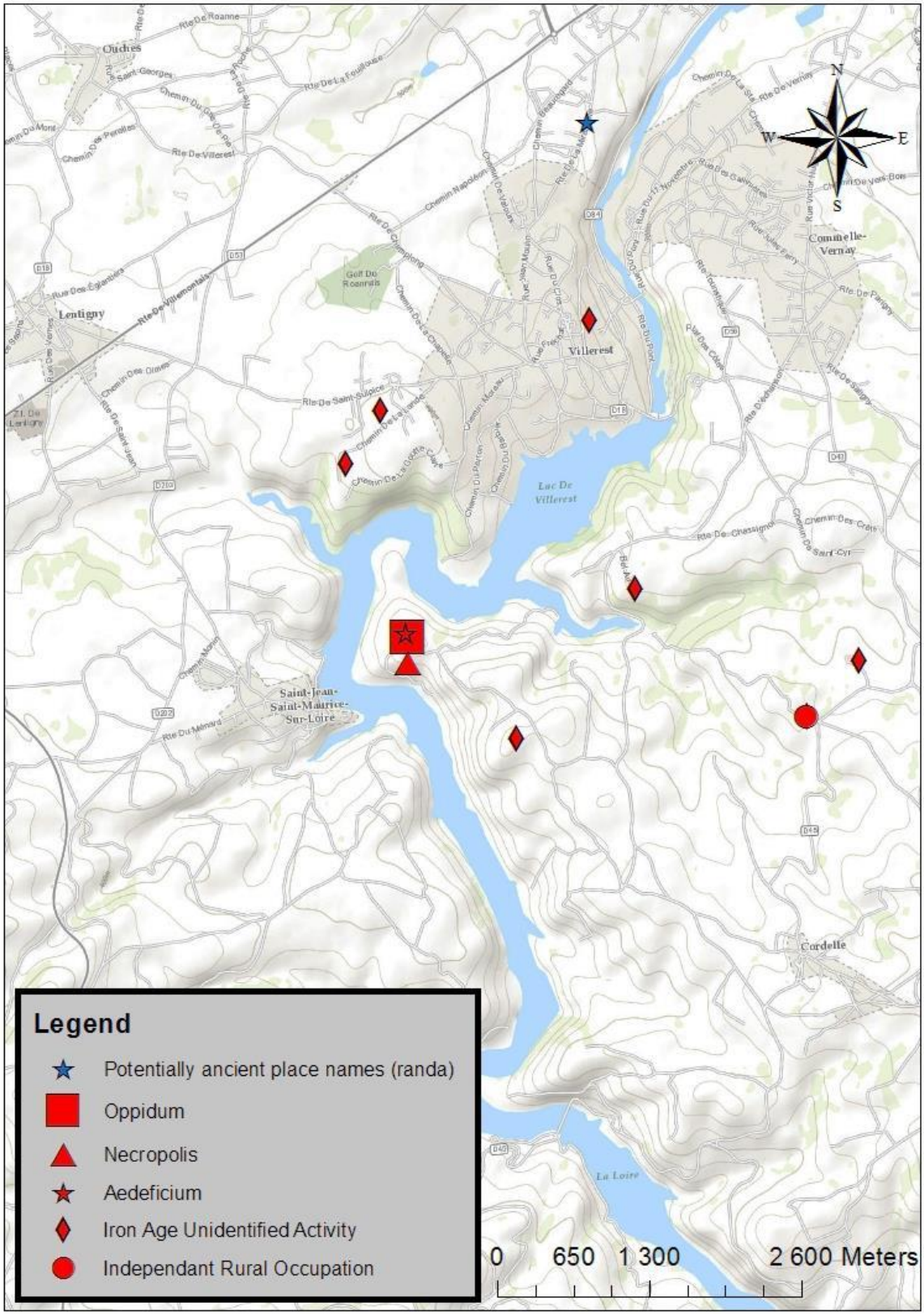


Figure 52: Joeuvre's Late La Tène Landscape

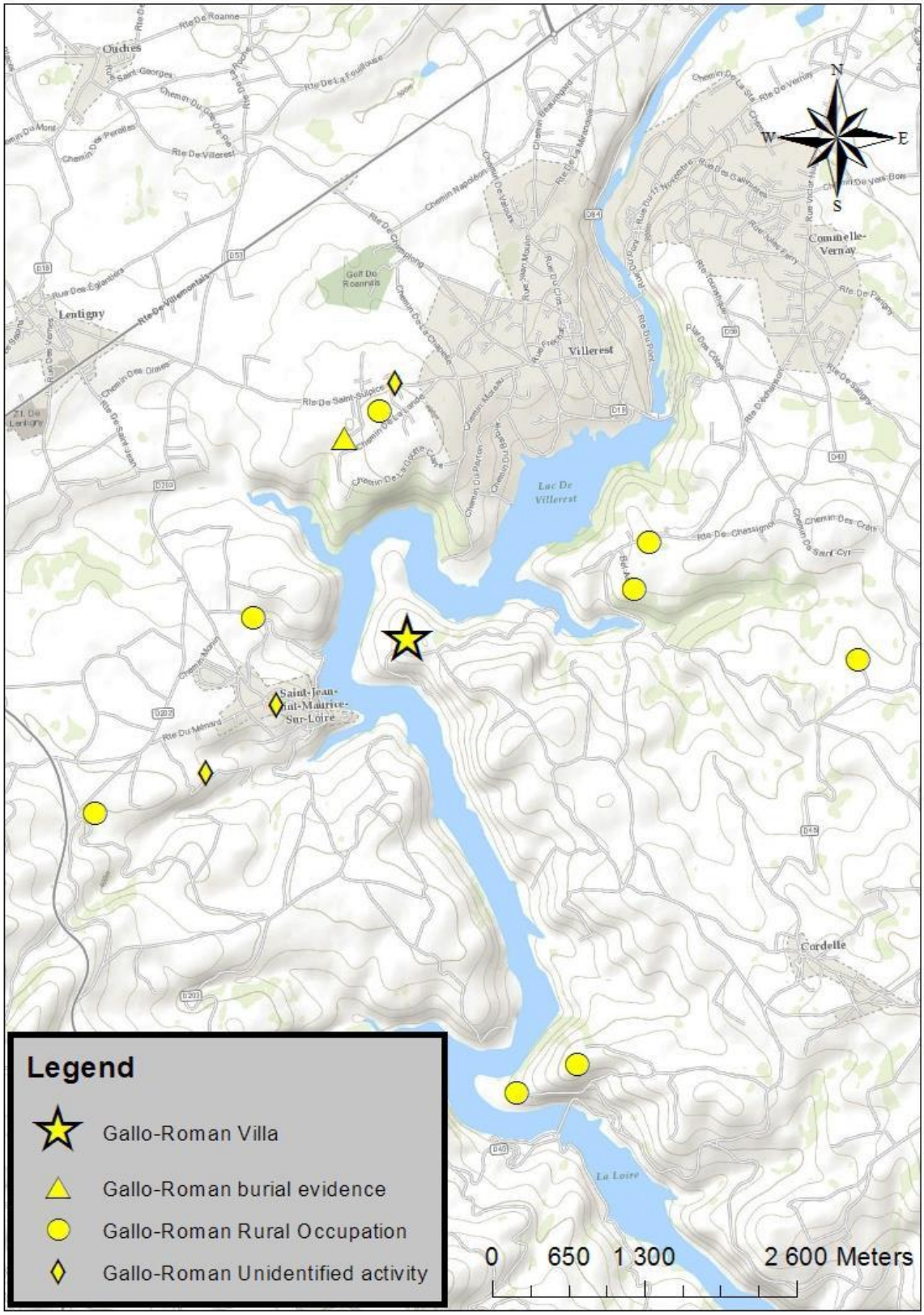


Figure 53: Joeuvre's landscape in the Early Gallo-Roman period

Figure 54: Aerial photograph of Le-Crêt-Châtelard and the view from the top of the oppidum (courtesy of INRAP - Roanne)

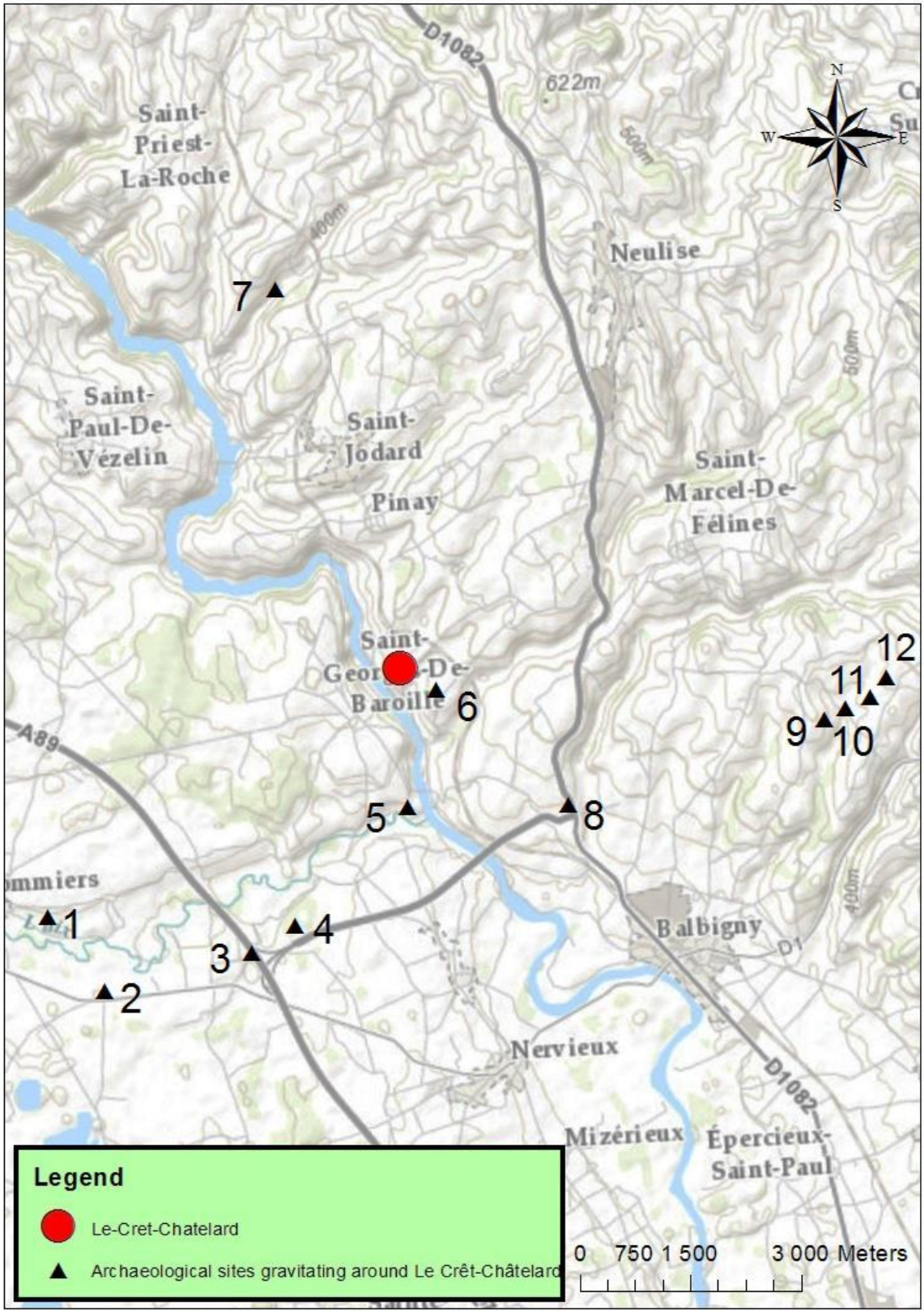


Figure 55: The distribution of archaeological sites around Le-Crêt-Châtelard depicting its relative isolation as only three sites were found within the a 3km radius of the site

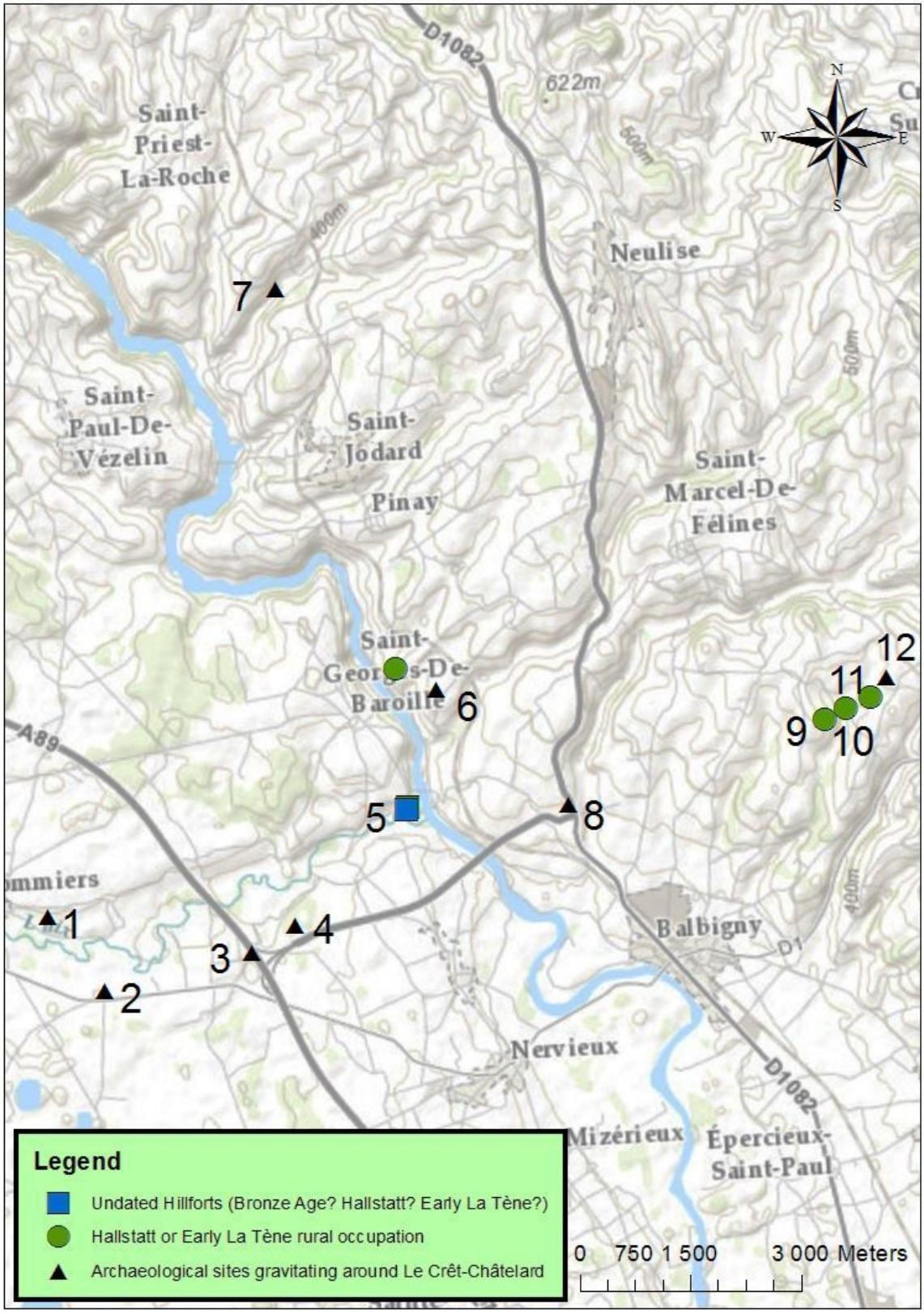


Figure 56: The Early Iron Age Landscape of Le-Crêt-Châtelard showing once again a potential twin on the other side of the river (Chazy) and a potentially intense Hallstatt D occupation near Néronde

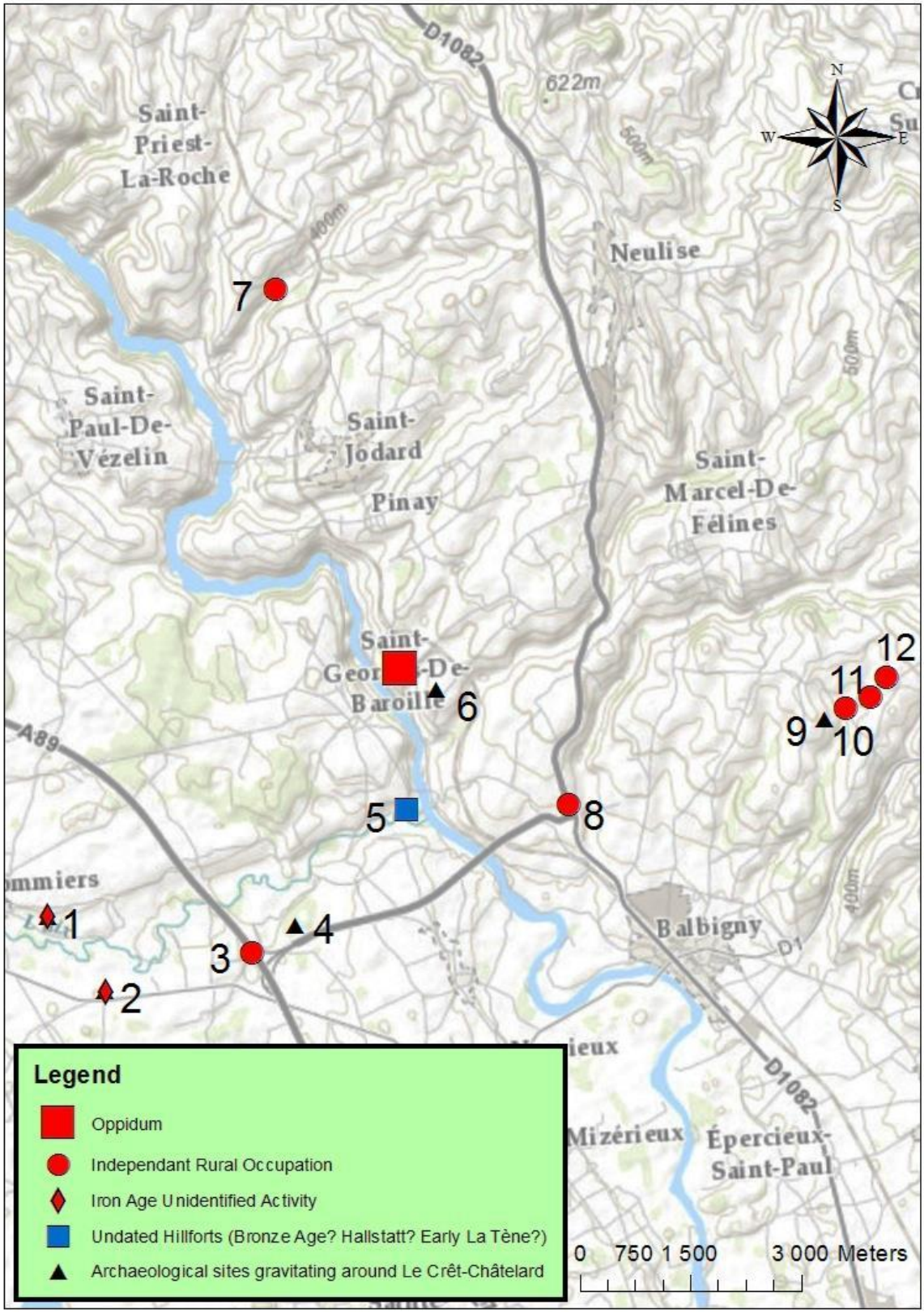


Figure 57: A Late La Tène Landscape showing activity in the lowland but also in the hills of Néronde where once again a cluster of occupation may have existed

