

PATHS TO COMPLEXITY

Centralisation and Urbanisation in Iron Age Europe



Edited by

Manuel Fernández-Götz, Holger Wendling and Katja Winger

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Front cover: 3D reconstruction of the Heuneburg at the height of its prosperity in the first half of the 6th century BC (after Fernández-Götz & Krausse 2013; © Landesamt für Denkmalpflege Baden-Württemberg)

Back cover: Reconstruction of the *Pfostenschlitzmauer* wall of the Donnersberg *oppidum* (Photo: Manuel Fernández-Götz)

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FOREWORD

I remember vividly the bright winter morning a year ago when Manuel Fernández-Götz gave me a tour of the Heuneburg. The site was officially closed for the season, and it was covered with snow. I had read some articles on the Heuneburg, and I had just listened to some presentations on the Heuneburg and other Iron Age settlements at a conference in Stuttgart that had brought me to Germany. But there is no substitute for walking over an ancient urban site. Archaeologists can learn about sites by reading reports and articles, but the experience of being there adds something intangible yet important to one's understanding. When I walk through a deserted landscape that had once been filled with ancient buildings, people and their activities, the dry professional facts about post-holes, radiocarbon dates, and potsherds come alive.

My visit of the Heuneburg brought to culmination a personal process of discovery of Iron Age urbanisation and its importance within the broad realm of urban studies. For many years I had included the *oppida* in the course I teach on “the earliest cities.” When I started teaching this class two decades ago, I presented the *oppida* of the Late Iron Age as an example of settlements that had a few urban traits (e.g., craft specialisation and fortification), but were not cities or urban settlements. My context of comparison was the cities of the great ancient civilisations, from Mesopotamia to Mesoamerica (Smith 2007; 2008). The *oppida* provided a good “teaching example” to explore the limits of the concepts of city and urbanism in the ancient world. But over the years, as my knowledge and understanding of comparative urbanism grew, I came to accept the *oppida* as urban settlements. This change was partly due to the fact that I learned more about the *oppida*, and partly due to my own changing concept of urbanisation and its varied forms around the world and through time.

Then Manuel sent me the draft of a paper he and Dirk Krausse had written arguing that the start of urbanism north of the Alps should be pushed back to the Early Iron Age, at the Heuneburg (Fernández-Götz & Krausse 2013). My first reaction – before reading the paper – was skeptical. I

worried that a couple of craft workshops and a fancy burial or two would be used to argue for Early Iron Age urbanism. Archaeologists always want to find the earliest example of things, whether artifact types or social institutions, and such claims are sometimes based on flimsy evidence. But I found the article convincing, and so I was excited when Manuel invited me to the conference on Iron Age urbanism and society in Stuttgart last year. Most of the participants seemed comfortable with the concept of Early Iron Age urbanism, including Colin Renfrew and Kristian Kristiansen.

From one perspective, the question of whether the Heuneburg is classified as an urban settlement is not important. For our understanding of that site, it is far more important to describe and explain the particular manifestations of Iron Age life and society than to classify the settlement. The Heuneburg is clearly a significant site whose excavation extends our knowledge of the Early Iron Age, whether one uses the label city, a town, a fort, or village. But from the broader perspective of comparative urbanism, re-classifying the Heuneburg as an urban settlement has two big advantages. First, it allows data from that site – and other Early Iron Age sites – to contribute to discussions of the nature of urbanism around the world. Comparative urban scholars can add another case – a unique and fascinating case – to our sample of early urban societies. Second, archaeologists who work at the Heuneburg can draw on the concepts and insights of comparative urban studies to add richness to their reconstructions of life, society, and change at the Heuneburg.

These dual advantages of acknowledging the urban nature of the Heuneburg – adding to our sample of ancient urban societies, and contributing insights to the study of the site – also apply to the Late Iron Age *oppida* sites. Although John Collis (1984) called the *oppida* “the earliest towns north of the Alps” three decades ago, my impression is that Iron Age scholars and comparative urban scholars were both slow to acknowledge this insight. Now, in 2014, there is no excuse to leave the *oppida* out of discussions of early urbanism.

The overall scholarly trend in the field of Iron Age

urbanisation parallels the changes in the way I presented the *oppida* in my university class. As more evidence accumulated and views of the nature of cities and urbanism expanded, it became increasingly clear that the Iron Age (both Early and Late) was the setting for some complex and unique urban societies in Europe.

This book appears at a crucial time. It marks the clear arrival of a new view of urbanism and social complexity in Iron Age Europe. Much of the primary excavation data have been published previously in German, French, Spanish, and other languages. While that is only a minor problem for Iron Age scholars, comparative urban scholars like me who are fascinated by these sites can typically read only a few of these languages. Much of the information in this book appears in English for the first time, and it will bring the Iron Age to a new English-language audience. To take just one example, I have long considered Manching a fascinating site, yet I had access to only a few papers in English and the short descriptions in Fichtl (2005). The chapter here by Wendling and Winger greatly extends the English-language coverage of Manching, and there are similar benefits for other sites and regions throughout these chapters.

The editors of this book – Manuel Fernández-Götz, Holger Wendling, and Katja Winger – deserve thanks from the archaeological community for assembling an outstanding group of papers. They have brought the complexity and fascination of Iron Age urban society to a much wider

audience. And I want to thank Manuel, not only for his intellectual and scientific contributions, but also for taking me to see snow-covered Heuneburg. We should all be pleased that Early and Late Iron Age society are now part of the universe of early urban societies, and I look forward to the continuing productivity and insights of archaeological research in this area.

Prof. Dr. Michael E. Smith
Arizona State University
17 February 2014

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GRAND NARRATIVES: THE RISE OF URBANISM
IN TEMPERATE EUROPE

Introduction: New Perspectives on Iron Age Urbanisation

Manuel Fernández-Götz, Holger Wendling and Katja Winger

Crossing divides: centralisation and urbanisation in the 1st millennium BC

Exploring the origins of urbanism, i.e. the emergence and development of the first cities,¹ constitutes one of the main challenges of archaeological and ancient historical research, from the seminal study of Fustel de Coulanges (1864) to more recent overviews which adopt a comparative and

transcultural approach (Gates 2011; Hansen 2000; Marcus & Sabloff 2008; Smith 2007; 2009; Smith M. L. 2003; Storey 2006). What were the preconditions that led to the fusion of previously scattered communities? Is it possible to recognise some common patterns that transcend time and space? Can we speak of an ‘urban revolution’, as V. Gordon Childe did in his influential paper of 1950? (Fig. 1.1). How did mental



Fig. 1.1: Locations of the six areas where the ‘Urban Revolution’ happened independently (after Smith 2009)

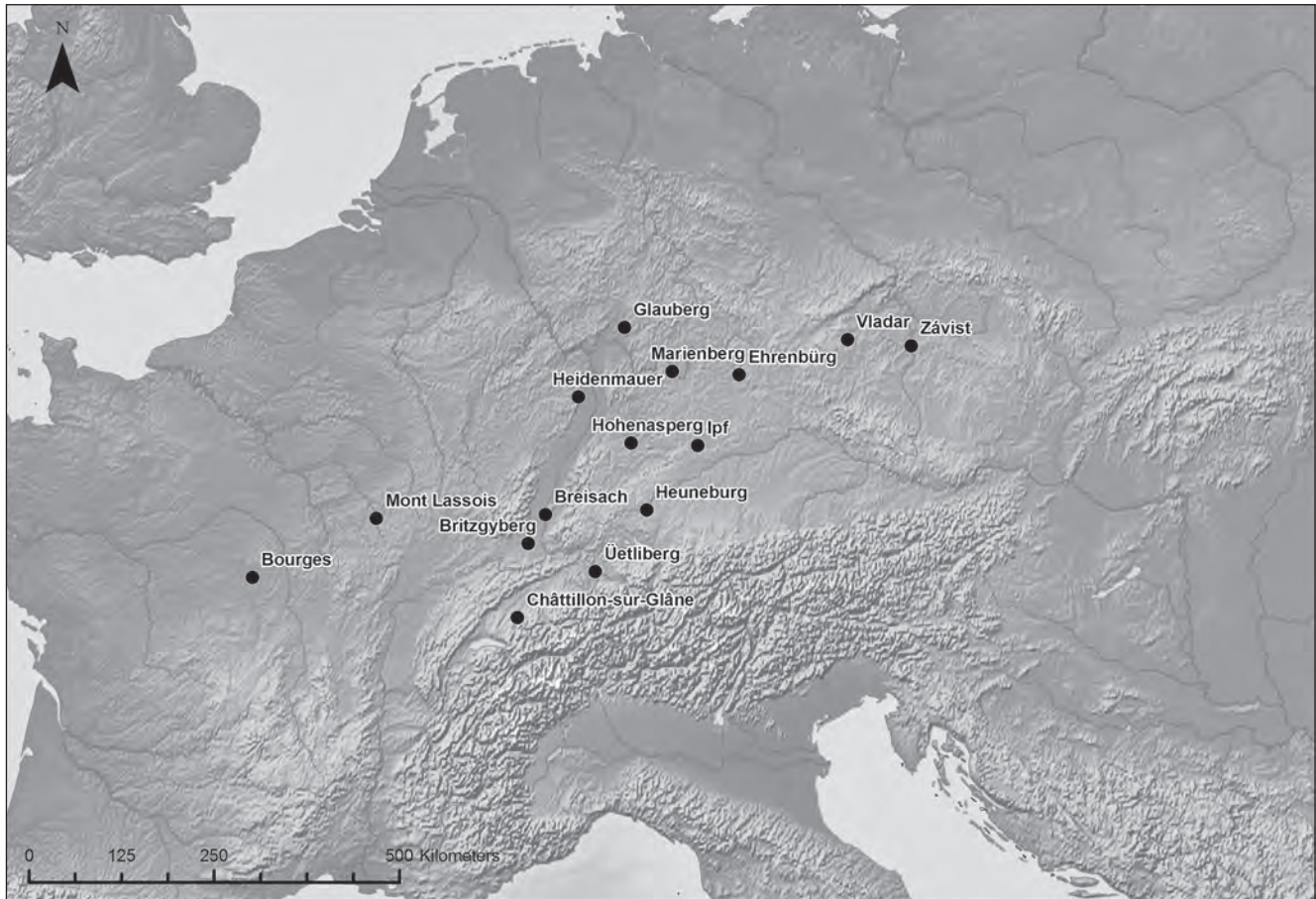


Fig. 1.2: Main central places of the 7th to 5th centuries BC from Central France to Bohemia (after Fernández-Götz & Krausse 2013)

structures, identities and the perception of space change as a result of so many people living together in a comparatively small area? How did the evolution of more impersonal relationships associated with urban ways of life affect social organisation? Studying cities in a long-term and cross-cultural perspective links the past with the present, allowing a better understanding of one of the most important developments in human history (Clark 2013; Fernández-Götz & Krausse forthcoming; Sjöberg 1960; Smith M. L. 2003; Storey 2006). Moreover, archaeological research on ancient cities can contribute to a better understanding of contemporary processes of urbanisation (Smith 2010b; 2012b).

From the beginnings of Iron Age archaeology in the 19th century, scholars have focused on the emergence and characteristics of Europe's 'earliest towns north of the Alps' (to use the title of the famous book by J. Collis; see also Guichard *et al.* 2000; Sievers & Schönfelder 2012; Wells 1984). These were perceived as a common trait of Late Iron Age communities, following J. Déchelette's fundamental paraphrase of the '*civilisation des oppida*' (Déchelette 1914). However, large-scale research projects carried out during recent years have radically changed our traditional

picture of early centralisation and urbanisation processes (Brun & Chaume 2013; Fernández-Götz & Krausse 2013). In the light of new data, we can conclude that the first urban and proto-urban centres of temperate Europe developed between the end of the 7th and the 5th centuries BC in an area stretching from Závist in Bohemia, to the Heuneburg in Southern Germany and Bourges in Central France (Augier *et al.* 2012; Chaume & Mordant 2011; Drda & Rybová 2008; Krausse 2008a; 2010; Milcent 2007) (Fig. 1.2). Moreover, the origins and functions of the Late Iron Age *oppida* of the 2nd and 1st centuries BC need to be fundamentally reconsidered, by paying attention to aspects such as the symbolic meaning of walls, the role of sanctuaries as focal points for community identity or the importance of the large open agglomerations that preceded and/or co-existed with the fortified centres (Fernández-Götz forthcoming; Fichtl 2005; 2012a; Haselgrove & Guichard 2013; Moore *et al.* 2013; Rieckhoff 2010; Wendling 2013). But perhaps the main change has to be the recognition of several changing and dynamic cycles of centralisation and decentralisation (Collis 2010; Eller *et al.* 2012; Fernández-Götz 2014; Krausse 2008b; Salač 2012).

In order to link different approaches to particular temporal phenomena all over Europe, the EAA-Session '*Princely Sites, Oppida and Open Settlements: New Approaches to Urbanisation Processes in the Iron Age of Central and Western Europe*', which took place at Helsinki in August 2012, tried to incorporate a variety of regional and supra-regional analyses on urbanisation and on the emergence of complex settlement structures throughout the European Iron Age. A pronounced intention was to facilitate a comparative view on developments within different Iron Age communities promoting a sustained discussion on similar underlying trends or unique aspects of centralisation and urbanisation. The current book is the outcome of that session, which has been further enriched by a series of additional papers from scholars who were not present at the meeting in Helsinki. We thank all contributors for submitting their papers in time, Prof. Michael E. Smith (Arizona State University) for his willingness to write the foreword of the book and Prof. Bettina Arnold (University of Wisconsin-Milwaukee) for her advice and support.

The volume aims not only to bring together the latest continental and English-speaking research, but also well-established researchers with younger colleagues providing innovative perspectives. By way of covering the whole Iron Age – c. 800 BC to the beginning of the Common Era – on an international basis, we are able to discuss, for example, the similarities as well as the differences observed between the centralisation and urbanisation processes that took place both in the Early and Late Iron Age. Moreover, new approaches to the internal organisation of the settlements and their formation processes can be analysed comparatively in a fruitful way. Another aspect that is mentioned and reflected upon is the supply management of central places and economic support from their environment. Finally, topics such as the crucial role of sanctuaries in the formation of many urban settlements are also discussed. All in all, the book tries to provide a full range of innovative insights and of recent archaeological data that in many cases have not yet been published in English, making it accessible for a broader audience. Although temperate Europe constitutes the geographical core, other areas such as the Iberian Peninsula are also included in the analyses. Thus, the contributions cover an area stretching from central Spain to Moravia and from southern France to Britain. The aim has been to produce a work of reference for readers interested in Iron Age archaeology in particular, and in urbanisation processes in general.

It should be noted from the beginning that when we talk about levels of complexity in this study, it is only in reference to socio-economic/technological complexity (for a recent overview on the archaeology of complex societies see Smith 2012a). Any classification of human communities as 'primitive' vs. 'developed', 'passive' vs. 'active', 'barbaric' vs. 'civilised' etc. is quite unacceptable

and needs to be rejected (Lydon & Rizvi 2010). Moreover, it must be emphasised that throughout the Iron Age there were not only strongly hierarchical societies, but also other communities, often nearby, in which the structures of power were less clearly defined and which present evidence for a more heterarchical and decentralised landscape without major settlement centres (Hill 2011; Ruiz Zapatero & Fernández-Götz 2009).

From Heuneburg to Bibracte: structure and contents of the volume

For practical reasons, the book has been divided in five sections: 1) Grand narratives: the rise of urbanism in temperate Europe; 2) Towns before the *oppida*: centralisation processes in the Early Iron Age; 3) Modelling complexity: villages and cities in Late Iron Age Europe; 4) Open agglomerations and fortified centres: from sites to landscapes; 5) At the edge of the world? Iberia and Britain. After this introductory paper by the editors, the first section is completed with the comparison that John Collis (University of Sheffield) makes between urbanisation processes in the Mediterranean and temperate Europe. He contrasts 'city states' and 'tribal states', and discusses the implications each of them had on the emergence and quality of towns within different social and political systems. The second section opens with an article by Manuel Fernández-Götz (University of Edinburgh) on the Heuneburg in southwest Germany, one of the best-investigated centres of power which developed north of the Alps between the 7th and the 5th centuries BC. The whole biography of this famous place is traced taking into account the results of the latest research. With the sites of Bourges and Vix, Pierre-Yves Milcent (University of Toulouse) analyses two other famous sites of the Late Hallstatt and Early La Tène periods. He emphasises the multiplicity of urbanisation processes and shapes of urban structures in central and eastern Gaul. For his part, Raphaël Golosetti (Netherlands Institute for Advanced Study) discusses the role that places of memory, heroic cults and ritual continuity played for urbanisation processes in southern Gaul. He also highlights the importance of Bronze Age sanctuaries for the development of Iron Ages settlements.

At the beginning of the third thematic block, Vladimír Salač (Institute of Archaeology of the Czech Academy of Sciences, Prague) presents the current state of research embracing the categories hilltop *oppida*, low-land *oppida*, Production and Distribution Centres (PDC) and Némčice-Roseldorf type Centres (NRC). Furthermore, he forms models of relationships between the different types of settlements and develops a La Tène period urbanisation cycle including the (dis)appearance of the *oppida*. Alžběta Danielisová (Institute of Archaeology of the Czech Academy of Sciences, Prague), meanwhile, examines the socio-

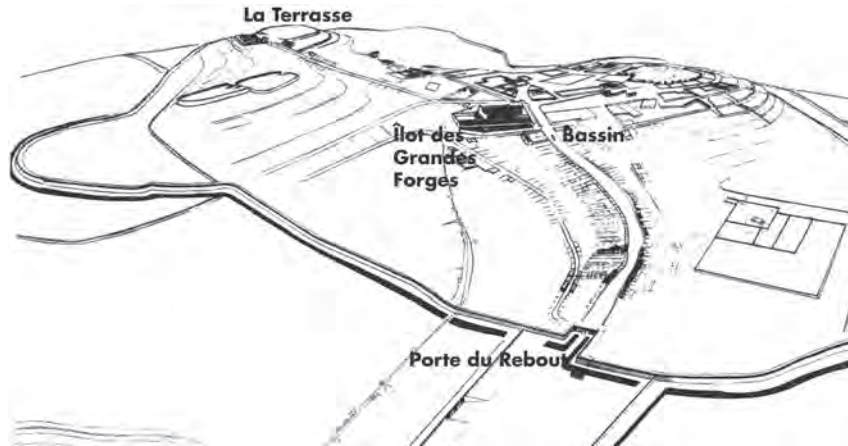


Fig. 1.3: Idealised reconstruction of the oppidum at Bibracte in the 1st century BC (after Rieckhoff 2010, drawing P. Andréu)

economic structure of the Late La Tène *oppida* in Central Europe, focusing on their social and economic potential in terms of food production and social structure in relation to the production mechanisms.

In the following paper, Dominik Lukas (Excellence Cluster Topoi, Berlin) pursues a historical semantic approach to the term '*oppidum*'. Following the history of research at Bibracte/Mont Beuvray in Burgundy, he exemplifies the changing meaning and appropriation of archaeological terms within the discussion of Late Iron Age urbanisation. Also using the example of Bibracte, Sabine Rieckhoff (University of Leipzig) discusses the role of architecture as an instrument in tracking down the identities of the elites (Fig. 1.3). By emphasising the importance of a sociology of architecture, she traces the actors of the urbanisation process in 2nd/1st century BC Gaul. Finally, Caroline von Nicolai (Ludwig Maximilians University Munich) investigates deposits of metalwork and other artefacts, as well as of human and animal remains, related to the defences of Iron Age hillforts. Using examples from continental Europe she shows that these symbolic acts were not restricted to the British Iron Age where they are a well-known feature.

The ensuing section – which includes a number of case-studies – begins with an article by Veronika Holzer (Museum of Natural History, Vienna) on the new research conducted at the largest La Tène settlement in Austria: Roseldorf. Fieldwork has revealed a variety of artefacts and features that provide an insight into ritual and economic aspects of this Iron Age agglomeration. She portrays structural and functional characteristics of the eponymous unfortified site of the type 'Němčice-Roseldorf'. In the next contribution, Holger Wendling (Salzburg Museum/Keltenmuseum Hallein) and Katja Winger (Freie Universität Berlin) re-analyse two large areas within the *oppidum* of Manching, the so-called 'Zentralfläche' and the 'Südumgehung'. By pointing out sacred spheres, different functional zones and

indications for expansion and decline of the settlement, they provide new approaches for the history of this well-known site.

Tom Moore and Côme Ponroy (Durham University) re-examine the phenomenon of open agglomerations in Late La Tène Gaul, suggesting that the traditional tendency to prioritise enclosed sites may limit our appreciation of the nature of broader social change. Among the sites discussed, we can highlight the recent identification of a focus of occupation covering a large area of approximately 120 ha around the Sources de l'Yonne, only a few kilometres away from the *oppidum* of Bibracte. Equally refreshing is the paper by Matthieu Poux (University of Lyon) on the 'multipolar town pattern' identified in the basin of Clermont-Ferrand (Auvergne), which reveals a singular urban pattern evolving around three important occupation poles at a distance of 5–7 km to each other. These three *oppida* (Corent, Gondole, Gergovia) can be interpreted as an overlay of population clusters within a large, strongly urbanised area which spread over an area of more than 2500 ha.

The next two papers present the results of two large international research teams, one working in Southern France and the other on the Upper Rhine in the triangle between Germany, France and Switzerland. The project headed by Ian Armit (University of Bradford) shows the impact of integrated geophysical and topographic prospection on understanding the organisation of space and urbanisation in the southern French Iron Age, including the long-lived *oppidum* of Le Castellon or the Late Iron Age *oppidum* of Entremont. In the following contribution, the trinational research project on the Southern Upper Rhine identifies various settlement types using cluster analysis: central places (like Basel-Münsterhügel, Basel-Gasfabrik or Breisach-Münsterberg), medium centres and farmsteads. Also taking a landscape-archaeological approach, Sabine Hornung (Johannes Gutenberg University of Mainz)

explores Caesar's campaigns in the territory of the Treveri and their impact on Late La Tène society in her paper on the environment of the *oppidum* 'Hunnenring' near Otzenhausen. Especially striking is the recent discovery of a Late Republican military camp which can be directly linked with the Roman conquest and the decline of the Iron Age settlement.

The volume ends with two regions which are normally not included in international debates on Iron Age urbanisation: central Iberia and southern Britain. Jesús Álvarez-Sanchís and Gonzalo Ruiz Zapatero (Complutense University of Madrid) consider the relationship between settlement, demography, centralisation and urbanisation in Iron Age central Spain. They analyse the evolution of the communities of the Iberian Meseta into larger and more complex societal structures. Francisco Burillo-Mozota (University of Zaragoza) presents results from the excavations at the important Celtiberian *oppidum* of Segeda. Here the synoecism which is attested in ancient written sources seems also to be reflected in the archaeological record. Finally, Niall Sharples (University of Cardiff) introduces new data and recent approaches that lead to a re-evaluation of the developed hillforts of Southern England. Some of these centres were large and often densely settled sites that controlled extensive agricultural hinterlands.

Defining the 'city'

The diversity of temporal and regional phenomena explored in the volume reveal the need for a reconsideration of seemingly comprehensive phenomena which are subsumed under the broad term 'urbanisation' (Clark 2013; Sjöberg 1960; Storey 2006). With reference to singular processes and concepts, peculiarities and similarities within emerging complex settlements of different regions and times might be revealed (Smith 2007; 2010a). This in turn enables the characterisation of common basic imperatives and analogous processes which might lead to the development and subsequent testing of models of pre- and protohistoric urbanisation.

The phenomenon of early urbanisation has been a matter of considerable discussion amongst scholars of archaeology, ancient history and anthropology (Gates 2011; Kolb 1984; Marcus & Sabloff 2008; Rykwert 1976; Smith 2007; Smith M. L. 2003). However, there has often been a tendency to attribute the supremacy to ancient historical evaluations of early urbanism (Kolb 1984) over those approaches made by archaeology (Cowgill 2004; Smith forthcoming). Certainly, drawing on literary sources on ancient cities ideally meant a quite concise attribution of urban traits to certain settlements. However, the intrinsic lack of direct literary data on most of the Iron Age settlements of temperate Europe, and the need for an archaeological approach to protohistoric urbanisation

made the discussion seem rather unsatisfying. Meanwhile, also in studies on urbanisation of literate Mediterranean societies the deficiencies of an approach based purely on textual sources have been recognised (e.g. Fröhlich & Wendling 2014).

F. Kolb (1984), in his fundamental study on ancient Mediterranean towns, set the standard for an evaluation of urbanity from an ancient historical perspective. However, his criteria of urban status evidently pose some problems for Iron Age archaeology in most of Western and Central Europe. While *topographical closeness* might be evaluated on the basis of distribution and density of architectural features, *administrative and political separation* is hardly ever detectable without textual evidence. The complex administrative and legal situation of medieval and early modern towns advises against hasty conclusions. Although literary sources on the political role of Gallic *oppida* are comparatively frequent, their significance and expressive value are a matter of continuous debate. With the detection of ritual sites in urban contexts, the supposed correlation of religion and politics might give a further insight into political performance within an Iron Age town from an archaeological perspective (Fernández-Götz forthcoming; Fichtl *et al.* 2000; Golosetti this volume; Wendling 2013; Wendling & Winger this volume). On the other side, it is difficult to provide evidence of the *number of inhabitants* and *urban lifestyle* in a protohistoric context. Whereas libraries, baths, theatres, and parks might be traceable in Mediterranean centres, the wooden architecture of Iron Age centres and its state of preservation will hardly ever provide reliable data on urbanity. In any case, in recent years it has been possible to identify a growing number of public spaces within the Late Iron Age *oppida* which provide evidences of political and ritual activities (Fernández-Götz 2012; Fichtl 2012b; Metzler *et al.* 2006) (Fig. 1.4).

In an attempt to overcome any intrinsic flaws of urban assessment, B. Hänsel (2005) has proposed another set of criteria from a prehistoric point of view. Similar to the historical approach, these include *settlement size*, i.e. a certain density of architectural structures and a population figure of at least approximately 1000 inhabitants. Apart from a *topographical concentration of occupation*, a *variability of archaeological structures* and *economic diversity*, he adds *long-distance contacts* and the role of settlements as *regional centres*. According to Hänsel, *long-lasting continuity of urban space* is only to be alluded to as an additional criterion.

Be that as it may, the insufficiency of a 'checklist-approach' has frequently been stressed (Collis 2010; Osborne 2005). Thus E. Gringmuth-Dallmer's (1996) systemic model tries to combine geographical and archaeological criteria while intentionally omitting the problematic term 'town'. Instead, he creates a hierarchical model of settlements which is dominated by 'complex centres'. These combine different

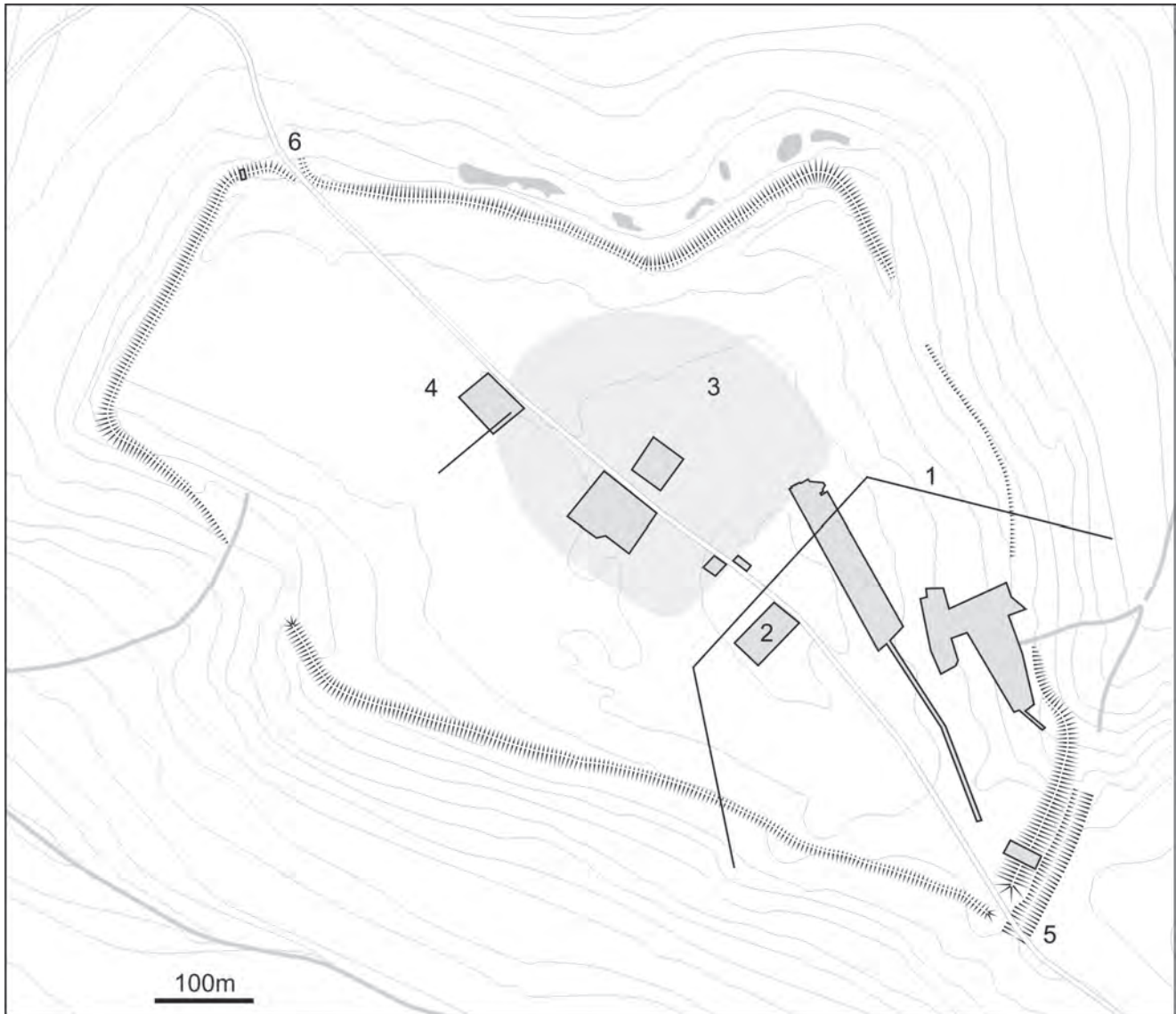


Fig. 1.4: Plan of the Titelberg oppidum in Luxembourg: 1) cultic ditch that marks the boundary of the public space of c. 10 ha; 2) excavation of the monumental centre (re-drawn after Metzler et al. 2006)

functional aspects, including *authority and leadership*, *protection and fortification*, *crafts, trade* and *religious institutions*. Settlements of lower rank exhibit only a few or none of these criteria. According to the functional correlation of different sites and their regional environment within a single system, the model allows for a diachronic, interrelated and gradual interpretation of settlement centralisation (see also Nakoinz 2013).

A similar approach was pursued by Y. V. Andreev (1989) who stressed the transformative character of urbanisation from village to quasi-city and proto-city. Similar to the aforementioned approaches, some key-features of urban status were of general importance for distinguishing the

varying degree of urbanisation. Two of these – compact layout of buildings and complex dwellings that differ from rural structures – are considered to be obligatory in any urban characterisation. By stressing the gradual development of urban settlements, Andreev initially avoided a rigid binary distinction between settlements that have either reached urban status or those which are pre-urban. This rigid categorisation is intrinsic to any of the checklist-approaches, but was never really systematically tackled. Instead, archaeological studies often tried to account for obvious, albeit inconceivable differences in the level of urban development by reverting to an elusive and inconsistent terminology: the terms *pre-urban* or *proto-urban*, *urban-like* or *largely urban* all exemplify

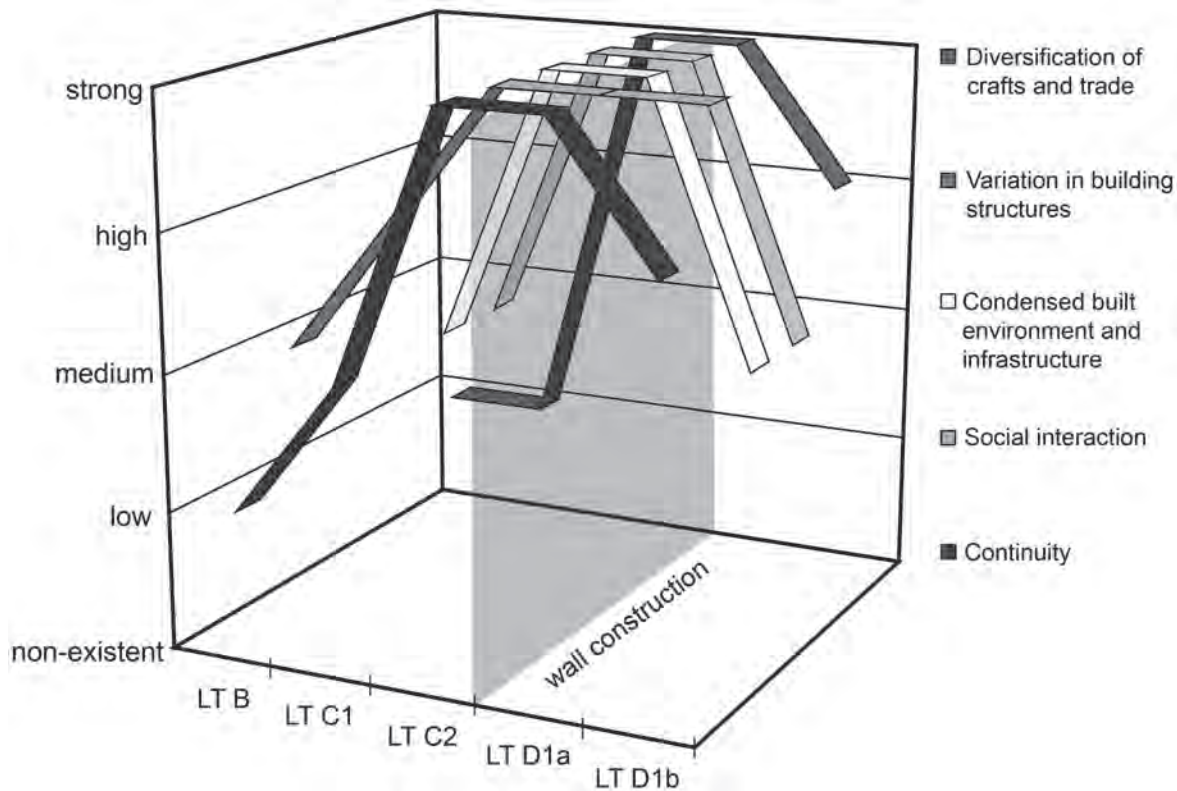


Fig. 1.5: A gradual quantitative and qualitative development of different urban traits as characterised by the process of urbanisation at Manching (H. Wendling)

the need to characterise a certain moment in a continuous process. However, it largely remains unclear where to draw the line between these different states.

The significance of those lines or thresholds was already noted by Collis (1984) in his fundamental work on the ‘earliest towns north of the Alps’. However, it is quite difficult to establish a coherent classification with regard to the physical criteria that can be analysed archaeologically – size, density and diversity of buildings. Beyond that, Collis points to problems in identifying and evaluating functional categories which are generally referred to by geographers and sociologists. Moreover, research on modern urban communities discusses topics of interaction between urban centres and peripheries, of urban fragmentation, decentralisation and issues of social competition between urban and rural environments (Schroer 2006). In an attempt to explain the emergence and decline of Late Iron Age centres, these internal social concepts have been identified as major factors of urban development rather than the influences of mere external stimuli (Wendling 2010; 2013). During a process of social differentiation which initially emerged from within a rural environment, distinct social groups may have organised themselves in a new economic environment of emerging towns.

The fact that a town is inseparably embedded into an economic and social urban hinterland and is an integral part of its regional environment has always been recognised in geographical approaches. Starting from W. Christaller’s economic theory of central places, geographical models were regularly used to explain the emergence and interaction of prehistoric centres (Christaller 1966; see also Doneus 2013). With an increasing importance of territorial approaches and the growing use of GIS-applications, the regional perspective gained more and more acceptance in archaeology. Whereas outstanding sites like Bibracte and Manching traditionally were analysed with a focus on internal urban traits, recent approaches increasingly consider the environment of the assumed urban centres (Eller *et al.* 2012; Moore *et al.* 2013). This look beyond the fortified space is of basic importance for an adequate evaluation of site-specific conditions and the quality of an urban core area (Blöck *et al.*, Moore & Ponroy and Poux this volume). The degree of urban development can only adequately be perceived when incorporating comparative data from the urban hinterland, i.e. the rural environment. This supra-local notion of urbanisation has recently been stressed in comparative studies of Late Iron Age towns and early state formation. It will be further elaborated in this book (Collis and Danielisova this volume).

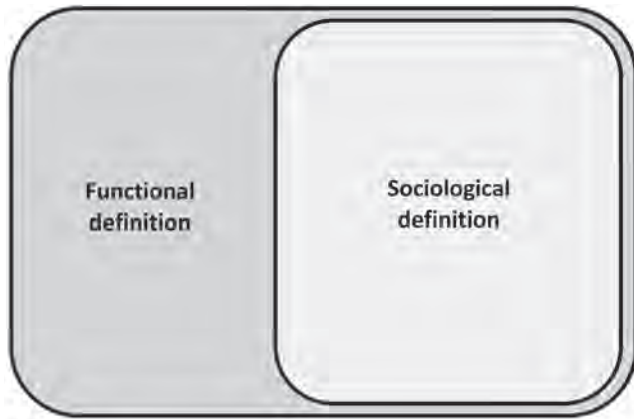


Fig. 1.6: The relationship between the functional and sociological definitions of urbanism. All 'sociological' cities also fit the functional definition, whereas the converse is not true (after Smith forthcoming)

Similar to the spatial extension and comparative approach in studies of Iron Age urbanisation, the processual character of urban evolution is increasingly considered. The notion of urbanisation as a continuous, impartible process was recently stressed by R. Osborne (2005) in an introductory discussion of ancient Greek urbanisation. As a 'phenomenon which admits of degrees', urbanisation exhibits a gradual, transformative character. Accordingly, alterable degrees of urbanisation imply a temporal aspect that allows for a convertible settlement history: a city is not a static entity that suddenly appears, but an interactive organism that gradually emerges and develops (Fig. 1.5). This leaves room for either temporal decline or an increase of urban standards. Ultimately, even occasional ruptures and breaks in settlement evolution are part of urban settlement history. These events would often be hastily – and incorrectly – classified as 'non-urban' if considered as temporal sections that are detached from a coherent continuum.

Having reached this point, in the present work we follow Smith's (2007: 4) definition of 'urban settlements' as "centres whose activities and institutions – whether economic, administrative or religious – affect a larger hinterland". According to Smith, there are two principal ways to define a city: the sociological definition, based on criteria such as permanence, large population size or social heterogeneity; and the functional definition, where the settlement in question has to be the setting for people and institutions that impacted a larger realm (Smith 2010a; see also Marcus & Sabloff 2008) (Fig. 1.6). Whereas scholars working on the Mediterranean world make widespread use of the terms 'towns' and 'cities' to designate a wide range of 1st millennium BC settlements, the use of such categories is still much discussed for temperate Europe. However, this reluctance – which is ultimately based on the unacceptable distinction between a 'civilised' south

and a 'barbarian' north – has often more to do with modern prejudices than with the past reality of ancient societies. Building on the insights above, we would like to propose a context-dependent definition of 'city' which recognises the high levels of variation that often exist between and within different urban traditions: "A numerically significant aggregation of people permanently living together in a settlement which fulfils central place functions for a wider territory" (cf. Fernández-Götz & Krausse 2013: 480).

A non-linear development

In recent years, both regional approaches in urban studies and the investigation of processes of urban development have contributed fundamentally to an understanding of Iron Age urbanisation in Central Europe (Sievers & Schönfelder 2012) and beyond (see for example Álvarez-Sanchís *et al.* 2011). Frequently, the integration of spatial and temporal data helps understand the economic network, the degree of urbanisation and its impact on social evolution. Consequently, Early and Late Iron Age urbanisation do not represent two distinct facets of Late European Prehistory, but rather are to be considered as interdependent degrees of settlement complexity within a process that includes cycles of centralisation – decentralisation – centralisation (e.g. Augier & Krausz 2012; Fernández-Götz 2014; Salač 2012).

As noted at the beginning, on the basis of new data emerging from several research projects conducted at so-called 'princely sites' such as Heuneburg, Glauberg, Ipf, Mont Lassois or Bourges, we have to rethink our traditional understanding of Early Iron Age centralisation and urbanisation processes (Krausse 2008a; 2010). The results indicate that the political and demographic dimensions of Central European societies in the 6th and 5th centuries BC have to date been under- rather than over-estimated (Brun & Chaume 2013; Fernández-Götz & Krausse 2013). To quote only two of the most spectacular examples, recent research has shown that the entire settlement of the Heuneburg (citadel, lower town and outer settlement) had an area of c. 100 ha during the mudbrick wall phase, with an estimated population of around 5000 inhabitants; and in the case of Bourges the whole complex covered several hundred hectares in the 5th century BC (see Fernández-Götz and Milcent this volume). Monumental fortifications, profane, sacred and funerary architecture, quarters for craft workshops, and Mediterranean imports all bear testimony to the manifold functions of the centres of power which developed between the end of the 7th and the 5th centuries BC in an area stretching from Bohemia to Berry (Fig. 1.7).

However, it is important to stress that this early process of centralisation and urbanisation was followed by a phase of decentralisation that set in at different times in different areas. In fact, if we take a broader look we can assert that there was



Fig. 1.7: Above: Mont Lassois: geomagnetic plan of the plateau of Saint-Marcel, showing the well-organised structure of the settlement (after Chaume & Mordant 2011); Below: Fragments of Greek pottery from the Heuneburg (Landesmuseum Württemberg)

no continual evolutionary development on a European scale from simple to more complex forms of settlements and socio-political organisation during the Iron Age, but rather multi-layered, changing and dynamic cycles of centralisation and decentralisation (Brun 2001; Fernández-Götz 2014; Krause 2008b; Salač 2012). Very generally, and still at the risk of over-simplifying, it is possible to establish the following sequence in the area immediately north of the Alps: 1) a first wave of centralisation occurred in the so-called *Fürstensitze* or 'princely sites' of the 6th and 5th centuries BC; 2) a period

of decentralisation, which largely coincided with the stage referred to as the 'Celtic migrations'; and 3) a new phase of centralisation that would lead to the development of large unenclosed centres and of the fortified *oppida* of the 2nd and 1st centuries BC. This sequence is in marked contrast to the developments that can be observed in wide areas of the Mediterranean world, where many major settlements show a continual, relatively gradual development from the Early Iron Age to Roman times, and sometimes even up to the present day (Garcia 2013).

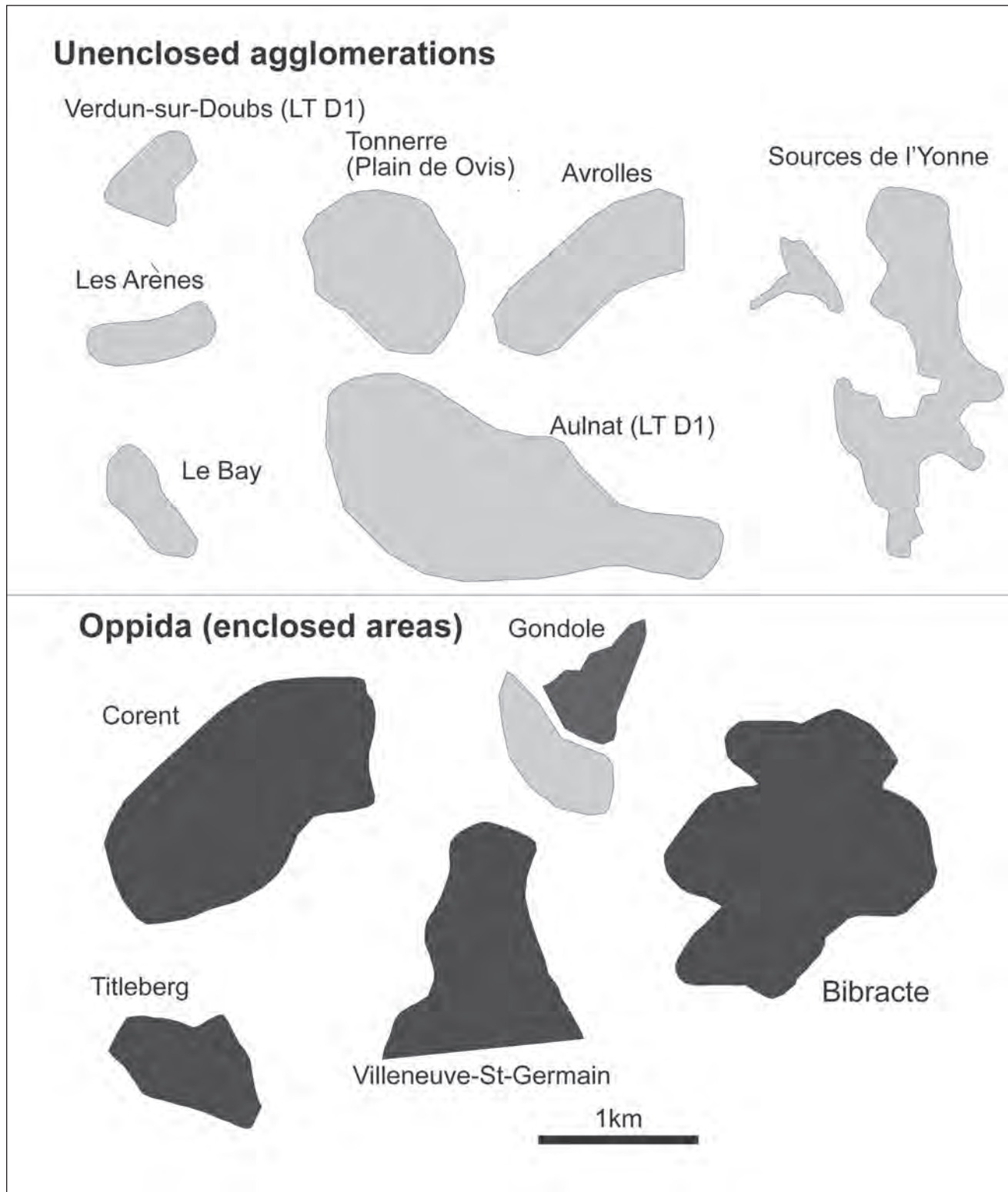


Fig. 1.8: Size comparison of Sources de l'Yonne with selected other unenclosed agglomerations, Bibracte, and selected examples of oppida from eastern and central France (after Moore et al. 2013)

Coming back to the Late La Tène *oppida*, these sites present a much wider geographical distribution, and in many cases also had a larger surface area than the Late Hallstatt/Early La Tène *Fürstensitze*. However, the differences between the two forms of settlement seem to be less marked than was believed in earlier studies (Sievers 2010). Furthermore, there is a considerable number of *oppida* which reoccupied sites that had already been fortified at earlier stages of the Iron Age, as in the case of the large hilltops of the Middle Rhine-Moselle region like Wallendorf or Otzenhausen, and also in other places like Závist, Dünsberg or Bourges. This makes it necessary to reconsider or at least qualify the traditional explanations about the genesis of these sites, placing them into a *longue durée* perspective (Fernández-Götz 2014).

Together with the growing appreciation of the role played by religion and social memory, one of the most important advances made by research has been the discovery, on a large scale, of considerable economic activity in many of the great open agglomerations (Salač and Moore & Ponroy this volume) (Fig. 1.8). Thanks to examples like Levroux in Gaul, Berching-Pollanten in Bavaria, Lovosice in Bohemia or Némčice in Moravia, today the idea that industrial and trading activities of any importance were concentrated exclusively in the *oppida* has to be discarded. In this respect, Manching is a very instructive, albeit special example: being initially unenclosed, the settlement was supplemented by a massive rampart only after a considerable period of urban growth and prosperity (Eller *et al.* 2012; Wendling 2013; Wendling & Winger this volume). Finally, one should remember that, despite the development of large fortified and open agglomerations which can sometimes be labelled as ‘urban’, the European Iron Age remained a fundamentally rural world, where the immense majority of the population lived in farmsteads and small villages that were scattered across the countryside (Malrain *et al.* 2002).

Note

- 1 In this work, no distinction is made between the terms ‘city’ and ‘town’.

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Urbanisation in Temperate Europe in the Iron Age: Mediterranean Influence or Indigenous?

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A distinction can be made between the urban sites of Iron Age temperate Europe and those of the Mediterranean. The classical cities start in the early 1st millennium BC with a competitive system leading to a hierarchy of sites in terms of size and economic and political power. In contrast urbanisation starts later in the mid-1st millennium BC in temperate Europe, and is characterised by monopolistic urban settlements often of large size, and it is not until the end of the Iron Age if not the Roman period that site hierarchies make their appearance. In the Mediterranean area political entities tend to be small, whereas in Europe they appear to be much larger; a contrast made in this article between 'city states' and 'tribal states'.

In this article I aim to look in a general way at the development of urbanisation in temperate Europe during the Hallstatt and La Tène Iron Ages, from about 650 BC to the Roman conquest in the 1st century BC. Normally this period is seen in terms of a core-periphery model with the rise of Greek, Carthaginian and finally Roman empires in the Mediterranean area, and with temperate Europe north of the Alps being technologically, politically and economically less developed. While this model has much to recommend it (we can for instance document the diffusion from south to north of phenomena such as iron working, the potter's wheel, orientalising art, literacy and coinage) I will argue that this is not true of urbanisation, and that the process of urbanisation and the nature of the sites in the periphery is substantially different from those of the Mediterranean. I suggest it is better to envisage two distinct zones evolving in parallel with one another. In the south there is the development of the 'city state' and in the north what I have termed the 'tribal state' (Collis 2000), until in the Roman period the two fuse to form the *civitates* as the basic administrative building block of the provinces in Gaul and southern Britain. In both areas there was complexity, state levels of organisation (at least by the end of the Millennium), and technology

and political and social development sufficient to support urban settlements, though there were many variations in the detailed nature of these organisations both in Mediterranean and temperate Europe.

City states and tribal states

The city state is generally considered to be the archetypal feature in the 1st millennium BC around the Mediterranean coast and by extension through colonisation of the Black Sea littoral as well. Though considered especially a feature of the Greek and Roman worlds, mainly because of the written sources from those two ethnic groups, the prototypes for it can be claimed in the Phoenician world, starting in the Levant and extended by colonies such as Gades and Carthage, but also of Etruscans and probably Ligurians, Iberians and other groups in northern Italy or in central and eastern Spain (e.g. the Celtiberians) and southern France. One of the characteristics is that the town tends to give its name to the people (Athenians, Corinthians, Carthaginians, Romans, etc.). On the coinage the name and symbol of the city appears (e.g. the owl and the goddess Athene on the

coins of Athens). Territories (the *chora*) are usually small, just enough to provide agricultural land for the inhabitants of the city (Osborne 1996). The largest, that of Sparta, at 8000 square kilometres was more like an empire, with the helot peoples of Messenia subjugated by force. The second largest, Syracuse, at 4000 square kilometres similarly contained a large number of subjugated Sicel peoples, the Cyllirii. The third largest was Athens whose territory, Attica, of 2400 square kilometres had been formed by absorbing secondary centres rather than by conquest. But the norm for a city state was to have a *chora* of about 100 square kilometres. The cities themselves were rarely very large, and territorial expansion was carried out by colonisation with the establishment of towns which quickly became independent. The origin of some of these towns lies in the early part of the millennium, and growth tends to be slow and organic. There is a large degree of continuity, often up to the modern day. The system was competitive both in economic, political and military terms, and hierarchies were established by treaties, with smaller sites linking up with major cities as in the Delian League under Athens. There were however exceptions to this pattern, for instance on the fringe of the Greek world, the so-called *ethne* such as Arcadia, Epirus and Macedonia where urbanism arrived late and was imposed through synoecism which is more akin to the tribal states of temperate Europe.

In contrast the tribal states tend to be large in area (Collis 2000; 2007), for instance those of the Arverni and the Bituriges, as far as they can be reconstructed from Roman place names (e.g. *Finis* and *Aequeranda* names marking boundaries) or from the boundaries of early Christian bishoprics. Urbanisation happens late, perhaps at earliest the 6th and 5th centuries BC. At any one time there were few urban (or 'large') sites until the 2nd–1st century BC with the foundation of the *oppida*, and in most regions for most of the time there were no such centres. There is virtually no continuity, and sites usually only survive for a century or so before they are abandoned, but in comparison to Mediterranean towns they are very large (up to 2 or 3 square kilometres), and their rise and their collapse are very rapid. It is not until the foundation of the *oppida* that we can talk of continuity either into the Roman period or to the present day (e.g. Besançon, Orléans, Paris), and urbanisation appears irregularly in each region. The name of the town is regularly replaced by that of the tribe *Avaricum Biturigum* (Bourges); *Lutetia Parisorum* (Paris); *Durocortorum Remorum* (Reims). The name of the tribe or city rarely appears on the coinage, and coin inscriptions are mainly the names of wealthy individuals.

Political organisation: written sources

Some sort of tribal organisation could well be in position

by the 6th–5th century BC. The list of names of tribes which appears in Livy's account of the Gallic invasions of northern Italy (which he dates to around 600 BC, but which is generally now dated to the late 5th–4th century BC), included several which also appear in Caesar and other Roman contexts from the 2nd/1st century onwards, mainly in Gaul: Bituriges, Arverni, Boii, etc. and we have to assume they were already more or less located in the territories assigned to them by Caesar in the 1st century BC. Some names such as the Boii, Lingones and perhaps Senones were transferred to northern Italy which would support a 5th century BC date at latest, though the earliest contemporary mention of one of the tribal names is the graffito of a Helvetian on a potsherd from Mantua dated to around 300 BC (Vitali & Kaenel 2000). Otherwise most names first appear from the mid-2nd and especially the 1st century BC. This does not mean the later 'state' organisations described by Caesar were in existence this early; rather we should assume rapid social and political change as was also happening in the Mediterranean areas in the second half of the 1st millennium BC.

For the 5th century BC we have minimal written evidence – Livy mentions Ambigatus as the king of the Bituriges, and that he had some sort of over-riding status within Gaul, but quite what this means in terms of how 'kingship' may have functioned is unknown or what was the basis of power. For the 4th and 3rd centuries BC the main connection between central European societies and the Greek and Roman worlds was military in the form of the mobile armies which appear in Italy, Greece and Asia Minor, and there the power lies in military leaders, such as the Brennus who attacked Rome and the other Brennus who attacked Delphi. Livy suggests the two leaders Belovesus and Segovesus of the Gallic migrations were of 'royal' origin, the nephews of Ambigatus, but the main basis of power must have been military and organisational skills coupled with personal charisma. From the 2nd century BC we have the story of Luernios who became king of the Arverni by means of massive potlatches of feasting and distribution of money so that he was made king and established a short-lived dynasty as he was succeeded by his son Bituitos, and the Arverni controlled an area 'from the Rhine to the Atlantic' according to Strabo. Certainly the Arverni were involved in events in Provence, leading up to their defeat there by the Romans in 123 BC. But we are not told what the basis of Luernios' wealth was or who decided he should be king, or how the 'Arvernian Empire' (a misleading term!) actually functioned. The importance assigned to the Bituriges in the 5th century BC and the Arverni in the 2nd are both supported by the settlement archaeology.

It is in the 1st century BC that we get some first-hand description of how some of the Gallic political systems worked, but we must assume there was no 'Gallic model' by which a feature in one tribal state can be assumed to

exist in another. Thus in some societies there are ‘kings’, for instance among the Atrebates (Commios), whereas in others there was a strong resistance to kingship or any form of autocracy, for instance the fate of Celtillus, the father of Vercingetorix, who tried to make himself king of the Arverni (despite their 2nd century BC tradition for kingship), or the rules among the Aedui whereby no close relative of a person who had been chief magistrate (*vergobret*) could be elected to the office. Caesar mentions the ‘senate’ of the Aedui, but we do not know who these people were and how they were chosen to take part in deliberations. We hear of general assemblies of adult males like that called by the Treveri to decide whether to declare war on the Romans. We also know there were state funds among the Aedui, the results of auctioning off the right to collect taxes from trade into or through their territory. All we can say is that politically in many ways these societies resembled their better known Mediterranean contemporaries (e.g. the conflict between democracy, oligarchy and monarchy).

In the Roman period these polities were easily absorbed into the Roman system of government. The tribal state became the unit of government, but with the city state form of local government as developed in Rome imposed upon them. The size and extent of the tribal states allowed wide areas of countryside of small towns and farms to develop and be incorporated into the system of government, better than the small territories of many of the city states. The main settlement, a *vicus*, formed the centre of government, and the location for the necessary public buildings – basilica, forum, temples, etc. So the Roman system of provincial government in Gaul, and later in Britain, represents a merging of the indigenous and the Roman systems.

The archaeological evidence: 6th and 5th centuries BC

Since Wolfgang Kimmig first defined what he called the *Fürstensitze*, our understanding of the 6th century BC has changed in fundamental ways. One of his main criteria, at least for sites where there had been little or no excavation was the presence of imported Greek or other Mediterranean imports, but we now know that Attic fine wares for instance, are not confined to the major sites, and where extensive excavation has taken place, as at Bourges, such imports seem to be accessible to a wide range of the population, not only the elite. The model of a small hillfort surrounded by rich burials is no longer quite so valid. The Heuneburg is not confined to a small rich hillfort surrounded by tumulus burials, but in its earlier phases included an extensive area of occupation around it, though this was abandoned in the later phases when only the defended core of the settlement remained in occupation (Fernández-Götz this volume). The complex of Vix and Mont Lassois may still fit the model, as

recent work has shown the importance of the occupation on the plateau, but the surrounds, especially the western slope of the hill, have yet to be extensively excavated (Milcent this volume). We still know little about the central settlement at Hohenasperg which is assumed to form the focus for the rich tumulus burials, but the nearby small open settlement at Hochdorf was importing fine wares as well as engaged in industrial production.

Bourges is different as it represents a concentration of settlement areas covering a very large area, with a probable core under the modern town where there were prestigious buildings, one with painted wall plaster. But areas such as Port Sec have an industrial character. In this case the limited written information we have from Livy suggests the term *Königsitz* might be more apposite, though none of the ‘rich’ burials with their Mediterranean bronze vessels and other imports in any way match those of the Heuneburg and Vix. But one characteristic of all these sites is that they are short-lived. The two main phases at the Heuneburg lasted little more than a century, and the occupation on Mont Lassois was even more short-lived. Even Bourges which covers both Hallstatt D and La Tène was abandoned at the beginning of the 4th century BC, or at least the nature of the occupation changed radically with a cluster of small sites which seem to be essentially agricultural, though with large facilities of grain storage in the form of subterranean silos.

We also know that there is a wide variety of different sorts of sites for which some urban characteristics can be claimed (Fig. 2.1). There are sites which may be primarily for trade, especially along the Rhone and its tributaries; the sites of Vienne, Lyon and Bragny as well as Breisach on the Upper Rhine, do not seem to conform to the *Fürstensitz* model, but were involved in trade with areas to the south and were engaged in industrial production. There were also industrial centres, with the presence of salt seeming to be the catalyst for the development of nucleated settlements that may have been engaged in other forms of production as well. This is most clear at the Dürrnberg bei Hallein, but could be true also for the undiscovered settlement at Hallstatt and for La Seille in Lorraine. One major settlement does not fit any of these models, the site of Závist near Prague where there seems to be a religious centre on the ‘Akropolis’ at the core of the huge defended area (Drda & Rybová 2008). It lacks the rich burials and the imported wares, though it is well placed near the confluence of major rivers, the Vltava, the Berounka and the Elbe, and fits the pattern of the *Fürstensitze* as located on the upper reaches of rivers which flow to the north, east or west away from the Mediterranean. The monumental defences of the hill-top site of Vladař in northwest Bohemia also enclose a large area though it is not clear if the occupation is of an urban character.

The 5th century BC sees a continuation of the pattern, or lack of it, of the 6th century BC. Both the Heuneburg and Mont Lassois lose their importance, in contrast to

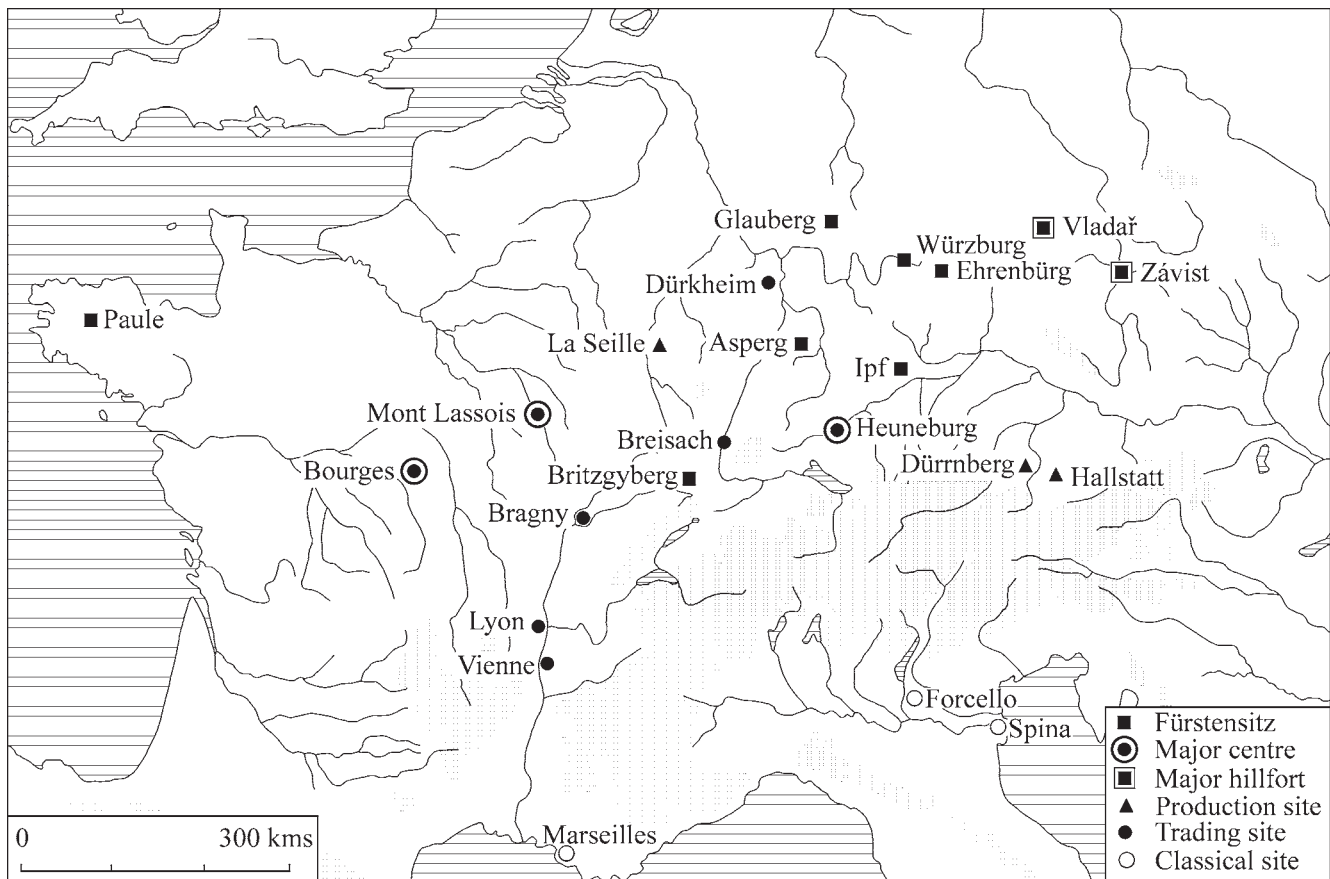


Fig. 2.1: Distribution of major sites in Hallstatt D and La Tène A (author)

Bourges and the Dürrnberg which, judging by settlement and burial evidence, seem to reach their zenith in this period. Further to the north and west major sites appear which seem to have local importance perhaps as the residences of local chieftains, but which lack the size of population of the more southerly sites and so perhaps do not fall into an 'urban' category: the Glauberg, Paule in Brittany, and perhaps Dürkheim and the Britzgyberg. But generally the rich burials of this period are dispersed, around the Mosel, in Champagne and in southern Bohemia, and are not associated with major centres.

At the beginning of the 4th century BC, the start of the period of major migrations, almost all the centres are abandoned (Paule is the exception, and remains occupied to the end of the Iron Age), and generally wealthy burials disappear. Where there are major concentrations of population, they are mobile, like the armies of Celts and Gauls which invaded Italy, Greece and Asia Minor. Large populations capable of living off the land in a purely parasitic way became a feature of much of central and southern Europe, be they state controlled like the Macedonian, Carthaginian and Roman armies, or consist

of slaves, gladiators and other 'have-nots' like the army of Spartacus, or were simply tribes migrating in search of new territory like the Helvetii. The shift towards urban settlement suffers a major setback especially in temperate Europe.

Urban rebirth in the 3rd to 1st centuries BC

In the 3rd century BC we see two new features in the settlement pattern which are not entirely unrelated. Firstly there is the appearance of formal temples or sanctuaries, mainly in rural situations, and secondly large open settlements which have an industrial character and are involved in trade both internal but also increasingly with the Mediterranean world (Fig. 2.2). When I published my doctoral thesis in 1984 I was able to list a number of these open sites, especially on the Rhine and the upper Loire, though most seemed relatively small (e.g. Basel Gasworks), but others such as Manching and Aulnat are very large. Some had later *oppida* on them (Bern-Engehalbinsel, Chateaufort and Manching) but most of them seemed to be abandoned at the time the *oppida* were founded, and

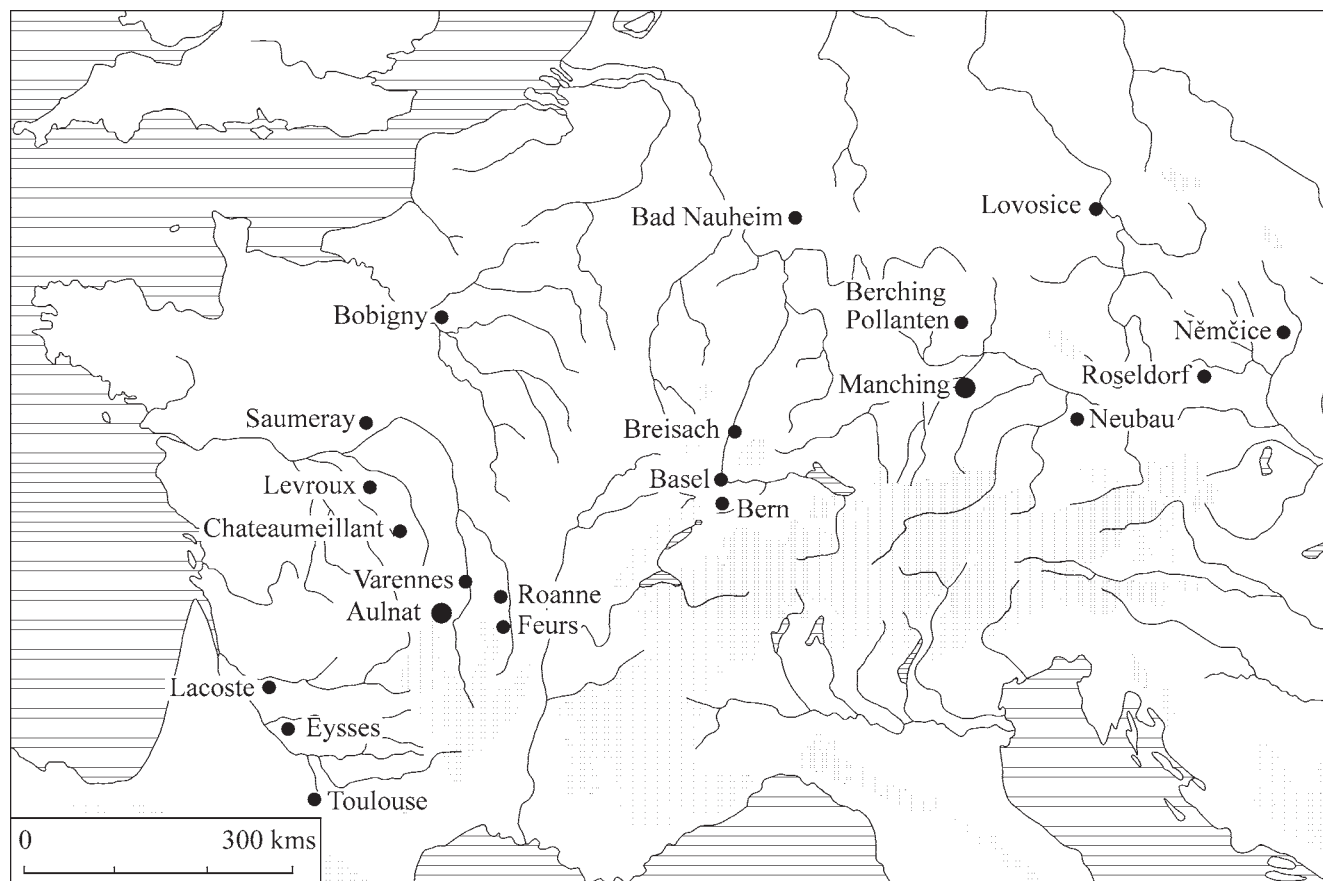


Fig. 2.2: Distribution of major open settlements of La Tène B2 to D1 (author)

in several cases had defended *oppida* nearby to which the population moved. Independently both I and Olivier Buchsenschutz suggested a simple pattern of Middle La Tène open sites which were abandoned sometime during La Tène D at the time the *oppida* were founded, and then in the early Roman period there was a move back to lowland settlements; we were both involved in the excavation of these sites, Buchsenschutz at Levroux, and myself at Aulnat and around Clermont-Ferrand. But more recent work has shown the pattern is a bit more variable (Collis *et al.* 2000), and so the sites on the upper Loire like Roanne and Feurs were not totally abandoned when the *oppida* were founded, but were reduced in size, though both these examples flourished again after the Roman conquest, with Feurs becoming the *civitas* capital of the state of the Segusiavi. In other cases such as Saumeray no *oppidum* was founded, and the open settlement continued until the early Roman period when it was finally replaced by a new centre at Alluyes in the 1st century AD.

Since the 1980s more sites have emerged both in France and in central Europe. Though some are found on major rivers like Lovosice on the Elbe in northern Bohemia,

many like Bobigny in the northern suburbs of Paris, Aulnat, Levroux and Lacoste avoid the major river routes, though they are not far from them. Several have produced evidence of shrines or temples like the paired structure at Brezet in the Aulnat complex, and the two Austrian sites, Neubau and Roseldorf where the temples may be the focal point around which the settlement coalesced. In the early phases of these settlements trade with Mediterranean regions is not well represented, but does occur like the black-gloss 'Campanian' vessels from burials at Bobigny, and these also occur at Aulnat-La Grande Borne along with one Greek sherd and fine white wares from the south of France including a mortarium. Néměice in Moravia has produced Mediterranean coins along with large numbers of local issues. The status of supposedly early 'Greco-Italic' amphorae from sites such as Chateaufeillant is still a matter of discussion as such amphorae also appear in later contexts alongside Dressel 1 amphorae. At Aulnat amphorae (Dressel 1a) only turn up in the final phase (La Tène D1a) and then in large quantities, and their earlier absence when other imports were arriving seems to be significant. Vladimír Salač (2012) has characterised these sites as 'centres of production

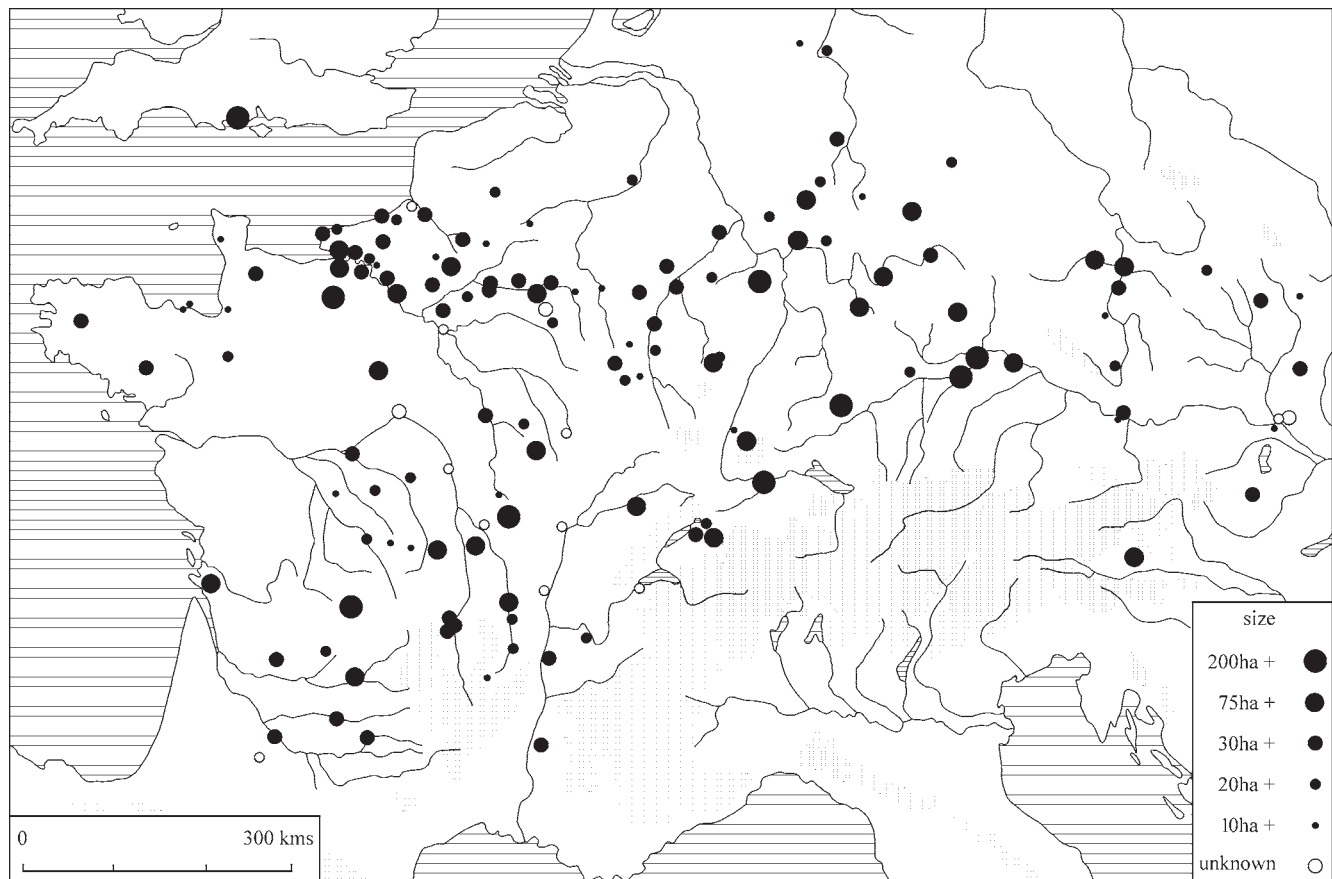


Fig. 2.3: Distribution of Late Iron Age oppida (author)

and distribution'; his site at Lovosice was heavily involved in the production and export of querns. Iron working was important at Berching-Pollanten in Bavaria, and from its earliest phases Aulnat was involved in the working of gold (including coin manufacture), bronze, iron, textiles, bone and probably leather. The rescue excavations have demonstrated that it was a densely occupied site covering up to 2 square kilometres, not a cluster of small settlements as I suggested in the 1980s (Deberge *et al.* 2007). Sites like Aulnat started by La Tène B2, but by La Tène D2 many had been abandoned in favour of defended sites.

The oppida, 2nd to 1st centuries BC

Though undoubtedly more large open settlements will be found, the number of such sites and their distribution is much greater than for Hallstatt D and La Tène A, but it is much less than that of the oppida. The implication is that, though there are several cases such as Aulnat, Basel or Levroux where it was simply a move from an open to a defended site, for many of the oppida there must have been

the equivalent of the Greek synoecism with the population arriving from many small settlements. In some cases such as the Auvergne there does seem to be a systematic emptying of the countryside, but in other areas such as the Titelberg in Luxemburg some of the population including the elite members of society were being buried on their country estates as at Goebblange-Nospelt and Clemency.

The relative date for the foundation of the oppida is still much as I described in 1984 (Fichtl 2000), with the earliest sites dating from La Tène C2 in the Czech Republic and parts of central Germany, but for much of France, Switzerland and southern Germany it is still La Tène D2 which is now dated around 130–100 BC on the basis of dendrochronological dates, and so historically could be explained by the chaos in the aftermath of the Roman invasion of southern Gaul in 125 BC and the defeat of the Arverni in 123 BC.

The distribution of the oppida is still patchy with areas such as southwest France largely devoid of oppida, while the valleys of the Seine and Aisne have dense distributions. In some tribal areas such as that of the Arverni there may be only one or two major sites at one time, while in that of the Bituriges there may be half a dozen or more. Though

as stated above this is the period when we can first see continuity in Gaul of urban sites into the Roman period if not to the modern day (Orleans, Chartres, Besançon, etc.) these are the exceptions and most sites are short-lived, often lasting as little as a generation or two (e.g. Guignicourt, Villeneuve-St Germain in the Aisne valley). In the Auvergne, over a period of little more than a century, even though the sequence is not as simple as once thought, the focus of the population shifts from Aulnat to Corent, to Gondole, to Gergovie and finally to the Roman town of *Augustonemetum* under modern Clermont-Ferrand. In southern Germany there is a hiatus between the *oppida* such as Manching and the Roman settlement, and the Roman urban settlement pattern bears little or no relationship with that of the Late Iron Age. In the Czech Republic and central Germany the defended sites disappear in the later 1st century BC, and some such as Závist show signs of violent destruction. This is usually explained as the arrival of incoming populations from southern Poland and northwestern Germany, and generally there is no more urbanisation in these areas north of the Danube until the early medieval period.

Central places

The models relevant to our discussion are those labelled 'central place'. The original concept as formulated by Christaller dealt with modern market-based capitalist economies with competitive hierarchies of settlements. But as I have argued in presenting my 'crisis' model for the *oppida*, we have to demonstrate that sites are indeed central places rather than over-nucleated agglomerations of population (Collis 1984), and we cannot assume there were competitive systems, so these capitalist based models may be irrelevant. Carole Smith (1976), using anthropological and historical evidence, has identified monopolistic non-competitive situations. One of Smith's models is the 'solar central place' where there is one often huge centre but no secondary centres, perhaps relevant for Early La Tène Bourges, Middle and Late La Tène Aulnat, or some of the Late La Tène *oppida* such as Mont Beuvray or Manching which are much larger than their Roman successors. A second monopolistic situation is the dendritic system, based on examples from the modern world where a 'world economy' is operating, for instance in the case of the 'banana republics' of central America. The model as formulated by Smith is essentially exploitative as a way for extracting especially raw materials from peripheral areas. It is characterised most commonly by the existence of a port site controlled directly or indirectly by people from the core area who are ethnically different from the indigenous peoples of the interior, often leading to a monopolistic control with only one outlet for traded indigenous products. Such extreme situations

probably did not operate in the Iron Age, and trade could even be beneficial to the receiving societies rather than exploitative. Most operated on a small scale, but some may have been more extensive, like those operating out of *Gades*, *Massalia* and *Narbo*. In these cases typically the trade outlets are under foreign control, Phoenician, Greek and Roman, but the outlets could also be neutral, the 'ports of trade' discussed by Karl Polanyi (1963). Steponaitis (1978) has described another monopolistic situation, his 'tribute model' where there is a primary centre which relies on the payment of tribute collected by secondary centres. He demonstrated that the centre would act as a magnet for the secondary centres which were collecting the tribute for the main site, counterbalanced by the pull of the minor sites (farms and villages) which were paying the tribute. The system would therefore be centripetal, in contrast to the centrifugal nature of the competitive models postulated by Christaller and may be relevant to sites such as the Heuneburg.