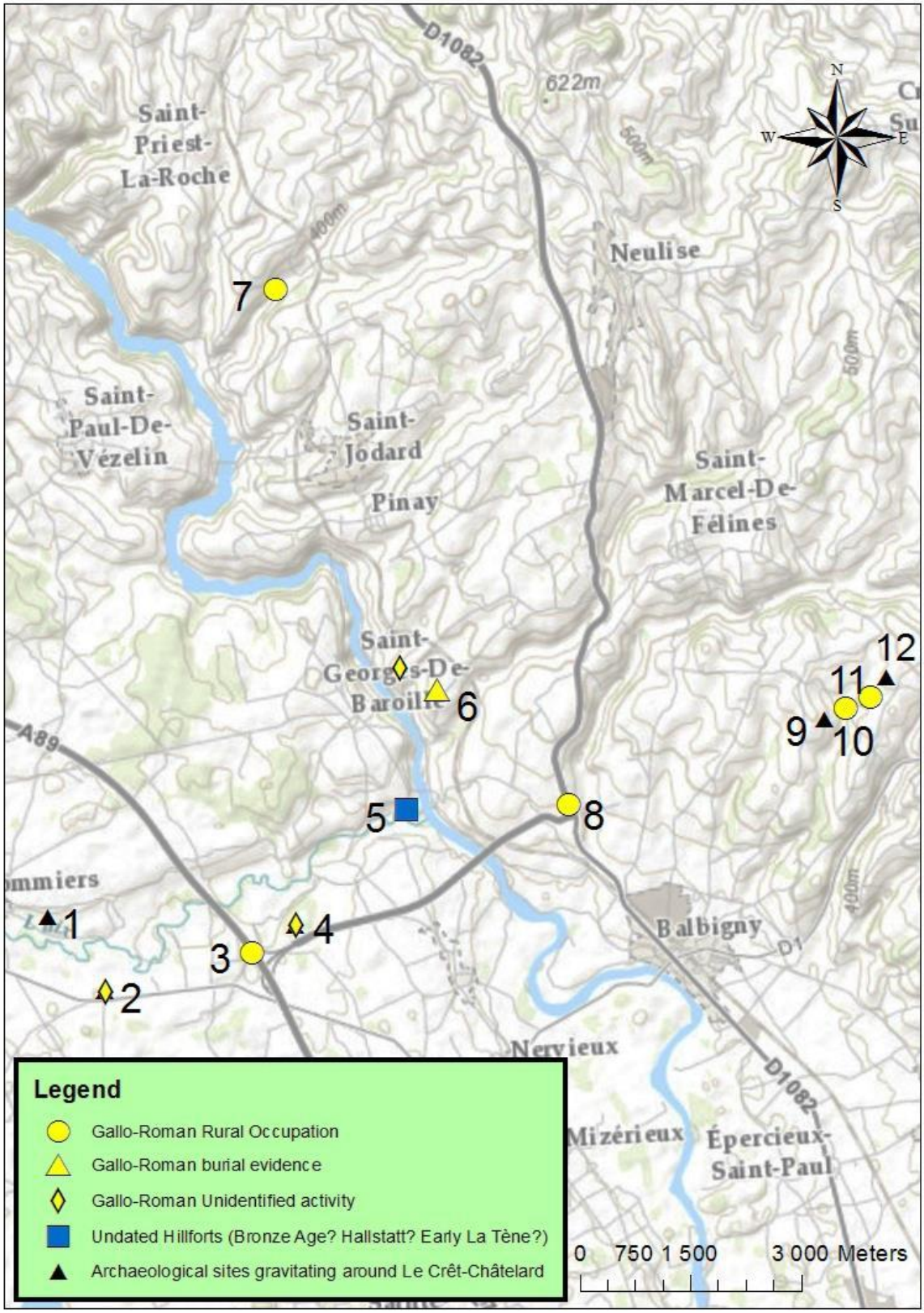


Figure 58: Evidence of continuation in the Early Gallo-Roman period

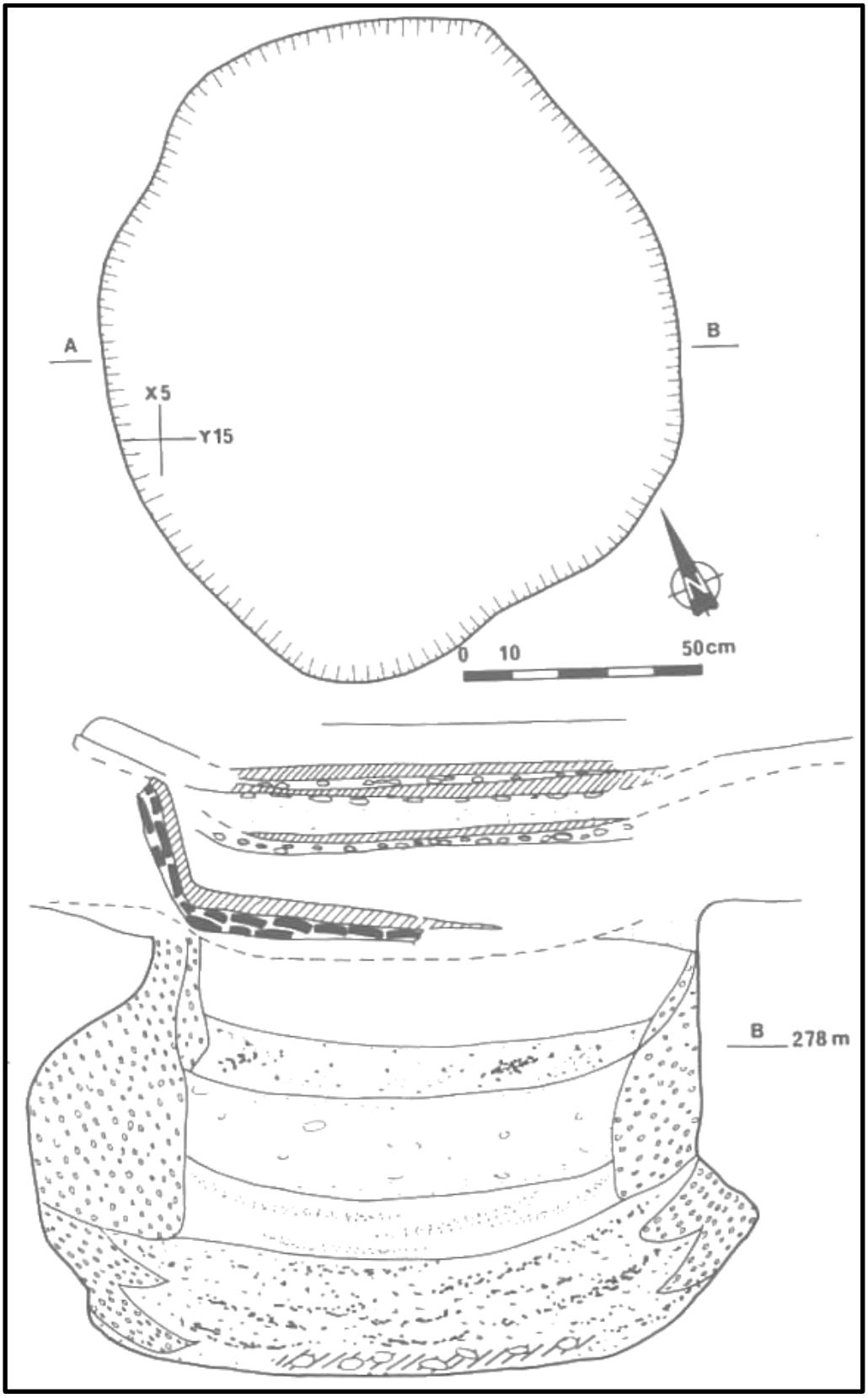
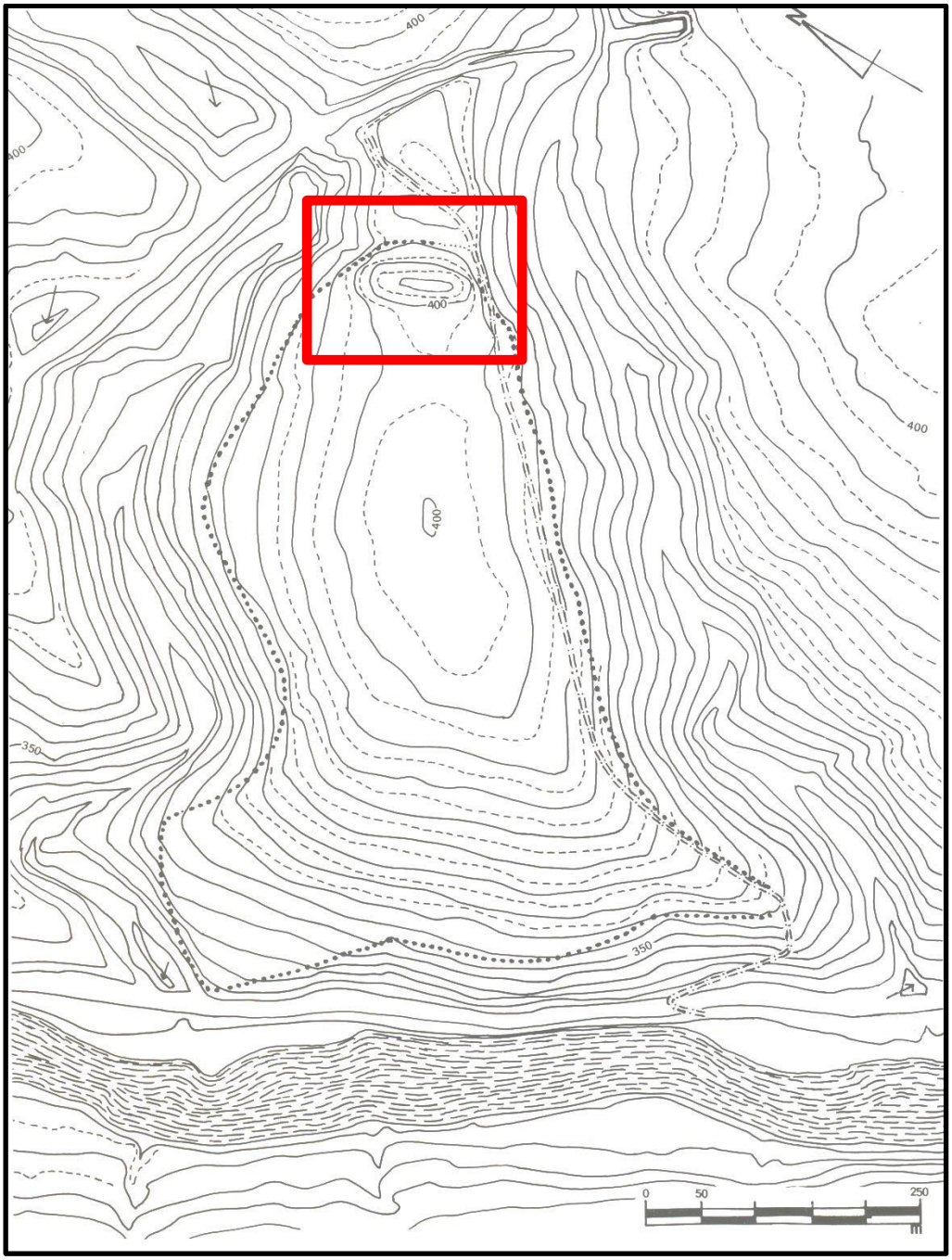


Figure 59: The plan and cut of a storage pit found at Roanne thus showing that the Segusiavi did use such features for storage rather than only Large storage vessels (Lavendhomme & Guichard 1997)



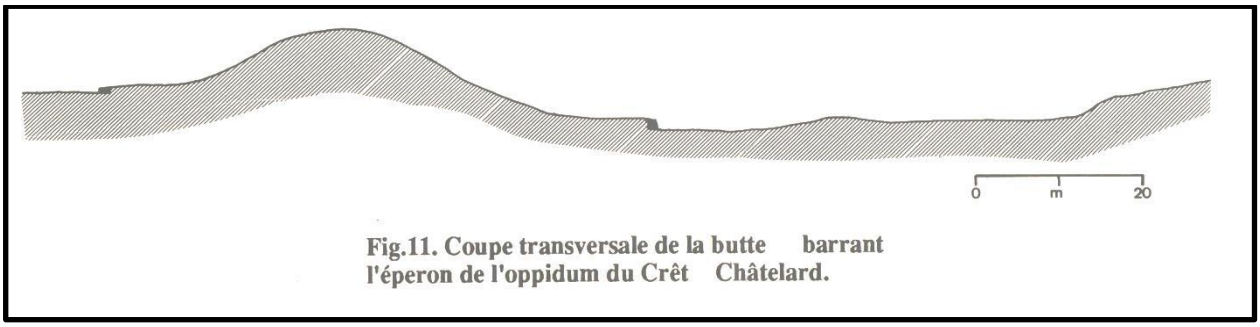


Figure 60: Topgraphic plan of Le-Crêt-Châtelard depicting a clear difference between the murus gallicus and the Eastern Earthwork (see cut) (after Vaginay 1989: 56-7)

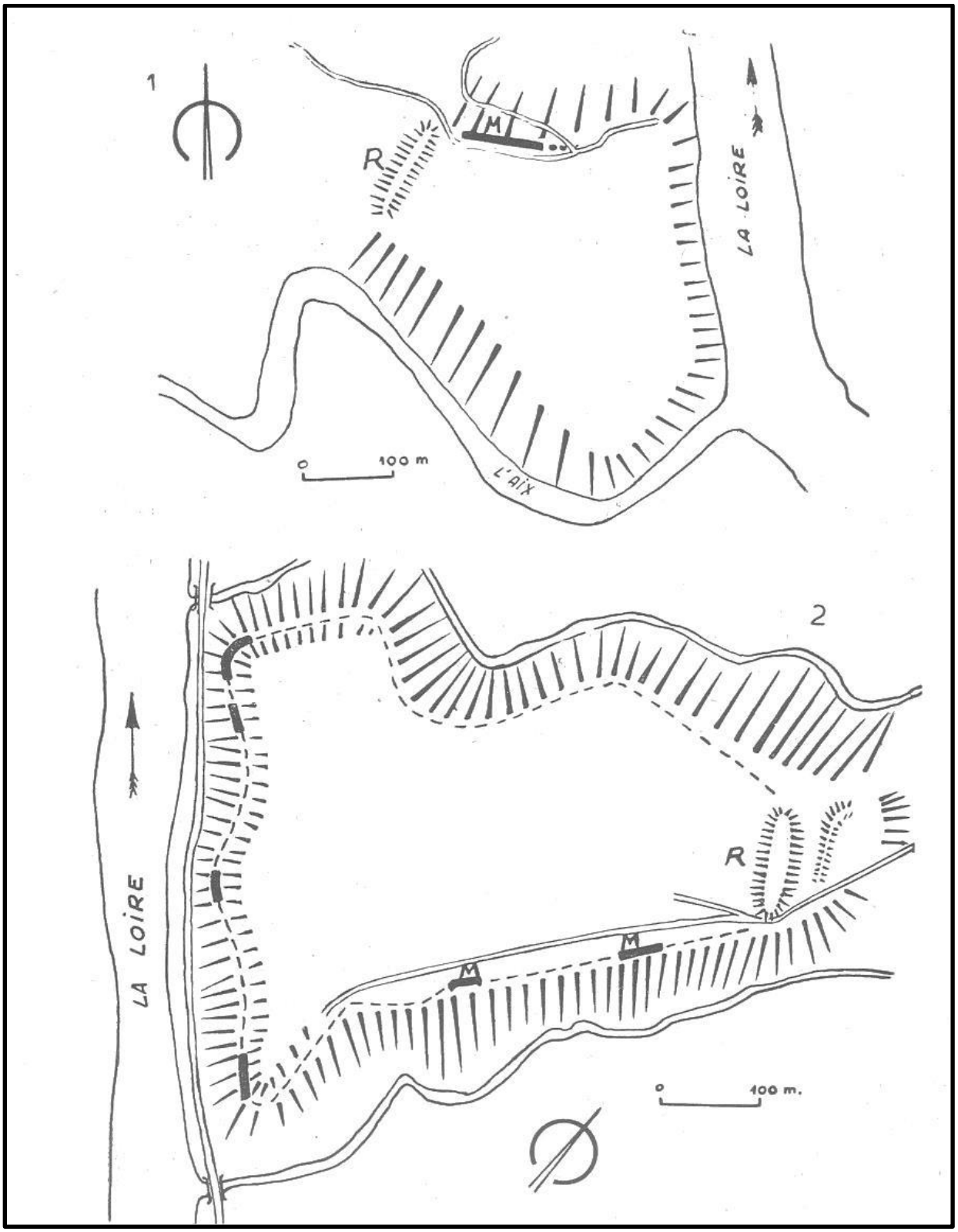


Figure 61: Topographic comparison of Chazy and Le-Crêt-Châtelard. R- Earthwork; M-excavated segments of the murus gallicus