This raises the problem of the scale of the societies we are dealing with, something of which we can only be fairly sure when we have documentary evidence. In their original paper using the prestige goods model, Frankenstein and Rowlands (1978) assumed the systems around the Heuneburg and Hohenasperg may between them have encompassed most of Baden-Württemberg. Though these sites may have had considerable reach in their trade connections as has been suggested for Mont Lassois, Hohenasperg and the Heuneburg, their territorial basis may have been much smaller, as was certainly the case for the city states of the Mediterranean like *Massalia*.

Conclusions

I hope the evidence that I have presented schematically and briefly in this article is sufficient to document my basic thesis that temperate Europe was not occupied by wild barbarians as generally portrayed in the writings not only of Greek and Roman authors, but also by more recent authors. These societies may have been unstable and this instability may have on occasion caused them to erupt and to threaten the urbanised states further south, but they were sufficiently developed to support their own version of urbanisation and state organisations; it was simply different from that of the classical world. By the time of the Roman conquest they were sufficiently advanced not merely to adapt easily to the Roman system, but in the case of the well-established tribal states to produce the essential building blocks for the *civitates* whose success led the Gallic provinces to become some of the wealthiest in the Roman Empire.

More detailed versions of this article with more extensive bibliographies have appeared in German and French (Collis 2010; 2012).

Summary

Mediterranean Europe	Temperate Europe
City state	Tribal state
Small territories (chora)	Large territories
Continuity	Intermittent
Long lived	Rapid rise and collapse
Competitive	Monopolistic
Small to medium size urban sites	Some very large settlements
Some regional variation	Considerable regional variation

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**TOWNS BEFORE THE OPPIDA:
CENTRALISATION PROCESSES IN THE EARLY IRON AGE**

Understanding the Heuneburg: A Biographical Approach

Manuel Fernández-Götz

Among the centres of power which developed north of the Alps between the 7th and the 5th centuries BC, the Heuneburg on the Upper Danube is without doubt the best known and the one which has provided the most spectacular results, to the point that it has often been referred as the 'first city north of the Alps'. However, the site presents a much longer history of settlement extending far beyond the Hallstatt period. The Heuneburg already flourished in the middle Bronze Age, around 1000 years before the establishment of the Fürstensitz, while in subsequent periods it was repeatedly – but not continually – frequented and occupied. This article takes a 'biographical approach' to the site at the Heuneburg, from the beginnings of the prehistoric settlement until the last phases of construction in the Middle Ages, whereby the emphasis of course lies on the development of the central place in the Late Hallstatt period.

Towards a biography of places

In recent decades, there has been increasing interest in the 'cultural biography of artefacts' (Appadurai 1986). However, the 'biography of places' has received far less attention. Apart from a few exceptions (e.g. Roymans 1995), archaeological research has almost always concentrated on the most significant phase of occupation of a site, in other words Hallstatt D in the case of the Heuneburg, La Tène A at the Glauberg, La Tène D at the Titelberg or Bibracte, etc. However, more recent research has repeatedly shown that in most cases the history of settlement will have lasted much longer – sometimes continual, in many cases intermittent – so that a comprehensive 'biography' of the sites is only possible from a *longue durée* perspective.

Why were particular sites repeatedly frequented over the centuries, abandoned and then used once more? Did a sort of social memory survive, a kind of cultural reminiscence in the form of stories, sagas or legends (e.g. between the Bronze Age and Late Hallstatt occupation of the Heuneburg, see below), or was this memory reinvented? Did tales of earlier ages – whether real or imaginary – play a role in the

resumption of settlement activity at particular sites, or did they perhaps sometimes lead to precisely the opposite, that is to a conscious avoidance of certain sites for ideological or religious reasons? Even if in many cases these questions cannot be answered on the basis of the archaeological data alone, the subject of the 'past in the past' and of cultural memory has taken on ever increasing significance (Assmann 2007; Bradley 2002). Even in cases where we can be fairly certain that there was no direct continuity either in settlement or in the transmission of social memory, earlier periods of occupation could nevertheless have been relevant; for example the re-commissioning and reuse of older defensive works such as banks or ditches, the use of old routes, or the exploitation of old remains for construction material. Building on these ideas, this contribution follows a 'biographical' approach to the site at the Heuneburg, from the earliest prehistoric traces through to the final structural phases in the Middle Ages, whereby the emphasis will naturally be placed on the development of the Late Hallstatt central place between the late 7th and the early 5th centuries BC.

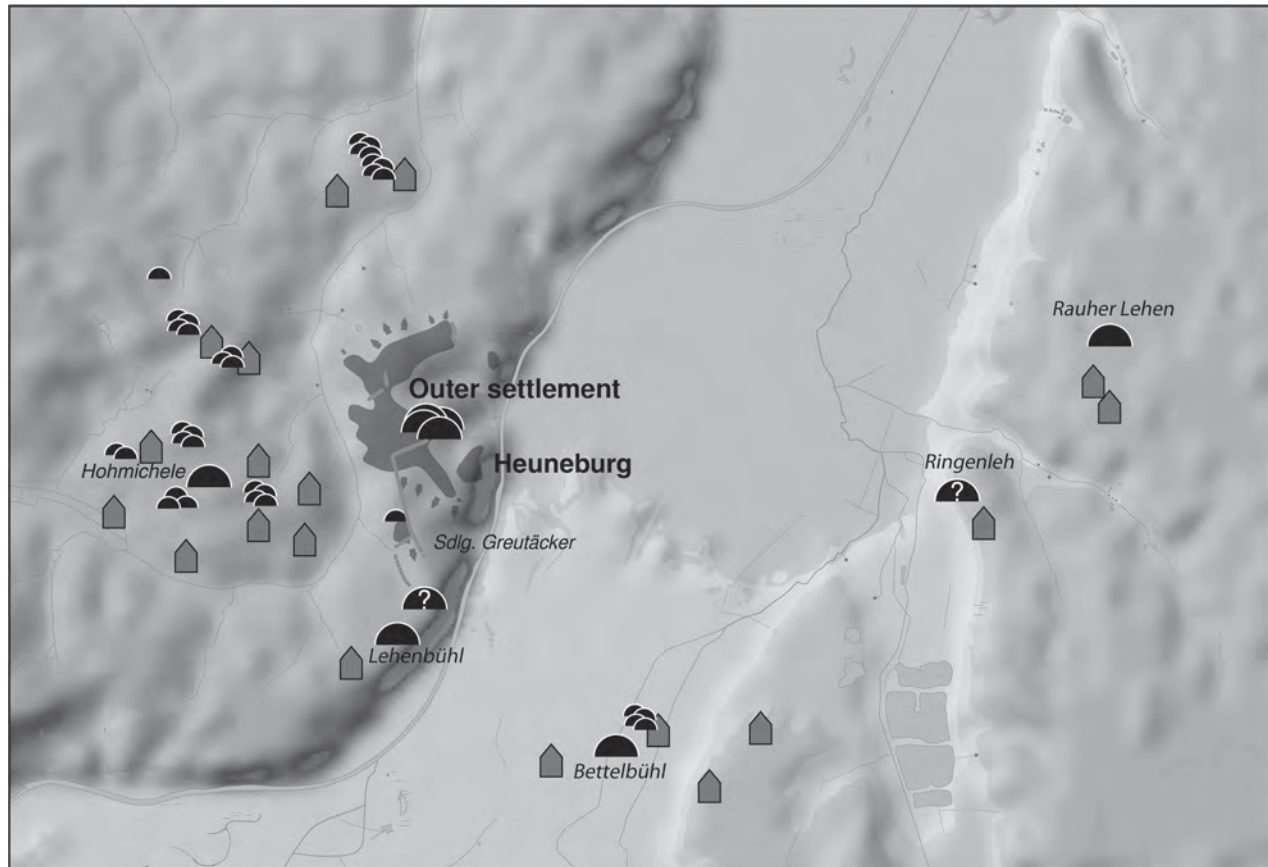


Fig. 3.1: The Heuneburg and its surroundings with the Hallstatt period archaeological sites. The Danube runs through the centre of the picture (S. Kurz, Landesamt für Denkmalpflege Baden-Württemberg)

The rediscovering of an archaeological landscape

The Heuneburg on the Upper Danube is one of the most important archaeological sites in Central Europe. The main hilltop plateau, the *Burgberg*, covers an area of some 3 ha and was first mentioned in written sources in 1560, being referred to as the 'Heineburg'. It lies between the modern villages of Hundersingen and Binzwangen, and rises approximately 60 m above the flood plain of the Danube (Fig. 3.1). The favourable situation on the Danube, one of the most important east–west trade routes on the European continent, was probably one of the main reasons for the choice of the site and the extent to which it flourished in various periods. Furthermore, we can assume that the inhabitants of the Heuneburg profited from the fact that it lay on the boundary between two natural regions: on the one side the Swabian Alb with its rich deposits of iron; and on the other the fertile soils of the Danube valley, which will certainly have served as the 'breadbasket' for the settlement.

As late as the early 19th century the fortified rings of the so-called lower town (*Vorburg*) at the Heuneburg were still clearly visible on the ground as a 'triple line'. Various historical reports and earlier topographical records tell us

of the enormous changes in the landscape that were carried out during the course of work in the surroundings of the hilltop plateau from the early 19th century (Schuppert forthcoming). They resulted in the levelling and the destruction of much of the fortification of the lower town. What is more, roads were also moved. Interest in the archaeological remains only developed in the second half of the 19th century, mainly as a result of the discovery of the rich grave goods in the Gießübel-Talhau barrows, on which the State Conservator Eduard Paulus reported. In the early 1920s Peter Goessler initiated the first excavations on the plateau in order to confirm the date of the site. There then followed the excavation of the monumental Hohmichele barrow by Gustav Riek and the SS in 1937/1938 (Riek & Hundt 1962).

Systematic research on the Heuneburg itself only began after the Second World War, and the enormous research potential of the site became clear as soon as excavations started in 1950. The work at the Heuneburg rapidly became one of the most important settlement archaeological projects in post-war Germany, just like the research at the Late La Tène *oppidum* at Manching. Intensive excavations

continued, with short breaks, until 1979, mainly on the hilltop plateau. The results far exceeded all expectations; above all the discovery of a mudbrick wall built using Mediterranean techniques, as well as 14 Late Hallstatt structural phases and ten associated fortification circuits. Scholars such as Kurt Bittel, Adolf Rieth, Wolfgang Dehn, Wolfgang Kimmig or Egon Gersbach were involved, some of the most renowned German archaeologists of the time.

After 1979 there first followed a phase of analysis that saw the publication of several fundamental works on the Heuneburg (Gersbach 1989; 1995; 1996), leading to important conclusions on the chronology of the Hallstatt period based on the rich and numerous finds (cf. above all Sievers 1984). New research, which was to radically change our picture of the Heuneburg, began in the 1990s with work in the immediate surroundings by Siegfried Kurz. It soon became apparent that the outer settlement (*Aussensiedlung*), which had already been identified under the Gießübel-Talhau barrows (Schiek 1959), was in fact far more extensive than had been assumed (Kurz 2000). Further work was carried out by Hartmann Reim from 2000–2003 directly at the foot of the hilltop plateau in the lower town, while thanks to funding provided by the German Research Foundation (DFG) for the Priority Programme ‘Early Celtic Princely Centres’, between 2004 and 2008 fieldwork could be continued on a larger scale. Two excavations teams worked on the Heuneburg: one examined the huge outer settlement, as well as the Alte Burg near Langenenslingen, while the other worked in the lower town at the Heuneburg (Krausse & Fernández-Götz 2012; Kurz 2008; 2010). Finally, from 2008 to 2012 several areas at the hilltop plateau and on the east terrace were investigated in the course of surveys and small-scale excavations (Krausse *et al.* 2013).

Today the Heuneburg is the most thoroughly investigated centre of power of the late 7th–5th centuries BC (Fernández-Götz & Krausse 2013; Krausse 2008; 2010; Krausse *et al.* 2014). At the same time, recent work has thrown up a whole range of new questions, and future work on the Heuneburg would greatly benefit from focusing on the immediate and further environs in order to understand the genesis, development and decline of the large settlement from a broader perspective. It should include searching for open, rural settlement sites, as well as research into the numerous hillforts that are to be found within a radius of some 20 km of the Heuneburg¹ (Alte Burg bei Langenenslingen, Große Heuneburg bei Upflamör, Bussen bei Offingen, Ennetacher Berg bei Mengen, etc.). Preliminary work at the Alte Burg near Langenenslingen has produced extremely promising results, including the identification of an Iron Age cult shaft where ritual practices were apparently performed well into the La Tène period (Dürr 2010). At the same time, it is important not to neglect the proper ‘core’ of the settlement complex, the Heuneburg together with the outer settlement. Coming to terms with balancing these two aspects, centre

and regional context, will be one of the main challenges in coming decades.

The Heuneburg before Hallstatt

The hilltop plateau itself can look back on a long history of settlement, perhaps already beginning in the Neolithic and continuing, with various breaks, into the Middle Ages. It is possible to identify 23 structural phases, 14 of which date to the Late Hallstatt period (Fig. 3.2). The oldest traces of human activity are a series of stone axes and worked flint flakes, but which cannot be associated with any features. Nor has any Neolithic pottery been recorded to date. A 9–10 m deep flat-bottomed ditch that is cut by a Bronze Age ditch system is more difficult to interpret. Given the present state of research, it is not possible to say whether it is related to a Neolithic fortification, or dates to the Bronze Age.

But what is certain is that the first heyday of the Heuneburg is to be dated to the Middle and Late Bronze Age (c. 1500–1200 BC, see Gersbach 2006). It was now that a large bank about 110 m long and 20 m wide was constructed securing the west face against the flat hinterland. An artificial terrace on which various buildings stood was built behind the bank, and was renovated over the years and drained to keep it dry. At this time the plateau was fortified with a timber box rampart, while a flat-bottomed ditch divided the internal area into two unequal sections, all indications of careful, central planning. In addition, the excavations of the last years have repeatedly uncovered Bronze Age finds in the area of the lower town and the outer settlement (Fig. 3.3). Clearly the importance and the dimensions of the Heuneburg as a Bronze Age centre of power have been under- rather than overestimated. The functions that the settlement complex exercised in this early period will in many respects probably have been similar to those of the later large Late Hallstatt settlement. There is every indication that already in the Middle Bronze Age the Heuneburg was the centre of a polity of regional, and perhaps even supra-regional importance.

Rise and fall of an Early Iron Age central place

After a hiatus of several centuries, at the beginning of the Late Hallstatt period (c. 620–450 BC) the Heuneburg was again frequented and fortified. Over the remains of the Bronze Age fortification a box-rampart with two rows of compartments was erected. The reuse of the Bronze Age site was probably not accidental, and it is a clear possibility that there was some kind of cultural memory about the previous occupation, since the landscape around the Heuneburg was never completely unoccupied. As Van Dyke and Alcock (2003: 1) have rightly pointed out: “past peoples knowingly


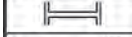


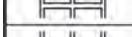

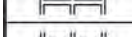

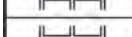

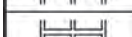
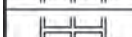





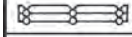






	Humus	Periods Heuneburg stratigraphy	Structural phases	Chronology
		Middle Ages	1	Middle Ages
			2	
			3	
		Ia 	4	HA D3
		Ib/1	5	
		Ib/2	6	
		Ib/3	7	
		Ib/4	8	
		II	9	HA D2
		IIIa 	10	
		IIIb	11	HA D1
		IVa/1 	12	
		IVa/2 	13	
		IVb/1	14	
		IVb/2	15	
		IVb/3	16	
		IVc	17	HA A1
		Va	18	
		Vb	19	BZ D
		VI	20	BZ B
		VII	21	
		VIII/1	22	Neol.
		VIII/2	23	
	Old ground surface	IX		

Fig. 3.2: Settlement at the Heuneburg: chronological sequence from the Late Stone Age to the Middle Ages (after Gersbach 1989, modified)

inhabited landscapes that were palimpsests of previous occupations. Sites were built on sites; landscapes were occupied and reoccupied time and again. Rarely was this a meaningless or innocent reuse”.

Initially several groups of farmsteads within palisaded enclosures were built in the interior of the Iron Age site (period IVc of the Heuneburg stratigraphy). These scattered groups of farms with their outbuildings suggest the transfer of rural settlement patterns to a more confined area, in other words a kind of ‘translocated landscape’, whereby it is possible to recognise the elements of a carefully thought out plan.

Around or soon after 600 BC the Heuneburg was completely restructured, an act that is to be interpreted as the result of a planned political decision (Periods IVb–IVa). A fortification that was unparalleled and quite unique north of the Alps was constructed along the circuit of the Heuneburg, replacing the old earth and timber rampart; it

consisted of mudbricks set on a stone foundation (Gersbach 1995). It has been estimated that approximately 500,000 mudbricks were required, which were then plastered with daub and then whitewashed with lime. The wall was 3 m wide, and probably 5 m high, including a timber parapet, the charred remains of the beams of which were found. Masonry plinths and mudbricks were widespread in the Mediterranean from the Bronze Age, but no other examples of this construction technique are known from the Early Iron Age in Central Europe to date. Although it certainly will also have functioned as a fortification, the structure is to be understood as a conscious demonstration of power and status that underlined the role of the Heuneburg as the political and economic centre of an extensive region, probably the territory of a polity. This interpretation is also supported by the fact that 17 towers projected from the west and north fronts of the plateau.

At the same time the internal arrangement of the hilltop

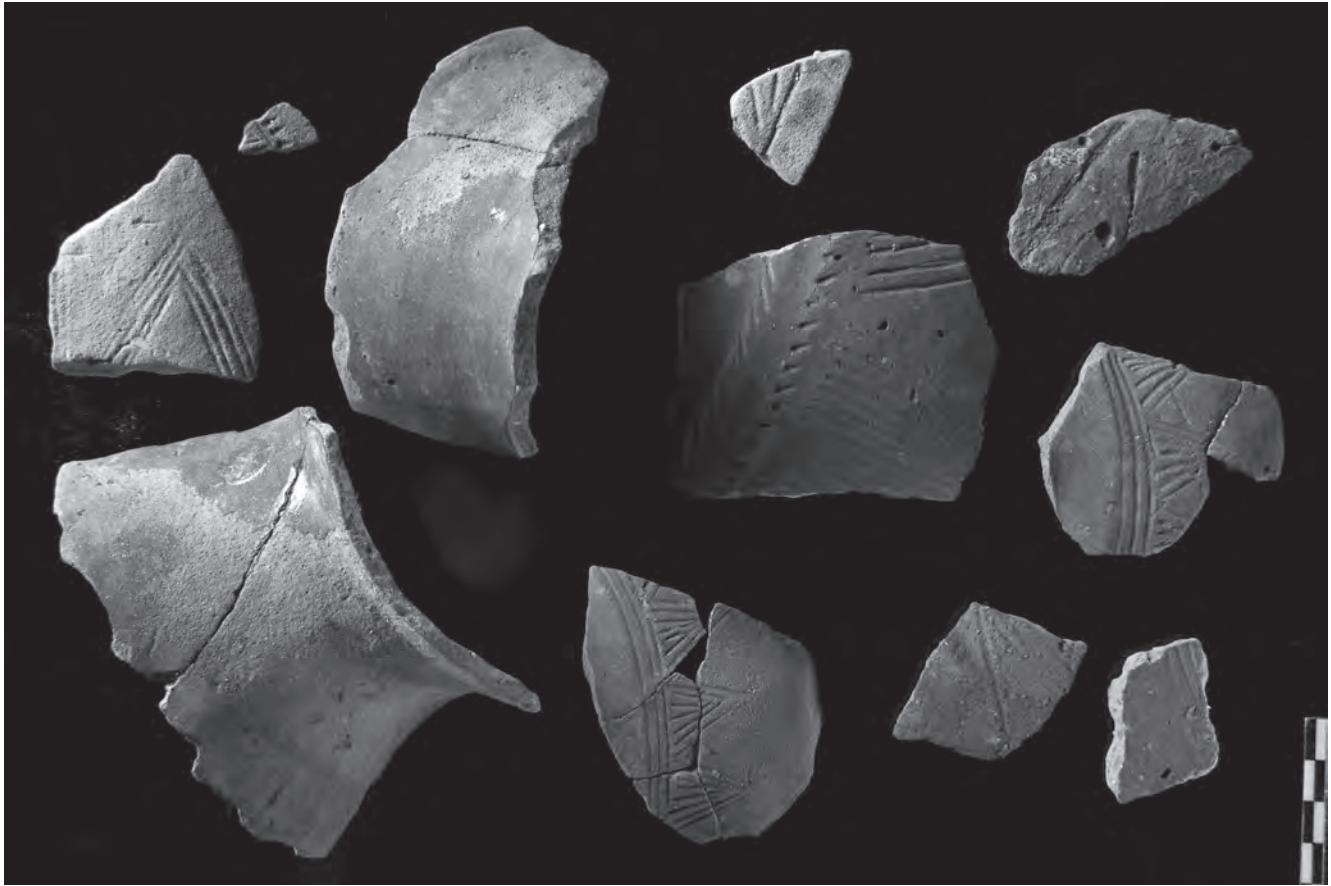


Fig. 3.3: Bronze Age pottery from the Heuneburg (Landesamt für Denkmalpflege Baden-Württemberg)

plateau was modified. Without any traces of fire all of the farmsteads were demolished, probably parallel to the construction of the mudbrick wall, and a regular town plan was established with rows of houses along a network of streets that crossed at an angle (Fig. 3.4). Investigations in the southern section produced evidence for the presence of specialised crafts in the form of finds and several kilns (Gersbach 1995). So far no indications have been found for the presence of genuine ‘palace buildings’ during this stage in the 1 ha of the hilltop plateau area that has been examined, although some of the structures can in all probability be interpreted as the residences of the higher social classes (e.g. a house in the south-west with an area of 130 m² and high-status furnishings). In addition, there is clear evidence that residences of the social elite were also located outside the plateau; for example the monumental building with several rooms covering an area of c. 320 m² that was found beneath barrow 4 of the Gießübel-Talhau necropolis that was built over it. The structure and layout of the building recalls the Etruscan palaces of Murlo and Acquarossa (Verger 2008).

The archaeological research conducted during the last two decades has in fact revealed that the Heuneburg was much more than just the actual hilltop plateau (Krauss &

Fernández-Götz 2012; Kurz 2000; 2007; 2010). The hilltop plateau can be better described as the ‘tip of the iceberg’, for during Ha D1 the entire complex of the Heuneburg consisted of three areas: the hilltop plateau (*acropolis*), lower town and outer settlement (*suburbium*). When in 2004 numerous finds of timber were made in the ditch beneath the northern promontory of the hilltop plateau, it was finally clear that the fortification of the lower town was not medieval, as scholars had long assumed, but in fact formed a significant contribution to the appearance of the Heuneburg in the late Hallstatt period. As late as the early 19th century the rings of the fortification of the lower town were still clearly visible on the ground as a ‘triple line’, but extensive work carried out in order to render more land arable led to the levelling of much of the fortification (Schuppert forthcoming). Much of it was only rediscovered during the course of the excavations of 2000 to 2008. The biggest sensation of all was the discovery of a monumental town gate constructed of mudbricks on a stone foundation. At least 16 m in depth and 10 m wide, the gate can without doubt be described as a demonstration of power of the first order (Fernández-Götz 2013; Kurz G. 2008) (Fig. 3.5). It was also clear from the work in the area of the lower town that the interior was

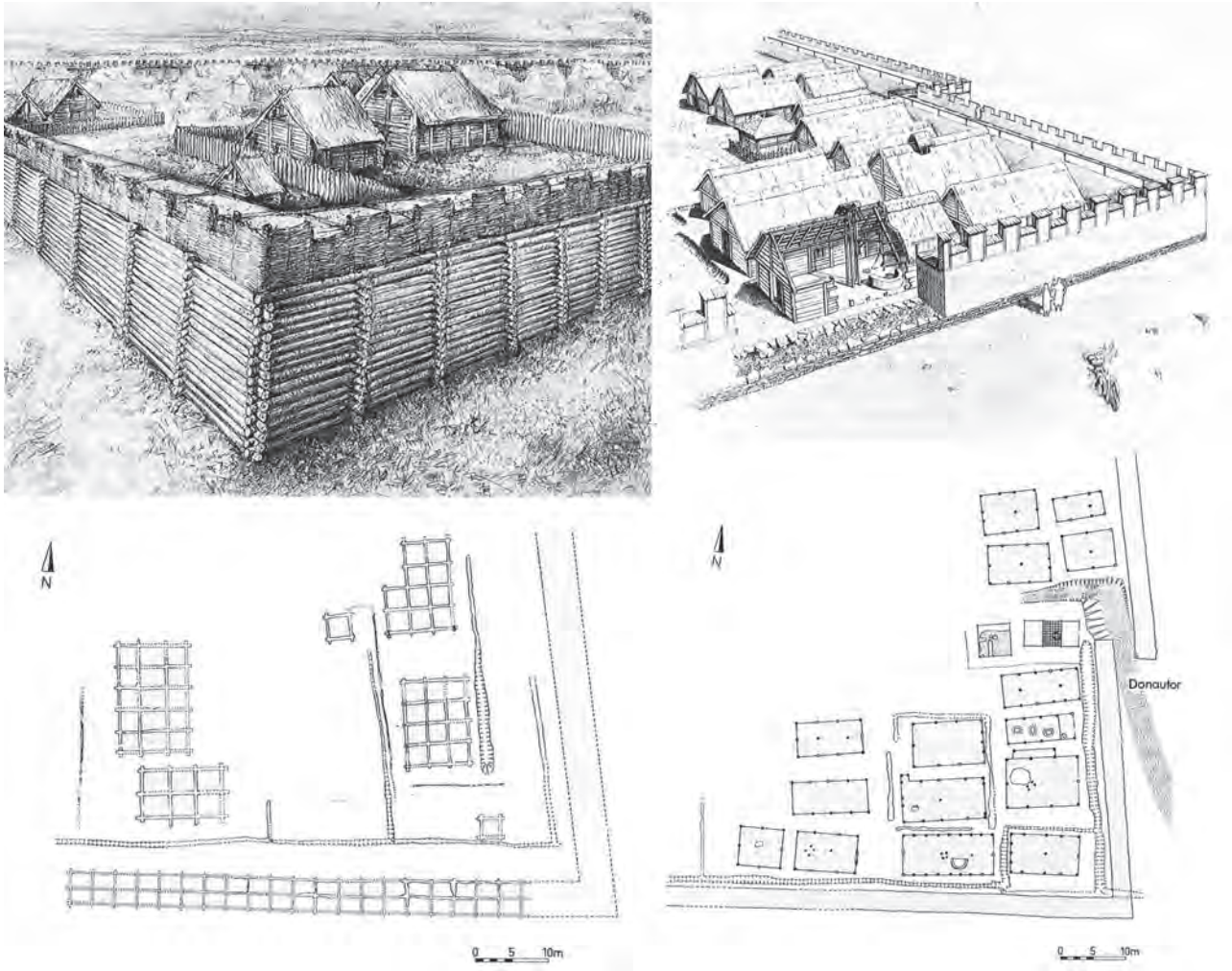


Fig. 3.4: Reconstruction and plan of the southeast corner of the hilltop plateau during period IV (Ha D1). Left: phase before the mudbrick wall; right: period of the mudbrick wall (after Kimmig 1983)



Fig. 3.5: Stone foundation of the monumental gate of the Heuneburg lower town with the adjoining bank and the ditch in front of it (Landesamt für Denkmalpflege Baden-Württemberg)



Fig. 3.6: Division of the settlement areas in the outer settlement into smaller quarters, each containing several farmsteads (S. Kurz, Landesamt für Denkmalpflege Baden-Württemberg)

densely settled. The fact that even the unsuitable areas on the slopes of the hill were rendered usable by the planned construction of terraces indicates that there must have been a significant concentration of population and that there was a shortage of space here. In this way a whole range of artificial podia was created that provided level ground for the construction of habitations and workshops (Bofinger & Goldner-Bofinger 2008).

The recent results from the outer settlement are also of particular importance for our understanding of the Heuneburg. Surveys and excavations conducted by S. Kurz (2008; 2010) have revealed that at least in the first half of the 6th century BC, in an enormous area covering c. 100 ha to the west, north and southwest of the hilltop plateau, there were closely spaced farmsteads that were demarcated

by rectangular palisades. This huge outer settlement was divided into smaller quarters by an extensive system of banks and ditches, which in turn enclosed individual 'properties' 1–1.5 ha in size that were surrounded by massively constructed timber fences. Those sections of the higher-lying part of the outer settlement that were most suitable for settling will have provided space for about 50 such units (Fig. 3.6). It was here that most of the population groups lived that had apparently joined together as part of a process of synoikismos. The division of the outer settlement into several settlement quarters separated from each other could be an indication of the existence of various kinship groups that each inhabited one of these quarters.

Overall it is estimated that in Ha D1 a total of some 5000 people lived in the entire Heuneburg complex (hilltop plateau, lower town, outer settlement) (Krause & Fernández-Götz 2012; Kurz 2010). Given the size of the settlement, the presence of imposing monumental structures (mudbrick wall with towers, impressive gate in the lower town, monumental building beneath Gießbübel-Talhau barrow 4, etc.), as well as indications for strong social differentiation and specialised production, it seems fully justified from both a sociological and a functional point of view to use the term 'town' to describe the Heuneburg, at least during the period of the mudbrick wall (periods IVb–IVa of the Heuneburg stratigraphy, c. 600/590–540/530 BC) (Fernández-Götz & Krause 2012; 2013; Smith forthcoming). For example, the substantial concentration of high-status burials in the immediate vicinity indicate that the settlement enjoyed an important political role that will have served as a crystallisation point for the wider area. What is more, the Heuneburg was an important centre of production, distribution and innovation in which skilled craftsmen produced ceramics, fibulae, textiles and sapropelite jewellery (Gersbach 1995; Kimmig 1983). There are good reasons for believing that particular types that are found across a wide area were actually invented at the Heuneburg itself; an example of this are the red-white coloured vessels with a high neck (Dämmer 1978). From an archaeozoological viewpoint the settlement is also of further relevance; for example it has produced the earliest evidence for the presence of chicken north of the Alps. Moreover, stable isotope analysis indicates that during the mudbrick wall period with its high concentration of population a significant proportion of the animals consumed at the Heuneburg was imported over a considerable distance of 50–60 km (Schatz & Stephan 2008).

A significant hiatus in the history of the settlement at the Heuneburg came after the middle of the 6th century BC, when a devastating fire occurred (transition periods IVa/III). The fact that after this traumatic event the mudbrick fortification was replaced with a more traditional timber and earth construction; that the layout of the interior of the hilltop plateau was radically altered; and that the greater

part of the outer settlement was abandoned suggest that violent conflict occurring about 540/530 BC was the most likely cause. Possibly this took the form of an attack by an external enemy or internal conflict between rival factions. But even if settlement continued without any recognisable chronological break and the material culture indicates a degree of continuity, the fact that the reconstruction was carried out on a completely different (or better: 'traditional old') pattern is suggestive of deep ideological changes (Arnold 2010a). Confirmation for this hypothesis comes from the necropolis at Gießbübel-Talhau, which was established about or just before 540/530 BC. This group of barrows was erected on the top of the remains of the outer settlement. It is to be interpreted as the isolated cemetery of an aristocratic social elite. Unlike the Hohmichele it was not integrated into a larger cemetery but, situated at an isolated site in the immediate vicinity of the entry to the lower town, emphasised the extraordinary social role of the elite that ruled on the Heuneburg.

The interior of the hilltop plateau also underwent fundamental change. Instead of the relatively uniform, row-like arrangement of the houses of the mudbrick phase, in period III buildings of different size and function appear, among them imposing structures of enormous dimensions, so-called *Herrenhäuser* (Gersbach 1996). Various suggestions have been made for their interpretation: royal or aristocratic residences, meeting halls for the councils of leading families, etc., whereby these interpretations are by no means mutually exclusive. At the same time occupation in the lower town became more intensive. Here, during the last quarter of the 6th and the early 5th century BC, closely spaced structures were built in terraced areas that have produced large quantities of finds and appear also to have housed artisans and other sections of the population that were involved in supplying services. Summing up, we can say that during the mudbrick phase the buildings within the hilltop plateau were arranged regularly and close together, while outside there was a more scattered and varied arrangement. In contrast to this, during the following period buildings within the core of the site were more scattered and varied, while in the lower town the architecture was more regular and the buildings set closer together. It is interesting to note that the majority of the imports from the Mediterranean, including several Greek vases, date to after the end of the mudbrick wall (Kimmig 2000).

As for the question of the end of the Heuneburg, the latest work has unfortunately not produced any conclusive new evidence. We must assume that settlement on the hilltop plateau and in the area of the lower town came to an end towards the middle of the 5th century BC. The reasons why a settlement that had once been so important apparently came to an relatively abrupt end are still shrouded in darkness. But that surprises are still to be expected is shown by finds made during a watching brief at construction work below

the Heuneburg in 2009–2010. During operations to return the Danube to its natural course, a new river bed 40 m wide was excavated over a distance of 2 km. Directly beneath the Heuneburg, in the thick layers of gravel, a number of prehistoric finds were made that had been deposited there secondarily, including at least two Early La Tène bronze fibulae and a further Early to Middle La Tène example made of iron. These La Tène fibulae are indication of previously unrecognised activity in the direct vicinity of the Heuneburg (Krausse *et al.* 2013).

Ancestral monuments: the burial landscape around the Heuneburg

From the beginning of the Late Hallstatt settlement, the Heuneburg was surrounded by numerous groups of barrows that served as a last resting place for members of the social elite and their families (for example Hohmichele, Satzert, Bettelbühl and Rauher Lehen; see Kurz & Schiek 2002; Riek & Hundt 1962) (Fig. 3.7). The term 'landscape of ancestors' is quite applicable (Arnold & Murray 2002), and this will have played a decisive role in the construction and preservation of the social memory and the power relationships both within and between the family groups (Arnold 2010b). As in most ancient societies, death, identity and social memory would have been fundamentally interrelated. Quoting Parker Pearson (1999: 193): "Death is engraved on the landscape. It is re-experienced by the living whenever we see (or even think about) the event and its location". In this context, the placing of tumuli in the landscape could imply a strategy of tying the dead of particular households or lineages to specific parcels of land.

An interesting feature is the fact that in the early phase the burials were sited relatively far away from the settlement centre. At least some of the large barrows and the 'princely burials' are arranged in larger cemeteries that include not only rich burials, but also ones with normal or simple furnishings, as is the case, for example, with the Speckhau group of barrows that surround the imposing Hohmichele. One example of a rich chamber grave of the period is wagon burial 6 at Hohmichele, which must have been laid out some time in the first quarter of the 6th century BC (Riek & Hundt 1962) (Fig. 3.8). Unfortunately many of the central burials in the barrows were already robbed in Antiquity, so that probably we no longer have most of the richest burials (Kümmel 2009; Kurz & Schiek 2002).

It is for precisely this reason that the latest results from the Bettelbühl necropolis 2.5 km southeast of the Heuneburg in the Danube valley are of such enormous scientific interest. In 2005 the secondary burial of a 2–4 year-old girl was found in mound 4. It was furnished with two gold-plated fibulae and two gold pendants, and is one of only a handful of rich child burials of the Hallstatt culture (Kurz & Wahl 2005).



Fig. 3.7: Gießübel-Talhau barrows (Landesamt für Denkmalpflege Baden-Württemberg, Photo R. Hajdu)

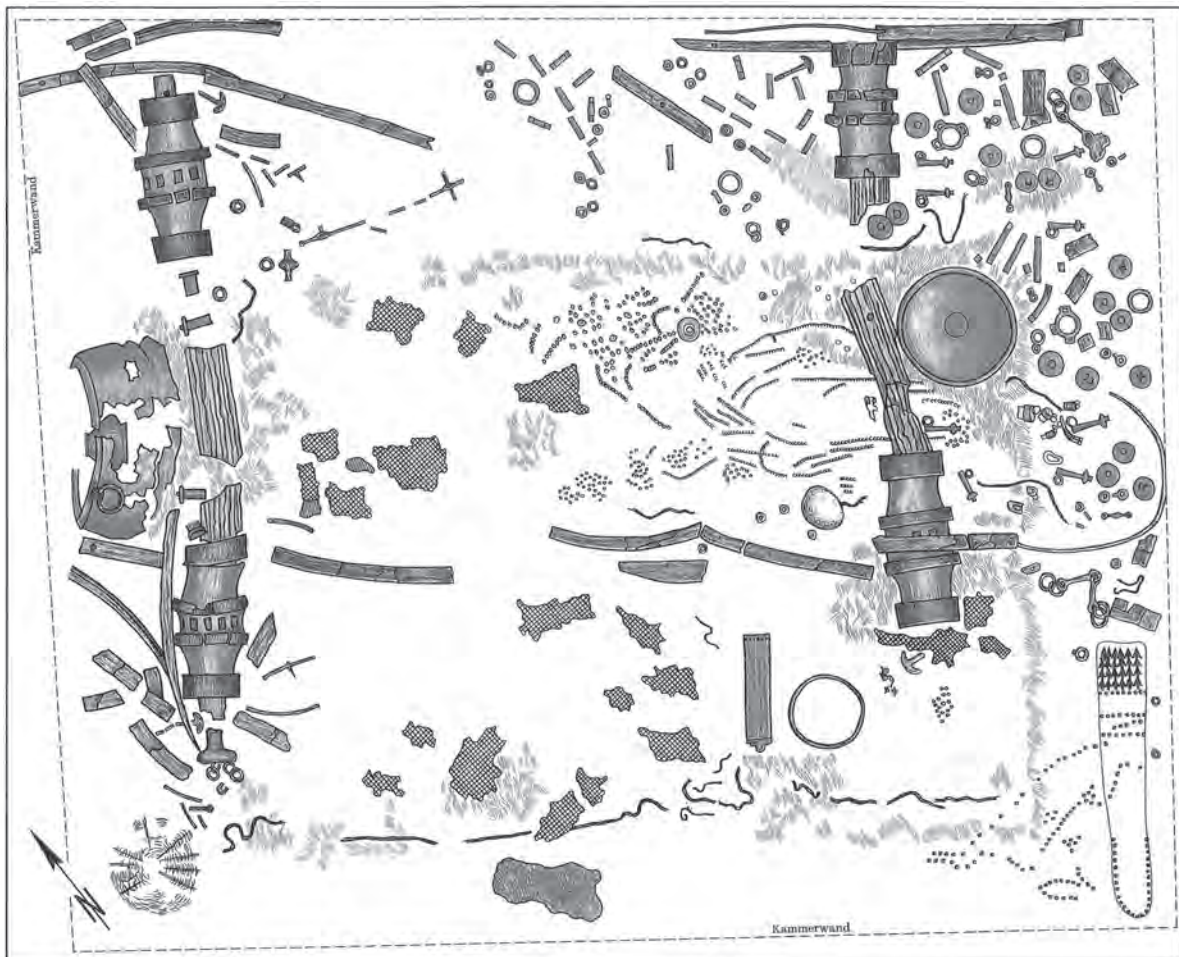


Fig. 3.8: Position of the finds in burial VI at Hohmichele, chariot burial in a wooden chamber (after Riek & Hundt 1962)

Such a wealthy burial of a young child is an indication that at this time the concept of inherited status was establishing itself at the Heuneburg, for it is generally assumed that the children will hardly have been buried so conspicuously as a result of their own actions. But the main highlight is the central burial in the same barrow 4 of the Bettelbühl necropolis, which was recovered at the end of December 2010 as a 80 ton block. It is a shaft grave with a 4.6×3.6 m timber chamber, the floor boards and some of the side planks of which were excellently preserved thanks to the extreme humidity of the soil. The unrobbed main burial was of a middle-aged woman who was buried with very rich grave goods, including a large number of gold objects and amber jewellery (Krausse & Ebinger-Rist 2011; 2012). The gold jewellery and the fibulae are very similar to the gold objects in the child's grave, so that we must assume that there were probably strong social connections between the two rich burials. First dendrochronological analyses place the grave at the beginning of the 6th century BC, meaning that it is one of the very oldest known examples of a rich burial of a woman from the Early Iron Age. Furthermore, it is a succinct example of the elevated social role that certain women could enjoy within Late Hallstatt societies (see Arnold 2012).

Epilogue: The Heuneburg until the Middle Ages

On the basis of the scarcity of finds from the La Tène period, the hilltop plateau at the Heuneburg seems to have remained effectively uninhabited in the Late Iron Age, or was only sporadically frequented. Nevertheless, the nearer and further vicinity was by no means devoid of human activity (Early La Tène fibulae in the area of the Danube, ritual activity on the Alte Burg near Langenenslingen, Late 'Celtic' Viereckschanzen in the surrounding area, etc.). A few isolated finds from the Roman period present a similar picture, even if here too no evidence has been found so far for a sizeable settlement in the area of actual Heuneburg. The medieval finds and features are more difficult to interpret (Gersbach & Böhm 2013). First early medieval finds suggest that there was an Alamannic or Merovingian settlement, although at present we cannot say anything about its size or nature. It is possible that the site was more important during the Ottonian period, before the Heuneburg was finally abandoned after the mid-12th or in the 13th century, thus bringing to an end a history of more than 2500 years of discontinuous occupation.

Note

- 1 These questions will be the subject of a new long-term research project funded by the German Research Foundation (DFG): "Besiedlungs- und Kulturlandschaftsentwicklung im Umfeld der Heuneburg während der Hallstatt- und Frühlatènezeit".

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Hallstatt Urban Experience before the Celtic Oppida in Central and Eastern Gaul. Two Cases-Studies: Bourges and Vix

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Celtic oppida from the Late La Tène period are often interpreted as the earliest towns in temperate Europe. But it seems clear that some of the open agglomerations built on plains in the 3rd and 2nd centuries BC, like the site of Aulnat, were also proto-urban settlements. These two types of large settlements, fortified on a hilltop or open, have in fact 'ancestors', often dated from the end of the First Iron Age and the end of the Late Bronze Age, like Bourges or Corent in central France. The aim of this article is to discuss the features and status of these sites which are older than the Celtic oppida, in central and eastern Gaul. Some of them are only the result of a concentration of rural settlements, or correspond to the development of an aristocratic house. But others, like Bourges, are clearly urban sites although they were not occupied for a long time. They show there were different waves and ways of experimentation during the earliest history of urbanisation.

Introduction

A recurring set of problems from European Protohistory is how to characterise Iron Age societies based on their organisational forms and underlying long term dynamics in order to determine their level of complexity, which is sometimes increasing and sometimes decreasing. Among these societies, we often ask ourselves to discuss those which had a complex structure; and, in particular, those which could be considered as state level societies. In order to argue for the existence of state level societies, identification of towns becomes a key archaeological criterion. This is true even if we know that certain states were not structured around towns, whether they were permanent or not. The debate may be extended by more specific questions: when do towns appear and in what forms? Were these towns perennial or ephemeral? What role did external stimuli, including Mediterranean, play in the access of certain societies to an urban state? Without going further, the questions naturally lead to the problem of how to archaeologically define what a town is in the context of European protohistoric societies. This problem is subtle

because the definitions and recognition criteria for towns were not produced by protohistorians and often not even by archaeologists (with some exceptions).

In temperate Europe, the Celtic *oppida* from the Late La Tène period have been interpreted for the past thirty years as the oldest towns (Collis 1984). Today one may ask oneself about the status and functions of some of the large unfortified settlements situated on flat, open terrain of the La Tène world dating from the 3rd–2nd centuries BC, like Aulnat in Auvergne, which immediately precedes the time of the large *oppida*. Generally regarded as mere craft villages, some of these could correspond to proto-urban settlements. Both types of settlements agglomerated from the end of the Iron Age – large grouped habitats on plains and *oppida* – have in fact some antecedents dating from the First Iron Age or, more often, at the end of this period. These fall in the central and western Hallstatt area (Fig. 4.1). These large Hallstatt habitats have generally been interpreted as 'princely seats' following the work of W. Kimmig and from the identification of some of the four main characterisation criteria that the

German scientist had proposed (Kimmig 1969). In France, the elite Hallstatt graves and the Mediterranean imports have long focused the attention of experts (Kimmig 1983), rather than the settlements that could be associated with them. The renewal of research on Hallstatt habitats during these past 20 years allows us to relook at information regarding the status of the main habitats in a completely different manner today. From this point of view, the excavation conducted in Bourges on a large settlement which was occupied and agglomerated primarily during the 5th century BC, provided the material for new interpretations. 15 years ago, I formulated the hypothesis that Bourges, at the end of the First Iron Age, was not a 'princely seat' more spread than others, but a real agglomeration with features and functions that were properly urban (Milcent 1998; 2004: chapter 3). Three centuries before the Late La Tène *oppida*, the town of Bourges from the 5th century BC witnessed a proto-urban process during a short time (less than a century) and without any immediate aftermath. This is why I called this process an "Hallstatt urban experience" (Milcent 2007). Reactions to this thesis were at first reserved and even the French were skeptical. However, the development of the German research program called *Frühe Zentralisierungs- und Urbanisierungsprozesse* (Krause 2008) has allowed these points of view to evolve. It is true that in France, the idea that towns existed northwest of the Mediterranean before the Roman conquest was accepted with difficulty for the Late La Tène period. The protohistorians remember how difficult it was to impose the idea that the main Celtic *oppida* were really fortified towns. However, in order to pitch their renewed vision of Late Iron Age societies, some of them have sinned by optimism and glided over a more complex reality. All the Late La Tène *oppida* are not, in fact, towns, and much remains to be done to characterise these from a functional point of view. Similarly, it would be wrong today to promote the idea that most of the larger Hallstatt settlements from the end of the First Iron Age, in the past qualified as 'princely seats', participated in the Hallstatt urban experience. Having underestimated the scope and complexity of these settlements, it would be harmful to overestimate the degree of organisation and the status of some of them. Their archaeological features should be discussed in the context of the possible identification of proto-urban sites. We will give two examples with the Bourges and Vix sites. These case studies, to be well understood, must first be placed in a broader context, namely, that of the French sites which were qualified until recently as Hallstatt 'princely seats'.

About the diversity of Hallstatt sites qualified as princely settlements or princely seats in Gaul

If one must retain one aspect of Hallstatt settlements which becomes a focus of attention because they contained

Mediterranean imports and/or because they were surrounded by elite tombs (the two most important identifying criteria according to W. Kimmig), the one aspect is the diversity of cases, especially in terms of size (Fig. 4.2). What is common, other than some Greek pottery fragments, among agglomerations like Bourges or Lyon which cover, at the very least, dozens of hectares, and hilltop settlements such as those of Salins-les-Bains or Montmorot in Jura, whose area is measured in a few thousands of square metres? These very small settlements are not exceptions. To my knowledge, all the small fortified sites of the end of the First Iron Age which have been the object of investigations in Central and East-Central France delivered Mediterranean imports (table Milcent 2007: fig. 35). So I think the vast majority of similar settlements were acquainted with, but to varying degrees, a consumption of imported goods, more or less luxurious, but rarely exceptional. As long as we admit that it's about habitat, which is only an educated guess, knowing that other functions are possible (places of refuge, of periodic meetings, etc.) and could have been able to succeed each other or could have been combined, then, these sites could correspond to permanent or temporary elite residences. But to speak of 'princely' residences on the basis of some Mediterranean sherds is excessive or premature because indicators of exceptional habitats or of true nearby princely tombs are usually missing. To return to the example of the Camp du Château in Salins-les-Bains, the wagon burials from the end of the First Iron Age known in the area, those that have been discovered in the Moidons forest, about 6 km as the crow flies, can in no way rival true princely tombs: these are burials in an older barrow of average size and deposited on a very simple wagon with four wheels (Les Moidons 'Tumulus de Morgan' and Bois de Parancot T.21 'Champ Peupin'). None of these poor wagon graves presents any luxurious objects, whether in gold or imported goods from the Mediterranean area (Piningre & Ganard 2004: 114–125, 155–158, 337–339, fig. 122). In addition, no very large mounds have yet to be reported near Salins-les-Bains.

Other fortified sites that have Mediterranean imports are naturally more extensive, but they do not necessarily show signs of a dense habitat or of a large dimension. At Bourguignon-lès-Morey in Haute-Saône (17 ha in size), occupations and constructions appear concentrated along the rampart (Dubreucq & Piningre 2007; Piningre 1995) and a large part of the surface area, in the centre, would be empty. What is known about the sites of Bègues in Allier (5 ha) and the Cité d'Affrique at Messein in Meurthe-et-Moselle (7 ha for the main rampart, 2 ha for the attached rampart) would go in the same sense: the empty areas surpass the developed and inhabited areas (Lagadec *et al.* 1989; Milcent 2007: 421–422; Pion 2009). The wealth of these sites does not appear clearly superior even if we consider their small finds or the objects from the tombs excavated in their environs. In other words, again, the information is missing that could

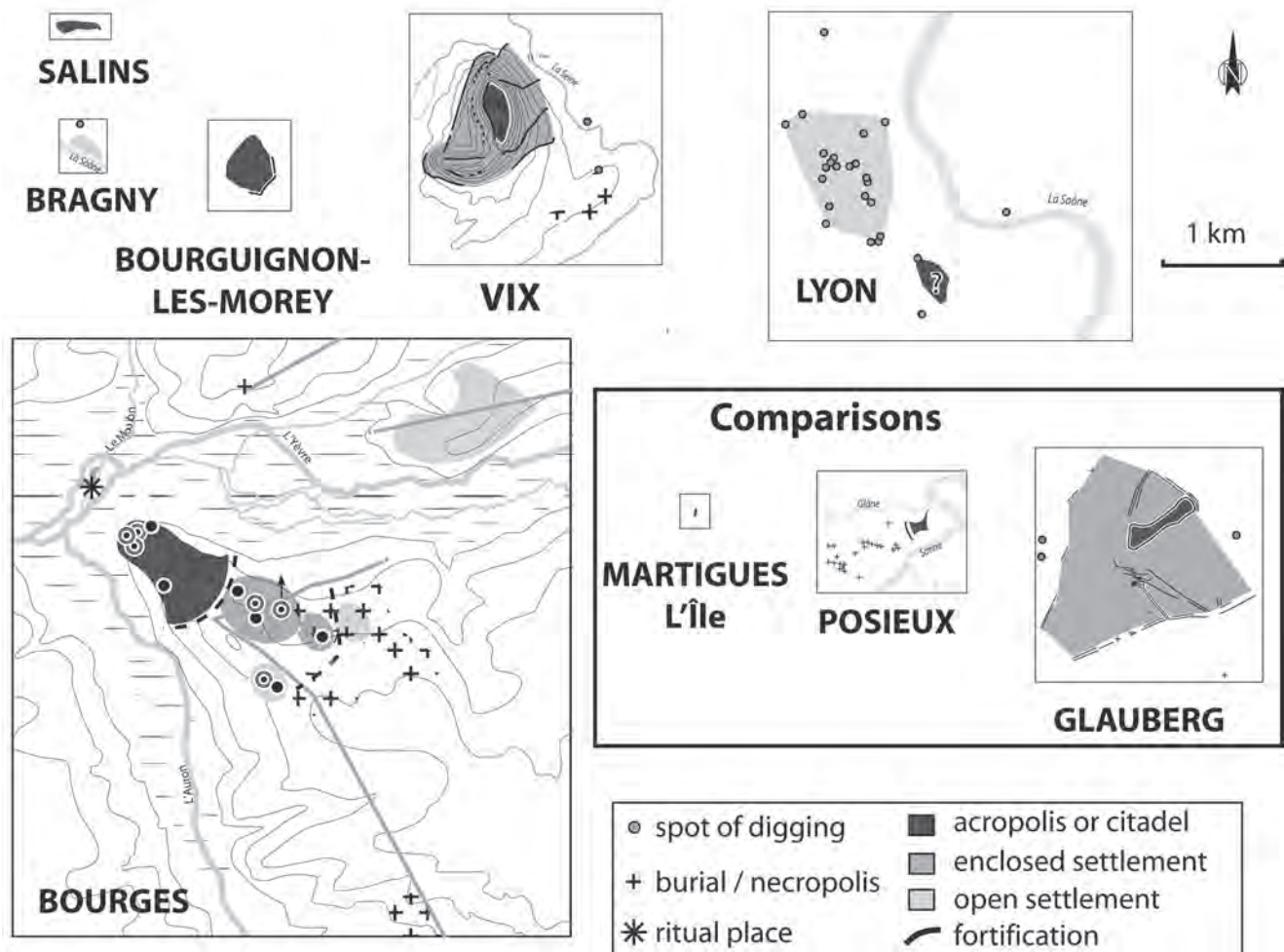


Fig. 4.2: Plans of different Hallstatt sites from the 6th and 5th centuries BC (Milcent 2012). Salins (Jura) 'Camp du Château'; Bragny-sur-Saône (Saône-et-Loire) 'Sous Moussière'; Bourguignon-lès-Morey (Haute-Saône) 'Camp Romain'; Vix (Côte-d'Or) 'Mont Lassois'; Lyon (Rhône); Bourges (Cher). For comparisons: Martigues (Bouches-du-Rhône) 'L'Île'; Posieux (Switzerland, Fribourg) 'Châtillon-sur-Glâne'; Glauberg (Germany, Hesse)

qualify these as princely residence or even housing. As far as we can tell, the dominant impression is that these sites do not show any evidence that could clearly distinguish them from their antecedents of the Late Bronze Age either functionally or economically. But we must admit that information about them remains poor, and no investigation has been conducted to verify the presence or absence of an extension of these settlements outside the fortifications.

A 'Big Ranch' instead of an acropolis: Vix

Based on the current state of research, at least one original fortified site remains. It is the Mont Lassois in Vix. The research having been intensive and of such a quality in Vix, that one knows not only the Hallstatt habitat itself,

but also its immediate environs, the necropolis below, as well as other surrounding funerary deposits (Fig. 4.3). The presence of an exceptional tomb in Vix (Rolley 2003), along with other rich wagon burials in Sainte-Colombe, as well as the remarkable quality of habitat finds allows, without difficulty this time, to classify Mont Lassois among Hallstatt settlements of the first rank.

The highest part of Mont Lassois, the Saint-Marcel plateau, covers an area of 5.4 ha and has a very powerful fortification 9 m wide of a *Pfostenschlitzmauer* type. The wall only defines the western edge of the plateau; but, the most recent research confirms what René Joffroy had introduced (Joffroy 1960), which is that the slopes of Mont Lassois are doubled, especially at the base by impressive fortifications from the end of the First Iron Age (Chaume & Mordant 2011; Pertlwieser & Urban 2010). Aside from a

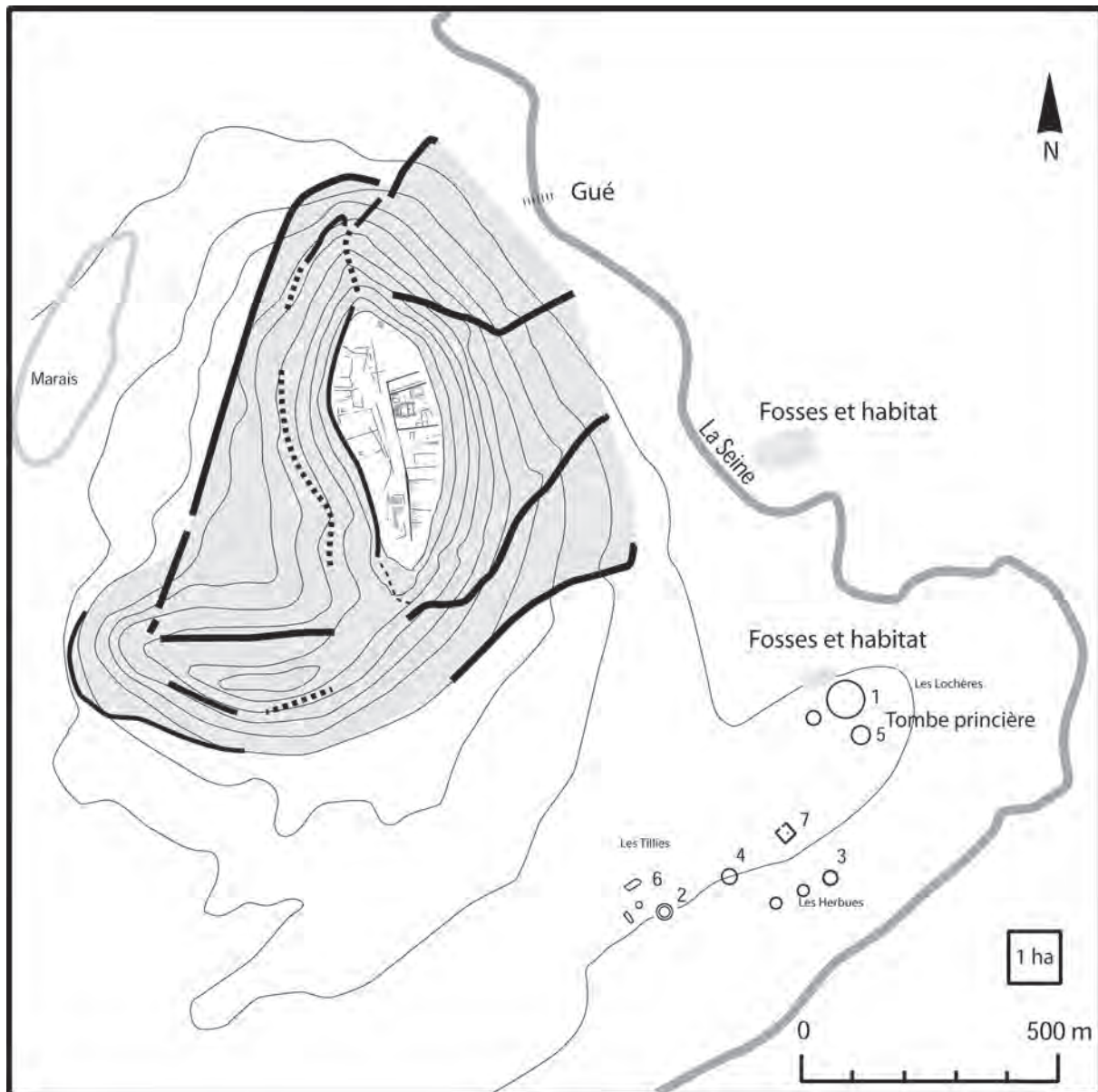


Fig. 4.3: The Mont Lassois at Vix (Côte-d'Or, Burgundy) (after Milcent 2012, with corrections and additions)

few inhabited ledges that have been dug by R. Joffroy, we do not know much about these slopes: were they neglected for the most part, or cultivated, or were they inhabited terraces where the terrain permitted? In total, the walled area of the Mont Lassois is extensive and comprises at least 55 ha, knowing also that small scattered habitats are also identified outside the fortifications, in the immediate vicinity (Chaume & Mordant 2011: 186). However, an important part of this walled area (upper slopes for the most part) was not conducive to the installation of buildings considering the hilly landscape.

Another significant development is the acquisition of a readable and interpretable plan regarding major structures

in negative features of the Saint-Marcel plateau, which dominates Mont Lassois, thanks to geophysical prospecting methods (Mötsch *et al.* 2008: fig. 2; Von der Osten-Woldenburg 2011: 129–132, figs 28, 32 & 33). Recent excavations and surveys reveal that the hollowed outlines correspond to palisade trenches more or less important, and that the regular holes are postholes; the structures in the excavated hollows are dated essentially by material from the end of the Hallstatt D period and show few signs of maintenance, except for the largest buildings in the eastern part (Mötsch *et al.* 2008: 14–18). The readability of the plan and the spatial coherence is such that it presumes a concerted development during one phase, ascribable to the late 6th

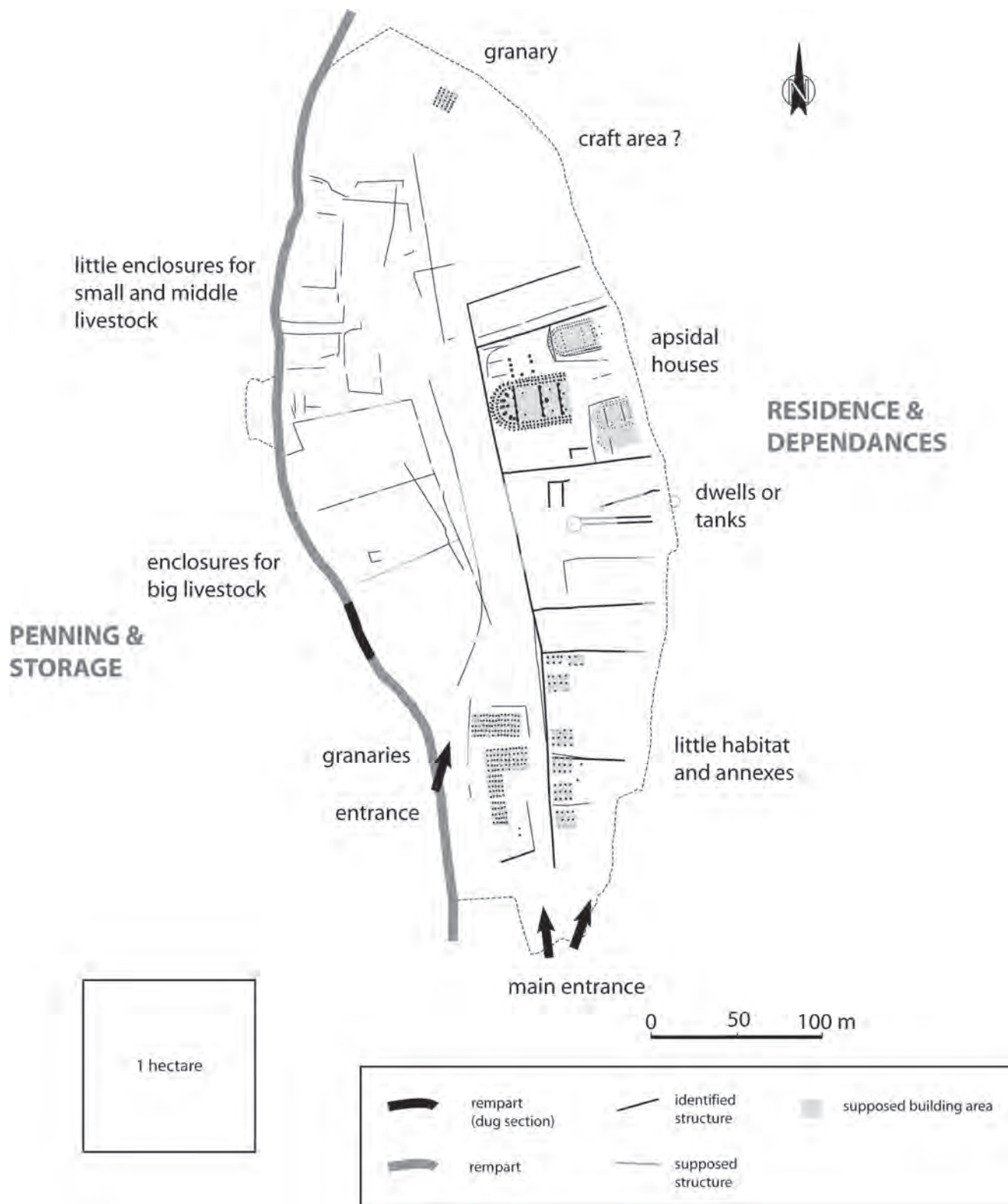


Fig. 4.4: Plan of the princely residence of the Saint-Marcel plateau, on the top of the Mont Lassois at Vix (Côte-d'Or, Burgundy). It is based on the results of the geophysical survey conducts by H. von der Osten-Woldenburg and on the new excavations (after Milcent 2012, with corrections and additions)

century BC. That's why the geophysical surveys, combined with the results of the first excavations, allow one to see clearly, and for the first time, the structure of a complete Hallstatt citadel (Fig. 4.4). This plan merits observations in the context of determining whether it shows or not, original traits, namely urban (B. Chaume and his colleagues (2004, 11, 41) cited a 'quasi-urban organisation') compared to the most common habitats.

We first notice there, in the extension of the main entrance situated to the south, a double enclosure system very airy on either side of an operating service split into two parts, oriented north-south. This has been described earlier as a 'street', or as a 'planned square' (Chaume *et al.* 2004: 14, 41). However, this central area appears very simple since there is no single transversal path leading to it directly. Rather, it is left free for one to circulate in, without organisation or a specific boundary area. Near the main entrance to the southwest, four large rectangular buildings based on five rows of tall poles squeezed together (the spacings are about 50 cm), 10 m wide with a length exceeding 20 m for the biggest ones (that is just over 200 m² of surface area), are identifiable as large granaries raised on stilts and delimited by some fences. From the same west side, more to the north, two major sub-trapezoidal spaces are delimited by small palisade trenches with many interruptions, sometimes in zig zag or sometimes in a funnel shape. The northernmost of these is itself partially cut into small sub-rectangular enclosures of various sizes, also with complex entrances, including overlapping ones. The system of the access and morphology of these enclosures indicate areas dedicated to the management and penning of herds of domestic animals. The differences in size and area suggest the presence of animals of different species: small and medium livestock in the northern enclosures; and probably large animals (possibly horses?) in the main southern enclosure which is cut into three areas. Beyond these enclosures and opposite the entrance, the northern zone remains virtually empty of visible organisation, with the exception of another rectangular building of five rows of fairly tightly arranged posts that should correspond to another storage building. But the terrace near the top of the hill that is next to the northeast slope has delivered numerous refuse items, mostly from handcraft activities, which could indicate the presence of production activities relegated to the end of the plateau due to the nuisance they could engender.

To the east and across the central service area, the palisaded enclosures are larger and more regular than others. They are also based on wider trenches and probably deeper. We do not know their eastern boundaries. Given that these tidy enclosures introduce very few interruptions which open onto the central service area, we can make the hypothesis that they opened up on another circulation space, the latter along the eastern edge of the plateau. In this system of very regular enclosures, to the southeast and in front of the

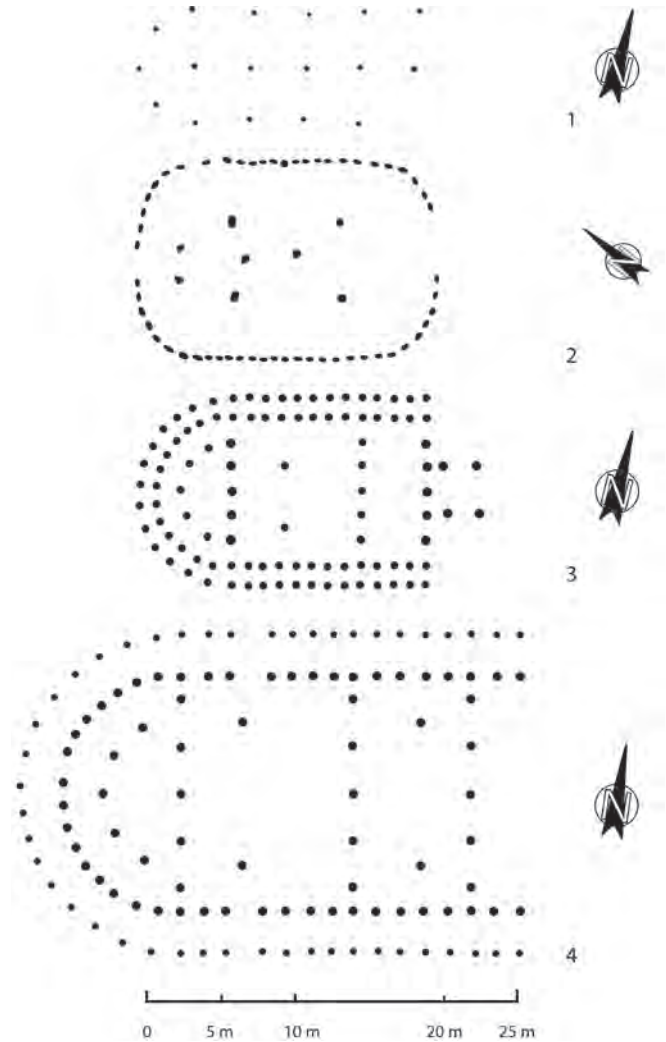


Fig. 4.5: Central-eastern Gaul apsidal buildings from Late Bronze Age (No. 1) to the end of the 1st Iron Age (Nos 2–4). 1: Barbuise (Aube, Champagne-Ardenne) 'L'Erable' (Lenda, Ducreux 2010, with modifications); 2: Grisy-sur-Seine (Seine-et-Marne, Île-de-France) 'Les Terre du Bois Mortier' (Gouge, Séguier 1994, with modifications); 3–4 : Vix 'Mont Lassois' northeastern and western buildings of the main enclosure (after Chaume *et al.* 2008; Chaume 2012, with modifications). The building No. 3 is probably older than No. 4

granaries, there are five similar rectangular buildings with 12 posts based on three rows, 40 m² in area (Chaume *et al.* 2004: 13–14), and at least two buildings with two rows of posts. These constructions must correspond to a small zone of simple habitats, with a few annexes that seemed to be in a position to monitor not only the comings and goings, but also, the granaries. Towards the centre, a large enclosure (about 60 m on each side) has a large hole, which, if not natural, could correspond to a storage arrangement or access to water: probably a well or a tank. Two ditches appear to leave towards the east and could indicate small water

channels. Another well or tank is localised near this place on the top of the eastern slope. Finally the largest trapezoidal enclosure (approximately 60–70 m long depending on the sides) surround four or five apsidal buildings of which two large edifices were recently excavated (Chaume & Mordant 2011; Mötsch *et al.* 2008). The plan with internal partitions and especially the impressive size of these two buildings (35 × 22 m for the first, of which 400 m² was covered in its last state, 21 × 13 m for the second, see Fig. 4.5, Nr. 3–4), as well as their luxurious equipment (painted walls with reliefs, local banquet ceramics and Greek ceramics imported from the Attic; see Mötsch *et al.* 2008: 16–18) leads us to identify these as very privileged dwellings, and also as places for reception, performances, assemblies and for religious gatherings (different domestic, political and religious functions closely overlap in these kind of archaic aristocratic residences). The apse of the Vix's buildings, oriented based on the prevailing winds in Mont Lassois, that is to say, to the West, is above all an element to moderate the windage on a framework that would be elevated and could possibly accomodate at least one upper floor. Knowing that the apsidal houses (and bi-apsidal in the south) are well documented in Eastern and Southern Gaul in the Bronze Age (Buchsenschutz & Mordant 2005) as well as the First Iron Age (Dedet 1990; Moret 2002), the two buidings seem to derive, despite their size and remarkable degree of development, from an architectural tradition if not exclusively, at least essentially, of an autochthonous descent (Fig. 4.5). The entry porch as well as the gallery of the Vix main apsidal buildings are rare, but not unknown features, in the dwellings of the Bronze and Early Iron Age from middle Europe; there is no need to imagine some Greek comparisons, at worst anachronistic (e.g. the large building of Toumba at Lefkandi in Evia, dated 10th century BC, see Popham *et al.* 1979) while at best occuring at the same time, but having become very rare and undervalued in the Greek world at the time of the apogee of Mont Lassois.² Unlike the big dwelling, with a tripartite main body, of Etruscan design that belonged to the area outside the walls of Heuneburg (Verger 2008), no Mediterranean influence can be detected with certainty using the floor plans of the main buildings in Vix.

In summary, the Saint-Marcel plateau is longitudinally divided into two main areas each one with an access path, some enclosures and some buildings. To the west, the space is devoted to storage and penning activities, essentially of an agro-pastoral nature, and forms a large farmyard. To the east, there is a residential and service area, of the type where an upper courtyard could accomodate fairly large social activities and gatherings. This area is not oriented towards the central service area: it 'turns its back to it' while opening itself to the east. A third area, a periphery to the north, with no net development apart from a probable traces of an isolated granary, or perhaps devoted to craft industries,

probably needs to be distinguished unless it simply needs to be connected to the rest of the farmyard. Without being really complex, the bi-or tripolar organisation of the site appears to be consistent and very functional, probably planned, with areas devoted to specialised and well-defined functions. It also appears partitioned because the articulation between the different areas is reduced to a minimum and it is clear that the residential areas do not open onto the interior of the site and its central service space. They are cut off by fences that present only rare and small interruptions. On the other hand, residential enclosures are widely open to the outside of the plateau, especially the panorama offered, to the east, by the valley of the Seine lower down. From the evidence, nothing demonstrates that this site had urban characteristics as seen by a reconstructive illustration (Fig. 4.6). If one ommitted the scale and the fortification, we could qualify this site as being an enclosed private estate residence as it existed in the campaigns in northern Gaul at the beginning of the Iron Age, and even earlier during the Late Atlantic Bronze Age.

For comparison, we will observe that a large enclosed farm from the Middle Atlantic Bronze Age similar to the one which was discovered in Nonant (Lower Normandy, Calvados) already presents about ten centuries before the times that interests us, a somewhat similar organisation (Lepaumier *et al.* 2005; Fig. 4.7). This rural settlement is included in a trapezoidal moated enclosure of 6200 m² and partitioned by palisades. The first space is an open court yard which serves not only as a service area, but also as a warehouse area with some annexes, storage pits and granaries. Another yard apparently devolved to penning and livestock management if we are to judge by its zig zag and funnel shaped access. A third area at the heart of the site, but in an off-centre position, has a domestic nature as evidenced by the presence of an oven. This main space brings together three large buildings. The largest one of them has an apsidal plan, oriented in the same way as in Vix, and covers an area of about 110 m², which is important for that time. In summary, the Saint-Marcel plateau does not evoke, at all, a Mediterranean acropolis. It looks more like a rich farm, albeit hypertrophied, such as those that have existed in Gaul since the Bronze Age. No concentration of buildings, no original architectural form or structured or complex space is perceptible. The ambition is limited somehow to monumentalise and fortify an aristocratic dwelling and its annexes of rural and traditional morphology. As such, we can consider the Saint-Marcel plateau as a typical example of a true 'princely' Hallstatt residence. It certainly had few inhabitants (a few dozen at most) and indeed, the foremost of them had a higher socio-economic status based on the size and quality of the apsidal buildings qualified as palatial. Linking the princely tomb in Vix, found below, with the contemporary residence on the Saint-Marcel plateau appears, therefore, very relevant today. In addition, the

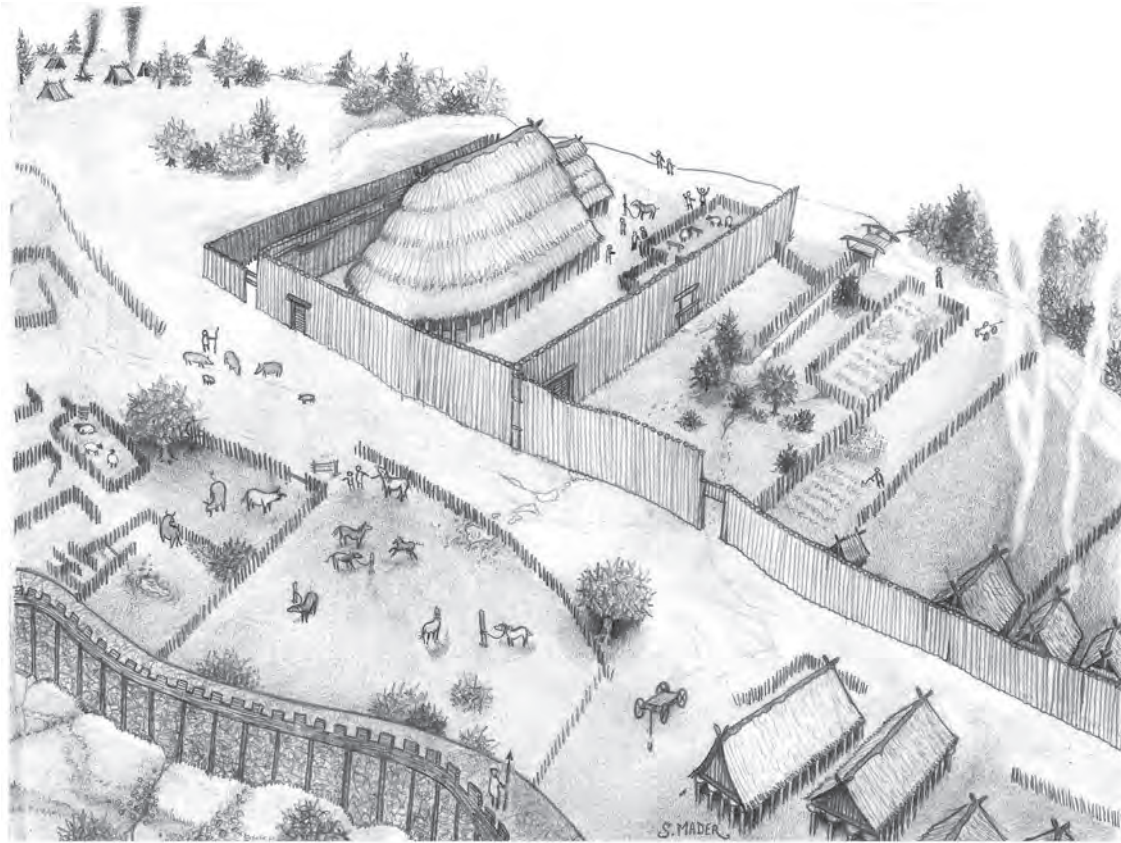


Fig. 4.6: Idealised reconstruction of the princely residence of the Saint-Marcel plateau at Vix, around 500 BC (drawing by Sylvain Mader)

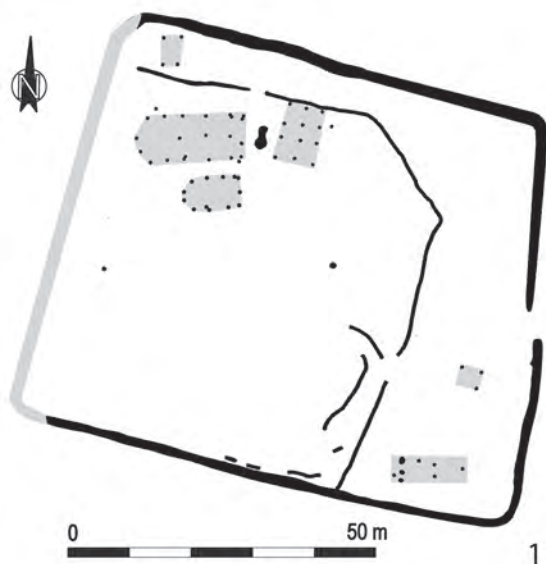


Fig. 4.7: Middle Bronze Age rural settlement from Nonant (Calvados, Normandy) 'La Bergerie' (Lepaumier et al. 2005). 1: plan; 2: reconstructive illustration

architecture and structure of the site is mostly consistent with an indigenous tradition, without any really noticeable Mediterranean influence. The presence of corrals and barns and especially enormous granaries are, at last, a completely new element, which emphasises an economic element that never appeared in classical models of princely residences, that of a wealth based on agro-pastoral resources and their management. The differences appear therefore distinct with the Hallstatt citadels of Ipf and especially the Heuneburg, where the open spaces are reduced, while improvements and buildings appear very dense with few partitions. With the Heuneburg citadel, there is no doubt that we are dealing with grouped dwellings which brought together a significant number of families. But since the occupations on the slopes of the Saint-Marcel plateau remain unknown (neither their area, nor their density, nor their functions), one must keep from concluding that Mont Lassois was limited only to a hypertrophied, fortified, farmlike princely residence. The impressive aspect of these outermost fortifications and small discovery areas on the slopes leave open the hypothesis that a relatively large settlement encircled the princely residence. Finally, the 'rural' morphology of the princely residence of the Saint-Marcel plateau is not an argument by itself to exclude the identification of an urban agglomeration at Mont Lassois. In other words, if the occupation of the Saint-Marcel plateau is absolutely not urban in its form, that does not exclude that it was part of a larger settlement with potentially urban functions. Recent paleoenvironmental research shows, however, that the vegetation around Mont Lassois remained heavily wooded during the First Iron Age and that the human impact remained small, especially compared to the Roman period (Cruz 2012). This vital information does not argue in favor of the existence of a very large and permanent population on Mont Lassois.

A proto-urban complex site in Bourges/*Avaricum*

With the huge settlements of the First Iron Age in Bourges and Lyon, the documentary situation is almost the opposite of that of Mont Lassois. Topographically dominant spaces (acropolis?), which could correspond to the centres of these settlements or to fundamental areas to the structuring of the sites, are accessed with difficulty by the archaeologists because they are covered by large posterior occupations, while peripheral areas, or supposed as such, have been the subject of many extensive surveys and excavations (see Fig. 4.2). Given the fact that the agglomeration of the First Iron Age in Lyon, covering at least 50 ha, has a chronology and shows traces of craft and commercial activities comparable to what is known in Bourges, and also because it has been the object of a recent and well documented review by Stéphane Carrara (Carrara 2009), we will focus on the example of Bourges in the Berry region.

At Bourges,³ the area most densely occupied during the First Iron Age, and with the longest duration, is located on the promontory of current downtown Bourges, on approximately 40 ha (Fig. 4.8). The chronological clues collected cover all of the Hallstatt D as well as La Tène A1 periods, that is to say, a period of two centuries from about 625 to 425 BC, but the period 525–475 BC is the best documented. An hiatus or lesser occupation is next observed at the end of the 5th century and at the beginning of the 4th century BC. Despite the confined excavations, artefacts and infrastructures from the First Iron Age are often of high quality. One will note in particular, the remains of buildings with several rooms decorated with real plaster walls painted brown, red and blue (conjecturally), on a white background (Cammass & Allag 2007: 147). Recurrent, overlapping and successive improvements portend a constraining framework, perhaps in the form of a densely built area.

Setback from the promontory, several belts of defensive ditches have been identified, but their initial excavation is still not dated with confidence. A first ditch was excavated at the site of 'Haut de la rue Moyenne' and superficially dug in 1987 (Krausz & Ralston 2009). The excavations cross-section is triangular, 25 m wide at the opening and estimated to have a depth of more than 10 m (Fig. 4.9). Its upper level filling could be attributed to the Augustus period and this Augustan *terminus ante quem* is the only confirmed chronological clue. The triangular shape and size of the trench has no exact parallel in the fortified sites of the Late La Tène period. However, since the discovery of the extension of peripheral defensive network in the Heuneburg, and especially since the excavations of very large ditches below the plateau of Vix, one can no longer exclude that the large defensive ditch at the site of 'Haut de la Rue Moyenne' had been made in the First Iron Age, and subsequently maintained and later integrated into the defense system of the Late La Tène period mentioned by Julius Caesar (*BG*, VII, 23). The best comparison to be found is the Late Hallstatt triangular ditch levy 3 at Mont Lassois, 30 m wide and 10 m deep.

Moreover, setback and at 1 km from the 'Haut de la Rue Moyenne', a second defensive ditch with a triangular cross section (8 m wide and 4.5 m deep) has been repeatedly spotted in the southeastern zone of *Etablissements militaires* (Figs 4.8 & 4.9), as early as the end of the 19th century. It would have delivered a burial with ornaments dating from the end of the First Iron Age (Milcent 2007: 23–24). If the dating is verified, it should be recognised that some areas from the First Iron Age initially assimilated to a kind of open suburbs (Saint-Martin-des-Champs neighborhood and *Etablissements militaires*), were, in reality, areas within the walls of the city, which would identify Bourges as a huge settlement with multiple and extensive fortifications, covering an area exceeding 100 ha. The recent archaeological evaluations in the *Etablissements militaires* sector seems

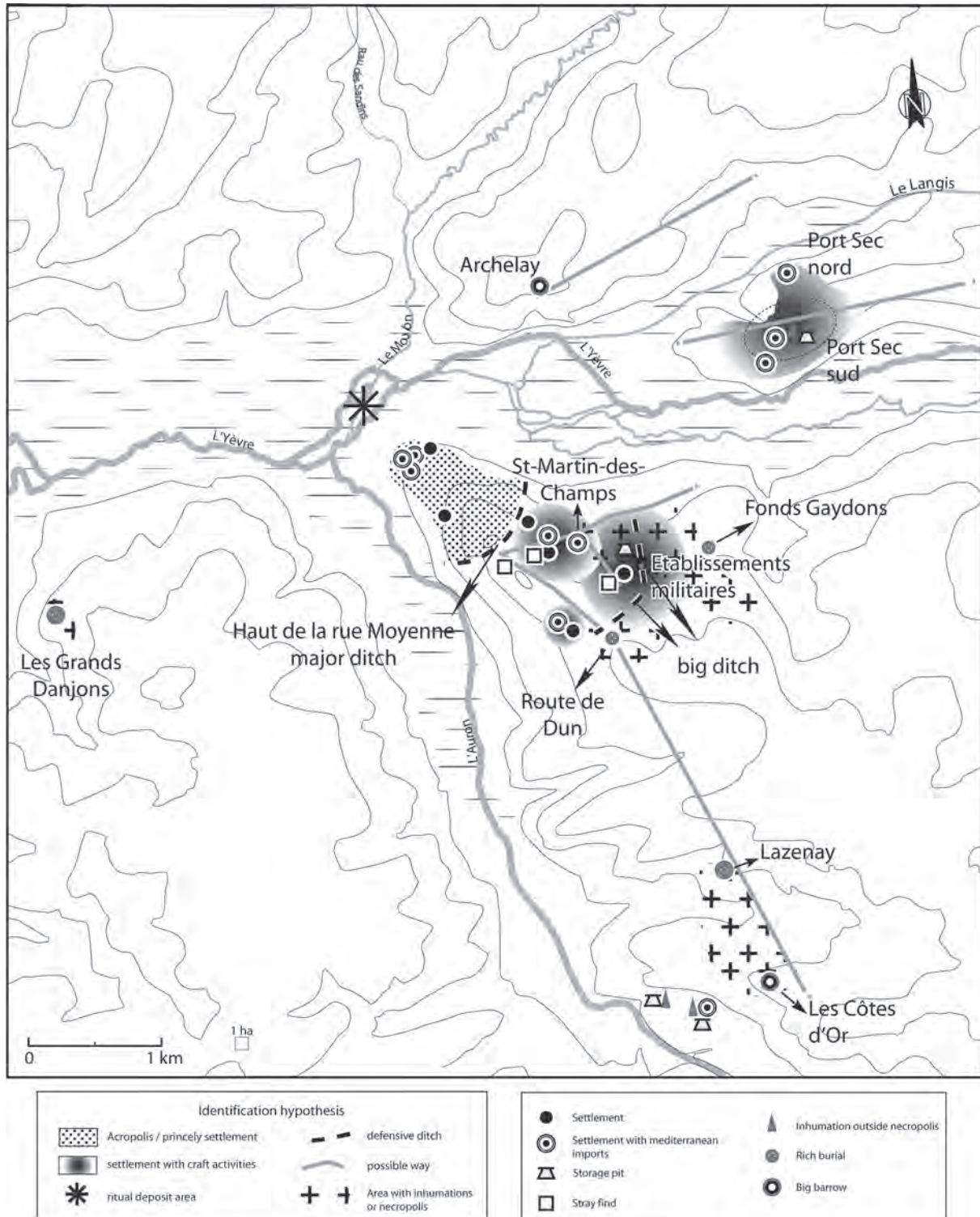


Fig. 4.8: The proto-urban complex of Bourges/Avaricum (Cher; Berry) during the Hallstatt D3-La Tène A1 period (c. 510–425 BC)

also to further confirm one of my assumptions, namely that at the end of the First Iron Age a settlement covered also the locations of *Etablissements militaires*.

The areas surrounding the town of Bourges, hypothetically

within or outside of the walls, are loosely and discontinuously arranged, which is why the term 'complex' is justified. This low density agglomeration does not preclude, in any event, a regular or, at a minimum, a planned layout. The latter

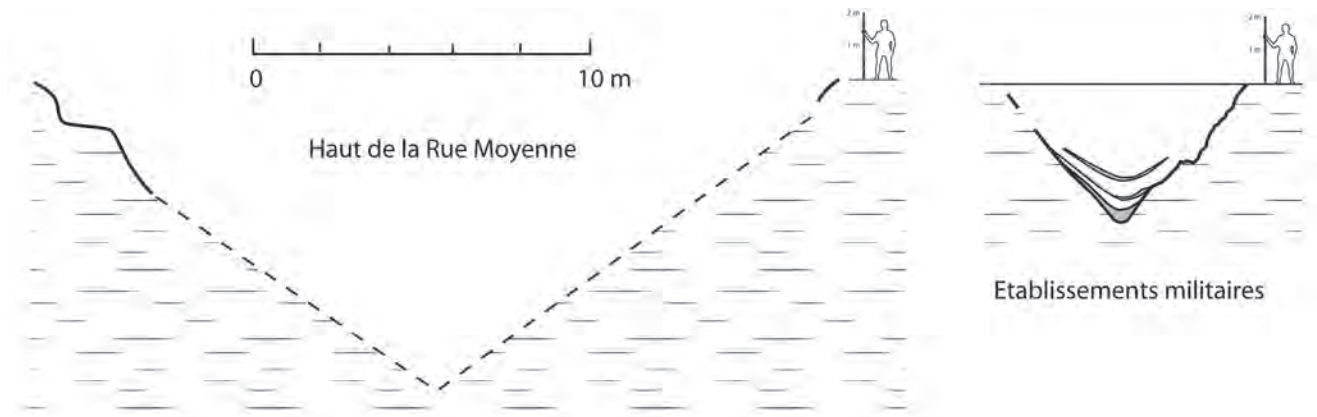


Fig. 4.9: Bourges (Cher, région Centre). Defensive ditches profil from the Haut de la Rue Moyenne (after Krausz & Ralston 2009, with modifications) and from the Etablissements militaires (after Milcent 2007)

is reflected in the spatial distribution of facilities in the Saint-Martin-des-Champs area, where rectangular spaces of comparable modules can be delineated (Milcent 2007: 253–255; Fig. 4.10). Organisation is also visible in another sector, in the Port Sec nord and Port Sec sud, where the negative features conform globally to straight alignments (Fig. 4.10). The surrounding fabric of the agglomeration of Bourges therefore appears less dense, organised around different cores, not necessarily synchronous but perhaps structured around a network of branched passageways. To this date the surface of the Bourges complex is impossible to accurately estimate since the aggregate limits are hardly tangible, and also because the small rural satellite settlements dispersed around the farming area could befuddle attempts to measure it. Apparently many in numbers, these rural settlements could, if one is not careful, maintain the illusion of an enormous extension of the Bourges complex. One could also advance that the global seat of the agglomeration at the point of its maximum development, during the 5th century BC, should be measured in hundreds rather than tens of hectares. From east to west and from north to south, the distance between the truly grouped habitats are 3.5 and 2.5 km. In addition, a few necropolis and large burial mounds mark, without doubt, certain symbolic limits of the city.

Peripheral habitats, for example in the recently published area of Saint-Martin-des-Champs (Milcent 2007), have some fences or little ditches, post holes, and storage pits, but also many semi-sunken quadrangular features corresponding to workshops, sheds or other types of ancillary habitats. The houses, themselves, remain unknown, so we think they were built without being deeply anchored in the ground, in the location of many spaces left open (on the promontory of the present city centre, where patches of once occupied ground are preserved, some footprints of houses, for example, have been able to be detected). Abundant refuse of a domestic nature, indeed, leave little doubt about the presence of these

homes. Among the trash one could be astonished to see a mix of refuse from craft activities as well as fragments of luxury goods, including Mediterranean imports. I see there the indications of overlapping, in the same place, of populations of different statuses, as has been suggested by the external extension at the Heuneburg, where elites often share the same spaces as their close dependants, including craftsmen. The rich graves discovered at the periphery of the agglomeration of Bourges is also a sign that the elite lived there or at least in close proximity.

In a more synthesised way, various archaeological criteria reveal the functions and status of the agglomeration of Bourges. We have just seen that, despite a low density periphery, the size of the agglomeration hints at a large concentration of population for this period. This population is stratified from a socio-economic perspective. From the area of the promontory towards the centre, to the peripheral areas, differences appear: one passes from a mostly residential area, probably fortified, perhaps densely occupied with at least two high quality buildings (since they are decorated with painted walls), to open areas, where craft related activities dominate (Augier *et al.* 2009). Beyond this, almost to the four cardinal points, large mounds punctuate as monumental marks, which could be the main access to the city. No religious area has yet been identified with certainty, but we know that the marshy confluence of the Yèvre and the Auron, dominated by the headland, has delivered at least three exceptional objects, two of which date back to the end of the Bronze Age (an Atlantic carp's tong sword and an Italic razor), while the third is an antennae dagger of Ludwigsburg type, imported from around Hohenasperg near Stuttgart (Baden-Württemberg) and for which the best comparison is the dagger covered in gold leaf from the Hochdorf tomb (Milcent 2004: 289–290). This dagger, along with other imports from far away, allows us to understand that Bourges occupied at the end of the First Iron Age, a

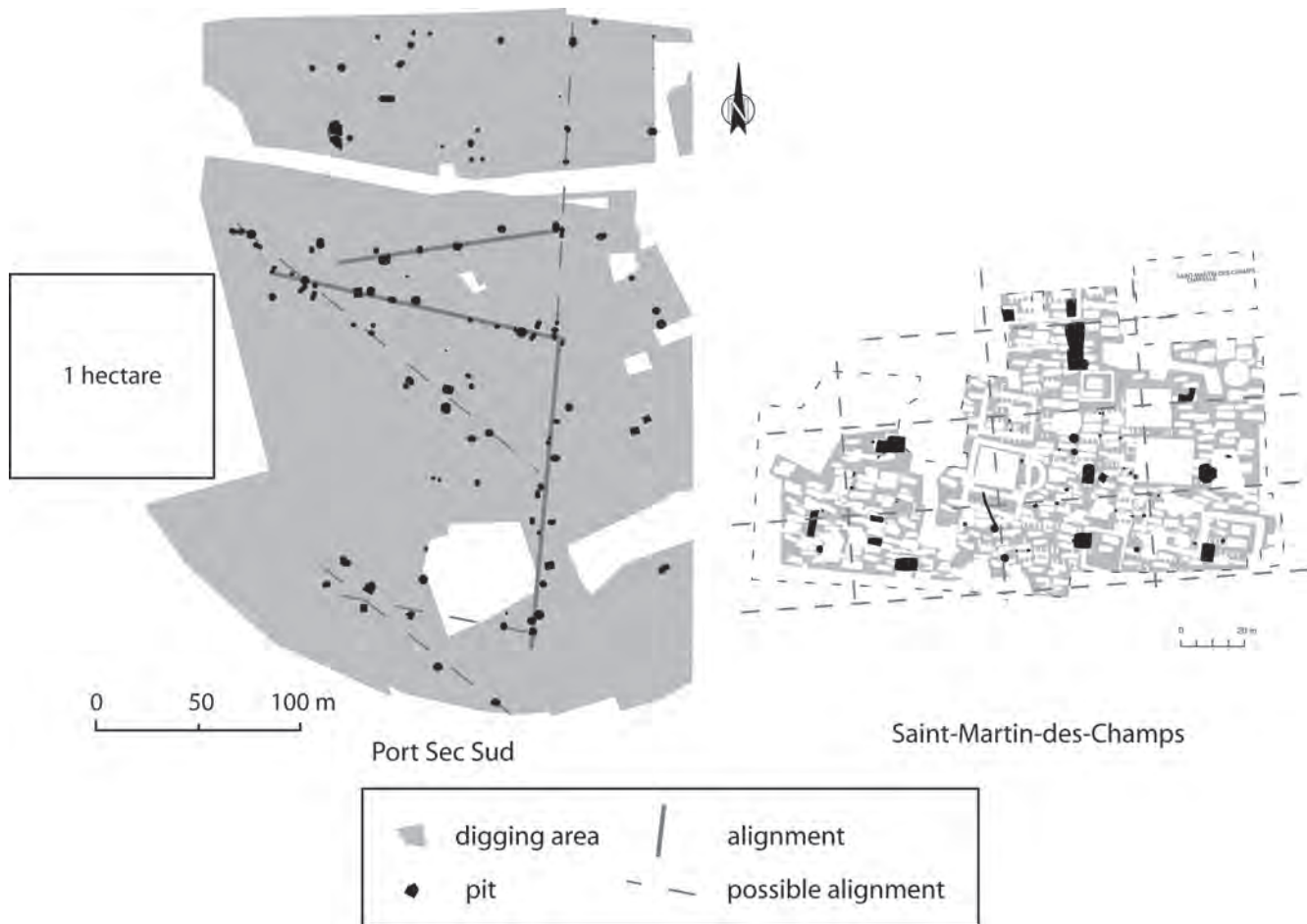


Fig. 4.10: Bourges (Cher, région Centre). Plans of the peripheral settlements of Port Sec sud (after Augier et al. 2009: fig. 2, with modifications) and Saint-Martin-des-Champs (after Milcent 2007: fig. 1, 253) dated from the La Tène A1 period (c. 475–425 BC). A regular distribution of the features is visible on each settlement

remarkable position in an extensive network of contacts and exchanges between the centre of the Hallstatt area to the Atlantic coast via the lower basin of the Loire, and between the Parisian basin to the Mediterranean via the upper basin of the Loire (see Fig. 4.1). Among other clues, the average proportion of attic pottery in Bourges (around 1% of vessels), much higher than what we know of the hilltop habitats in the Mediterranean hinterlands of Gaul, reveals that we not only have to deal with individual gifts of luxury items among chiefs, but also real trade of Mediterranean goods for which the trading compensations are still not well identified (mainly metals?). Bourges therefore corresponds to a transit and trading hub, market, as well as a consumer of a relatively large amount of these imported goods.

Overall, all the evidence that I have just listed comes from urban markers defined for the end of the Iron Age by Henri Galinié (Galinié 2009: 201–202): out of the 14 markers that we keep in mind (the 15th, presence of a mint, must be rejected for the period we are interested in)

seven are identifiable, four are probable and one is hinted at (Table 4.1). To these clues, one can add data relative to the political territory that go in the same direction, namely the identification of a city of the first rank, or polyvalent in the sense of Henry Galinié, that is to say a city in the full sense of the term at Bourges. In east-central Gaul, examining the distribution of elite tombs of the late 6th and 5th century BC, which show at least two levels of wealth, allows one, in fact, to identify the coexistence of very different territorial entities (Fig. 4.11). These territories overlap in a mosaic quite distant from the theoretical picture that was made up until recently about the distribution of Hallstatt principalities. It appears that the political territories envisaged from the distribution of elite tombs are numerous, generally small in size (a dozen kilometres radius on average), and with no real centre, at least not in the form of an agglomeration or a monumental fortified princely residence. These entities could be autonomous, interspersed among much larger territories and centralised around a location with a breadth

Table 4.1: Archaeological urban markers defined by Henri Galinié and their presence or absence in Bourges at the end of the First Iron Age

Marqueurs urbains (d'apr. Galinié 2009)	Présence de ces marqueurs à Bourges à la fin du 1er âge du Fer
Système défensif / tracé distinguant dedans et dehors	Probable (fossés des Etablissements militaires et du haut de la rue Moyenne (?))
Desserte viaire dense, hiérarchisée, parfois pré-établie	Probable (St-Martin-des-Champs ; Port Sec)
Lieux de culte ou d'expression du sacré	Avérée (marais de confluence)
Monuments ou monumentalisation de constructions, utilitaires ou non	Avérée (édifice à enduits peints du collège Littré)
Bâtiments publics ou lieux d'assemblée pour l'expression des rôles sociaux	?
Bâtiments exprimant l'exercice de l'autorité, le contrôle des populations et des productions	Probable (édifice à enduits peints du collège Littré)
Densité forte de l'occupation du sol dans l'enceinte ou la zone circonscrite	Avérée (secteur Collège Littré, La Nation, Hôtel Dieu; St-Martin-des-Champs (?))
Constructions aux plans spécifiques, distincts des constructions agricoles ou villageoises	Possible (édifice à enduits peints du collège Littré)
Usages du sol, des habitations et des objets variés, reflétant la stratification sociale	Avérée (zone résidentielle de la vieille ville ; faubourgs artisanaux de St-Martin, Baudins, Port Sec)
Usages du sol et des constructions à vocation artisanale et/ou commerciale adaptés à chaque métier	Probable (faubourgs artisanaux de St-Martin, Baudins, Port Sec)
Structures et instruments attestant la spécialisation des tâches et la standardisation des productions	Avérée (fabrication de fibules à timbale(s) à St-Martin, Baudins, Port Sec ; production de céramiques tournées)
Produits de luxe d'origine lointaine	Avérée (nombreux vases nord-italiques, étrusques et grecs, vin et parfum grecs, poignard centre-hallstattien, etc.)
Un lieu au moins de marché	?
Un espace au moins dévolu aux morts	Avérée (nécropole de Lazenay, nécropole de la Route de Dun et ses environs, etc.)

similar to Vix. In the case of Berry, a vast territory, about 25 km in radius, seems to structure itself around Bourges: this is another critical argument in order to identify a city there, at the end of the First Iron Age.

A critical question remains, the one of the territorial nodes of the major centres such as Bourges. Without exception, it is difficult, indeed, to conceive of a city organising a vast territory without the existence of any secondary nodes stitching that area together. The scarcity of excavated hillforts in Berry leaves open this question: perhaps this is where we should identify some secondary centres of territorial organisation.

One could also make an historical hypothesis: was Bourges/*Avaricum*, at the end of the First Iron Age, the capital of the kingdom of the Bituriges mentioned by Livy (V, 34)⁴ about the initial Celtic migrations? A lot has been written about the passage that Livy dedicated to this episode and it is not for us here to summarise the discussions. This text should not be taken literally because it is primarily a literary construction (four centuries separate the events from the narrator ...), especially because it includes tangled chronologies and gives pride of place to a narrative at once mythical and full of rhetorical figures (Milcent 2007: 288–294). But it still resonates, nevertheless, with key archaeological facts observed in Berry and Bourges in the 5th century BC:

First step: a demographic growth, a concentration and intensification of economic activities, a rising political

organisation, development of trade in goods and ideas with Northern Italy and Southern Gaul.

Second step: a rapid decline of the Bourges agglomeration and disappearance of Mediterranean imports.

Conclusion: from the characterisation of sites to the identification of the Hallstatt urban experience

Settlements which were once otherwise called, without distinction, princely Hallstatt residences thus cover realities very different, both in terms of morphology as well as the structuring, functions and status, not to mention the chronology. They have little in common, other than being defended and having delivered imported objects from far away, which is also well known during the Late Bronze Age and which became common during the Late La Tène period. The majority of them remain very poorly known, insofar as information concerning them is often limited to the results of one-off and old excavations, and are difficult to use. None has been excavated on a scale that would suggest that most of the vestiges have been found. Only a few can be characterised and it is significant that, from one to the other, the variability in the findings is great. Among them, however, there is a small group of agglomerations sharing the same traits: a very large size, a high degree of organisation, some activities of specialised production generating a

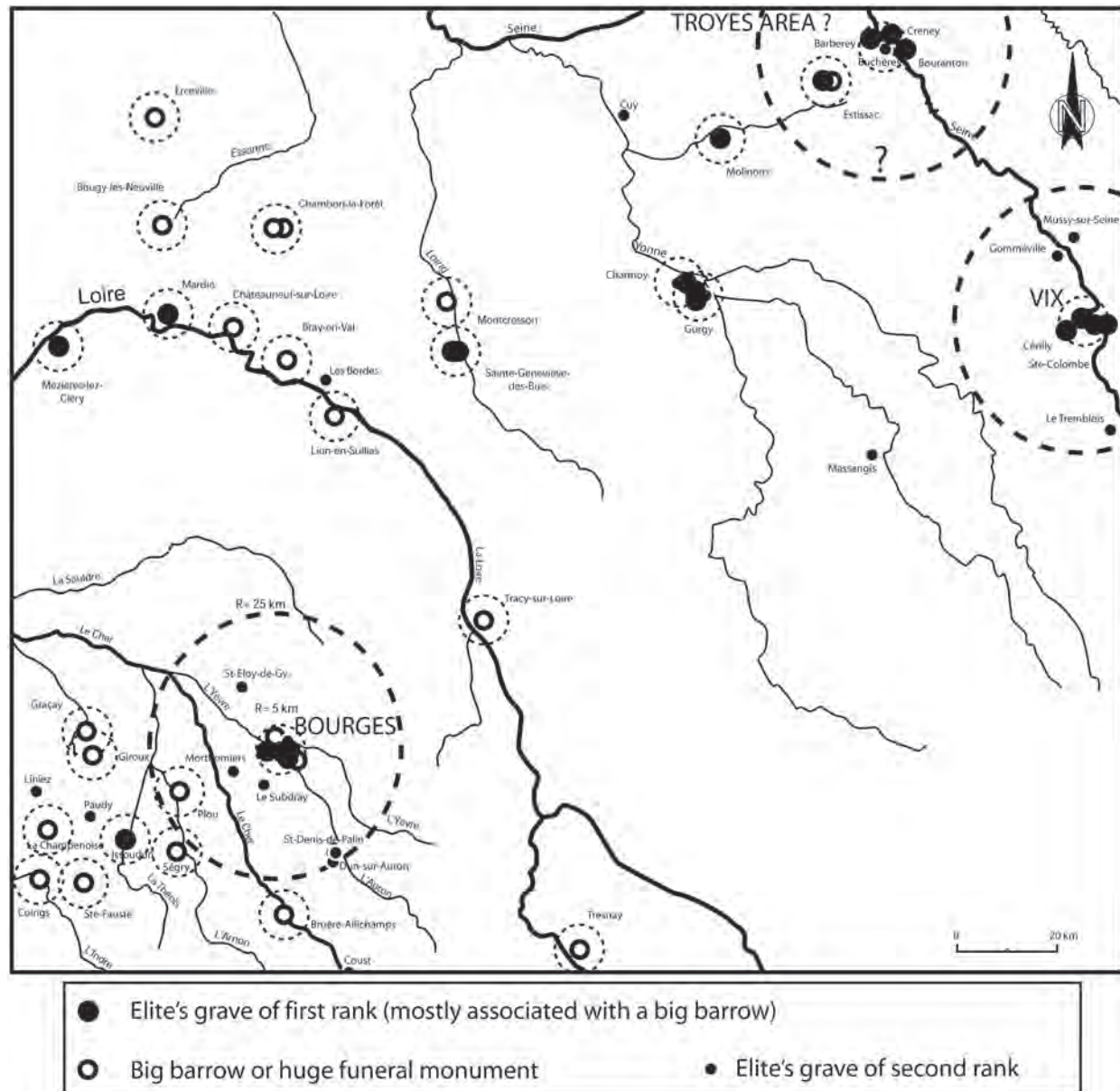


Fig. 4.11: Central-eastern Gaul elite's burials and possible territories at the end of the First Iron Age (Hallstatt D3-La Tène A1)

large volumes of wastes, an excellent integration in trading networks at medium and long distance, and a calling as a political centre for a vast territory. All this implies the development of centralisation, the release of agricultural surplus to feed a large population no longer dedicated, or very secondarily, to agro-pastoral activities, in short a major socio-economic shift that affects a large part of society and not just the elites. This endogenous development favours, at the same time or subsequently, the development of long-distance trade, especially trade concerning Mediterranean goods. The complex of Bourges, and also probably that of Lyon, belongs to those rare agglomerations monopolising the majority of these markers that we can use to qualify it

as urban given the level of development of societies in the First Iron Age of temperate Europe. The example of Vix brings insight into how these agglomerations can appear inside architectural and organisational traditions essentially autochthonous; and which are not necessarily disconnected in their form or in the structure from the rural world.

I speak of the 'Hallstatt urban experience' regarding these agglomerations in so far as they reach their maximum development in a short time, apparently very quickly, and because they decline just as fast, if not brutally, between the second and third quarter of the 5th century BC. Insofar as it is the first confirmed urbanisation process in the History of interior Gaul, and because it did not have the time to be

carried out over several generations, nor, perhaps, could it take original forms clearly distinct from what is known about anterior rural sites and agglomerations, the term of 'proto-urbanisation', in the strict etymological sense, seems appropriate to us, even if we would prefer that of 'urban experience'. The process of centralisation and intensification that we observe proceeds from an experience to the extent that it had no immediate descendants during the early La Tène period. In Berry, Burgundy and the Lyon region, there is no urban continuum because one has to wait until the end of the 3rd or 2nd centuries BC to see a resurgence of these agglomerations which, anyway, does not bear the same physiognomy nor the same characteristics. In other words, the first cities in the Iron Age, ephemeral and original, reinforce the idea that Protohistory does not follow a slow and gradual evolution always towards greater complexity, and where Mediterranean stimuli necessarily play a key role. In fact some chaotic trajectories and involutions have cut across the history of these societies between the Late Bronze Age and the time when the urban threshold was definitively established (Roman or Middle Ages according to the region).

Notes

- 1 English translation: Harry and Marie-Madeleine Pugh.
- 2 The occasional appearance of apsidal buildings is seen in the Greek world up until the 6th century BC; but, it is observed in rural sites that are not distinguished by their wealth or, very occasionally observed, in urban settlements during a period of crisis and pending restructuring of the urban fabric of the agglomeration (Luce 2002). In other words, these buildings no longer represent a typical Greek model, which is even less prestigious, during the period we are studying. In the Mediterranean, at that time, the Greek house was quadrangular in shape (Moret 2002).
- 3 Bourges was also a Celtic *oppidum* called *Avaricum* at the end of the Iron Age. According to Julius Caesar, it was the capital of the Bituriges *civitas*.
- 4 "About the passage of the Gauls into Italy we have received the following account. Whilst Tarquinius Priscus was king of Rome, the supreme power amongst the Celts, who formed a third part of the whole of Gaul, was in the hands of the Bituriges; they used to furnish the king for the whole Celtic race. Ambigatus was king at that time, a man eminent for his own personal courage and prosperity as much as for those of his dominions. During his sway the harvests were so abundant and the population increased so rapidly in Gaul that the government of such vast numbers seemed almost impossible" Translation Rev. Canon Roberts.

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Places of Memory, Hero Cults and Urbanisation during the First Iron Age in Southeast Gaul

Raphaël Golosetti

The stelae of the Early Iron Age in Southern Gaul should be seen as the expression of a hero cult linked to the promotion of a lineage. This work points out their reclamation in the context of 'proto-urbanisation' driven by an elite of Big Men or dominant lineages and their position in zones previously occupied during the Bronze Age. This paper develops the idea of reclamation of a place of memory and a process of memorial interpretation of space. The establishment of these cult places would have contributed to the endurance of the memorial value of these zones and would enable, along with other factors, explanation of the role of these shrines in the development of urbanism in the 6th–5th centuries BC. Such shrines would have been spatial markers of a relationship with the past for these communities. Their appropriation in the phenomenon of urbanisation would enable re-appropriation of this link to the past.

Overview

For a long time, the study of Iron Age religion has been influenced by historical conceptions of research in Prehistory. Therefore, the practice of exhibition of stelae has often been explained in a 'naturalist' perspective (e.g. Garcia 2006: 138). Results of recent research, however, do not support this interpretation. In order to better understand the logic of their installation, this work has described these monuments through the comprehensive study of all of the bibliographic documentation available for Southeast Gaul.¹ This is not the place to present the analysis of monuments done for my doctorate (Golosetti 2009: 40–50). This paper plans only to discuss the conclusions obtained, knowing that only a new complete study of the monuments could confirm the interpretation.

Since the seminal article by J.-C. Bessac and B. Bouloumié (1985), no synthesis had been done on these specific monuments. The objective, based on the typology developed (Fig. 5.1), was to re-examine this subject in the light of new discoveries and analyses. Data collected for the monuments of Saint-Blaise (Saint-Mitre-les-Remparts) and Glanum (Saint-Rémy-de-Provence) in this catalogue has

been enriched by more or less complete studies of Saint-Marcel, the Ile and Saint-Pierre-lès-Martigues (Martigues), La Roque (Graveson), Caisses de Saint-Jean (Mouriès), the Courrens *oppidum* (Beaumes-de-Venise) and Saint-Laurent at Vaison-la-Romaine.

Several monuments identified as stelae have not been included in this inventory. First, this work does not accept the identification of stelae among the stone elements discovered at the Entremont *oppidum* (Aix-en-Provence), at Roquepertuse (Velaux) (Bessac & Bouloumié 1985: 17, 177–178), and at Tours de Castillon (Paradou). Actually, the two main criteria for identification (chamfered tops and ridges) in Bessac and Bouloumié's typology (1985: 158–165) are lacking in these examples. Moreover, although sometimes identified as stelae, the monuments from Saint-Michel-de-Valbonne (Hyères) do not correspond to the types inventoried in the Lower Rhône Valley, as indicated by the lack of regularity and chamfered edges (Brun 1999: 462). In addition, the representation of 'severed heads' on the faces of these blocks does not belong to the typical decoration on southern stelae. Finally, this paper has also excluded the monuments discovered at the Constantine

Typologie des caractères essentiels. I : stèle à sommet rond ; II : stèle à sommet arrondi surhaussé (non attesté) ; III : stèle à sommet surbaissé ; IV : stèle à sommet en segment de cercle ; V : stèle à sommet déprimé ; VI : stèle à sommet droit biseauté latéralement (non attesté) ; VII : stèle à sommet droit entièrement biseauté ; VIII : stèle à sommet droit ; IX : stèle à sommet en mitre ; X : stèle à sommet en mitre émoussée (non attesté) ; XI : stèle à sommet pyramidal.

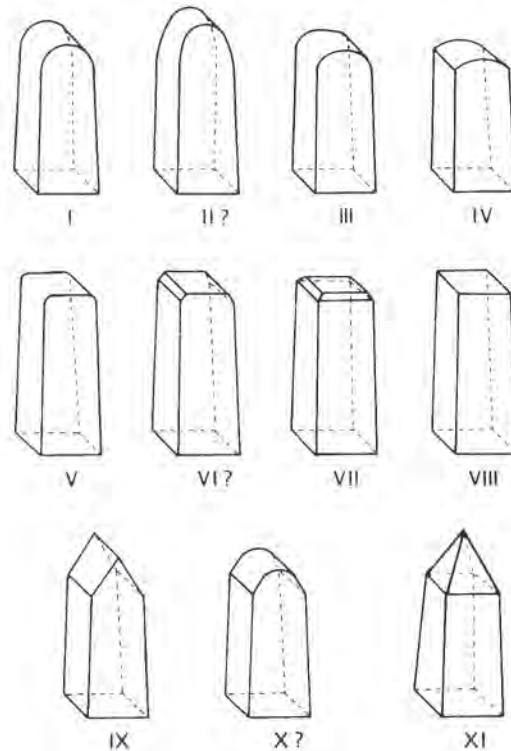


Fig. 5.1: Typology of stelae developed by J.-C. Bessac and B. Bouloumié (1985)

oppidum (Lançon), at Pierre-Aiguille at Crozes-Hermitage, at the Bagnols-en-Forêt *oppidum* and at the Roquefavour *oppidum* (Ventabren) (Bessac & Bouloumié 1985: 176–178).

In conclusion, of the 395 stelae mentioned in the archaeological literature, 356 stelae (and six supports) with a clear correspondence in the typology have been retained. These 362 stone elements come from only nine sites, with an average of 39.5 stelae per site. However, of the 356 stelae, 160 come from a single site, Saint-Blaise, representing 44.9% of all of the known stelae. The height of these monuments ranges mainly between 0.3 m and around 1–1.1 m, although, more rarely, some can be quite high, 2.8 m or 3.2 m. They have a variety of forms, particularly at the top, within a single site, and a few, whether small or large, are decorated. They are made of local limestone (Garcia 2003: 224; 2006: 139) using stonecutting techniques considered to be archaic.

Ultimately, these stelae with quadrangular sections and unhewn bases (Bessac & Chausserie-Laprée 1992: 136) were destined to be implanted in the ground and exposed with the main faces are individualised monuments that would indicate technological heterogeneity (Bessac & Bouloumié 1985: 174–175). They are thus linked to activity spread through time and represent a uniform phenomenon across the zone in which they first appeared. The cultic interpretation of these monuments is further supported in light of recent discoveries, although other hypotheses have

been proposed (Arcelin *et al.* 1992: 193; Dedet 1992: 169; Tréziny 1992: 346).

Context of discovery

The study zone includes nine stelae sites – or 11 if we accept the inclusion of the monuments at Roquepertuse and Tours de Castillon. Given the limited number of sites,² the approach employed is also limited. Their discovery context and the underlying issues, in terms of geographic mobility of the monuments, as well as chronological issues, should all be addressed.

Such contexts are now described here. We have no information about the initial organisation of the stelae in southeast Gaul since these monuments were discovered only in secondary contexts, particularly re-used in Protohistoric fortification sites. Figure 5.2 thus shows re-use in fortifications as the preponderant discovery context, both in number of contexts as well as the number of stelae, with 66% of the monuments found in this context (Fig. 5.3).

Some researchers (Arcelin & Gruat 2003: 193) question whether the stelae were “[necessarily] originally disposed at the same site” in which they were discovered. Based on a synthesis in 1992 (Arcelin *et al.* 1992: 191), the rarity of extensive excavations at the sites makes it extremely difficult to evaluate the relevance of the observed concentrations or

	<i>Fortification</i>	<i>Domestic unit</i>	<i>Other</i>	<i>Indeterminate</i>
L'Ile		19		
St-Pierre-lès-Martigues	22	3		2
St-Blaise	110	4		47
Glanum	5		10	11
Caisses de St-Jean	59			
Courrens/Durban				1
St-Laurent	12			4
La Roque	16		4	
St-Marcel	13			9
Total stelae	237	26	25	74
Total sites	7	3	2	6

Fig. 5.2: Discovery context of stelae in southeast Gaul (author)

dispersals. Figure 5.4a–b summarises the discovery contexts of stelae for all of the sites: we see that re-use in fortifications was done at early dates for the settlements of Glanum, Saint-Pierre-lès-Martigues, Graveson, Saint-Laurent at Vaison-la-Romaine and Saint-Marcel at Pègue. As at Glanum and Graveson, re-use in the fortification at the foot of a slope, this time next to a waterway, raises the same question of possible movement of the stelae and original location of presentation at the level where they were re-used. For the Mouriès *oppidum*, the recent results of Y. Marcadal and J.-L. Paillet (2008) show the construction of a rampart, after the first undated fortification, as early as the 6th century BC in which the external facing already contained stelae. Recent work shows that the destruction of the shrine and re-use of the stelae dates to an early date, which is close in most of the occurrences.

Indeed, based on re-use in fortifications, sites with stelae appear to have been developed before the end of the 6th century BC.³ Re-use in fortifications does not at first sight indicate concerns other than with recuperation of materials available at the site. While use in the foundations and blocking of the fortifications at Saint-Blaise, Glanum and the concealment of the engraved faces within the blocking for the stelae at Mouriès (Benoit 1948: 142) would support an argument for the desecration of the stelae and thus justify their presence around the site, the contexts described above clearly demonstrate that this pattern of re-use in the foundation is later and thus irrelevant since the enclosures in question are from the 2nd century BC ('Hellenistic' ashlar enclosures for Saint-Blaise and Glanum, enclosure at Mouriès). When we see the re-use in fortifications at an early date, when the data indicate it, such re-use concerns the external facing of the ramparts (Graveson, Saint-Pierre-lès-Martigues, Le Pègue and re-use in phase 2 at Glanum – see Paillet & Tréziny 2003: 234). However, there is no reason to necessarily give a symbolic meaning to this re-use since these well cut blocks would provide material readily useable for the facings. Particularly following the example

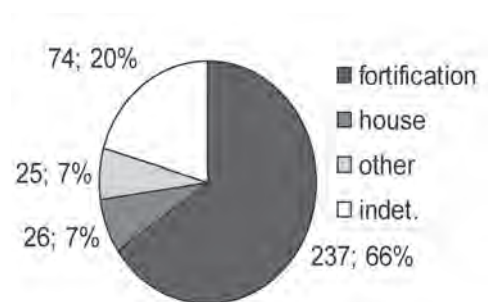


Fig. 5.3: Context of re-use of stelae (number of stelae) (author)

of P. Arcelin (Arcelin & Gruat 2003: 193), it is possible to estimate that the little care taken with these blocks (broken and often incomplete)⁴ rather suggests desecration of the monuments. Finally, we consider that the place of discovery of the stelae probably and approximately marks the place where the monuments were originally presented. But it is quite difficult to identify more precisely, based on these contexts, the original place of stelae presentation, since although some concentrations can be seen, they are either late (e.g. Saint-Blaise) or linked to very limited excavation of the fortifications.

Contexts (when known) other than re-use in fortifications are low, with 7% of stelae found in the settlement and 7% in other buildings (Fig. 5.3). Re-use in the settlement is seen at only three sites: Saint-Blaise and the Martigues sites of L'Ile and Saint-Pierre. These are the only stelae for which re-use is early thereby possibly contradicting the hypothesis of D. Garcia (2003: 224) regarding the lack of use of stelae "as threshold, lintel or *bloc de chaînage* for a private construction".

Before any interpretative discussion of the location of the sites, it should be clarified that the discussion here assumes low geographic mobility of the stelae. No relationship of these sites with the natural environment is developed

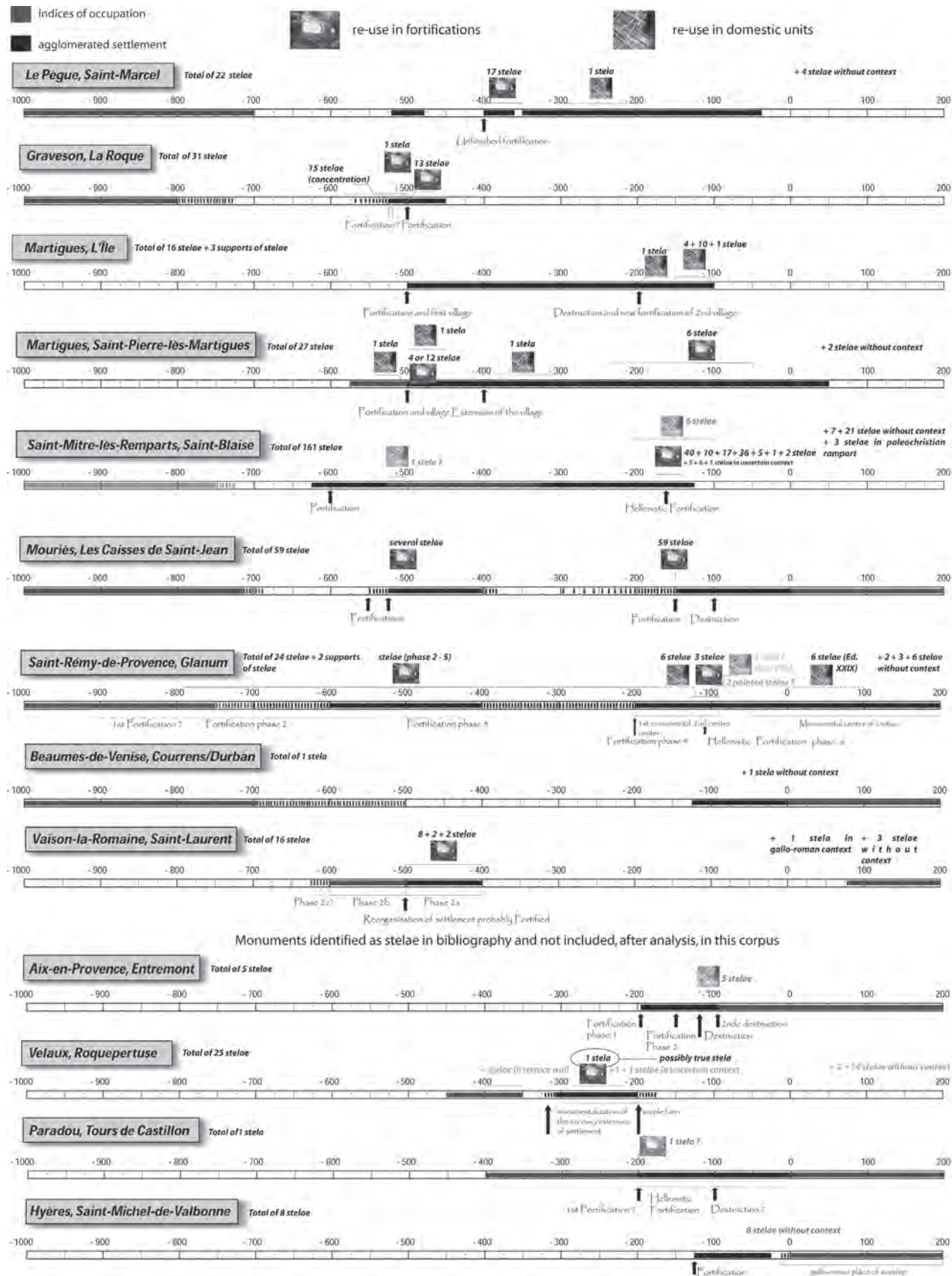


Fig. 5.4a-b: Synthesis of discovery context of stelae in southeast Gaul (author)

(Golosetti forthcoming). The position on a ‘natural’ site, or at least rural, does not in any way indicate an obvious relationship to nature. We cannot accept the hypothesis of sacred places included in a “context of naturalist beliefs inherited from late prehistory” (Arcelin & Gruat 2003: 172). Rejecting the hypothesis of a ‘naturalist cult’ proposed again recently (Garcia 2006: 139; Gruat 2009: 40) and the idea of an exclusively symbolic interpretation of the landscape, the analysis of human occupations before and after these sites probably provides one of the keys to explaining the mechanism for implantation of these shrines through a memorial interpretation.

A place of memory at the onset of settlements during the Second Iron Age

A relatively recent hypothesis developed by Garcia (2003; 2005: 178–181; 2006: 140) proposes attribution of a crystallising role of a ‘stelae shrine’ occupation and thus the origin of towns. All of the 356 stelae included come from protohistoric settlements. Even if we extend the analysis to mentioned stelae, such as those in the bibliography, the result is identical with 395 stelae discovered at 13 protohistoric settlements. We cannot deny the relationship of these sites within the urban phenomenon. Such sites, although having different implantations in the topography, correspond to fortified urban settlements distributed across a varied landscape.

Figure 5.4a–b presents a synthesis of the dates of stelae re-use with the known periods of occupation. The first re-use took place at the earliest in the 6th century BC.⁵ We thus note that the stelae were in place prior to the construction of the fortified settlement in the 6th century BC,⁶ but also somewhat later in the 4th century BC (Le Pègue): the late date of re-use, in the 2nd century BC with the settlement at Courrens, should be considered with caution given the lack of real research. We take the example of the recent research on Mourières (Marcadal & Paillet 2008) which has just contradicted this uniqueness and resituated it in the general scheme.

Based on indices of occupation prior to these settlements on the sites, most had an occupation from the Bronze Age to the 8th century BC. It is tempting to reconstruct shrines with stelae in sectors that already had ancient occupations. They can be considered contemporaneous with occupations at the end of the Bronze Age since it is possible that they intervened afterward either without leaving visible archaeological layers⁷ or because our knowledge of the material culture of the transition from the Bronze Age to the Iron Age limits our ability to identify an occupation between the 8th and 6th century BC. This hypothesis of shrines dating to the 8th–6th century BC, for which the only material evidence is the stelae, is today retained because

first, the stelae were never found in a context dating to the Bronze Age or the start of the Iron Age (Garcia 2003: 224) and second, such a date would explain the apparent absence of occupation during the Bronze Age or Early Iron Age prior to the settlements at Vaison and Saint-Pierre-lès-Martigues although both had at minimum a human presence during the 6th century BC prior to the construction of the fortifications. In addition, the technique and iconography of the décors suggest a date of 8th century-start of the 7th century BC (Arcelin 2004: 71).

Nonetheless, to consider these shrines as isolated, encounters an obstacle: the existence of a possibly late fortification at Glanum. In effect, the stelae were re-used only from stage 2, certainly prior to 500 BC (Paillet & Tréziny 2003: 234), but would Stage 1 have been contemporaneous with the stelae? Is this a site operating with a small grouped fortified settlement?

By contrast, the urban development of these sites coincides with a definitive abandonment of such shrines with stelae since the fortifications evidence re-uses of the monuments. Early re-use in fortifications involves only the external facing of the ramparts while their use in foundations and blocking is only observed later. Does this indicate differential treatment of stelae between the early settlements and the later ones? While we could possibly consider that the first examples of re-use may reflect a degree of respect for the monuments, the fact that these well cut blocks offered readily useable material for the external facings limits this consideration.

Re-use in fortifications and only in the external facing during the first phases of the ramparts remains a striking detail. We can, in particular, consider that construction of the fortification was symbolic for the community and that re-use of earlier cultural monuments, although possibly desecrated, was not neutral. This, along with the fact that such stelae are never found outside contexts of re-use in fortified settlements, leads to investigation of the role of these shrines in the development of urbanism.

The relationship between the establishment of stelae sites and the development of towns is undeniable. Analysis of the contexts of re-use of stelae is set against the complexity of this relationship since, while these open-air shrines may have played a role in urban development, the treatment of the stelae does not reflect respect for such religious monuments. So, their condition (broken with a sledgehammer, reworked, recut, etc.) would indicate complete desecration, sometimes interpreted as linked to probable changes in the composition of resident populations. Yet we have seen that their re-use remains specific to use in the fortification for at least two-thirds of the stelae, if not much more (Fig. 5.3). To this should be added that when re-use was done in the 6th–4th century BC, it took place only in the external facings of the rampart and not the internal blocking or the foundations.

How can we balance a capacity for crystallisation of

human occupation with the hypothesis of abandonment, dismantling or even desecration of the stelae (Arcelin & Gruat 2003: 193)? Garcia (2006: 141) has opened an interesting path by identifying a ritual act consistent with reclaiming these religious monuments by including them in the enclosure delimiting the new settlement, in order to assert the cohesion of the social group. This interpretation is based on the idea that such shrines, originally frequented by a disseminated population, would have played a role in grouping human communities. Such an interpretation, however, cannot address the question of the dismantling of the shrines: if they held such symbolic and sacred value sufficient to attract the population, their complete abandonment and destruction without development into another form is perplexing.

We propose to explain the conjugation of a polarising capacity of these cult places with their desecration by examining the perception of these installations by the populations responsible for urban development. Shrines from the 8th–7th century BC would have been perceived by those who came later as places of memory in the territory of these populations. The concept of *timemark* (Holtorf 1998: 34) makes it possible to suggest a possible reclamation of memorial geosymbols, places significant in the memory of the communities. The location of towns is understood by the desire to establish them on ancient places that had meaning; such reclamation thus plays a role in the phenomenon of appropriation of space. By attaching to a spatial reference that, rightly or wrongly, is considered an ancient place of occupation, a process of legitimisation for the settlement is activated by the development of a relationship to the past (Hingley 1996: 240). We cannot, moreover, as proposed by P. Arcelin and P. Gruat (2003: 193), truly support the appropriation of ancient symbols by a newly composed population because the material record does not reflect such societal changes but rather socio-cultural continuity between the Bronze Age and the Iron Age (Garcia 2004: 43, 50–51). Yet it does not matter whether the relationship was real and the communities responsible for the urban phenomenon were the actual descendants of the communities that created the stelae shrines, or whether the relationship was invented in order to justify the establishment. What emerges is obviously the creation of a link by calling upon a memorial interpretation of space. The study of R. Hingley (1996) concerns the re-use of Neolithic funerary monuments during the Final Bronze Age and the First Iron Age in Scotland, but it stresses a process of reclamation of the symbolic value of the older remains, in which the hypothesis of an interpretation of these monuments as ancient ancestral houses would clearly indicate reinvention of the past. It has also been proposed that certain Prehistoric monuments contributed to the establishment of shrines in the Roman period in Great Britain (Williams 1998: 95).

The urban development that took place on sites with

stelae may be explained in part by a desire to reclaim older sacred places to benefit the social structure in a process of appropriation of space. That these monuments are no longer sacred does not exclude the fact that they still have meaning, which would explain their destruction or exploitation at the onset of urban development. Such memorial interpretation may also have been as much made by a new population reclaiming for its own benefit ancient symbolic places as resulting from development within a single population.

It would appear that such an interpretation of this relationship between stelae sites and settlements of the Late Iron Age is supported by the hypothesis of hero cults at these shrines. Based on the *décors* (Fig. 5.5) of the stelae in the inventory, horsemen or horses (Mouriès and Glanum) may effectively be heroic references, but it should be acknowledged that this remains uncertain. However, outside our study zone, several stelae contribute to the debate. Garcia (2006: 139–140) mentions those in Languedoc with a *décor* that could represent weaponry in a very schematic representation of a warrior: a lance, sword and shield. Such a hypothesis is supported by the discovery of stelae at Touriès (Gruat 2008: 119; 2009: 40–42) that have *décors* comparable to the representation of weapons. If the stelae are related to ritual practice linked to a hero cult, this can only further support our interpretation of places of memory for which their stature in space would have persisted during the urban development of the 6th–5th centuries BC, marked by a dimension combining history and myth via the intermediary of hero cults.

Regardless, this initial phenomenon at the onset of the establishment of towns in the 6th–5th centuries BC necessitates a dynamic interpretation of space. It should also be clarified that the stelae phenomenon is not the underlying cause of all towns: it explains only one settlement process by reference to the past.

It is not so much the shrine that leads to polarisation of occupation as the memory of the shrine, its meaning in the perception of space. But we can also question whether the memory of a pole of occupation could itself lead to the development of these stelae shrines.

From one occupation to another, the sacralisation of a place of memory?

We have just seen that most, if not all, of these open-air shrines with stelae were found in a rural context. While no other material was observed for the First Iron Age, the period in which these shrines are situated, many stelae sites show clear evidence of an earlier occupation during the Middle and Final Bronze Age (Fig. 5.4a–b).

Among the nine sites, only the Martigues and Vaison sites lack a Bronze Age occupation. This earlier occupation does not mean that the exhibition of stelae dates to this period

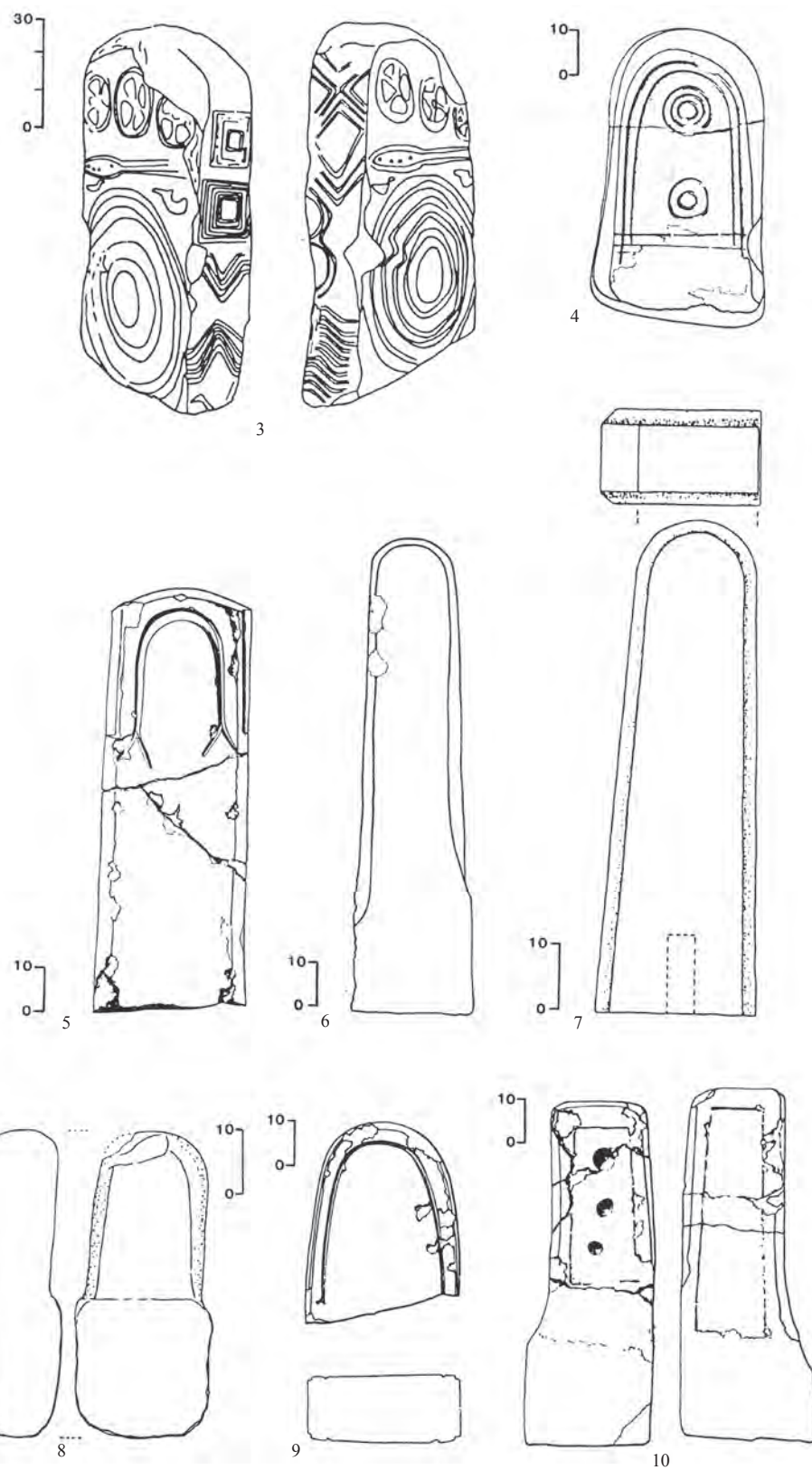


Fig. 5.5: Drawing of several stelae in south Gaul (3: Sextantio; 4-6 and 9-10: Le Pègue; 7-8: Saint-Blaise) (after Arcelin et al. 1992)

as the stylistic analysis does not support such a hypothesis. Yet in contrast, does such antiquity in occupation highlight the value of these places for communities at the Bronze Age/Iron Age transition? A hiatus in occupation at these sites in the mid-8th to mid-6th centuries BC has long been demonstrated. Following the Final Bronze Age III with broad diversity in site types and the possible beginnings of urbanisation, it has been proposed that such a hiatus reflects a period of crisis or at least rupture. The reasons for such rupture are poorly understood, but Garcia (2004: 34–51) proposes that an ecological crisis affecting subsistence may have affected the populations in Southern Gaul during the last third of the 8th century BC, for which the mode of social organisation (*Big Man* type society?) sparking proto-urbanisation at the end of the Bronze Age, being insufficiently hierarchical, could not resist against a return to segmentation.

This rapid description of phenomena of the Bronze Age/Iron Age transition enriches the current discussion. Indeed, places of occupation during the Bronze Age, abandoned due to a temporary crisis, saw the establishment of open-air shrines with stelae prior to the return of settlement in urbanised form and linked to the phenomenon of the *civilisation des oppida* in the 6th century BC. While a crisis of some sort could explain this hiatus, the establishment of shrines after an older occupation would orient us toward considering the persistence of the significance of these places from the 8th–7th centuries BC. Such specific value of these former sites was probably maintained by the presence of shrines with stelae, themselves retaining value which was a key factor for the rise of urbanism in the 6th–5th centuries BC. We propose, with caution, and although this does not resolve all the issues, that the populations living through the transition from the Bronze Age to the Iron Age, while deserting ancient places of occupations nonetheless had a sufficiently evocative perception of these sites to preserve their meaning. Yet we cannot attach a symbolic value specifically linked to the natural landscape since this phenomenon involves varying contexts. On the contrary, we see clearly that the phenomenon involves different kinds of sites from the Final Bronze Age (highlands, plains, etc.) in land use patterns during this period (Garcia 2004: 34, 53).

There seems to be the impression of former zones of occupation which, although deserted or in any case archaeologically seen as such,⁸ assume a symbolic value that can identify them as probable places of memory. Such places of memory thus accommodate rather isolated (?) shrines for which we consider that we need to abandon the idea of naturalist cults. The hypothesis of hero cults remains, in contrast, entirely compatible with such a memorial interpretation.

Conclusion: hero cults and places of memory

We propose to link the development of these stelae shrines with ancient occupations, potentially responsible for a symbolic value, in these rural zones during the First Iron Age. The occupation hiatus at many sites, between the Final Bronze Age and the first indications of urbanisation would evidence this, for example the phase 1 rampart at Glanum, and the 6th–5th centuries BC towns would be linked to a possible ecological crisis affecting subsistence: we can examine the role of these shrines with stelae in the reoccupation of these zones during the 6th–5th centuries BC. The symbolic value in space of these formerly occupied zones may have persisted until the 6th–5th centuries BC via the existence of shrines with stelae. The role in the origins of urbanism of the latter would be explained by their definition as memorial markers in space. Former occupation zones would retain a symbolic value that allows them to be identified as probable places of memory in the community at the Bronze Age/Iron Age transition and during the First Iron Age. Yet such a hypothesis regarding the establishment of such shrines works well with the hypothesis of hero cults that has been proposed for these shrines with stelae.

Our interpretation of the stelae as monuments of hero cults finds support not only in the representation of weapons and shields, but also in similarities between some monuments more or less contemporaneous with statues of heroic warriors, such as the ‘two-headed’ bust found at the Marduel *oppidum* at Saint-Bonnet-du-Gard which could be the missing link between the sculpture in the round in the Iberian and northern Celtic world at the end of the 6th century BC and the sculpture of warriors known in Mediterranean Gaul. In particular, this bust could indicate the heroic nature of a cult to which the stelae at Marduel could have been associated (Garcia 2006: 139). The recent discovery of stelae at Touriès in Aveyron forms a new group of stelae with décors suggestive of a schematised representation of warriors: this would be confirmation of the heroic value of cults within these shrines with stelae.

A memorial interpretation of space leads to the proposal that these shrines with stelae, linked to hero cults, were established in formerly occupied sectors, thus forming places of memory for the populations of the First Iron Age. The establishment of these cult places would have contributed to the endurance of the memorial value of these zones and would enable, along with other factors, explanation of the role of these shrines in the development of urbanism in the 6th–5th centuries BC. Such shrines would have been spatial markers of a relationship with the past for these communities. Their appropriation in the phenomenon of urbanisation would enable re-appropriation of this link to the past. Reclamation of this link to the past by the

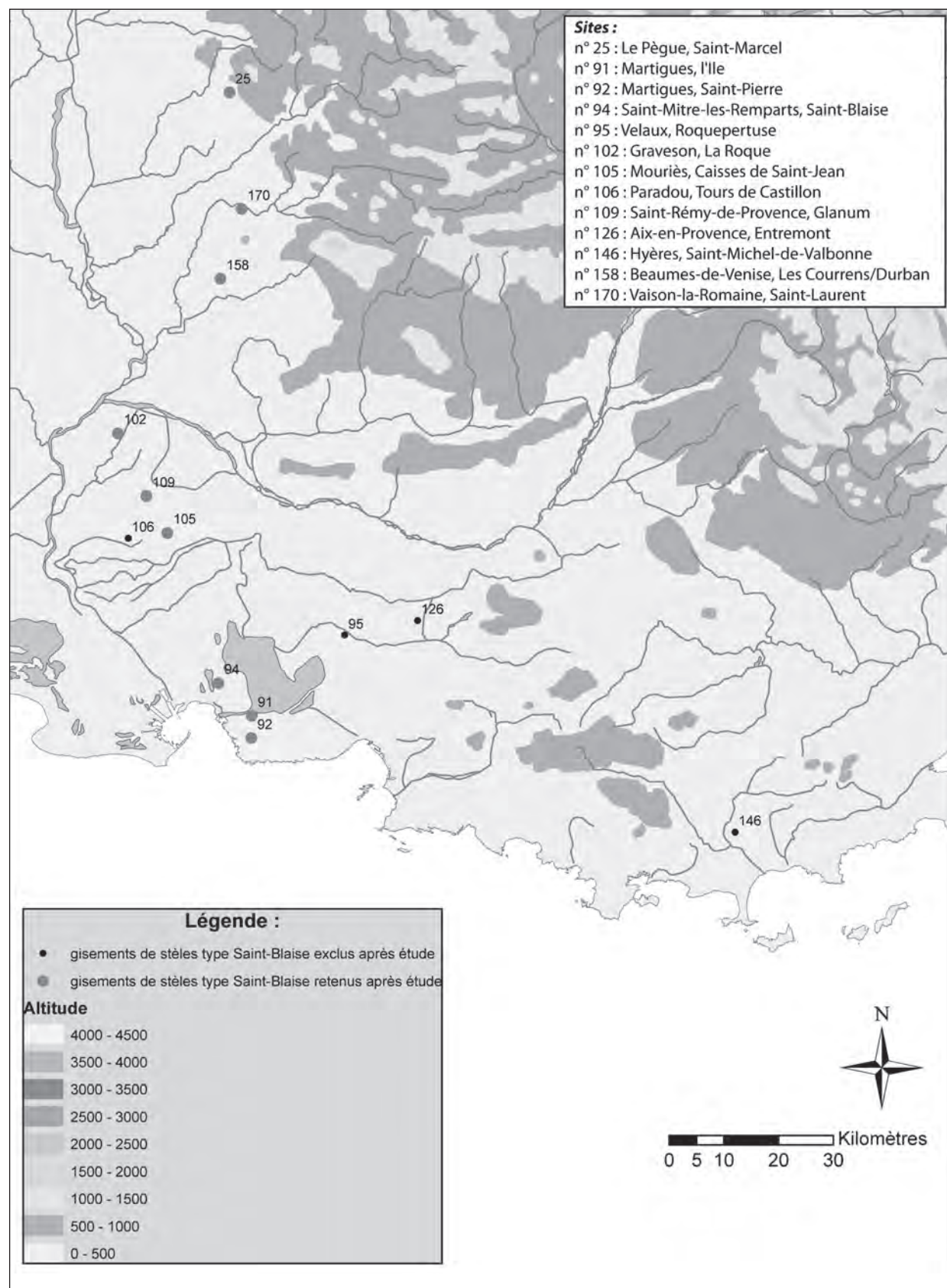


Fig. 5.6: Map of sites with stelae in southeast Gaul (author)

establishment of a town on a place of memory, a *timemark*, would legitimise taking possession of this space.

Although we have already made comparisons to the reclamation of prehistoric monuments during the First Iron Age and the Roman period, we can also make comparisons with the eastern Mediterranean. Indeed, for shrines of the Geometric period on former Mycenaean sites, it has been suggested that this is not a continuum in sacred space, but a phenomenon of re-appropriation of the past in the form of a more or less conscious return to a place to which a specific memory was attached (Etienne *et al.* 2000: 58).

We should, however, be wary to not think that the relative proximity in time between shrine and occupations at the end of the Bronze Age is concordant with a real perception of the past: the difference of a century, minor for an archaeologist studying these periods, is largely enough time for reinvention of the past since collective memory is continually developing. We should consider this reference to the past, which religion terms ‘transcendence of authority’, within a dynamic of adaptations, innovations and reinterpretations (Rivière 2003: 15).

It is proposed then to explain the regrouping of populations in western Basse-Provence and along the Rhone (Fig. 5.6) during the 6th–5th centuries BC in sedentary towns of varying size governed by communities of *chefferie* or *Big Men* type in the context of dominant lineages (Garcia 2004, 76–77). The representations sculpted during the First Iron Age, such as those at Marduel and Touriès are then seen as the expression of a hero cult linked to the promotion of a lineage. It is of interest to point out that while such urbanisation was done by *Big Men*, or rather the dominant lineages, we can only question the choice to build these towns on former sites where stelae were presented. We propose with caution that these places had significance for the communities, not necessarily because they still had a sacred nature, but because these points in the landscape and human space would have corresponded to places of memory for these communities, due in particular to the antiquity of the occupation.

In conclusion, stelae are seen as the expression of a hero cult linked to the promotion of a lineage. Yet the fact that these hero cult shrines are situated on former Bronze Age zones of occupation leads to the idea of reclamation of a place of memory. Would the latter find ideological support for the phenomenon of consolidating populations? But the desecrated aspect of the monuments is a limit to such reasoning: does this reflect reclamation of ancient symbols for a new social order? Such a hypothesis would have the merit of explaining the desecrated aspect of the stelae, broken and re-used, and the attention that seems to have been paid for such re-use, which almost exclusively involves fortifications and, when we look at the first phases, only the external facing. We can see that the stelae are no longer sacred monuments, but their symbolic reclamation

required a specific form of re-use, intentional and not used simply as available raw material. While we cannot respond positively, we find the idea seductive that these shrines with heroic functions had first reclaimed the symbolic value of the places of memory before in turn being seen as such in the process of urbanism under the aegis of dominant lineages.

Notes

- 1 This includes the entire region east of the Rhône to the department of Alpes-Maritimes.
- 2 If we consider only monuments well-identified typologically, this includes the areas north and south of the sites of Saint-Pierre-lès-Martigues and Ile, Saint-Blaise, Caisses de Saint-Jean south of the Alpilles and Glanum and Graveson to the north, and well north of Courrens/Durban, Le Pègue and Vaison-la-Romaine.
- 3 Recall that the *in situ* stelae of Touriès would have been definitively abandoned during the 5th century BC (Gruat 2009: 39).
- 4 Indeed, of the 315 stelae inventoried, only 90 are described as whole (after refitting), or 28.6%.
- 5 Vaison Saint-Laurent, Saint-Pierre-lès-Martigues, Graveson and Glanum.
- 6 Graveson, Vaison, Saint-Pierre-lès-Martigues, Mouriès and quite likely also Saint-Blaise even if we have not inventoried re-use before the 2nd century BC.
- 7 In particular this is the isolated shrine limited to exposition zone without deposits of material.
- 8 As we have seen, some evidence of an occupation at the Bronze Age/Iron Age transition is found at Mouriès and Beaumes-de-Venise. The site may thus not have been entirely abandoned: these traces of frequentation may be linked to the stelae or to a settlement site not archaeologically visible. It remains, however, that these were clearly held in relation to the Bronze Age and even more so during the Iron Age at all of the sites. Where are sites dating from the 8th to the first half of the 6th centuries BC located? The inventory of sites in a radius of 3 km around sites with stelae, based on bibliographic compilation, does not permit a response (Golosetti 2009).

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MODELLING COMPLEXITY:
VILLAGES AND CITIES IN LATE IRON AGE EUROPE

Oppida and Urbanisation Processes in Central Europe

Vladimír Salač

The article offers an outline of the history of research into oppida and urbanisation processes of the La Tène period in Central Europe. The author addresses the fact that the interpretation of oppida as towns came about at the beginning of the 20th century when, besides a few oppida, no other La Tène settlements were known at all. Today this interpretation does not correspond with what we know regarding the La Tène settlement structure. Recently discovered unfortified production and distribution centres and centres of Němčice-Roseldorf type play a significant role in the urbanisation process, in which we are able to see the beginnings of urbanisation of Central Europe during the La Tène period. As opposed to these, the oppida are attributed tasks primarily of a defensive and prestigious nature.

The history of research

Research on La Tène (LT) settlements concentrated in its first more than 100 years on excavations and studies of the *oppida*. Although the research of the unfortified central places began paradoxically at the same time (Fig. 6.1), no further interest in it and the published excavation results arose among archaeologists. As a result, archaeologists were depriving themselves of information about settlement types other than *oppida* and the interpretations got lost for decades in a vicious circle: *oppida* were presented as the first towns north of the Alps. Only in the last quarter of the 20th century did the unfortified settlements become objects of programmatic research thanks to which numerous activities – previously only supposed in the *oppida* – were ascertained there. With the growing evidence of intense production, coin minting, planned settlement organisation, and sanctuaries in these pre-oppidal settlements, doubts arose as to whether the *oppida* can effectively be considered the first towns and whether some of them actually performed urban functions.

The 1980's excavations of the unfortified settlement in Lovosice (NW Bohemia) demonstrated that its extent, as well as the volume of production and exchange activities, surpassed any agricultural settlement. It was therefore

labelled 'Production and distribution centre' (henceforth PDC); although in its later phase it is contemporary with the *oppida*, it originates well before them. Recently, similar settlements have been discovered in Němčice (Moravia) and Roseldorf (Lower Austria, see Holzer this volume) both enclosed and with a regular organisation of the inner space (Fig. 6.2). However, no imposing fortification usual in the *oppida* was ascertained. The quantity and quality of finds testifying to their extraordinary economic and – in Roseldorf – also cultic significance are incomparable with any other site including the PDC, which made us label them with the provisional term 'Němčice-Roseldorf type centre' (henceforth NRC, cf. Salač 2005, 2012 with further bibliography).

The present state of knowledge

Settlement structure and economic relations

Today, the settlement structure in Central Europe (as well as in Gaul, see Buchsensschutz 2007) is acknowledged to have consisted of enclosures-farmsteads; agricultural settlements;

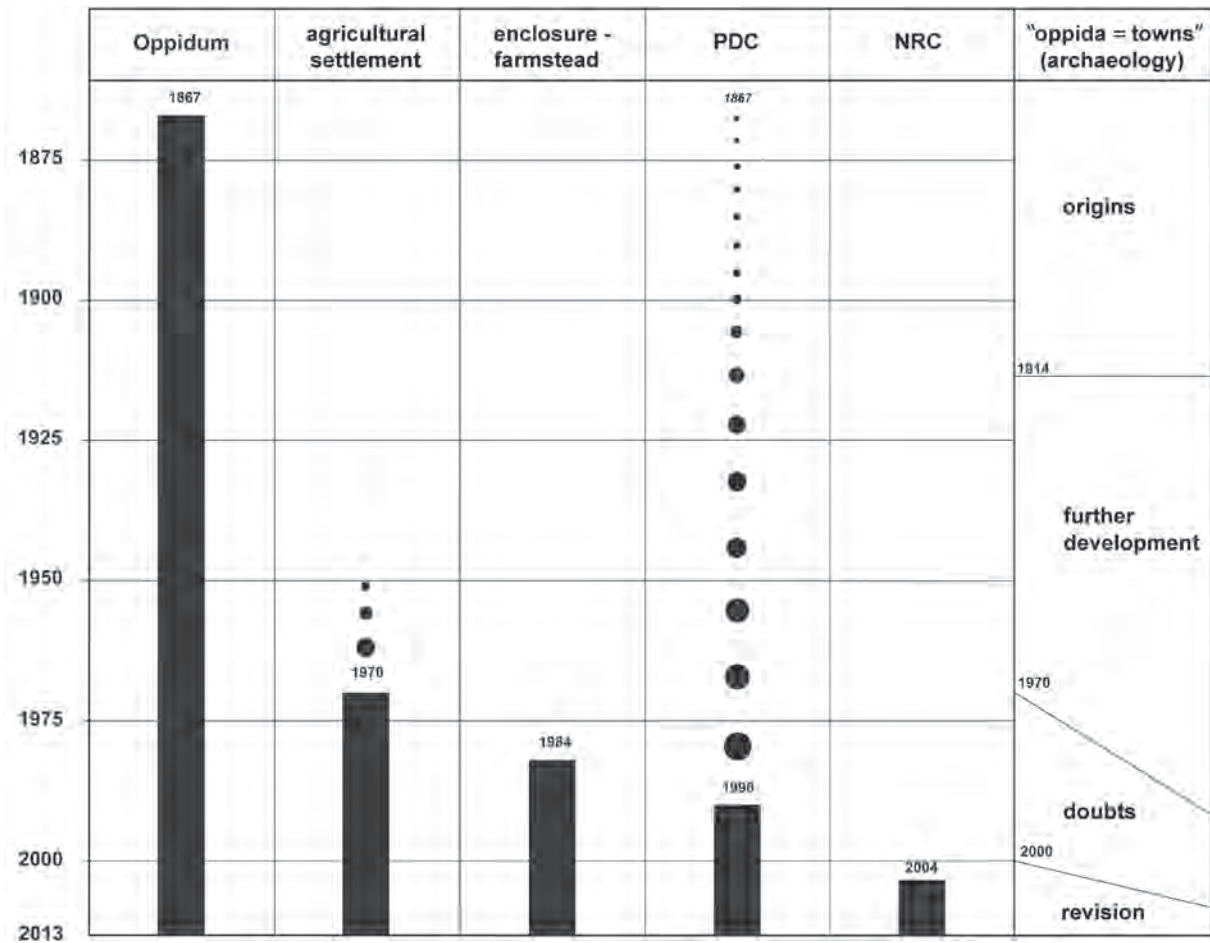


Fig. 6.1: Advancement of our knowledge of individual types of La Tène settlements in Europe (after Salač 2013)

PDC; NRC; and the *oppida* (Fig. 6.1). It was mainly the unfortified centres (such as Basel Gasfabrik, Lovosice, Bad Nauheim, Berching-Pollanten, Němčice, etc.) which have changed our notion of the settlement structure. The previous simplifying concept consisting of the *oppida* ('towns') and the agricultural settlements ('villages') has become definitely obsolete as well as the idea that production and trade was concentrated only in the *oppida*. It has become clear that from the economic point of view the *oppida* did not stand out as markedly as had been imagined.

The quality and quantity of finds prove clearly that it was not only in the *oppida* that wealth was concentrated (Table 6.1). Surprisingly, among the sites with the greatest collections of glass bracelets, there are only two *oppida* (Manching, Stradonice) among numerous PDC and NRC at the top (Salač 2012: fig. 8), while some *oppida* (excavated for decades over huge surfaces) often fall short of them in order of magnitude. Two facts result from these findings: 1) in terms of quantity of finds the sites differ from each other radically; 2) the NRC dominate among the richest sites.

Manching – an NRC

Its wealth is not the only feature which Manching shares with the PDC/NRC. As in them, its beginnings go back to LT B2; it lies in the midst of fertile lowland, directly on communication routes and on the former Danube bank; the region has always been densely populated and the site itself is partly covered by a present day town (Fig. 6.3). All this sets Manching clearly apart from the majority of Central European *oppida*, the only link with them being its formidable fortification. However, Manching remained unfortified for the greater part of its existence and it was in this state that it reached its economic climax (Eller *et al.* 2012; Sievers 2003). In LT B2-C1 there was hardly any difference between it and the other centres and may be thus classified among the NRC. Manching became an *oppidum* for only a short period (*c.* 70 years) at the very end of its development.

The Centres, hilltop and low-land oppida

Manching is characterised by its low-land position and we therefore label it a *low-land oppidum* considering this



Fig. 6.2: Geophysical map of the centre at Roseldorf (after Holzer 2009)

settlement type a variety of the NRC. This group can be clearly distinguished from characteristic Central European *hilltop oppida*.

Low-land *oppida* and the NRC (Fig. 6.3):

- Lie in densely populated fertile lowlands disposing of suitable agricultural hinterland.
- Were inhabited also in other (pre)historic periods preceding and following the La Tène and are usually also settled today.
- Are placed on natural communication routes or river banks, often on their intersections which they exploit and control directly.
- Cover large surfaces (tens of hectares), are thickly



Fig. 6.3: Position of a typical lowland oppidum: Manching (after Sievers 2003)

inhabited and with a concentration of production and trade activities.