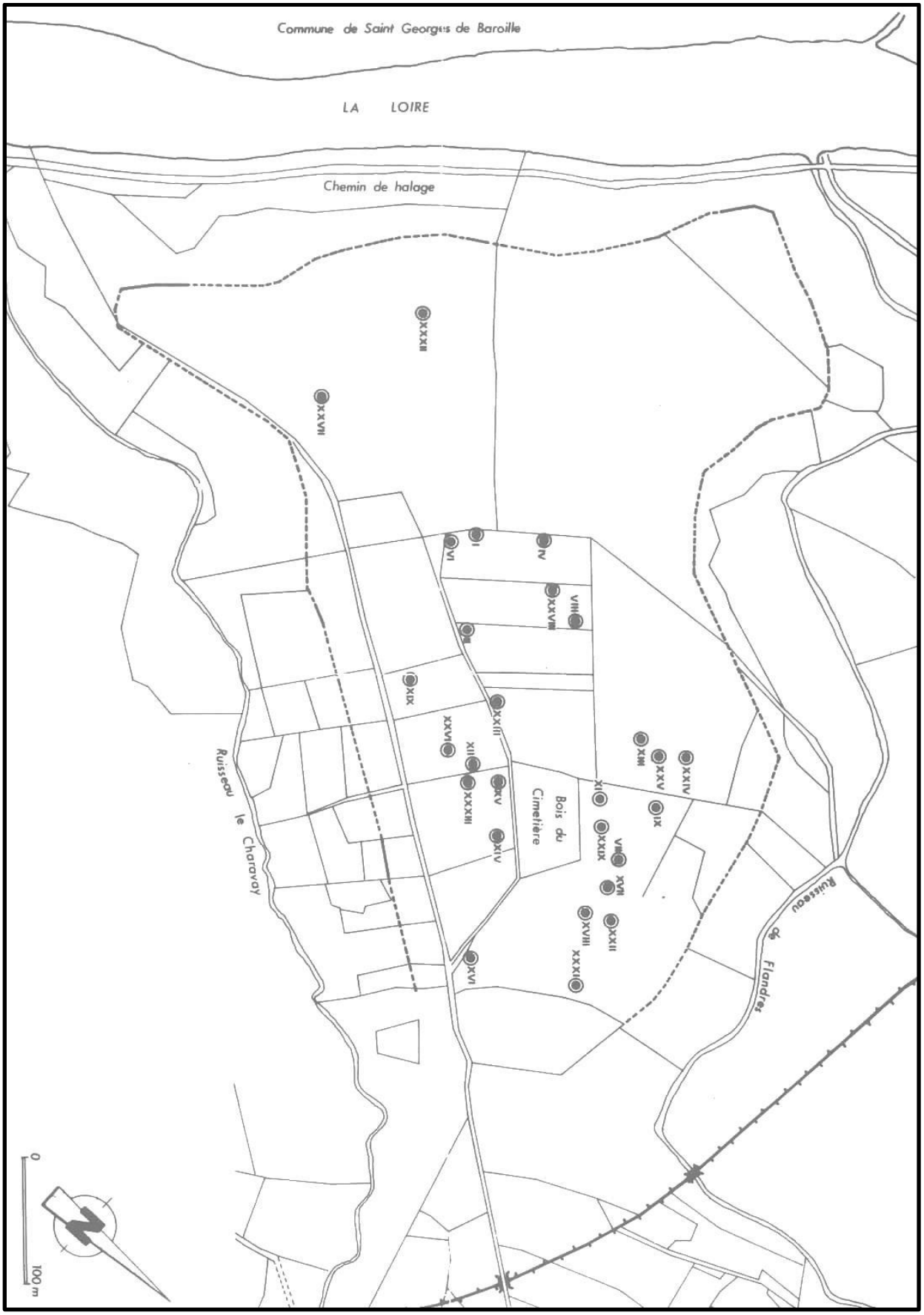


Figure 62: The location of the various wells found at Le-Crêt-Châtelard (after Petiot 1994)

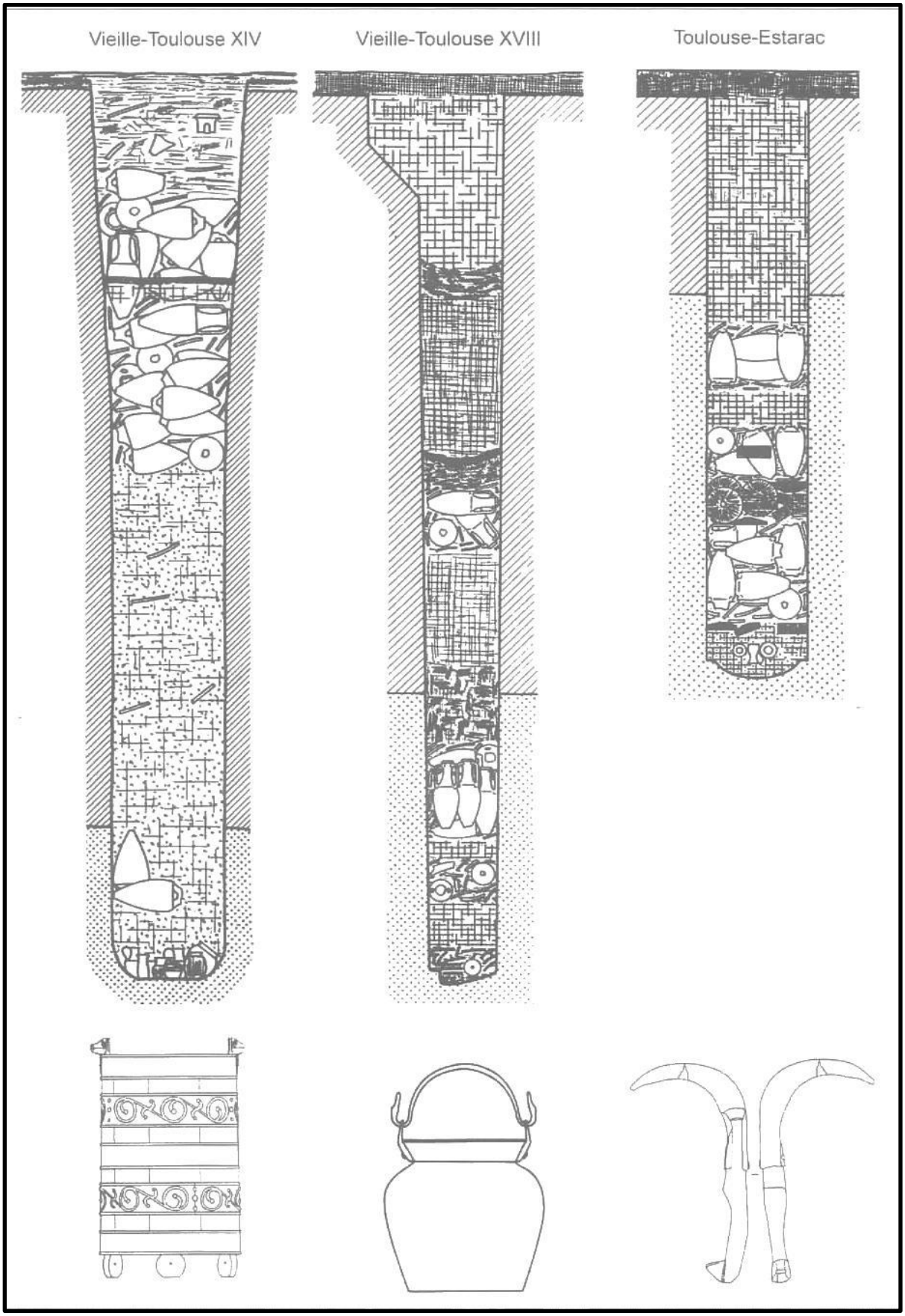


Figure 63: The now famous wells of Toulouse with clear evidence of structured deposition and re-use (Poux 2004: 167)

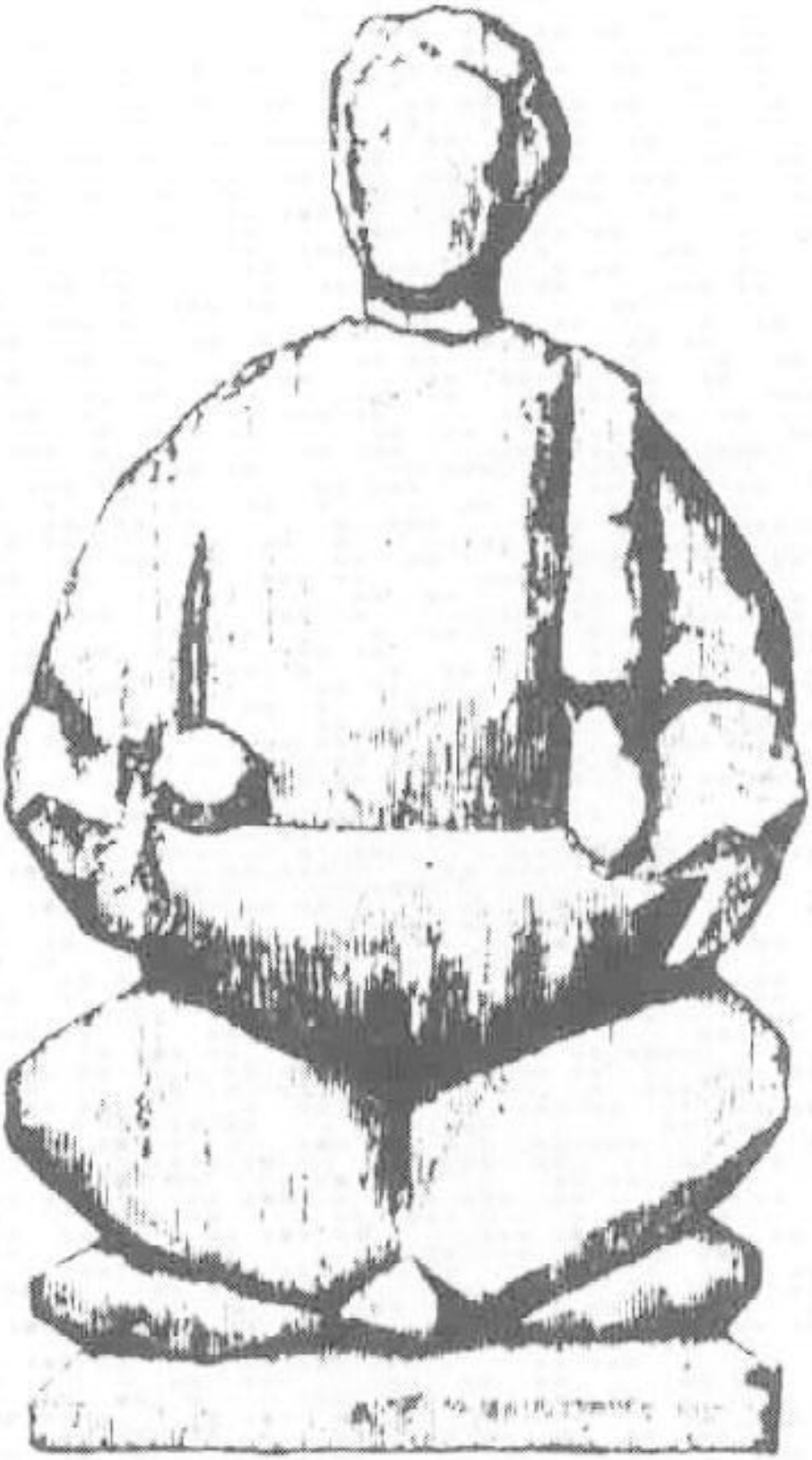


Figure 64: Vincent Durand's drawing of the wooden figurine that may have depicted Cernunos found at the bottom of a well (now lost) (Petiot 1994: 100)

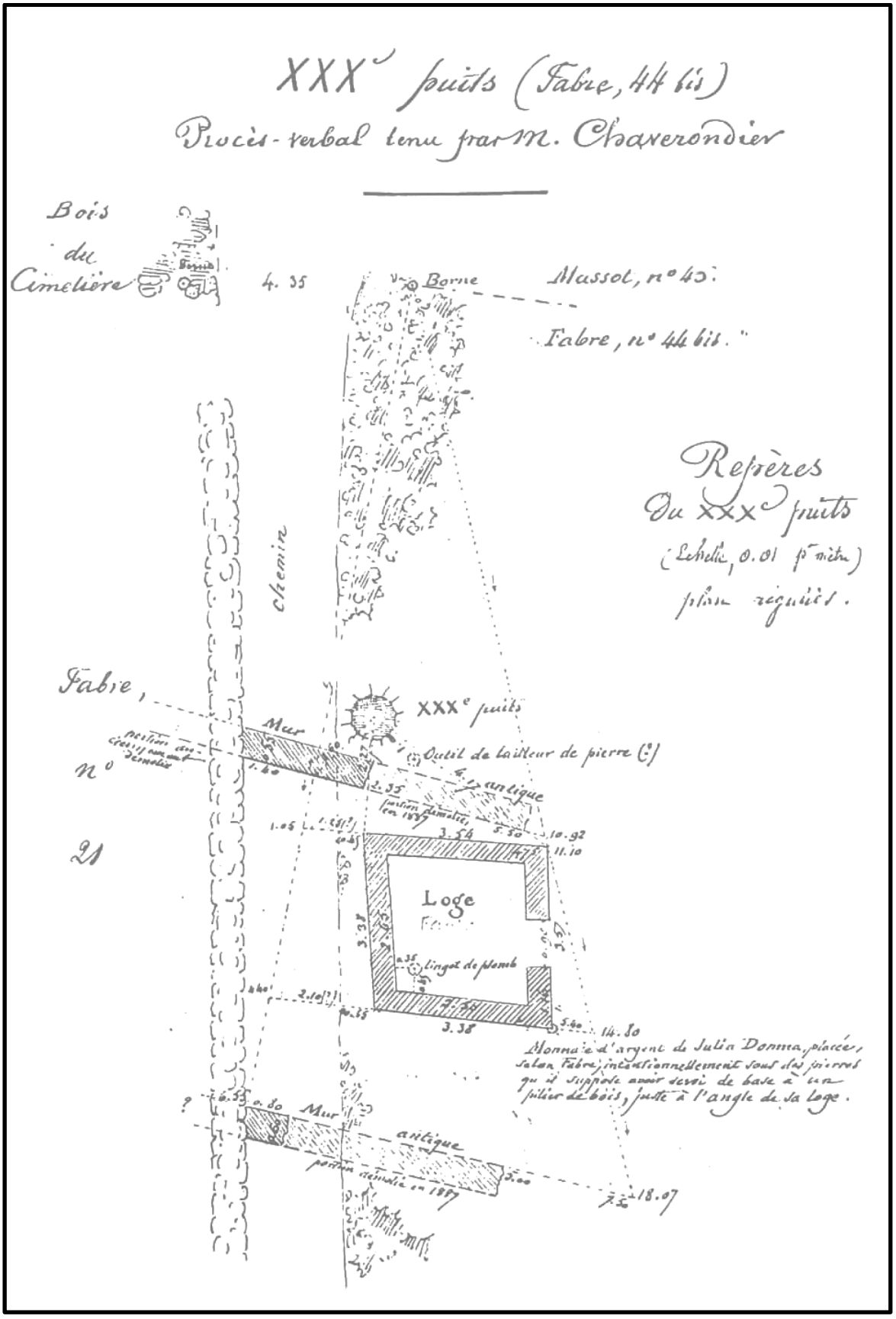


Figure 65: a 19th century misinterpretation? Evidence for a possible temple? Interesting position of Well n°30 (Périchon & Péronnet 1984: 67)

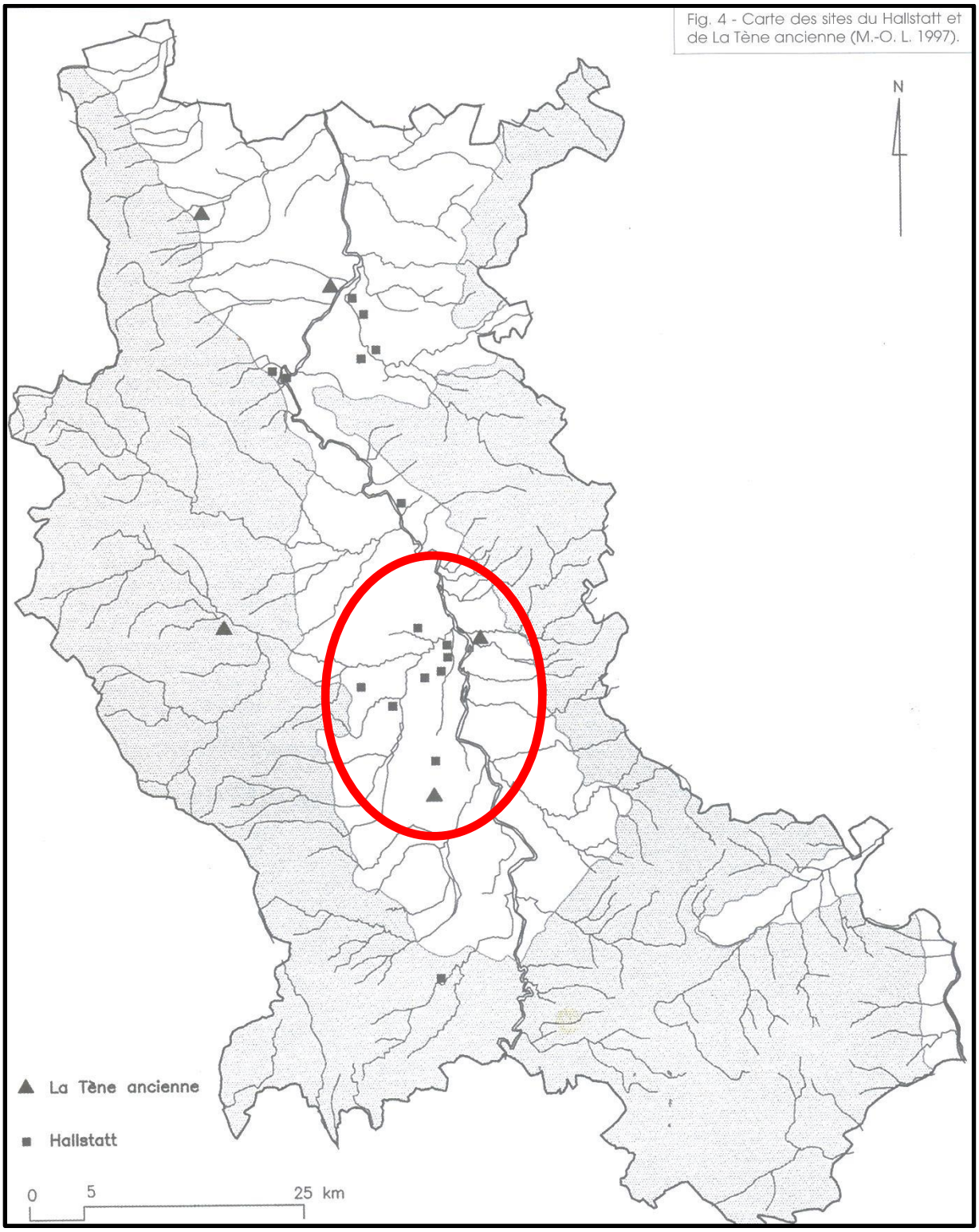


Figure 66: Cluster of Hallstatt occupation in the lowland of the Plaine du Forez reaffirming the spread of occupation for this period in the Segusiavi territory as a whole (Lavendhomme 1997: 38)