- Have planned and structured ('urban') internal organisation.
- No imposing fortification is present or is only erected in a later phase of the settlement's development.
- Came to be by gradual development from small villages.
- Being significantly older than the *oppida*, they perform central functions in the 3rd–2nd centuries BC.

Hilltop *oppida* (Fig. 6.4):

- Are founded in perched positions on the margins of inhabited regions or completely out of these; they lack any agricultural hinterland.
- Often lie off any communication routes or in positions whence they cannot perform any direct control of these.

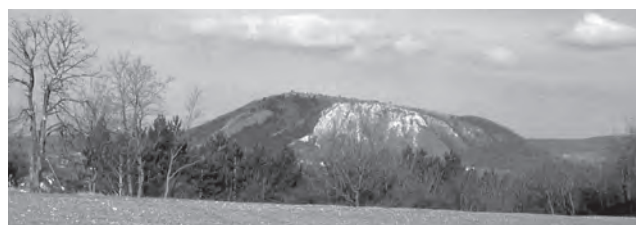


Fig. 6.4: Position of a typical upland oppidum: Braunsberg near Hainburg (author)

Table 6.1: The finds of coins and glass bracelets in selected PDC, NRC and oppida in Central Europe (1) Including coins in private collections, estimation; (2) amount of coins found in the 1877 hoard and melted down, estimation (after Salač 2012).

Site	Site type	Excavations over 1 ha	Coins (N° of finds)	Glass bracelets (N° of finds)
Berching-Pollanten	PDC/NRC	+	98	430
Hrazany	hill-top <i>oppidum</i>	+	3	0
Lovosice	PDC	-	-	23
Manching	NRC / low-land <i>oppidum</i>	+	1342	620
Němčice	NRC	-	990 (+2000) ¹	518
Neubau bei Linz	PDC/NRC	+	162	?
Roseldorf	NRC	-	1500	108
Stradonice	hill-top <i>oppidum</i>	±	1400 (+700) ²	143
Staré Hradisko	hill-top <i>oppidum</i>	+	91	62
Třisov	hill-top <i>oppidum</i>	+	81	9
Závist	hill-top <i>oppidum</i>	+	16	4

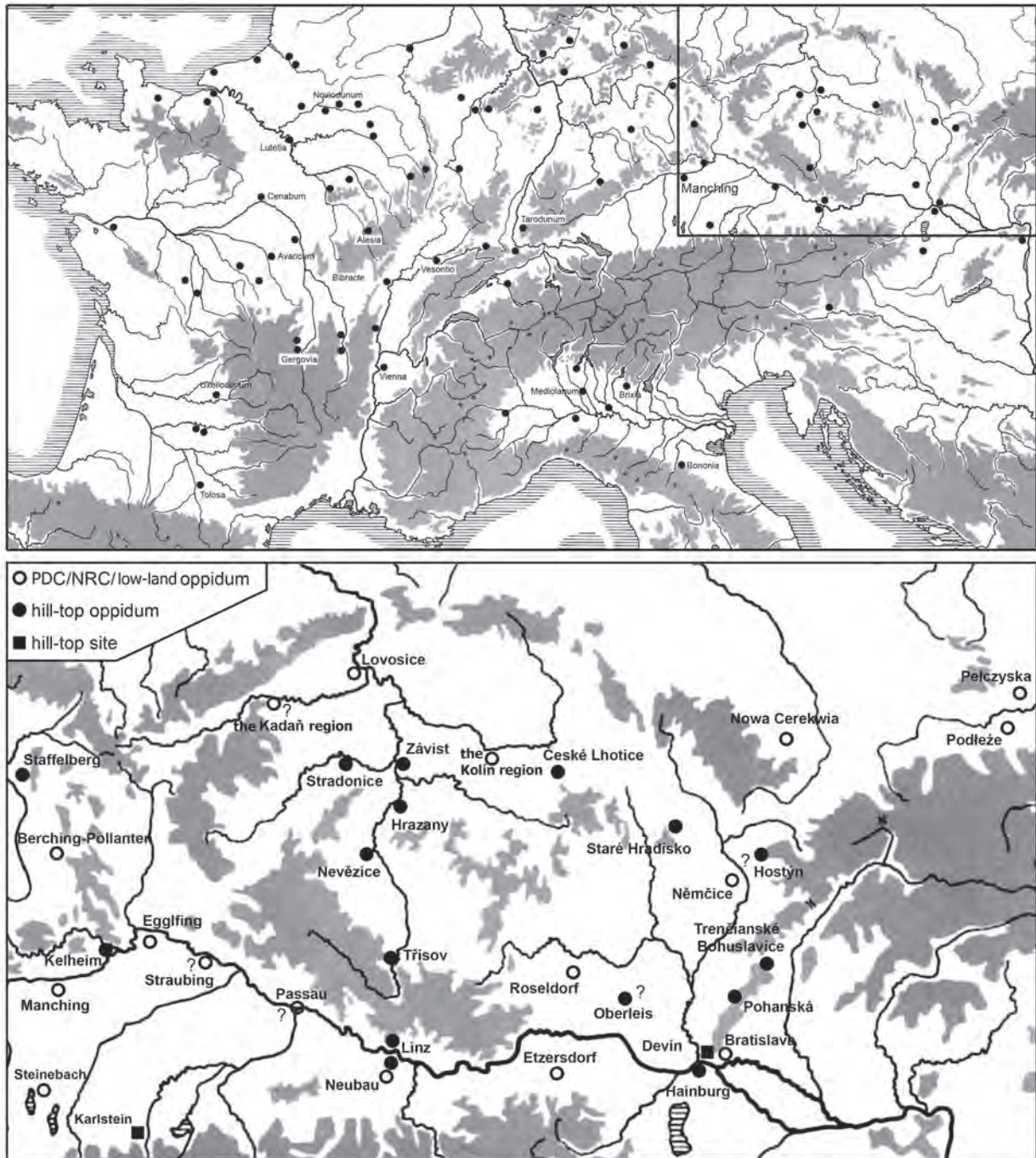


Fig. 6.5: Above: LT oppida in Europe (after Schaaf & Taylor 1975). Below: hill-top oppida, lowland oppida, PDC and NRC in Central Europe (author)

- Before and after the *oppidum*, the site remained unsettled.
- In many of them, no extensive and dense settlement or an extraordinary concentration of economic activities is attested.
- In some of them, the inner space was planned and structured, in all of them, there are extensive areas free of any structures.
- All are monumentally fortified.
- Their creation always results from a premeditated and organised project.
- All were built after c. 150 BC.

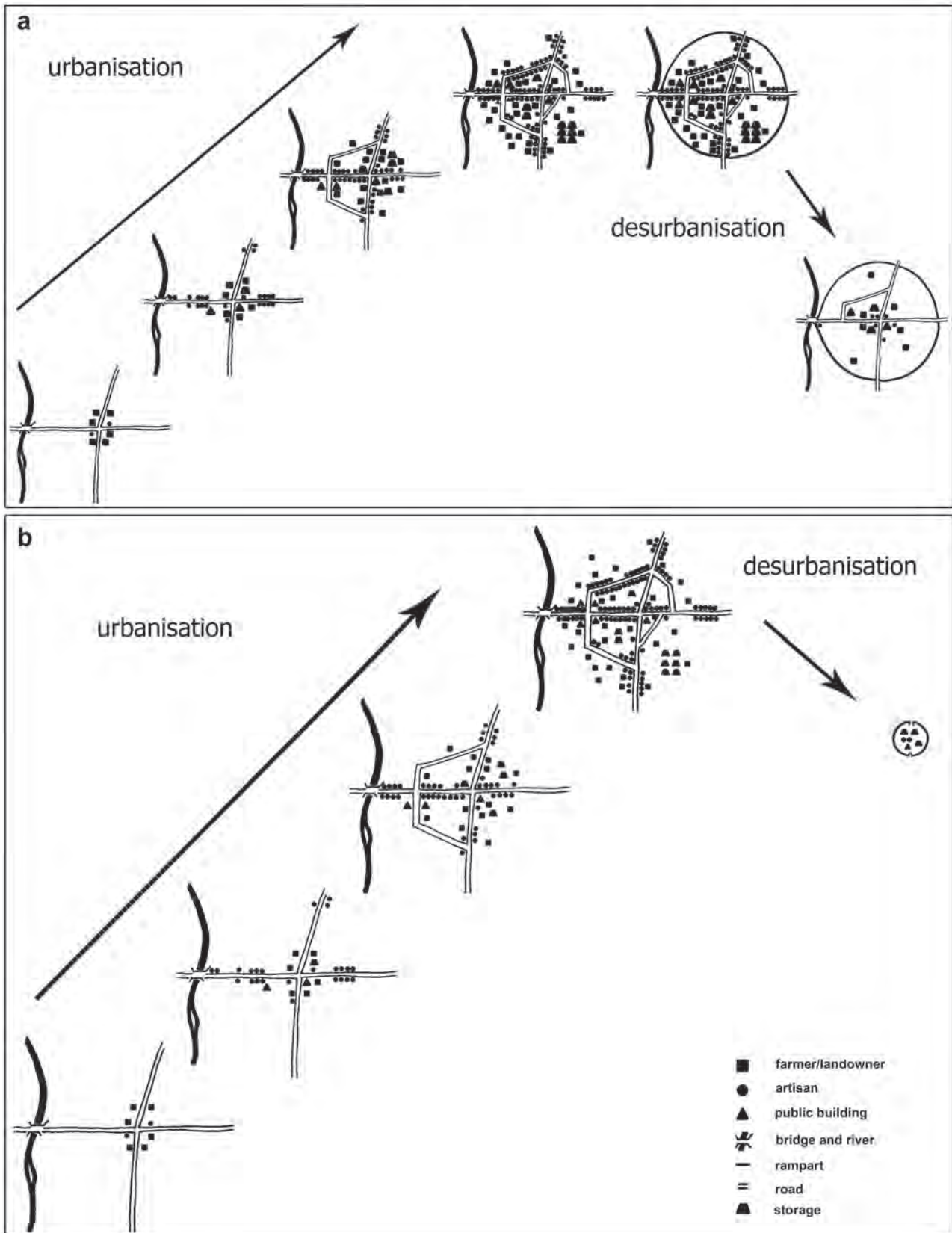


Fig. 6.6: a) Model of urbanisation process according to the settlement in Manching, b) Model of urbanisation process according to settlements on the Upper Rhine (Basel, Sissach, Hochstetten) (author)

Four models of relationship between PDC, NRC, low-land and hilltop *oppida*

The hilltop *oppida* seem to prevail over the low-land centres but this is certainly largely only the present state of knowledge: while the number of the former remains stable, the latter have just started being discovered: recent new entries include e.g. Pełczyska and Podłęże (Rudnický 2009), Etzersdorf, Eggfling and Steinebach (Kaindl 2010; Karwowski 2004; Uenze 2007). These sites may often be concealed by contemporary towns (Lovosice, Kolín, Passau, Straubing, see Fig. 6.5). By completing our maps with these open centres we obtain a more balanced view of the settlement structure, urbanisation processes and even better comprehension of the *oppida* themselves. The relations between the *oppida* and centres are not yet well known; four different models may be proposed:

(1) A centre becoming an *oppidum*. A direct transformation of an NRC into an *oppidum* is documented in Manching, where a flourishing low-land centre gets fortified. This is a unique case in Central Europe. The construction of a rampart used to be considered as the climax of the settlement's development, at the present state of knowledge, however, the economic power and the number of inhabitants seem to have been higher in the unfortified phase and – quite to the contrary – soon after the construction of the rampart, Manching seems to have been affected by a crisis, loss of inhabitants, decline in volume and quality of production and finally around the mid-1st century BC the site is abandoned (Fig. 6.6a).

(2) An *oppidum* in the centre's vicinity. In Basel, the open central settlement 'Gasfabrik' was abandoned during the Late La Tène period and a new one was created and fortified on the hill of Münsterhügel, though much smaller and probably also less significant from the economic point of view (Fig. 6.6b; Furger-Gunti 1979). A similar scenario takes place elsewhere on the upper Rhine, in Breisach, Sisach, Zarten (Wendling 2005), and in Gaul e.g. in Levroux (Buchsenschutz 2007: fig. 46), or presumably in Bratislava (Pieta 2010: obr. 62). In all these cases, the settlement shifts only by several hundreds of metres, obviously with the intention of maintaining control over the same area. The scheme is similar to that of Manching where there is, however, no strategic position on the disposal and fortification of the open settlement was the only choice. It is not clear whether both settlement types coexisted for some time and functioned as components of a single economic and power system (e.g. Jud 1998). Such a symbiosis may be stated for certain periods in Bratislava or Zemplín (Collis 1984; Pieta 2010).

(3) An *oppidum* created far from the centre. According to M. Čížmář *et al.* 2008, Nēmčice did not survive until LT D1, being abandoned while the *oppidum* of Staré Hradisko, founded 30 km away in LT C2, lives its greatest floruit. Significantly, this hill-top *oppidum* gave up the control of

the low-lands with a dense net of agricultural settlements where Nēmčice directly controlled the course of the so-called amber route, and withdrew into a barren highland. This is not an exceptional case either, as documented by the situation in Auvergne (Orengo 2003) or in the valley of Doubs (Barral 2003).

(4) Centres without *oppida*. Last but not least, many centres existed without an *oppidum* in their close vicinity though contemporary and cooperating with them economically: e.g. Bad Nauheim (*oppida*: Dünsberg 30 km, Heidetränke 22 km), Berching-Pollanten (Kelheim 37 km, Manching 44 km), Lovosice (Stradonice 57 km, Závist 66 km).

PDC, NRC, low-land and hilltop *oppida* within urbanisation processes

The beginnings of urbanisation are traditionally connected with the *oppida*, considered to have been the earliest towns north of the Alps (cf. e.g. the titles Collis 1984; Cunliffe & Rowley 1976; Müller & Lüscher 2004; Rieckhoff & Fichtl 2011). The notion of urbanisation often shrank only to the period between their construction and abandonment, their origin was even linked with an external impulse from the Mediterranean (for a summary of the opinions and bibliography see Kaenel 2006) as was their abandonment blamed on factors from beyond the Celtic world – Germans and Romans (e.g. Drda & Rybová 1995).

Geography and sociology, however, conceive urbanisation not simply as a 'construction of towns', but as a complex social process entraining transformations of the whole settlement structure. One such definition of urbanisation goes as follows: "a concentration of anthropic activities and of inhabitants expressed by changes in human behaviour, motivations, cultural patterns, and in the forms of social organisation" (Musil 1996: 1358). Urbanisation is a process, within which inhabitants get concentrated in settlements, whose form plays only a marginal role (Johnston *et al.* 2000: 883).

Central to our inquiry is the notion of 'town'. More than one hundred years ago, archaeologists identified it with *oppida* without, however, being able to define the latter more precisely than with three criteria: it may be whatever that is Late La Tène, fortified and big enough (more than, say, 10–15 ha). These *criteria* do not correspond, however, with the source of this term (i.e. Caesar's *Commentaries*) and the word *oppidum* itself denote various types of settlements in Latin.

Caesar, describing principally military actions, puts most stress on fortifications. Consequently rampart became the key element for the definition of a Celtic town for which analogies were produced from Antiquity and the Middle Ages. The terms '*oppidum*' and 'town' and their characteristics and

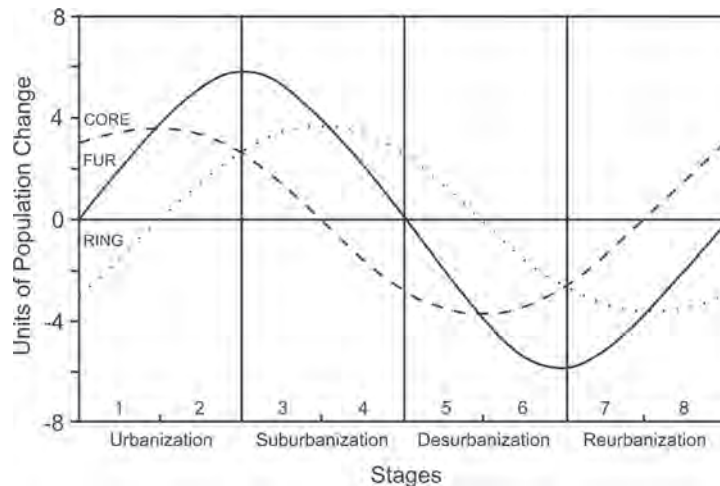


Fig. 6.7: Population changes during urbanisation process: differential urbanisation interpretations (after van den Berg *et al.* 1982; CORE – town core, FUR – functional urban region, RING – background).

interpretations are, however, only artificial constructs and do not necessarily correspond with the Roman conception of the Celtic reality, let alone with the Celtic reality itself: the ancient and medieval towns also often lack a rampart, Greek or Latin terms *polis* and *civitas* denote primarily the social or juridical units, only *per extensionem* also their material settlements. Their perimeter may have been materially delimited to denote the area of certain juridical relations, this could however be attained by merely symbolic means. There is no reason why a simple palisade (cf. Roseldorf) should be insufficient to term the settlement as a ‘town’ (Fig. 6.2) or why Manching should become town only at the moment of the rampart construction. On the contrary Hrazany, Gleichberg or Heidengraben cannot be proclaimed ‘towns’ only on the grounds of their impressive ramparts. It is not (a specific type of) rampart that defines the urbanity of a settlement but the concentration of population and of (non agrarian) activities (Johnston *et al.* 2000; van den Berg *et al.* 1982).

Caesar moreover never states the urbanity of *oppida* and significantly one of few places he terms ‘*oppidum*’, where he mentions the presence of artisans and merchants, is *Cavillonum* (BG VII,42,1), Chalon sur Saône, which is in our terminology a PDC/NRC, not an *oppidum* (cf. the similarity with Lovosice: Guillaumet 1985). Incongruities between Caesar’s and the archaeologists’ use of the term ‘*oppidum*’ do not cease there: he also mentions (IV, 19,1) ‘*oppida*’ by the German Suevi where the archaeologists do not know any; a key-element for understanding the ancient settlement terminology is Strabo’s (IV, 3,2), mention of a Haeduan city *Cavillonum* and fortress Bibracte.

La Tène period urbanisation – a general view

Considering urbanisation in general we may state for the

NRC and low-land *oppida* a broad scale of urban traits absent in the hilltop *oppida*: a concentration of inhabitants and production, control of transport, extensive trade activities, cultic facilities, and planned ‘urban’ organisation. When supplemented with a rampart (Manching) they could perform also defensive roles. Most hilltop *oppida*, on the other hand, lack these urban functions (e.g. České Lhotice; Mt. Vully) and their economic significance was probably inferior to that of the low-land centres which could perform urban functions much more easily.

In the hilltop *oppida* on the other hand, the stress seems to have been on their dominant position for either strategic or prestigious reasons. Also the ramparts (with their extent and architecture) were probably built with ostentatious aims in mind. Their foundations seem to have been motivated by strategic and symbolic purposes (e.g. the presence of sanctuaries, see Fernández-Götz 2012; Fichtl *et al.* 2000) rather than economic considerations.

The 3rd century BC PDC/NRC prove in Central Europe sufficient economic and social conditions for the existence of towns well before the *oppida*. They originated in sites naturally suitable for the internal needs of La Tène societies and only subsequently started attracting goods and maybe persons of Mediterranean origin. They were a focus of information, contacts, ideas which could contribute to the further evolution of the urbanisation process, though could not be its cause. The creation of towns (not of fortresses) and restructuring of economic and social relationships could never be implanted from outside. The Central European urbanisation process must therefore have had its own local roots independent of the Mediterranean.

Urbanisation is a human movement into towns. The finds from the NRC and low-land *oppida* testify to a gradual centripetal movement of local producers, not of an afflux of foreign artisans: the pottery produced here is characteristic not

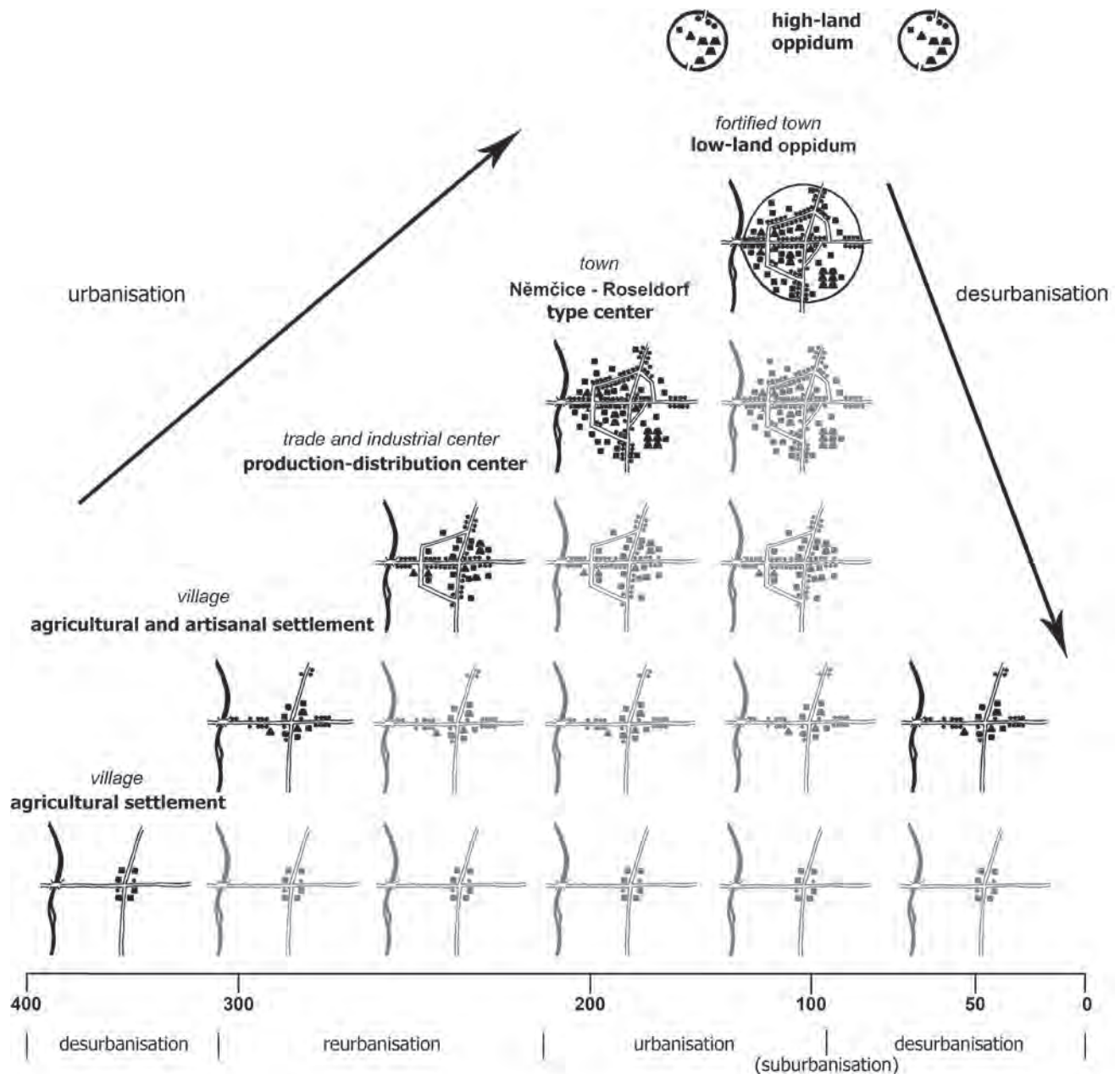


Fig. 6.8: Urbanisation process during the La Tène period (author)

only of Central Europe but of the very regions of the single centres. In this respect, the situation is analogous to the hill-top *oppida*: although the *oppidum* does usually not develop from a previous settlement, its material culture is completely in the local tradition. Even the *Pfostenschlitzmauer* rampart itself is of local, not Mediterranean make.

The LT period urbanisation may therefore be considered as a local process; preceded by the Late Hallstatt urbanisation processes (Krausse 2008), it is not even the first such phenomenon in Central European Prehistory. Rises and

declines of central settlements, concentration of inhabitants and economic as well as other activities, i.e. urbanisation, is a natural process re-appearing in the human History since the beginnings of stable settlements in the Neolithic. Such is the view of the prehistoric settlement structure through the so-called differential urbanisation, which, basing on the proportion of people living in the centres, their hinterland and in the countryside distinguishes four cyclical stages: urbanisation (relative cumulating of inhabitants in the centres), suburbanisation (centrifugal movement from

centres to their periphery and vicinity), deurbanisation (the system's disintegration and abandon of towns) and finally reurbanisation (van den Berg *et al.* 1982). Such an approach may be applied to a whole region's chronological phases and cultural units (Fig. 6.7). The single stages, however, had different durations in different periods and some (e.g. suburbanisation) may even be absent. The curves characterising the urbanisation cycle therefore differ, depending on the periods and cultural milieus.

The La Tène period urbanisation cycle (Fig. 6.8)

The La Tène urbanisation can therefore be conceived only as a part of a repetitive cyclic process. After the urbanisation peak of the 6th–5th centuries BC (e.g. Heuneburg, Závist, cf. Krause 2008), a sudden and profound deurbanisation entered on at the turn of the 5th–4th centuries BC (there are no proofs of the suburbanisation). The former centres/hillforts are abandoned and the absolute majority of settlement sites take up a fully agricultural character. Even in the 4th century BC, however, the settlements differed in significance. Those in suitable positions attracted non-agrarian activities and certain portions of population (e.g. the Lovosice region: cf. Salač 2000a). In these settlements, few workshops started working, supplying the settlement's vicinity with their products (for ornaments cf. Kruta 1975).

From the end of the 4th century BC an inverse trend sets in and a gradual reurbanisation turns into urbanisation in the 3rd century BC. Centres arise (Lovosice, Němčice, Roseldorf, Manching) in which population and production accumulate. The new economic relations are reflected by the introduction of coinage (e.g. Čížmář *et al.* 2008).

The urbanisation process reaches its peak in the second half of the 2nd century BC with the climax of the concentration of population and production in the flourishing PDC/NRC. At the same time, hilltop *oppida* start being founded as a reflection of other – probably primarily non-economic – processes. In some of them we may observe the same accumulation of inhabitants, production and trade. Both settlement types coexist in this period (cf. Lovosice – Závist – Stradonice; Manching – Kelheim – Berching-Pollanten; Bratislava – Hainburg; Němčice – Staré Hradisko).

We cannot prove that a suburbanisation stage followed though a hint in this sense may be found in Caesar's mention of aristocracy living outside the *oppida*. In any case at about 100 BC a deurbanisation gradually sets in. Some centres (Němčice) are abandoned, other ones get fortified and their population and production capacities slowly trail off (Manching, Fig. 6.6a), also the occupation of some hilltop *oppida* gets scarcer (Závist).

This deurbanisation reaches its peak in the mid-1st century BC when the processes get diversified. In Bavaria, Bohemia and Moravia the hilltop *oppida* disappear without

being resettled; no reurbanisation process has concerned them. Also some unfortified centres (Berching-Pollanten) and low-land *oppida* (Manching) are abandoned while others (Lovosice, Kolín) are settled by Germans and continue to be characterised with exceptional finds even after the overall transformation of the archaeological situation. The areas of Linz, Staßfurt, Passau or Hainburg/Devín/*Carnuntum* are soon occupied by the Romans. The functions of the pre-Roman settlements do not disappear, only their form and location undergo some modifications. In this way a reurbanisation phase is launched also in the nascent Roman provincial milieu (e.g. Ficher 2002).

In other areas the 1st century BC deurbanisation phase brings about a shift of centres from their low-land positions to hilltops. They get fortified and their area, number of inhabitants and production capacities clearly diminish (Fig. 6.6b: Basel, Breisach). Also here, a reurbanisation phase occurs with the Romanisation and under completely modified cultural and political conditions.

In actual Gaul the urbanisation process followed different lines: no deurbanisation seems to have occurred. The Romans took up the Gallic settlement structure maintaining it economically relatively prosperous and politically stable (Bedon 1999). Inorganic elements – the hilltop *oppida* – gradually disappear; some of them are supplanted by low-land settlements (Bibracte – *Augustodunum*).¹ In this way, the Romans restituted the purely practical direction of the urbanisation process.

The causes of the (dis)appearance of the *oppida*

The grand projects of hilltop *oppida* do not fit into the natural economic and urbanisation process in Central Europe. The causes of their creation are often searched for outside the system: Someone blames the Celts expelled from northern Italy (Drda & Rybová 1995). Others connect the construction of ramparts with an external threat, most often with the Cimbri (113–102 BC: Čížmář *et al.* 2008; Sievers 2003). It seems little probable, however, that a single event could cause such a profound transformation of the settlement structure from the Carpathian Basin to the Atlantic shores. The causes of the construction of the *oppida* (and of the open centres) must have been embedded in the Celtic society itself and occurred as a result of the changing economic and social relations.

Also the disappearance of *oppida* can hardly be explained by external causes like Roman or Germanic pressure. I tried to demonstrate elsewhere that its possible causes are to be found in their difficult relationship with their agricultural hinterland (e.g. Salač 1993; 2000b; 2005). The fact that the hilltop *oppida* had been founded in climatically and pedologically unfavourable conditions came to cause economic problems, principally in supplying the growing number of their inhabitants with provisions. The hilltop

oppida could not reassure many goods by themselves and had to rely on supplies of foodstuff, wood, metal ores, and even some artisanal products (e.g. quern-stones exported from Bohemia to Staré Hradisko Moravia: Čižmář 2003), not to mention luxury goods (Mediterranean imports). The economic position of the *oppida* was hardly as dominant as had been though since a great deal of production took place in the PDC or NRC and it must have been difficult for the hilltop *oppida* to maintain their position only on economic grounds. Those with the highest concentration of population and production had to assure their survival through an active involvement in trade. With a growing population and a decreasing supply of food and other resources in their closest vicinity, the low-quality soils in the *oppida* surroundings got exhausted and the wood, indispensable for rampart repairs, timber constructions and as fuel grew scarce. The economic problems thus grew more quickly than those of the low-land *oppida*, in comparison with which the hilltop ones were economically disqualified (Buchsenschutz 2002; Jud 1998).

The foundation of hilltop *oppida* was a grave systemic error which brought about persistent economic problems to the whole society. The perfectly fortified *oppida* paradoxically constituted the weakest point of the Late La Tène civilisation and the cause of its economic collapse culminating in the mid-1st century BC.

The hilltop *oppida* did not survive the end of the Late La Tène civilisation unlike some of the PDC and NRC in more favourable communication positions. It was them that the following cultures took up and which continue to be settled until today.

Conclusion: several certainties and uncertainties

- It is obvious that the construction of an *oppidum* in itself cannot stand for an urbanisation process. It is only one of its components, in the case of the hilltop *oppida* even its dead end.
- It is obvious that the significance of the *oppida* and unfortified centres will only become clear when set (together with the whole settlement structure) into the full context of the previous and following development.
- It is obvious that urbanisation must be studied in different regional and chronological levels and a change of perspective requires specific methods of observing this process.
- It is obvious that – as demonstrated by the history of research – the *oppida* themselves cannot explain the causes of their appearance and disappearance.
- It is also obvious that the presented scheme is greatly generalising and simplifying. The development must have been much more complex and variable depending on periods and geographical areas. The

easiest way to change the present universal model of *oppida*-towns is, however, by supplanting it with another universal model.

- It is not sure that the term ‘town’ corresponds well with the Late La Tène reality. The very amount of its definitions makes it clear that we deal here with modern constructions with only loose relation to the past reality. It is therefore far from sure that defining the La Tène town through ancient, medieval or modern analogies or creating auxiliary terms such as proto-town may help us better understand the urbanisation process in question.
- It is not sure that the term ‘the *oppida* culture/civilisation’ is the most fortunate one: most of the civilisation traits it describes came into existence and developed well before the creation of *oppida*: the internal planning; artisanal mass-production; developed trade; monetary economy, etc.
- It is not sure whether the creation of *oppida* should be considered as the climax of the urbanisation process or the beginning of its crisis and the onset of deurbanisation in the La Tène settlement structure and society.
- It is obvious that in order to evaluate the urbanisation processes, it is necessary to find out what proportion of population and of economic activities concentrated in the central settlements and not to what extent their appearance corresponded with what we consider to be a town.
- It is not clear how to find out what proportion of population and production concentrated in the centres.

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Note

- 1 Similarly, *Carnuntum* is founded close to the former *oppidum* of Hainburg.

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Oppida, Production and Social Status – Complexity of the Late La Tène Period in Central Europe

Alžběta Danielisová

This paper deals with the Late Iron Age oppida and their position within the contemporary settlement hierarchy. It aims to examine the socio-economic structure of the Late La Tène oppida in Central Europe: their social and economic potential in terms of food production and social structure in relation to the production mechanisms. The economy of the oppida could be explained partially as a response to environmental conditions and climate; economic development then can be seen as an adaptive system to the balance of the ecological factor. However, neither economy nor society is determined solely by the limits of the environment; social and political factors also played an indispensable role. Therefore, an analysis of the subsistence strategies during the Late La Tène period is as much a social study as it is an economic one. Furthermore, it could eventually help to understand the development of the complex societies at the end of the Iron Age.

Introduction

This paper deals with the economic and social background of the Iron Age settlements in Central Europe with special attention paid to the *oppida*. The distinct intensification of settlement pattern during the Late La Tène period accompanied by specialised activities and long distance trade involved also the founding of the fortified agglomerations out of the traditional settlement zones. This phenomenon was probably influenced by a combination of factors which we have yet to discover.

The *oppida* were conventionally perceived as a peak of social, economic and political development in the La Tène period. They represented complex systems with multiple functions as referred to already in Antiquity (Fig. 7.1). Recently, however, such perception erodes in favour of chronologically preceding *emporia*, the open agglomerations whose economic potential has only recently become more known due to the new findings in recent years. The issue why the *oppida* were founded at such specific locations and whether and how they acted as the central places in terms of the producer–consumer relationships within their own regions could be approached from several points of view.

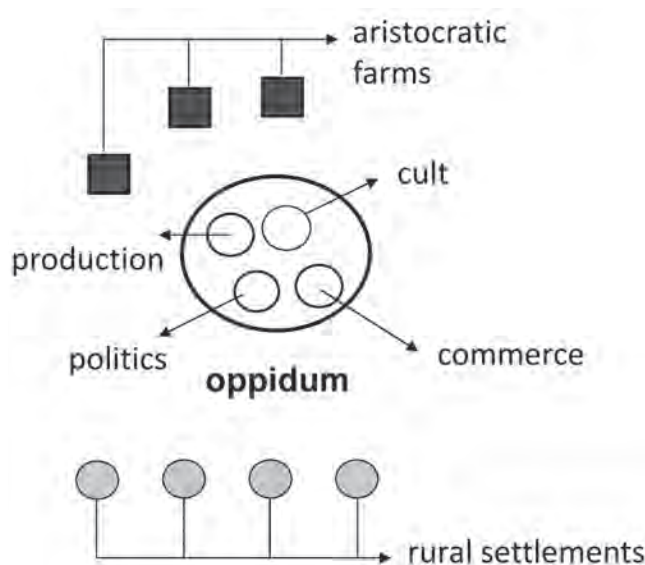


Fig. 7.1: The complexity of functions represented by the oppida according to Gaius Iulius Caesar (author)

But where probably lies the key factor for the Iron Age social hierarchy and what deserves the attention at the first place is a relationship between the agricultural base of the La Tène society, the economic potential of the landscape and the local development of settlements and their social ranking connected to the exchange networks. Therefore special attention should be paid to the hinterlands of the *oppida* and the network of the rural settlements (as J. Collis already put forward in the 1980s). An interesting factor is also a highly embedded notion about the Iron Age settlement hierarchy which affects strongly the interpretations of their social and economic role.

Traditional interpretations tend to see the *oppida* as rather a decline in the development of social trends, as having failed in their function or even as a blind branch in the socio-economic evolution (e.g. Salač 2006). But the whole story was probably not as simple as that. The aim of this paper is to briefly address the Central European *oppida* within their cultural milieu as the centres of production, economic activities, political interactions and social life at the end of the La Tène period.

Urbanisation and the rural world

On the transition from the Middle to the Late La Tène period we encounter a transformation of the society which was represented especially by disappearance of the flat cemeteries at one hand and by the new settlement forms at the other. The phenomenon of the settlement concentrations with new commercial, economic and craft functions and not only the agricultural focus in a wider European area precedes the foundation of the *oppida* and dates back as far as to the 3rd century BC (Kaenel 2006: 31). The sites known from Central Europe follow the distinct pattern along the Amber route, connecting the Baltic area with the Mediterranean. Together with the absence of fortifications, these open agglomerations are characterised by concentrated craft production, and the new element of coin minting. Then in the beginning of the 2nd century BC we encounter a moving parts of the society behind the ramparts of the newly founded *oppida*, probably as the reaction on the new economic and political development in Europe and probably also on the change in long distance trade strategies. The Central European area has undergone the process of the open agglomerations being replaced by fortified sites, but unlike in the West where these spatial shifts were usually on very short distances, the replacements were carried out within the substantially wider areas. The central place is usually moved to a different environment, but this shift does not affect the general settlement structure and connection to the main commercial routes. Until the 2nd century BC when the *oppida* appeared the rural character of the landscape and society was the premise of the Iron Age.

Open agglomerations of the 3rd century BC even if engaged in intensive specialised production were deeply rooted in the country. When the *oppida* emerged, being understood as “deliberate foundations rather than a gradual evolution” (Collis 2000: 223), they formed a new aspect of the settlement structure, which was perceived as a “separation of the rural area from the urban centre by a monumental rampart” (Buchsenschutz 2006: 62).

Within the fortifications the enclosed farmsteads, same as in the countryside, constituted the basic settlement units in the *oppida* (Fig. 7.2) reflecting the traditional organisation of the rural society (Wells 1993: 139). However, the *oppida* were more than a mere collection of farms (Haselgrove & Guichard 2013: 323), although the *oppida* did not reach the urbanisation level of towns as we know them from Antiquity or the Middle Ages. Within the agglomerations the farms also became productive units in terms of crafts industries, organisers of commercial contacts and embodiments of the social life of that time. The complexity of their relations might have been modified individually by the actual conditions of each site and region, but virtually all these sites seem to represent concentration of activities previously dispersed more widely in the landscape (Woolf 1993: 214).

No issue is as complex and variable at the same time as the *oppida* and spectre of their activities, functions and social hierarchies (for the discussion on some of them, see Collis 2000: 233–234). What the *oppida* usually do have in common, at least in Central Europe, is the dynamics of their occupation: according to the archaeological record the population density increased from the beginning of the occupation (the LT C2 phase), peaked around the end of the 2nd century/beginning of the 1st century BC, and then, within two generations or so, it decreased again. This decrease seems to have been quite rapid and the final population might have been even five times smaller than during its highest density. For example at the Manching *oppidum* it seems that the settlement pattern was dissolving towards the end of its inhabitation. Small individual households were founded in places originally occupied by the large ones (Siewers 2004: 69–70). At the Závist *oppidum* during the fifth and last horizon (based on the chronology of the main gate D) the number of livestock decreased dramatically to 10% of the number kept during the occupational peak (Motyková *et al.* 1990: 364). This probably extensive change in the first half of the 1st century BC was not restricted to the *oppida* only, but reflected also on the settlements in the countryside even in wider European context (cf. Haselgrove & Guichard 2013). Causes for gradual trend of depopulation can be seen in several factors both endogenous and exogenous. Beside political (reaction to the military events in the West and East), economic/commercial (difficulties on long distance commercial routes) and organisational (fewer people to perform necessary tasks), the ecological/subsistence problems are worth contemplation as well.

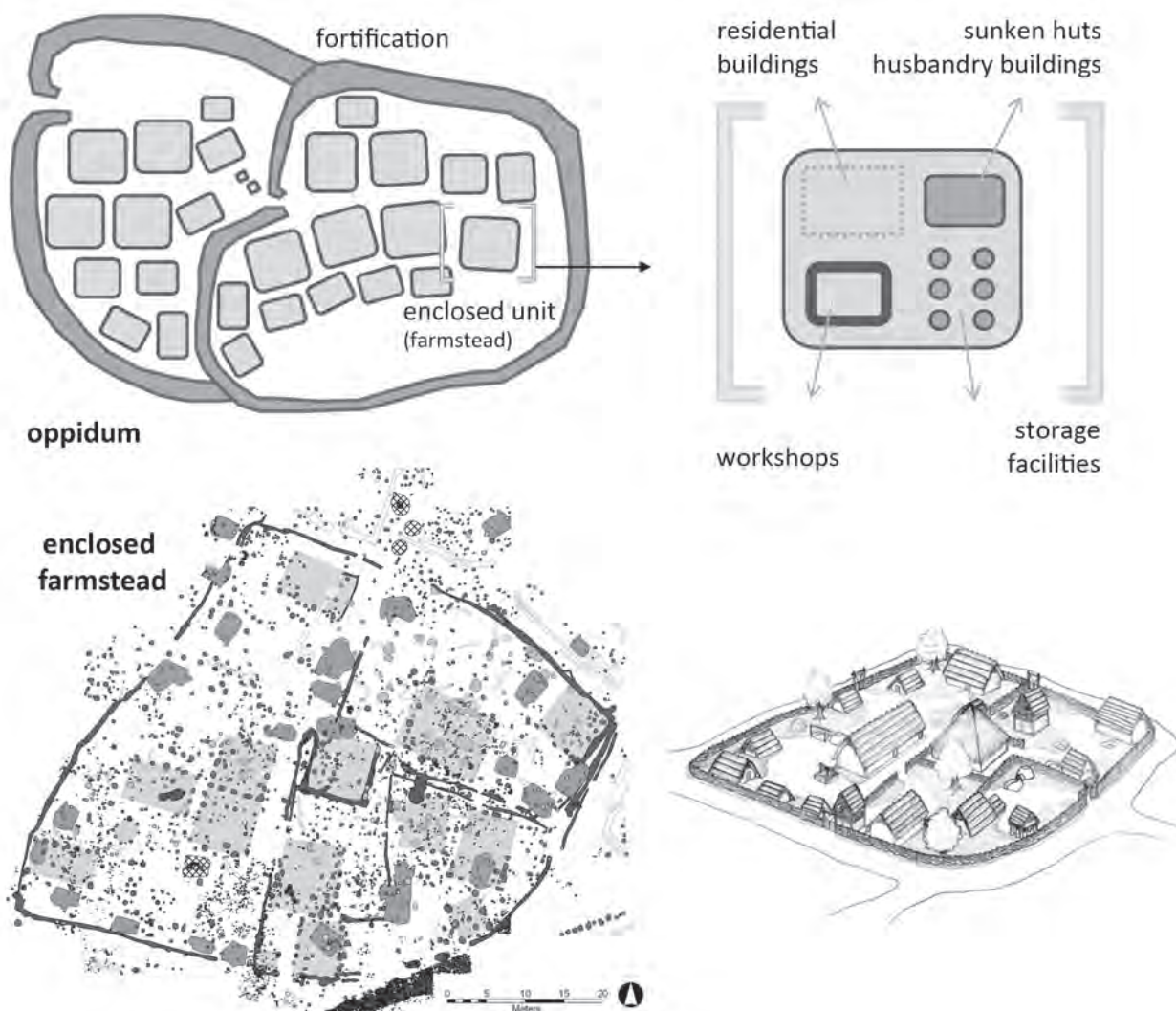


Fig. 7.2: Internal structure of the oppida (inspired by Buchsensschutz 2007).

Regional settlement patterns

The process of the *oppida* founding and their often quite exceptional locations at the margins of the traditional settlement zones raise the important question: was this a very new location strategy never to be repeated in following periods or do the *oppida* locations in Central Europe represented in fact a part of the regional settlement traditions? From the archaeological record it is apparent that many of the *oppida* reveal the occupation evidence from times preceding the Late La Tène period. They were often preceded by Bronze Age or Hallstatt settlements (sometimes even fortified) and finds dated to Early or Middle La Tène periods make no exception either. The evidence of long-term regional settlement traditions connected especially with the communication routes is thus apparent in numerous cases. It is where the settlement structure does not differ substantially

through ages, but it is the position of the central place which moves within the region according to the different functions and demands through different times of later prehistory.

The character and pattern of the unfortified rural settlements in the Bohemian/Moravian territory is partially known from the excavations and extensive surface prospections. Basing on the archaeological record a single household – farmstead or several such units together forming a village were considered as typical Late La Tène settlement types in Bohemia and Moravia (Čižmář 1994; Koutecký & Venclová 1979; Waldhauser 1993). There existed also larger second-order, third-order or another-order settlements where the specialisation and the extensive production seem to be quite probable. However, the ratio of settlements of a family size to larger villages or agglomerations still remains unknown. From the evidence of the surface prospection (cf.

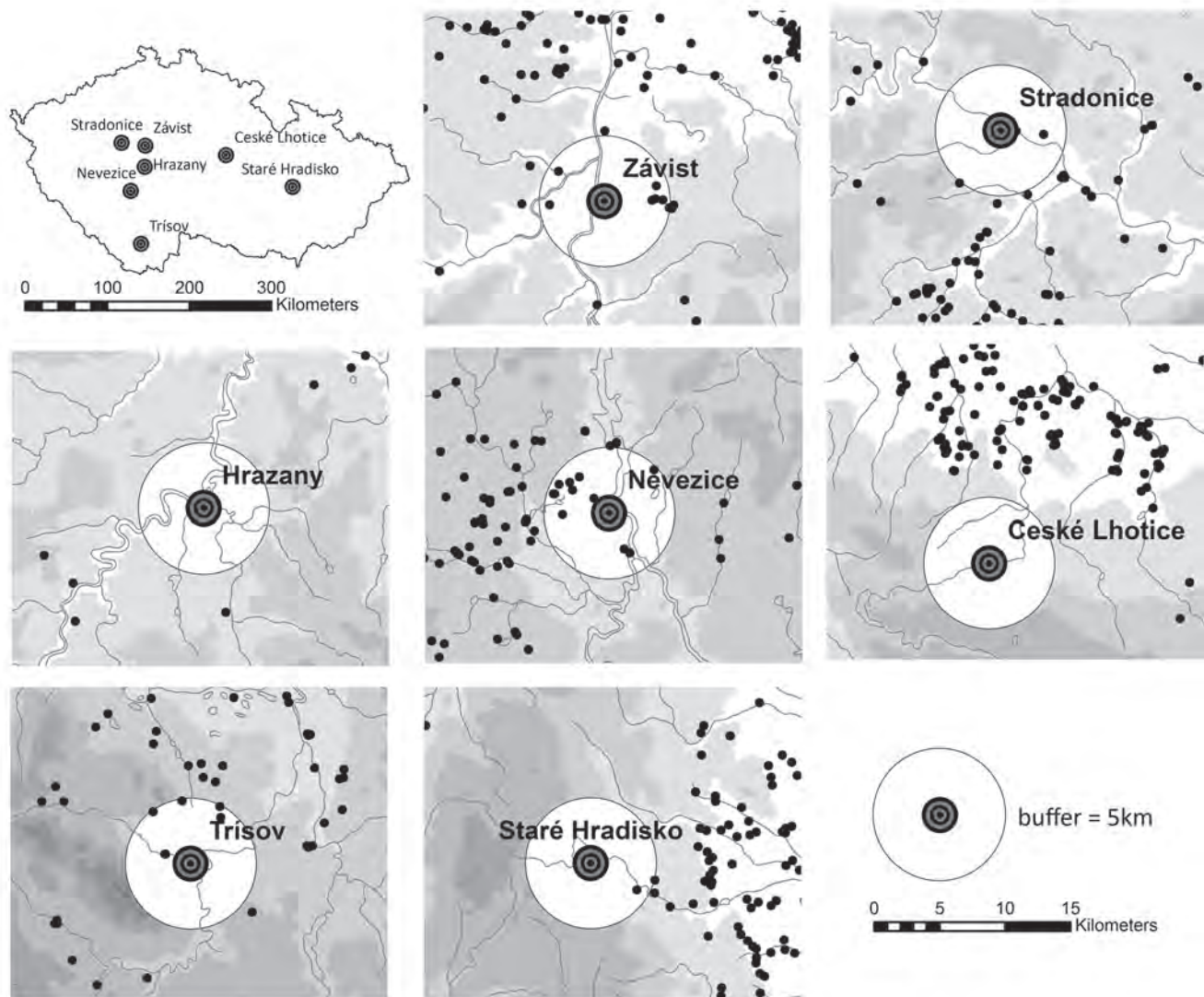


Fig. 7.3: Spatial patterns of the rural settlements in relation to the central site: almost all the oppida show empty 'hinterland' within a distance of 5 km (author)

Kuna 1993, and other unpublished data) it seems that the majority of the settlements were represented by smaller family farms as it is supposed e.g. for Gaul (cf. Bakels 2009: 105; Haselgrove 2007; Haselgrove & Guichard 2013; Malrain *et al.* 2002). The agglomerations, though they are being recently investigated for example in Austria (P. Trebsche, personal communication), are still difficult to prove archaeologically in Bohemian territory (exceptions cf. Čížmář 2003; Waldhauser 1993). Having mostly to judge only from the incomplete excavations or surface scatters, we have to cope with the fact that what in the archaeological record appears as an agglomeration, can in fact be the oscillating residential core of one household or small community site (Venclová 2001).

During the 1st century BC the rural settlements underwent a significant transformation observable over a large territory

(see Haselgrove & Guichard 2013). In Bohemia and Moravia the situation developed probably in a similar way, though this process is mostly evidenced only at the *oppida*. It is because the majority of the rural settlements, due to the lack of chronologically significant finds, cannot be dated more accurately than to the 'Late La Tène period' in general.

Settlement structure around the *oppida* in many cases implies that they have had rather empty surroundings, which could be exploited as their agricultural hinterlands. Many factors – the environmental conditions in the first place and the archaeological evidence in the second – affect this indeed theoretical assumption. Nevertheless, the empty strip of land regularly occurs around the Bohemian and Moravian sites (Fig. 7.3). Such a situation can be observed also around other *oppida*: for example, the results of the investigations around the Kelheim *oppidum* suggested that the *oppidum* "seems

to have commanded a rather empty hinterland” (Murray 1993: 126), although occupational evidence from earlier and later periods was found within the *oppidum*’s close surroundings. Resource requirements are suggested to have been fulfilled by the part of the population of this *oppidum*, which tended the fields and pastures within the hinterland and returned daily back to the *oppidum*. Such situations are explained as an ‘implosion’ of the rural population behind the *oppidum* ramparts (cf. also Collis 2000: 237; Haselgrove 2007: 508, 510; Haselgrove & Guichard 2013: 323; Murray 1993: 125–127).

Complexity of food production

The organisation of food production and its redistribution is an essential factor for understanding the complexity of the society and for determining its limits. Every type of society has a characteristic way of the flow of resources and commodities through it, and the organisation of transforming these resources to products (Fuller & Stevens 2009). Together with the increasing of the social hierarchies, these processes can start to differentiate. This leads to increasing specialisation within the society and to starting up the exchange. Luxury commodities contribute to further outlining the social hierarchies and the increasing of their complexity. However, the basic aspect of ascertaining the level of complexity in the society is the detection of the character and aspects of the food production.

The major aspect in the food production is the significance of agriculture as the primary source of subsistence and organisation of potential surplus production. For the socio-economic development, the key aspect is the principle of redistribution of surplus between the consumption and investment. In terms of the technological and economic progress, which contributes to social complexity, the surplus needs not to be spent, but accumulated for further investment. When a certain level of complexity within a society is achieved, and seasonal tasks somewhere allow engaging in non-agricultural activities and at the same time a regular supply of necessary foodstuffs from elsewhere is provided, regional differences (in terms of specialisation) occur (Klír 2010: 375). Such aspects and their mechanisms in the Iron Age are still being discussed. A traditional argument in these discussions concerning the level of complexity in the Late La Tène society is that the central places were set in their environments as so called ‘total consumers’ (e.g. Salač 2006). That generally means that they were too “specialised” and hence engaged in other activities, so they were not capable of producing any foodstuffs. This fact should have eventually contributed decisively to the collapse of the La Tène social structure as a whole. It is of course plausible, that some of these settlements had to overcome or accept some environmental

constraints (imposed for example by higher altitude) or were forced to adapt their subsistence practices (e.g. develop an alternative approach to the exploitation of land). Contacts of varying intensity with open settlements in order to obtain their agricultural products are equally expectable, but the very idea of the *oppida* acting as pure receivers of the agricultural products, i.e. the “total consumers”, needs reconsideration. The whole Iron Age world despite its technological innovations, specialisation and economic contacts, or its level of complexity, was still principally a world of the common farmer. There are several proofs providing support to the notion that the food production was an inseparable part of the *oppidum*’s life. The evidence is in fact abundant: numerous livestock, agricultural tools, storage facilities, archaeobotanical and pollen analyses etc. (Danielisová & Hajnalová forthcoming). But there are several factors for further contemplation:

Communities in the *oppida* most probably included non-producers; that means that members of the elite and to some degree also full time specialists (if present) could be supported by the part of the *oppidum*’s population, which was engaged in the agricultural production. This non-productive part of the population depended heavily on the site’s socio-economic organisation.

In prehistoric times and during Antiquity the production for a potential food market and its supply was not so much determined by the total harvest as by the amount of surplus production attainable especially by applying sufficient workforce and agricultural strategies. Much of the potential market production was in the hands of local farmers, who, however, consumed a large portion of their production. Therefore, potential market supplies fluctuated quite heavily. Even a minor disruption of supply could cause their costs to multiply (Erdkamp 2005: 145–147). So the primary goal for all ancient farmers was principally to achieve a production stability and then potentially to enter the food market. The reliability of stable and permanent supplies for the non-producing parts of the society, especially in the case of large communities, was therefore low and unpredictable. So when the market integration was not stable and efficient it usually meant that individual communities tended to be self-sufficient in food supplying as much as possible (Erdkamp 2005: 96).

Surplus production is rather a cultural choice – it depends on actual choices made by the particular community in relation to many factors, their production preferences in particular. Technically, the level of surplus production is directly connected with the labour input. As evidenced by historians, the agricultural surplus mostly occurred in the most favourable of economic regions (i.e. the lowlands). In harsher areas (hills, mountains) the cereal production usually stopped at the subsistence and necessary storage level and the community’s capital (such as land and work force) was spent on more profitable non-agricultural activities

(for example stock farming, various crafts and specialised activities) (Klíř 2010: 377).

Specialisation for increasing labour productivity would need stable and favourable market conditions, and a functioning and effective transport system. Potential risk then would be compensated by distribution of available resources across the region through integrated markets or other distributional schemes (tribute, exchange or trade). When the developed infrastructure could offer the price (= supply) stability and demand for regular supplies of goods balancing thus the risk of shortages the specialisation and commercialisation within the region could develop. Small scale husbandry and lack of capital generally hamper the potential for specialisation. Larger communities, i.e. larger producers, might on one hand have created an atmosphere of mutual dependence among households for assistance and labour, but on the other hand could also have led to releasing a part of labour potential towards an increased specialisation and/or the cumulating of capital.

In case the necessary foodstuff was supplied from the agricultural regions, the obvious question would be: how did the *oppidum* reciprocate? Traditionally, the *oppidum*, as the centre of the specialised production, was believed to provide the rural regions with the products of their craft industries. Yet, there is the evidence, that scale and level of technology in the rural regions was capable of supplying the required equipment by its own production (i.e. Venclová & Dreslerová 2007). There is also not much evidence that lowland rural sites were in larger demand for the luxury goods (e.g. amber, imported bronze vessels ...). That shows so far, that the situation in Bohemia and Moravia might have been different from the contemporary Gaul (Buchsenschutz 2006: 58). On the other hand, there is increasing evidence that the coins issued at the *oppida* were not limited solely for the long distance connections, but they were used also in the local trade. This is especially the case of small silver coins, which (due to more extensive prospections in recent years) occur more often also at the open settlements. This might testify about the nature of the economic contacts between the local rural farms and the *oppidum*, in which the farmers had the opportunity of being involved through their labour and/or agricultural products. Rural settlements could maintain a relationship to the *oppidum* in order to provide themselves either by money or goods/services they needed, or to ensure the possibility of using the resources or variables intermediated by the *oppidum* (religious events, feasts, legal rights, protection/shelter in crisis periods).

Production and social status

Social hierarchies and perceptions of social status were reflected in every social aspect; in the Iron Age world this meant probably unequal access to and treatment of the

food supplies. At the Central European *oppida* it seems that the necessary food supplies were managed probably by individual households themselves; this notion is supported especially by absence of any communal storage facilities. Households, besides securing their long-term existence, also aimed to preserve their social status. Seeing as it had long since been represented especially by consumption, a social position had to be regularly confirmed at community events such as communal feasts (Erdkamp 2005: 96). The basic social *niveau* therefore lied slightly above the immediate subsistence level and, depending on the social position of a household; in some cases it also comprised certain luxury aspects (luxury food, personal objects, etc.). Such a 'level of luxury' can then be attainable through the market, probably in exchange for their surplus production when available (Fuller & Stevens 2009: 44), products of their specialised workshops, and in cases of larger, also for money. The power of the Late La Tène nobility (which is archaeologically recognisable) could have arisen probably due to the monetary market and long distance connections. Such social distinctions, based on economic wealth and control over commercial routes, may then span over several generations and create a real interconnected diplomatic environment.

The typical member of the Late La Tène nobility was a fusion between the warrior from earlier period of military campaigns and the 'businessmen' trading along the long distance routes, representing themselves namely by the personal wealth (luxury drink/food, feasting equipment, gold). When attempting to apprehend the number and character of this Late La Tène high social class, in other words the potential non-producers within the society, there is one considerable constraint imposed by the archaeological record – a total absence of any burial evidence from the area of Central Europe. Thus the only information about the social hierarchy during the Late La Tène period can be retrieved from the settlement context and *by proxy* from the burial evidence from abroad. The *oppida*'s settlement pattern shows various different forms of settlement units, which indicate a rather unequal social environment. There are rare examples showing that really a limited number of people could be perceived as 'the highest nobility', whose higher status is manifested by the evidence of the specific (spatially often limited) residential settings, as shown e.g. by the new evidence from the acropolis of the Bratislava *oppidum* (Musilová *et al.* 2010), geophysical prospection of the acropolis of Stradonice, or surface prospections of the Třisov *oppidum*. Recent archaeobotanical evidence from the acropolis of Bratislava shows certain indications of the consumer status of local inhabitants, hence the non-producing part of the society in terms of foodstuff (Hajnalová, personal communication). But as the evidence shows, such part of the *oppida* population was rather small. In some cases they could be separated from the

rest of the society in their residences, but more often they were probably heads of the extended families living in the *oppidum* enclosed farmsteads. J. Collis (2000: 234) refers to it quite convincingly: "Some see these enclosures as working farms; others as the residences of the elite class (...). Perhaps the two interpretations are not mutually exclusive, with the enclosures marking the residences of an elite land-owning class, but whose lives were not as divorced from the realities of agricultural and even industrial production as the elite in the classical world".

Leading groups of the society can eventually become non-producers and put pressure on the remaining parts of the society to secure their food supplies. Supplying organised by this form of social contacts requires developed social organisation, sometimes even with military or other pressure control over large areas (Gamble 1982: 103; Halstead 1995: 18). The environment of socially non-equal food distribution and clientelism may have led to the instability of the whole community due to the social conflicts.

Conclusion

Economy could be explained partially as a response to environmental conditions and climate; economic development then can be seen as an adaptive system to the balance of the ecological factor. However, neither the economy nor society is determined solely by the limits of the environment (Erdkamp 2005: 317); social and political factors also played an indispensable role. Therefore, an analysis of the subsistence strategies during the Late La Tène period is as much a social and political study as it is an economic one. As such it can eventually help to understand the dynamics of the development in the second half of the 1st century BC and explain the 'collapse' of the complex system represented by the *oppida* and their hinterlands.

The decline of the *oppida* is apparent (archaeologically) for example at the *oppidum* of Manching by the absence of certain structures connected traditionally with higher social class, such as decreasing flow of imports, diminishing of special buildings, reduced size of farmsteads and increased 'auto-subsistence'. Relying on the self-production would indicate the collapse of the potential market system. These signs are interpreted as the gradual disappearance of the leading social class along with some of the specialised craftsmen (Sievers 2004). This phenomenon is then explained by the participation of the Late La Tène aristocracy on the major historic events of the 1st century BC, such as Caesar's campaigns in Gaul and the Dacian offensive in the Upper Danube region (Danielisová 2011). The remaining part of the society/nobility could not thrive on its prestige status as before and though the natural resources were not scarcer, the labour mobilisation potential, collective mentality, and potential partners in both day to day and more general

economy were in short supply if not already lost. The crisis or failure of the crucial social class belongs to the main collapse theories and we may presume that it was also one of the crucial factors which contributed to the collapse of the La Tène society in Central Europe. The decline of the *oppida* was supposed to be followed by the 'decentralisation' and dissemination of the remaining members of nobility into the countryside and their subsequent vanishing under the new overpowering systems of either the Roman Empire or the Germanic tribes.

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A Historical-Semantic Approach to the Concept of ‘Oppidum’. The Example of Bibracte

Dominik Lukas

The significance of the technical term ‘oppidum’ has been strongly debated since its first application in archaeology. Originally deriving from the De Bello Gallico by Julius Cesar, the term was used to determine Celtic settlements whose functional interpretation ranged from fortified place, to emporion, city and even metropolis. Approaching the concept oppidum as a historical semantic subject, furthers the understanding of archaeological reasoning in the second half of the 19th century and clarifies existing preconceptions about the oppida and their historic role in Celtic society. The underlying concepts that lead to these scientific models, had not only been determined by the analysis of archaeological documentation, but have also been influenced by the researchers personal background. The example of Bibracte (Mont Beuvray, Burgundy, France) allows a further understanding of the formation of the archaeological term, as this site underwent extensive fieldwork conducted by different researchers (e.g. Jacques-Gabriel Bulliot, Joseph Déchelette), leading to diverse interpretations and definitions of the sites state of urbanisation. By the beginning of the First World War, this site had actually become a prototypical example of the Gallic oppida and was then used to describe Celtic sedentary behaviour as a whole.

Homogenous Layers and pre-Roman Civilisations

In a brief introductory summary, G. Kaenel analysed the problem of applying the term ‘city’ to the heterogeneous structures declared as *oppida* in Late Iron Age archaeology and stated: “(...) l’archéologie permet de reconnaître, voire de mesurer, des différences de fonction, d’importance entre les sites que l’on qualifie d’*oppidum*: d’où la nécessité d’affiner les contenus des cartes sur lesquelles sont fondées les interprétations de cette ‘civilisation des *oppida*’, dont l’uniformité apparente empêche d’en saisir les fonctionnements et les spécificités” (Kaenel 2006: 23).

According to Kaenel, the fundamental problem in applying the term ‘city’ derives from the fact that modern Iron Age archaeology is faced with the illusion of homogeneity that seems to originate in the definition of the *civilisation des oppida*. This concept was introduced by Jan Filip (1971) to describe a phenomenon, that had already been defined previously by Joseph Déchelette in his *Manuel d’archéologie celtique et protohistorique*

(Déchelette 1914). Here, various structures of the Late Iron Age (e.g. Mont Beuvray, Manching, Stradonice and Velem-Szentvid) are compared and combined with the analysis of the common material culture that was shared by different archaeological sites. Déchelette closes his synthesis with the constatation: “On est comme en présence d’une couche uniforme recouvrant une vaste zone du territoire celtique et présentant sur tous les points de ses affleurements les mêmes séries d’objets” (Déchelette 1914: 476). The problematic *uniformité* that has urged Kaenel’s criticism was therefore already part of Déchelette’s argumentation. It is the purpose of this paper to demonstrate how the term ‘*oppidum*’ originated as a concept of pre-Roman urbanisation in the first excavations in France during the second half of the 19th century and how implicit concepts introduced by relevant researchers were brought into the discussion and thus becoming a key issue for the ambiguity of urbanism in the context of the Celtic *oppida*. As will be shown, the issue of sociocultural implications is not only

a problem of explicit manipulation of results or conscious political intentions, but is also rooted in the 'meaning' of singular terms.¹

Research History and Historical Semantics

The Ambiguity of Scientific Terms

In archaeological research, criticism of the development of scientific results is part of the field of research history. The scientific output of specific archaeologists will be examined and possible underlying political intentions in their works by recognising specific interpretations of e.g. Celtic identity will be analysed. The focus of the examination here lays on the researcher himself, the policy he supports or the environment that tries to manipulate and exploit his results.² In the last decades, studies on this subject have increased enormously (e.g. Kaeser 2000; Murray 2002; Schnapp 2002). The central question on how archaeological research developed and how specific researchers or research questions were influenced by their sociocultural background has already been evoked and the knowledge and recognition of this increased significantly.

The determination of the urban status of the Celtic *oppida* is indeed a topic for research history as it is an ongoing discussion since at least the middle of the 19th century. Recently, the objective to understand the specifications of Celtic urbanism culminated in the question on whether it is actually not a question of "urbanism" in general, but the actual definition of 'Celtic' that defines the 'urban', as Sabine Rieckhoff did in her distinction between the 'Celtic' town and the Celtic 'town' (Rieckhoff & Biel 2001: 256ff). On the one hand the term of 'Celticity' has already been questioned rather convincingly to the extent that a proper and righteous denomination of a prehistoric structure as 'Celtic' has become difficult and is a matter of detailed scrutiny (e.g. Collis 2000; 2003). On the other hand, while the term 'city' has been coined by highly different approaches, be it the discussion on Latin philology, the discussion of the term defined by Max Weber (1921), the definition by the positivist approach to induce archaeological parameters directly from the archaeological evidence as it had been proposed in the 1950s and 1960s, its historical development in Iron Age archaeology still remains ambiguous.

In the latter case the focus of analysis is not necessarily an explicit miss-use of the term to support political ideals, but merely the question on the unreflected usage of a not always properly defined term. It seems that the problem of the charged term 'city' is more an indication for the problem of implicit theories and implicit knowledge within scientific terminology. In many cases this is also true for the term 'Celtic', which was not always used because of the inherent aim to support specific policies, but in consequence to its

usage in former publications and its descriptive value for interpretation of the archaeological features.

Also in the context of the *oppida*, archaeology is confronted with the problem of ambiguity of meaning of scientific terms that cannot be solely understood by focusing on the authors themselves, but to reflect on the basic conditions of meaning of terms. According to the historian Reinhart Koselleck the ambiguity of a scientific term derives from the sociocultural background in which a word is uttered. Koselleck distinguishes *Wort* (word) and *Begriff*³ (concept) where words are understandable by common sense while concepts are dependent on specific social, cultural and linguistic background factors (Koselleck 1989: 119–120). In contrast to 'words', 'concepts' are complex and cannot be grasped solely by definition. Koselleck understands concepts as containers of entire social processes that in their entirety indicate meaning. By quoting Nietzsche, Koselleck states that only those terms are definable that have history. Therefore it is crucial to examine the different applications, potentials and opportunities of semantisation of the various means of expression throughout the history of the concepts in question.⁴

This approach can be understood as a consequence of the discussion around the 'Linguistic Turn',⁵ where the status of objectivity and the truth-value of scientific assertions had been questioned on a philosophical scale. Where the linguistic turn emphasises philosophical concepts as being dependent on language, historical semantics question those terms further as being also dependent on the sociocultural context in which they are used.

Methodological Guidelines

In order to analyse the term *oppidum* as a scientific concept, it is necessary to define a framework in which specific texts can be determined that are equally important for the genesis of this scientific term and which are also linked with each other, thus allowing an examination of possible interdependencies. It is necessary to reduce the relevant texts to those that directly influenced the creation of the archetype *oppidum* as it has been described by Déchelette in 1914.

Conducting an intended analysis of historical semantics of the archetype *oppidum* as it became popular in the succession of Déchelette's usage in his manual (1914), this analysis will be based on reports of archaeological excavations on Mont Beuvray from the middle of the 19th century to the beginning of the First World War, conducted by the researchers Xavier Garenne, Jacques-Gabriel Bulliot and Joseph Déchelette. The persons in question have been living in central France, in the towns of Luzy (Département Nièvre), Autun (Département Saône-et-Loire) and Roanne (Département Loire). Being altogether of French origin and therefore sharing the same language community, they arguably share similar social and economic principles (cf. Binétruy 1994). Furthermore, the texts of Bulliot refer to

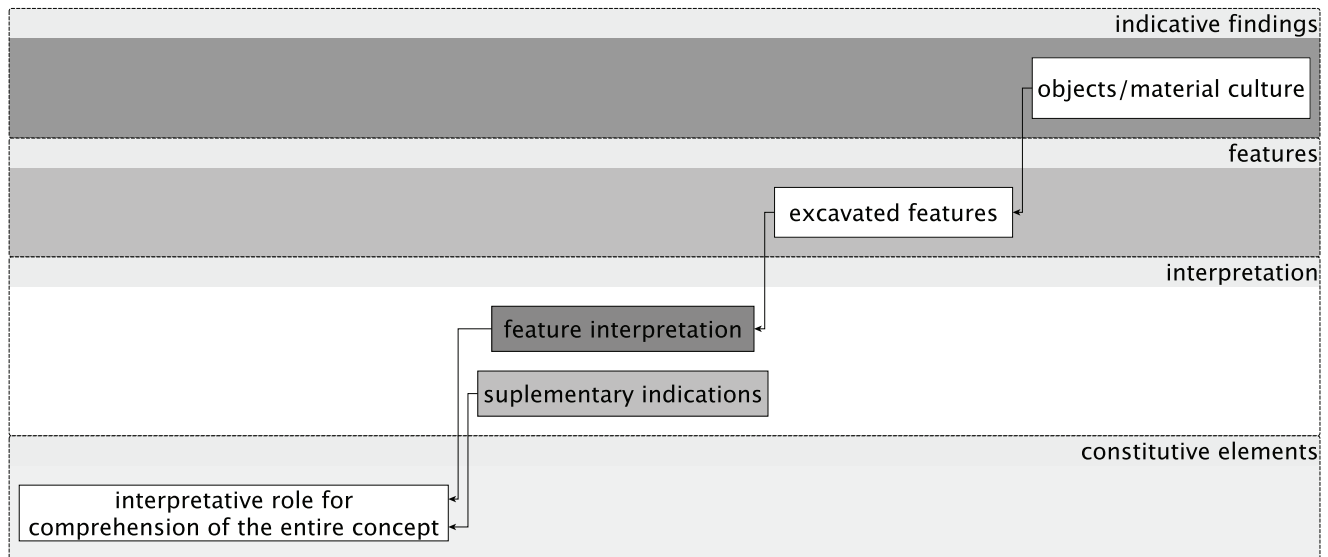


Fig. 8.1: Framework for the confrontation and analysis of the different concepts of oppidum (author)

least indirectly to the text of Xavier Garenne, whereas Joseph Déchelette is heavily quoting information given by Bulliot.

In order to analyse the relevant texts that originally proposed the fundamental parameters of the *oppidum*, it is necessary to apply an archaeological strategy of historical semantics to deconstruct the argumentative basis of these texts, in order to compare them equally. As the argumentative structure of these texts has to be described as heterogeneous in regard to the different authors and their intellectual background, it is also necessary to extract the logical sequence of ‘archaeological facts’ that are used to determine a specific reading of *oppida* in each case. Although 19th century archaeology lacks its own explicit scientific theory, argumentation can be principally subsumed along the denomination of:

- a. indicative findings.
- b. indicative archaeological features.
- c. interpretation of a. and b. in respect to a supposedly known historical context.

In synthesis of the description of these different types of information, the researcher then brings forth a general interpretation of the site in question, combining findings and features with their specific interpretation and integrating the ‘facts’ within a site-specific concept of what the researcher understands as the general interpretation of the site as a whole. Different aspects of these interpretations will be called ‘constitutive elements’ (d.) of the concept in question (Fig. 8.1).

The interpretative understanding of *oppidum* according to each author can then be compared to each other on a

synthetic level, as the argumentation based on indicative findings, indicative features and their interpretation is made transparent. In conclusion, the implicit theoretical structure of argumentation is made explicit and is consequently comparable for further studies.

Research History of the Celtic Oppida and the Sociocultural Context

Interest in the ancient sites of the Celtic era significantly increased after the foundation of the *Académie Celtique* by Napoleon Bonaparte in 1804. The first official act of evaluation of prehistoric traces in France itself dates around the 1830s. Francois Guizot, minister of education of the July Monarchy requested research in that domain in order to initiate the creation of a systematic descriptive inventory of all types of remains of historic and prehistoric periods, that had been identified on French territory. Guizot understood the important role that archaeology played with the discovery of the remains of ancient Egypt, Greece or of the Etruscans. In his opinion, modern France had to represent the same civilising role like the ancient civilisations did in their respective continuum.

For the first time in France, the idea of heritage (*patrimoine*) became evident and was coined with a political impetus. According to Guizot, this term should symbolise the idea that a nation must be aware of the monuments that can be found on its territory, as these represent eternal values of the very nation. National heritage was particularly considered as a representation of moral values (in the national spirit) which were recognised in the historic

monuments of the country (Poulot & Wrigley 1988: 42).

In the romantic atmosphere of that era, these ideas found fertile ground in the genesis of educated societies, the *Sociétés Savants*. The paradigmatic example of Arcisse de Caumont (1801–1873) should be mentioned, who established the *Société française pour la conservation des monuments historiques*. This society was interested in the organisation of interregional meetings of previously only regionally organised scientific societies and to exchange information about discovered monuments in the different territories of France.

Concerning the question of the *oppida*, the project was fundamental to locate pre- and protohistoric monuments. Furthermore, the idea of identifying the *oppida* in the French landscape as they were described in the *De Bello Gallico* of Julius Caesar and compiling inventories of these monuments, were officially institutionalised in the era of emperor Napoleon III. In 1858 the *Commission topographique de la Gaule* was installed with the purpose to research the archaeological topography of Gaul, respectively modern France. It was the emperor's expressed objective to publish a *Histoire de Jules César* (Napoleon 1866), in which he would describe topographic information given in Caesar's account of his military campaigns in ancient Gaul, in combination with the results of the *Commission topographique*.

Methodologically, ancient places known from literary sources had to be identified in the modern landscape and verified archaeologically. Although many topographic insights were delivered by Caesar, the resulting data was not precise enough to identify only one specific place, but rather several probable locations. While Caesar's definition of Gallic placetypes as *aedificium* and *castellum* seem to imply either a small agglomeration of sites or a fortified structure, those places described as *oppida* imply a structured settlement of at least a gradually urbanised character. Some of these *oppida* were even described as *urbs*, a term normally preserved exclusively for Rome, the city *par excellence*. The ambiguity of Caesar's determination of otherwise historically unknown settlements and a term that ascribes an urban potential to those places, triggered a broad scientific discussion on the complexity of the Celtic *oppida* and the question whether they are to be understood as urban places or not.⁶

Excavations on Mont Beuvray

One of the crucial *oppida* in the Gallic wars had been Bibracte, where Vercingetorix, the chieftain of the tribe of the Arverni held a reunion of a certain amount of Gallic tribes to gather and join forces against the Roman conqueror (*BG* VII, 63). For Napoleon and the *Commission topographique*, the localisation of this *oppidum* was not of primary interest. In the ambience of the development of the *Sociétés Savants*,

Jacques-Gabriel Bulliot, a member of the *Société Éduenne* in Autun, focused his research on the question of Bibracte around 1850. At that time it was only common sense that the traces of this *oppidum* were to be found in the subsoil of Autun, the Gallo-Roman *Augustodunum*, although alternative locations had been proposed throughout history. The most qualified alternative was Mont Beuvray, a mountain situated 25 km to the west of Autun (Fig. 8.2). For Bulliot's research this site first gained significance after recognising it as the place of a legendary event of Saint Martin, who was following his missionary duty to baptise the pagan population. After having examined the site he arrived to the conclusion that the still visible earthen ramparts, that surrounded an area of ca. 140 ha, had to be indicators of a pre-Roman settlement (Bulliot 1852: 186).

In 1856 Bulliot published an *Essai sur le système défensif des romains dans le pays Éduen* giving a description of the region between the Saone and the Loire, bordered north by the Seine and in the south by the Charollais region. The mountains of this region have been found to be occupied by various pre-Christian fortifications. Bulliot mentions these structures in his work and interprets them as markers of an integrated defensive system. In addition to the fact that no excavation in Autun had ever delivered pre-Roman material, his conclusion was to identify the remains on Mont Beuvray with the *oppidum* Bibracte. Bulliot thus generated a general layout for a systematic concept of *oppidum* based on the structures on Mont Beuvray. The basis for this first concept is the topographical situation of the site – its position in the landscape (Bulliot 1856: 130). The main aspect of the *oppidum* is seen in its defensive function. As a secondary feature, the *oppidum* also included simple habitations that were meant to be built of perishable materials. Bulliot underlines this observation with the idea of moving the capital as part of the historic reorganisation of Gaul in the time of Augustus when the newly founded *Augustodunum* is presumed to have taken over the role as principal capital.⁷ Besides these factors, Bibracte was assumed to not support any type of economy nor or to hold political administrative organisations as these were only necessary institutions for a Roman city. In consequence, Bulliot defines the *oppidum* as a 'defended city', a definition that shares the idea of a fortified place as well as an urban agglomeration (Bulliot 1856: 135).

Bibracte on Mont Beuvray

A fierce debate was ignited concerning the localisation of Bibracte, which had a very strong political connotation (cf. Guillaumet 2000). Certain republicans supported a localisation in Autun while those who supported Napoleon III favoured Mont Beuvray. In to prove the existence of Celtic presence on Mont Beuvray, the *Commission topographique* funded Xavier Garenne, who opened small trenches and published his results in 1867 (Fig. 8.3). After Napoleon

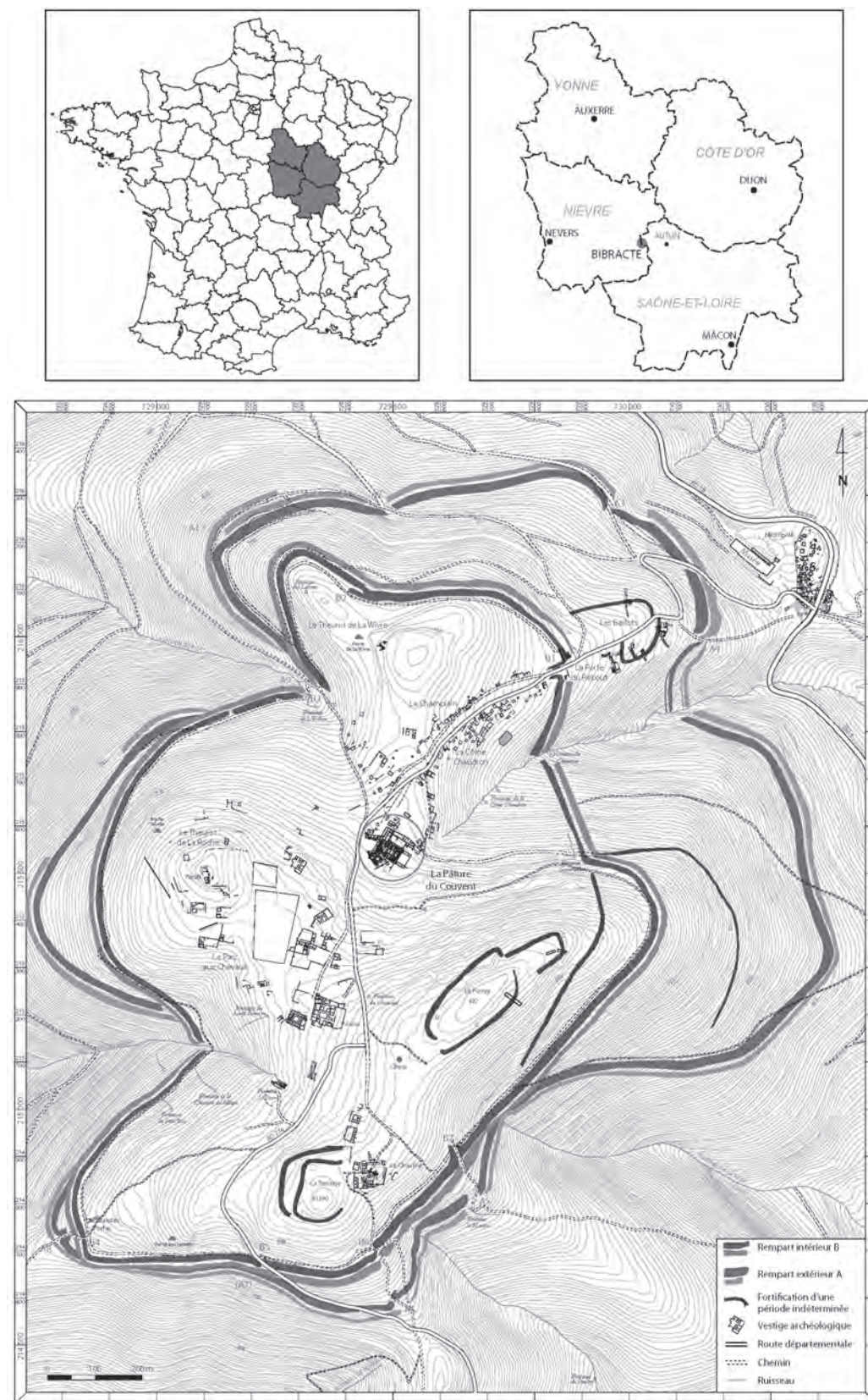


Fig. 8.2: Localisation of the site of Mont Beuvray (Département Nièvre/Département Saône-et-Loire, Burgundy, France) and general plan of archaeological sectors (copyright by Arnaud Meunier, Centre Archéologique Européen)

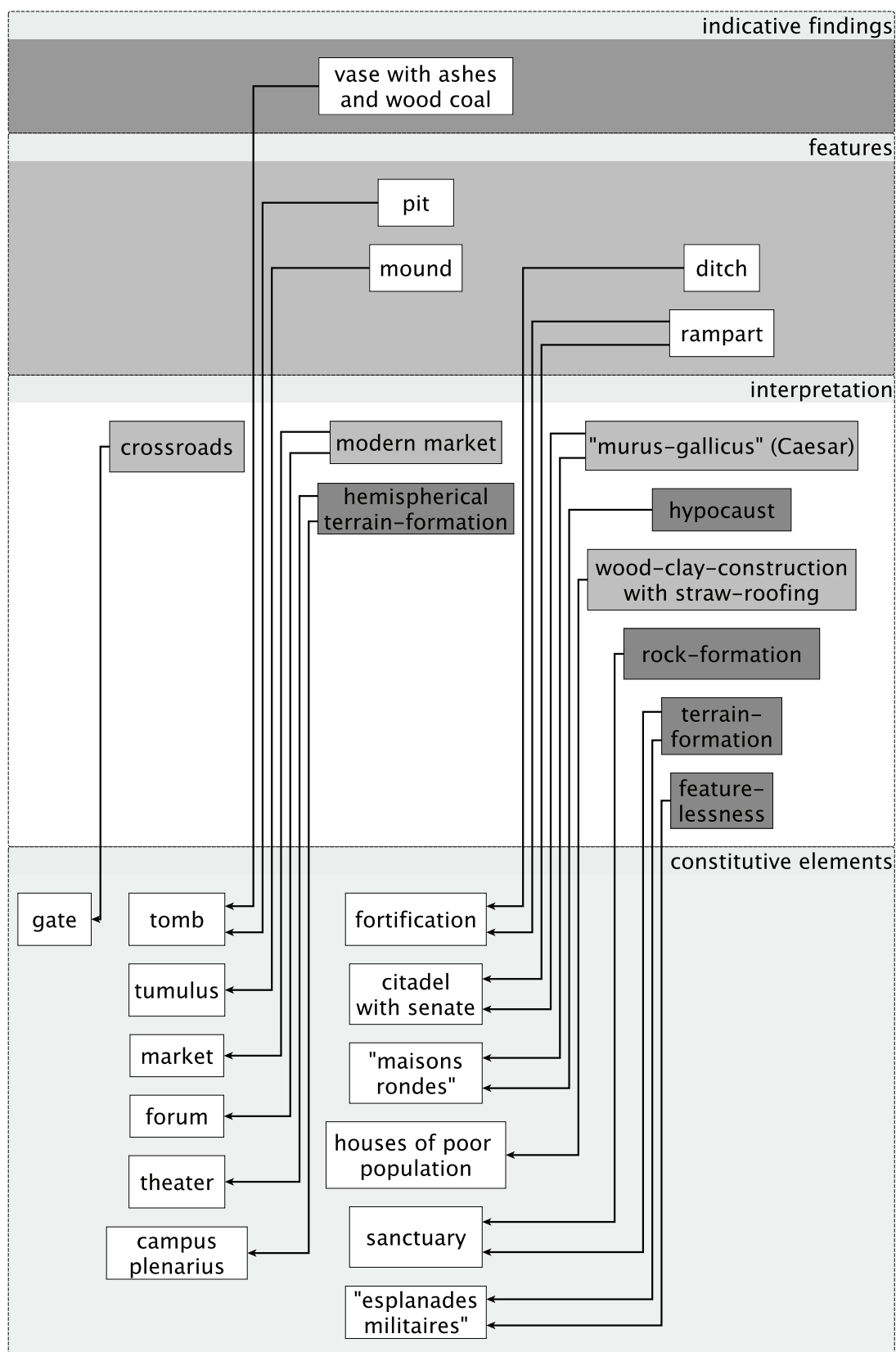


Fig. 8.3: Conceptualisation of the oppidum according to Garenne (1867) (author)

located Bibracte on Mont Beuvray (Napoleon 1866: 67), the debate had been decided on an administrative level.

To a large extent, Garenne follows the methodology of the common approach to pre-Christian architecture at the time.⁸ These early approaches understand megalithic monuments, cemeteries, mounds or walls to be Prehistoric and therefore of Celtic origin. These writings demonstrate a concept of historical continuity that either derives from religious belief or from the idea of the eternal nation (Richard 1991: 25). Batissier (1843) for example reflects in a long passage on the discussion on the *oppida* and the idea of understanding them as Gallic cities. Dwellings in these cities are thought to be huts of wood, clay and straw. Batissier (1843: 176) quotes Caesar, Strabo and Vitruvius to support his conclusions.

Garenne's reasoning follows the same primarily historical orientation: Archaeological excavations only serve the understanding of the historical context and fieldwork results are taken into account for the description of morphological specificity or scenes of life. One example is his usage of the Caesarian description of the fortification of *Avaricum* (BG VII, 23). Garenne identifies this type of construction not only by the ramparts of *La Chaume* (Garenne 1867: 87), but also by the walls of private houses, as for example in the so-called *Maison de Dumnorix*. For Garenne another type of housing were those of straw and clay construction, obviously deriving from the descriptions of Caesar, Strabo or Polybius (Garenne 1867: 88).

Garenne also identifies several areas in the *oppidum* with different functional significance. The ramparts of *La Chaume* are built as a citadel or city hall, containing the senate of Bibracte (Garenne 1867: 68–69). Another structure, that later will be identified as a Roman *domus*, is interpreted as a theatre. In a combination of geomorphological observations and etymological reflections Garenne identifies the ancient forum of Bibracte at the location of a contemporary rural market held each year on top of the mountain. The reason for this is not only the existence of this modern market on the site, but also the name of the neighbouring landscape of *Le Porrey*. According to Garenne the modern name had derived from the Latin term *emporium*.

According to Garenne, the *oppidum* of Bibracte should be interpreted as a city. All the necessary structural elements as mentioned by Servius (e.g. the senate on *La Chaume*) are present. In comparison to other known *oppida* (*Alesia*, *Avaricum*, *Vesontio*, *Gergovia*) or other sites not known by historic name but described by Bulliot (1856), Bibracte can be considered to be an *oppidum* of maximal dimensions (Garenne 1867: 63).

La Cité Gauloise

In 1867 systematic research began with the first extensive excavations organised by Bulliot that were again supported by important funding from the emperor Napoleon III. In the

following years (up to 1872) Bulliot's excavations were not only published in the journal of the *Société Éduenne* (cf. Bulliot 1899), but also in the *Revue Archéologique*, which was then accessible for a nationwide audience.

The excavations focused on the region of *Côte Chaudron* and *Champlain*, inside as well as outside of the fortification while also examining the structure of the rampart itself (Fig. 8.4).

Excavations at the entrance (*Porte de rebut*) and the ramparts revealed constructions that seem comparable to the description of the fortifications in Caesar's account. Furthermore, similar constructions that were defined as *murus Gallicus* by Caesar (BG VII, 23) were already found in Murcens (Castagné 1869).

On both sides of the main street, which enters the site by the *Porte de rebut*, Bulliot was able to uncover many buildings in wood-clay-stone-architecture that were supposed to be roofed with straw. Like in Garenne's publication this interpretation derives from Caesar (BG V, 43) and Strabo (IV, 4, 3). Bulliot highlights the level of civilisation referring to Cicero⁹ and defines the dwellings as 'huts'. In his opinion, the Gauls had not yet reached a level of civilisation to build right angles.

Within these constructions, large amounts of iron, slag and evidence for metallurgy were found. The discovery of features that allowed the interpretation of workshops (clay tubes, fireplaces, burned clay) indicates an important level of Gallic craftsmanship. Bulliot was quite surprised by the presence of metallurgical remains and therefore published a long article dealing with the metallurgical production and the *Emallerie* of the Gauls (Bulliot & de Fontenay 1875). Although the quality of the objects is striking, Bulliot understands them only within the aesthetics of classical civilisations, whereas, in Bulliot's opinion, the Gallic producers lacked 'imagination' and 'fantasy' (Bulliot 1899).

The discovery of long wooden buildings between the road and the workshops were interpreted by Bulliot as remains of a *porticus* construction along the road. However, these features are missing the specific indicators for this interpretation, but Bulliot assumed, in the same manner as Garenne, that the existence of regular fairs on the mountain in contemporary times, underlines the idea that Bibracte had a certain economic importance (Bulliot 1899: 233).

Contrary to Garenne and to the methodology of the era, Bulliot applied a consequent archaeological method. While Garenne was excavating small trenches, Bulliot systematically opened trenches in order to discover stone masonry and then followed these walls by parallel ditches. He was thus able to uncover entire architectural ensembles that he reconstructed mainly as sedentary structures. Of course Bulliot nearly never considered different construction phases or stratigraphical elements attached to the walls (cf. Guillaumet 2000).

Complementary to his focus on the archaeological

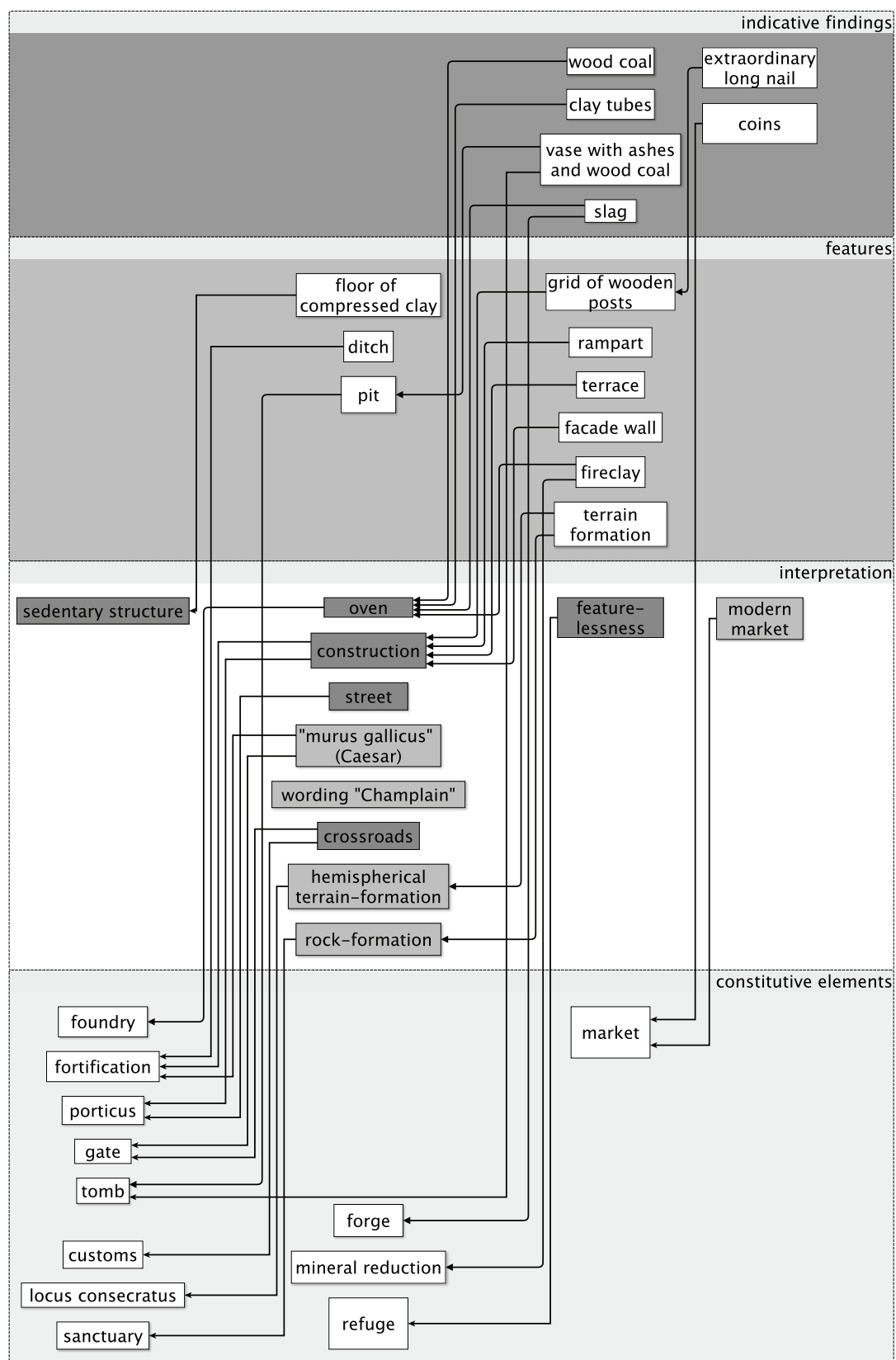


Fig. 8.4: Conceptualisation of the oppidum according to Bulliot up to the publication of *La cité gauloise* (1879) (author)

evidence, Bulliot still examined the traditional understanding based on the analysis of historical sources. In contrast to Garenne he did not only quote ancient authors, but tried to integrate archaeological and historical knowledge into one coherent interpretation. Even if Bulliot discovered rather unusual, ‘Ungallic’ traces on Mont Beuvray, he hesitated to interpret the site as a sign for urbanisation or the *oppidum* as a city. One reason for this can be seen in his difficulty to understand possible similarities between the pre-Christian society of the Gauls and the Roman conquerors. To a large extent he followed the work of Numa Denis Fustel de Coulanges’ (1830–1889) *La cité antique*. Written in 1866, it was one of the first theoretic examinations of ancient cities (cf. Finley 1977). According to de Coulanges the notion of city is based on the understanding that urbanisation and civilisation are two parallel, inseparable phenomena.¹⁰ De Coulanges therefore distinguishes *Cité* and *ville*. In consequence, the term *cité* bears the signification of city-state.

Together with Roidot, Bulliot published the *Cité gauloise* (Bulliot & Roidot 1879), where they discuss the theoretical application of *La Cité antique* to the archaeological results of the research on Mont Beuvray. While de Coulanges describes an entirely urbanised society, Bulliot and Roidot find it difficult to interpret the present settlement patterns in a similar way. To them, the creation of a Gallic urban space was not possible for the existing population, because their social structure was not elevated enough to conceive the idea of urbanisation. However, after taking the complex structures in *Come-Chaudron* into account, technical competitiveness within Gallic society¹¹ was indeed proven. Still, the general notion that civilisation was only possible in the classical Mediterranean cultures prevailed. While de Coulanges did not give a frame of reference in the *Cité antique* itself, he criticises the idea of a civilised level in the Gallic societies comparable to that of the Romans in other publications (de Coulanges 1901). The verdict about the urban status of the Gallic society remained the same: there were no cities in Gaul before the conquest.

The *oppidum* therefore has to be interpreted as a fortress and as an *emporium*: The dual function of the *oppidum*, both as a fortress and as *emporium* does not only respond to a functional division at the time of Gallic independence, but is also understandable in the political context against the “partisans de l’enthousiasme des villes Gauloises” (Bulliot & Roidot 1879: 29)

Forging the Industrial City (1879–1907)

Although conducting intensive research in the following decades – up to 1896 – Bulliot does not change his interpretation fundamentally. With the end of the monarchy in France, the lavish funding by the state seized after 1870. At the end of his fieldwork, Bulliot managed to have nearly 10% of the entire site excavated and to have gained a

profound insight in its architectural remains (Guillaumet 1996). As a preeminent example the *Parc-aux-Chevaux*, on which a large number of structures similar to the Roman *domus* type are situated, was examined. The most important of these buildings is the PC1, the complex with the longest history of research of all structures on Mount Beuvray. In Garenne’s excavations this building had been interpreted as a theatre due to its crescent-shaped topography. Excavations by Bulliot provided evidence suggesting that it might be a large rectangular building of Roman type (Bulliot 1899: 308) that Bulliot compares with buildings Pompeii (Bulliot 1899: 338). Around Pierre Salvée (Fig. 8.2), Bulliot also examined artificial terraces. As these excavations did not yield fragments of tiles, he interprets the structures to be of Gallic origin. According to Bulliot the terraces can be understood as structures of refuge¹² (Fig. 8.5).

As a result, in the end of his field campaigns Bulliot described the social situation of the residing Gallic tribe of the Aedui having reached the “Apogée de la civilisation gauloise” (Bulliot 1899: 507).

After Bulliot’s compiled publication of his excavation reports in 1899, his nephew Joseph Déchelette resumed the fieldwork. At the end of the 19th century, archaeological research had changed its status of ‘exemplification’ for historiography and had gained a basis with a consequent methodology of systematic research. The work of Déchelette included not only the already known method of comparing different structures, but also the systematic comparison of findings. Contrary to Bulliot, Déchelette explicitly stressed the analysis of the material culture and the processing of the findings. As his research was centred on the comparative method of analysis of similar objects that can be found throughout the research region, the fieldwork results from the excavations of Déchelette therefore did not add many new structures to the plan of Mont Beuvray (Fig. 8.6).

Although not having retrieved fundamentally new archaeological features that could allow a change in interpretation, Déchelette’s reading of the entire site shifts significantly. For example, the *Parc-aux-chevaux* is now described as the “aristocratic centre of an industrious city” (Déchelette 1904: 65). While Bulliot understood the lack of right angles in the architectural patterns of the archaeological remains as technical inability, Déchelette considers this to be a specificity of the Gallic aesthetic code: the construction of right angles was simply of no concern to the inhabitants.¹³ What meant irregularity for Bulliot, became intentional and a decisive act in the point of view of Déchelette.

In his manual the question of the urban status of the *oppida* is underlined in reference to the interpretation of Camille Jullian in whose work *Histoire de la Gaule* (1908), that he explicitly understood in respect to the aforementioned series of works under similar title from the middle of the 19th century (Motte 1991: 84), he defines the Gallic *oppida* as cities. This interpretation does not

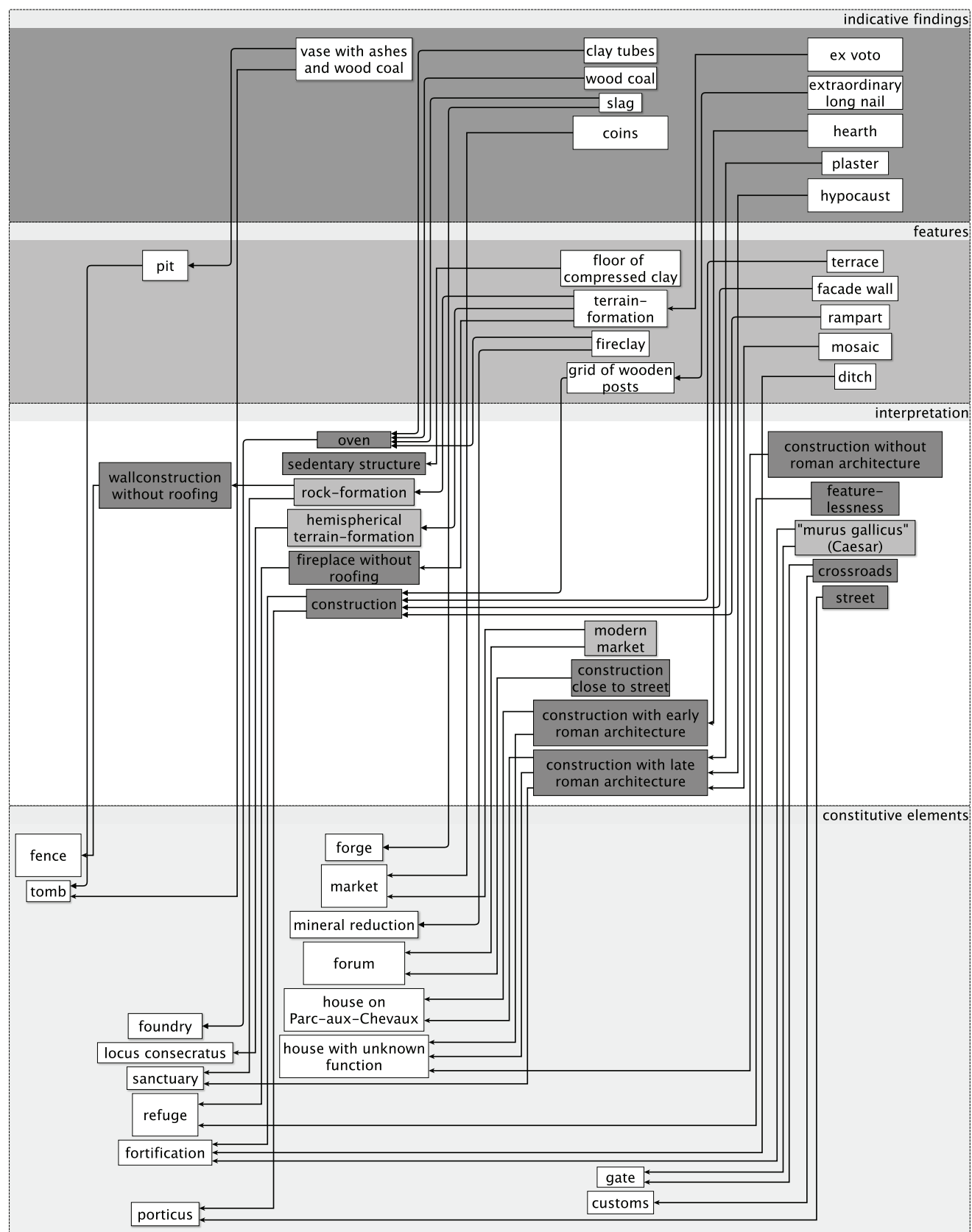


Fig. 8.5: Conceptualisation of the oppidum according to Bulliot at the end of his archaeological research (1899) (author)

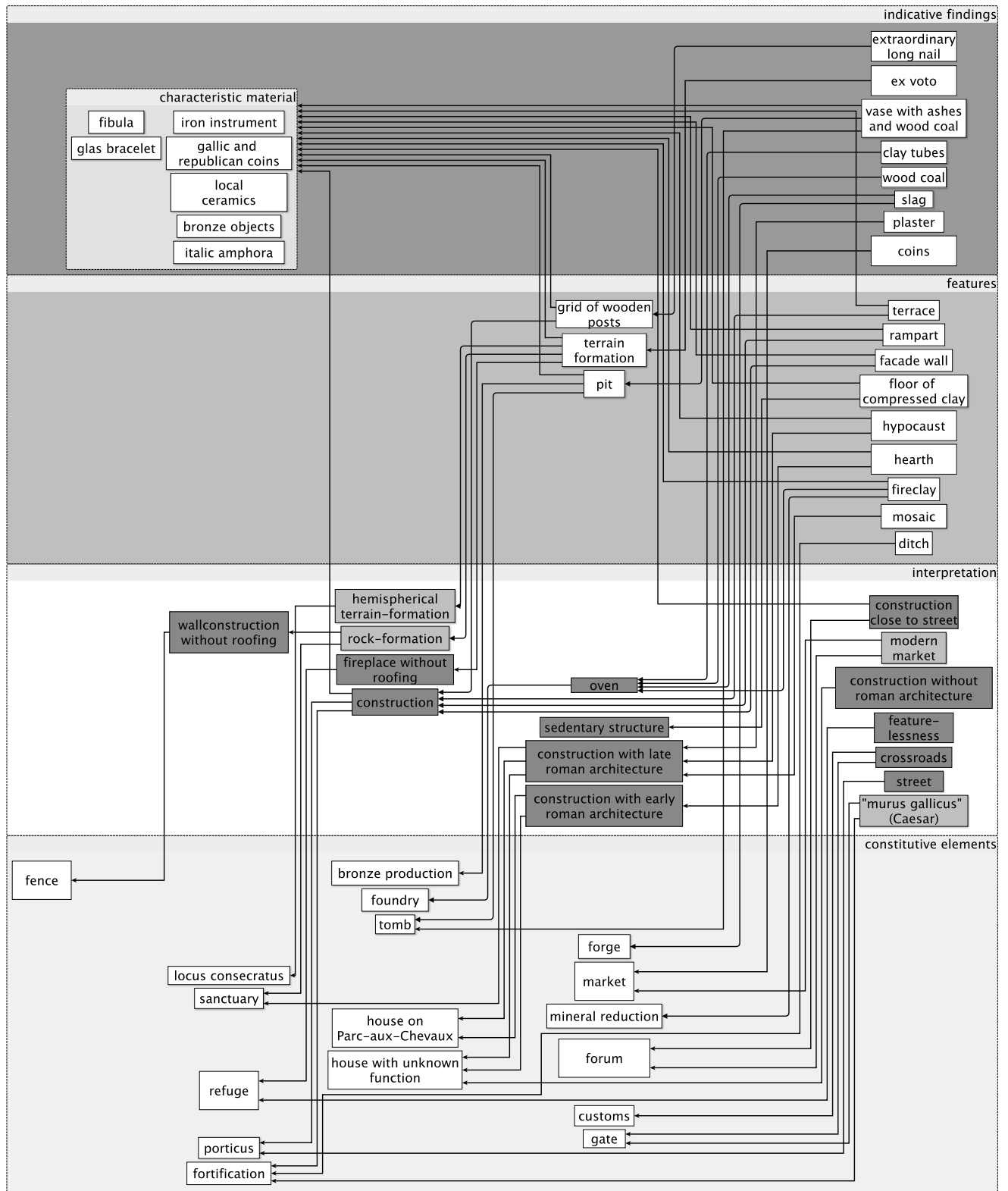


Fig. 8.6: Conceptualisation of the oppidum according to Déchelette with specific consideration on Mont Beuvray (1904) (author)

necessitate a similar configuration like their Mediterranean counterparts to be considered as tribal capitals (Jullian 1908: 240). Déchelette for his part refers to this conception as well in his introduction to the classification of the *oppida* (Déchelette 1914: 948) as well as in the description of the *oppidum* of Stradonice (Déchelette 1914: 981) and accepts Jullian's opinion on the urban status as an authoritative interpretation. Déchelette therefore leaves no doubt that, in his opinion, the *oppidum* Bibracte was a prosperous city.¹⁴ The Gallic tribes had already reached the level of a fully equipped civilisation. In addition to his preconception on the social status of the Gauls, the basis of the uniformity of the Gallic stratum, the predecessor to the *civilisation des oppida*, is in consequence more based on the seemingly similar material culture that was found during archaeological excavations and not so much on the equality of the sites themselves. The concept of *oppida* as it can be described according to the analysis in the *Manuel* (Fig. 8.7), shows the comparative approach in both directions: the comparison of archaeological features as well as finds. The architectural structures of Déchelette's *oppidum* described in the *Manuel* mainly correspond to those of ancient Bibracte on Mont Beuvray. The reason for similarity between the *oppida* therefore is less significant in terms of morphological similarities as in the material culture, which makes Mont Beuvray comparable to sites like Manching, Stradonice and Velem Szentvid. The interpreted uniformity therefore is mainly based on specific types of objects that were found throughout the region in question.

Aspects of Discourse

The development of the concept of *oppidum* as it has been summarised giving the background of excavations at Mont Beuvray, can on the one hand be described as an 'additive' concept, as archaeological results are summed up to a generalised, global idea of the site in question. Architectural remains as well as findings are taken into consideration and, in general, all factual results of fieldwork of previous research on the site maintain their relevance (Fig. 8.8).

As the meaning of *oppidum* does not remain intact throughout its development, while central key features like archaeological results or referenced ancient sources are dealt with simultaneously by all authors in question, the ambiguity of the term *oppidum* has to be understood as a result of the implicit interpretation of applied terms originating from the discourse of the second half of the 19th century. This ambiguity seems to centre around three main aspects:

1) An important difference between Bulliot and Déchelette can be recognised in the theoretical background of their analysis. The underlying notion of Gaul and its Roman opponents derived from respective opinion-building sources like de Coulanges for Bulliot or Jullian for Déchelette. Where Bulliot found theoretical comfort in the study of the

works of de Coulanges, Déchelette understands the historical context of the *oppida* according to the line of thought of Camille Jullian, who is based on the assumed civilising status of the Gauls. The distinction of both explanatory schemes and their necessarily different results for the interpretations of the concept *oppidum* can be explained best with a debate on the Gallic level of civilisation, led by de Coulanges and Jullian themselves:

In the aforementioned *Histoire des Institutions politiques de l'ancienne France* de Coulanges examined different social structures in French History and Prehistory. As one result, he again underlines the idea that the Gallic society was not able to develop complex political institutions as it was the case for the Roman civilisation. In a second edition published by Jullian in 1901, the latter contradicts de Coulanges explicitly in his point of view of the Gallic civilisation, that in contrast to de Coulanges, Jullian understood as equal to the Mediterranean societies (de Coulanges 1901: Préface).

For the question of the *oppidum* on Mont Beuvray, it is at least not only in consequence to archaeological research that the thesis of the urban character of these sites is supported, but the necessity of the social and cultural ability of the Gauls, that define the site as a city.

2) The background and argumentative framework for combining past and present realities in the same interpretation can be understood as cultural continuity through time, as it is manifested by the definition of *patrimoine*. While Garenne referred to the Gallic tribes as predecessors of the French nationalist state, which is not only founded in the same territory, but is also bound to its past by historical, linear continuity, Bulliot emphasises the importance of this linkage and supports the idea of religious continuity that connects residents throughout time by sharing the same space. Evidence is found in his assumption of determined functionality to marketplaces or sanctuaries. The idea of historical foundation of the nation state in its past, monumentalised by its archaeological and architectural remains (cf. Dietler 1998: 74) does not play a role in the concept of Bulliot. This again became only a relevant issue with Déchelette on the background of Jullian's theoretical analysis.

3) The problem of implicit terminology is not only relevant for the *oppidum* itself, but also for terms used within scientific argumentation, which are influenced by the alternating definition of the term in question (Fig. 8.9). While the personal opinion of the researcher on Gaul and Roman influences forms part of the reasoning and interpretation, terms such as *industrie* or the concept of continuity as it is transported by the term *patrimoine* also play a decisive role.

For example *industrie* became of central importance in Bulliot's concept after he discovered the archaeological remains of *Côme-Chaudron* and *Champlain*. Bulliot's

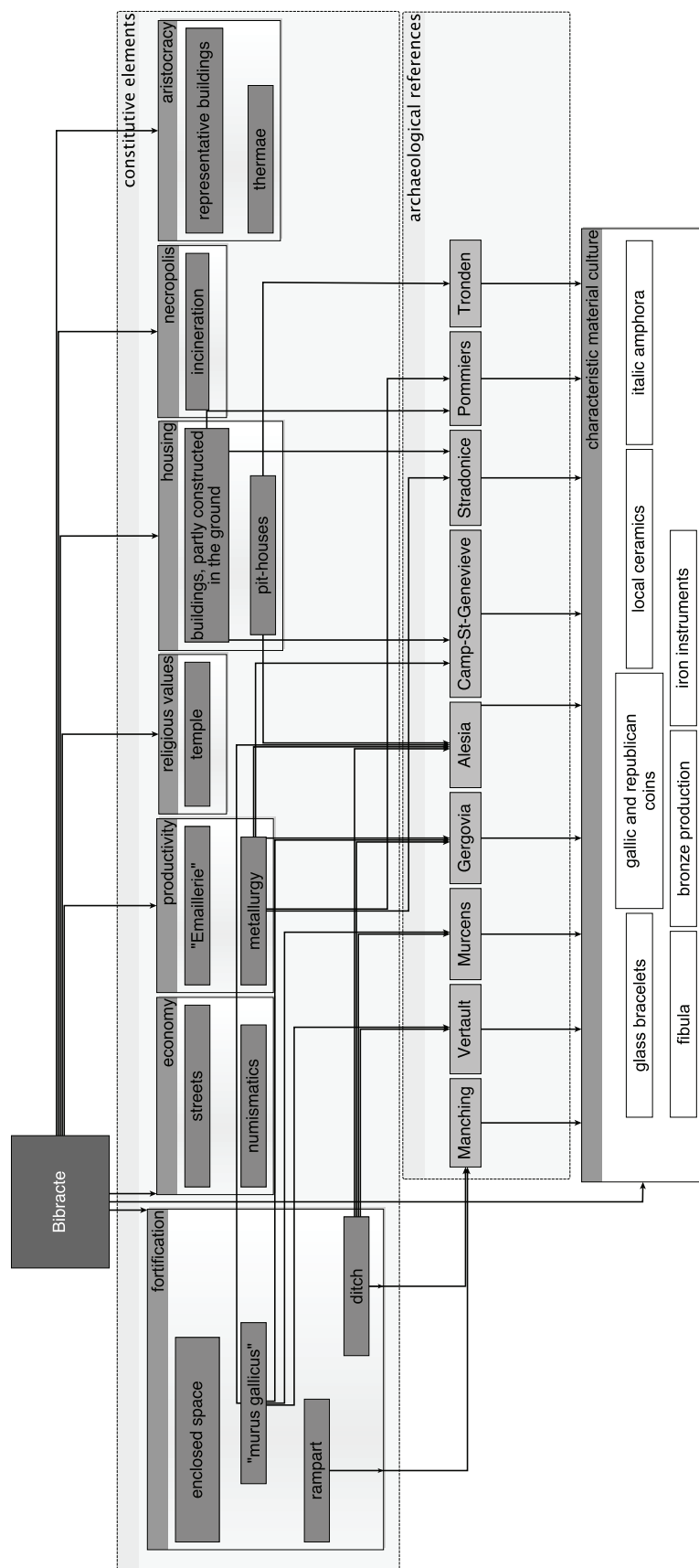


Fig. 8.7: Finalised concept of the oppidum according to Déchelette (1914) (author)

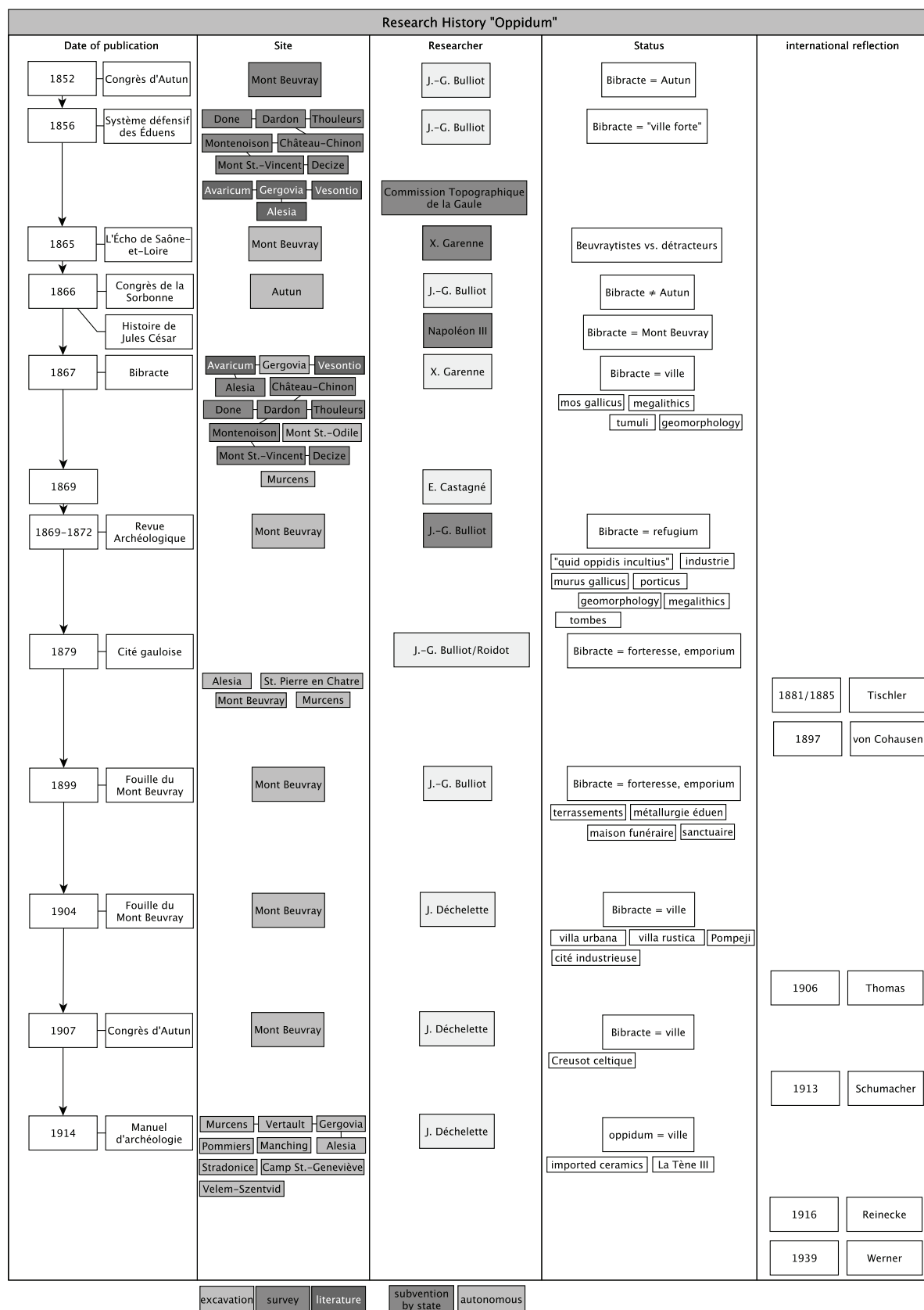


Fig. 8.8: Timetable of research on the concept of oppidum from the middle of the 19th century to the beginning of World War I (author)

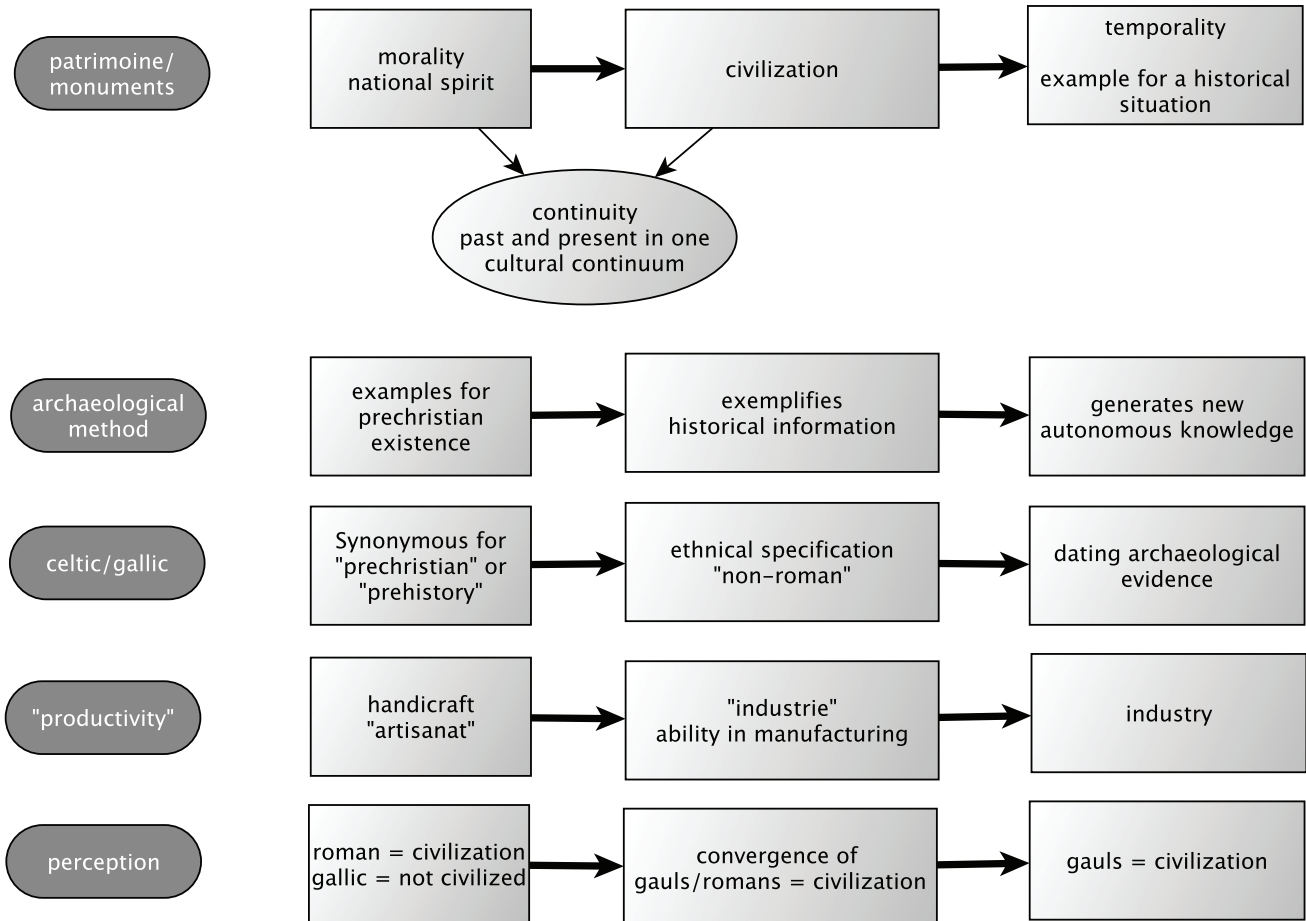


Fig. 8.9: Development of specific aspects of discourse around the concept of *oppidum* (author)

definition of the term is identical to the concept of the middle of the 19th century, which differs from the modern use. According to Braudel, in the 1880s *industrie* might still have been considered equal to ‘agricultural industry’ or ‘viticulture’. In Bulliot’s sense *industrie* should therefore be understood as “skill in the field of manufacture” and “productive expertise” (Braudel 1990: 298). With the advancement of the industrial revolution and its ‘arrival’ in central France, the same term used in the works of Déchelette inclined its modern definition. A highly productive quarter in Bulliot’s Bibracte became an industrious site of a prosperous city in the *oppidum* of Déchelette. In this way, the latter’s description of Bibracte as *Le Creusot celtique* (Déchelette 1907: 950), at a time when the modern city of Le Creusot (c. 40 km to the southwest of Mont Beuvray) had become one of the most important industrious cities in France, demonstrates the influence of contemporary developments on the interpretation of the urban status of the Gallic *oppidum*.

Outlook

Approaching the concept of *oppidum* as a historical-semantic subject enhances the understanding of archaeological reasoning in the second half of the 19th century and clarifies existing preconceptions about the *oppida*. The underlying concepts that lead to these scientific models were not only determined by the analysis of archaeological documentation, but were also influenced by the researcher’s personal background and the development of the shared linguistic community. In consequence, specific characteristics of the *oppidum* can indeed be better understood, not as a logical result of scientific argumentation, but in its relation to the personality of the archaeologist.

The scientific term based on these concepts was used and recognised from the 1880s onwards. Otto Tischler (1885) already quotes the excavations on Mont Beuvray, as well as those directly organised by Napoleon in Alise-St Reine and other local archaeologists in Mursen or Saint-Pierre-en Chatre (Département Oise). In addition to other authors like Thomas (1906), the results of research

on Mont Beuvray became known to a wider international scientific community with the publication of the manual by Déchelette. As one central example for the German tradition Werner (1939) is to be mentioned, who then refers to the finalised, uniform concept by Déchelette. It would be interesting to understand how these concepts were included into their referring scientific concepts and to what extent the underlying preconceptions as shown here consequently influenced the resulting concepts of *oppidum*.

Notes

- 1 This paper presents a short version of results from my master thesis, submitted at the University of Leipzig in 2007 (Supervisors: Prof. Dr Sabine Rieckhoff, Dr Julia K. Koch).
- 2 This was for example the case at a congress in Luxemburg in 2005, entitled *L'archéologie, instrument du politique*. Here the political implication of researchers and their explicit interpretations have been evoked and discussed for the field of Late Iron Age archaeology.
- 3 In accordance with the English translation of *Begriff*, 'concept' is used to describe the complexity of the term *oppidum*. 'Concept' in return can also be translated as *Konzept* in German, a term that emphasises the distinction of words in quotidian usage and scientific terms that are in development or lack a yet 'proper' definition.
- 4 For a recent discussion on 'Historical Semantics' according to Koselleck see Junge & Postoutenko 2011.
- 5 The eponymous compilation by Richard Rorty (1967) marks a specific point in time when the dependency of philosophical concepts on linguistic parameters became widely debated.
- 6 The study of other ancient sources such as Varro, Nepos or Servius does not offer a better understanding of the Celtic *oppida*. A general definition is given by Servius who proposes a definition by four categories: "*Quidam a vico castelloque magnitudine secernunt; alii Locum muro fossave aliave qua munitiones conclusum; Locum aedificiis constitutum alii, ubi fanum, Comitium, forum et murus sit*" (ad Aen 9, 605). In consequence an *oppidum* would be defined by its size (bigger than an *aedificium* or *castellum*), existence of a fortification, the possibility of a sanctuary, assembly space and market place (e.g. Boos 1989; Tarpin 2000). While these criteria seem consistent for the Mediterranean continuum, their application to the *oppida* has proven to be problematic when confronted to specific sites in continental Europe.
- 7 For further reference on this topic see Béal 1996.
- 8 Cf. *Histoire de la Gaule* by Amedée Thierry (1828), *Histoire de la France* by Henri Martin (1837). Further examples have been published by Batissier or Coblet.
- 9 "*Quid oppidis incultius?*" – *Provinciis Consularibus Oratio* – XII, 29
- 10 A similar perspective on the phenomenon can be seen in Lucrèce (*Métamorphoses* 5, 1019–1027), where the act of foundation of the city also constitutes the community of citizens as social group.
- 11 A rare example where the primacy of historical information can be seen conflicting with the archaeological evidence.
- 12 "On entre là dans la région vraiment gauloise ou disparaissent

les emprunts faits aux étrangères. L'*oppidum* y revêt son caractère authentique, celui de refuge" (Bulliot 1899: 428).

- 13 "Les constructeurs gaulois ne se préoccupaient pas, comme ceux des pays classiques, de la régularité géométrique du tracé. Peu leur importait que les angles et les côtes du quadrilatère fussent inégaux" (Déchelette 1904: 22).
- 14 "Il est évident que Bibracte existait comme ville d'avant la conquête, comme en témoigne son puissant rempart dont nous parlerons sur place en présence de la fouilles" (Déchelette 1907: 949).

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Space, Architecture and Identity in Gaul in the 2nd/1st centuries BC

Sabine Rieckhoff

The urbanisation process in the 2nd/1st centuries BC, which resulted in the development of the oppida, is traditionally portrayed in a positivist manner as a history of events. However, we actually lack the necessary knowledge of social, political, economic etc. structures, because there is simply no clear archaeological evidence for them. Therefore, this article goes beyond the persistent addressing of questions to archaeological objects that can only be answered by means of written sources, and instead looks at the potential of architecture as a means of exploring the construction of collective identities. As a case study, we will look at the Celtic city of Bibracte-Mont Beuvray (France); in terms of methodology, the analysis is based on the sociology of architecture. Following a sociology of space as well as theories of perception and semiotics, I will demonstrate in which way conclusions regarding the intention and the behaviour of actors can be drawn from interactions between architecture and social action. Urbanisation was not a mechanical demographic process. On the contrary, the architecture of the oppidum of Bibracte will be deciphered as a spatial construction programme on the part of local elites that developed the 'town' as an identification object in order to gain and maintain their power.

Oppida: The 'first towns' north of the Alps

As is well known, Caesar speaks of the *oppida* in Gaul; modern science, however, refers to the 'first towns' north of the Alps. Today, there is wide consensus regarding the urban character of a number of well-researched Late Iron Age fortifications of the 2nd/1st century BC – e.g. Bibracte-Mont Beuvray in Eastern France (Dhennequin *et al.* 2008; Guichard forthcoming). However, there is still disagreement regarding the criteria for defining a town and ways by which these criteria might be identified. Admittedly, a kind of 'check list' has established itself, in Germany at least, comprising the following points: 1. topographical and administrative unity; 2. more than 1000 inhabitants; 3. division of labour and social differentiation; 4. diversity of architectural forms; 5. urban lifestyle; 6. function as a local centre. However, this list has never been of great help since it was compiled by ancient historians regarding the town

in classical Antiquity (Kolb 1984) and was insufficiently verifiable in archaeological terms (Guichard *et al.* 2000).

This was not least because the social structures of the *oppida* still remain largely unknown to us, even after more than half a century of intense research. Our knowledge about the economic basis of the *oppida* and the reasons for their development is not as certain as some sources suggest (Haselgrove 2006: 10). On the whole, we tend to refer back to Caesar, even though we know that his descriptions present an *interpretatio romana*, bound to a particular time and place. The primary sources, namely the archaeological data, are mostly of indifferent quality from a sociological point of view. For example, the presence of an aristocracy is supposedly reflected by finds of Mediterranean imports, which are regarded as prestigious. But at which point does an amphora become an object of prestige, and at which point is it just a means of transporting liquids?

Aims and methods

First of all, we should understand that the usual questions regarding the society and residents of the *oppida* – questions regarding their social, administrative, political, economic and religious structures – can only be answered unambiguously with the help of written sources. Archaeology, however, can only draw conclusions based on the regular behaviour of people when dealing with objects, and these have been changing in a quantitative rather than in a qualitative way over the past decades. Thus, the time has come to deploy new methods in order to ask new questions. M. Fernández-Götz has successfully demonstrated this relating to the Treveran *oppida* in his recent article “The Role of Sanctuaries in the Construction of Collective Identities” (Fernández-Götz 2012). I, on the other hand, would like to demonstrate this process of construction with reference to the architecture of the *oppida*, although not by referring to a building typology, one of which has already been established for Bibracte. Unfortunately, this classification could not contribute to the question of social structures besides commonplaces, leading the author himself to caution against a premature identification of building type with social status (Meylan 2005: 133).

There is a much more pressing need for new paradigms, as pertinent to the sociology of architecture. Consequently, we have to deal with three areas:

- A sociology of space (as proposed by G. Simmel in 1908).
- Psychological and philosophical theories of perception (as established by E. Cassirer in 1923 and by M. Heidegger in 1952).
- The semiotics of architecture (as stated by U. Eco in 1968).

With the help of these theories and theses, I would like to demonstrate – using the example of the extensively explored *oppidum* of Bibracte – that inferences can be drawn regarding the intention, experience and behaviour of the actors, meaning the constructors and users, and how this might be done, in order to understand the process of ‘urbanisation’ during the *oppida* period (Rieckhoff 2010).

Notions of space

The sociology of architecture is based on the thesis that there is a direct relationship between architecture and society, since social activity, be it individual or collective, is always related to space (Schäfers 2006: 19). In order to understand this, we must differentiate between physical, measurable space on the one hand and social space on the other. In turn, the social sciences differentiate between an absolute (passive) notion of space, which sees space of

whatever kind as a sort of container for social action, and a relational (active) notion of space, according to which a particular space only comes into being through the actions of the relevant actors. In this case, then, space is understood as a social construct (Schroer 2006: 47, 174).

Current sociological theories tend to favour the relational concept of space as set out by P. Bourdieu, namely that “habitus creates the habitat” (Bourdieu 1991: 32). However, the relational concept has occasionally neglected to consider the effects of spatial configurations – such as the town – once these have emerged. This interaction between space and society was already been described more than 100 years ago by the sociologist G. Simmel (1995). In the following discussion, I will take this principle as my starting point. Therefore, I regard space as a social construct that, in its turn, also structures our social interactions; and I further assume that this interaction is in each case embedded in a specific sociocultural context that is subject to change. Thus, it is also able to alter space and endow it with new meanings and functions (Schäfers 2006: 17).

Starting from these premises, I will, in the following discussion, assume that the ‘first towns’ were the result of a process of interaction in which social space took a physical form and – vice versa – architecture regulated social interactions.

Conceptualisation of space

In view of the theories of sociology of architecture, I will, in the following discussion, not differentiate building types by form, ground area and materials, but rather assume three spatial concepts: firstly, the static, three-dimensional enclosed space that defines an outside and an inside; secondly, its counterpart, the public and dynamic open space, comprising paths, squares, yards, etc., that defines near and far; and, thirdly, the unbuilt space, both inside the *oppida* (e.g. unsuitable locations for settlement or fields and pastures) and *extra muros*.

In order to identify the actors behind these physical spaces, i.e. the representatives of social structures, I draw on Simmel’s concept of ‘space qualities’. Space qualities are the forces regulating the social processes that result in the creation of spatial structures. Three of Simmel’s five notions of quality are suitable for our purposes (in a slightly adapted form): 1. subdividability of space by *boundaries*; 2. creation of *locations* by fixing actions; 3. correlation between proximity and distance through *movement* (Schroer 2006: 60). Simmel’s concept has the advantage of being, on the one hand, sufficiently abstract to be applicable to nonliterate societies as well, and, on the other hand, of drawing on concrete terms that are constitutive for urban sociology.

Theories of Perception

A spatio-sociological perspective also includes *experience of space* and *spatial behaviour*, which in turn depend on *spatial perception*. It is only through perception that an interactive situation between spaces and social orientation develops, because the valency people attribute to certain spaces and locations causes corresponding behaviour.

Urban sociology differentiates between four different dimensions of perception (Müller 1983: 37), drawing on a variety of theories from psychology, philosophy and sociology. Lately, this has been complemented by cognitive science, which demonstrates that the sensorial acquisition of information takes place by means of an interplay of form, colour, light, sound, temperature etc. in a selective and relational way. This means that the act of perception already implies an interpretation that depends on the specific socio-cultural paradigms of each case.

Perception is structured on the cognitive map of urban inhabitants by means of orientation elements such as paths, perspectives, focal points (targets of activities) and landmarks.

In order to memorise and recall perception, the human being depends on 'symbolic forms' (Cassirer 2010). Symbolisation in this context means the appropriation of reality through the bestowal of meaning. Symbolisation can occur either 'discursively' through language and writing, or 'presentatively' through, amongst other things, images, rituals, art and also built structures. This dichotomy, developed by S. K. Langer (1942), has been applied in a variety of ways, e.g. in the theory of art (N. Goodman) and in anthropology (C. Geertz).

Perception and symbolisation are themselves required for the cognitive and emotional process of identification with a built structure or a location. The identification process can take place by means of rituals, language (e.g. renaming), or integration into their own culture context, hence in the case of architecture, for example, by translation into indigenous building traditions.

Architecture and Semiotics

From spatial perception it can be concluded that architecture is also a medium within the non-verbal communication process that occurs via non-linguistic signs. The study of the use and function of signs is the purpose of Semiotics. In archaeology, this approach has to be carefully pursued, because material sign systems do not follow the same rules as language (Hahn 2005: 137). However, U. Eco demonstrated that a 'Semiotics of Architecture' may actually facilitate insights if the relationship in terms of content between the architectural element on the one hand (be it a ground plan, a column, a roof tile or a stair) and the sign on the other is unambiguous, because the meaning of the sign

is the function: "According to an immemorial architectural codification, a stair or a ramp denotes the possibility of going up" (Eco 2002: 304, 308). As an example, we may look at the steps that lead to the basilica at Bibracte. They do indeed combine all semiotic functions: not only are they clearly steps (icon) but they are also an index referring to a social context, i.e. the access to a public space, and, last but not least, they are a symbol of representation and power (Szabó et al. 2007).

The Case of Bibracte

In the following discussion, I will try to apply the theories devised above and the theses taken from sociology of architecture to the *oppida*. As a case study, I have chosen the exceptionally explored *oppidum* of Bibracte during the pre-Roman period (c. 120/110–60/40 BC) (Dhennequin et al. 2008).

Space and Ritual

The choice of location on Mont Beuvray, at a height of 820 m above sea-level in a hostile climate, in the Morvan, an extension of the Massif Central, was already an innovative spatial programme the origins of which have prompted many questions (Fig. 9.1). Even though there are formal similarities to Hellenistic fortifications that are spread over a wide area in a similar way, an *oppidum* is not a mere copy of foreign towns but rather an index, i.e. a sign, indicating a foreign idea, that is, however, being interpreted within a completely different cultural context north of the Alps.

Example: Architecture

One characteristic of almost all *oppida* is the negation of the natural terrain. Bibracte is in any case an extreme example. Walls with a total length of 5–7 km had to overcome elevation differences of 50–100 m. Due to natural topography, the walls seemed to be even higher, the fortification even more imposing, and there is no doubt that this was intended. Also typical for Gaul is the technique of the *murus Gallicus* (Fichtl 2010). This was a very complex construction of nailed beams, consuming entire forests and innumerable iron nails that, from a technical point of view, might have been unnecessary and are therefore also interpreted as a ritual phenomenon (Buchsenschutz & Ralston 2007: 765). The construction of the drystone revetment of the front required an estimated 3000 wagonloads of stone to be transported up Mont Beuvray. In spite of this extreme effort, a series of absolute datings indicates that a *murus Gallicus* had to be renewed every 20–25 years (Meylan 2005: 141). Nevertheless, this technique was persistently maintained. This can only be explained by the integrating effect of this

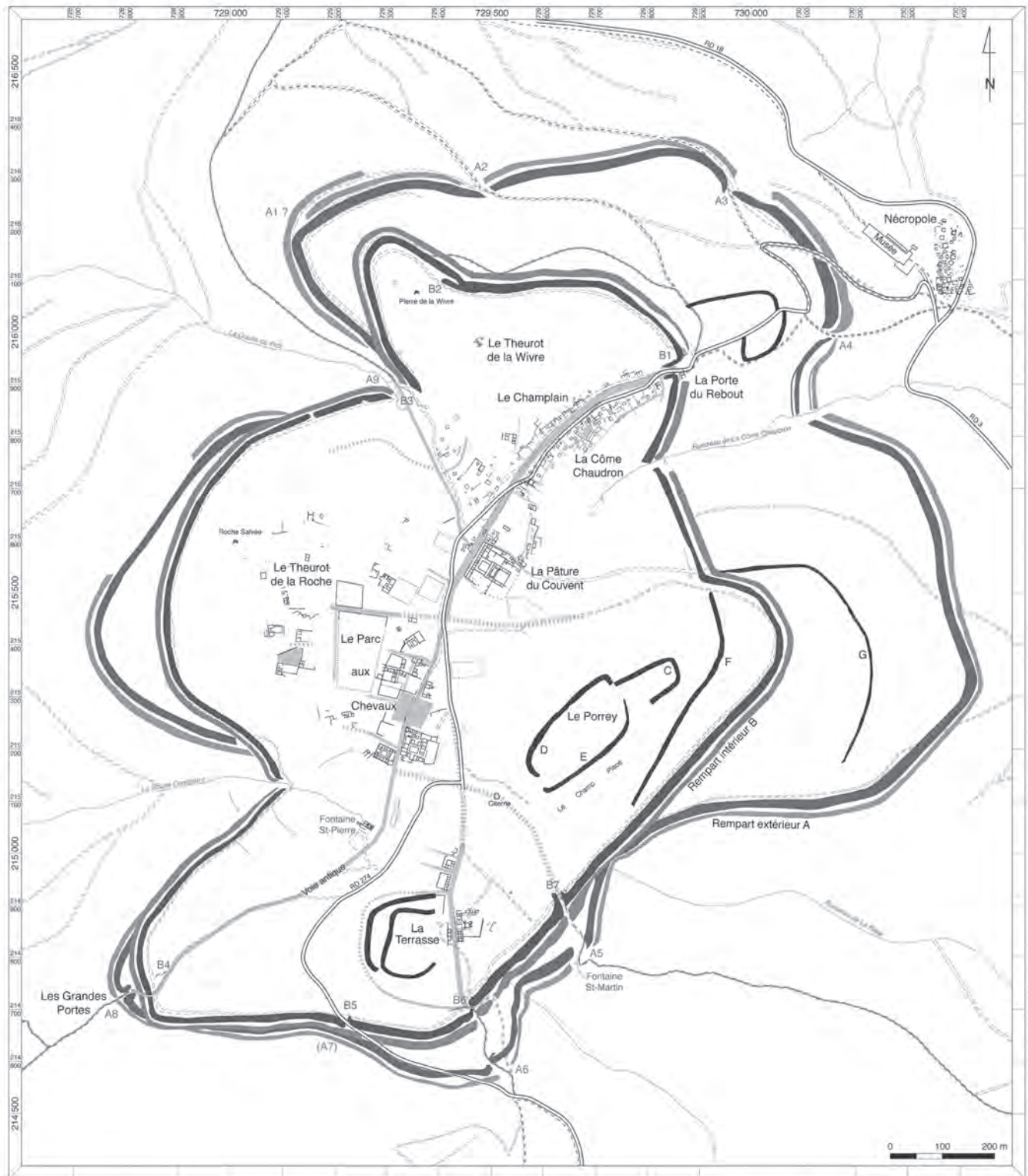


Fig. 9.1: Bibracte-Mont Beuvray. Plan of the Celtic oppidum (after Guichard forthcoming)



Fig. 9.2: Bibracte-Mont Beuvray. Reconstruction of the murus gallicus of the Porte du Rebout (picture by A. Maillier, Bibracte)

founding architecture (Fig. 9.2). It served as a medium of cultural memory that accorded significance both to the social act of building and to the finished wall. The construction itself brought together an enormous number of people – in Bibracte, an estimated 4000 workers, i.e. if families are also included, about 10,000 people in all (Meylan 2005: 148, 203). People gathered not only for a common project but also for a common history that was meant to be legitimised retrospectively, to be imagined prospectively and to be eternalised by means of monumentalisation (Assmann 1992: 71). By multiple repetition (in Bibracte at least four times), the construction of the wall became a ritual. Through symbolisation, the ritual served to give a meaning to collective action. In this way, the wall became a ‘presentative symbol’ – not only of remembering the past but also of a new collective identity.

Example: Boundaries

Both the alleged ‘nail offering’ and the symbolism of the wall construction point to the sacred significance of the town boundaries. It has frequently been emphasised that walls extending for several kilometres, such as those at Bibracte, were of limited strategic value. Consequently, the walls are mainly interpreted as a sign – as a symbol of both power and self-representation of local elites (Fichtl 2012a: 44–46). However, the sign not only indicated outwardly the demarcation of the society (Woolf 2006: 271) but

above all – as explained above – inwardly its cohesion. In effect, the walls formed a virtual boundary within a cosmological system of order that differentiated the familiar from the other, the tamed from the wild, the sacred from the profane, the world of the living from the world of the dead, etc. Crossing this boundary meant infringing the order which then had to be restored by means of corresponding rituals, the so-called *rites de passage* (Gennep 2005). This could be achieved by a simple gesture. However, there seem to have been numerous occasions requiring more complex rituals, since so many deposits of material goods, mainly consisting of iron, animals and human skeletons, were discovered within, under, in front of and behind the fortifications (Buchsenschutz & Ralston 2007; Nicolai this volume). Those are no remains of ‘barbarian’ rites but the materialisation of an idea that was already put into writing at a very early date in Mediterranean cultures: the idea of the ‘divine walls’. It is the idea of ‘beautiful’ or ‘long and high’ walls which stand under divine protection and constitute the town as a space in which humans and gods can communicate and which thus creates a collective identity (Brandt 2008).

Symbolisation and Appropriation – The Portico

Our second example is a roadside wooden portico – a Mediterranean architectural element hitherto unknown in Gaul. The portico is a special, quasi perforated boundary of the enclosed space because it interlinks outside and inside.

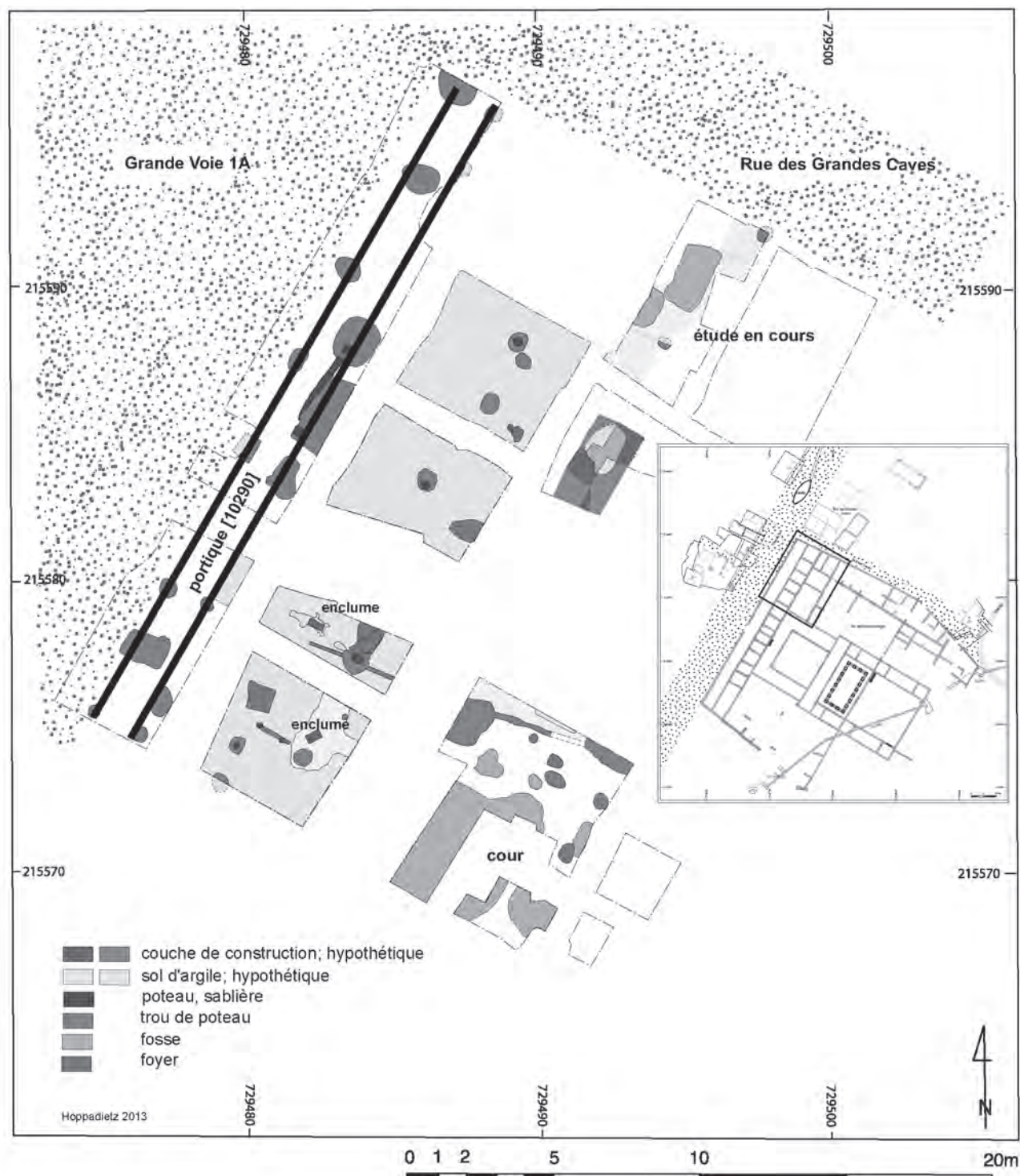


Fig. 9.3: Bibracte-Mont Beuvray, northwest corner of the Îlot des Grandes Forges in the centre of the oppidum. Remains of a wooden building with roadside portico from the earliest building period (c. 120/110–90/80 BC). Leipzig University excavations (based on Hoppadietz 2008). – Right: Between 60/40 BC, the Îlot was rebuilt in stone. The portico and the small, uniformly set out rooms (tabernae) located to its rear were part of the ensemble of the Basilica and the Forum. Budapest University excavations (after Rieckhoff & Timár 2010; plan by A. Meunier, Bibracte 2013)

In the Mediterranean, porticos were primarily intended as simple protection from the sun, whether in the garden of a Roman villa or at the Forum. Increasingly, porticos enclosed squares and roads everywhere and, if deep enough, were frequently used for commercial purposes in shops, workshops or taverns (*tabernae*), which were located at the rear of the portico.

At Bibracte, this foreign architectural element can be verified already in the earliest phase of wood construction dating from the end of the 2nd century BC as a boundary between the main road and the *Îlot des Grandes Forges*, the largest building complex in the centre of the town on the *Pâturage du Couvent* (Hoppadietz 2008; Fig. 9.3). A number of *tabernae* was located behind the portico that was certainly a protection against rain rather than sun during most of the year. The symbolic function of this sign must have been all the more important. There is actually a specific historical point of reference for this symbolism, namely a treaty of hospitality (*hospitium publicum*) between Rome and the Aedui that is dated to around the middle of the 2nd century BC (Dobesch 2001: 760). The reason for this treaty must have been the strategically advantageous position of the Aedui in relation to communication links, since their territory was crossed by important ‘Tin Roads’ (Rolley 2006). The Aeduan elites benefitted from their new political status, perhaps by material advantages in the form of presents for the hosts, but surely by gaining prestige within Gaul. I assume that this implied a social change: A loose network of landowners was converted into a politically stable community of several families or clans, uniting in a kind of synoecism to found a town *ex nihilo*. The representative layout of the centre, clearly referring to the model of Roman avenues, was as intentional as was the act of foundation. However, the process of acculturation is evident. The portico was given a new functional interpretation, embedded into the local method of wood construction and ascribed with symbolic meaning. As a sign, it conveyed a political message, namely the alliance of a Gaulish tribe with the greatest power in the world at the time.

Architecture and Communication

In Italy, porticos were increasingly used for decorative purposes in order to add value to the urban image. Thus, one might suggest, that the portico at Bibracte also had an aesthetic quality. In Gaul, there is an impressive example of the way in which the aesthetics of architecture became the medium for converting the town into an object of identification. Caesar reports that the *oppidum* of *Avaricum* (today’s Bourges) was regarded as one of the most beautiful towns of Gaul because of its walls and architecture. For this special reason, in order to save its architectural treasures, *Avaricum* was actually not burnt down to the ground at the

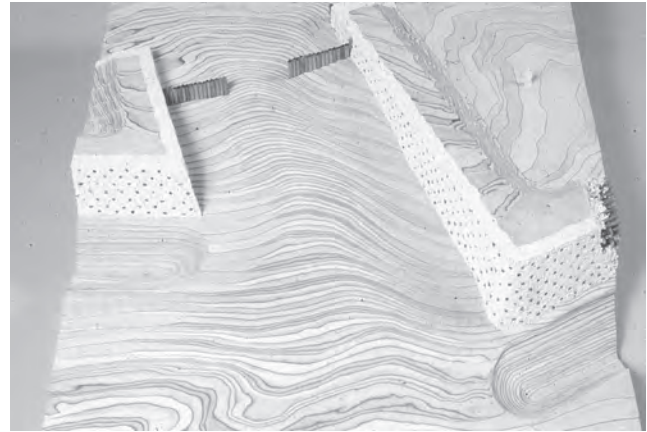


Fig. 9.4: Bibracte-Mont Beuvray. Model of the Porte du Rebout (after Buchsensschutz et al. 1999).

request of its inhabitants (Caesar *BG* VII, 15,4; Dobesch 2004: 23).

In my opinion, something comparable can be observed in Bibracte. Around 100 BC, the external wall (A) was replaced by the inner rampart (B). 20 years later, the main gate of B was in need of repair. Around 80 BC, the largest example of a Celtic town gate was built: the *Porte du Rebout* (Fig. 9.4). R. Hoppadietz has drawn attention to the fact that, around the same time, the *îlot des Grandes Forges* was also converted. The wooden columns of the portico were placed on a massive base, maybe in order to elevate the construction by another floor, the main road was broadened to 16 m and the opposite side of the road was also equipped with porticos (Hoppadietz 2008; Rieckhoff et al. 2009).

There is good reason to suggest that the simultaneous transformation of the main gate and the centre were related in a perceptual manner that was one of the reasons for reducing the size of the *oppidum*. In any case, the reason for widening the gate could not have been a purely military one: The *Porte du Rebout* as a pincer’s gate of 21 m width without any identifiable gatehouse evidently contradicts the strategic function of this well-known type of gate – forcing the enemy into a narrow alley (Buchsensschutz et al. 1999). Therefore, we may assume that in the case of the *Porte du Rebout* the symbolism of prestigious Roman city gates was ‘translated’ into the local language of Celtic fortificatory architecture, even though its strategic function was thereby reduced *ad absurdum*.

Instead, upon passing through the gate, everybody perceived a grand panorama of the town. As the distance between the gate and the centre had been reduced, the broad and steeply rising road opened the view to the *Pâturage du Couvent*, which was dominated by the architectural complex of the *îlot des Grandes Forges* which at least in part rose to at least two storeys.



Fig. 9.5: Bibracte-Mont Beuvray. Reconstruction of the ship-formed water basin in the centre of the oppidum, 10.5 m long (picture by A. Maillier; Bibracte).

Public space

Experience of space

There is perceptive activity between space and social action, which can be decoded semiotically or phenomenologically, i.e. by means of signs or sensory impressions. Due to this interrelation, phenomenology already played a significant role for Simmel and has since been expressed in various parts of architectural theory. As I refer to this in more detail elsewhere (Rieckhoff forthcoming), I will confine myself to stressing two points which both are considered to be specific phenomenological aspects: horizons, perspectives and fields of vision on the one hand, and, aesthetic qualities such as material structures, colours, light, sounds, etc. on the other. These sensory experiences were combined in the *Porte du Rebout*. The overwhelming sight of the fortification – about 8 m high from the bottom of the moat to the parapet – and the 40 m long walk through the gateway until it revealed the urban panorama created an intersubjective setting that promoted social cohesion. Communal experiences in public space – as I will shortly demonstrate by means of the water basin and the main road – were clearly part of a new spatial programme on the part of local elites who, without any doubt, succeeded in increasing the “urban sense of life” with the help of their reconstruction work around 80 BC.

Spatial design

The location of the monumental basin, a unique example of its kind in the Celtic world (Fig. 9.5), has been a cause

of perplexity ever since its discovery, because we know neither its purpose nor when it was built, since it does not demonstrate any relationship to the surrounding built environment. However, it has so far not been taken into account that the basin is topographically exposed at the fork of two main arterial roads (Meylan 2005: fig. 4.15). In ancient times, a parting of roads had always been a religious point of reference because it required a decision to be taken under the protection of a deity. The basin, rightfully referred to as *lieu de mémoire* (Goudineau & Peyre 1993: 45), thus surely had (also) a cultic function, and, if it was not already built around 80 BC, as assumed by R. Hoppadietz, it must have had a predecessor in some form or other (Hoppadietz 2013). With it, the centre of Bibracte had a ‘location’ around which to develop collective activities and – in the sense of Simmel – social interaction processes, converting it into a ‘focal point’ (Lynch 2001) imprinted indelibly on the cognitive map of everybody who had ever stood before it.

Spatial behaviour

It is beyond doubt that public ritual creates common identities among its participants. However, public space in itself as being in existence only at the *oppida* had the same effect (Fichtl 2012b). As scattered farmhouses and estates were separated from each other by considerable distances, the communication of their inhabitants apart from living and working together within the context of relationship was limited to temporary markets and feasts. In contrast to these

isolated social spaces, urban paths, squares and locations resulted in a close proximity for all people – even if they were not related to or did not know each other due to their belonging to different social strata. This way, a completely new – intrinsically urban – experience of space developed. This notion was recently quite appropriately categorised as the ‘third location’ by D. Mölders (Mölders forthcoming). Apart from locations for living and working, modern urban sociology defines this ‘third location’ as areas of public space where people move, stay and communicate. Today, these are easily accessible and inviting locations such as bars and parks, and especially locations for consumption such as shopping centres or cinemas. They are characterised by an all-embracing act of socialisation and, in this respect, the concept can also be transferred to historic societies (Zurstiege 2007).

An open space for all – or a ‘third location’ – was the *Grande Voie*, the main road of Bibracte, the main artery of the town. Its heart was in the vicinity of the *îlot des Grandes Forges* where several roads met. Human circulation and the enclosure by porticos formed, as it were, a square that – in the same spatial context as the *tabernae* – could have had additional functions. These include market stalls on certain days or collective rites at the water basin. In this respect, the *Pâturage du Couvent* possessed all qualities to provide an integrating zone for people of different social status. This is in contrast to the privileged walled-off post-Caesarean squares that were reserved for specific events (and also actors?) (Guichard forthcoming).

The town as an identification object

Starting from theories of sociology of architecture and with the help of examples taken from the *oppidum* of Bibracte, I have tried to draw conclusions regarding the actors of urbanisation in the 2nd/1st centuries BC in Gaul. In principle, I have always come to the same result: Spatial concepts provided for the acquisition and retention of power. Building was a process of identification, architecture represented collective identity, and therefore all building projects were political measures that had to be communicated through rites and symbols. The selective assimilation of Roman construction features and their integration into the familiar cultural system did not constitute a thoughtless copying but rather a hybrid self-staging involving a message primarily aimed at the familiar society. The town as an object of empathy and an intentional focus for identification became successful. Bibracte attracted so many people that, after the Gallic Wars, large-scale new planning and construction became necessary. It was the bloom of the *oppidum*, not its decline, which led to its relocation to the plain at around the start of the Common Era. There, the new town continued to flourish as *Augustodunum*-Autun for 300 years.

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Symbolic Meanings of Iron Age Hillfort Defences in Continental Europe

Caroline von Nicolai

Deposits of metalwork and other artefacts, as well as of human and animal remains found in close association with hillfort ramparts, are a common feature of the British Iron Age. However, until recently, only few similar finds were known in Western and Central continental Europe. These were often interpreted as objects that were accidentally lost, or as caches of valuables and scrap metal that were meant to be hidden only temporarily in the ground. However, over the last years, a considerable number of deposits consisting of metalwork (weapons, tools, currency bars, fittings of chariots, horse harnesses, coins, etc.) or of other kinds of material culture (ceramics, statuettes, etc.), as well as of human and animal remains have been discovered in or beneath fortifications or in close proximity to hillfort gateways and defences all over continental ‘Celtic’ Europe. A careful analysis of the archaeological contexts shows that these objects were not buried with the intention of later retrieval, but were meant to remain permanently in the ground. The aim of this paper is to discuss the significance of these finds, which may relate to symbolic meanings and ritual activities connected to settlement boundaries and entrances.