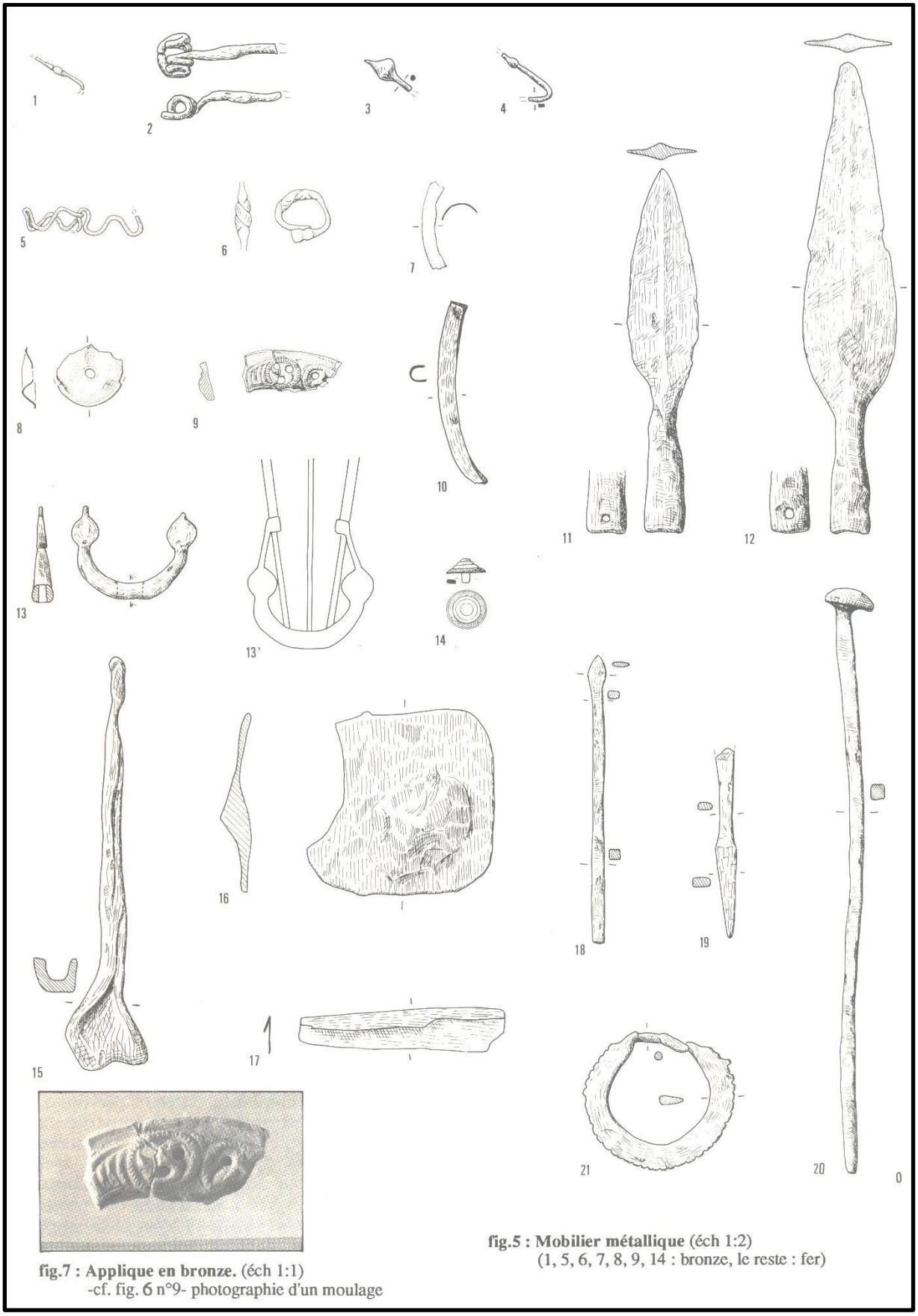
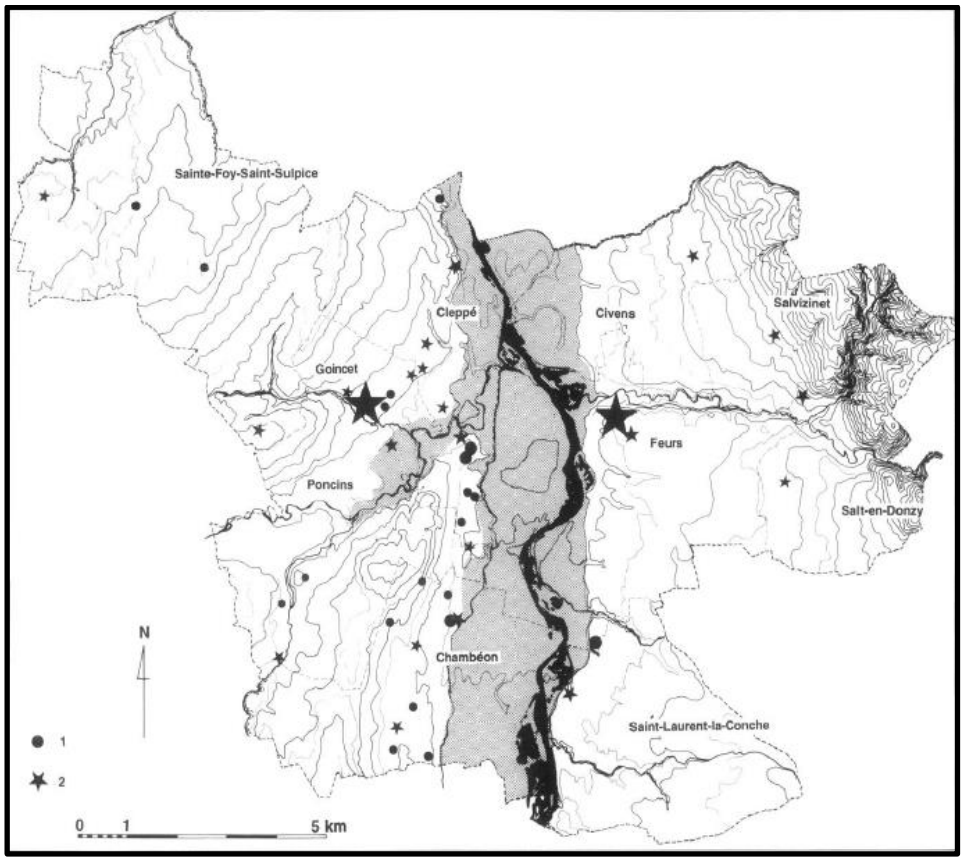


Figure 67: The metallic material from the Châtelard de Lijay which perhaps supports the idea of a relatively high status for the site (Beforet et al. 1989: 24)



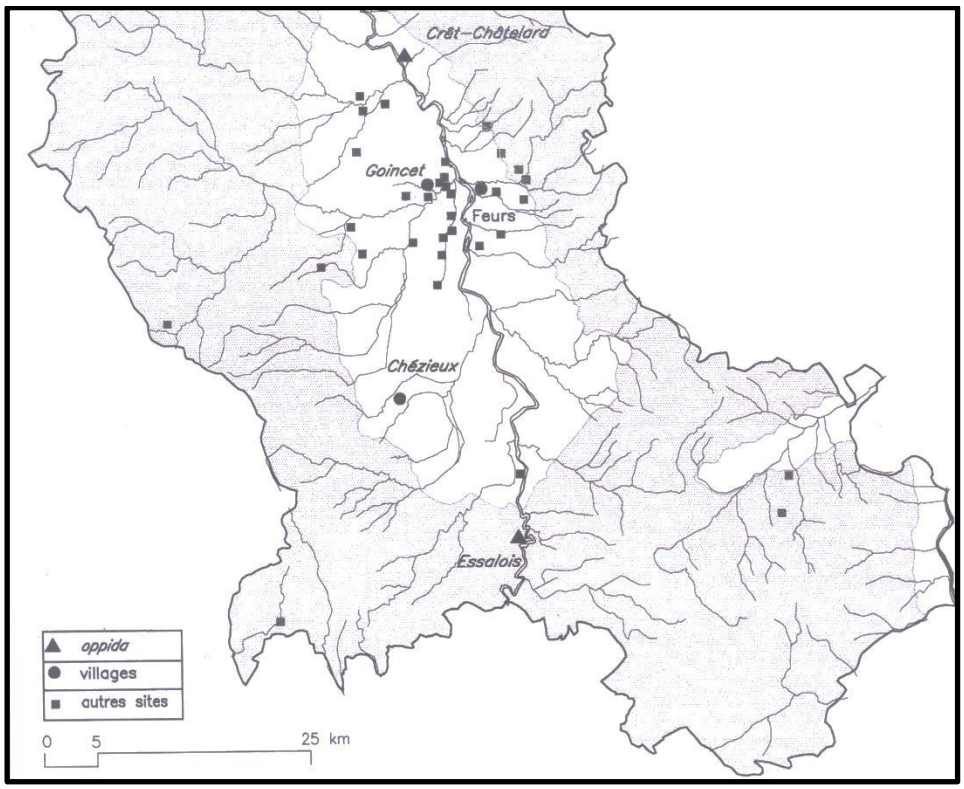


Figure 68: Distribution maps of Late La Tène activity in the Plaine du Forez depicting an important cluster of occupation around the open settlements of Goincet and Feurs rather than the oppidum of Le-Crêt-Châtelard (Lavendhomme 1997: 43 and 137)

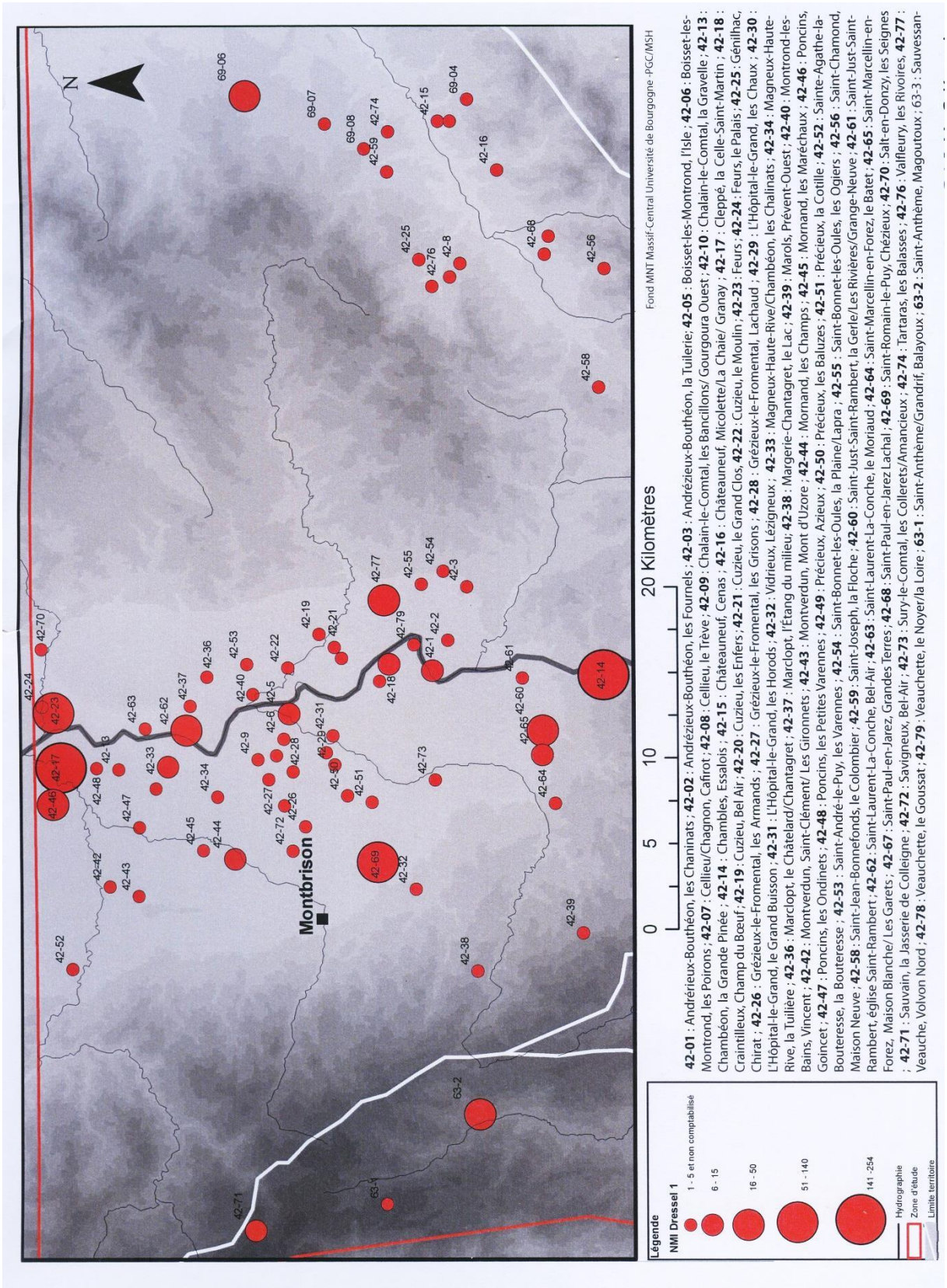


Figure 69: Map of the Southern part of the Segusiavi territory depicting the distribution of Dressel 1 amphorae (Kurzaj 2012: Planche 32)

Figure 70: Map of the open settlement of Acy-Romance and its 3D reconstruction (Fichtl 2005: 172)

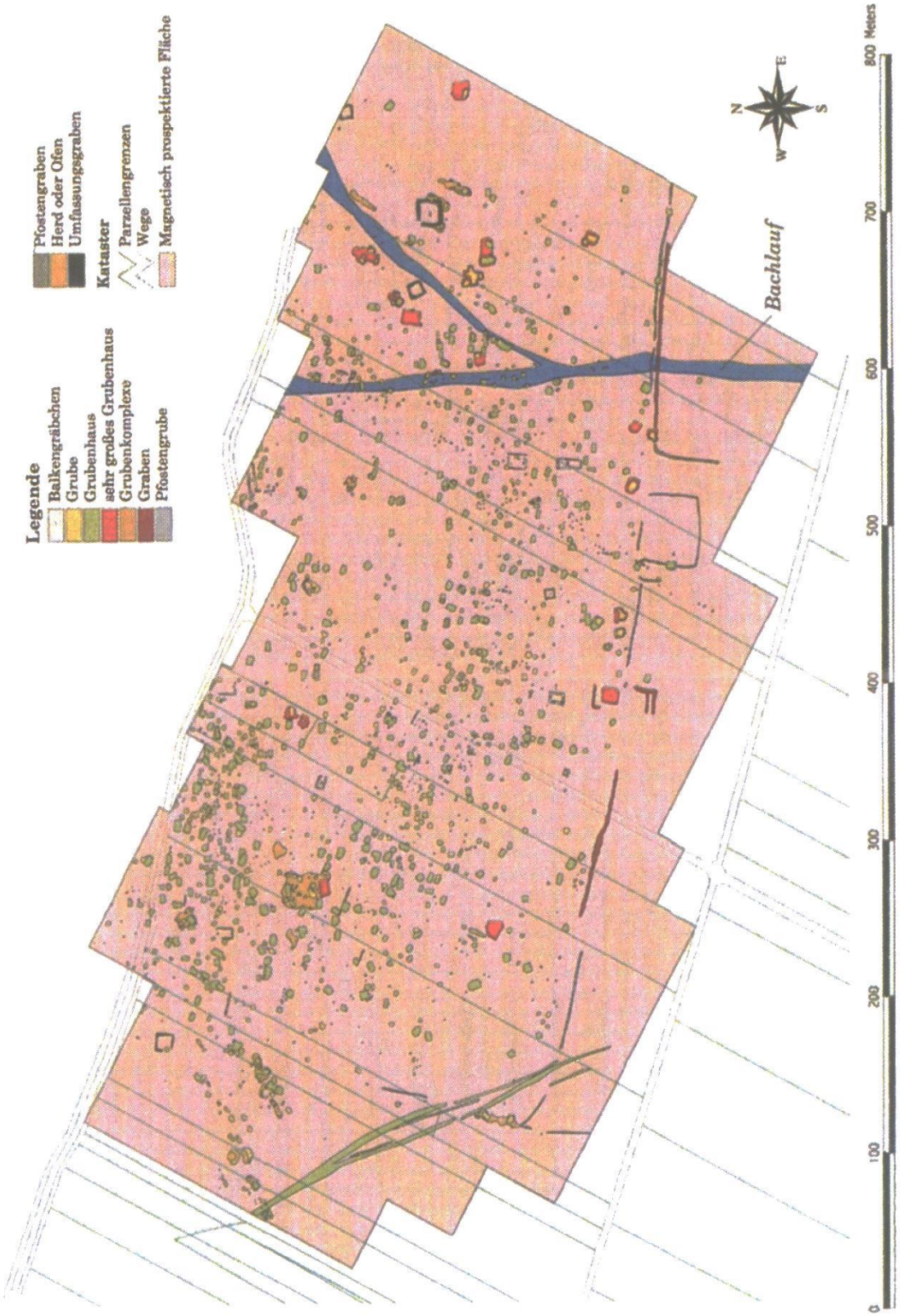


Figure 71: Interpretation of the Geophysical results at Roseldorf showing the existence of a palisade around the open settlement (Salac 2012: 327)

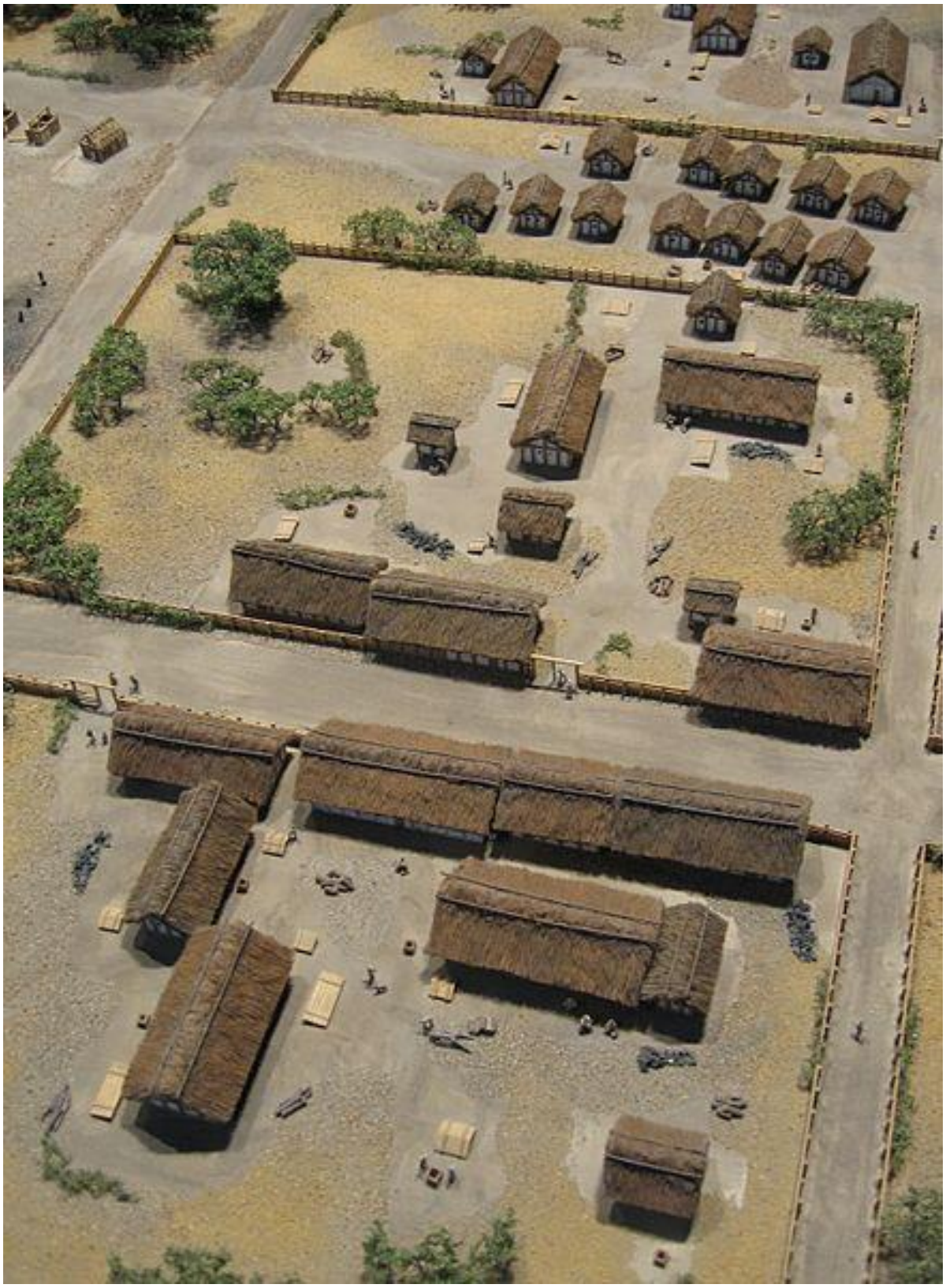


Figure 72: Reconstruction of the central zone of Manching depicting isolated housing plots delimited by palisades (Kelten Römer Museum Manching)