Introduction

Deposits of metalwork and artefacts made of other materials, as well as of human and animal remains, found buried within or close to the ramparts of hillforts, are a well-known feature of the British Iron Age (Hingley 1990: 98–103; Ralston 2006: 125–142). These finds are often interpreted as ‘structured deposits’, buried for ritual and religious reasons (Haselgrove & Hingley 2006: 147; Hingley 2006: 213). In contrast, similar finds from Western and Central continental Europe have not been studied in detail. Moreover, until recently they were often interpreted as accidentally lost objects, or as caches of valuables and stores of scrap metal that were hidden by metalworkers or tradespeople who intended to recover and reuse them at a later date (Cosack 2008: 92–103; Rybová & Motyková 1983: 146). Many archaeologists have assumed that these objects were buried within or close to Iron Age hillforts as a consequence of particular historical events, such as the Gallic Wars, or troubles between different social groups (Kurz 1995: 113). Instead, a careful analysis of the archaeological contexts

indicates other possible explanations for the considerable number of deposits and human and animal skeletal remains that have been recovered in recent years (Buchsenschutz & Ralston 2007: 764–766; von Nicolai & Buchsenschutz 2009: 328–329). The aim of this paper is to discuss the evidence for this phenomenon in Western and Central continental Europe during the La Tène period, i.e. between the 5th and the 1st centuries BC.

Examples of deposits found in association with the ramparts of hillforts

Deposition is defined as the meaningful act of intentionally placing objects, human or animal remains into the ground (Beilke-Voigt 2007: 30–31). Deposits are thus the result of deliberate activities planned in advance, and hence display certain patterns regarding their distribution, composition, and treatment (Fontijn 2002: 37–38). We may further distinguish between ‘closed’ deposits, consisting of one or several items

buried at a specific place at a single point in time, and larger collections of objects “that accumulated during longer periods as a result of repeated acts of deposition” (Haselgrove & Hingley 2006: 149). These non-closed deposits are also called accumulated, or open deposits.

The Iron Age hillforts, where the deposits studied in this paper were discovered, vary considerably with regard to their architecture, size, and presumed use. Their basic feature is a circuit of artificial enclosing works composed of a single rampart or wall, with or without a ditch in front. Some fortifications consisted only of a dry-stone wall, or of a simple bank made from earth. However, most of them were composite constructions, like the so-called *Pfostenschlitzmauer* or the *murus Gallicus*. The latter construction consisted of box ramparts, made of a timber framework, sometimes fixed with iron spikes 20–30 cm long, that were filled with rubble, earth, or clay, and fronted on the exterior by a vertical dry-stone wall face. A sloping embankment of earth typically adjoined the interior wall of the rampart (Fichtl 2005a: 40–63; Ralston 2006: 48–57). Some sites did not even cover 0.3 hectare, whereas the fortified urban settlements of the 2nd and 1st centuries BC, the so-called *oppida* (Fichtl 2005a: 11–20), usually covered an area of 30–600 hectares. While most hillforts were permanent places of settlement, others were probably only temporarily occupied.

So far, a total number of 139 deposits from 67 hillfort sites located all over Western and Central continental Europe have been identified (for further details, see von Nicolai 2014: 55–110). Around or within these hillfort sites, deposits have been found 1) beneath the ramparts, 2) within the ramparts or earthen banks, 3) in pits subsequently dug into the ramparts, 4) in pits located just behind or in front of the ramparts, 5) in ditches belonging to the ramparts, 6) in areas located in close proximity (i.e., within a distance of 50 m) to the ramparts, as well as 7) within the inner areas enclosed by the ramparts (Fig. 10.1).

Thirteen (10%) of the aforementioned 139 deposits and burials have been recovered from beneath the ramparts of the hillforts, and must therefore have been placed there just before or during construction work. For example, at the Steinsburg *oppidum* (Thuringia, Germany), a damaged shield umbo dating to La Tène D was found together with “many other iron objects” lying on the original ground surface beneath a dry-stone wall some 1.5 m high (Spehr 2005: 69).

Twenty-eight of the deposits (20%) consist of artefacts, or human remains embedded within the ramparts during construction. For instance, at the Basel *oppidum* (Basel, Switzerland), the body of a 40–60-year-old man, unaccompanied by grave goods, was placed on its back in one of the timber boxes of the *murus Gallicus* during La Tène D. It was subsequently covered as the construction was completed (Deschler-Erb 2011: 226).

Eight (6%) of the finds were put into pits cut into the rear of the ramparts after construction. For example, a Late La Tène deposit of metalwork, consisting of two fragmented scythes, two sickles, a broken bar of unknown use, an axe, a ploughshare, and a knife, was discovered in the bank of the *oppidum* of Stradonice (Bohemia, Czech Republic) (Waldhauser 1995: 422–424).

Fifteen (11%) of the deposits and burials were found in pits located just behind or in front of the rampart. At the Závist *oppidum* (Bohemia, Czech Republic), the skull of a young man, showing traces of blunt force trauma on the left front side, was discovered in a pit situated at the north-eastern wing of Gate A (Fig. 10.2). The lower jaw of the skull and cervical vertebrae were missing. The surface of the skull revealed alterations due to weathering, suggesting that the skull was originally displayed on the gate before it was buried in the pit beneath a large stone (Likovský & Drda 2003: 295–296; Motyková *et al.* 1990: 426–427).

Thirteen (9%) of the deposits and burials were excavated in ditches. At the *oppidum* of Gergovia (Auvergne, France), two mature women were buried at a distance of 4 m from one another in a quarry hollow located behind the rampart (Fig. 10.3). One of the women was inhumated face-down accompanied by a small vessel. The other woman was buried lying on her back without grave goods. Both were probably killed by blows on the head. These skeletons were uncovered close to the headless skeleton of a lamb and the partial skeleton of a dog (Pertlwieser *et al.* 2010: 292–293).

Thirty-eight deposits and burials (27%) were discovered in close proximity to the ramparts. During excavation, they were often found in secondary contexts, as the original stratigraphy was disturbed by later activities and events at the sites. For example, at Greifenstein-Holzhausen (Hesse, Germany), more than 65 bronze and iron items (weapons, tools, horse harnesses, personal ornaments, coins, etc.) dating from La Tène B and C were scattered 5–10 cm below the present-day surface of the ground between the ramparts and the hilltop enclosed by the fort. Many of these items had been deliberately bent or broken (Verse 2007: 154–159).

Lastly, twenty-four (17%) of 139 deposits came from the interior areas of the hillforts enclosed by the ramparts (settlement burials not included). Some were related to settlement features, like the deposit of ironwork found buried in a pit next to the remains of a post building at the Braunsberg *oppidum* (Lower Austria, Austria) (Urban 2006: 94). On the other hand, at Schnippenburg (Lower Saxony, Germany), hundreds of metal objects and ceramics dating to the Middle La Tène period have been found as single stray artefacts, or in small clusters lying on or just below the present-day surface of the ground, or recovered from pits (Fig. 10.4), but no buildings or other features indicating a permanent settlement have been identified on this site (Möllers 2009: 29–36).

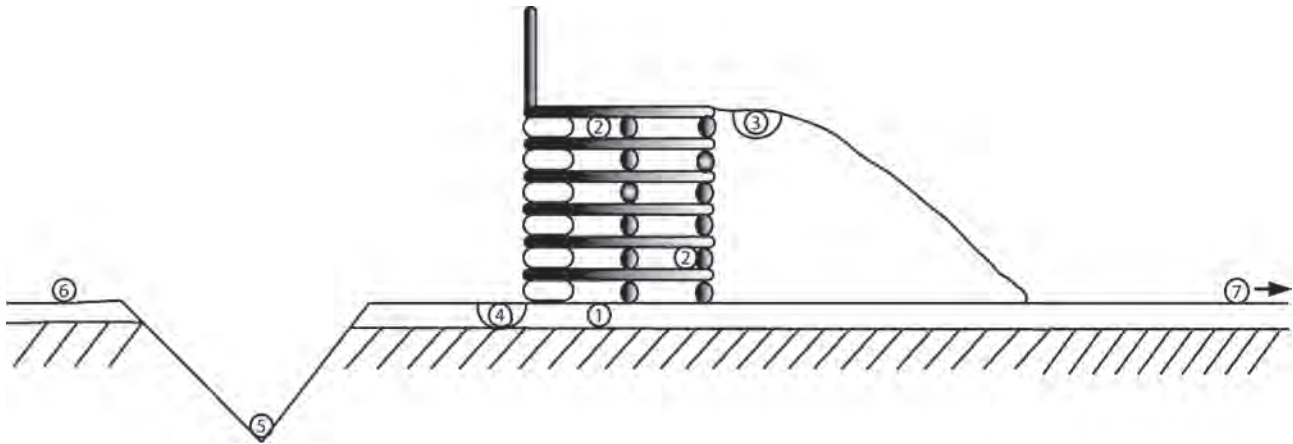


Fig. 10.1: Cross-section of a typical hillfort rampart showing the possible locations of deposits and burials (author)



Fig. 10.2: Skull discovered in a pit next to gate A at the Závist Oppidum (after Motykova et al. 1990)

The character and dating of the items deposited

Forty-nine out of 139 deposits covered by this paper consisted of only a single object, whereas others included more than 1700 items. Seventy-eight deposits were so-called 'simple finds' that only included objects belonging to a single functional category (e.g. weapons), while the others were 'complex' or 'mixed finds' containing different



Fig. 10.3: Gergovie oppidum. Burial and animal deposit in the quarry hollow behind the rampart (after Pertlwieser et al. 2010)

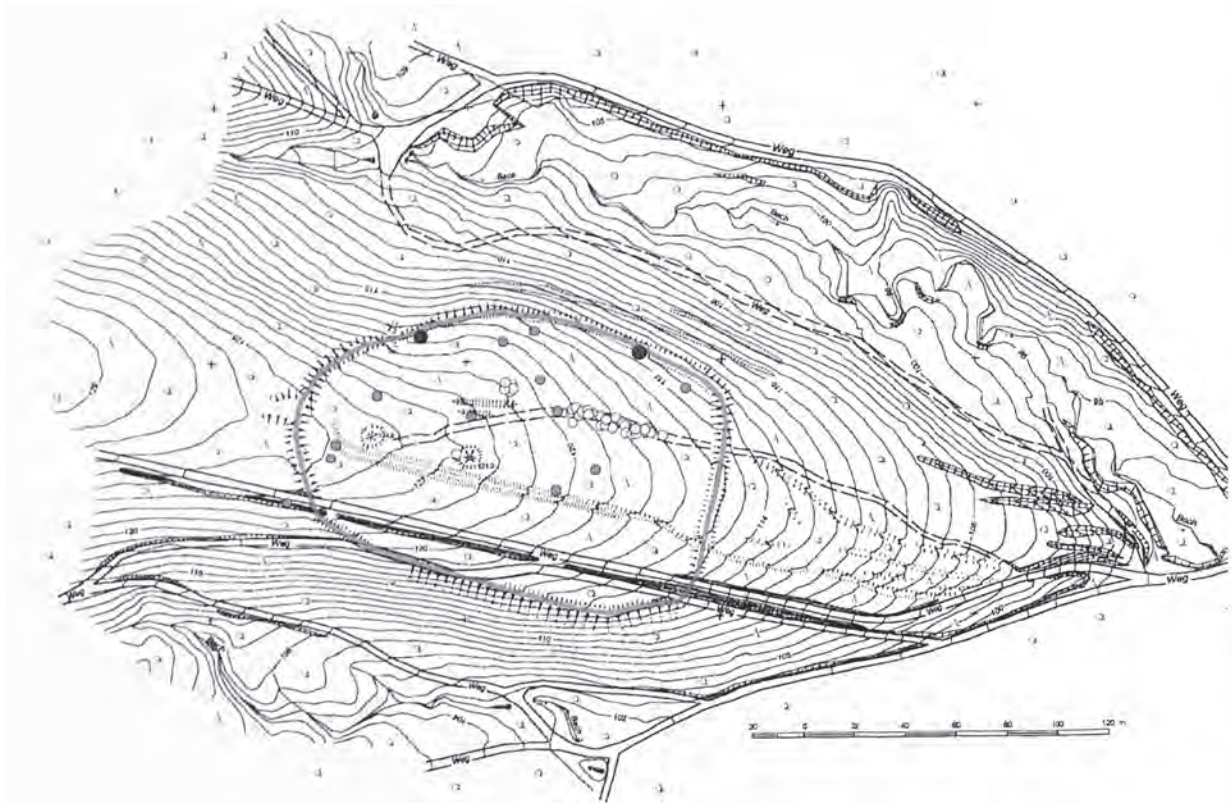


Fig. 10.4: Position of smaller deposits (medium grey), pits with deposits (light grey), and larger find accumulations (dark grey) within the interior area of the hillfort at Schnippenburg (after Möllers 2009)

types of objects. Many deposits, such as the so-called ‘implement deposits’, were composed of a wide variety of tools, including implements for metalworking, general-purpose tools (axes, knives), raw materials (e.g. currency bars), agricultural tools (ploughshares, sickles, scythes, and reaping-hooks), as well as kitchen implements, hearth furniture, and other domestic objects. Other deposits contain weapons (swords, scabbards, chains, spearheads, shield umbos, chain mail, etc.); artefacts relating to transport (fittings and tyres of chariots and horse harnesses); personal ornaments (brooches, rings, belt hooks); objects relating to personal care; architectural elements made of iron (nails, keys, and hooks); statues and statuettes made of wood, stone or metal; as well as balance weights, balances, and coins. Some deposits consisted of single bones or the skeletons of domestic animals (cows, pigs, horses, sheep/goats, and dogs). Inhumation and cremation burials, as well as disarticulated human skeletal remains, have also been found associated with the ramparts of hillforts.

Some artefacts were in good condition and obviously never used when buried, whereas many others – especially weapons, some kinds of tools, chariot fittings, and horse harnesses – were fragmented and worn or had clearly been damaged on purpose before burial. Several deposits showed

a special arrangement of the artefacts, whereas others were found within containers made of stone or ceramics, or of organic materials that completely decomposed after burial.

Due to the difficulty in dating many kinds of artefacts, such as iron implements, it is not always easy to determine the chronology of the hillfort deposits precisely. In addition, eleven of the 139 deposits covered by this paper were ‘non-closed’ accumulations of artefacts that were assembled by repeated acts of deposition. Nonetheless, it is possible to outline the main developments in the practice of deposition through time. The tradition of depositing objects close to, or within enclosure earthworks can be traced back to the Early and Middle Bronze Age (c. 2200–1300 BC) but became particularly frequent during the Late Bronze Age (c. 1300–800 BC). So far, 50 deposits and burials associated with Late Bronze Age fortifications from 22 sites have been identified (von Nicolai 2014: 141–149).

At Hesselberg (Bavaria, Germany), for example, eleven deposits were discovered in various locations under, within, or close to the ramparts of the hill fort (Fig. 10.5). They contained bronze tools and agricultural implements, bronze metalworking debris, personal objects, horse harnesses, ceramic vessels, and animal bones. In addition, a human skeleton was encountered buried face down under the

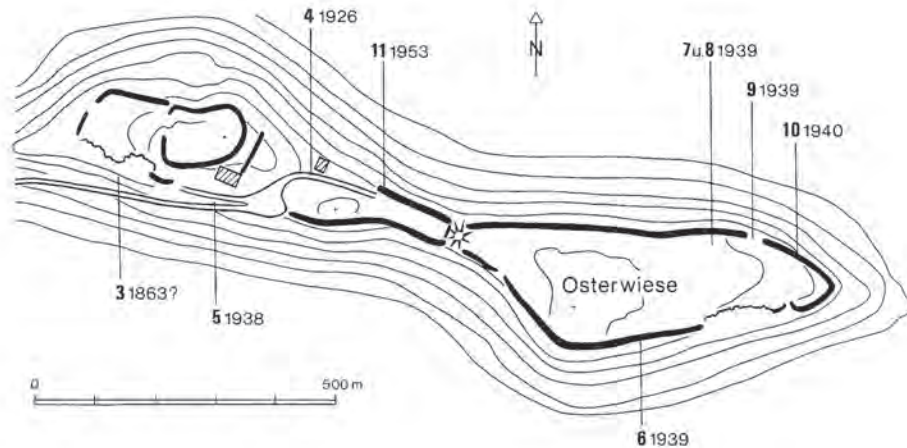


Fig. 10.5: Hesselberg. Locations of deposits (after Berger 1994)

rampart, probably together with a ceramic cup, an arrowhead and unidentified bronze objects (Berger 1994: 47–56). During the Hallstatt period (c. 800–450 BC), the number of deposits dropped dramatically, but they became a more regular phenomenon again from the Early La Tène period onwards. Gradually increasing throughout the Late Iron Age, a conspicuous peak in the number of deposits can be recognised during the last phase of the La Tène period, as the majority of the studied deposits belongs to La Tène D (c. 150–25 BC). Apparently, the tradition of depositing metalwork and other materials close to defences came gradually to an end in Roman times, as only some Roman forts and settlements in Britain (Hingley 2006: 227–229) and on the Continent have produced deposits in the context of the boundaries of fortifications; Kops Plateau (Nijmegen, Netherlands) (van Enckevort & Willems 1996: 128–133) is a case of the latter.

Regional differences

Obviously, a general practice of deposition in association with the ramparts of hillforts existed in continental Europe during the Later Iron Age. Regarding the location of the deposits in relation to the ramparts, no regional differences can be observed. However, significant regional patterns are apparent with respect to the composition of the deposits (Figs. 10.6 and 10.7), the treatment of objects before they were buried in the ground, and the dating (Fig. 10.8). In this way, three separate geographical zones with different depositional traditions can be distinguished. West of the Rhine, in France and Belgium (i.e., the territories of ancient *Gallia*) the deposits date mostly to the Late La Tène period, are relatively small, and consist mainly of ceramics, skeletons, or human and animal bones. In the

second zone, covering much of Central Europe (Czech Republic, Slovakia, Austria, Switzerland, and Southern Germany), a large number of sizeable deposits rich in metal objects, including numerous weapons, tools, and other metal artefacts, are known from the Early to the Late La Tène period. Large deposits rich in metal objects are also widely diffused from the Early La Tène period onwards in the third zone, which is the German *Mittelgebirge*. This last zone shows the strongest concentration of deposits, and includes the largest finds containing lots of metalwork. Open deposits accumulated over longer time spans, especially during the Middle La Tène period, are also particularly frequent in this region.

Interpreting the evidence

It is often assumed that artefacts placed in the ground – especially finds from settlements or hillforts – were meant to be temporary because they seem at first sight to be more easily accessible than artefacts found in naturally significant places, such as bogs, rivers, or rock crevices (Geißlinger 1983: 322). However, this cannot be the case for artefacts found beneath or within the bodies of the ramparts of hillforts, because the owners would have had to demolish the walls to recover these objects. This means that these items were, in fact, deposited with the intention that they would remain there forever. On the other hand, deposits discovered in pits or ditches, or in close vicinity to the ramparts of hillforts, were easily accessible for everyone at any time. Some were even publicly exhibited in highly visible locations, but – despite the large number and often considerable value of the artefacts that they contained – nobody touched or removed these for reuse and recycling. Therefore, we may assume that the vast majority of the

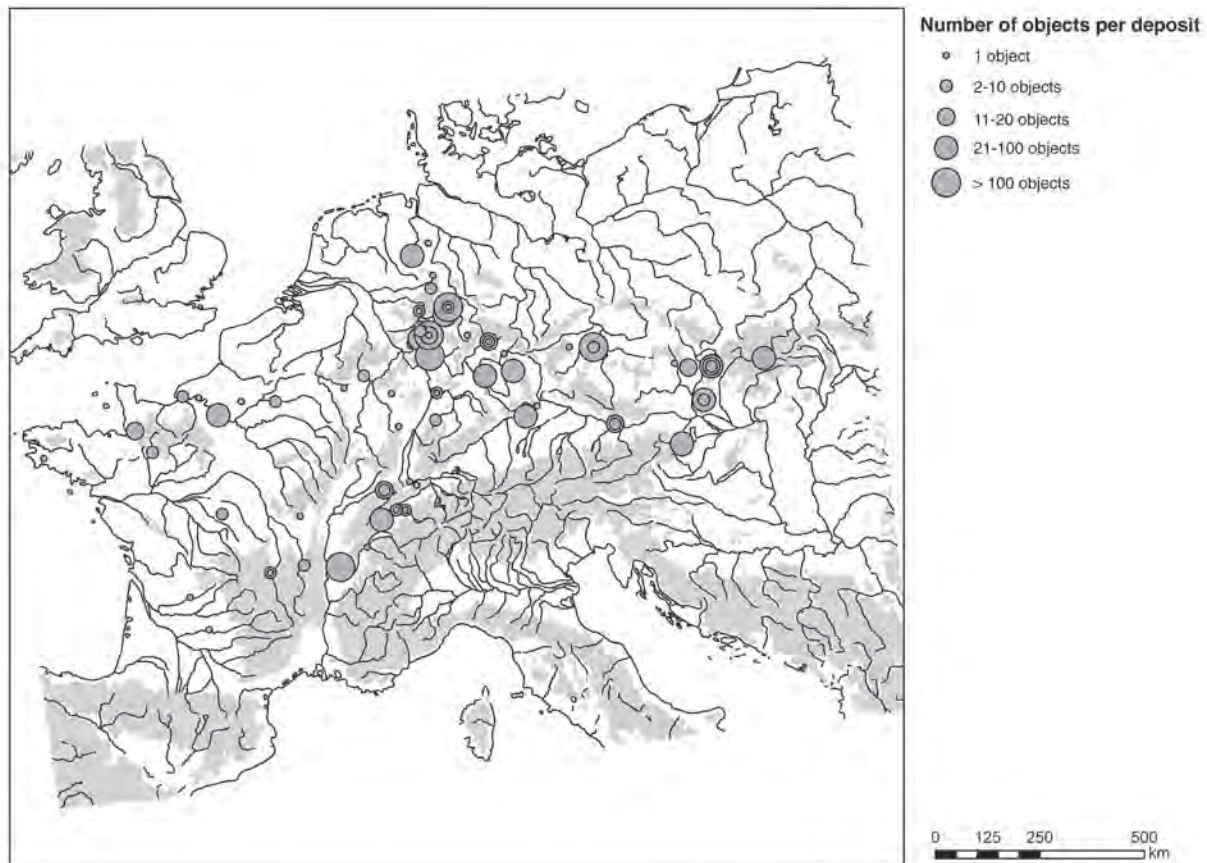


Fig. 10.6: The largest deposits, in terms of the number of objects, occurred in Eastern and Central Europe, while in Western Europe, deposits of single objects or small clusters of up to ten objects were more frequent (author)

deposits encountered in close association with Iron Age hillforts were not caches of valuables hidden temporarily in the ground, but had been buried on purpose and permanently with the obvious intention of leaving them there forever (Geißlinger 2002: 130–137). The depositional patterns, which can be observed over a very large geographical area, and over a very long period of time, suggest that most of these deposits were the result of formalised and repeated activities that might be explained by symbolic and ritual behaviour (Trachsel 2008: 3). It is noteworthy that evidence of such behaviour cannot only be found in and around the hillforts of Western and Central Europe from the Early Bronze Age to the end of the Iron Age, but also around the boundaries of enclosed farmsteads during the Late Iron Age, even if deposits from rural sites usually included fewer objects (generally, tools and agricultural and domestic implements) (Gransar *et al.* 2007: 553–556; von Nicolai 2009b: 527–530).

Depending on the position and composition of the deposits and the time of their burial, it is sometimes possible to determine the motivations and identify the protagonists behind these ritual activities. Objects placed below or in the

body of a rampart could be offerings or sacrificial remains. If this act took place during the period when the rampart was being constructed, such remains can be interpreted as foundation offerings or sacrifices (Beilke-Voigt 2007: 48–52). Ceramic or metal vessels, amphorae, knives, or axes might be considered as ritual instruments if it can be presumed that they were used during these ceremonies, and afterwards deliberately abandoned at the place where the ritual was performed (Trebsche 2008: 73–75). However, in the case of smaller objects or single finds, we cannot exclude the possibility that these ended up by chance within the ramparts, after having been previously buried or discarded, and then dug up during the construction of the fortification.

Sacrifices and offerings could also have taken place after the construction of the earthworks was completed. Here, they might either occur as part of rituals conducted only once for very special occasions, such as the abandonment of a settlement, or as part of rituals which were repeated periodically at certain times during the year. The remains of these sacrifices and offerings were then probably placed in ditches or pits situated close to the walls or displayed in front of it.

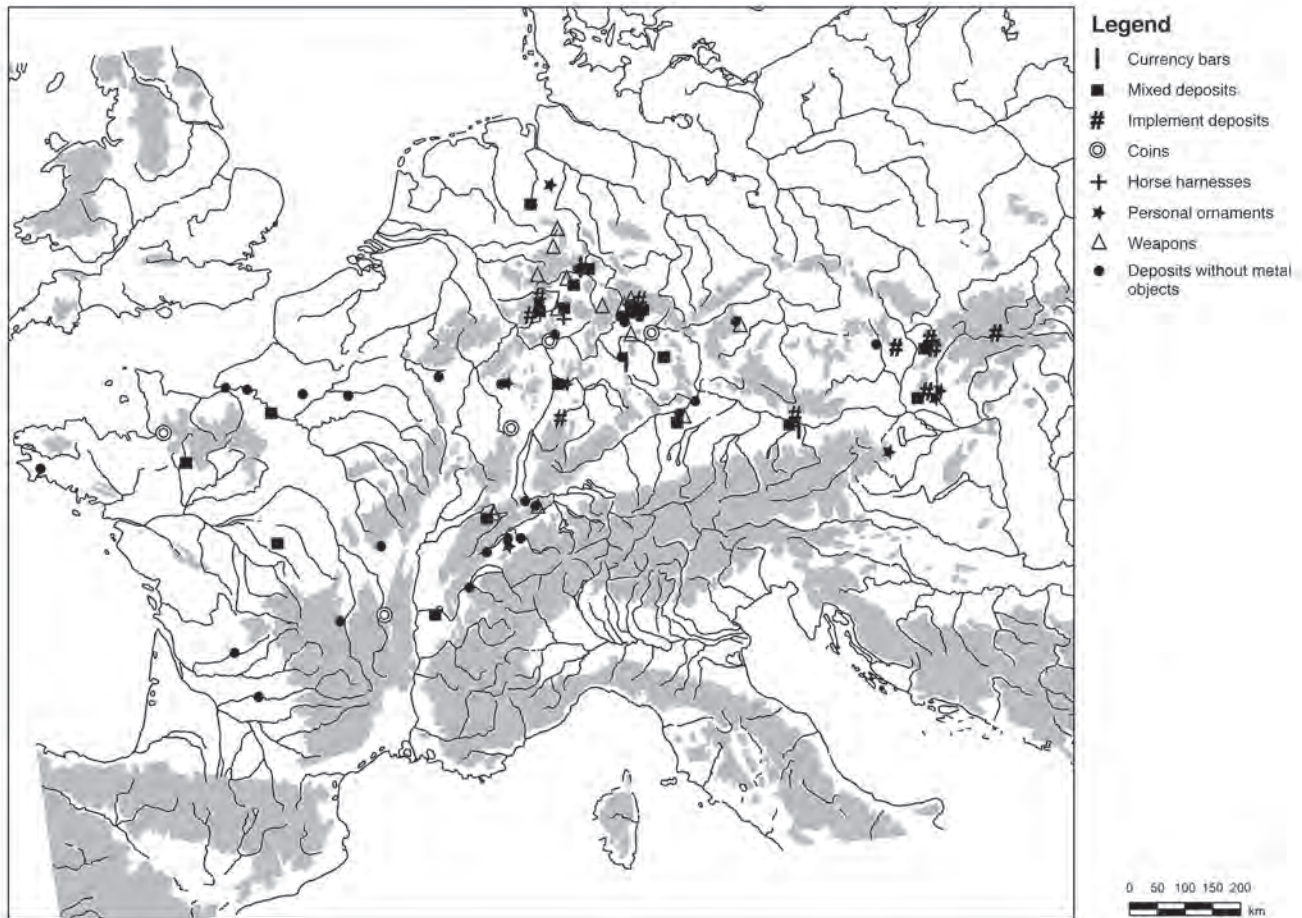


Fig. 10.7: Deposits containing many metal objects, above all tools, prevailed in Central and Eastern Europe. Deposits consisting of currency bars or weapons were concentrated in the German Mittelgebirge. In Western Europe, deposits generally contained fewer metal objects, except for coins, or consisted entirely of ceramics, animal bones, or human remains (author)

Burials and human bones discovered beneath, within, or in close vicinity to the ramparts can be identified as “special burials”, as they occurred outside of the existing cemeteries. The practices involved in such interments presumably also differed considerably from common funerary rites. These special burials were probably dedicated to special members of the community, either of a particular high or of a very low status (Veit 1996: 27–28). Human skulls and isolated human bones found in the body of a rampart, or in pits and ditches located close to fortifications might be the trophies of enemies, or relics of ancestors, buried after having been displayed elsewhere, for instance at the walls or gates of the hillfort (Rousseau 2012: 132–133). Such deposits resembled the *têtes coupées* known from sanctuaries and settlements in southern France (Drda & Likovský 2003: 293–294).

Likewise, single weapons, as well as larger collections of weapons, horse harnesses, tools, etc. – often deliberately damaged before burial, and assembled over a longer time span – might have been originally fixed to entrance gates,

or walls, or exhibited in front of them on poles or platforms. Hence, they might have been trophies (i.e., items taken as booty) displayed in a highly visible manner, and not recycled or reused, although they were sometimes very valuable, and easily accessible to everyone (Müller 2007: 367–373). After a certain time, the items were taken off and buried close to the ramparts or entrance gates or may have fallen accidentally to the ground, where they would have been displaced by erosion or human activities.

The ritual activities associated with hillfort defences in Iron Age Europe were social practices which only reveal their significance against the background of other archaeological sites situated in the same regions, such as sanctuaries and cemeteries, and of other types of deposits discovered, for example, in bogs, watery places, or other naturally exceptional locations. West of the Rhine, the majority of metal goods were not deposited in or next to Iron Age hillforts, but rather in sanctuaries dating from the Middle and Late La Tène period, such as Gournay-sur-

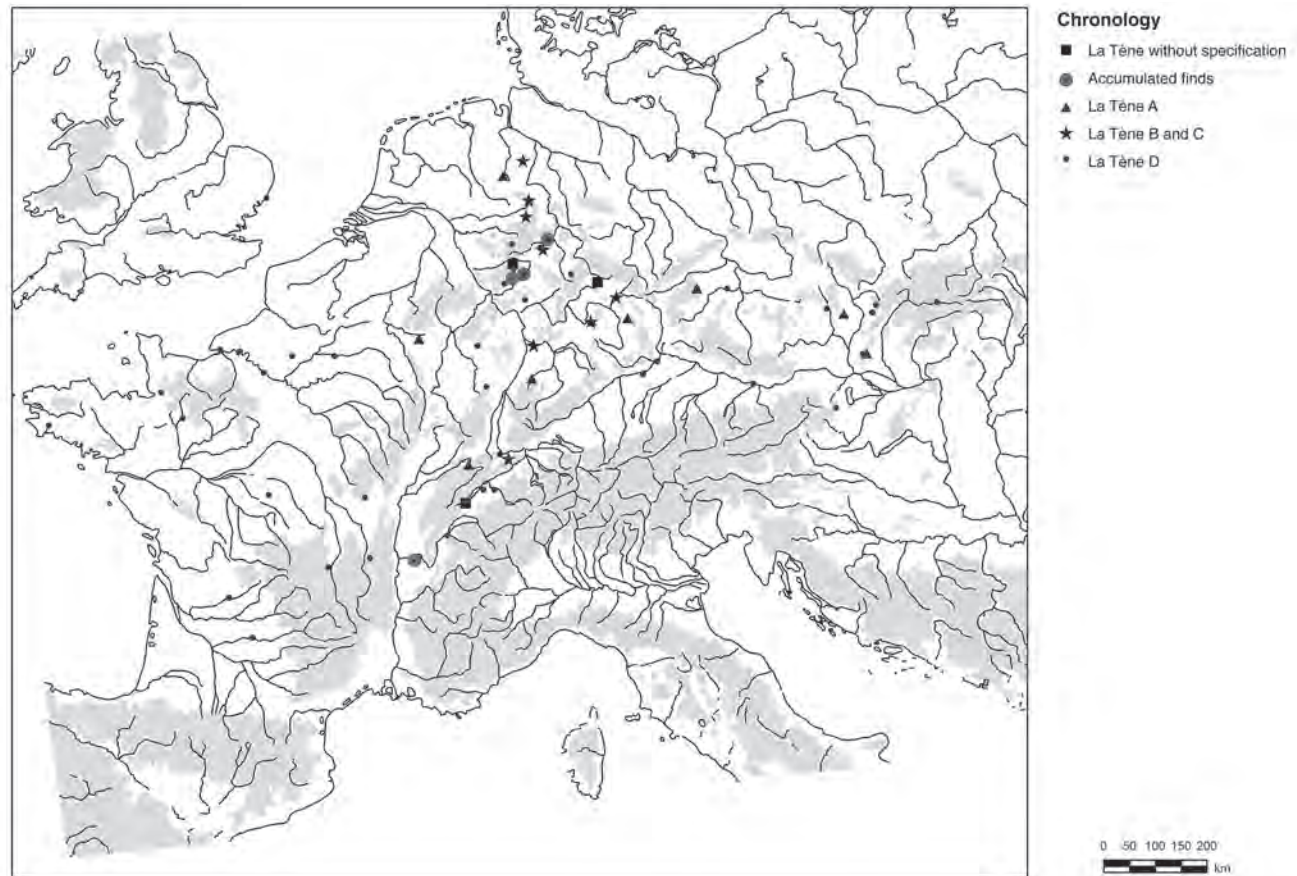


Fig. 10.8: The oldest finds, dating to La Tène A (c. 475–375 BC), are located in the Czech Republic, Slovakia, Germany and Switzerland. Deposits dating to La Tène B and La Tène C (c. 375–150 BC), are concentrated in the German Mittelgebirge, including all of the large accumulated find complexes. Deposits occurred in the entire area of the La Tène culture only during La Tène D (c. 150–25 BC) (author)

Aronde (Picardie, France) (Brunaux *et al.* 1985: 118–124) or La-Villeneuve-au-Châtelot (Champagne-Ardenne, France) (Bataille 2008: 46–154). In these sanctuaries, large quantities of metal objects, consisting above all of deliberately broken weapons, were accumulated during several decades or even centuries along with other types of artefacts and remains, including personal ornaments, tools, ceramics, amphorae, coins, and animal bones (Brunaux & Malagoli 2003: 15–25). In the East, closed deposits containing large numbers of metal objects occurred frequently in Iron Age hillforts, especially during the Early and the Late La Tène period. However, some sanctuaries, where metal and other artefacts were deposited from the Middle La Tène period onwards, are also known in this region. Within the Liptovská Mara hillfort (Zilinský Kraj, Slovakia), for example, an enclosure surrounding a pit carved into the rock appears to have served as an area for cult activities. The enclosure was found to contain several post alignments, remains of pavement, as well as the remains of open hearths. The hearths, in turn, yielded thick layers of ash that contained burnt and

unburnt human and animal bones, grain, ceramic and bronze vessels, tools, personal ornaments, and coins, dating from between La Tène C2 and D2 (Pieta 1996: 85–95). In the German *Mittelgebirge*, a different way of withdrawing metal objects from the usual cycle of production and reuse can be observed. From the Early to the Late La Tène period, deposits were placed below and within the ramparts, or in ditches and pits located in their proximity. But in addition, in some larger fortified settlements, like Dünsberg (Hesse, Germany) or Altenburg-Niedenstein (Hesse, Germany), particular places situated close to the walls were apparently used over a period of several decades or even centuries for repeated ritual activities (Schulze-Forster 2007: 132–138). Alongside these larger fortified settlements, a certain number of small, often poorly fortified hillforts in northern Germany, like the Schnippenburg, were obviously not, or only temporarily, occupied, but probably served as central places for the constant deposition of different artefacts (Möllers 2009: 103–113).

Conclusion

Deposits occurring close to the enclosures and entrance gates of hillforts are a widespread phenomenon found all over Iron Age Europe, although with different regional characteristics. Many if not all of these deposits would appear to have been the result of formalised and repeated activities of a symbolic or even religious significance, such as the presentation of offerings and sacrifices, the display of trophies, and the interment of individuals of a particular social status. In a broader context, such ceremonies and performances were intended to accentuate the significance of the boundaries of a hillfort as the zone of passage between the enclosed interior and the excluded exterior (Hill 1995: 50–51). Therefore, these rituals performed cyclically or at special occasions can be identified as collective rites of passage that were meant to support and strengthen the coherence and identity of the communities who built and used these fortifications (Haselgrove & Hingley 2006: 158; Rieckhoff 2010: 291–292). Obviously, the lines of enclosure surrounding Iron Age hillforts were thus not only intended as monumental defensive works, but also fulfilled important social and symbolic functions (Fichtl 2005b: 70; Hingley 2006: 224).

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OPEN AGGLOMERATIONS AND FORTIFIED CENTRES:
FROM SITES TO LANDSCAPES

Roseldorf – An Enclosed Central Settlement of the Early and Middle La Tène Period in Lower Austria (Roseldorf/Němčice Centre)

Veronika Holzer

Roseldorf, the largest La Tène settlement in Austria, provides a new impetus for European Celtic archaeology. Large-scale survey and excavations during the last twelve years have shown that the urban settlement at Roseldorf cannot unanimously be compared to any contemporary settlements mentioned by Caesar in his reports on the Gallic Wars. The importance and influence of the settlement at Roseldorf, which was established in the Early La Tène period, stretches far beyond its direct hinterland. The existence of a mint and its internal organisation clearly mark its status as a central settlement that is controlled and managed by an elite. In spite of a deliberate economic orientation towards long-distance-trade, the settlement seems to have been considerably dependent on agricultural markets and pastures of the hinterland. Three cult districts with seven sanctuaries obviously played a major role in the functional orientation of the central place. Roseldorf is the only archaeological site with such a large number of Celtic sanctuaries from the Early and Middle La Tène periods that display different ritual backgrounds. The characteristics of similar settlements have been classified as eponymous centres of Roseldorf/Němčice type.

The settlement of Roseldorf, situated on the Sandberg (elevation 339 m) in the western part of the Weinviertel in Lower Austria, has already been known since the beginning of the 18th century by stray finds of Celtic coins. But a research-project was only initiated in 1995, which aims at the interdisciplinary study of this biggest Celtic central settlement in Austria (Holzer 2009a).

The site is located in a purely agricultural area and is not disturbed by any preceding or successive settlement activity. The earliest settlement period is documented by the well-known iron belt-hook with dragon motifs from LT A, which was found in 1932 and bought by the Natural History Museum Vienna in 1935. Stray finds by private collectors like Nauheim type fibulae represent the latest settlement phase in LT D1. Since 2001, the annual excavations have uncovered features and finds from the Early and Middle La Tène periods (LT B1/B2 and LT C).

All results of this research-project clearly show that the economic importance of this largest Celtic settlement of Austria was supra-regional. However, any attempt to assign one of the Roman terms of Celtic settlement types of Caesar's reports of the Gallic Wars (*oppidum*, *vicus* and *aedificium*) to this important settlement in Roseldorf is problematic. This is due to a general problem of transferring categorisations and types to phenomena of different cultures. In my opinion, the Roman concepts are at best, if at all, relevant to the Late La Tène period, but not to the Early and Middle La Tène Celtic settlements. With a constant increase of variations of Celtic settlements, the former simplistic categorisation of settlements does not provide a sufficient characterisation. Growing variability in settlement structure raises new questions on definition and concepts. Therefore, new and greater differentiation of settlement types will be essential.

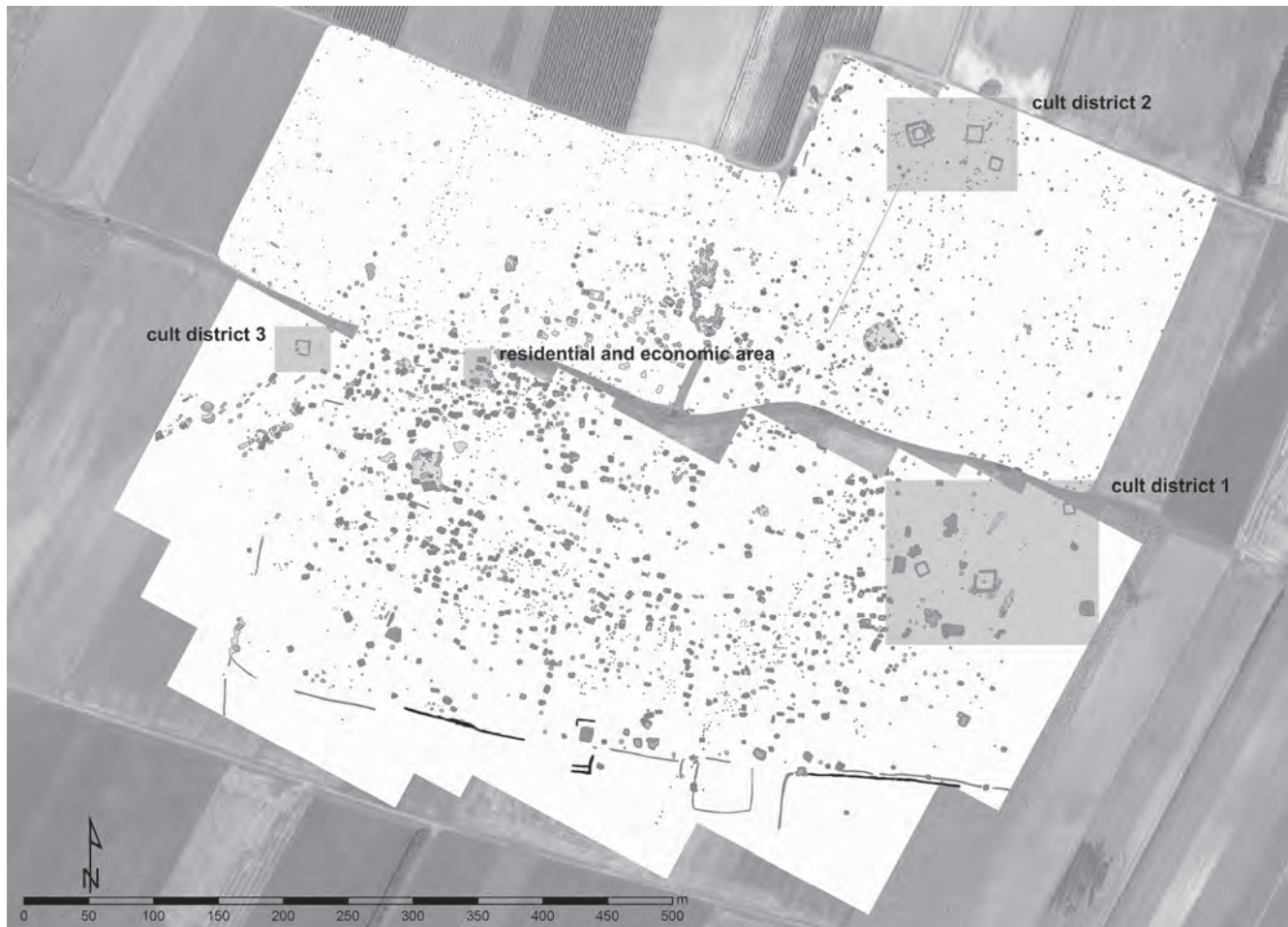


Fig. 11.1: Roseldorf. Interpreted geomagnetic prospecting plan of the Celtic settlement, 2011 (© NHM/Keltenforschung Roseldorf, ZAMG, V. Holzer)

Regarding this new discussion about concepts, Roseldorf plays a key role (Holzer 2007). Early and Middle La Tène settlements that distribute local coinage and reveal a complex economic system as a commercial and administrative centre exhibit parallels to the *oppida*. However, they had not been designed as such. The meaning of the term '*oppidum*' was coined by modern scholars in a very heterogeneous way and is probably not identical to the content of the ancient term (Salač 2009: 249). Moreover, there is no uniform meaning of the Roman term *vicus* which does not show any distinct settlement layout (Kortüm 2008: 20). Thus, it does not sufficiently describe the settlement of Roseldorf. This problem is shown very clearly by the urban-like Celtic settlement in Manching dating back to the 3rd century BC as well, which was not built as an *oppidum*, but has developed into one in later times. Manching reached its economic peak before the construction of its fortifications with a *murus gallicus* or timber-framed wall and shares with other *oppida* just this type of fortification (Sievers 1993: 34; 2003).

Despite its remarkable parallels to Manching and its

important criteria as being a Celtic town with central function for the surrounding area, Roseldorf does not show any subsequent development towards an *oppidum*. However geomagnetic measurements in Roseldorf show clearly a not yet excavated enclosure of the large central settlement, characterised by a ditch-system in the south. The main ditch has a width of 2–3 m and an estimated depth of 1–1.5 m and shows an interruption, which perhaps indicates one of the gates of the settlement. In the eastern section of the settlement another ditch runs inside parallel to the main ditch. This construction is probably a ditch with one or two palisades running inside, perhaps in combination with a rampart. In any case, this construction is in my opinion rather a kind of reinforcement or protection for the settlement than a small fence mark (Fig. 11.1).

This raises the question which type of settlement is found on the Sandberg. For these Early and Middle La Tène settlements, whose importance and influence go far beyond a small region V. Salač has created a new eponymous after the site of Roseldorf and the site of Némčice in the

Czech Republic (Moravia) – which is in many respects similar to Roseldorf – the type ‘Němčice-Roseldorf’ Centre (NRC) (Salač 2005). This new type is characterised by an exceptional location, a complex settlement structure, a recognisable political power, far-reaching trade and cultural contacts, a well-organised supply and especially by a significant religious centre.

The exceptional location of the archaeological site on the Sandberg is shown by one of the highest elevations in the hilly landscape with expansive views in all directions. The sight-distance-radius is very big. To the north it is possible to see as far as Znaim and the Nuclear power station of Dukovany, to the east the view extends to the Oberleiserberg, where a Late La Tène settlement is located, to the south the Danubian region and the Voralps are visible and finally the view to the west stops at the Manhartsberg. Despite of this deliberately strategic choice of the Celts for this location, their settlement cannot be equated with a hilltop-settlement in the classical sense as in the mountainous regions. Another important aspect with respect to the excellent location of the settlement is the close proximity to the catchment area of two extremely important trade routes as the Amber Road from north to south and the Danube waterway from west to east.

Large-scale geomagnetic prospecting measurements since 1995 revealed an expansion of at least 38 ha, which already makes Roseldorf the largest La Tène settlement in Austria. The final boundary of the settlement has not yet been prospected, making the total extension not yet known. Because of the general orientation of the buildings in this complex settlement structure former roads and paths can be reconstructed. Zones without traces of settlement structures might be marketplaces, witnessed by numerous coins found in this area. Coins were mainly used in market areas and were hardly lost elsewhere. But the most important and spectacular discovery owing to geomagnetic investigation are three distinct areas located within the settlement, exclusively reserved for the cult.

Such a complex settlement with its society shows its political power in the management of the internal structure and organisation, in trade and cultural contacts, but especially in its own coinage. At the beginning of Celtic coinage it seems that any nobleman with sufficient influence and the required raw materials for minting was producing his own coins. But later on circumstances changed and strong centralised political structures with a differentiated and powerful monetary system were established. With goods and products frequently exchanged, the control of economic transactions became very important. Both this control-function and the organisation of the market require a considerable political power.

The existence of an own mint in Roseldorf is clearly documented by the finding of a spot plate with traces of gold, further gold- and silver-bars, even fakes of gold bars, cut-up bars, flans of silver and bronze for fakes, slashed

Fig. 11.2: Small silver coins of Roseldorf type I (© KHM)



and hacked east-Celtic tetradrachms. Together with the previously collected and scientifically analysed 1500 coins, this proves that Roseldorf was the Celtic settlement richest in coins in Austria as well as having a central urban function. It seems that both small silver coins and gold coins and their fakes had been made there. The rather rare eighth-staters at various stages of stamp damages may indicate that these pieces could have been entirely produced in Roseldorf. If, as expected, fakes of mussel-staters and their cuts were also made there, the settlement is likely to be one of the most important mints in Austria, where Celtic money north of the Danube was embossed (Dembski 1994: 64; 1999: 54–55, 57).

Far-reaching trade and business contacts of Roseldorf can be proved by several foreign coins. In Roseldorf coins of the Vindelici Manchinger type and Buschl-quinars from Lower Bavaria, Potin-coins of the Leuker and of the Sequani have been found, which indicate trade relations with the Gauls. In addition, small silver coins of the Norici in Carinthia and the Taurisci in Slovenia, chopped large silver coins (tetradrachms and obol) of the Eastern Celts, a Late Republican Roman coin (denarius Mark Antony, 32–31 BC) and a coin from the time of the Principate, a bronze coin from Syracuse of Hieron II (274–212 BC) and a drachm of Trajan (AD 98–117), which was coined in the Cappadocian Ceasarea (Dembski 2009: 97–100) have been unearthed.

In return, coins of Type Roseldorf I and II, which undoubtedly had been minted at Roseldorf, were found in other archaeological sites, especially in the area of the Boii and the Vindelici (Fig. 11.2). In Austria, they can be



Fig. 11.3: Roseldorf. Iron druid crown (© NHM/Keltenforschung Roseldorf, Photography A. Schumacher)

found in Neubau near Linz, in Etzersdorf near St Poelten, in Haselbach near Korneuburg and in Stripfing upon March. Further to the north-east, these coins were also found in Nĕmčice in Moravia and in Nowa Cerekwia in Poland. In the area of the Vindelici, these types of coins can be found at Manching and at Berching-Pollanten.

Although the analysis of the archaeological material is far from complete, cultural contacts may be derived from many special finds in all cardinal points. Based on the coin type *Schmid*, G. Dembski has established links with the Celts in England (Dembski 2009: 96). The same connection shows the iron druid-crown of the first big sanctuary (object 1) of Roseldorf (Fig. 11.3). It is the only one on European mainland and the only one made of iron and maybe even the oldest. The crown had been intentionally destroyed and bent and only about half of the crown has been found. It corresponds to the type I by K. Parfitt with an encircling headband and two bands crossed at the apex (Holzer 2009b: 175–177, 182; Parfitt 1995: 72–82).

M. Karwowski, who is just going to do the scientific analysis of the Roseldorf finds, noted probably the most north-eastern evidence of a so called Sanzeno key in Roseldorf, which is associated with shrines (Holzer & Karwowski in preparation). Roman cattle bones in the cult districts of Roseldorf show the contacts to the Mediterranean world (Abd el Kareem 2011: 75–78; Bruckner-Höbling 2009: 205). A little forged fibula with four knots, according to M. Karwowski similar to Mötschwill, probably suggests relations with Slovenia and the Adriatic Sea and a second

Middle La Tène iron-fibula with coral ornaments has parallels in the Carpathian Basin, yet they are not 100% typologically identical. Face-beads like our fragment (Holzer & Karwowski 2008: 164, 168) are manufactured in the Pontic areas and may show the contacts of Roseldorf with the upper Tisza and the Black Sea. According to M. Karwowski, a vessel fragment with a full foot and plastic strip-rings may indicate connections to the Este-culture of the Veneto region, but definitely to the northern regions of the Boii with similar finds known from Manching, Lower Austria, Bohemia and Lesser Poland. Probably they have also a votive character, because many of them are from the Reitia-sanctuary of Este-Baratella. Many different small zoomorphic figurines from Roseldorf have their parallels especially in the northeast, in the Celtic settlements in Nowa Cerekwia in Poland and Nĕmčice in Moravia (Čižmář *et al.* 2008: 660–663).

To supply such a large settlement with the essential goods, an agriculturally fertile region is important. The well-organised supply of Roseldorf is shown in the agricultural- and livestock-production with commercial focus, commercial food processing and related trade. The meat supply in Roseldorf was based on three main livestock species: cattle, sheep/goat and pig. Dog and horse were indeed eaten as well, but their proportion in the diet was very low. Also the minimum percentage of wild animals shows that hunting has hardly played a role. In comparison to other rural settlements Roseldorf shows a small portion of cattle. This is explained by the fact that in the course of urbanisation the complex



Fig. 11.4: Roseldorf. Layers of winter and summer seed grain in house 1, excavation in 2001 (© NHM/Keltenforschung Roseldorf)

keeping of large animals in residential areas was given up and relocated to the countryside. Consequently beef was only obtainable through the market and regulated by the trading price.

Here social differences come into play: only the richer people could afford to consume meat on a regular basis. This assumption is supported by the relatively high proportion of high-quality body parts of cattle in Roseldorf (56%). The trade probably caused a preliminary selection of the meat on offer. Cattle was used for dairy, meat production and farming, but with animals being slaughtered between the age of 1–5 years in Roseldorf, meat production seems to have dominated. This is a clear contrast to rural settlements. In addition, the predominance of oxen in the range of animal bones distinguishes Roseldorf significantly from rural assemblages, where cows are much more represented (Bruckner-Höbling 2009: 193–198)

Successful farming requires adequate and good pastures. Grazing areas for cattle and horses were moist or wet lowlands with wetlands. Seggenrieder, reed beds and riparian forest remnants probably for the hay served as winter forage. On the steeper hills and loess grounds around the settlement there was dry grass for the frugal and moisture-sensitive sheep and goats. Larger herds of sheep and goat migrated to the west and north to the more distant, but larger pasture areas of the Manhartsberg region (Caneppele *et al.* 2010: 18–20).

The grain supply was secured by extensive field management. The flat, extremely fertile loess slopes around the settlement were covered by vast open fields, probably already marked out. These fields were growing einkorn, spelt, barley, millet and emmer, some in mixed culture. On small areas close to the homes, legumes such as peas and lens, and oil seed crops such as camelina, poppies and flax were grown with intensive care. Due to the high number of corresponding archaeobotanical remains, it seems that the rye in Roseldorf was no longer just weed but was already being used intentionally as crop (Caneppele *et al.* 2010: 20) although the seeds are still smaller than those of the rye in the Middle Ages. A real sensation is the discovery of a charred seed of cultivated grapes, which could have been a valuable luxury import from the south, but it may also hint at a local wine-growing tradition in pre-Roman times (Caneppele *et al.* 2010: 16).

The granary of Roseldorf (Holzer 2008) holding a total of 204 litres seed grain, clearly separated into winter crops like einkorn, spelt and barley and spring crops comprising barley, oats, einkorn and spelt (Caneppele *et al.* 2009: 129), proves a more comprehensive grain storage for a larger number of persons and organised stock holding in everyday life (Fig. 11.4).

Apart from the economic power of a settlement, the religion and its cult play an exceedingly important role in society as a kind of spiritual food for the soul and



Fig. 11.5: Roseldorf. Second large sanctuary (object 30) on the plateau of the Sandberg (© NHM/Keltenforschung Roseldorf)

for providing answers to key questions of life. Religion, being immanent in all areas of Celtic life, finds its specific expression in their sanctuaries as places of encounters between the people and their gods. Such meeting and offering places seem to have played a very significant role in Roseldorf, because this archaeological site currently is the only one in Europe where three contemporaneous Celtic cult districts have been documented within the settlement area. They comprised at least two large temples, five smaller ones and at least one large sacrificial pit. All of them date to the Early and Middle La Tène period according to the current state of research. This makes the settlement of Roseldorf a significant religious centre.

All seven prospected sanctuaries are of square ground-plan and look very similar at first glance. But on closer examination, the four sanctuaries that have so far been archaeologically investigated show significant differences in respect to both the construction as well as to the range of offerings (Holzer 2010). The differences in the architecture are reflected in the dimensions of the shrines and the presence of central sacrificial pits or palisades. The two bigger ones have a side length of about 17 m and the smaller shrines a side length of about 10 m. Except for the second large sanctuary, where the situation is exactly the other way round, each shrine shows one, respectively four, sacrificial pits in the central sacred space and no traces of a ditch for

a palisade running parallel to the sacrifice ditch (Fig. 11.5). The different orientation of the shrines in the area follows no obvious pattern. In none of the examined sanctuaries the location of the entrance was detected. There were neither archaeological traces nor deposits of special offerings.

The finds from the sacrificial-trenches of the sanctuaries of Roseldorf as remnants of the religious banquets and rites correspond largely to the votive-offerings known from Gallic sanctuaries. Apart from so-called blood sacrifices in which both humans and animals were either killed in a complex ritual or specially chosen corpse ritual, weapons, horse gear and chariots, but also equipment, tools and jewellery were offered to the gods. Especially the spectrum and the percentage of the offerings clearly show the differences in ritual and worship of shrines or cult districts in Roseldorf.

The human sacrifice as such cannot be determined on the basis of human bones, but the post-mortem ‘finishing’ and the ritual manipulation of corpses are documentable. The human remains (Teschler-Nicola 2009) in cult district 1 of Roseldorf show exclusively single-bone deposits per individual. This seems to reflect a *pars-pro-toto* practice in the rites like in other cases of offerings. For these single-bone-offerings only arm- and leg-bones of young and strong men had been selected. At the time when the bones were cut and gnawed at by game animals, they were still surrounded by the flesh and tendons. On the other hand the bones were

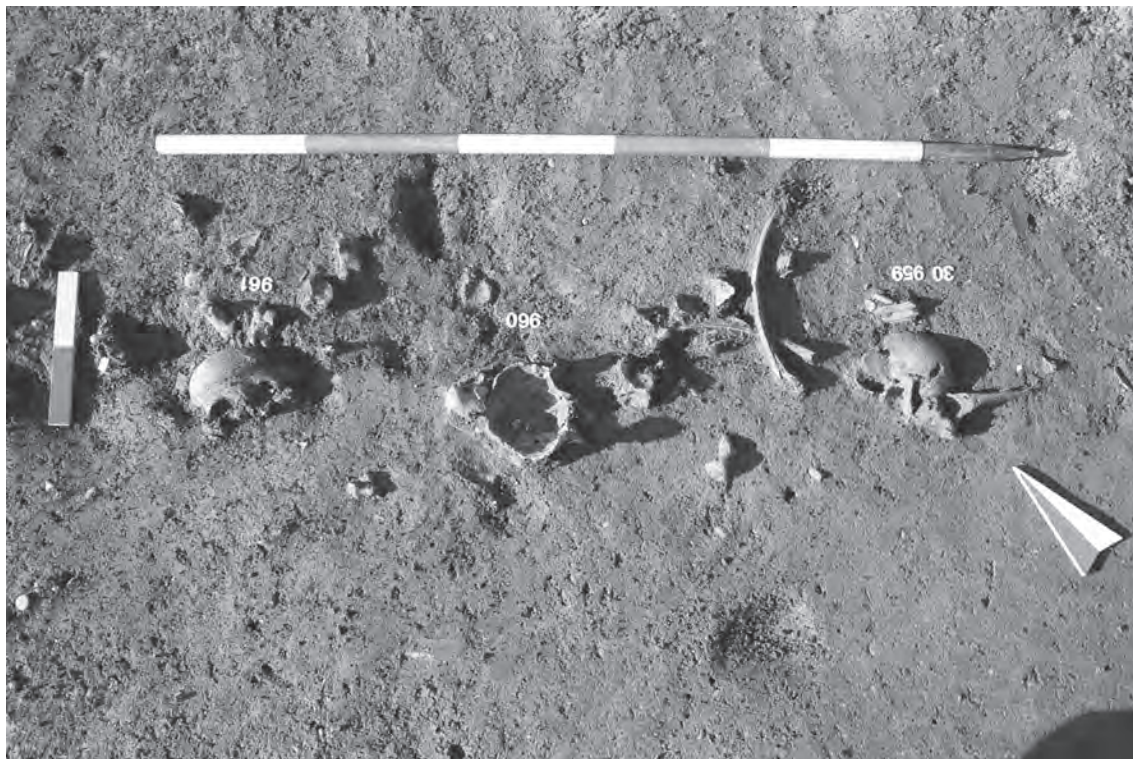


Fig. 11.6: Roseldorf. Fragments of human skulls found at the second large sanctuary (object 30) (© NHM/Keltenforschung Roseldorf)

already macerated when they were fractured and hacked. Hairline cracks and chipping on the human bones indicate that the fragmentations were carried out on a hard surface. Only in three cases it was possible to reassemble the bone fragments. Only a few and small cranial remains of the entire human bones were deposited in the big sanctuary object 1.

In contrast to object 1, we found several skullcaps in the sacrifice ditch in the second large sanctuary (object 30) (Fig. 11.6). One even shows an artificial perforation from inside out. This fact suggests a nailing of the skull for display.

Animal bones are the second aspect of the blood sacrifices (Abd el Karem 2011; Bruckner-Höbling 2009: 199–205). In the first large sanctuary object 1 we have a total of 24,000 animal remains, from which 10,500 could be attributed to individual species. The distribution of the species shows: 55% cattle with mainly working oxen, 20% sheep with female bones prevailing, 13% pigs, 11% horses with mostly mares and geldings, additionally dogs from lap-dogs to watch-dogs and smaller animals. The higher proportion of beef and horse in the sanctuary than in the residential and economic area is remarkable. Due to the lack of young animals the animal bone-remains show no selection with respect to meat quality, also no specifically selected body parts as body parts rich in meat are missing. Furthermore, there are no bone-pairs and thus no whole animals. Similarly there were no teeth-age-data of juvenile

animals to determine any seasonal slaughter date. These findings suggest that the animal bones are surely the remains of the banquets.

As for the second big sanctuary object 30 of the cult district 2, we found numerous individual animal bones in the upper layers – like in object 1, but now especially the bones of horses. In the deeper layers in contrast partial skeletons of horses – whole horse-skulls in association with anterior horse-halves – had been deposited (Fig. 11.7). For the first time this fact shows very clearly that in Roseldorf large animal sacrifices were being performed.

The property offerings in the sanctuaries were primarily iron war equipment. We found in object 1, the first big sanctuary, mainly close-combat-weapons like swords with scabbards, sword-chains, loop-straps, chapes and shields but also some spearheads, parts of chariots and horse-harnesses. The offering-spectrum in object 12 was similar to object 1. In object 13 however there was a big difference in the spectrum of the offerings: there were at all only little finds and almost all ceramic and no war-equipment!

The offering-spectrum in object 30, the second big sanctuary, was quite different from the first big sanctuary. It shows a very high percentage of horse-harnesses like phalerae made of bronze or iron, iron ring-snaffles with a two-piece mouthpiece and ring assemblies as belt distributors and also chariot-parts like hub-rings, eyelets-pins, shaft-pins



Fig. 11.7: Remains of horse sacrifices in the second big sanctuary object 30 (© NHM/Keltenforschung Roseldorf)

and a linchpin. The deposited weapons in object 30 were predominantly range-weapons, which were used from the chariot: lances and spears.

Nails driven into offered objects like scabbards prove the public display of trophies, as these nails did not have any other function. These publically displayed trophies were obviously finally deposited in the sacrificial pit. Similar procedures have been found in connection with human sacrifices, as a human skull from the second large sanctuary shows a similar perforation.

This intentional destruction of all offerings by killing, burning and decaying on the one hand, or by crushing, bending, chopping etc. on the other hand transferred the offerings from the human to the divine sphere and was a quite popular Celtic tradition.

It seems that the sacrifice of war equipment played an important role, because it represented a valuable asset and served for representation purposes. Due to the large number of war items having been sacrificed one is inclined to attribute these places to a Celtic god like Teutates, Taranis and Esus who can be equated with Mars.

However, taking a closer look at the cult areas, differences

concerning the findings require a more complex interpretation. Despite the fact that the range of offerings is similar in the various cult areas, the percentage of the individual types differs considerably. In the first temple district short-range weapons prevail with only a few chariot parts and harness remains, whereas in the second cult district weapons mostly used from the chariot like lances and spears together with iron parts of chariots and horse harnesses dominate.

This suggests that at least the cult-districts, if not every sanctuary itself, were dedicated to different gods. In the first big sanctuary (object 1) a deer-antler has been found which shows sophisticated artificial treatment. The natural coronet had been removed and a new one cut to extend the pedicle in order to fix it more easily with an iron nail or pin – witness the traces of rust near the borehole – and the cutting off of the last antler point, perhaps for an amulet. It might therefore have been part of a God figure, probably of Cernunnos (Fig. 11.8).

On the other hand the second big shrine object 30 with the numerous horse harnesses, horse skeletons and chariot parts etc. could be interpreted as a place of sacrifice for the horse-goddess Epona.



Fig. 11.8: Carved and pierced attached-deer-antler of a God figure of Cernunnos (© NHM/Keltenforschung Roseldorf, Photography A. Schumacher)

Further special finds like the bones of the white Roman cattle, which remind us of Pliny the Elder's reference to the white sacrificial animals (Plin. *Nat.* XVI, 95–249), the iron druid crown as a ceremonial headdress of the druid, remains of chain mails, one carbonised seed of a cultivated grape, six small Celtic silver coins of the types Roseldorf I and II, which are clearly stratified, give an interesting insight into the religious rites and actions of the druids in Roseldorf.

All these features of Roseldorf described in this paper, especially the laborious work of the population of the Middle La Tène settlement at Roseldorf to erect more than just one sanctuary and to set up their specific own cult-districts for several religious occasions and their rituals, show that the settlement had more than a rural character. The process of urbanisation in Roseldorf had at least clearly begun. The studies of V. Salač confirm that even the climax of the urbanisation process occurred already at the time of the Némceice-Roseldorf Centre (Salač 2009: 245; Sievers 1993: 34; 2003).

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Aspects of Iron Age Urbanity and Urbanism at Manching

Holger Wendling and Katja Winger

As one of the most extensively excavated and well published European sites, Manching plays a major role in Iron Age settlement archaeology. Recent research on the ancient excavations at the 'Zentralfläche' (excavated 1955–1973) and at the 'Südumgehung' (1967–1971) brought new insight into the structure and evolution of the oppidum and its pre-fortified settlement phases. In an attempt to combine data from structural features and from artefact distribution, different functional zones could be identified. The role of sacred spheres and spaces as indicators and prerequisites of social differentiation in an urban environment is investigated. In different zones of the enclosed area of the oppidum, variable facets of the growth, internal organisation and decline of the settlement can be observed.

Introduction

Research on Later Iron Age communities in Central Europe is intrinsically tied to a number of central sites that have thoroughly contributed to the understanding of various aspects of 'Celtic' prehistory. Despite an ever increasing scope of recent research programmes at different places all over Europe, there are a few sites that remain outstanding in Iron Age settlement archaeology. The impact of these 'big five' – if they are to be delimited to a certain number – is related to changing degrees either on the quality or quantity of finds, the extent of archaeological excavations or to an eminent position in research history both on a regional and an supra-regional scale. Thus, the *oppidum* of Bibracte (F), the unfortified settlement at Levroux (F), the settlement complex at Basel (CH), the *oppidum* Závist (CZ) and the *oppidum* of Manching (D) still play an important role in contemporary research. However, other important sites have considerably enhanced knowledge on Late La Tène settlement structures and systems in recent years, e.g. the *oppidum* and sanctuary at Corent (Poux 2007), the unfortified centre of production and distribution at Roseldorf in Austria (Holzer 2009; Holzer this volume) or the various

oppida and unenclosed settlements in Moravia and Bohemia (Salač 2009).

The *oppidum* at Manching, situated on a flood-free river bank of the Danube in central Bavaria, incorporates most of the aforementioned characteristics that make for an influential position in contemporary settlement archaeology. In more than 60 years of almost continuous large-scale excavations, the *oppidum* of Manching set the pattern in various regards, starting from chronological arrangements or the classification of multiple categories of finds, to the economic and structural organisation of a complex settlement and fundamental research on Iron Age fortifications (Sievers & Wendling 2014). Yet, due to the amount of excavated objects and the immense quantity of data gathered in documentation of structural features, two most important parts of the settlement have not been extensively investigated until recently. Accordingly, the *Zentralfläche* and the so-called *Südumgehung* were the focus of two projects of the Roman-Germanic Commission of the German Archaeological Institute (Eller *et al.* 2012). Some of the results are presented in the following sections.

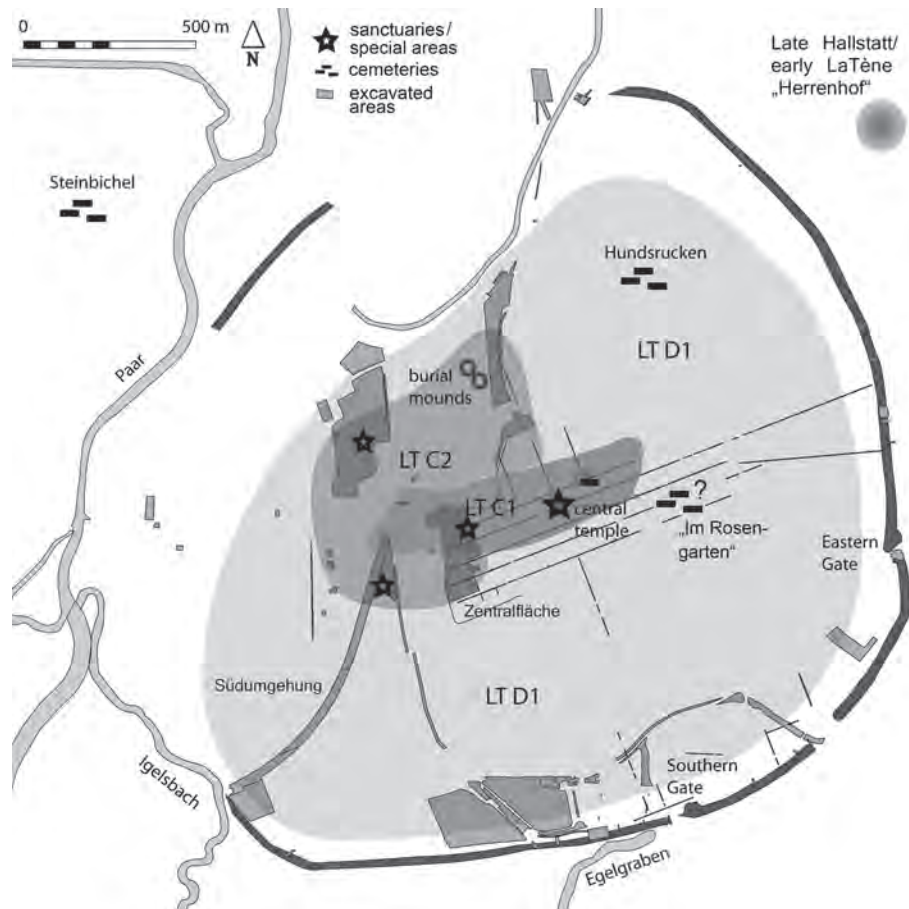


Fig. 12.1: Manching. Archaeological features and sites within the area enclosed by or adjacent to the rampart of the later oppidum. Settlement expansion is indicated by different shades of grey (H. Wendling)

Sacred spheres and social differentiation at the *Zentralfäche*

Geophysical survey has verified the existence of a Late Hallstatt/Early La Tène enclosed farmstead or so-called *Herrenhof* some 300 m northwest of the 7 km circular rampart (Wendling 2011; 2013: 464–465) (Fig. 12.1). Together with a number of similar sites, which are quite equidistantly distributed along the course of the Danube, the rectangular double enclosure seems to represent one of the initial foci of local Iron Age settlement. Two burial places that were in use from LT B to LT C1 further indicate a certain division of the landscape among different communities (Krämer 1985: 32–33, 71–97). Only at the end of the Early La Tène period, a gradual concentration of the population seems to occur in the central parts of what was later to become the Late La Tène *oppidum*. One of the prime movers of this centralisation was probably a common set of religious beliefs that eventually led to the establishment of a local or regional sanctuary in LT B2 (Sievers 1991). The remains of the first phase of the sanctuary reveal remarkable similarities to a distinct building type which is characterised by a setting

of four to six posts and a shallow encircling ditch (Wendling 2013: 466–468). This particular layout can in turn be related to elevated granaries on posts. Thus, one might infer an ideational correlation between those agricultural storage facilities and the special house forms which repeatedly occur in ritual contexts of the Later Iron Age (Donat 2006: 144–146; Leicht & Sievers 2005: 233). At Manching, an integrating focus for surrounding agricultural communities might have gradually evolved. The inhabitants of nearby villages, hamlets or farmsteads might have gathered at such an assembly point to celebrate ceremonies of harvest or fertility. The importance of religious thought for the emergence of the centralised community undoubtedly still played a major role in the proceeding development of the urban space. In analogy to comparable features, for example at Roseldorf (Holzer 2007 and this volume), a rectangular ditch system at the eastern side of the *Zentralfäche* is interpreted as another cult area (Fig. 12.2). The adjoining passageway respects the position of the sanctuary by passing by in a twisting direction just south of it. The sanctuary thus seems to be one of the earliest features in the central part

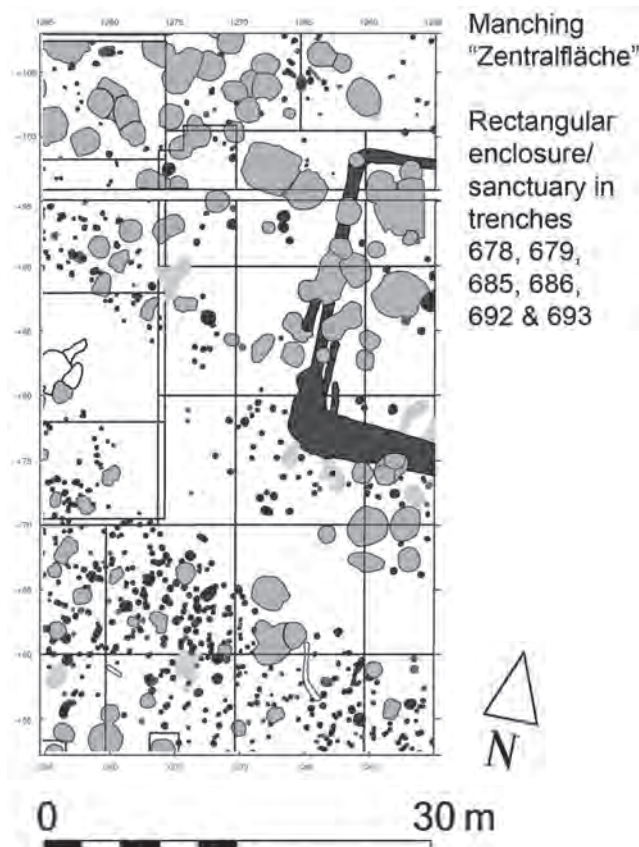


Fig. 12.2: Manching. Enclosed sanctuary at the eastern border of the Zentralfläche (H. Wendling)

of the emerging town. According to the finds which have been recovered from the ditches and its surroundings, the enclosed area was established insignificantly later than the central temple in trench 20. At approximately the same time, towards the end of LT C1, a complex of special buildings was erected along the second traversing road in the *Südumgehung* (Schubert 1983: 10–11). The unusual shape of a multi-faceted or round building as well as wide-span buildings consisting of more than 25 posts, can be seen as explicit signs of the religious character of this area (Schubert 1994: 186). On the one hand, the direct connection of both sacred zones to major lines of communication emphasises their distinct integration into public space (Eller *et al.* 2012: 311). On the other hand, all temples are clearly separated from the supposedly profane public sphere. Architectural devices like ditches, palisades or empty space around the enclosures seem to have deliberately delimited the internal, sacred realm of the supernatural. Physical and visual access to these distinguished ritual zones might have been restricted to certain privileged groups of people. In the c. 30 ha that have been systematically excavated at Manching, at least four cult areas can be identified on the basis of buildings and structures for late LT C1. Consequently, an increasing

ritual complexity might subsequently have fostered social differentiation. Such an increasing separation between religious and political authorities and subordinate groups is one of the major characteristics of socially stratified urban communities not only at Manching.

Unlike architectural sanctuaries, other cult areas are more difficult to identify archaeologically. The distribution of intentionally distorted weaponry at the *Zentralfläche* might indicate a zone of deliberate deposition which partially coincides with the dispersal of fragments of a cultic horse statue (Krämer 1989; Sievers 2010: 130–131). Another category of finds has only recently been attested to additionally fall within this pattern. Depositions of complete skulls of horses and cattle in abandoned storage pits or wells are concentrated in the same area (Fig. 12.3). This spatial concurrence suggests the existence of another ritual zone between the northern and middle passageways of the *Zentralfläche*. Special animal deposits and a horse statue might indicate a cultic reference to cattle or horse breeding, whereas a chthonic cult might also have been executed according to the horse's role in Celtic mythology (Aldhouse-Green 1992: 72–73, 113–116; Brunaux 2004: 57–59). Whether the area was open to public access cannot be sufficiently determined.

The practise of non-public cult and ritual is suggested by a variety of deposits which have been dumped or carefully placed into pits and wells. The arrangements of objects cover the whole excavated area and include a variety of functional and material categories. Complete and fragmented ceramic vessels occur isolated or in combination with animal bones or skulls. Iron tools and weaponry are also frequently combined with ceramics and faunal remains. Other implements, such as millstones or large quantities of slag seem to be only ostensibly identified as rubbish and might also have been deliberately interred with a religious motive (Aldhouse-Green 2002; Hingley 1997). The variety and distribution of deposited objects suggest some sort of unregulated religious activity that is rather consistently distinguished from the public or communal cults in the elaborate architectural sanctuaries. Still, these established public amenities that seemed to have both a structuring and an integrating function from the beginning of urban development were subject to change and development. While the temple in trench 20 was rebuilt as a circular temple twice and existed until the later days of the *oppidum*, the rectangular enclosure in its centre was abolished around the transition to the Late La Tène period, towards the second half of the 2nd century BC.

Before this significant break, the rectangular sanctuary played a fundamental role in the planning and outline of the entire settlement: the orientation of houses and ditches of the first archaeologically detectable settlement phase are directly related to the position of the sacred site (Eller *et al.* 2012: 311). The temporal correlation of the construction of the

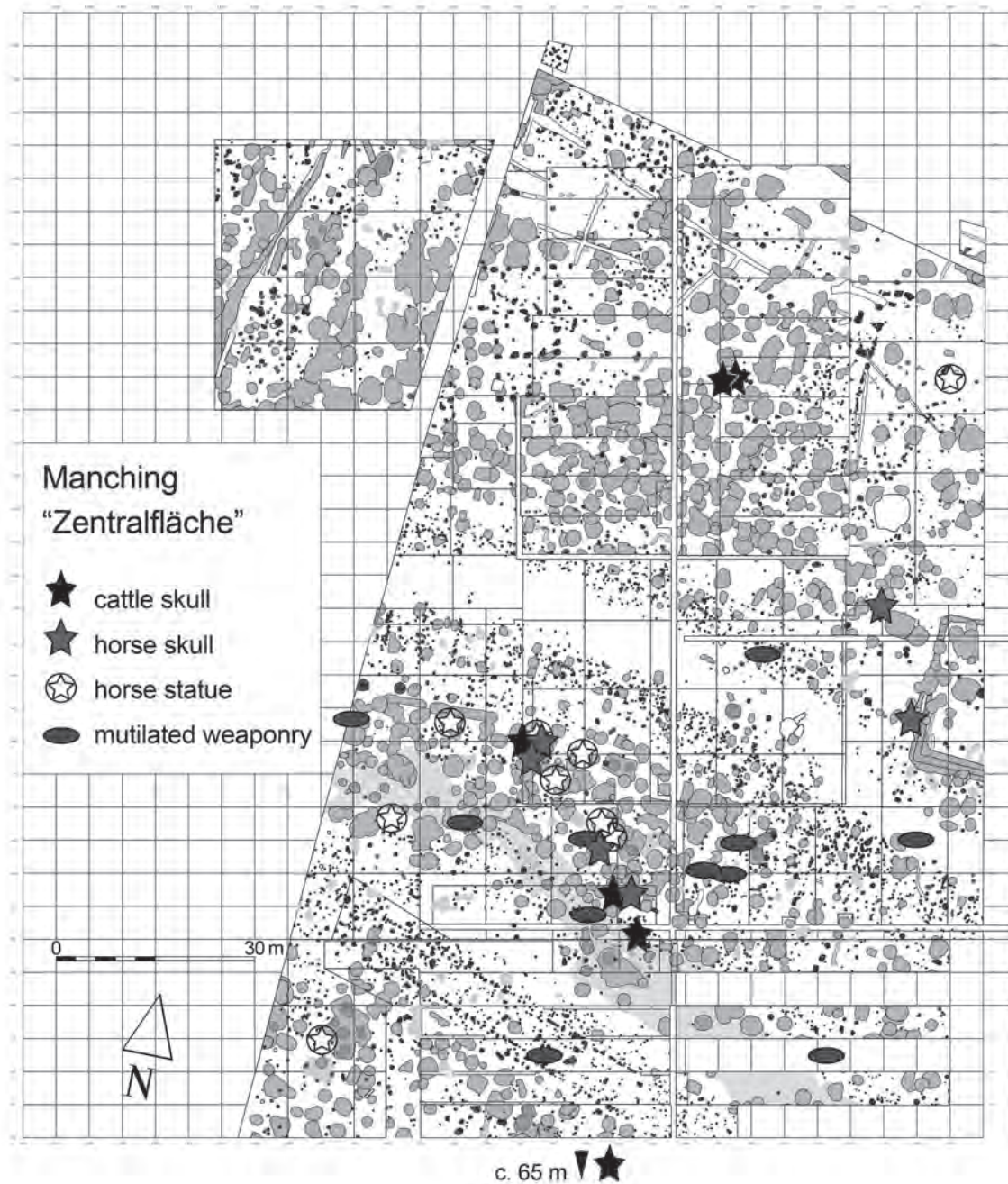


Fig. 12.3: Manching. Distribution of deposited horse and cattle skulls, fragments of a horse statue and mutilated weaponry indicate the location of a sacred area in the centre of the settlement (H. Wendling)

sanctuary and settlement expansion at the transition from LT C1 to LT C2 attests the fundamental integration of religious concepts into the creation and structure of urban space. Whether this urban religious prospect can be distinguished from contemporary rural religious practise is not clear. Thus, it is difficult to assess to what degree religion as part of the ideological aspect of urbanism served as a means of wilful distinction from the rural environment. 'Being urban' as a

main feature of distinction does not necessarily need to have involved diversity of belief or ritual.

According to the distribution of fibulae, glass and jet bracelets, the occupation at the *Zentralfläche* evolved from north to south. Whereas earlier analyses assumed a gradual enlargement of the settled area according to subsequent lines of progress, recent research confirms earlier studies suggesting a sudden expansion in LT C1b/LT C2 (Gebhard

1989: 34; Stöckli 1974). Both the distribution of fibulae and the position of a rectangular building complex at the southern end of the excavated area which precisely follows the orientation of the rectangular sanctuary support a planned architectural programme at this time. The sequence of several congruently oriented ground plans indicates a well-established, persistent urban structure well before the construction of the rampart.

R. Gebhard correlated the spatial evidence of finds with linear features and achieved a primary sequence of settlement evolution (Gebhard 1989: 32–36; 1991: 97). The orientation of those linear features and their congruent buildings showed marked ruptures in the development of settlement structure and orientation. Recent research could largely verify this sequence and add some detailed results. Apparently, around the middle of the 2nd century BC, the initial urban layout was considerably altered and rearranged. Although this date roughly coincides with the construction of the Manching *muris Gallicus*, there is yet no reliable evidence for any external threat causing this comprehensive modification.

The following evolution is generally regarded as the economic height of the *oppidum* and comprises several phases of altering orientation. Unfortunately, the sequence of these settlement phases cannot be established definitely, although a general tendency of clockwise rotation of houses and linear features is evident. The traditional curved route of the northern road might account for local peculiarities in orientation in the northern quarter of the *Zentralfläche*. Here, in LT D1, straight alignments of pits and wells together with a rectangular palisade and drainage ditches enclose courtyards with side lengths of up to 80 m. These rectangular courtyards might be interpreted as urban imitations of rural farmsteads. Similar structures with a palisade or fenced enclosure frequently occur in the early stages of massively fortified *Viereckschanzen* farmsteads, e.g. at Holzhausen (phase I–3) (Schwarz 1975: 327–330). Different types of houses are arranged within the urban courtyards: economic buildings, stables, granaries and large supposedly multi-functional buildings for dwelling and economic purposes. Covering an area of up to 200 m², these halls communicated economic and military power and served as an ostentatious means of elite representation. Remarkably, large halls not only occur within the urban centre, but also in rural settlements in the surroundings of the town (Wendling & Eggert forthcoming). This parallel occurrence might indicate the presence of elite inhabitants both in the urban core and the rural hinterland suggesting the existence of two separate social entities and distinct identities. However, the uniformity of house forms in both economic and social environments seems to imply an identical social, political and ideational background. Apparent similarities in form, size and architecture of rural and urban enclosed estates further support the notion of a common origin. Rectangular enclosures at Manching and

other major settlements in Central Europe might therefore be interpreted as urban dependencies of a persistent rural elite. Imitating the traditional residential facilities, they were to demonstrate the origin of an agricultural aristocracy and its wealth (Buchsenschutz & Ralston 2012: 358–360). Traditional dwelling habits were transferred into a new economic environment in which trade and craftsmanship complemented the former preoccupation with farming and cattle breeding.

The analysis of features at the *Zentralfläche* amply confirms the results of an excavation which was conducted at the *Nordumgehung*-area during the late 1980s. Here, ground plans and ditches were correlated to produce a three-phase sequence that can be roughly equated with the chronological phases LT C2, LT D1a and LT D1b (Köhler 1992; Sievers 1992). In the latter phase, towards the final occupation at Manching towards the middle of the 1st century BC, another change in the settlement structure can be observed in both areas. Together with another clockwise rotation, the number of detectable houses significantly decreases (Eller *et al.* 2012: 313; Köhler 1992: 61–64; Sievers 1992: 332–334). This fragmented occupation implies a thorough decline in population. Structural decay and spatial fragmentation significantly mirror an economic decline which can be attested for example by a gradual reduction of graphite as a component of pottery. The decreasing import of everyday raw materials but also of exotic prestige goods like Mediterranean wine were just two of many symptoms of decline which came along with the structural collapse (Sievers 2004). (HW)

Urban expansion, orientation of buildings and the decline of the *oppidum* at the *Südumgehung*

The re-evaluation of more than 3000 post-holes and almost 500 pits excavated at the *Südumgehung* provides an insight in the building structures of the eight final phases (each lasting approximately 20 years) of the settlement. As indicated before in studies of find distribution (Gebhard 1989; Stöckli 1974), the growth of the residential area can be seen at this elongated cut from the central parts to the periphery of the *oppidum*. Even the first phase of the settlement dating to the end of LT C1 (220/200 BC) features orthogonally oriented structures and gives the impression of an accurately planned extension of the existing site (Eller *et al.* 2012: Abb. 7a). A similar contemporaneous development was identified at the *Altenfeld* (Sievers *et al.* 2014), suggesting a programme of large-scale conversion and aggrandisement all over the settlement (Fig. 12.4). After evaluating the finds from the field season ‘E.ON 2002’, it can be stated that this area was not affected by this amelioration. Just as in other ‘Němčice-Roseldorf type centres’ and lowland *oppida*, the prospective additional inhabitants cannot be determined

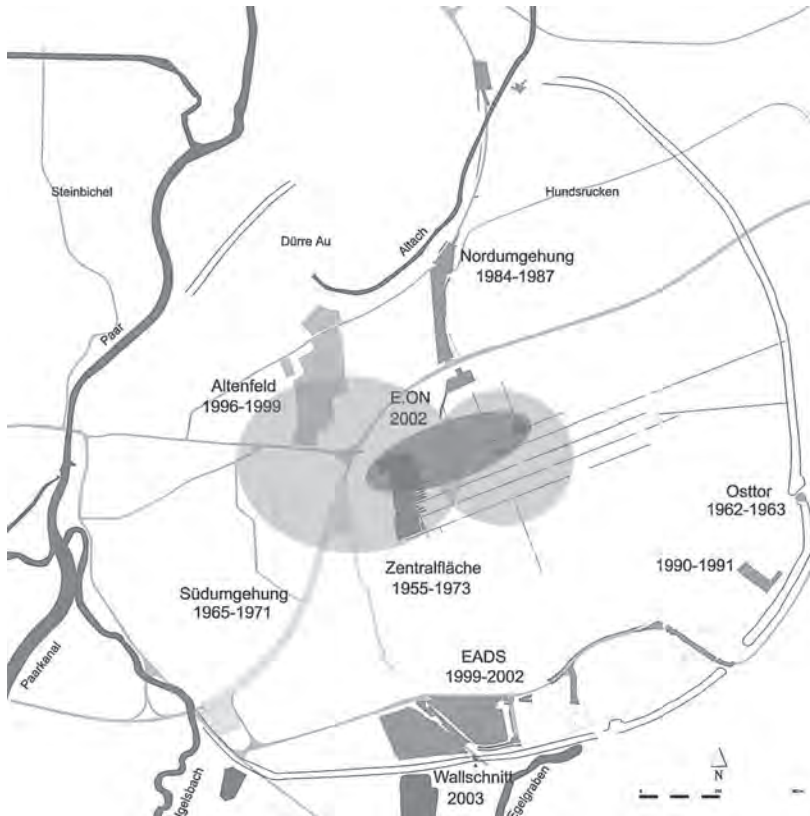


Fig. 12.4: Manching. Settled areas at the beginning and at the end of LT C1. Settlement expansion is indicated by different shades of grey (K. Winger)

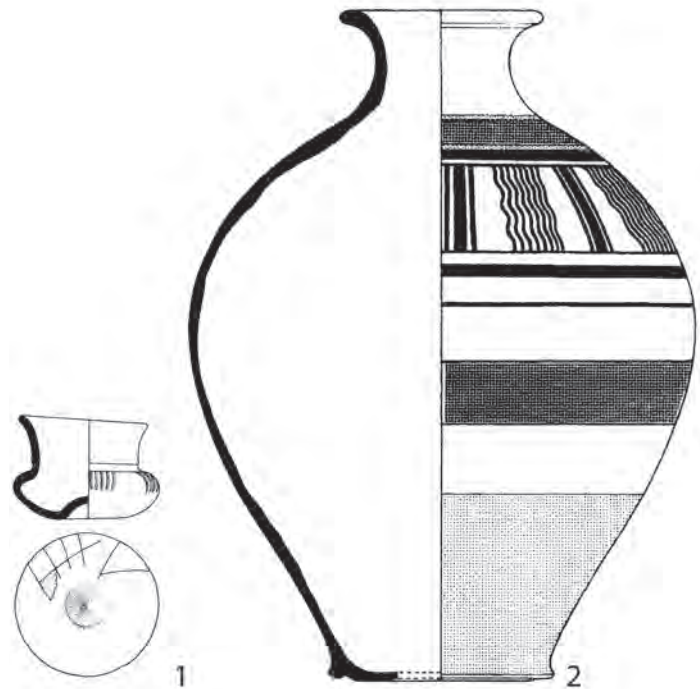
amid an afflux of foreign finds. For the time being, they are therefore labelled as people coming from the hinterland of the settlements (Salač this volume).

During seven of the eight established phases, the orientation of building structures and ditches at the site gradually shifts westward (Eller *et al.* 2012: Abb. 7) – a trend that can also be determined in other excavated areas of the settlement. Only the complex of ritual buildings south of the second traversing road which shows a certain consistence, as well as the structures of the eighth phase with their non-standard orientation that varies by *c.* 90° from that of the preceding phase, do not follow this general trend. The fact that the plan of this last phase appears to imply that the area of the *oppidum* was only sparsely covered with buildings might also be caused by accumulated cultural layers, which may have prevented structures such as postholes, ditches and pits to reach unspoilt strata. Due to the fact that most excavations at Manching happened to be rescue-excavations, the hard to distinguish dark brown cultural layer was largely removed completely and merely structures reached into the natural ground were identified. This is not to say that the *oppidum* was a crowded place in the second half of the 1st century BC, but we have to keep in mind that there is a methodological problem about all subsequent phase-plans.

As mentioned before, the *Südumgehung* also features a complex of non-standard buildings that have been

interpreted as a temple complex. In this case, the ritual compound was set up in an area that was at the fringe of the settlement at the time. Unfortunately, no particular preference for certain objects can be determined among the finds. As such, there is no evidence as to what kind of cults might have been worshipped here. Yet it is possibly to hypothesise that the different temples would have been attended by various social groups or have been responsible for different domains. While a cluster of weaponry may suggest martial cults (*inter alia?*) in the case of the two ritual areas at the *Zentralfläche*, only a LT B2-sword belt can be read to suggest such an identification at the *Südumgehung* (Sievers 2010: 54; no. 420). One of the oldest finds from this area, it was potentially already regarded as an ancient object on occasion of its deposition in conjunction with the establishment of this cult place. The deposition of a complete painted bottle at the temple complex and a Sanzeno-Cup with an incised inscription, recovered from a post-hole belonging to the round or multi-faceted temple are of further interest in this respect (Fig. 12.5). Interestingly, both the aforementioned cult area indicated by a conspicuous distribution of finds and the rectangular enclosure as well as the archaeologically detectable ritual structures at the *Südumgehung* fall out of use at the LT C2/D1-transition. For the latter, this might be a result of the large-scale processes of restructuring that can be identified at the *Südumgehung* in

Fig. 12.5: Manching. The distribution and deliberate deposition of certain special objects at the *Südumgehung* sanctuary indicate their distinct ritual character (K. Winger after Stöckli 1979 and Lorenz 2004)



connection with the building of the *muris Gallicus*. During this time, the settled area increased again as formerly unused space inside the newly-built ramparts was also developed. This development was facilitated after the rerouting of two small streams that from now on acted as moats in front of the wall. (KW)

Conclusion

Some 40 years after the final excavations at the *Zentralfläche* and *Südumgehung* areas at the centre of Manching, a thorough analysis of features, ground plans and artefact distribution provides important new data on urbanisation and social life in the Iron Age *oppidum*. Religious thought and practice have frequently been suggested as essential factors for the initial establishment and further growth of the Late Iron Age community. Both elaborate sanctuaries, access to which was limited to certain social groups, and depositions in pits and wells that seem to be of rather ‘private’ character, were of importance in social differentiation and settlement organisation. The location and orientation of sanctuaries was fundamental for the orientation of buildings, places, streets, enclosures, and the general layout of the settlement (Fröhlich & Wendling 2014). In subsequent phases, settlement organisation was subject to several rearrangements. The orientation both at the *Zentralfläche* and at the *Südumgehung* shifted clockwise, while the initial urban frame, following a rectangular grid was established prior to the building of the Manching rampart. Thus, Manching is one of the major

Middle La Tène centres of production and redistribution that dominantly figure in the eastern Celtic settlement hierarchy. Finally, after a short time of exorbitant economic bloom, a fragmentation of urban space and a significant decrease in buildings characterise the settlement’s gradual decline. After centuries of urban life, Manching was facing a rural future that was to prevail until recently.

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What's in a Wall? Considerations on the Role of Open Settlements in Late La Tène Gaul

Tom Moore and Côme Ponroy

Despite significant expansion in research on oppida and the impact of development-led archaeology, there continues to be a perceived fundamental division between 'enclosed' sites and open settlements when looking at the emergence of 'urbanism' in Late La Tène Gaul. This emphasis on enclosure as an indicator of the status of Late La Tène sites has recently been questioned, ensuring that there needs to be a careful examination of whether the presence or absence of enclosure provides a meaningful reflection of the chronology, role and status of such sites. This paper seeks to re-examine the phenomenon of unenclosed agglomerations in Late La Tène Gaul through the examination of two regions which have seen recent research. Exploring how such sites are classified and understood as part of the broader changes in Late La Tène society and settlement patterns, this paper questions whether current approaches are in danger of restricting our understanding of the meaning and implications of 'enclosure' at oppida and within society. It suggests that a tendency to prioritise enclosed sites may limit our appreciation of the nature of broader social change in the Late La Tène period.

Introduction

It has been 20 years since Greg Woolf's (1993) seminal paper challenging archaeologists to rethink the debate over Late La Tène *oppida*, and nearly 30 years since John Collis's (1984) major assessment of the phenomenon. Since these studies, research on these monuments has significantly expanded with major projects on key sites and regions, including intensive research at Bibracte (Dhennequin *et al.* 2008); in the Auvergne and Allier (Collis *et al.* 2000; Lallemand 2009; Poux 2012); Picardy and Aisne Valley (Brun *et al.* 2000; Haselgrove 1996); the Berry (Augier & Krausz 2012; Buchsenschutz *et al.* 2009; Ralston 1988), and across Eastern and Central France (Barral & Nouvel 2012). Much of this work has been underpinned by increasing data from development led archaeology (*archéologie préventive*) (e.g. Barral & Nouvel 2012; Billoin *et al.* 2009; Krausz 2009). Studies elsewhere in Europe are also providing a more nuanced appreciation of the phenomenon with which to compare developments in Gaul (e.g. Salač 2012; Wendling 2013). Developments in the archaeology

of the Late La Tène period have been matched by greater understanding of the nature and context of an earlier Late Hallstatt proto-urban phase through examination of the hinterlands of enclosed sites (known as *Fürstensitze*) at Bourges, Mont Lassois and the Heuneburg (Brun & Chaume 2013; Fernández-Götz & Krausse 2013; Ralston 2010) allowing Late La Tène developments to be placed in a broader chronological context.

Despite the availability of an increasing data set, it is questionable whether Woolf's conclusions have had the influence one might have anticipated. There continues to be a division in attempts at defining urbanism and a rather muted discussion over the definition of *oppida* as a group of monuments (Collis 2012). One significant aspect of existing approaches to Late La Tène *oppida* continues to be a division between 'enclosed' sites (often deemed a defining characteristic of *oppida*: e.g. Buchsenschutz & Ralston 2012: 34, 358–360) (Fig. 13.1) and open settlements. However, the emphasis placed on enclosure as a fundamental indicator of the status and role of Late La Tène sites has been questioned

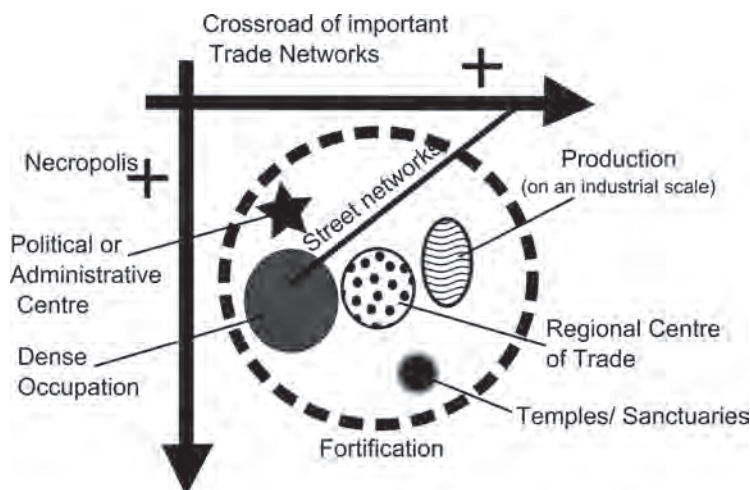


Fig. 13.1: Model of oppida characteristics as defined by Buchsenschutz and Ralston (2012) after Galinié

(e.g. Kaenel 2006; Salač 2012) ensuring that there needs to be a careful examination of whether the presence or absence of enclosure provides a meaningful reflection of the chronology, role and status of such sites. This paper seeks to re-examine one facet of this debate: the phenomenon of unenclosed agglomerations in Late La Tène Gaul. Building on recent research, examination of two regions will explore how such sites are classified and understood as part of the broader changes in Late La Tène society and settlement patterns. We will question whether current approaches are in danger of restricting our understanding of the meaning and implication of 'enclosure' at *oppida* and within Late La Tène society. This paper does not seek to directly assess whether *oppida* or agglomerated settlements should be classified as 'urban', partly as this has already been discussed elsewhere (Fichtl 2013), but suggests that a focus on attempting to define sites as urban may limit our appreciation of the process behind the development of these sites and underestimates the significance of unenclosed complexes in the wider landscape. It suggests that a tendency to prioritise enclosed sites and give pre-eminence to enclosure as a process, whilst implicitly regarding unenclosed sites as secondary, may limit our appreciation of the nature of social organisation in the Late La Tène period.

Late La Tène open settlements

Since excavations at Basel, Switzerland in the 1930s, a group of unenclosed sites have been recognised as fundamental to the changes which took place in settlement patterns in the Late La Tène period (Collis 1984: 77, 189–190; Kaenel 2006: 31; Salač 2012). However, it was only with the development of more systematic approaches to La Tène settlement patterns from the 1970/80s that the discovery

and assessment of lowland sites significantly increased, revealing the complexity and size of some major unenclosed settlements, most notably at Aulnat (Auvergne), Roanne, Feurs and Poncins (Loire), Acy-Romance (Ardennes), Saumeray (Eure-et-Loir) and Levroux (Indre). At Levroux, an open settlement at Les Arènes was demonstrated to have emerged on the plain in La Tène C2 with an apparent later shift to an enclosed *oppidum* on the nearby hilltop, with the succeeding Roman town encompassing both areas (Fig. 13.2; Audouze & Buchsenschutz 1992; Buchsenschutz *et al.* 2009; Collis *et al.* 2000: 76; Kaenel 2006: 32). Research at Aulnat and Levroux, in particular, suggested that these settlements appeared to be situated on route-ways and had greater levels of artisanal activity (e.g. glass manufacture) than contemporary rural settlements. Further investigations have identified seemingly similar sites further afield in Central Europe, at Němčice, Berching-Pollanten and Roseldorf, indicating that this phenomenon was not restricted to Gaul but much of the area traditionally characterised as that covered by the 'Civilisation des *Oppida*' (Collis 1984: 77; Fichtl 2013; Kaenel 2006: 31; Salač 2012).

Chronological evidence from these sites indicated that they emerged between the 3rd and 2nd century BC, *prior* to the appearance of enclosed *oppida* (Barral 2011: 209; Collis *et al.* 2000). As such, they are normally regarded as village type settlements and the first appearance of specialised communities before the development of proto-urban centres in the 2nd and 1st centuries BC. For some, it was clear that these open settlements were the precursors to enclosed *oppida* either in the same location (as at Manching) or, as at Aulnat, representing communities which relocated to enclosed *oppida* at Corent, and later Gergovie (Collis 1984).

The sequence from Levroux has been regarded as potentially applicable across the rest of France (Audouze & Buchsenschutz 1992: 238; Buchsenschutz *et al.* 1998;

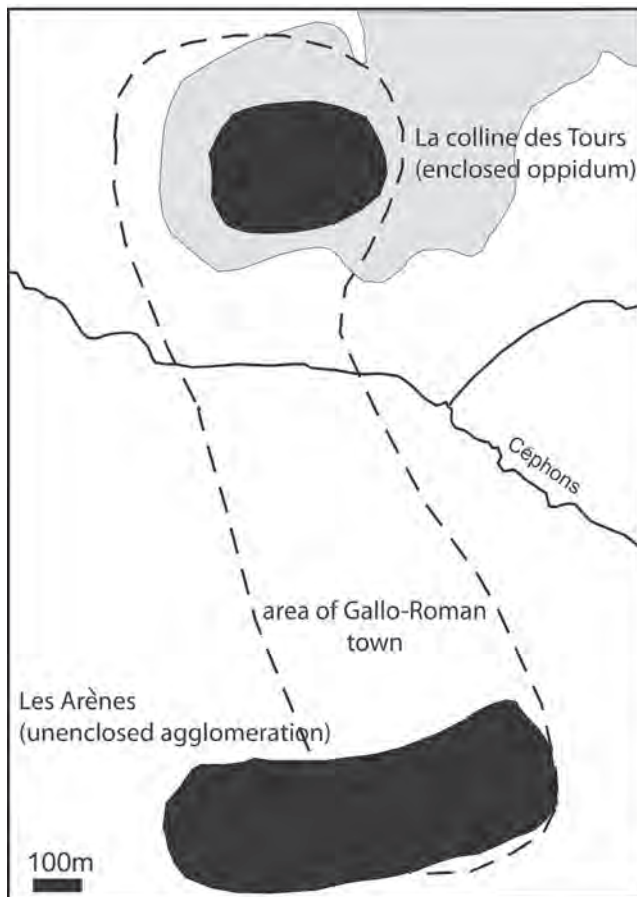


Fig. 13.2: Model of open to enclosed at Levroux (authors, after Collis *et al.* 2000)

Buchsenschutz & Ralston 2012; Collis 1984: 78; Collis *et al.* 2000: 81; Fichtl 2005a). This can be summarised as: after the demise of Late Hallstatt hilltop sites, lowland open settlements developed in La Tène C, this preceded the later La Tène D move to hilltop locations with the development of enclosed ‘*oppida*’, which was usually followed by a subsequent move to lowland locations associated with the construction of a Roman town. The enclosed *oppida* have generally been perceived as the dominant foci for political and economic activities, usually regarded as the central places of proto-states or tribal entities (e.g. Buchsenschutz & Ralston 2012; Fichtl 2005a: 120–134). The discoveries at Aulnat and Levroux, alongside recognition elsewhere at sites like Manching, ensured that the development and role of open settlements has been regarded as part of a longer trajectory in the Late La Tène period towards more complex and centralised societies (Audouze & Buchsenschutz 1992; Bintliff 1984, 171–174; Collis 1984: 77–85). The role of open, agglomerated settlements within the development of *oppida* has thus been crucial to discussion of urban development in Iron Age Europe. Understanding the nature,

date and role of these sites, and the environs of *oppida* more generally, has, therefore, fundamental implications for models of urbanisation and social change at the end of the Iron Age (Kaenel 2006).

New perspectives and recent developments

The model of enclosed *oppida* as the top of a settlement hierarchy which developed subsequent to an earlier phase of unenclosed agglomerations, whilst widely applied across France was recognised to have problems at a relatively early stage. S. Fichtl (2005a: 174–175) recognised that his more generally applied model of enclosed *oppida* as the central places (or *civitas* capitals) of Late La Tène proto-states may not fully apply to the Loire region (Fig. 13.3). Here he realised that the open settlements of Roanne, Feurs and Goincet should be regarded in similar terms of importance to the three ‘enclosed *oppida*’ within the gorges of the Loire (Joeuvre; Le-Crêt-Châtelard and Essalois) when reconstructing regional centres. It has also been recognised for some time that in a number of cases Late La Tène open agglomerations may not have always been abandoned in favour of an upland, enclosed *oppidum*, with some potentially overlapping with fortified sites, as at Basel (Collis 1984: 77; Kaenel 2006: 32) and even possibly Levroux (Collis *et al.* 2000, fig. 3). More recently, M. Poux (2012: 252–253) has also suggested that, before the open settlement was gradually abandoned, most probably in favour of the *oppidum*, occupation at Corent may have overlapped with the unenclosed site at Aulnat-Gandaillat (Fig. 13.4; Collis *et al.* 2000; although this remains contested). Detailed survey of Central-Eastern France has indicated some sites followed the sequence attested to above (a shift to upland site from a lowland agglomeration: Nouvel 2011), but also provided evidence that certain geographical areas had contemporary hilltop and lowland sites (Barral & Nouvel 2012; Nouvel 2011). This is leading to a recognition that the Levroux sequence may not fit all sites (Fichtl 2013; Moore *et al.* 2013). Elsewhere, the establishment of a dichotomy between the status of enclosed ‘*oppida*’ and unenclosed agglomerations has also been questioned (Barral & Nouvel 2012; Kaenel 2006).

The number of Late La Tène agglomerated settlements has steadily increased in recent years, partly due to the increase in *archéologie préventive*. This has led to the identification of a range of new agglomerations, for example in Central-Eastern France (Barral 2011; Barral & Nouvel 2012), whilst in other cases allows for a better understanding of already recognised agglomerations, such as Roanne (see below; Lavendhomme & Guichard 1997). Elsewhere, research projects in the environs of particular *oppida* are revealing new elements to this phenomenon which may suggest alternative sequences for some agglomerations

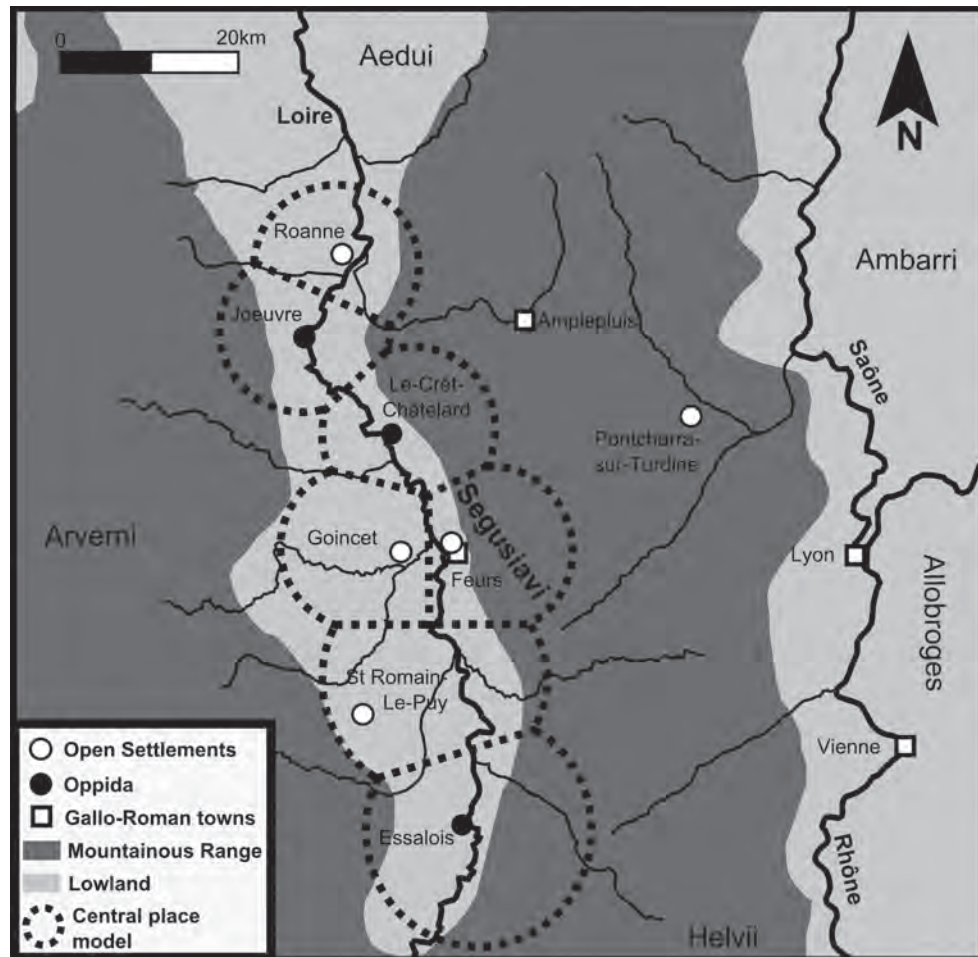


Fig. 13.3: Model of 'oppida' and open settlements in the Upper Loire valley (after Fichtl 2005a)

(see below; Moore *et al.* 2013). Meanwhile, research on the Late Hallstatt period has demonstrated the existence of unenclosed sites from an earlier phase, most notably at Bourges and Bragny (e.g. Ralston 2010), potentially focused on craft activity, that date earlier than the emergence of sites such as Levroux. Some of these appear to have had comparable status to the enclosed *Fürstensitze* and indicate a more complex picture of proto-urbanism at this time than previous models suggested (Brun & Chaume 2013; Ralston 2010). This recognition of the complex roles of unenclosed settlements has been matched by research further afield in Central Europe with more detailed examination of the large unenclosed sites at Roseldorf and Némčice (Salač 2012). These large unenclosed complexes (up to c. 50 ha) have been shown to have fulfilled the roles of *oppida* without substantial enclosure structures, despite possible palisades at some examples. This has led some to challenge the previous models of development and which may have implications beyond Central Europe.

Current problems and issues

Despite increasing recognition of the complexity within the *oppida* phenomenon some significant issues remain in our approach to unenclosed agglomerations and *oppida* in general. Perhaps most significant is the way in which we classify and define sites. Following Henri Galiné's model, a recent overview by Olivier Buchsenschutz and Ian Ralston (2012) argued that *oppida* could be defined by a number of characteristics (Fig. 13.1: enclosure; political activity; dense occupation; ritual roles). There is something of a danger of circular argument here: that *oppida* are defined by certain characteristics and that these are also, therefore, our definitions for urbanism and social status. Such an approach focuses less on examining the roles of such sites in a broader social context but more on the physical evidence at one particular moment in time. This is in danger of underplaying the dynamic development of sites and the different roles sites of relatively similar form might have in their respective socio-cultural landscapes (Wendling 2013: 461).

One fundamental factor subsequently dominates

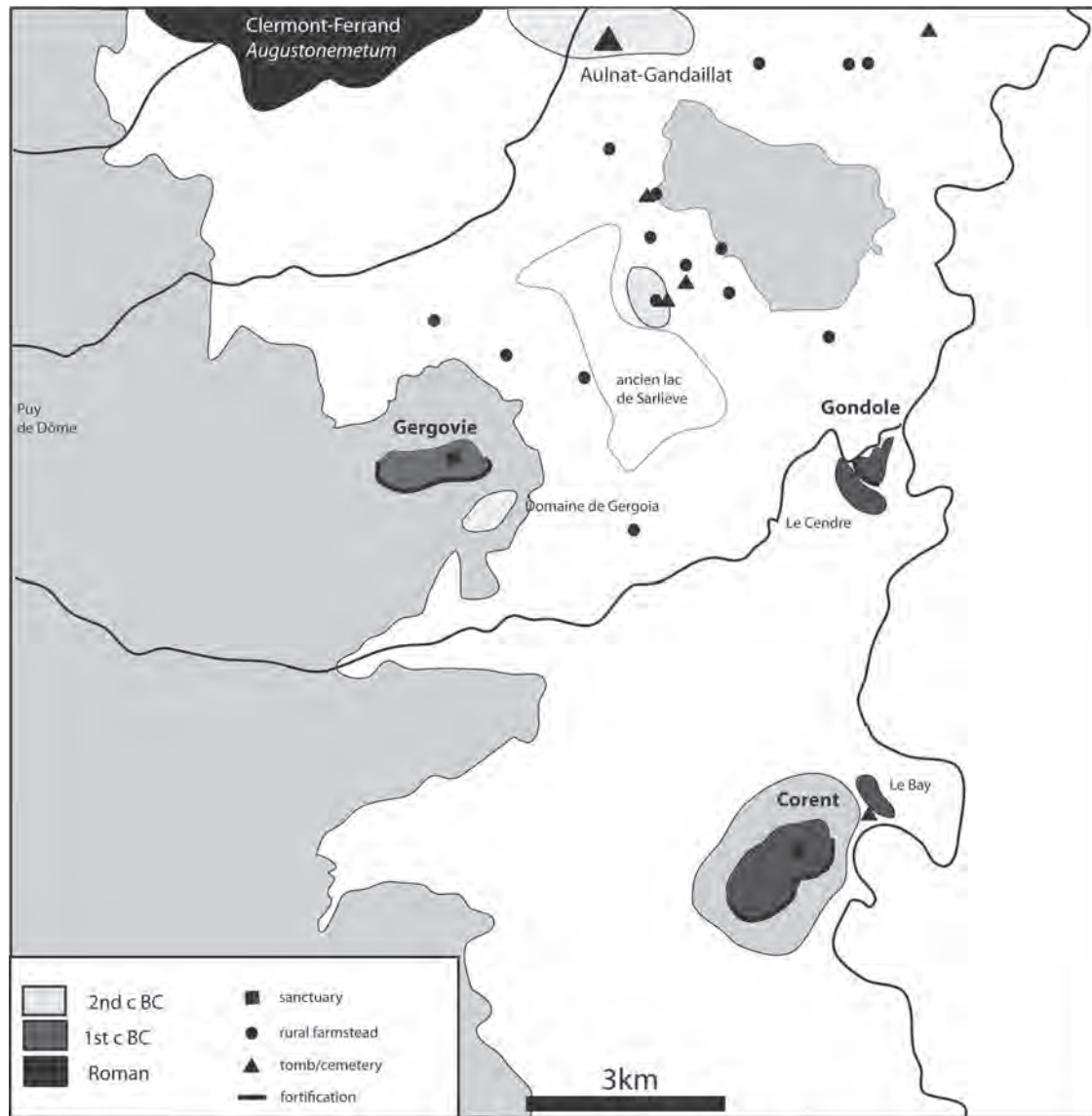


Fig. 13.4: Sequence of settlement patterns in the Auvergne (after Poux 2012)

discussion: the role of enclosure. Often used to define *oppida* as a type of settlement (and phenomenon), and as a signifier of status and urbanism, this prioritising of fortifications has often led to a concurrent automatic ‘downgrading’ of open settlements (e.g. Fichtl 2005a: 176) or the establishment of a dichotomy regarding the process behind their formation between the ‘top-down’ imposition of *oppida* versus a ‘bottom-up’ development of open agglomerations (see Buchsenschutz & Ralston 2012: 347).

At the same time, by focusing on enclosure as a characteristic of *oppida* there is a danger of regarding the act of enclosure as representing the same expression of social processes (see Fichtl 2013). Although the scale of such enclosure may undoubtedly stress the amount of labour involved and the potential status of the community

(or its ‘elites’) (Ralston 2010: 71), enclosure was not the only way in which Iron Age societies throughout Europe expressed status, with many communities expressing it in other forms of display or deliberately downplaying such distinctions through settlement architecture (e.g. Sharples 2007). In addition, the nature of enclosure took very different forms across Later Iron Age Europe, signifying different stimuli for enclosure and social relations and functions, as seen in the different form and roles of earthworks around British ‘*oppida*’ (Moore 2012). A lack of enclosure need not, therefore, signify a site or its inhabitants’ lack of status. By seeing enclosure as an expression of status, there is a danger in regarding all enclosure as part of a uniform development in settlement form, and one resulting from the same social processes, rather than reflecting certain moments

in a site and its community's development and biography. Assessment of the *oppidum* of Manching demonstrates that the process of enclosure was a relatively late addition to the settlement, one which many would argue had already achieved 'urban' status (Wendling 2013: 477). The reasons for enclosure represented, therefore, more complex processes than a mere reflection of the site's status and urban character. The possibility that enclosed *oppida* and open settlements may have been the result of similar social processes but articulated in different expressions should, therefore, feature in future discussion.

Prioritising enclosure as part of the complexity and urban nature of *oppida* may say more about the roots of La Tène archaeology than the role of these sites. A practical and philosophical Roman emphasis on the importance of walls in defining a city (Vitruvius *De Architectura* I.5.1–8; Varro *De Lingua Latina* V.143) and their social and symbolic significance, usually associated with the concept of *pomerium*, have perhaps overly influenced Late Iron Age views on the importance of walls as a characteristic of urbanism (e.g. Fichtl 2005b; 2013). The emphasis on regarding walls as defining *oppida* (and cities in general) is one emphasised by archaeologists, but is not one that Caesar appears to have been especially concerned with when he identified a number of sites as '*oppida*' which show little evidence for being enclosed, for example, Chalon-sur-Saône and Geneva (Billion *et al.* 2009; Salač 2012: 333).

An additional question is raised by the role of open sites. The early dating for a number of sites and apparent evidence of artisanal activity has led to this being perceived as their prime role. Other models for the Late La Tène period have, however, tended to regard enclosed *oppida* as the central foci for production and exchange (Fichtl 2005a: 107–142). Salač (2012: 328), however, has emphasised for Central Europe, that a focus on only seeing enclosed *oppida* as the focus for production, exchange and social status ignores the equally significant (contemporary) role of unenclosed sites. Many unenclosed sites in Gaul too have significant levels of imports and evidence for production which compare with enclosed sites. There is also evidence that many unenclosed sites had a prime role as foci for sanctuaries. In some instances, for example at Acy Romance, the presence of sanctuaries may indicate it was these sites that had a prime role as regional centres, rather than nearby enclosed *oppida*. Elsewhere, the sanctuary at Gournay-sur-Aronde in Picardy, may also have acted as a catalyst for the emergence of the settlement which then coalesced in to an urban centre (Brunaux *et al.* 1980). To what extent was a ritual role fundamental to their development or their roles distinctive from enclosed *oppida*? At present there has been little systematic comparison between the roles of unenclosed sites and enclosed *oppida* in those areas where the two were clearly contemporary.

Despite the significance of research at Aulnat, Levroux

and Acy-Romance and impact of developer-led archaeology in uncovering new sites it is surprising that the majority of research on Late La Tène urbanism continues to focus on the upland sites. This has much to do with our research focus (Salač 2012: 330) but is also partly due to the presence of later Roman and Medieval urban centres on top of many of such sites, making them generally less well preserved. This means that many of the features that are regarded as characteristic of '*oppida*' (and often considered as evidence of urbanism), such as planned layouts and different sectors of activity, are often harder to recognise from the piecemeal excavations at sites like Basel and Roanne. This may also explain a confusion and uncertainty over the scale of these settlements, frequently perhaps underestimating their scale. At Roanne, for example, claims of occupation covering 3 ha can now be revised upwards, to nearer 15 ha. This may also have led to an underestimation of the number of unenclosed agglomerations that existed in the latest La Tène (La Tène D2), and thus contemporary with the heyday of some *oppida*, because of the confusion of their material in amongst the earliest phases of early Roman towns (Barral & Nouvel 2012: 142). There is something, therefore, of an irony that many open settlements are less well understood because, in many ways, they were more successful in later periods than many of their upland counterparts, often because of their placement on natural route-ways. This may even suggest that some enclosed sites were the anomaly, rather than unenclosed centres.

Approaches to *oppida* have, therefore, been undermined by a relatively narrow approach to defining sites and in judging their urban character (Collis 2012). In order to explore to what extent such an approach has underestimated the complexity of settlement forms and nature of sites beyond enclosed *oppida* we will examine a number of unenclosed agglomerations. Of course, in assessing unenclosed agglomerations in such a way, there is danger that we are perpetuating a division between enclosed and unenclosed sites. Describing and defining sites by the presence or absence of fortifications puts us in danger of perpetuating the problem, whilst agglomeration implies a less well defined and coherent entity. This paper does not attempt to present a new model for unenclosed agglomerations or define these as a distinct set of sites (cf. Salač 2012). Indeed, as we shall see below, many unenclosed sites had different trajectories and roles; it is potentially misleading to see these as necessarily part of a unified phenomenon. We will argue instead that unenclosed sites need to be seen in the context of regional landscape development. This echoes the long-held recognition by the likes of John Collis (1984: 84, 2012) that only by a better understanding of the settlement patterns from which *oppida* emerged, and their contemporary settlement landscapes, can we understand the role of both open and enclosed sites, and the social systems in to which they were embedded.

Case Studies

The increasingly complex picture of the place of open settlements in the development of *oppida* can be emphasised by two case studies which reveal alternative patterns of development. Based on recent fieldwork, alongside a reassessment of settlements which have figured prominently in these debates, these show the complex roles of open settlements in socio-political dynamics.

Bibracte and Sources de l'Yonne

The large enclosed *oppidum* at Bibracte (Mont Beuvray) is recognised as one of the best-studied *oppida* in Europe and often used as a type-site in discussion of the role and implications of this phenomenon. The last 20 years in particular have witnessed a major advance in understanding the nature of activity on Mont Beuvray, from its emergence in the 2nd century BC to its heyday in the late 1st century BC (Dhennequin *et al.* 2008). However, despite its fundamental role in discussion of *oppida*, the place of Bibracte in relation to the wider settlement patterns remains less well understood and it has been notably absent from many broader discussions over the dynamics of settlement change (e.g. Collis *et al.* 2000; Kaenel 2006).

Recent research in the environs of Bibracte is starting to change this picture. Building on an earlier survey project within the adjacent Arroux Valley (Buchsenschutz & Richard 1996; Creighton *et al.* 2008), research has included systematic survey of the immediate landscape around Bibracte and is being built on by continued surface survey in the region (Nouvel 2012). One of the most striking results from this work has been the identification of a focus of occupation (indicated by ceramic finds, particularly Dressel 1 amphorae) covering an area around the Sources de l'Yonne (henceforth: SDY), approximately 3 km to the northwest of Bibracte itself (Figs 13.5 & 13.6; Haupt *et al.* 2007; Moore *et al.* 2013). The spread of material covers a large area of approximately 120 ha, forming a horse-shoe of activity around the source of the river Yonne. Additional topographic survey and LiDAR have revealed the presence of large-scale terracing, extending along the slopes around the source. Subsequent excavations of areas of this complex revealed intensive occupation, including drainage systems, buildings and material culture similar to those on Bibracte. Evidence from both excavation and surface survey indicates occupation began in La Tène D2a (90/80–50 BC) or, more likely, in D2b (50–30 BC), with intense occupation continuing into the Augustan period (30 BC–AD 15). Occupation appears to have largely ceased at the end of the Augustan era, reflecting the situation at Bibracte (Moore *et al.* 2013: 509–510).

The evidence from SDY indicates a settlement contemporary with the heyday of Bibracte and one which followed

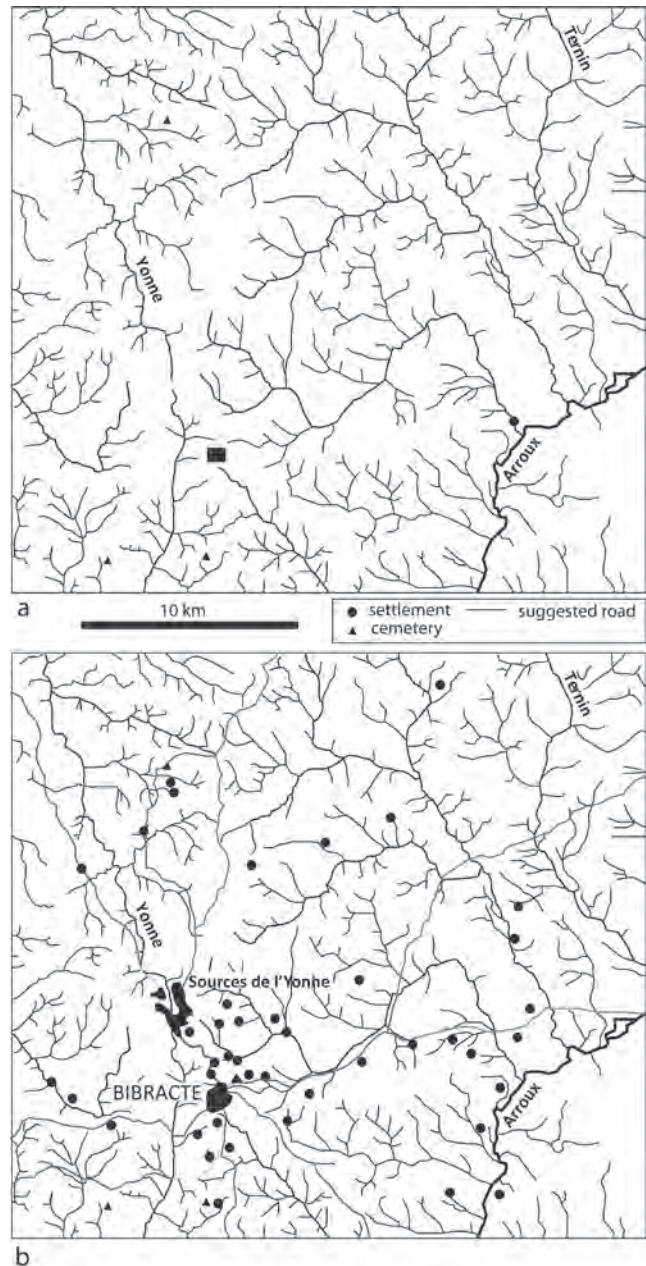


Fig. 13.5: The Bibracte and Sources de l'Yonne environs (a) La Tène D1a and (b) D2 settlement patterns in the Bibracte Environs (after Barral & Nouvel 2012)

its trajectory. Much of the evidence from SDY is remarkably similar to that from Bibracte itself, with terraces of the same construction and chronology to those at Bibracte: comparable drainage structures and similar forms of architecture. Whilst there is some craft working evidence from the site, there is little to suggest it necessarily acted as a poorer, artisanal neighbour to the *oppidum* and it is notable how similar the material from the two sites is.

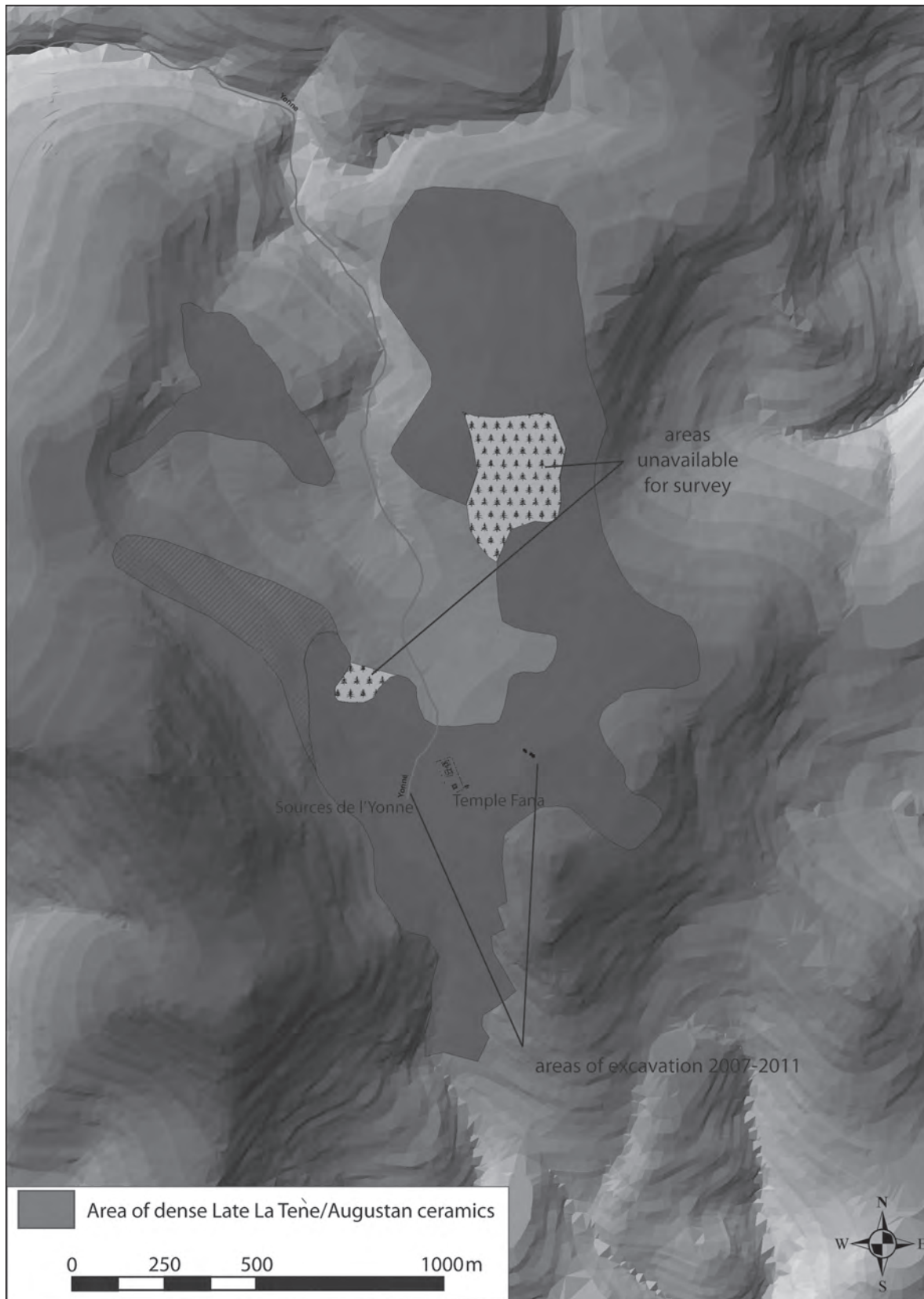


Fig. 13.6: Plan of extent of Sources des l'Yonne agglomerations as identified from Dressel 1 and other ceramic finds (after original plan by Ines Klenner)

SDY presents an alternative to those unenclosed agglomerations which were precursors to enclosed *oppida*, representing instead an apparent ‘suburb’ to the enclosed settlement. Unenclosed sites contemporary with enclosed *oppida* are rare but not entirely unknown in Gaul. Notable examples have been recognised in the vicinity of Avrolles, Tonnerre and Les Granges in Burgundy (Barral & Nouvel 2012; Nouvel 2011: 209); and the smaller site of Le Bay, just below the *oppidum* of Corent in the Auvergne (Poux 2012: 45). Meanwhile at some major *oppida* such as Besançon a clear distinction is made between the enclosed ‘citadel’ and a related lower settlement (Caesar *De Bello Gallico* I.38), with a somewhat similar placing of certain activities immediately outside the rampart at Gondole in the Auvergne (Deberge *et al.* 2009: 58–70). In a quite different context, it is notable that the intensive recent research around Bourges has demonstrated that major Late Hallstatt centres could also have contemporary artisanal unenclosed ‘suburbs’ which were of some status (Ralston 2010).

Covering approximately 120 ha, SDY is on a different scale to other Late La Tène ‘suburbs’, and agglomerations in general. Alongside its scale, its location some way from the *oppidum* makes the label ‘suburb’ somewhat problematic. Such a location and the material evidence from the complex mean that we need to be cautious in assuming it merely played the role of lower-status, artisanal neighbour. In so doing, SDY raises a broader issue of what we mean by ‘suburb’ which may have different functions and relationships to enclosed *oppida*. Preconceived ideas that these sites represented industrial ‘faubourg’ similar to those associated settlements of modern towns, may underestimate the evident status some such sites possessed. Current evidence from SDY (the date for the construction of the terraces and consistent dating across the complex), also implies that it may have been a planned imposition – perhaps more so than Bibracte itself – probably in the mid-1st century BC. The reasons for such an imposition are potentially complex (see Moore *et al.* 2013: 507), but underlying these is clear evidence that SDY developed alongside an intensification at Bibracte itself. Salač (2012: 335) has seen ‘suburbanisation’ as a precursor to the eventual decline of urban centres. It is notable that Bibracte and SDY follow a similar pattern. The complex expanded leading to the creation of a large satellite to accommodate the people and industry required to sustain this centre. The complex was, however, perhaps unsustainable, leading to its relatively short length of occupation. Whilst Bibracte and SDY were clearly terminated partly by a political decision to move to Autun, was this also the likely outcome of an unsustainable large complex? SDY thus follows a trajectory of the *oppidum* and may have been an essential part of the complex, despite its existence beyond the walls.

Roanne, Feurs and the gorges of the Loire

The situation in the Loire *département*, often regarded as the territory of the *Segusiavi* ‘tribe’, presents a range of somewhat different issues (Fig. 13.3). Until the 1960s, 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 Joeuvre (Saint-Jean-Saint-Maurice) and Le-Crêt-Châtelard (Saint-Marcel-de-Félines) located in the gorge of the Loire. Since then, *archéologie préventive* has contributed new evidence regarding the rise of proto-urban forms in this region. This work confirmed the importance of these open settlements in the 2nd and early 1st century BC in regards to trade and production. It also reaffirmed the date of the earliest occupation levels as La Tène C2, contemporary with the date usually associated with the emergence of such agglomerations in Gaul.

For the last ten years Roanne has 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: 174–177; Kaenel 2006: 31). Excavations provided evidence for continued occupation from La Tène C2 to the 1st and 2nd century AD (Lavendhomme & Guichard 1997: 48). The lack of a clear hiatus indicates that the emergence of the nearby *oppidum* of Joeuvre did not have any major impact on the trajectory of the open settlement. Evidence from recent rescue projects has since confirmed the absence of a hiatus but has also contributed to the discovery of new areas of activity leading to a reconsideration of the size of the settlement (now c. 10–15 ha) (Bocquet 2005; Le Barrier & Lavendhomme 1999; Le Nézet-Célestin 2005; Monnoyeur & Thévenin 2003; Thévenin 2001).

The southern settlement of Feurs, by contrast, provides evidence of a rapid decline around the second quarter of the 1st century BC, reflected in the near total absence of La Tène D2 material (Vaginay & Guichard 1988). This decline coincided, chronologically at least, with the rise of the nearby *oppidum* of Le-Crêt-Châtelard (Vaginay 1986; Lavendhomme 1997a: 208–209). The hiatus during this period has been interpreted as a consequence of *oppida* emergence (Collis 2012; Collis *et al.* 2000: 81), seemingly reinforcing the accepted model. However, a closer study of the landscape indicates there was no significant disruption of the settlement pattern in the Plaine du Forez (Lavendhomme 1997c), whilst Late La Tène rural settlements have yet to be identified around Le-Crêt-Châtelard despite various field walking projects and evidence of occupation in the area from the 1st and 2nd centuries AD. It is also worth noting the distance between Le-Crêt-Châtelard and Feurs (18 km), compared to that with between Feurs and the open settlement of Goincet (Poncins) (only 5 km). Goincet, located on the left bank of the Loire, immediately opposite

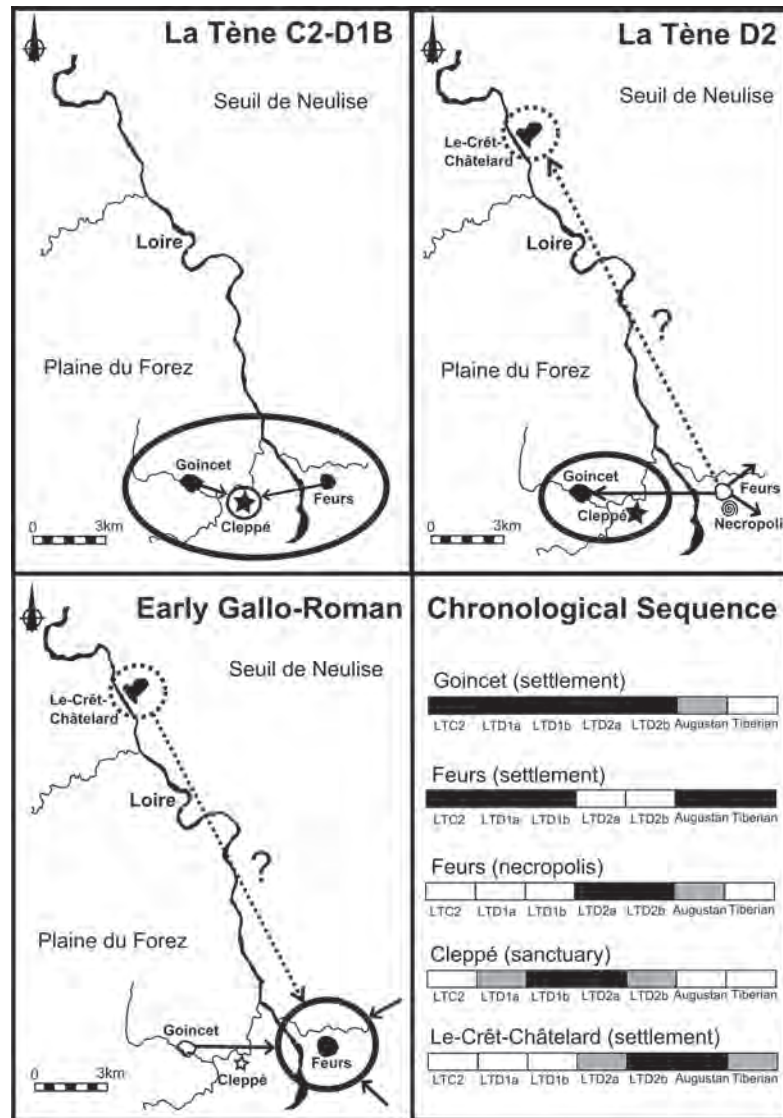


Fig. 13.7: The settlement dynamic in the Segusiavi region (authors)

Feurs, also emerged in La Tène C2. However, there is no evidence of Late Iron Age hiatus or decline at the latter, despite the contemporary emergence of Le-Crêt-Châtelard (Lavendhomme 1997b; Peyvel & Pionnier 1975; Vaginay & Valette 1982). The evidence from the sanctuary excavated at Cleppé, located between Feurs and Goincet also suggests that both settlements may have formed one socio-cultural landscape as it seems to have played the role of a meeting place and quickly went out of use in La Tène D2b when Feurs was abandoned (Fig. 13.7 and Poux 2004: 523–524). If the emergence of Le-Crêt-Châtelard had a major impact on the trajectory of Feurs, it seems logical that it should also 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.

The discovery of a large cemetery of La Tène D2 date at Feurs, although only partially excavated (Valette 1999: 80–82), reinforces this possibility. This discovery has usually been associated with the potential for sporadic activity in the vicinity (Collis *et al.* 2000: 75), but the size of the cemetery and the exceptional and highly visible character of some of the monumentalised burial enclosures weakens such an argument. Despite the probable abandonment of the settlement, the site appears to have retained a symbolic status for a displaced or dispersed population who appear to have wished to continue to be associated with their previous home in death, if not in life. The potential for such behaviour has

to be taken into account and seems unlikely to be related to the populace at the *oppidum* considering the significant distance and difficult terrain between the two sites.

When Feurs became the *civitas* capital in the Late Augustan period, Goincet was rapidly abandoned whilst Le-Crêt-Châtelard continued to witness activity, despite a relative decline (Dumoulin 2008: 125–131; Peyvel & Pionnier 1974). 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 rescue archaeology projects at Poncins, the data set 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: 73–75). 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). 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 14 of the 60, 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 52 BC 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 centralisation. Rescue excavations in the 1970s and 1980s of the northeastern part of the unenclosed settlement revealed the presence of relatively thick (0.2 m), levelling layer in three different sectors (Lavendhomme & Guichard 1997: 40–41). The presence of this layer provided a clear chronological break and marked a rapid reorganisation of the orientation and nature of occupation at the settlement in the La Tène D1/D2 transition (80/70 BC). Unlike Feurs, Roanne was not abandoned and has evidence of La Tène D2 occupation, despite significant disturbance by later Gallo-Roman phases (Lavendhomme & Guichard 1997: 47–48). However, there was clearly a major change in occupation, with potential cultural, social and political associations, which took place at the same time as developments at Feurs.

In order to determine the implications of such a rupture it is necessary to reinterpret the nature of the activity at the western end of the settlement. At the Chantier St Paul a well and various pits containing unusual deposits were enclosed by a rectangular ditch (Fig. 13.8). The collective use of this area has been hinted at (Lavendhomme & Guichard 1997: 63–65, 183, 190), but no clear characterisation regarding the nature of activity occurring within this enclosure has been formally given. The nature of the finds from this area, including multiple cattle 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 suggests activities other than the ‘domestic’ may have taken place here. M. 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). The close presence of domestic activity near this ditched enclosure has perhaps led to the overlooking of its alternative role, despite

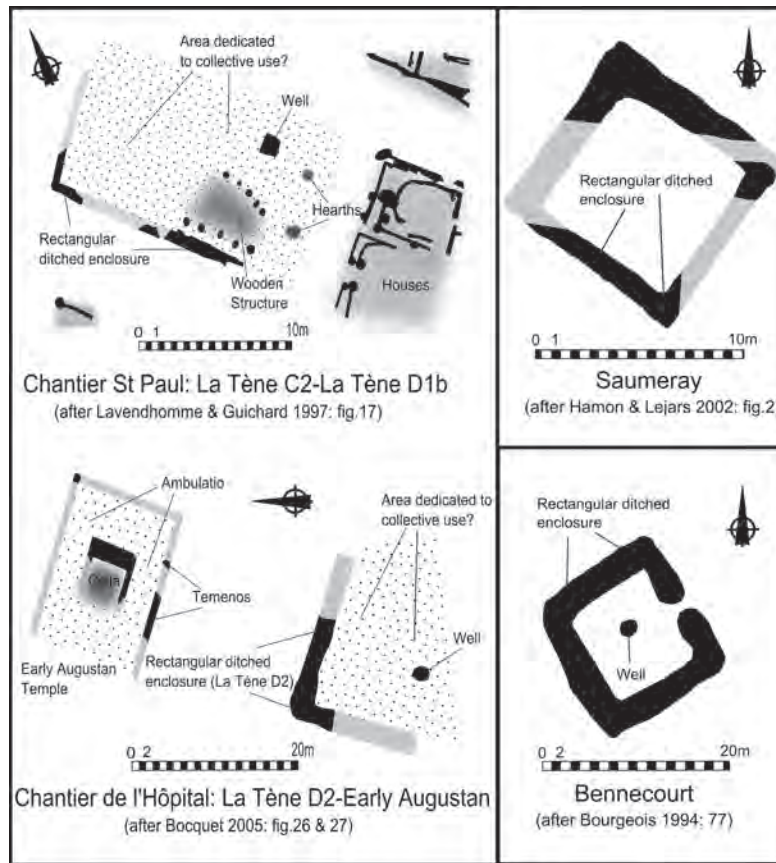


Fig. 13.8: Comparison of evidence from the Roanne 'sanctuaries' (authors)

the fact it is morphologically comparable to sanctuaries elsewhere, such as those at Saumeray or Bennecourt (Bourgeois 1999; Hamon *et al.* 2002). The abandonment of this potentially sacred space and the re-orientation of houses and streets in this particular district should, therefore, be regarded as a significantly symbolically charged act, rather than the natural consequence of urban evolution.

The importance of this rupture becomes 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. The presence, and the remarkably similar orientation, of this Gallo-Roman temple convinced S. Bocquet that the ditched enclosure, accompanied again by a central well with multiple phases of structured deposition, should be characterised as a sanctuary, or at the very least as an area dedicated to collective feasting (Bocquet 2005). However, what is potentially most significant is 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. The eastern sanctuary was therefore erected when the western one was abandoned. 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 organisation of the settlement (Lambot & Méniel 2000). By contrast, at Roanne it appears that the sanctuaries emerged as a consequence of an orchestrated re-planning of the urban structure, rather than the opposite. This raises significant questions; 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. This perhaps implies profound changes in the ruling élite.

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 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.

Conclusions

This brief assessment of Late La Tène unenclosed agglomerations in two distinct areas has emphasised the diverse histories of this group of sites. 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 & 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 in 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* region 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' 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. For some, as SDY, 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. Elsewhere, other unenclosed settlements in the vicinity of enclosed *oppida* show a longer, more organic development (as at Levroux and Roanne), where the enclosed *oppidum* might be seen as a short term element in settlement patterns.

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 period (e.g. Fernández-Götz & Krausse 2013; Poux 2012; Ralston 2010). 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 cannot 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 surprise that the role of *oppida* and their social context was also varied even within relatively local areas of Gaul.

The developments in both case study areas were part of broader phases of rupture and re-organisation of settlement across the late 2nd and 1st century BC (e.g. Barral & Nouvel 2012; Collis *et al.* 2000; Haselgrove & Guichard 2013; Poux 2012). 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. At SDY the large agglomeration might contrastingly be seen within Collis' (2012) vision of a 'monopolistic' *oppidum*: part of a broader Bibracte complex that served as a major regional and super-regional 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 period, 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 1st 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 systematic assessments of the broader landscape context of these sites.

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Enlarging Oppida: Multipolar Town Patterns in Late Iron Age Gaul

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For a considerable time, Late Iron Age oppida have been considered as fortified hilltop settlements within reduced or unsustainable occupation, limiting the urban space to the walls and ignoring any extra muros extent. This restricted view is questioned by recent studies in the basin of Clermont-Ferrand (Auvergne, France), which reveals a singular urban pattern evolving around three important occupation poles at a distance of 5–7 km to each other. These three oppida are neither ‘competing’ nor ‘ephemeral’ succeeding capitals, but most probably an overlay of population clusters with a temporal overlapping in the course of the 1st century BC within a large, strongly urbanised area which spread over an area of more than 2500 ha. This multipolar town pattern is clustered around a large sanctuary, associated with a public square and an assembly edifice. The concentration of religious, political and civic features represents the true matrix of the Celtic town rather than any enclosing walls. It features an early stage of urban development well attested in Greece and Italy during the archaic period, which could be applied to other oppida in Late Iron Age Gaul.

Introduction

Studies on urbanisation in pre-Roman Gaul have always been suffering from a schizophrenic syndrome that can be summarised as follows: How to talk about cities, considering the historical dimension and the current meaning of the word? How to talk about settlements which neither have the appearance, the structure nor the longevity of cities?

During the past few decades, many syntheses demonstrated the strong contribution of archaeology for studying the very first ‘cities’ of the Late Iron Age (Collis 1984a; Fichtl 2005; 2012; Garcia 2013; Guichard *et al.* 2000; Sievers & Schönfelder 2012). The exponential increase of discoveries, far from mitigating the syndrome, multiplied the evidence: fortified *oppida*, large agglomerations in plains, sanctuaries, feasting enclosures, aristocratic residences, demonstrate a great variability in settlement structures and patterns. Common trends and similarities that can be noticed in

shape, structures and architecture are confusing the scope of traditional definitions, without reaching a single and consensual type. Essentially made of perishable materials, the remains are not spectacular: wood and cob structures, postholes, pits and ditches are ephemeral traces that are still not considered by scholars of Classical studies and medieval archaeologists who are used to deal with monumental and sustainable urban shape.

Coming out from the ‘Stone Age’

Analysis of these remains is still deeply steeped by concepts and definitions taken directly from the Mediterranean world. The Greek *polis*, the roman *colonia* or *municipium* are generally invoked to enhance and to characterise the Celtic *oppida* evolution. Protohistorians apply, in their

archaeological descriptions, strongly connoted terms as ramparts, *temenoi*, public places, to architectural types, which do not correspond precisely to the formal shape. The task becomes even more perilous, when it comes to the interpretation of remains within the institutional framework of political, religious and civic practices (Marc 2011). This is a great challenge for Late Iron Age research, given that agglomerations, as burials, constitute the only means to enhance the knowledge on the development of stately structures in illiterate societies.

These extrapolation attempts of field data are facing an outdated, monolithic conception of Mediterranean cities. It is most paradoxical whereas the consideration of this notion has greatly evolved during the last decades by the study of urbanisation in the archaic world, a better understanding of the structure and hierarchy of urban shape and the consideration of older materials from Hellenistic and republican periods. These instances constitute some of recent achievements, most favourable for promoting a comparison with Iron Age *oppida* (Carandini & Capelli 2000; Garcia 2013; Goodman 2007; Polignac 1996; Reddé *et al.* 2003). Despite the significant archaeological and conceptual progress achieved by both directions, the connection between all urban realities is still facing three major prejudices.

The first is linked to the importance given to the appearance of ashlar and masonry architecture of fortifications and public buildings in the Greco-Roman world. Noble and enduring, stone is so deeply rooted in the genome of the archaeological research that it could appear inconsistent to any serious comparison with perishable structures of the prehistoric architecture.

However, apart from the largest cities and especially Rome, earthen and wooden constructions remained the dominant shape across the Mediterranean until the 1st century BC. South of the Alps, it is widely used in the internal organisation of *oppida*. It must be recalled that this last Latin term designates the earliest cities in Italy (Tarpin 2000). Recent excavations in the Latin colony of *Norba Latina* provide a great example: its cyclopean walls dominate the Latium plain and enclose an agglomeration of 40 ha. Irregular residential areas are entirely built by perishable materials. The destruction by Sulla around 80 BC produces an imprint of the urban morphology, probably representing most of the Latin or Etruscan cities of the 2nd century BC. The clay surface of the court from the first forum at Cosa and its religious and public wooden buildings (temples, theatres, amphitheatres) which are described in pre-Augustan literary sources (Gros 2011) offer a less anachronistic comparison than Gallo-roman urban architecture from the 2nd century AD. This comparative perspective, which is fundamental for the archaeology of the *oppida*, improves classical stone architecture analogies by referring to examples of contemporary constructions in perishable material.

***Oppida* as Hillforts: a Restrictive Stance**

The second impediment lies, paradoxically, in the importance given to the defensive walls in the definition of prehistoric cities. From the discoveries in Bibracte to the first work undertaken by M. Wheeler in Northern France, the definition was first based on fortified hilltop sites, which were often interpreted as the fortified places named by Caesar in *De Bello Gallico*, most frequently under the term *oppidum*. Indeed, research was limited to the enclosing walls and ramparts, which were designed to prevent enemies from intruding. Military experts pointed out that Caesar had paid special attention to the qualities of the famous *murus Gallicus*. Its characteristic internal wooden frame was identified several times in archaeological investigations.

The monumentality of these walls and their technical complexity, establishing direct connections to the urban poliorcetics of classical and hellenistic times, had always attracted the attention of specialists of the Celtic town. The excavation of walls, gates and access routes follows an inward strategy that barely helps to glimpse at the internal layout. From the 1970s to the end of 1990s, more attention had been paid to the margin than the internal content of *oppida* which was frequently investigated only partially or superficially by surveys or limited fieldwork. Craft production, with high added value or imports of Mediterranean food products, give a good idea of the specialisation, economic prosperity and acculturation of the indigenous population. The latter is divided into broad categories of elites, craftsmen and traders, who were presumably located in special areas that have not yet been highlighted to a large scale. Whereas the centralising political and religious role of the *oppida* is always postulated, corresponding urban constructions, such as sanctuaries, assembly buildings, have rarely been revealed (Manching, Titelberg, Martberg, Corent).

The surrounding fortifications of *oppida* remain the first criterion of identification: The Swiss Mont Vully for instance, is consistently mentioned as an Helvetian *oppidum* even though no archaeological record has ever been found inside the enclosure. On the other hand, large lowland agglomerations with a very dense occupation but no walls, as Acy-Romance, Nanterre, Bobigny, Levroux, Roanne, Saumeray or Aulnat-Gandaillat, are classified as 'open settlements' if not considered as mere 'villages'. Their demographic extent and their material wealth, unmatched at a regional scale, lead to an interpretation as territorial nerve centres (Fichtl 2013). Their territorial influence could be far beyond the impact of fortified sites or barred spurs which were termed *oppida* although they are of quite limited size (Fig. 14.1).

This trend and intellectual stance disregards the distinction between *oppida munita* and *immunita*, frequently made in literary sources and lead to a double trap. On the one hand, it reduces the Celtic town to its defensive function, excluding open settlements/agglomerations, at least of

Site	Occupation Area (ha)	Localization	Extended Settlement	Fortification	Public Structures
Acy-Romance (F)	10	Plain	I	None	
Châteaumeillant (F)	18	Hillfort	I	Continuous	
Villeneuve-St-Germain (F)	30	Meander	I	Barred spur	Monumental ditch-gallery system, voting place (?)
Variscourt (F)	170	Meander	I	Discontinuous	Urban road & demarcation system, public (?) square
Roanne (F)	40	Plain	I	None	Community centre
Mont Vully (CH)	50	Hillfort	-	Barred spur	No remains of occupation
Levrux "Les arènes" (F)	24	Plain	I	None	
Levrux "Colline des Tours" (F)	20	Hillfort	I	Discontinuous	
Aulnat-Gandaillat	200	Plain	I	None	Opened cult place (Le Brezet)
Corent (F)	60	Hillfort	I	?	Sanctuary, assembly building, public (voting ?) square, market place
Gondole (F)	60	Meander	I	Barred spur	Urban road system, sanctuary (?)
Gergovia (F)	70	Hillfort	?	Continuous	Urban road system, sanctuary (?), mainly roman
Boviolles (F)	60	Hillfort	I	Continuous	Urban road system, extra-urban sanctuary (Mazeroie)
Titelberg (LUX)	43	Hillfort	I	Continuous	Urban road system, sanctuary, voting place (?)
Martberg (D)	70	Hillfort	I	Discontinuous	Urban road system, sanctuary
Alésia (F)	90	Hillfort	I	Continuous	Sanctuary (?), public square
Bibracte (F)	200	Hillfort	I	Continuous	Pre-roman public places & monumental basin, early roman basilica
Sources de l'Yonne (F)	120	Plain	I	None	Pre-roman sanctuary (?)
Berne-Engelhalbinsel (F)	140	Meander	?	Discontinuous	No remains of occupation
Besançon (F)	120	Meander	I	Barred spur	Harbour
Basel-Gasfabrik (CH)	20	Plain	I	None	
Basel-Münsterhügel (CH)	4	Hillfort	I	Barred spur	Sanctuary (?)
Altenburg-Rheinau (D)	316	Meander	?	Barred spur	
Roseldorf (D)	25	Plain	I	None	Sanctuary
Manching (D)	380	Plain	I	Continuous	Urban road system, cult & market places
Grabenstetten (D)	1600	High plain	I	Discontinuous	

Fig. 14.1: Comparison of some Celtic oppida and open settlements. © M. Poux

similar importance, located very close to economic resources and communication routes. On the other hand, it limits the urban space to the enclosing fortification, ignoring any *extra muros* extent. Craft areas excavated in a zone of the Cendre du Rebout, situated close to the *oppida* of Bibracte and Gondole, are often seen as simple suburbs (Deberge *et al.* 2010). In fact, they seem to be constitutive elements of the town. Excavation and fieldwalking carried out in the larger scope of Levroux, Boviollles, Bibracte or Toulouse reveal more or less extensive *suburbia*, which clearly raise the issue of the extension of urban boundaries beyond the fortification.

Nomadic Urbanisation and Political Instability

The last obstacle to the recognition of *oppida* as actual cities is a result of their instability. According to *cross dating* methods, developed by classical archaeology and traditionally linked to literary history, the creation, expansion and decline phases of archaeological sites are generally correlated to events reported in ancient texts (conquest of transalpine Gaul, Cimbri-Teutonic invasions, Gallic Wars and the restructuring process of the provinces launched by Augustus). As the accuracy of chronology grows, based on increasingly refined studies of material typology, it allows the definition of different occupation phases and shows that the occupation of some *oppida* did not exceed one or two generations. Facing the concentration of several settlements in a single area, researchers often apply a stack of chronological phases, rather than considering the possibility of cohabitation of competing and complementary centres. Among the Helvetii and Rauraci territories (Basel, Bern, Mont-Vully), into the valley of the Aisne (Variscourt, Villeneuve-Saint-Germain, Pommiers), in the centre of France (Levroux, Aulnat, Corent, Gondole, Gergovia) or at Toulouse, the territorial development is studded by the succession of ephemeral settlements, founded, abandoned and recreated *ex nihilo*, at the whim of external or local conflicts (Colin 1998; Darteville *et al.* 2009; Guichard *et al.* 1993).

This recurrent instability is rightly perceived as a strong incompatibility to allow the development of advanced urbanism. Scholars of the Roman world tend to deduce that “the Gauls were probably not much concerned by the conception of the sustainability of their Capitals” which explains “the low level of architectural development that can be noticed in *oppida* and the use of light materials which can’t be a contribution to sustainability” (Bédon 1999: 45–47, 203). This urban nomadism is facing the territorial and institutional legitimacies, on which all political power is based. Massive moves of population, the fall and abandonment of communal and religious sites, the establishment of new frames, the renewal of borders and the

assigning of agricultural land, cannot be taken for granted. To explain the emergence and the abandonment of *oppida* by struggles of rival chiefs, by migration and tensions between neighbouring tribes, means to consider them as temporary and casual fortified sites, rather than genuine cities resulting from a long development process.