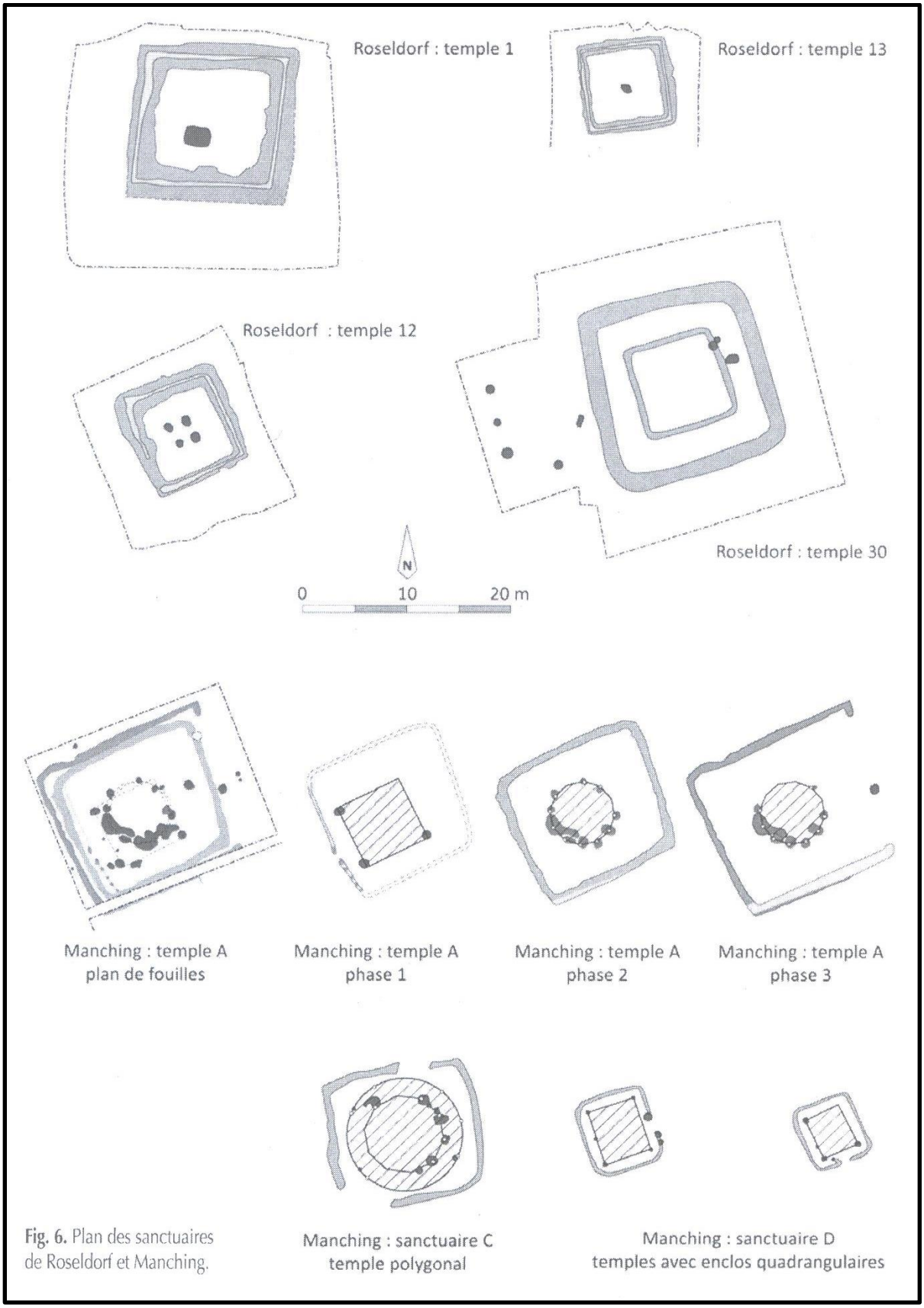


Figure 73: Plans of the various phases of the sanctuaries excavated at Manching and Roseldorf (Fichtl 2013: Fig.6)

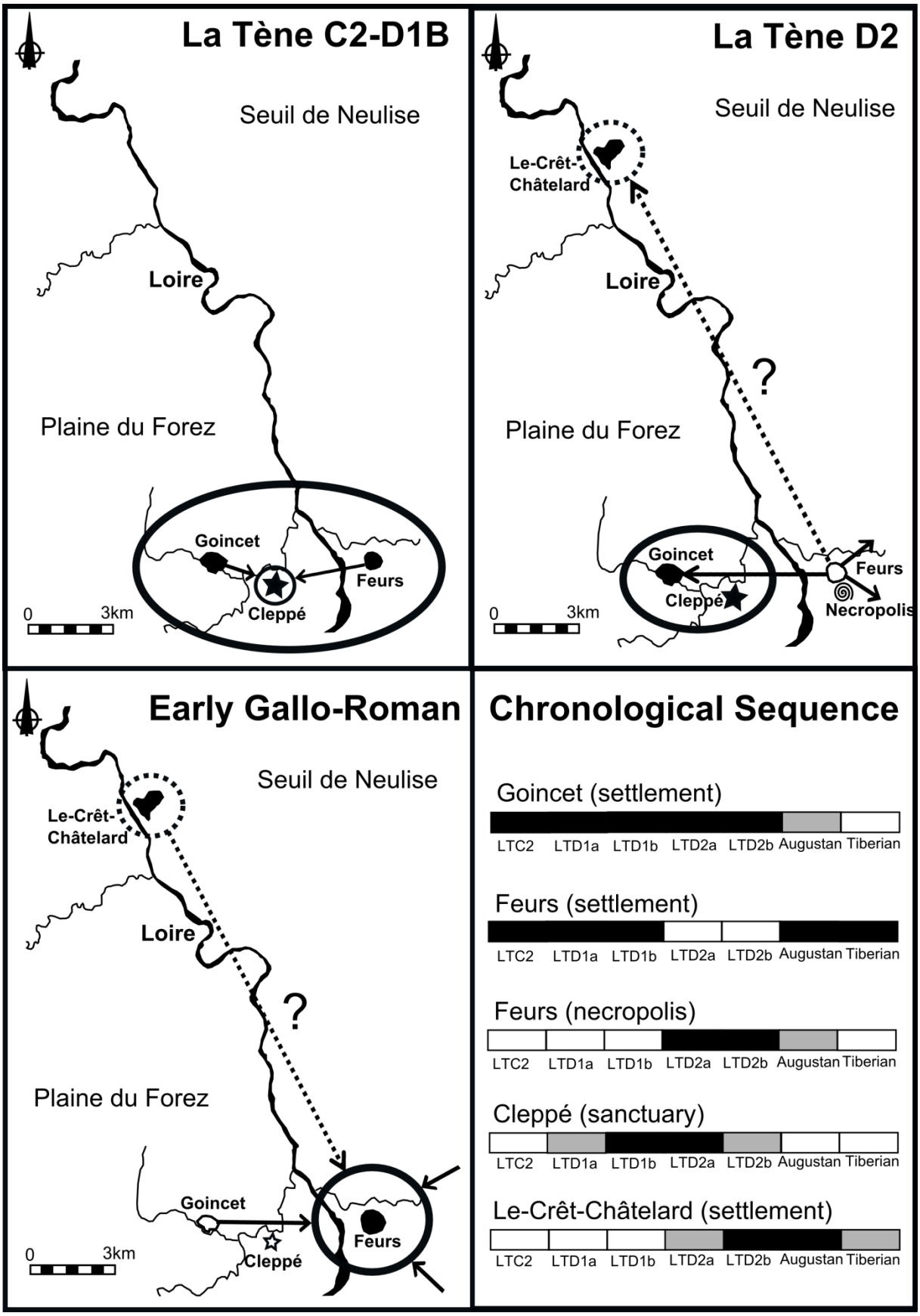


Figure 74: Modelling the settlement dynamics of the Southern part of the Segusiavi territory

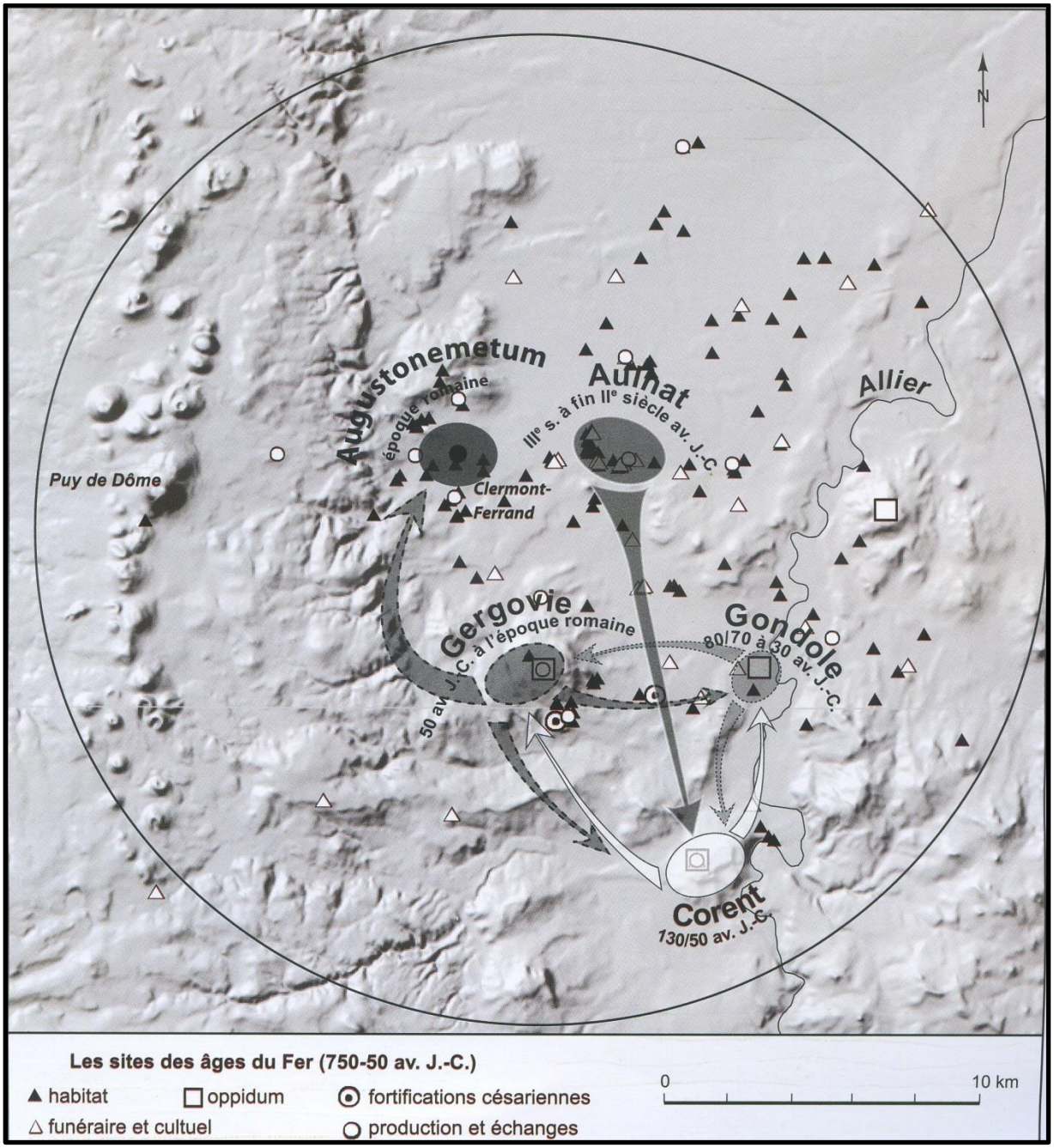


Figure 75: Settlement dynamics of the Arverni landscape (Dartevelle et al. 2009: Fig 15)

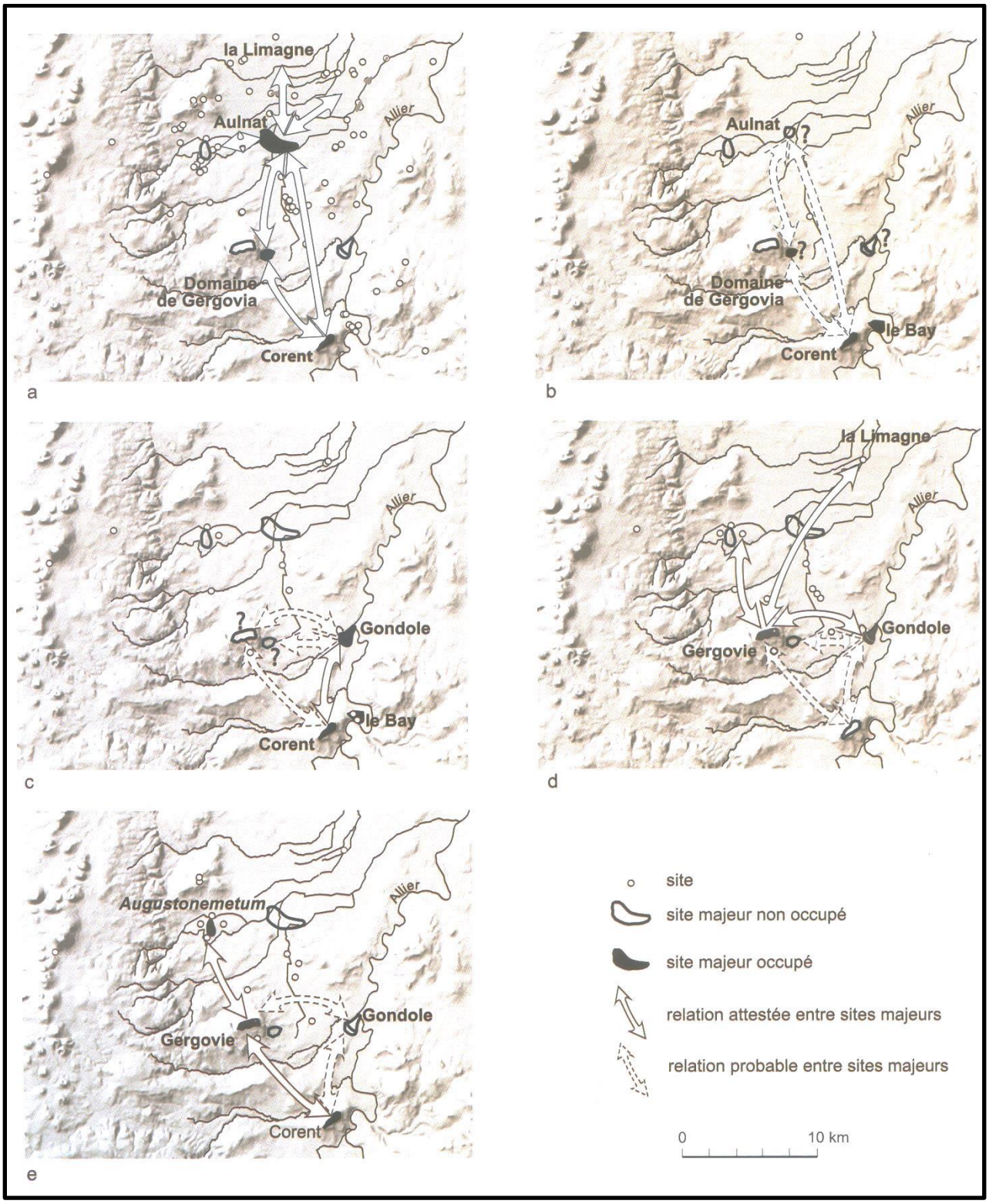


Figure 76: Detailed chronological analysis of the settlement dynamics in the Arverni territory. a- La Tène C2-D1a; b- La Tène D1b; c- La Tène D2a; d- La Tène D2b; e- Augustan (Dartevelle et al. 2009: Fig 16)

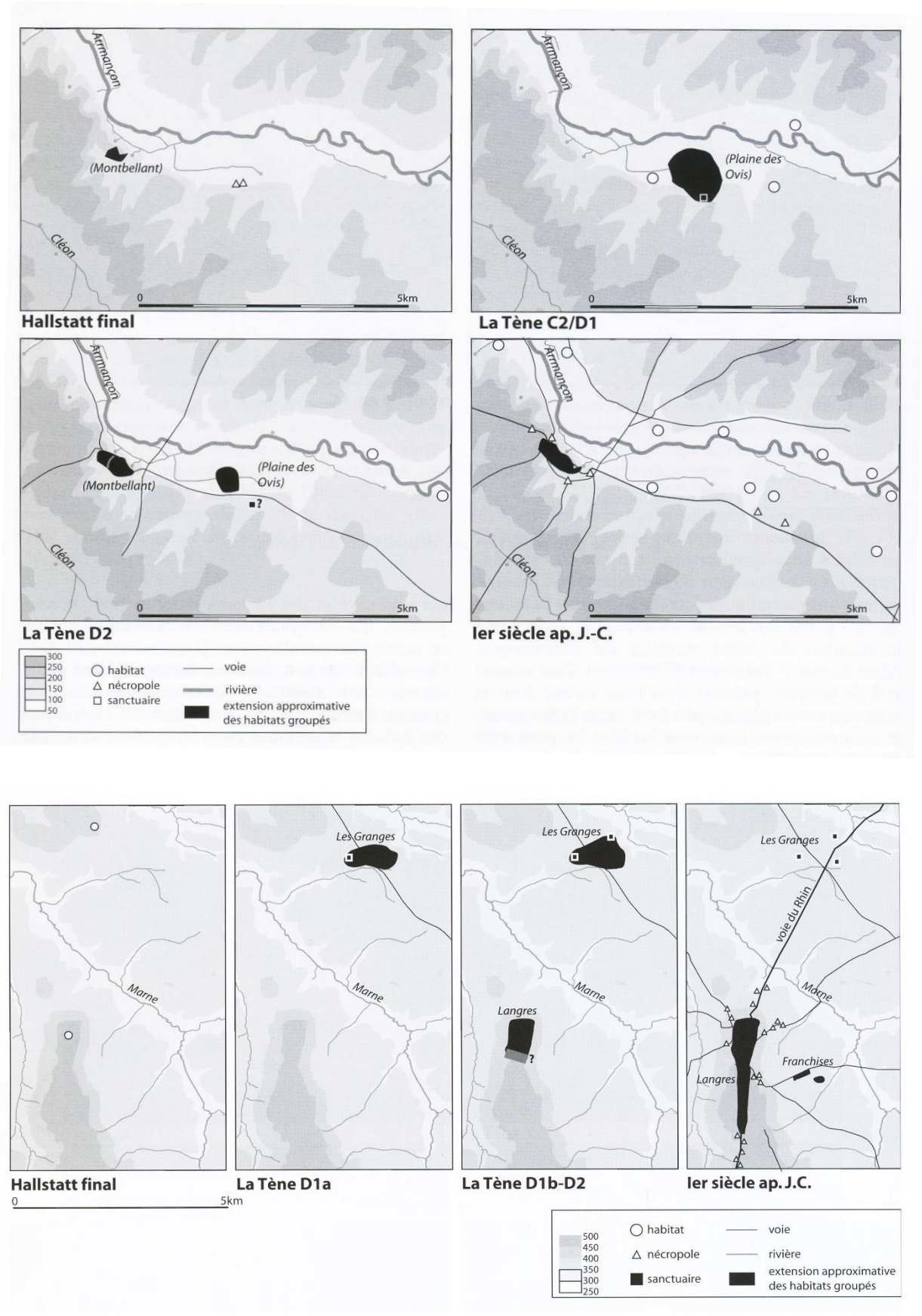


Figure 77: Settlement dynamics of Tonnerre and Langres (Barral & Nouvel 2012: 150-4)

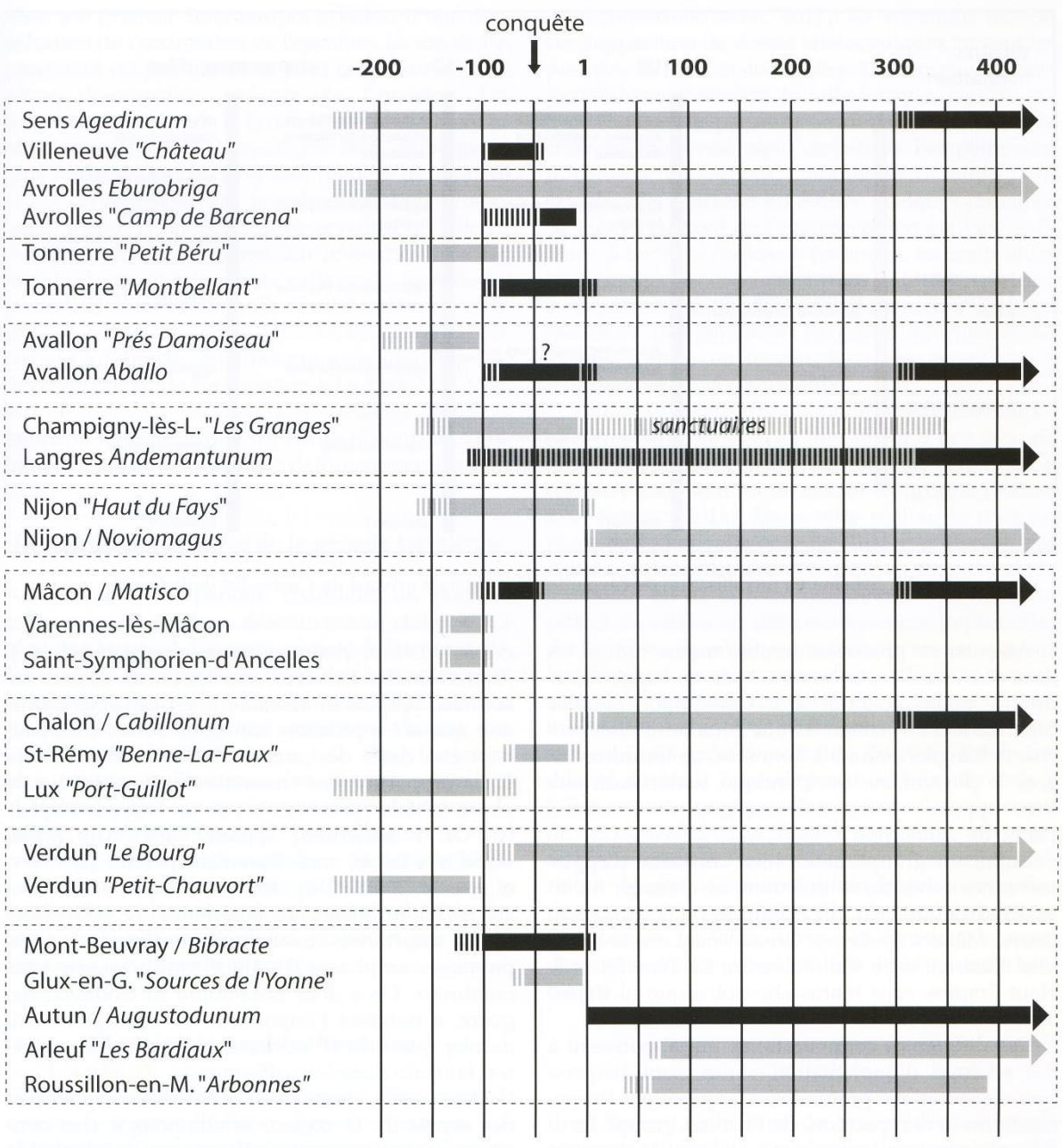


Figure 78: Chronological table for the various sites of Burgundy (in black fortified settlements) (Barral & Nouvel 2012: 157)

Bibliography

Argant T. (2009) *Néronde "Les Dérompés": Rapport de Diagnostic*, DRAC Rhône-Alpes, Lyon

Arnold B. (1999) 'Drinking the feasts: alcohol and the legitimation of power in Celtic Europe' in *Cambridge Archaeological Journal* n°9 (1), pp.71-93

Audouze F. Büschenchutz O. (1989) *Villes, Villages et Campagnes de l'Europe Celtique*, Paris

Augier L. & Krausz S. (2012) 'Du complexe princier à l'*oppidum*: les modèles du Berry' in S. Sievers & M. Schönfelder (ed.) *Die Frage der Protourbanisation in der Eisenzeit, Akten des 34. Internationalen Kolloquiums der AFEAF vom 13.-16. Mai 2010 in Aschaffenburg*, Dr. Rudolf Habelt GmbH, Bonn, pp.165-190

Ayala G. & Horry A. (2001) *Roanne (Loire) : 8 rue de la Charité, Rapport d'Evaluation Archéologique*, AFAN-INRAP, SRA Rhône-Alpes, Lyon

Barral P. (2003) 'Agglomérations ouvertes et oppida dans les plaines de Saône et du Doubs. Bilan et perspectives à partir de l'étude de quelques cas' in *Arch. Mosellana* n°5, pp.199-213

Barral P. (2010) 'L'*Oppidum* de Besançon' in *L'Archéologie* n°108, pp.26-31

Barral P. (2011) 'Dynamique de création et de romanisation des agglomérations dans l'Est de la France' in M. Reddé, P. Barral, F. Favory, J.-P. Guillaumet, M. Joly, J.-Y. Marc, P. Nouvel, L. Nuninger & C. Petit (ed.) *Aspects de la Romanisation de la Gaule*, Collection Bibracte n°21, Glux-en-Glenne, pp.207-14

Barral P. & Nouvel P. (2012) 'La dynamique d'urbanisation à la fin de l'âge du Fer dans le centre-est de la France' in S. Sievers & M. Schönfelder (ed.) *Die Frage der Protourbanisation in der Eisenzeit, Akten des 34. Internationalen Kolloquiums der AFEAF vom 13.-16. Mai 2010 in Aschaffenburg*, Dr. Rudolf Habelt GmbH, Bonn, pp.139-164

Befort J.-C. Delporte H. Guichard V. (1986) 'L'occupation protohistorique du Châtelard de Lijay : Loire' in *Cahiers Archéologiques de la Loire* n°6, FGRAL, Roanne, pp.19-46

Bellon F. (1980) *La Géologie de la Loire: 500 Millions d'Années d'Histoire*, Editions Le Hénaff, Saint – Etienne

Benoit F. (1957) 'Typologie et épigraphie amphoriques : les marques de Sestius' in *Revista di Liguri* n°23, pp.247-257

Besset F. & Périchon R. (1964) 'Contribution à l'étude de quelques sites fortifiés du département de la Loire' in *Celticum* n°9: *Actes des Journées d'Etudes Gauloises, Celtiques et Protoceltiques, 27-29 Juillet 1963 à Roanne*, pp.63-76

Bessou M. (1974) 'Etudes des vestiges de La Tène découverts à Roanne : fouilles de L'Institution Saint-Jospeh' in *C.E.F.* archéologie n°3 (supplément), Saint-Etienne

Billoin D. Bonnamour L. Mouton S. & Videau G. (2009) 'L'agglomération de Châlon-sur-Saône de LA Tène Finale au début de la période Gallo-Romaine : un port comptoir aux origines de Cabillonum' in O. Buschenschutz M.-B. Chardenoux S. Krausz & M. Vaginay (ed.) *L'Âge du Fer dans la boucle de la Loire : Les Gaulois sont dans la Ville. Actes du XXXIIe Colloque de l'AFEAF, Bourges 1-4 Mai 2008*, 35e Supplément à la *Revue Archéologique cu Centre de la France,* Paris, pp.263-278

Binétruy M.-S. (1994) *De l'art Roman à la Préhistoire, des Sociétés Locales à l'Institut : Itinéraires de Joseph Déchelette*, LUGD Editions Lyonnaises d'Art et d'Histoire, Lyon

Blin O. (1991) 'Roanne (Loire) : les fouilles de la rue de Charlieu en 1990, lecture d'une occupation péri-urbaine du 1er au 3e siècle apr. J.C.' in *Revue Archéologique du Centre de la France* n°30, pp.163-174

Bocquet S. (2005) *Roanne: Centre Hospitalier, 28 rue de Charlieu (Loire – Rhône-Alpes), Rapport Final de Fouille, Volume 1 : Texte*, Institut National de Recherches Archéologiques Préventives, INRAP, Bron

Bocquet S. (2005) *Roanne: Centre Hospitalier, 28 rue de Charlieu (Loire – Rhône-Alpes), Rapport Final de Fouille, Volume 2 : Planches*, Institut National de Recherches Archéologiques Préventives, INRAP, Bron

Bocquet S. (2009) 'Roanne : 26, 28, 30 rue des Aqueducs' in *Bilan Scientifique de la Région Rhône-Alpes*, Service Régional de l'Archéologie, Direction Régionale des Affaires Culturelles, Ministère de la Culture et de la Communication, Lyon, pp.113

Bourgeois L. (1994) Le Sanctuaire de Bennecourt (Yvelines): structures et rituels du IIe siècle av. J.C. au IVe siècle de notre ère, in C. Goudineau G. Coulon I. Fauduet (eds) Les Sanctuaires de Tradition Indigène en Gaule Romaine. Actes du Colloque d'Argentomagus (Argenton-sur-Creuse), 8-9 et 10 Octobre 1992, Paris: Errance, pp.73-77.

Bourgeois L. (1999) *Le Sanctuaire rural de Bennecourt (Yvelines) : du Temple Celtique au temple Gallo-Romain*, Documents d'Archéologie Françaises n°77, Editions de la Maison des Sciences de l'Homme, Paris

Bouttet S. (1912) 'Inventaire des enceintes, oppidums et châtelards du département de la Loire, *Bulletin de la Société Préhistorique Française* n°9

Bouvier A. (2004) 'Roanne : Centre Hospitalier Régional (28 et 71 rue de Charlieu)' in *Bilan Scientifique de la Région Rhône-Alpes*, Service Régional de l'Archéologie, Direction Régionale des Affaires Culturelles, Ministère de la Culture et de la Communication, Lyon, pp.138-139

Brun P. (1987) *Princes et Princesses de la Celtique : le Premier Âge du Fer (850-450 av. J.-C.),* Collection des Héspérides, Errance, Paris

Brun, P. Chartier, M. Pion, P. (2000) Le processus d'urbanisation dans la vallée de l'Aisne. In V. Guichard, S. Sievers, O. Urban (eds.) *Les Processus d'Urbanisation à l'Âge du Fer. Actes du colloque, Glux-en-Glenne, 8-11 juin 1998, 83-96.* Glux-en-Glenne: Collection Bibracte 4.

Brun P. & Ruby P. (2008*) L'âge du Fer en France : Premières villes, premiers états celtiques, La Découverte*, Paris

Brunaux J.-L. Méniel P. Poplin F. (1985) *Gournay 1 : les Fouilles sur le Sanctuaire et l'Oppidum (1975-1984)*, n° spécial de la RAP, Paris

Brunaux J.-L. & Rapin A. (1988) *Gournay 2 : Boucliers et Lances, Dépôts et Trophées*, Numéro Spécial de *la Revue Archéologique de Picardie*, Errance, Paris

Brunaux J.-L. (2005) *Les Gaulois*, Collection Guide Belles Lettres des Civilisations, Paris

Bryant S. (2007) 'Central places or special places? The origins and development of '*oppida'* in Hertfordshire in C. Haslegrove w T. Moore (ed.) *The Later Iron Age in Britain and Beyond, Oxbow Books*, Oxford, pp.62-80

Büschenchutz O. (1981) 'Les structures d'habitat à l'âge du Fer en Europe tempérée : L'évolution de l'habitat en Berry' in O. Büschenschutz (ed.) *Actes du Colloque de Châteauroux, Bourges-le-Château, Levroux, 27-29 Octobre 1978*, Paris

Büschenschutz O. Colin A. Krausz S. Levéry M. Soyer C. Villard A. (1993) *Le Village Celtique des Arènes à Levroux : Description des Structures*, 8e Supplément à la *Revue Archéologique du Centre de la France*, Levroux 2, RACF-ADEL, Levroux

Büschenschutz O. Colin A. Firmin G. Fischer B. Guillaumet J.-P. Krausz S. Lévéry M. Marinval P. Orellana L. Pierret A. (2000) *Le Village Celtique des Arènes à Levroux : Synthèses*, 19e Supplément à la *Revue Archéologique du Centre de la France*, Levroux 5, Paris

Buchsenschutz, O. and Krausz, S. (2001) Levroux et le modèle de la genèse des oppida. In: Collis, J., ed. *Society and settlement in Iron Age Europe. Actes du XVIIIe colloque de l'AFEAF, Winchester, April 1994*, 292-298. Sheffield, J.R. Collis publications.

Büschenschutz O. (2002) 'Vers une analyse spatiale de la cité des Bituriges' in D. Garcia & F. Verdin (ed.) *Territoires Celtiques : Espaces Ethiques et Territoires des Agglomérations Protohistoriques d'Europe Occidentale, Actes du XXIVe Colloque International de l'AFEAF, Martigues, 1-4 Juin 2000.* Coll. Assoc. Française Etude de l'âge du Fer, Paris, 261-270

Büschenschutz O. & Ralston I. (2007) 'Dépôts et fortifications à l'âge du Fer' in P. Barral, A. Daubigney, C. Dunning, G. Kaenel & M.-J. Roulière-Lambert (ed.) *L'Âge du Fer dans l'Arc Jurassien et ses Marges : Dépôts, Lieux Sacrés et Territorialité à l'Âge du Fer, Actes du XXIXe Colloque International de l'AFEAF*, Besançon, pp.745-764

Büschenschutz O. & Ralston I. (2012) 'Urbanisation et Aristocratie Celtique' in Sievers S. & Schönfelder M. (ed.) *Die Frage der Protourbanisation in der Eisenzeit*, Akten des 34. Internationalen Kolloquiums der AFEAF (13-16 Mai 2010 in Aschaffenburg), Dr. Rudolf Habelt GmbH, Bonn, pp.347-364

Cabotse J. & Périchon R. (1966) 'Céramiques gauloises et gallo-romaines de Roanne (Loire)' in *Gallia* n°24, pp.29-75

Cabotse J. (1967) 'La Villa gallo-romaine de Bonvert, commune de Mably (Loire)' in *Revue Archéologique du Centre*, pp.23-46

C. Julius Caesar. Caesar's Gallic War. Translator. W. A. McDevitte. Translator. W. S. Bohn. 1st Edition. New York. Harper & Brothers. 1869. Harper's New Classical Library

Chaume B. (2001) *Vix et son Territoire à l'âge du Fer : Fouilles du Mont Lassois et environnement du site princier*, Editions Monique Mergoil, Collection Protohistoire Européenne, Montagnac

Chaume B. (2007) 'Essai sur l'évolution de la structure sociale Hallstatienne' in H.-L. Fernoux & Stein C. (ed.) Aristocratie Antique : Modèles et Exemplarité Sociale, Editions Universitaires Dijonnaises, Collection Sociétés, Dijon

Colin A. (1998) *Chronologie des* Oppida *de la Gaule non Méditerranéenne*, Editions de la Maison de l'Homme, Documents d'Archéologie Françaises, Paris

Collis J. (1984) *Oppida: Earliest Towns North of the Alps*, Sheffield University Press

Collis J. Krausz S. & Guichard V. (2000) 'Les villages ouverts en Gaule Centrale aux IIe et 1er siècle av. J.-C.' in V. Guichard, S. Sievers & O. Urban (ed.) *Les Processus d'Urbanisation à l'Âge du Fer. Actes du Colloque de Glux-en-Glenne, 8-11 Juin 1998*, Collection Bibracte n°4, pp.73-82

Collis J. (2012) 'Centralisation et urbanisation dans l'Europe tempérée à l'Âge du Fer' in Sievers S. & Schönfelder M. (ed.) *Die Frage der Protourbanisation in der Eisenzeit*, Akten des 34. Internationalen Kolloquiums der AFEAF (13-16 Mai 2010 in Aschaffenburg), Dr. Rudolf Habelt GmbH, Bonn, pp.1-14

Combier J. (1982) 'Les gisements préhistoriques du Saut-du-Perron : fouilles de sauvetage (1977-81)' in *Cahiers Archéologiques de la Loire* n°2, F.R.AL. pp.9-16

Constantin C. Coudart A. Demoule J.-P. (1982) 'Villeneuve-Saint-Germain : les bâtiments de La Tène III. Vallée de l'Aisne : cinq années de fouilles Archéologiques' in *R.A.P.* (n° spécial), pp.195-205

Creighton J. (2000) *Coins an Power in Late Iron Age Britain*, Cambridge University Press, Cambridge

Creighton J. Haselgrove C. Lowther P. & Moore T. (2008) *Becoming Roman in Southern Burgundy: a Field Survey between Autun and Bibracte in the Arroux Valley (Saône-et-Loire) 2000-2003*, Internet Archaeology

Cunliffe B. (2000) *The Danebury Environs Programme (1) The Prehistory of a Wessex Landscape*, Oxford University Commercial Archaeology, Monograph n°48, Oxford

Dartevelle H. Mennessier-Jouannet C. & Arbaret N. (2009) 'La capitale des Arvernes : une histoire en boucle' in O. Buschenschutz M.-B. Chardenoux S. Krausz & M. Vaginay (ed.) *L'Âge du Fer dans la boucle de la Loire : Les Gaulois sont dans la Ville. Actes du XXXIIe Colloque de l'AFEAF, Bourges 1-4 Mai 2008*, 35e Supplément à la *Revue Archéologique cu Centre de la France,* Paris, pp.293-316

De Girardier M. (1882) 'Urnes funéraires et fibules trouvées à Pilon : commune de Villerest' in *Bulletin de la Diana* n°2/6, pp.145-151

Dacko M. & Garcia M. (2012) 'Processus d'urbanisation à Gergovie (Puy-de-Dôme, France) : de Corent à Augustonementum' in S. Sievers & M. Schönfelder (ed.) *Die Frage der Protourbanisation in der Eisenzeit, Akten des 34. Internationalen Kolloquiums der AFEAF vom 13.-16. Mai 2010 in Aschaffenburg*, Dr. Rudolf Habelt GmbH, Bonn, pp.191- 202

Deberge Y. Vermeulen C. Collis J. (2007) 'Le complexe de Gandaillat/La Grande Borne : un état de la question' in Mennessier-Jouannet C. & Deberge (ed.) *L'Archéologie de l'Âge du Fer en Auvergne*, Actes du XXVIIe Colloque International de l'AFEAF (29 Mai – 1er Juin 2003 à Clermont-Ferrand), Monographie Archéologie Méditerranéenne, Hors-série 2 (Lattes 2007), pp.267-290

Debord J. Lambot B. Buschenschutz O. (1988) 'Les fosses couverts du site gaulois tardif de Villeneuve-Saint-Germain (Aisne)' in F. Audouze & O. Buschenschutz (ed.) *Architectures des Âges des Métaux : Fouilles Récentes*, DP2, Paris, pp.121-135

Debord A. (1993) 'Les artisans gaulois de Villeneuve-Saint-Germain (Aisne) : structures, production, occupation du sol' in *R.A.P.* n°3-4, pp.71-110

Debord J. (2001) 'Noviodunum Suessonium : Pommiers ou Villeneuve-Saint-Germain?' in *Mémoires du Soissonais* n°2, pp.7-30

Déchelette J. (1903) 'La Nécropole gallo-romaine de Roanne' in *Bulletin de la Diana* n°13, pp.286-325

Déchelette J. (1908-1914) *Manuel d'Archéologie Préhistorique, Celtique et Gallo-Romaine*, Editions Picard A. et Fils, Paris

Déchelette J. (1910) 'Petit cheval de bronze trouvé à Joeuvre, commune de Saint-Maurice-sur-Loire' in *Bulletin de la Diana* n°17, pp.51-53

Déchelette J. (1911) 'Trouvailles à l'*oppidum* de Joeuvre' in *Bulletin de la Diana* n°17, pp.144

Dehn W. (1962) 'Aperçu sur les oppida d'Allemagne à la fin de l'époque Celtique' in *Celticum* n°4, pp.329-386

Delporte H. (1961) 'Une hypothèse de travail au sujet du Crêt-Châtelard' in *Bulletin du Groupe Archéologique Forez-Jarez* n°1, pp.10-14

Deyts S. (1983) *Les Bois Sculptés des Sources de la Seine*, Gallia Supplément n°42, Editions du Centre National de Recherche Scientifique, Paris

Dhennequin L. Guillaumet J-P. & Szabo M. (2008) 'L'oppidum de Bibracte (Mont Beuvray, France). Bilan de 10 années de Recherches (1996-2005)' in *Acta Archaeologica Academiae Scientiarum Hungaricae* n°59, pp. 1-152

Dietler M. (1998) 'A tale of three sites: the monumentalization of Celtic Oppida and the politics of collective memory and identity' in *World Archaeology*, vol.30 n°1: *"The Past in the Past: the Reuse of Ancient Monuments"* (June 1998), pp.72-89

Drda P. & Rybova A. (1995) *Les Celtes de Bohême*, Errance, Paris

Drda P. & Rybova A. (1997) 'Keltska oppida v centru Boiohaema. (Die Keltischen Oppida im Zentrum Boiohaemums)' in *Pamatky Archeologické* n°88, pp. 65-123

Drda P. & Rybova A. (2001) 'Modell der Entwicklung des Herrengehöfts' *in Jahrhundert v. Chr. Pam. Arch.* N°92, pp.284-349

Durand V. (1886) 'Enceintes de Saint-Alban et de Château-Brûlé : commune de Villerest' in *Bulletin de la Diana* n°3/1

Durand V. (1900) 'Le-Crêt-Châtelard' in *Bulletin de la Diana* n°11, pp.382-397

Dumoulin F. (1997) 'La production de céramique gallo-romaine à Roanne' *in Revue Archéologique du Centre de la France* n°36, pp.79-97

Dumoulin F. (2008) *La Céramique des Ségusiaves : du 3e siècle avant notre ère au 3e siècle de notre ère : vol.1/4 (Texte)*, Thèse Doctorale effectuée sous la direction d'Yves Roman, Ecole Doctorale Sciences Humaines et Sociales de l'Université Lyon 2 Lumière, Lyon

Fichtl S. (2005 *2nd ed.*) *La Ville Celtique : les Oppida de 150 av. J.C. à 15 apr. J.C.* Editions Errance, Paris

Fichtl S. (2006) '*Murus* et *Pomerium* : réflexions sur la fonction des remparts protohistoriques' in *Revue Archéologique du Centre de la France* n°44, URL : http://racf.revues.org/515

Fichtl S. (2012a) *Les Peuples Gaulois (2nd ed.)*, Editions Errance, Paris

Fichtl S. (2012b) *Les Premières Villes de Gaule : Le temps des* Oppida, Archéologie Vivante, Paris

Foucras S. (2012) 'Elevage et consommation en territoire Arverne : de l'agglomération d'Aulnat aux oppida du bassin Clermontois, changement ou continuité?' in S. Sievers & M. Schönfelder (ed.) *Die Frage der Protourbanisation in der Eisenzeit, Akten des 34. Internationalen Kolloquiums der AFEAF vom 13.-16. Mai 2010 in Aschaffenburg*, Dr. Rudolf Habelt GmbH, Bonn, pp. 203-210

Fichtl S. (2013) 'Les agglomérations de la fin de l'Âge du Fer en Europe Celtique (IIIe-Ier siècle av. J.C.)' in Garcia D. (ed.) L'Habitat en Europe Celtique et en Méditerranée Préclassique, Actes Sud, Paris, pp.19-44

Gache L. (1968) 'Le département de la Loire, contraintes et aptitudes du milieu naturel' in *Paysans de la Loire* n°4, p.4

Gachon L. (1946) 'Les variétés régionales du climat dans le Massif Central' in *Etudes Rhodaniennes* n°21, pp.33-53

Galinié H. (2009) 'Vers une appréhension partagée des villes' in O. Buschenschutz M.-B. Chardenoux S. Krausz & M. Vaginay (ed.) *L'Âge du Fer dans la boucle de la Loire : Les Gaulois sont dans la Ville. Actes du XXXIIe Colloque de l'AFEAF, Bourges 1-4 Mai 2008*, 35e Supplément à la *Revue Archéologique cu Centre de la France,* Paris, pp.199-206

Galinié H. (2009) Table Ronde Chrono-chorématique Urbaine le 2 Juin 2009, Tours, Livret, http://www.culture.gouv.fr/culture/cnau/pdf/2009_06_02_chorematique_livret.pdf (24.02.2014)

Genin M. & Lavendhomme M.-O. (1997) *Rodumna (Roanne, Loire) : le Village Gallo-Romain, Evolution des Mobiliers Domestiques*, Documents d'Archéologie Françaises n°66, Editions de la Maison de l'Homme, Paris

Georges V. (2007) *Le Forez du 6e au 1er Millénaire av. J.C. : Territoires, Identités et Stratégie des Sociétés Humaines du Massif Central dans le Bassin Amont de la Loire (France) : vol.1 (Texte, Figures et Bibliographie)*, Thèse Doctorale effectuée sous la direction de Claude Mordant et Hervé Cubizolle, Ecole Doctorale ED202 de l'Université de Bourgogne, Dijon

Georges V. (2008) *Saint-Marcel-de-Félines, A 89 secteur 12 : rapport d'opérations de diagnostic*, DRAC Rhône-Alpes, SRA, Lyon

Georges V. (2009) *Vougy, Aiguilly (Loire, 42): Rapport de Diagnostic*, INRAP & DRAC Rhône-Alpes, Lyon

Georges V. (2011) *Mably (Loire): ZAC de Bonvert Tranche 1*, DRAC Rhône-Alpes, Lyon

Goudineau C. & Kruta V. (1980) 'Les antécédents : y-a-t-il une ville protohistorique ?' in Duby G. (ed.) *Histoire de la France Urbaine : La Ville Antique*, Editions du Seuil, Paris, pp.143-231

Goudineau C. (1990) *César et la Gaule*, Collection de la Gaule à la France, Errance, Paris

Goudineau C. & Peyre C. (1993) *Bibracte et les Eduens : à la Découverte d'un Peuple Gaulois*, Collection Hauts Lieux de l'Histoire, Errance, Paris

Grand K. (1995) 'Le répertoire décoratif de la céramique peinte gallo-romaine de Roanne (Loire)' in *Revue Archéologique du Centre de la France* n°34, pp.177-194

Grand K. & Corompt N. (1996*) ZAC « La Villette », « La Demie-Lieue », Riorges et Mably (Loire) : Sondages*, SRA Rhônes Alpes, Roanne

Granier F. (2010) *Néronde « Le Rieu » : Rapport de Diagnostic*, DRAC Rhône-Alpes, Lyon

Granier F. (2011) *Riorges « La Villete » : Rapport de Diagnostic*, DRAC Rhône-Alpes, Lyon

Grosbellet B. & Périchon R. (1965) 'L'implantation gauloise et gallo-romaine à la périphérie de l'*oppidum* de Joeuvre (Loire) in *OGAM : Tradition Celtique* n°17, Rennes, pp. 313-325

Guichard V. Picon M. Vaginay M. (1991) 'La céramique peinte gauloise en pays Ségusiave aux IIe et Ier siècles avant notre ère' in Mémoires de la SAC n°5 : *La Céramique Peinte Celtique dans son Contexte Européen*, Symposium International, Hautvilliers (9-11 Octobre 1987), SAC, Reims, pp.221-227

Guichard V. Sievers S. Urban O. H. (2000) *Les Processus d'Urbanisation à l'Âge du Fer*, Bibracte n°4, Glux-en-Glenne

Guillaumet J.-P. (1984) 'Rapport introductif sur le rôle du rempart dans l'oppidum : structure préurbaine' in Cahen-Delhaye A. Duval A. Leman-Delerive G. Leman P. (ed) *Les Celtes en Belgique et dans le Nord de la France*, AFEAF n°6, Revue du Nord, Université de Lille, pp.277-278

Guillaumet J.-P. & Labaune Y. (2011) 'Les activités artisanales de Bibracte et d'Autun : une pérennité des savoir-faire' in Reddé M. *et al.* (ed.) *Aspects de la Romanisation dans l'Est de la Gaule : Volume 2*, Collection Bibracte n°21, Glux-en-Glenne, pp.895-906

Hamon T. Lejars T. Josset D. (2002) 'Saumeray : lieu-dit « Le Bas des Touches » (Eure-et-Loir). Les enclos cultuels d'époque gauloise' in *Revue archéologique du centre de la France* n°41, pp.111-127

Haselgrove C. (1996) 'Roman impact on rural settlement and society in Southern Picardy' in N. Roymans (ed.) *From the Sword to the Plough: Three studies on the Earliest Romanization of Northern Gaul*, Amsterdam Archaeological Studies, Amsterdam, pp.127-88

Haselgrove C. (2006) *Les Mutations de la Fin de l'Âge du Fer, Actes de la Table Ronde de Cambridge (7-8 Juillet 2005),* Bibracte n°12, Glux-en-Glenne

Haselgrove C. Hingley R. (2006) 'Iron deposition and its significance in pre-Roman Britain' in G. Bataille & J.-P. Guillaumet (ed.) *Les Dépôts Métalliques au Second Âge du Fer en Europe Tempérée*, Bibracte n°11 (Glux-en-Glenne), pp.143-163

Haselgrove C. & Moore T. (2007) *The Later Iron Age in Britain and Beyond*, Oxbow Books, Oxford

Haselgrove C. & Guichard V. (2013) 'Les Gaulois sont-ils dans la plaine? A proposdu peuplement des campagnes de la Gaule au 1er siècle apr. J.C.' in S. Krausz, A. Colin, K. Gruel, I. Ralston & T. Dechezleprêtre (ed.) *L'Âge du Fer en Europe: Mélanges Offerts à Olivier Buschenschutz*, Ausonius, Bordeaux, pp.317-28

Hill J.D. (1995) 'How should we understand Iron Age hillforts: a contextual study' in C.G. Cumberpatch & J.D Hill (ed.) *Different Iron Ages*, British Archaeological Reports, International Series: 602, Oxford, pp.45-66

Hill J.D. (2006) 'Are we any closer to understanding how later Iron Age societies worked (or did not work)?' in Haselgrove C. (ed.) *Celtes et Gaulois : l'Archéologie Face à l'Histoire, Les Mutations de la Fin de l'Âge du Fer*, Actes de la Table Ronde de Cambridge (7-8 Juillet 2005), Collection Bibracte 12/4, Glux-en-Glenne, pp.169-79

Hingley (1990) 'Domestic organisation and gender relations in Iron Age and Romano-British households' in R. Samsom (ed.) *The Social Archaeology of Houses*, Edinburgh, pp.125-147

Hodder I. (1982) *Symbols in Action: Ethnoarchaeological Studies in Material Culture*, Cambridge University Press, Cambridge

Hodder I. (1992) *Theory and Practice in Archaeology*, Routledge, London

Holzer V. (2009) *Roseldorf: Interdisziplinare Forschungen zur gröpten Keltischen Zentralsiedlung Österreichs.* Schriftenr. Forsch. Verbund n°102, Wien

Jacquet P. Lucas-Gonzalès A. and Mazuy D. (2006) Nouvel aperçu sur le site gaulois de Goincet (Poncins, Loire). In I. Chol (ed.) *La Mémoire des Lieux: Hommage à Robert Périchon (1928-1999)*, Centre de Recherches sur les Civilisations Antiques, Presses Universitaires Blaise Pascal, Paris. 65-90

Jeannez E. (1889) 'Canton de Roanne : Saint-Maurice-sur-Loire' in Thiollier F. & Thiollier N. (ed.) *Le Forez Pittoresque et Monumental*, Lyon, pp.133-163

Joly J.-L. (2003) *Mably (42) Granulats Rhône-Loire, carrière de Mably (lieu-dit Bonvert), Rapport de Diagnostic Archéologique*, SRA Rhône-Alpes, Lyon

Julian C. (1900) *Vercingétorix*, Libraire Hachette, Paris

Jullian C. (1903) *Recherches sur la Religion Gauloise*, Editions Féret et Fils, Bordeaux

Jullian C. (1908-21) *Histoire de la Gaule*, Librairie Hachette, Paris

Kaenel G. (2006) 'Agglomérations et oppida de la fin de l'Âge du Fer : une vision synthétique' in Haselgrove C. (ed.) *Celtes et Gaulois : l'Archéologie Face à l'Histoire, Les Mutations de la Fin de l'Âge du Fer*, Actes de la Table Ronde de Cambridge (7-8 Juillet 2005), Collection Bibracte 12/4, Glux-en-Glenne, pp.17-39

Krausz, S. (2009) 'L'Âge du Fer dans la boucle de la Loire: entre archéologie préventive et archéologie programmée' In O. Buchsenschutz, M.-B. Chardenoux, S. Krausz, and M. Vaginay (eds.) *L'âge du Fer dans la boucle de la Loire. Actes du XXXIIe colloque de l'Association Française pour l'Etude de l'âge du Fer. Bourges, 2008, 13-18*. Paris, AFEAF/Tour: RACF Supp. 35.

Krausse, D. and Fernandez-Gotz, M. (2013) 'Vom burgberg zur donau: nue untersuchungen zur Heuneberg (2008-2012)' in *Sonderdruck aus Arcaologisches Korrespondenzblatt Jahrang* n°43 – Heft 2, pp. 195-213

Kristiansen K. (1998) *Europe before History*, Cambridge University Press, Cambridge

Landry C. (2009*) Balbigny A 89 secteur 12 bis: Rapport Final d'Opération de Diagnostic*, D.R.A.C. Rhône-Alpes

Lamboglia N. (1955) 'Sulla cronologia delle anfore romane de està repubblicana (II-I seculo A.C.)' in *Revista di Studi Liguri* n°21, pp.216-230

Lambot B. & Méniel P. (1993) *Le Site Protohistorique d'Acy-Romance (Ardennes) 1 : l'Habitat Gaulois*, Société Archéologique Champenoise, Reims

Lambot B. & Friboulet M. (1996) 'Essai de chronologie du site de La Tène Finale d'Acy-Romance (Ardennes) in Revue Archéologique de Picardie n°3, pp.123-151

Lambot B. (1998) 'Essai d'approche démographique du site de La Tène Finale d'Acy-Romance (Ardennes) in *Revue Archéologique de Picardie* n°1-2, pp.71-84

Lambot B. (2003) 'Le village gaulois d'Acy-Romance (Ardennes) : vie quotidienne et pratiques religieuses' in *Bulletin de l'Académie Nationale de Chirurgie Dentaire* n°46, pp.43-50

Lavendhomme M.-O. (1996) *Saint-Alban-Les-Eaux (Les Verchères), DFS de Sauvetage Urgent*, SRA Rhône-Alpes, Lyon

Lavendhomme M.-O. (1997a) *Carte Archéologique de la Gaule : La Loire (42)*, Académie des Inscriptions et des Belles Lettres, Paris

Lavendhomme, M.-O. (1997b) 'Poncins, Goincet' in *Document Final de Synthèse d'Evaluation Archéologique.* S.R.A Rhône-Alpes, Lyon

Lavendhomme, M.-O. (1997c) 'L'occupation du sol de la plaine du Forez (Loire) à la fin du second Âge du Fer et dans l'Antiquité : données préliminaires' in *Revue Archéologique du Centre de la France* n°36, pp.131-144.

Lavendhomme M.-O. & Guichard V. (1997) *Rodumna (Roanne, Loire) : le Village Gaulois*, Documents d'Archéologie Française n°62, Editions de la Maison de l'Homme, Paris

Le Barrier C. & Lavendhomme M.-O. (1999) *Roanne (Loire) : Château, Rapport Final de Fouille*, AFAN, SRA Rhône-Alpes, Lyon

Le Griel H. (1984) 'Géologie et relief de la plaine du Forez' in *Paysages et Milieux Naturels de la Plaine du Forez*, p.139-188

Le Nézet-Célestin M. (2005) *Roanne (Loire) : Place-Maréchal-de-Lattre-de-Tassigny, Rapport de Fouille*, INRAP, SRA Rhône-Alpes, Lyon

Leglay M. (1971) 'Informations Archéologiques, Rhônes Alpes' in *Gallia* n°29(2), pp.411-417

Lefèvbre H. (2000) *La Production de l'Espace*, Errance, Paris

Lintz G. (2009) 'Saint-Gence (Haute -Vienne), le village gaulois' in Bertrand I. Duval A. Gomez de Soto J. and Maguer P. (ed.) *Les Gaulois entre Loire et Dordogne : Actes du XXXIe Colloque de l'AFEAF, Chauvigny mai 2007*, Tome 1, pp.155-180

Livy. *Ab Urbe Condita* translated by William Heinemann, Harvard University Press; London. 1919.

Lurol J.-M. (2008) *Riorges « ZAC du Pontet » : Rapport de Diagnostic*, DRAC, Rhône-Alpes, Lyon

Lurol J.-M. (2009) Balbigny Néronde, Saint-Just-la-Pendue. Saint-Marcel-de-Félines A 89 secteur 11 bis : Rapport Final d'Opération de Diagnostic, D.R.A.C., Rhône-Alpes

Marchand B. (1987) *Fichier de l'Arrondissement de Roanne*, S.L. (non paginé)

Marchand B. (1988) *L'Histoire autour du Lac : Bully*, S.L. (non paginé)

Marchand B. (1990) *L'Histoire autour du Lac : Cordelle*, S.L. (non paginé)

Marchand B. (1991) *L'Histoire autour du Lac : Villerest*, S.L. (non paginé)

Megaw R. & V. (2005) *Art de la Celtique : des Origines au Livre de Kells (VIIe siècle av. J.C. – VIIIe apr. J.C.),* Errance, Paris

Méniel P. (2001) *Les Gaulois et les Animaux : Elevage, Repas, Sacrifices*, Collection des Héspérides, Errance, Paris

Metzler J. (1984) 'Das treverische Oppidum auf dem Titelberg (Luxemburg)' *Trier. Augustusstadt der Treverer. Stadt und Land in vor-und frührömischer Zeit.* Mainz am Rhein, pp.68-78

Metzler J. (1991) 'Das Oppidum auf dem Titelberg und die spätkeltischen Adelsgräber des Umlandes' in A. Haffner & A. Miron (ed.) *Studien zur Eisenzeit im Hunsrück-Nahe-Raum*, TZ, Beiheft n°13, Trier, pp.263-280

Meztler J. (1995) *Das treverische Oppidum auf dem Titelberg (G.-H. Luxemburg)*, Dossier d'Archéologie du Musée National d'Histoire et d'Art n°3, Luxemburg

Milcent P.-Y. (2004) *Le Premier âge du Fer en France Centrale*, Société Préhistorique Française, Collection Mémoire n°34, 2 vol., Paris

Monnoyeur-Roussel V. (2003) 'Roanne : 4 à 14, rue Albert Thomas' in *Bilan Scientifique de la Région Rhône-Alpes*, Service Régional de l'Archéologie, Direction Régionale des Affaires Culturelles, Ministère de la Culture et de la Communication, Lyon, pp.147

Monnoyeur-Roussel V. (2003) 'Roanne : avenue de Lyon' in *Bilan Scientifique de la Région Rhône-Alpes*, Service Régional de l'Archéologie, Direction Régionale des Affaires Culturelles, Ministère de la Culture et de la Communication, Lyon, pp.139

Monnoyeur-Roussel V. & Thévenin B. (2003) *Roanne (Loire) : Place Maréchal-de-Lattre-de-Tassigny et Place Georges-Clémenceau, Document Final de Synthèse d'évaluation*, SRA Rhône-Alpes, Lyon

Moore T. (2011) Detribalizing the later prehistoric past: concepts of tribes in Iron Age and Roman studies. *Journal of Social Archaeology* 11(3), 334-360.

Moore T. & Armada X-L. (2011.) *Atlantic Europe in the First Millennium BC: Crossing the Divide*, Oxford University Press, Oxford

Moore T. (2012) 'Beyond the oppida: polyfocal complexes and late Iron Age societies in Southern Britain' in *Oxford Journal of Archaeology*, vol.31, pp.391-417

Moore, T., Braun, A., Creighton, J., Cripps, L., Haupt, P., Klenner, I., Nouvel, P., Ponroy, C. and Schönfelder, M. (2013) 'Oppida, agglomerations and suburbia: the Bibracte environs and new

perspectives on Late Iron Age urbanism in Central-Eastern France' in *The European Journal of Archaeology* 44, 491-517.

Moore T. & Ponroy C. (2014) 'What's in a Wall? Considerations on the role of open settlements in Late La Tène Gaul' in Fernandez-Götz M. Wendling H. and Winger K. (ed.) *Paths to Complexity: Centralisation and Urbanisation in Iron Age Europe*, Oxbow Books, London, pp.141-156

Motte S. & Georges V. (2009) *Saint-Marcel-de-Félines, Néronde, Saint-Just-la Pendue A 89 secteur 11 : Rapport d'Opération de Diagnostic (phases 1 et 2),* D.R.A.C, Rhônes-Alpes, Lyon

Nere E. (2009) Riorges « ZAC du Pontet » : Rapport de Diagnostic, DRAC Rhône-Alpes, Lyon

Nouvel P. (2011) 'La Tène and early Gallo-Roman settlement in Central Gaul : an examination of the boundary between the Aedui, Lingoni and Senoni (Northern Burgundy, France)' in T. Moore & X-L. Armada (ed.) *Atlantic Europe in the First Millennium BC: Crossing the Divide*, Oxford University Press, Oxford, pp. 205-22

Olmer F. (1997) *Les Amphores Romaines en Bourgogne : Contribution à l'Histoire Economique d'une Région de La Tène Finale jusqu'au Bas-Empire*, Thèse de Doctorat de 3e Cycle, Université de Bourgogne, Dijon

Olmer F. Roure R. Bohbot H. (2012) 'Les formes de l'urbanisation dans le Sud de la France (Languedoc) au second âge du Fer (IVe/ Ier siècle av. J.-C.' in S. Sievers & M. Schönfelder (ed.) *Die Frage der Protourbanisation in der Eisenzeit, Akten des 34. Internationalen Kolloquiums der AFEAF vom 13.-16. Mai 2010 in Aschaffenburg*, Dr. Rudolf Habelt GmbH, Bonn, pp. 243-266

Paunier D. & Luginbühl T. (2004) *Bibracte : le Site de la Maison 1 du Parc aux Chevaux (PC1), des Origines de l'Oppidum au Règne de Tibère*, Collection Bibracte n°8, Glux-en-Glenne

Pausanias. *Description of Greece* translated by W.H.S. Jones, Litt.D., and H.A. Ormerod, M.A., in 4 Volumes. Cambridge, MA, Harvard University Press; London, William Heinemann Ltd. 1918.

Périchon R. (1958) 'Fouilles récentes sur l'oppidum de Joeuvre' in *Bulletin de la Diana* n°35/8

Périchon R. (1961) 'Notes préliminaires sur les recherches à l'oppidum de Joeuvre' in *Celticum* n°1, pp.198-210

Périchon R. (1963) 'Premières observations sur la céramique peinte du Crêt-Châtelard' in *Bulletin des G.R.A.D.L.*, pp.23-29

Périchon R. & Caboste J. (1965) 'Premières observations sur le site gallo-romain de Grézelou, proche de l'oppidum de Joeuvre' in *Revue Archéologique de l'Est et du Centre-Est* n°25, pp. 275-285

Périchon R. (1967) *Recherches sur les Céramiques Peintes Gauloises et Gallo-Romaines du Centre de la Gaule*, Thèse de 3e cycle, Faculté des Lettres de Clermont-Ferrand

Périchon R. (1971) *Feurs: Forum Segusiavorum*, Saint-Etienne

Périchon R. (1976) 'L'Agriculture en Forez dans l'Antiquité gauloise et gallo-romaine' in *Centre d'Etude Forézienne* n°8, pp.13-34

Périchon R. (1981) 'Une fouille de Vincent Durand et Auguste Chaverondier au Crêt-Châtelard' in *Bulletin de la Diana* n°47, pp.79-96

Périchon R. & Péronnet P. (1984) *Vincent Durand : Archéologie et Recherche au 19e siècle (les fouilles du Crêt-Châtelard 1872-1895)*, Centre d'Etudes Foréziennes [publié avec le concours de la Fondation Guichard, de la Diana et de la Société d'Histoire et d'Archéologie du Forez]

Peronnet P. (1987) *L'Oppidum de Joeuvre (Loire) de l'Âge du Fer au Bas-Empire : Etude Archéologique*, OPUS : Organisation pour la publication de Travaux d'Intérêt scientifique, Saint-Etienne

Petiot H. (1994) *Le-Crêt-Châtelard (Loire) : Les Fouilles Anciennes*, Mémoire de Maitrise, Université Jean Moulin – Lyon III

Peyvel A. & Pionnier C. (1970) *Crêt-Châtelard, compte rendu des fouilles effectuées au cours de la saison 1969*, G.R.A.D.H.L

Peyvel A. & Pionnier C. (1973) 'Le-Crêt-Châtelard : fouille du groupe d'Histoire d'Archéologie de Balbigny ; principaux éléments de datation en provenance du mobilier mis au jour au bois du cimetière' in *La Diana* n°43, pp. 187-198

Peyvel A. & Pionnier C. (1974) 'Le-Crêt-Châtelard : fouilles du groupe d'Histoire et d'Archéologie de Balbigny : principaux éléments de datation en provenance du mobilier mis au jour au Bois du Cimetière' in *Bulletin de la Diana* n°43, pp.187-198

Peyvel, A. and Pionnier, C. (1975) Goincet – Commune de Poncins – *Rapport de fouilles de sauvetage – Gravière Marnat. Rapport de Fouilles Annuels*, Balbigny

Pierrevelcin G. (2012) *Les Plus Grands Sites Gaulois : Atlas des* Oppida, Archéologie Vivante, Paris

Pitts M. (2010) 'Re-thinkingn the southern British *oppida* : networks, kingdoms and material culture in *The European Journal of Archaeology* n°13, pp.32-63

Poncet J. (1981) 'Sauvetages récents en Roannais' in *Cahiers d'Archéologie de la Loire* n°1, pp.99-101

Popier A. (1981) 'Le gisement moustérien du Champ Grand (commune de Saint-Jean-St-Maurice, Loire 42)' in *Cahiers d'Archéologies de la Loire* n°1, pp.9-16

Poux M. Deberge Y. Foucras S. Pasquier D. Gasc J. (2002) 'L'enclos cultuel de Corent (Puy-de-Dôme) : festins et rites collectifs' in *Revue Archéologique Centre France* n°41, pp.57-110

Poux M. Feugère M. (2002) 'Le festin miroir privilégié des élites celtiques de Gaule indépendante' in Guichard V. et Perrin F. *L'Aristocratie Celte à la Fin de l'Âge du Fer : Actes de la Table Ronde des 10 et 11 Juin 1999*, Centre Archéologique Européen du Mont Beuvray, Glux-en-Glenne, pp.200-222 – p.213

Poux M. (2004) *L'Âge du Vin : Rites de Boisson, Festins et Libations en Gaule Indépendante*, Editions Monique Mergoil, Montagnac

Poux M. (2012) *Corent : Voyage au Cœur d'une Ville Gauloise*, Editions Errance, Paris

Ptolemy *Geography* translated by John Lennart Berggren and Alexander Jones, Princeton, 2000

Remy A.-C. (2002) *Deviation de la RN7 : La Pacaudière et Changy (Loire). Evaluation Archéologique Complémentaire*, SRA Rhônes-Alpes, Lyon

Renaud J. (1956) 'Le Dieu Gaulois accroupi de l'oppidum du Crêt-Châtelard' in *RAECE* n°7, fascicule ¾, p.292

Rieckhoff S. (2006) 'Les Celtes : peuple oublié ?' in Actes du Colloque du Luxembourg (16-18 novembre 2005), *L'Archéologie : Instrument du Politique ? Archéologie : Histoire des Mentalités et Construction Européenne*, CDRP Bourgogne, Glux-en-Glenne, pp.25-42

Roux J. (1851) *Recherches sur le Forum Segusiavorum et l'origine Gallo-Romaine de la ville de Feurs*, Lyon

Salač V. (2012) 'Les oppida et les processus d'urbanisation en Europe Centrale' in Sievers S. & Schönfelder M. (ed.) *Die Frage der Protourbanisation in der Eisenzeit*, Akten des 34. Internationalen Kolloquiums der AFEAF (13-16 Mai 2010 in Aschaffenburg), Dr. Rudolf Habelt GmbH, Bonn, pp.319-345

Shanks M. & Tilley C. (1987) *Social Theory and Archaeology*, Basil Blackwell, Worcester

Sharples N. (2010) *Social Relations in Later Prehistory: Wessex in the First Millenium BC*, Oxford University Press, Oxford

Sharples N. (2011) 'Boundaries, status and conflict: an exploration of Iron Age research in the twentieth century' in Moore T. Armada X.-L. (ed.) *Atlantic Europe in the First Millennium BC: Crossing the Divide*, Oxford University Press, pp.668-681

Soyer C. (1991) 'La céramique peinte de Levroux (Indre)' in Mémoires de la SAC n°5 : *La Céramique Peinte Celtique dans son Contexte Européen*, Symposium International, Hautvilliers (9-11 Octobre 1987), SAC, Reims, pp.237-239

Suetonius, *Life of Twelve Caesars* translated by Robert Graves, Penguin Books, 1957

Tarpin M. (2000) 'Urbs et oppidum : le concept urbain dans l'Antiquité Romaine' in V. Guichard, S. Sievers, O.H. Urban (2000) *Les Processus d'Urbanisation à l'Âge du Fer*, Bibracte n°4, Glux-en-Glenne, pp.27-30

Tarpin M. (2009) 'Oppidum vu par les Romains' in O. Buschenschutz M.-B. Chardenoux S. Krausz & M. Vaginay (ed.) *L'Âge du Fer dans la boucle de la Loire : Les Gaulois sont dans la Ville. Actes du XXXIIe Colloque de l'AFEAF, Bourges 1-4 Mai 2008*, 35e Supplément à la *Revue Archéologique cu Centre de la France,* Paris, pp.183-97

Testenoire-Lafayette P. (1889) Sans titre. In Thiollier F. (ed.) *Le Forez Pittoresque et Monumental*, Imprimerie de A. Waltener, Lyon

Thévenin E. (2001) *Roanne « Centre ancien » (Loire). Place Georges Clémenceau, Rue Alexandre Roche, Rue des Fossés, Rue d'Harcourt, Rue du Château, Place-Maréchal-de-Lattre-de-Tassigny, Document Final de Synthèse d'évaluation*, INRAP, SRA Rhône-Alpes, Lyon

Thévenin E. (2005) 'Le village gaulois de Roanne' in Bocquet S. (ed.) *Roanne: Centre Hospitalier, 28 rue de Charlieu (Loire – Rhône-Alpes), Rapport Final de Fouille, Volume 1 : Texte*, Institut National de Recherches Archéologiques Préventives, INRAP, Bron

Thévenin E. (2007) *La Pacaudière (Changy, 42), Rapport de Diagnostic*, DRAC Rhône-Alpes, Lyon

Thévenin E. (2011) *Riorges « La Villette » : Rapport de Diagnostic*, DRAC, Rhône-Alpes, Lyon

Thucydides, *The Peloponnesian War* translated by Richard Crawley, The University of Adelaide Press, 1903

Vaginay M. (1978) *Inventaire Archéologique de la Loire : Arrondissement de Roanne : Période de l'Âge du Fer au Ve siècle*, Mémoire de Maitrise, Université Lyon 2

Vaginay M. (1982) 'L'Âge du Bronze dans le département de la Loire à la lumière des découvertes récentes' in *Cahiers Archéologiques de la Loire* n°2, pp.17-37

Vaginay, M. and Valette P. (1982) Sauvetages sur le site protohistorique de Goincet, commune de Poncins. Cahiers Archéologiques de la Loire 2,109-111.

Vaginay M. (1983) 'Un site du Bronze Final à Pommiers en Forez' in *Cahiers Archéologiques de la Gaule* n°3, pp.114-117

Vaginay M. (1986) 'Les *oppida* de la Loire, Joeuvres et Le-Crêt-Châtelard : recherches récentes' in *Cahiers Archéologiques de la Loire* n°6, FGRAL, Roanne, pp.47-67

Vaginay M. & Guichard V. (1988) *L'Habitat Gaulois de Feurs (Loire) : Fouilles Récentes (1978-1981),* Collection Documents d'Archéologie Française n°14, Maison des Sciences de l'Homme, Paris

Vaginay M. (2009) 'Les Gaulois sont dans la ville : décoloniser la ville celtique de l'âge du Fer' in O. Buschenschutz M.-B. Chardenoux S. Krausz & M. Vaginay (ed.) *L'Âge du Fer dans la boucle de la Loire : Les Gaulois sont dans la Ville. Actes du XXXIIe Colloque de l'AFEAF, Bourges 1-4 Mai 2008*, 35e Supplément à la *Revue Archéologique cu Centre de la France,* Paris, pp.169-183

Vaginay M. (2012) 'Lieux de pouvoir et symbolique des lieux: ville et espace social en Gaule au second âge du Fer' in S. Sievers & M. Schönfelder (ed.) *Die Frage der Protourbanisation in der Eisenzeit, Akten des 34. Internationalen Kolloquiums der AFEAF vom 13.-16. Mai 2010 in Aschaffenburg*, Dr. Rudolf Habelt GmbH, Bonn, pp.365-386

Valette, P. (1999) Forum Segusiavorum : Le Cadre Urbain d'une Ville Antique (Ier – IIIe Siècle. Roanne, Société des Amis de Jacob Spon Diffusion de Boccard

Varro, *Of the Latin Language*

Verger S. (2009) 'Société, politique et religion en Gaule avant la Conquête : éléments pour une étude anthropologique' in *Pallas* n°80, pp.61-82

Viand A. (2008) *Nanterre et les Parisii: une Capitale au temps des Gaulois?* Catalogue d'exposition, Somogy, Paris

Vitruvius, *On Architecture* translated by Richard Schofield, Penguin Books, 2009

Wells P. (1980) *Culture Contact and Culture Change: Early Iron Age Central Europe and the Mediterranean World*, Cambridge University Press, Cambridge

Wells P. (1984) *Farms, Villages and Cities: Commerce and Urban Origins in Late Prehistoric Europe*, Cornell University Press, London

Woolf G. (1993) 'Rethinking the oppida' in *Oxford Journal of Archaeology* n°12(2), pp.223-34

Woolf G. (1998) *Becoming Roman: The Origins of Provincial Civilisation in Gaul*, Cambridge University Press