The importance given to the defensive and temporary aspects of *oppida*, as to the anachronistic comparisons made with stone architecture of Roman Gaul and Italy, lead to a rudimentary and limited perception of the Celtic town. Ancient and medieval cities provide a view of the urbanisation processes and developments that is more dynamic and broad and reaches beyond the fortification limitations and their historic evolution (Goodman 2007; Polignac 1996; Reddé *et al.* 2003). Particular attention is paid to the existence of peripheral poles (suburban areas, sanctuaries, harbours) occupied and forsaken alternately through centuries. They are in the centre of the establishment of any urban space. The notion of extension and decline requires a broader multilevel approach integrating several thousands of hectares, whereas traditionally, the areas excavated at most of the *oppida* do not exceed more than a few thousands of square metres.

This broader context is now favoured by recent analyses carried out in Eastern Central Gaul and in the region of Toulouse (Barral & Nouvel 2012; Vaginay 2012), following those undertaken in Auvergne since the early 2000s (Poux 2005). In this particular region, former researches had produced several patterns of analysis on urbanisation processes during the Late Iron Age, which have been confirmed by decades of fieldwork and excavation.

The lost Gergovia: a Case Study

The current basin of Clermont-Ferrand, located in the centre of the Arvernian territory, reveals an urban pattern which is probably unique in whole Celtic Europe. Due to its first contacts with the Mediterranean world, the region had undergone a process of urban development launched in the 3rd century BC that resulted in a large lowland agglomeration strongly connected to the site of Aulnat-Gandaillat. Whereas it shows some urban features traditionally assigned to *oppida* (a size of more than 150 ha, significant demographics, plot organisation trends and coexistence of specialised crafts), the lack of ramparts and the existence of indoor burials preclude the identification as a proper ‘city’ according to the classical norms. It rather seems to be the result of a progressive combination of several rural settlements, some of which remain at the periphery and contribute to its economic growth (Collis 1984b; Deberge *et al.* 2007). Although they are spread across large areas, the sites focus at the Limagne plain, which is being urbanised at the beginning of the Late Iron Age.

During the last third of the 2nd century BC, this agglomeration coexists with the foundation of a religious site on the plateau of Corent, located about 12 km to the south (Poux 2012). In the early 1st century BC, a monumental gallery of 50 m side length replaces a palisade enclosure, which corresponded to the architectural and functional model of the great martial sanctuaries of northern Gaul (Gournay-sur-Aronde, Ribemont-sur-Ancre, Fesques, Mirebeau, Hayling Island). War and hunting trophies commemorate and celebrate the territorial leadership of an Arvernian dynasty mentioned by written sources in the late 2nd century BC. The legendary feasts and coin distributions organised by the king Luernios are mainly confirmed through several tons of animal bones, fragments of Italic wine amphorae and hundreds of coins, which for the major part seem to have been struck on site.

During a first phase, 140–120 BC, the sanctuary of Corent seems to have assumed the status of an extra-urban cultural centre, spatially and visually associated to the settlement of Aulnat-Gandaillat. About one or two generations after its foundation, the site becomes a substantial city. Its fast growth corresponds to the abandonment of lowland sites at the end of the 2nd century BC. Field survey revealed the development of an *oppidum* that extended over more than 50 ha. In the centre of the settlement, three ha were explored by archaeological excavation from 2001 to 2012. It forms an empty open space of more than 5000 m², surrounded by various structures related to institutional and economic life of the city (Figs 14.2 & 14.3). Next to the sanctuary there is a crafts and commercial area, similar to ancient *macella*, and a semi-circular assembly hall with a wooden stand, which is later converted to a small Roman masonry theatre. Surrounding quarters are structured into islets separated by orthogonal lanes. Many prestige goods (gold jewellery, imported bronze and glass vessels, weaponry, chariot fittings, writing and surgical instruments) attest the high social rank of the population and close relations with the Mediterranean world. Several workshops that have been excavated in the same area demonstrate specialised craft activities (metallurgy, silver- and goldsmithing, butchery, bone and leather crafts) initialised by the resident elites (Poux 2012).

This high status *oppidum* is associated to a site that emerged at the end of the 2nd century BC at Le Bay, just below the plateau, along the Allier river (Fig. 14.4). During the second quarter of the 1st century BC, a second area of occupation is created in the meander of Gondole, located downstream, at less than 6 km distance. Considered as an *oppidum* since 1980s, its craft areas which extend below a later built massive wall are the only elements surely known. According to the same orthogonal pattern that is found at Corent, they are mainly dedicated to ceramic and metal production. Weaponry and other aristocratic items discovered in houses refer to a population of a certain social

status, closely linked to the Roman army (Deberge *et al.* 2010). A third settlement is built on top of the plateau of Gergovia even later, around the mid-1st century BC. The site is clearly identified with the place of the battle of 52 BC on the basis of medieval archives and excavations of the Caesarean fortifications in its surroundings that have delivered materials and Roman weaponry dating to the Gallic Wars (Deberge & Guichard 2000; Poux 2008: 203). A massive rampart, dating to the Early Iron Age was rebuilt during the Late Iron Age. The remains of internal occupation that would indicate a sustainable settlement before the conquest are still very rare and far from the wealth documented at Corent and Gondole. Nearly all archaeological material found in excavation and survey belongs to a later phase following the Gallic Wars (LT D2b). A significant proportion seems to be closely related to the numerous masonry constructions on the plateau, dating to the Augustan period. These formed an important agglomeration established at the beginning of Roman period (Dacko & Garcia 2012).

In the middle of the 1st century BC this development leads to a singular pattern evolving around three occupation poles at a distance of 5–7 km to each other. These three areas have been put in competition within a model of succession in their foundation and abandon in a very short time (Guichard *et al.* 2003). However, large-scale excavations led to a new arrangement of monetary phases and analysis of fibula and imports have disrupted the chronological sequences of the three sites (Poux 2005). Inhabited during five or six generations between the late 2nd century BC and the mid-1st century BC, Corent is occupied during the entire Late Iron Age (LT D1–LT D2b). The occupation of Gondole is focused on the middle of the 1st century BC (LT D2, 70/60–30/20 BC). The sequence of Gergovia is even later: the material is composed to a total of 95% by late epigraphic coins (EPAD, VERCA) and fibulae and imported ceramics which were mainly used in the second half of the century, from LT D2b to the reign of Augustus.

The three settlements are not ‘ephemeral’ succeeding capitals but most probably an overlay of population clusters with a temporal overlapping in the course of the 1st century BC within a strongly urbanised area (Fig. 14.4). The original core of the system is well identified. According to the present state of research, the site of Corent provides the oldest, the wealthiest and the most sustainable occupation of the three *oppida*. It is also the only one to host public buildings especially suitable to a proper institutional activity: a major sanctuary associated with a public square and an assembly edifice which might have been the place where Vercingetorix struggled with the Arvernian oligarchy. The discoveries of four coin dies in and around the sanctuary are one more major clue to identify the site with the main-town of this territory, prior to the Roman conquest. During the 1st century BC, the site of Le Bay, on the bank of the



Fig.14. 2: The oppidum of Corent (Auvergne, France): localisation and plan of the excavations (2001–2012). © M. Poux

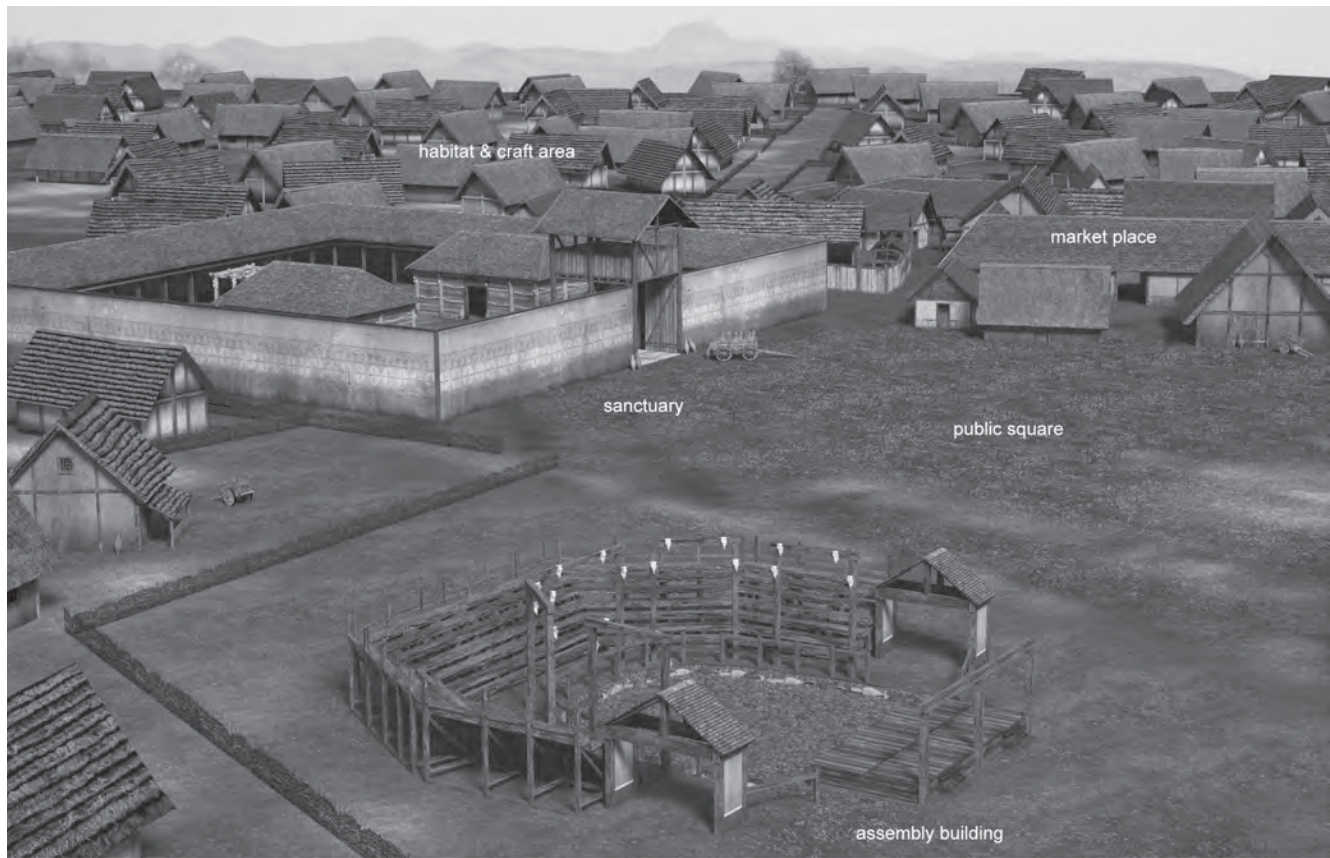


Fig. 14.3: Reconstruction of the centre of the oppidum of Corent with main public structures. © M. Poux, D. Geoffroy & M. Ciavarella (Court-Jus Production)

Allier River, and Corent constitute a large urban area, which dominates this particular Limagne region. The sites of Gondole and Gergovia grow within it without challenging the established dominion. Both should be considered as outgrowths rather than independent foundations.

This configuration is confirmed by Caesar (*BG* VII 2) who only refers to Gergovia, despite the fact that this is at this time the least important and the less urbanised of the three sites. On the other hand, there is no mention of Gondole, which is situated on the road along the Allier River, just behind Caesar's camps; neither any mention of Corent though, whose dominant position is a potential spot from where the Romans might fear setbacks, and whose wealth should have drawn the attention of Roman troops, following the assumption the site was not defended. This might be explained by the hypothesis that Vercingetorix' troops were not positioned inside but outside the city walls – *prope oppidum* – which means near the *oppidum* without further indication.

In this geographical context, the plateau of Gergovia is no more than a low urban defensive place, invested and refortified hastily during the events of 52 BC. This could explain why the place is occupied after Roman troops have taken it and were charged to build a fortified site fulfilling

central tasks, which were later to be transferred to the capital *Augustonemetum* (Poux 2008: 222). Due to his late and ephemeral development, only the toponym of Gergovia is mentioned in Caesar's text. Furthermore, it is never mentioned as the capital of the Arverni, whereas Strabo refers to another place: *Nemessos*, a major settlement (μετροπολις) located "on a watercourse" (ἐπὶ τῇ ποταμῷ, *Geogr.* IV 2, 3). This topographic detail fits much more with the sites of Corent, Bay and Gondole, that are abandoned while Gergovia rose in the decades after the Wars. Indeed, it is generally accepted that Strabo's description is mainly based on the *periegesis* of Posidonius of Apameia in the first half of the 1st century BC (Poux 2012: 268).

In the mid-1st century BC, the site of Corent seems to stand out as the main centre of a large urban multipolar structure which spread more than 2500 ha, between the height of Gergovia and the Allier river. The sites of Gondole and Bay were directly controlling the river course. The ceramic and metal workshops that are well attested in the area of Le Cendre near Gondole but are missing at Corent, are placed *extra muros*. This attests a craft and commercial purpose, probably linked with river port facilities whose remains are still unknown.

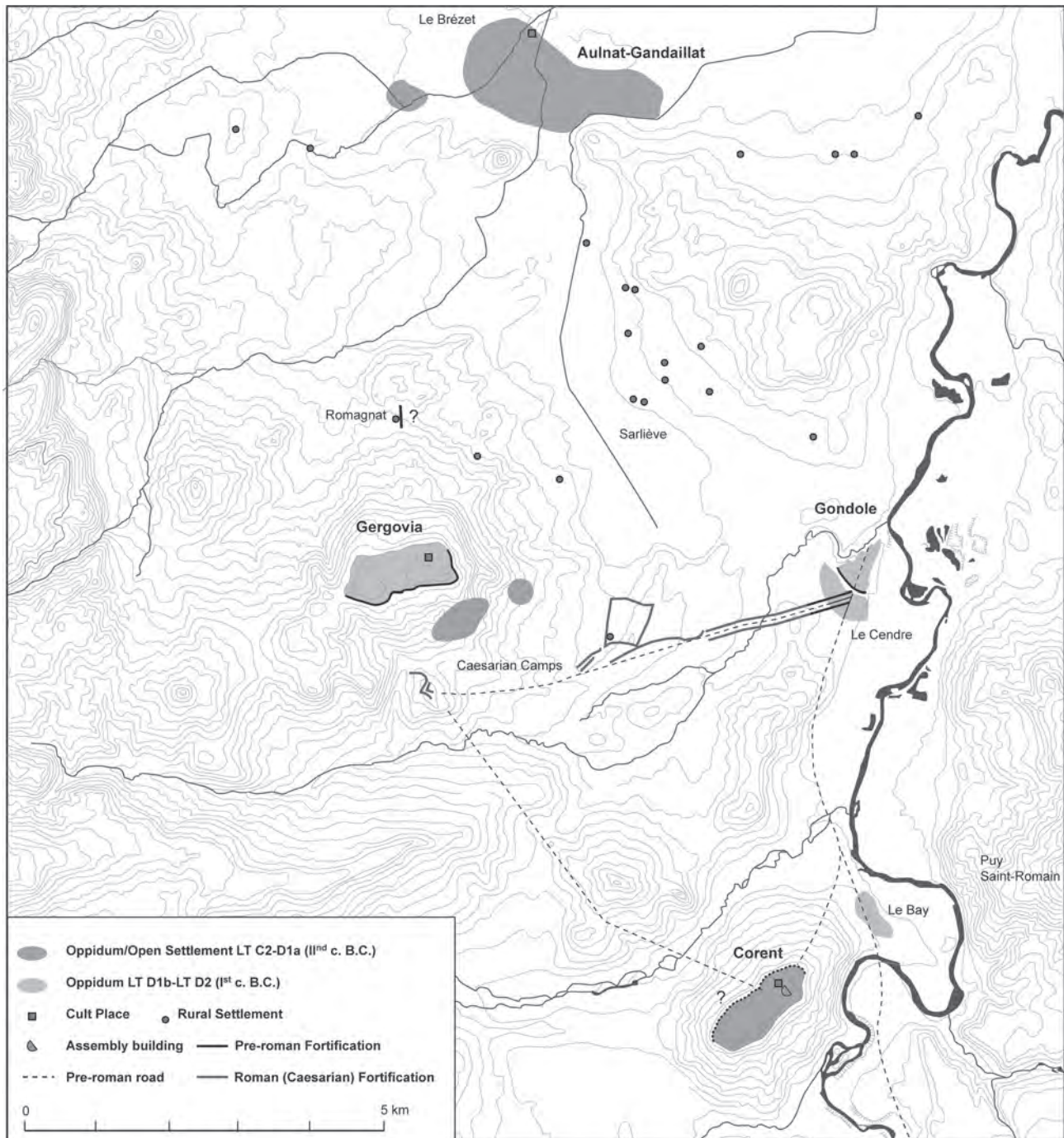


Fig. 14.4: Main settlements and territorial cohesion of the urban multipolar structure at Corent-Gondole-Gergovia. © M. Poux

The lowland and the average hills that lie between the three settlements surely were not fully occupied. Their cohesion was intended to be reinforced by various construction developments in the plain. They seem to have been connected by several roads and itineraries, few sections of which have been recognised around Gondole. The main axe, protected on both sides by two rows of fences, leads to the plateau of

Gergovie, while a second one runs along terraces and the river Allier, to reach Corent. A fortification path, dated to the first half of the 1st century BC, was also excavated at Romagnat, just down below Gergovie (Fig. 14.5: Liégard & Fourviel 2000). This isolated 'lowland wall' is only reasonable if intended to defend a wider area. The fortification of the main valley that opens to the path is very similar to a pattern well

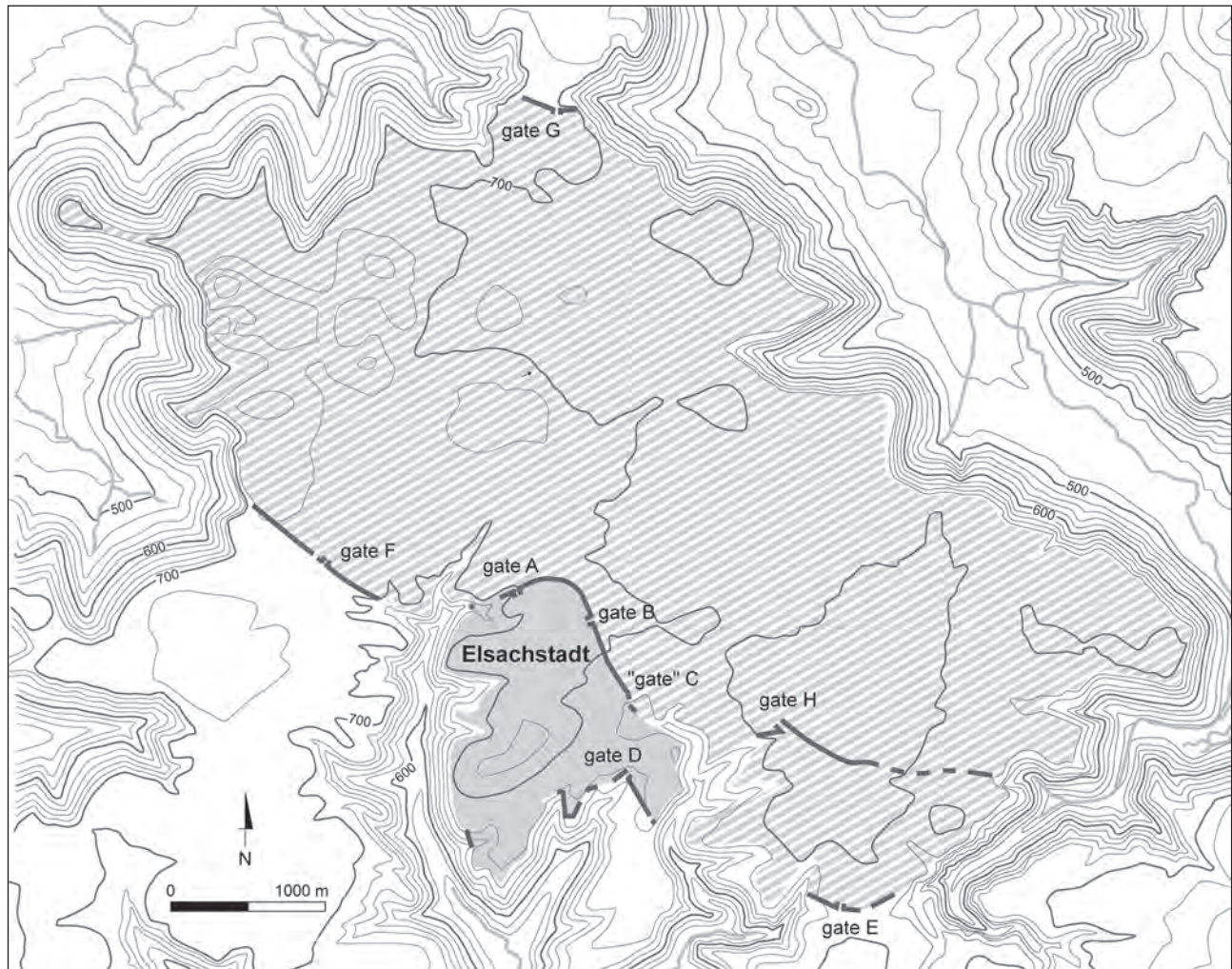


Fig. 14.5: The oppidum of Heidengraben at Grabenstetten (Baden-Württemberg, Germany) is situated on a plateau and reveals a discontinuous fortification system and a multipolar pattern © S. Fichtl

attested on the Heidengraben *oppidum*, near Grabenstetten. The vast plateau, whose main accesses are fortified, reveal an area partially constructed over 1500 ha and dominated by an inner enclosed area (Ade *et al.* 2012).

Wandering Capitals or Archaic Conurbations?

The close similarity of both cases confirms the suitability of a multipolar pattern in which the 'acropolis' of Corent would not cover the whole urban space. However, as a major core, it remained the heart of the political, civic and religious territory until the conquest. The extension of this area into the plain of Limagne was intended to constitute a *suburbium*, in its etymological meaning (i.e. 'lower town'). The fortification of the main accesses, moreover controlled by fortified strongholds (Gondole, Gergovia), fitted with craft and probably river ports alongside the Allier River (Le

Bay, Gondole), is forming a network that included all the economic and defensive functions traditionally assigned to the *oppidum* in the middle of the 1st century BC.

Ancient urbanism, e.g. at the cities of Athens and Rome, offers many similar examples of functional poles spread on large areas. The prerequisites of these multipolar structures are quite similar. Rather than a succession of volatile settlements founded and abandoned due to aristocratic struggles, the Arvernian example reveals a gradual and cumulative development of urban space, that grows throughout time alongside its economic and demographic expansion. Since the 2nd century BC, the visual relation that connect the agglomeration of Aulnat-Gandaillat and the sanctuary of Corent traduce a bipolarity that shifted to the south of the Limagne at the end of the century. This structure remained until Roman times as a network of sanctuaries, which strongly marks an entire sacred landscape (Poux forthcoming).

The development of the urban space around a religious site is a well-known process in the Mediterranean as in the Celtic world. It features an early stage of urban development well attested in Greece and Italy during the archaic period. Cities of Argos, Tarquinia, Vulci or Veii are all results of primary habitats regrouped by synoecism or conurbation around a central sanctuary. They previously assume the territorial integrity and play a major role in resolving conflicts between oligarchic families (Polignac 1996; Reddé *et al.* 2003). By their visual relations and the acknowledgment of a common ceremonial framework, the various poles have kept good relations before forming a homogeneous urban area. These links are the cradle of the archaic city, which takes a monumental shape only from the 7th century BC (Carandini & Capelli 2000).

In Gaul, the main major role of sanctuaries in the origin and development of urban sites from Late Iron Age has long been recognised. It seems to be confirmed by the case of Corent where the cult place precedes the *oppidum* development. Its monumental enclosure, the wide public square and the assembly building that are facing the sanctuary, constitute both the contribution and the manifestation of a territorial construction and the development of its central role. The implementation of these public structures is part of the urban process rather than part of a broader fortification program, as it has been observed on the Treverian or Boian territories (Fernández-Götz 2012). It is widely accepted for the site of Manching, that since the beginning, the development was concentrated around sanctuaries and housing areas. The settlement achieved the functional status of an *oppidum* before the construction of a rampart in the Late Iron Age (Eller *et al.* 2012). This also applies to the *oppida* of Besançon and Yverdon, as well as to a majority of Roman colonies in Eastern Gaul (*Aventicum*, *Augusta Raurica*). Whether they are large enclosures or established around sanctuaries, these foci of religious, politic and civic life represent the true matrix of the Celtic town. They guarantee sustainability beyond changes that might affect the periphery of the empire.

The same argument could be applied to other main cities with similar problems of location and name. *Oppida* explicitly nominated as ‘Capitals’, are rare in Caesar’s text, with the notable exception of those of *Avaricum*/Bourges and *Bibracte*. Concerning Bourges, recent research reveals a large multipolar urban complex of the Early Iron Age, covering an area of more than 500 ha and continuing, barely reduced in size, until the 1st century BC (Milcent 2012). Concerning *Bibracte*, an *oppidum* of 250 ha, with its triple wall system is associated with a peripheral agglomeration of c. 100 ha at a distance less than 4 km (Barral & Nouvel 2012). This might explain the text of Cassius Dio who considered that site as a *phrourion*, a ‘citadel’ depending on the *polis* of Châlons-sur-Saône.

Other major settlements are not clearly defined or made

up of several concurrent poles that face similar issues. At the beginning of the 1st century BC, in the small Rauraci territory, the lowland agglomeration of Basel-Gasfabrik and the *oppidum* at Basel-Münsterhügel coexist briefly on an area of only a few square kilometres. Concerning the Parisii, the *oppidum* of *Lutetia* is still undiscovered on the eponymous site of the Roman city and is surrounded by important agglomerations (Nanterre, Bobigny) that include the features of a central settlement without any ramparts. The site of Lyon, whose Celtic toponym has been discussed for a long time, shows a quite similar situation as Bourges in the Early Iron Age; at the 1st century BC, several residential poles are spread on the plain of Vaise, through the Saône riverbanks and the hill of Fourvière, with ditches and feasting remains corresponding to those of the sanctuary at Corent (Poux & Savay-Guerraz 2003). For the *Volcae Tectosagi*, a similar pattern to that of Corent is assumed and has recently been used to explain the important remains that were excavated on the plain of Toulouse and those of the *oppidum* of Vieille-Toulouse. The sites are contemporary and so coexisted (Vaginay 2012). The essential features that connect, for instance, the sites of Levroux and the hilltop *oppidum* of Boviollles with the lowland sanctuary of Mazeroie, should be studied with a corresponding multi-scale analysis. All these unresolved cases call for a renewed approach to patterns of urban development during the Late Iron Age which will be developed further.

Note

- 1 English translation: Jonatan Christiansen, University of Lyon

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Exploring Urbanisation in the Southern French Iron Age through Integrated Geophysical and Topographic Prospection

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A recent programme of integrated geophysical and topographic survey has revealed new evidence for the organisation of space and movement at a number of Iron Age sites in Mediterranean France including the long-lived oppidum of Le Castellan, Istres, the unenclosed rural site of Vigne Gaste, and the Late Iron Age oppidum of Entremont, near Aix-en-Provence. This paper examines the effectiveness of the various geophysical methods employed and the implications for our understandings of incipient urbanism in the region.

Introduction

The Lower Rhône Valley is a key area in the development of Iron Age societies in Europe. The foundation, around 600 BC, of the Greek colony of Massalia (modern Marseille) exposed the indigenous communities of Mediterranean France to new cultural and economic influences, including urbanisation, literacy and monumental art. Yet, despite the Greek presence, indigenous communities remained independent for nearly 500 years, until the eventual annexation of the region by Rome in the late 2nd century BC.

The Iron Age *oppida* of Southern France have been intensively studied over several generations and form the basis for wider syntheses of the protohistoric period in this region (e.g. Dietler 2010; Garcia 2004; Mocci & Nin 2006; Py 1990). Extensive areas of many important *oppida*, including La Cloche (Chabot 2004), Pech-Maho (Gailledrat & Solier 2004) and Entremont (Arcelin 2006) have been examined by excavation: in some cases, as at Verduron, near Marseille (Bernard 2000), virtually the entire interior has been exposed. Yet there has been little attempt to employ non-invasive methods, either to examine sub-surface

archaeological deposits at potentially analogous sites, or to explore the unexcavated parts of well-known *oppida*. Similarly, very little is known of the wider landscape context of the Southern French *oppida*. Indeed there has been a near-complete absence of substantial excavation on small-scale rural sites, leading to a potentially rather skewed and incomplete picture of settlement and social development. Given that any concept of urbanism demands the existence of a rural settlement sub-stratum, this is clearly a problematic situation for any attempt to trace urban development in the region.

A recent programme of work by a team from the University Bradford (2007–2011) set out to establish the potential for integrated geophysical and topographic survey to increase our understanding of Iron Age settlement landscapes Mediterranean France. Initial work (2007–2008) was carried out in collaboration with Frédéric Marty of the Musée Archéologique d'Istres on the area around the Étang de Berre, the largest of the numerous lagoons close to the mouth of the Rhône. The west side of the étang has a concentration of Iron Age sites (Fig. 15.1), including

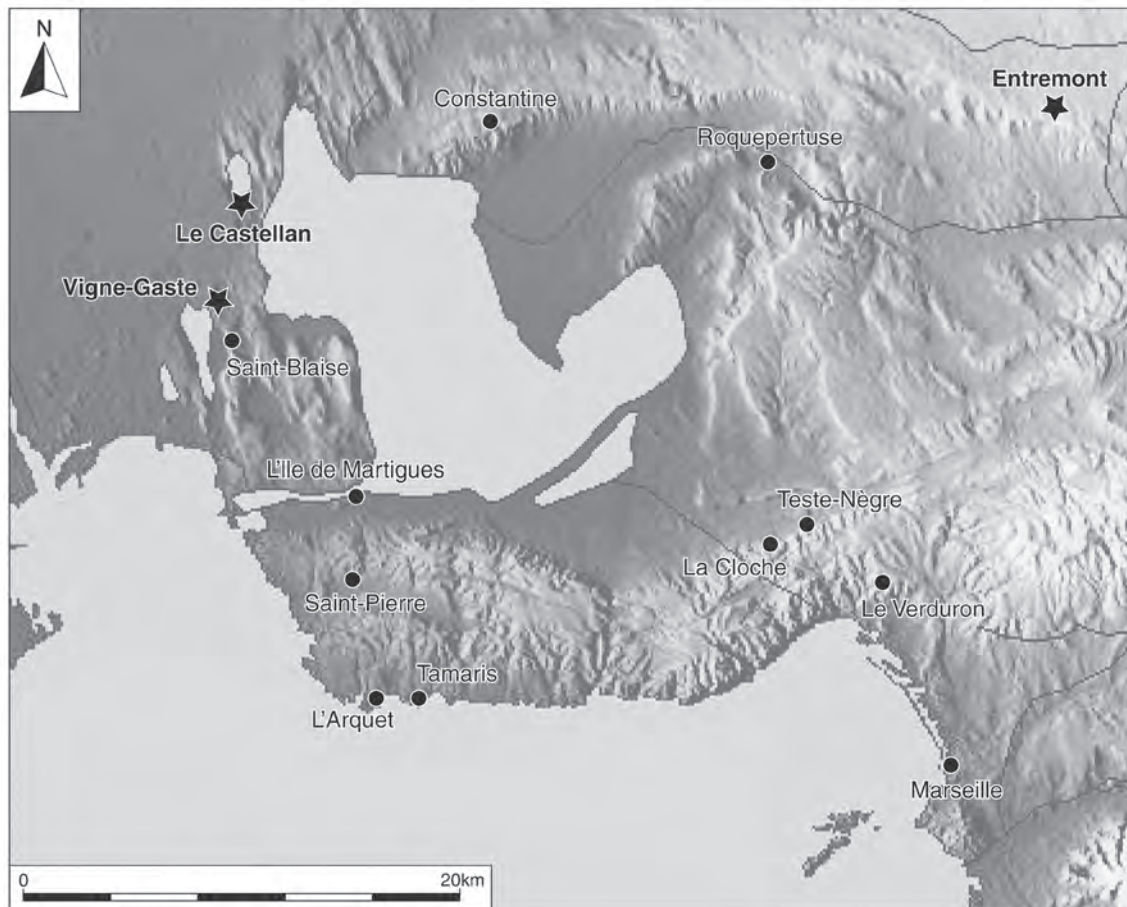


Fig. 15.1: Location of the surveyed sites and major oppida in Provence in relation to the Greek colony of Massalia (modern Marseille) (authors)

oppida such as Saint-Blaise (Bouloumié 1992), L'Île de Martigues (Chausserie-Laprée 2005) and Le Castellon, Istres (Marty 2002). Unusually for the region, however, numerous unenclosed sites are also known, primarily through surface pottery scatters (Marty 2004). The sites selected for initial work were the *oppidum* of Le Castellon, Istres, and the small rural site of Vigne Gaste. Subsequently, in 2010–2011, work shifted to the major *oppidum* of Entremont, on the edge of modern Aix-en-Provence.

This report focusses on the results from the work at Le Castellon, Istres and Vigne Gaste, with a brief note on the results from Entremont. A more detailed account of the latter has been published elsewhere (Armit *et al.* 2012).

Vigne Gaste

Vigne Gaste (Fig. 15.2) is located some 4 km southwest of the modern town of Istres, Bouches-du-Rhône (and the *oppidum* of Le Castellon, see below), and around 1.6 km north of the important *oppidum* of Saint-Blaise. The site,

which was identified initially by field-walking (Bouloumié & Soyer 1987: 130–133), lies at approximately 15 m above sea level and comprises surface finds scatters extending over some 12 ha of gently sloping ground (Trément 1994). There is no indication that the site was ever enclosed. Although a range of material has been recorded, including at least one sherd of 6th or 5th century BC Etruscan pottery, the surface material is dominated by 2nd and 1st century BC Italic amphorae which may have been re-used in the salt-refining process or some other specialised activity (Marty 2004): this would suggest an expansion or *floruit* of the site in the period after the abandonment of Saint-Blaise, and following the establishment of Roman control. A trial trench by Frédéric Marty (2004) identified sub-surface structures of 6th century AD date but concluded that earlier deposits in the area examined (Fig. 15.2) had been destroyed, leaving only residual ceramic material.

Magnetic and resistance survey, supported by magnetic susceptibility survey, were conducted at Vigne Gaste in 2008 (full details of methods and results in Armit *et al.* 2008b). The aim was to establish whether these methods could



Fig. 15.2: Vigne Gaste: location map showing the major concentration of finds (black) and trial trench (white) (authors)

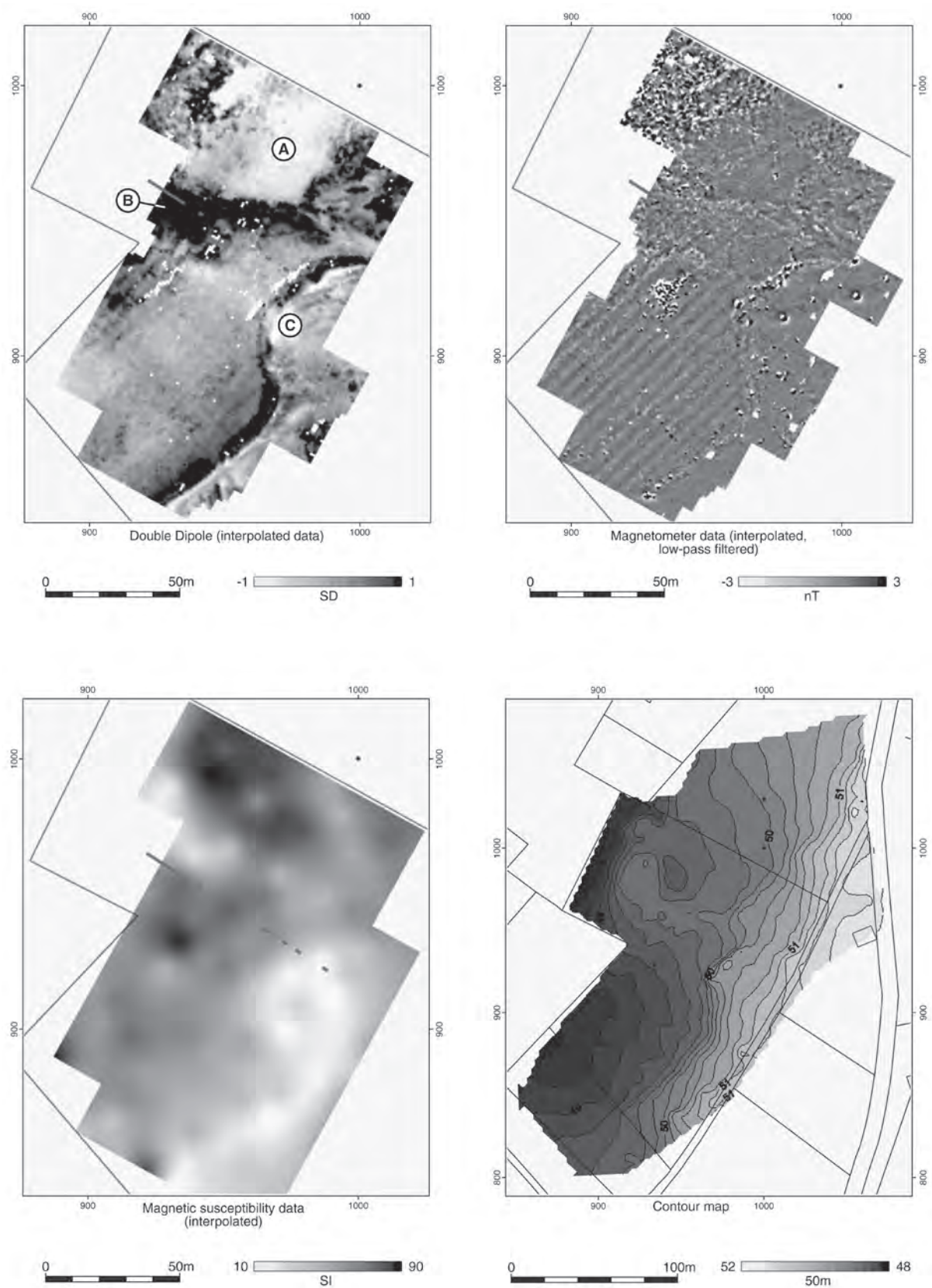


Fig. 15.3: Vigne Gaste results of (a) earth resistance survey, (b) magnetic survey and (c) magnetic susceptibility. The height scale (d) is relative only (authors)



Fig. 15.4: *Le Castellan, Istres, from the northeast (authors)*

identify zones of specific archaeological potential within the larger finds distribution. An area of *c.* 1.5 ha was selected, encompassing the earlier trial trench and a zone within which amphora fragments were particularly concentrated. The area was mostly covered with low scrub, with some dense clumps of bushes on the eastern and western fringes that limited access.

Although the site was significantly disturbed by agricultural activity dating to recent centuries (e.g. the obvious ‘ridging’ visible in the magnetic data), geophysical survey nonetheless focused attention on three main areas (Fig. 15.3: A, B and C). Area A is distinguished by an area of magnetic noise, coinciding with increased magnetic susceptibility and a number of high and low resistivity anomalies, all suggestive of human activity. Area B is located within an area of high resistivity to the west of the site that had already been shown to contain structural features by the trial trench. Area C coincides with a more recent agricultural terrace to the east of the area that has been highlighted to contain numerous anomalies in the resistivity data and a distinctly different character to the remainder of the site in terms of its magnetic properties. These features potentially relate to agricultural (non-occupational and perhaps associated with the use of the site as a vineyard in recent centuries) activities, or a distinct contrast in geology or drainage. Areas A and B thus seem to have most potential for further archaeological investigation.

Survey at Vigne Gaste has highlighted the ability of geophysical prospection to identify focal areas of human activity in unenclosed rural sites, although the picture is undoubtedly complicated (as will often be the case) by the multi-period and potentially discontinuous nature of the occupation. A wider programme of geophysical prospection accompanied by trial excavation might, however, be

expected to produce significant results to complement the intensive work on enclosed *oppida* in the region. This is a method that should undoubtedly be pursued if the potentially urban character of Southern French *oppida* is to be properly evaluated in relation to the wider settlement landscape.

Le Castellan

The *oppidum* of Le Castellan is situated on a Miocene calcareous limestone promontory projecting into the southern part of the étang de l’Olivier, a small salt-water lake immediately north of the town of Istres (Fig. 15.4). Morphologically, the site is typical of the many small, densely occupied *oppida* of the region (Garcia 2004), although its lake-side location is unusual. It can be divided into three main areas, descending in height from south to north; a narrow rocky plateau accessed by a series of natural terraces; and two gently sloping terraces, separated by a slight, tree-covered bank covered in trees. Soil depth is variable but can reach up to 2 m. The settlement was founded in the 6th century BC and occupied, perhaps episodically, through to the Gallo-Roman period (Marty 2002). There is significant excavated evidence dating to the 2nd century BC. Its latter periods of occupation are thus likely to be contemporary with the *floruit* of Vigne Gaste.

Although excavations have recovered evidence for a terraced rampart along the northern edge of the plateau (Marty 2002), the ramparts have been lost to erosion around most of the circuit. Archaeological investigations throughout the 20th century, mainly undertaken by local amateur groups, revealed the remains of buried stone structures, but the locations for many of these are now lost. Indeed, almost no trace of the Iron Age settlement is now visible above

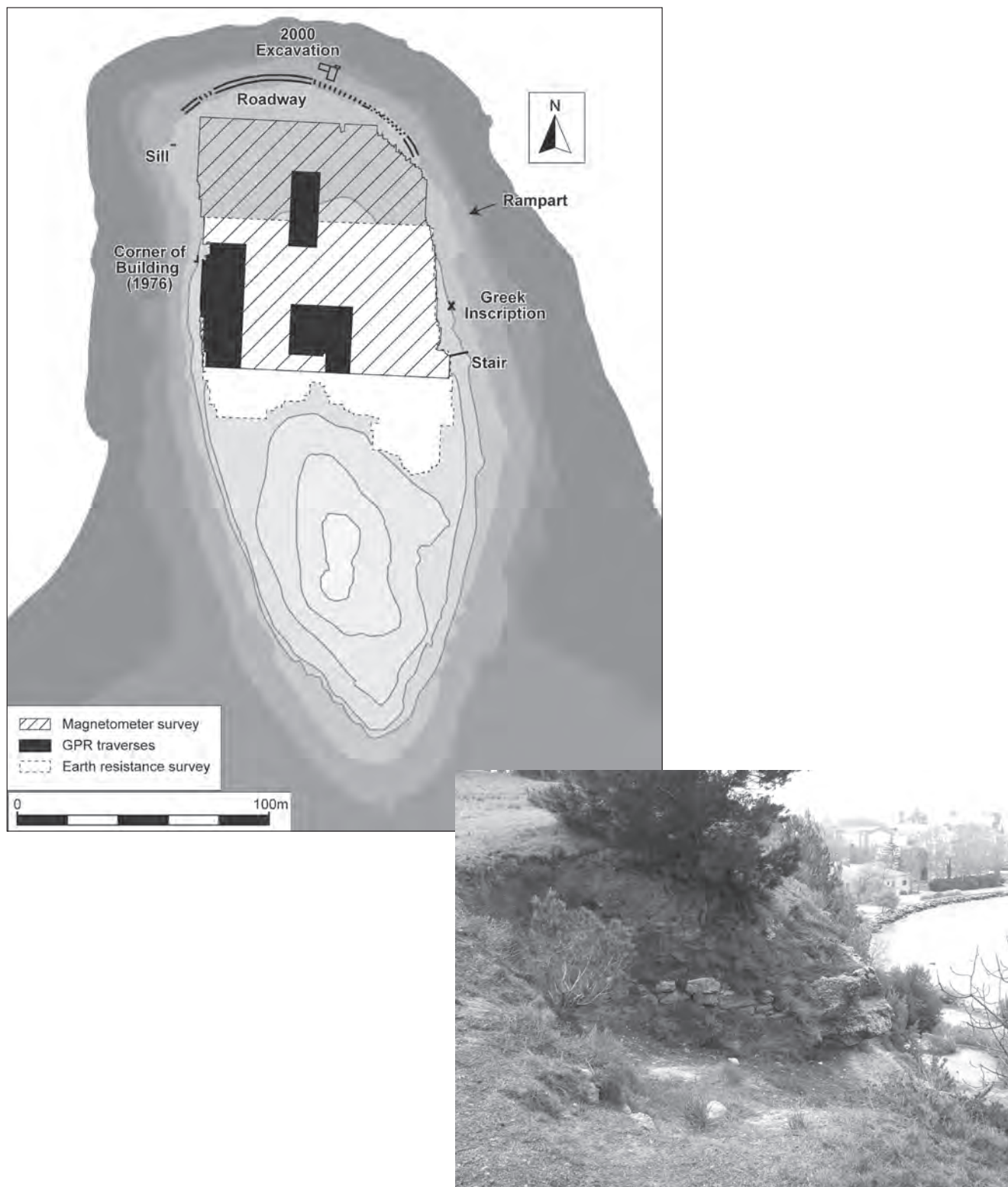


Fig. 15.5: Le Castellan: site plan showing extent of geophysical survey and key archaeological features. The original ramparts have been lost to erosion around most of the perimeter. The position of the rampart line is indicated on the east side, and also on the north where it ran through the most recent excavation trench. The 'roadway' is apparently Iron Age in date and essentially shadows the line of the rampart around the north edge of the promontory. The inset photograph shows excavated masonry exposed on the western edge of the promontory at Le Castellan, showing the soil depth and conditions (authors)

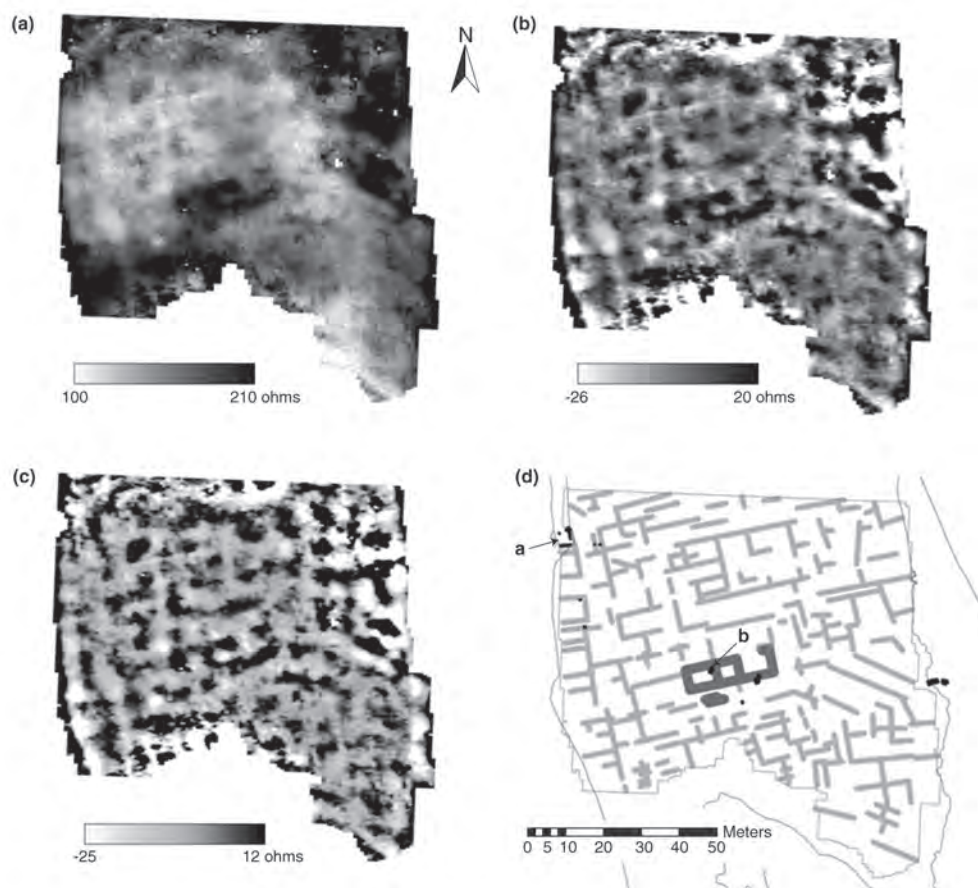


Fig. 15.6: Le Castellan: the earth resistance data. (a) raw data after despiking; (b) data after the application of a high pass filter and interpolation (see text for details); (c) data after the application of two high pass filters and interpolation; (d) simplified interpretation, showing probable shallow wall/foundation remains (dark grey), other probable buried wall alignments (light grey), and the locations of surface or excavated rocks: 'a' highlights the exposed wall sections, and 'b' shows the position of a piece of carved masonry (authors)

ground other than two short sections of wall (uncovered in 1976), exposed on the western edge of the site. These appear to form the corner of a structure buried between 1.0–1.4 m below the modern surface, and are capped by a cultural deposit up to 0.4 m thick and containing oyster shells (Fig. 15.5 inset). On the eastern side of the promontory, closer to the summit, another short section of wall has been exposed. It is believed that further structural remains were discovered within a line of excavation trenches opened in the mid-20th century across the site (roughly corresponding to the 25 m above sea level contour) which are visible today as a line of small depressions and accompanying mounds (the presumed remains of spoil heaps).

Integrated geophysical and topographic survey at Le Castellan was intended to evaluate and map the extent of buried structural features and provide new information about the layout of the site (Fig. 15.5). The work involved extensive magnetic and resistance survey supported and

enhanced by targeted GPR survey. Full details of the methods and results are contained in unpublished reports submitted to the *Service Régional de l'Archéologie* in Aix-en-Provence (Armit *et al.* 2007; 2008). Overall, the magnetic and earth resistance data exhibit a strong correlation.

A range of responses were detected by earth resistance survey, many forming regular linear patterns suggestive of buried stone walls. Although visible in the raw data, these are seen more clearly after the application of a high-pass spatial filter (Fig. 15.6). The resulting image strongly resembles the excavation plans of similar settlement sites, effectively revealing a buried street plan. A group of parallel and perpendicular responses in the western part of the site lie on a similar alignment to the exposed, excavated wall immediately to their north (highlighted at 'a' in Fig. 15.6d). These appear to represent a continuation of buried rooms along the western edge of the site. In order to rule out a natural origin for these regular resistance responses, such as joints in the underlying

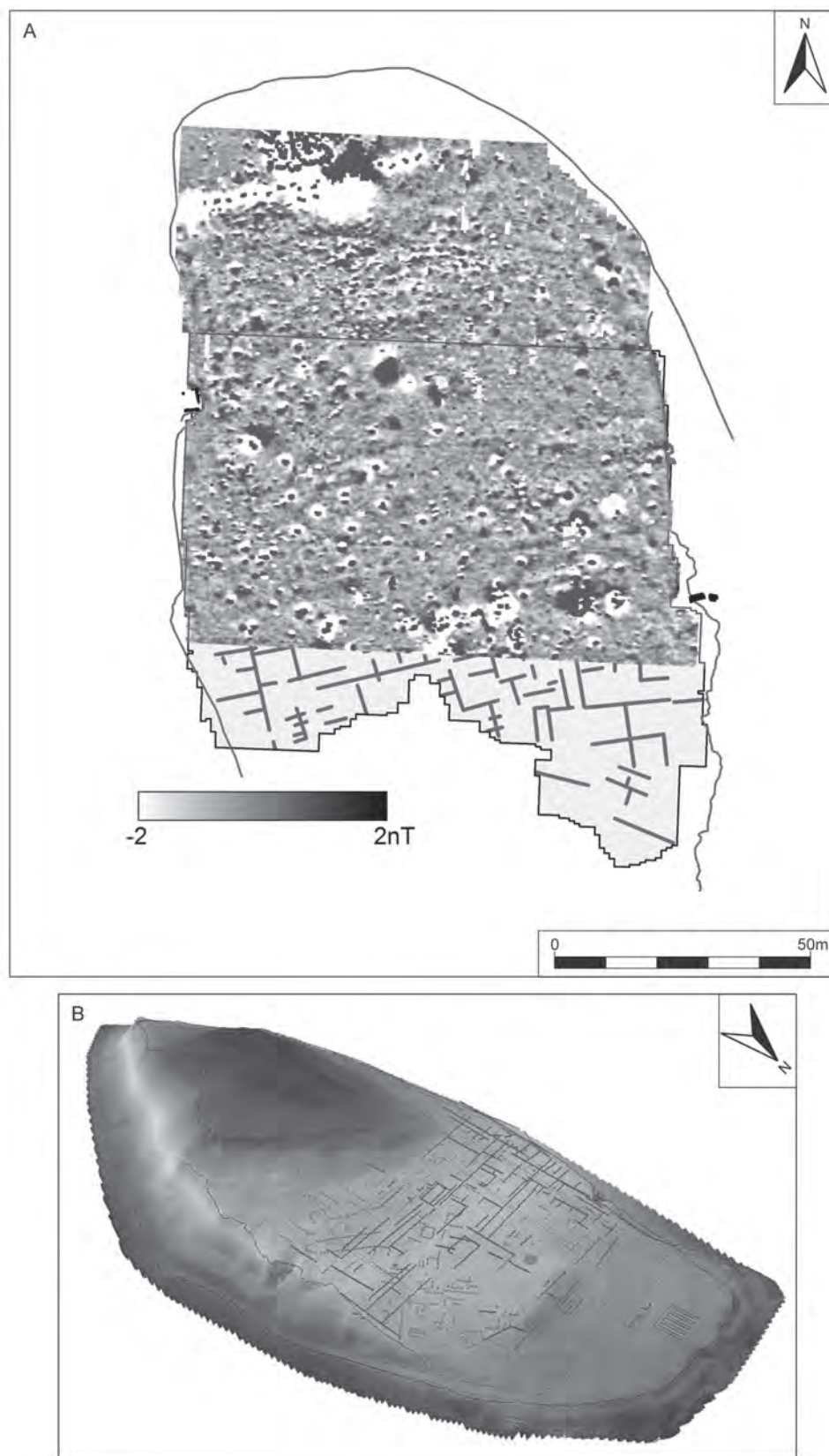


Fig. 15.7: Le Castellan: (a) interpolated magnetometer data (see text for details). The area of the resistance survey is also shown (outlined), with some of the probable wall anomalies for comparison. (b) interpretive summary of all data overlain on topographic survey (authors)

limestone, this western area was resurveyed using GPR. Here the bedrock was determined to lie at a depth greater than 2.0 m, supporting an archaeological interpretation for the resistance anomalies (Armit *et al.* 2008a).

One particularly clear feature in the central part of the survey area appears to represent a three-roomed structure which may be of more massive construction, and/or less deeply buried than the rest of the buildings (shown at 'b' in Fig. 15.6d). A fragment of carved masonry was visible on the surface adjacent to these features. It is possible that the structure may be a monumental building located centrally within the *oppidum*, as is the case with the 'hypostyle' building at Entremont (see below).

Despite a high level of magnetic interference due to surface or near-surface modern ferrous debris, it is possible to discern subtle linear trends in the magnetic survey over much of the survey area (Fig. 15.7). Weakly negative linear responses, generally between 0.0 and -1.5 nT appear to represent buried walls, similar to those seen for example at the Roman city of Wroxeter (Gaffney *et al.* 2000) and the Roman fort at Malton (Horsley 2007). At Le Castellan, these results indicate that the stone used in walls and footings, probably the local calcareous limestone, has a low magnetic susceptibility compared with the surrounding soil. These linear negative anomalies correlate well with the high resistance alignments, further supporting their interpretation as being due to the remains of walls or foundations.

The magnetic data also contains a number of discrete positive anomalies up to around 5nT in strength, the majority interpreted as hearth locations. A few larger and more intense positive anomalies have also been detected, however, including one some 5 m across and up to 33nT in strength, suggestive of intense burning; perhaps reflecting a high-temperature industrial process or possibly the location of a mud-brick building destroyed by fire.

The geophysical survey at Le Castellan was successful in identifying elements of a buried street plan, lined with closely-packed, relatively small structures, and at least one potentially monumental building, as well as indications of activity areas represented by intense burning. It indicates that the *oppidum* lacks any evidence for substantial open spaces, e.g. markets areas, zones for livestock, or ritual precincts, and monumental buildings seem to be limited to a single, centrally-located structure. This is an especially important outcome as it would have taken excavation on an enormous scale to address this issue independently. This feature of the spatial planning at Le Castellan will be discussed further below.

Entremont

Following the successful outcome of work at Le Castellan, geophysical and topographic prospection was undertaken in

2010–2011 at the 2nd century BC *oppidum* of Entremont. This site is generally considered to have been the political capital of the indigenous Saluvian confederacy – the predominant indigenous power in Provence during the 2nd century BC. Excavations since 1946 have revealed dense patterns of streets and buildings suggestive of a proto-urban centre, but lacking what might be regarded as key elements of urban infrastructure; public open spaces, ritual precincts, warehouses, storage facilities, large public buildings, etc. (cf. Arcelin 2006). The site is also well known for its assemblage of stone statuary, including three-dimensional, near life-size depictions of seated warriors clutching severed human heads; ranking among the prime evidence for the supposed 'Celtic cult of the head' (Armit 2012). Although dating from around the 5th–3rd centuries BC, and probably deriving from an early sanctuary on the hilltop, some of these sculptures remained on display within the later *oppidum* (as did even earlier, simpler sculptures depicting severed heads), mainly in and around the 'hypostyle': an unusually large building built near the centre of the *oppidum* around 150 BC.

Despite the probable existence of an earlier sanctuary, which appears to have left no structural traces, Entremont has the significant advantage over Le Castellan (for present purposes at least) of having been a rather short-lived settlement: following the construction of the 'Upper Town' around 180/170 BC, the much larger 'Lower Town' was added around 150 BC. It existed in this fully developed form for only a generation or so before the site was sacked by the Roman army around 125 BC. Final abandonment occurred probably around 90 BC. In comparison with Le Castellan and Vigne Gaste, there was much less time for remodelling and reorganisation of the settlement to distort and obscure the patterns visible in the geophysical results. Extensive geophysical and topographic survey was thus carried out over all the accessible unexcavated areas, in order to examine issues of space and movement within the *oppidum* (Armit *et al.* 2012; Fig. 15.8).

The most obvious result of this work was confirmation that the orthogonal street-plan exposed in the excavated area extends across virtually the whole interior (Fig. 15.8). Two major streets (Roads 1 and 2) follow the curve of the rampart and divide the interior space into a series of islets comprising numerous buildings formed of interconnected rectilinear units. There is no sign of any unusually large or monumental buildings, suggesting that the excavated 'hypostyle' was probably the major (perhaps only) public building within the *oppidum*. Magnetic anomalies indicate intense burning at very high temperatures within the central part of the interior and along the edge of the north rampart, suggesting that 'industrial' activity such as metal or glass working was undertaken within the densely packed interior. The zoning of this activity with specific areas of the interior again reflects the patterns seen at Le Castellan.



Fig. 15.8: Entremont: (a) magnetic data; (b) earth resistance data; (c) interpretation of the combined data-sets (authors)

Although there is some variation in the size of the islets (e.g. those defined by Roads 3 and 4 are rather narrower), there is no indication of any significant area of open space within either excavated or unexcavated areas. This reinforces the pattern seen at Le Castellán and implied by numerous partial excavations of *oppida* within the region. The importance of using multiple techniques is indicated in Figure 15.8, where it is apparent that magnetic survey gives best definition of the roads, while the earth resistance data provides far more clarity on the detail of individual buildings.

The other principal result of the survey at Entremont was the identification of a monumental entrance and passage-way giving access to the *oppidum* from the extreme east end along a length passage-way (Armit *et al.* 2012); an entrance which mirrored the arrangement at the previously-suspected smaller entrance at the extreme west end (Fig. 15.8). The two entrances can now be seen to be linked by an arterial road-way that passes the front of the ‘hypostyle’, reinforcing the singular position of this building as the key construction at the heart of the *oppidum*.

Discussion

The *oppida* at Entremont and Le Castellán have much in common. Both appear to have a dense street pattern across their entire interior, with an absence of public open space. This would seem to preclude the existence of formal market areas, or places of popular assembly. Although both *oppida* have apparent concentrations of industrial activity within their enclosed areas, neither has obvious evidence for specialised architecture or clearly zoned areas to accommodate such activity. In both cases there appears to be evidence for a single monumental building: the hypostyle at Entremont, and the three-roomed central structure at Le Castellán. Both of these structures are centrally located and both are larger and more substantially built than other buildings on each site. It seems likely that these represent buildings of political or administrative significance: in the case of the hypostyle at Entremont, this role was clearly framed within a symbolic or indeed religious context.

Given that both *oppida* appear to have been capable of housing populations of 1000 people or more, it is interesting that their most prominent buildings are so small, and unlikely to have held more than a tiny fraction of the population at any one time. Even though the major arterial road-way through Entremont widens in front of the hypostyle (it is not clear if the same can be said for Le Castellán), this would not have permitted a particularly substantial assembly. The strong impression, therefore, is that these settlements were administered by a relatively small elite (their role under-pinned by religious or ritual authority), with limited opportunity for public gathering or decision-making. There is, however, nothing to suggest

the presence of elite residences within the *oppida* (unless these central buildings were themselves residences); interior buildings were tightly-packed and had limited differentiation in size and morphology and there seems little differentiation of structural forms as might be expected in a more developed urban environment.

Overall, the layout of these *oppida* does not suggest that they were intended to fulfil the role of towns or cities as conventionally understood. Given that the community who built Entremont had lived for many generations within a few kilometres of Massalia, and given the manifest links between Greek and indigenous populations over some four centuries or more of intensive social, cultural and commercial contacts, it seems improbable that Entremont represents a failed experiment in urbanism. Rather it seems more probable that Southern French *oppida* represent something else entirely.

It is not simply the nature of their internal organisation that casts doubt on the urban credentials of these sites. Urban centres cannot, by definition, exist without an underpinning base of rural settlement. Identifying rural sites contemporary with the Southern French *oppida* has proved an ongoing challenge. Although the work at Vigne Gaste has demonstrated the potential of geophysical survey on unenclosed rural sites, it is not yet possible to say anything definitive regarding the role and chronology of such settlements in relation to the *oppida*. The limited archaeological evidence for Vigne Gaste suggests a *floruit* post-dating the main period of settlement at Saint-Blaise, but potentially contemporary with intensive settlement at Le Castellán.

An alternative to an urban model would be to see the Southern French *oppida*, with their often episodic (Le Castellán) or short-lived (Entremont) periods of occupation, as essentially societal responses to crisis situations. A similar ‘crisis model’ has long been propounded by Collis (e.g. 2012 and this volume), for example, for late 2nd and early 1st century BC *oppida* in Central Gaul. Nucleated and heavily enclosed population centres, with clear evidence for central planning and large-scale co-operation but lacking other trappings of urban infrastructure, can be identified at numerous other times and places across Iron Age Europe and beyond (Armit *et al.* 2012) and it may be that we should see sites like Entremont and Le Castellán in these terms, rather than as places on a trajectory towards urbanism.

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Interdisciplinary and Trinational Research into the Late La Tène Settlement Landscape of the Upper Rhine

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The southern Upper Rhine region, bounded geographically by the Vosges, Black Forest and Jura mountain ranges, is a major Late La Tène (Lt C2/D1 to Lt D2, c. 150–40 BC) settlement landscape. Data on 160 sites in France, Germany and Switzerland was systematically analysed. Site mapping and cluster analyses address various research issues: the development of the settlement landscape through time, the definition of different settlement categories and the identification of potential relations between sites reflected in the material remains. The classification produced three categories of settlements. The first two categories, ‘central places’ and ‘medium centres’, differ by the presence of fortifications, the intensity of processing metals, the production of pottery and coins and by the amounts of imports. The third category, interpreted as ‘farmsteads’, generally comprised small-sized settlements enclosed by ditches and exclusively found on the plains. Exchange networks are identified on the basis of coins and rotary hand querns made of Rotliegend breccia originating from one local quarry. Further information on the Late La Tène economic landscape will be generated by stable isotope mapping in an ongoing research project.

The southern Upper Rhine area has a large number of Late La Tène sites, several of which are of European significance. The modern division of the region by three national borders and two language areas meant that the area enclosed by the Vosges, the Black Forest and the Jura Mountains was not perceived as a geographical unit and connected settlement landscape.

Therefore, it was the objective of the trilateral working group to compile coordinated records of all the sites dating from the period in this cultural landscape. The following institutions were involved in gathering the archaeological data: Antea-Archéologie, Habsheim (F), Department of Monument Conservation in the Regional Council of Freiburg (G), Archaeology Service of Baselland (CH),

Archaeology Department of Canton Basel-Stadt (CH), Department of Prehistoric Archaeology at the University of Zurich (CH), Swiss Inventory of Coin Finds in Bern (CH). The results, including a complete list of sites and references, were presented in detail at the 2010 AFEAF conference in Aschaffenburg (Blöck *et al.* 2012).

The research was further expanded by working together with the research project “Approaching the living via the dead: Human remains from the Late La Tène site Basel-Gasfabrik and their cultural-historical interpretations”. This interdisciplinary research work comprises archaeological, anthropological, genetic, geoarchaeological, archaeobotanical and archaeozoological studies and isotope analyses, and is supported by the Swiss National Science

Foundation and the Freiwillige Akademische Gesellschaft Basel. Besides the Archaeology Department of Canton Basel-Stadt (Guido Lassau), the other partner institutions in the research project are the Institute of Anthropology at the University of Mainz (Kurt W. Alt), the Institute of Biometry and Statistics at the University of Freiburg (Werner Vach), the Department of Prehistoric and Provincial Roman Archaeology and the Institute for Prehistory and Archaeological Science at the University of Basel (Brigitte Röder, Jörg Schibler).

The data gathered related to well-known settlements such as Basel-Gasfabrik, Breisach-Hochstetten and Sierentz-Landstrasse (Fig. 16.1) on the one hand, and a number of unpublished sites on the other. The central questions raised were: Which categories of settlement existed in the region? What were the functions of the various settlements and what contacts can be identified by studying the archaeological material? How did the settlement landscape develop over the course of the Late La Tène period and what factors had an impact on this development?

It was one of the aims of the research project to gather the data in such a way that it would be possible to glean information about the relationships, dependencies and networks between the different settlements. The latest results obtained from the study of the coins were particularly important in this respect. Another line of approach in the study of the settlement landscape was offered by analysing the isotope ratios in human and animal bones and teeth as part of the interdisciplinary research project. It allowed us to record land use in the surrounding areas and mobility within the southern Upper Rhine region and beyond.

Defining the research area

The southern Upper Rhine region is characterised by special natural surroundings. It comprises different natural environments such as the Rheinaue wetlands, the gravel plains on the lower terrace of the River Rhine, the hills of the Sundgau and Markgräflerland, as well as numerous valleys whose watercourses feed directly into the Rhine.

For the purposes of the study the southern Upper Rhine region was defined wherever possible along its natural boundaries: The Black Forest, Vosges and Jura mountain ranges largely enclose the landscape. The only gaps are located in the north and in the southwest. The northern border was defined along a line which appears to separate two different archaeological assemblages (Zehner 2002). In the southwest, the boundary was placed in an area devoid of finds and along modern political borders. As part of the study all known Late La Tène sites were mapped. This included all types of sites: Settlements, graves, hoards, stray finds and individual finds.

Gathering of data and methodology

Because of the large number of Late La Tène sites in the southern Upper Rhine region it was necessary to identify a set of meaningful criteria, which would be suitable for mapping on one hand and would allow us to define site categories on the other. From a methodological point of view, the first step thus involved defining a data-recording grid based on theoretical considerations, which would serve as a basis for the analysis. An Internet database was then used to record more than 80 criteria for each site. This, however, was hampered by the considerable disparity between the sites with regard to their excavations, states of research and post-excavation analyses. The gathering of uniform data, on the other hand, was less problematic. This was helped by the fact that the individual criteria were described as precisely as possible at the outset in order to ensure that the researchers in the respective areas would assess their sites in the same way. The revised database eventually contained 162 sites and included the data assembled by Holger Wendling in his PhD thesis (Wendling 2012).

In order to facilitate the mapping of the settlements the chronological sequence had to be simplified, because the numbers would otherwise have been too small to allow a differentiated perspective. Thus only the phases Lt D1 and Lt D2 were recognised. Sites which covered both periods appear on both maps. A different symbol was used for settlements that can just be dated to the Late La Tène period in general. The mapped sites therefore represent the maximum number of confirmed and presumed settlements.

Grouping Late La Tène settlements by means of a cluster analysis

The number of sites in the southern Upper Rhine region, which could be identified as settlements according to the study of the archaeological finds and features, was large enough (46 sites in total) to warrant an attempt at arranging them into groups based on the criteria recorded. To this end, a cluster analysis (Bortz 1985: 691, 697) was carried out on all the settlements with sufficient data and irrespective of their dating.

The criteria used in the cluster analysis referred to the topographical location, the existence of a fortification, the existence of an enclosing ditch, evidence of above-ground granaries, evidence of crafts such as pottery, the processing of iron and non-ferrous metals, evidence of coin production, the frequency of coins and the presence of luxury objects. Imports from the Mediterranean region and from the East were also included. Due to the sometimes suboptimal range of sources available, other quite essential criteria had to be omitted because they could only be insufficiently recorded or not at all due to a lack of research results. The state of

research and analysis, the quality of the excavation methods and the finds assemblages available may also have led to a somewhat distorted result with regard to the criteria that were actually included, so that the interpretation of the results obtained from the cluster analysis required a careful archaeological assessment.

Results obtained from the cluster analysis

The cluster analysis eventually carried out on 29 confirmed settlements, which bore a sufficient number of criteria, showed that the settlements can be grouped into three clusters.

Characterisation cluster 1: 'central places'

Certain settlements were quite large. Approximately half of these sites were fortified with bank and ditch enclosures, while the other half were open settlements, usually without ditch enclosures. The settlement type in cluster 1 yielded evidence of various crafts: The processing of non-ferrous metals was regularly attested to, and evidence of iron processing and pottery production was also often found. Coin production was also a regular feature. Other crafts such as the production of glass beads and glass bracelets were either attested to or at least suggested in some cases. The assemblages of finds included many coins, some of them of foreign origin, numerous amphorae and other imports from the Mediterranean region and the East. An additional characteristic of these settlements was the presence of local luxury objects and status symbols. From an archaeological point of view, we may interpret this category of settlement as 'central places'.

Characterisation cluster 2: 'medium centres'

Another category of settlement was generally unfortified and did not have any enclosure ditches. There was evidence of pottery production in some of the sites, and sometimes we can presume the existence of iron processing. Neither the processing of non-ferrous metals, however, nor coin production was ever attested to.

The assemblages of finds regularly included coins and amphorae, but rarely in significant numbers. While other imports from the south were recovered at some of the sites, graphite-tempered ware from the East was rarely found. This category of settlement was termed 'medium centres'.

Characterisation cluster 3: 'farmsteads'

The third category generally comprised small-sized settlements enclosed by ditches. These types of sites were exclusively found on the plains. While some of the sites

yielded evidence of iron processing, there was no evidence of pottery production, processing of non-ferrous metals or coin production. With the exception of some amphorae and coins, imports from the South and East as well as other luxury objects were not generally found. From an archaeological point of view, we may interpret this category of settlement as 'farmsteads'.

The cluster analysis and its archaeological evaluation

The first result obtained from the cluster analysis was the identification of six 'central places': Basel-Münsterhügel (Fig. 16.1, 123), Basel-Gasfabrik (Fig. 16.1, 115), Ehrenstetten-Kegelriß (Fig. 16.1, 70), Breisach-Hochstetten (Fig. 16.1, 45), Breisach-Münsterberg (Fig. 16.1, 42) and Sasbach-Limberg (Fig. 16.1, 18). Based on the archaeological assessment, three further sites were added: Riegel-Ortsetter (Fig. 16.1, 17), Zarten-Rotacker (Fig. 16.1, 56) and *Tarodunum* (Fig. 16.1, 59). These had automatically been excluded from the cluster analysis because more than two of the criteria analysed had been recorded as undetermined.

Eleven settlements were assigned to the 'medium centre' category. One of these sites, Waldenburg-Gerstelfluh (Fig. 16.1, 162), was however subsequently eliminated because its remarkable assemblage of finds would actually have justified its interpretation as a central place, but its structural characteristics bore very few similarities to this category of settlement. The site was eventually not assigned to any of the existing categories and appears to have been a special case (Berger & Müller 1981). The site Colmar-Jardins des Aubépines (Fig. 16.1, 35) was interpreted as a farmstead because of its enclosure ditch. Both Meistratzheim-Laengelstein (Fig. 16.1, 1) and Colmar-Fronholtz (Fig. 16.1, 41) were excluded because these sites could not be assessed due to the limited amount of archaeological information available.

The six remaining sites were termed 'medium centres': Benfeld-Ehl (Fig. 16.1, 4), Colmar-Houssen (Fig. 16.1, 24), Sausheim-Rixheimerfeld (Fig. 16.1, 79), Sierentz-Landstraße (Fig. 16.1, 104), Reinach-Mausacker (Fig. 16.1, 138) and Sissach-Brühl (Fig. 16.1, 150).

The cluster analysis identified 12 'farmsteads', among which Houssen-Lotissement Les Jardins (Fig. 16.1, 21) was excluded due to the fact that the existence of a presumed enclosure ditch could not be confirmed. As mentioned above, the site Colmar-Jardins des Aubépines (Fig. 16.1, 35) was added to the category of farmsteads, which otherwise included Pulversheim-Hoell (Fig. 16.1, 74), Matzenheim-Les Berges du Panama (Fig. 16.1, 3), Hitzfelden-Munchauserstraße, (Fig. 16.1, 69), Colmar-Rue Balsac (Fig. 16.1, 33), Scherwiller-Châtenois-Giessen (Fig. 16.1, 8), Ensisheim-Reguisheimerfeld (Fig. 16.1, 72),

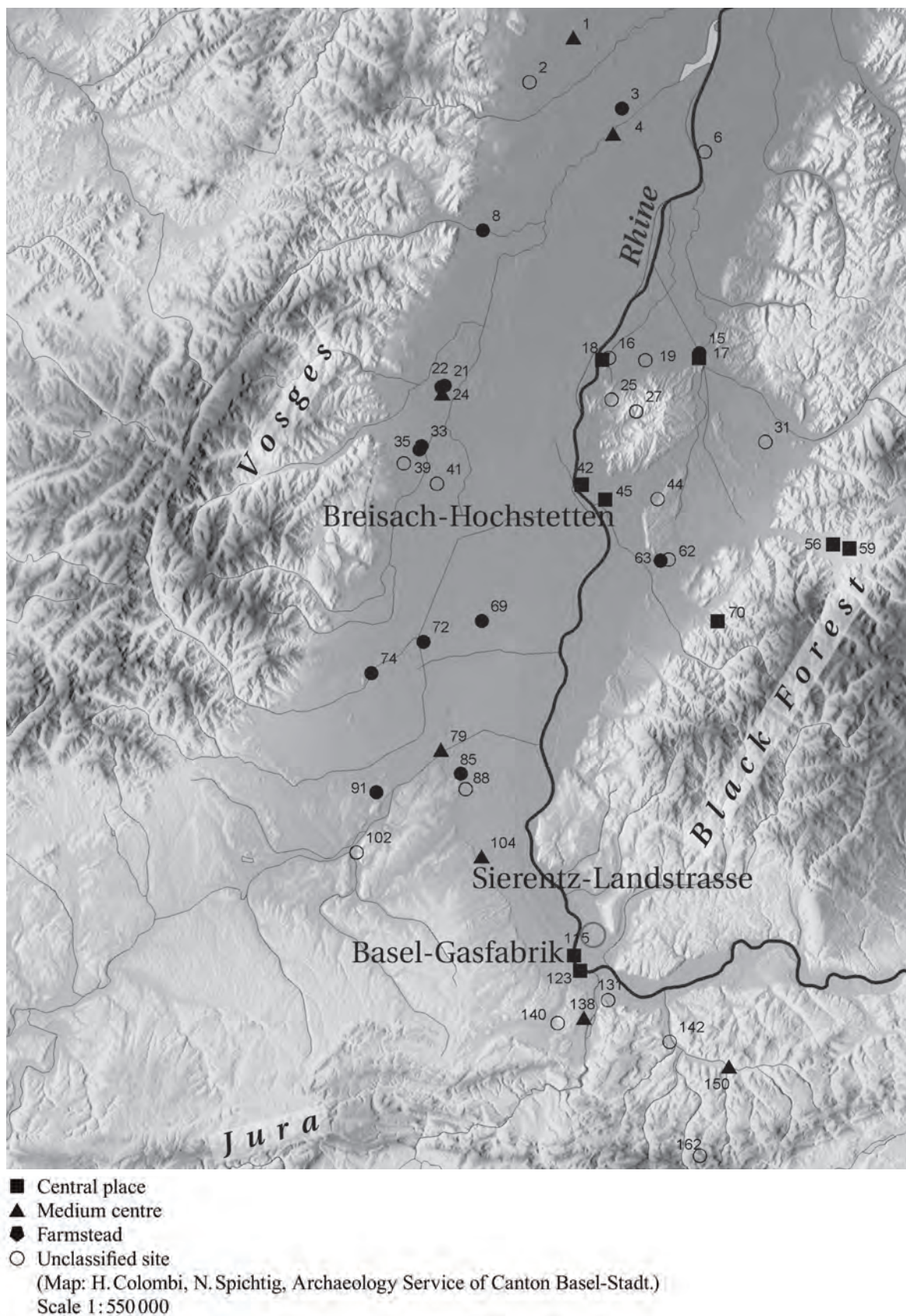


Fig. 16.1: Categories of Late La Tène settlement

Rixheim-ZAC Le petit Prince (Fig. 16.1, 85), Didenheim-ZAC Des Collines (Fig. 16.1, 91), Riegel-Gehrfad (Fig. 16.1, 15) and Mengen-Abtsbreite (Fig. 16.1, 63).

Distribution and functions of the three categories of settlement

All the central places were characterised by their special locations: five settlements were located on the river Rhine (Fig. 16.1, 18, 42, 45, 115, 123), the central transport axis within the study area, the sites Zarten-Rotacker (Fig. 16.1, 56), *Tarodunum* (Fig. 16.1, 59) and Riegel-Ortsetter (Fig. 16.1, 17) were situated on important routes over land, while Ehrenstetten-Kegelriß (Fig. 16.1, 70) was located on the slopes of the Black Forest. So far, no central place has been found in the Upper Alsace region; this probably reflects the current state of research.

The central places appear to have had different structures and functions, and their sizes varied considerably. The two open settlements of Basel-Gasfabrik (Fig. 16.1, 115) and Breisach-Hochstetten (Fig. 16.1, 45) were ideally situated on the fluvial terrace of the Rhine. They were centres of production and trading hubs, and probably had ports. Farming would also have played a role, as is attested to by agricultural implements found at both settlements. Riegel-Ortsetter (Fig. 16.1, 17) and Zarten-Rotacker (Fig. 16.1, 56) were also favourably located close to overland routes. Riegel-Ortsetter (Fig. 16.1, 17) stood at the narrows between Kaiserstuhl and the Rivers Elz and Dreisam, or in the foothills of the Black Forest, where several transport routes converged (Dreier 2003: 584). Zarten-Rotacker (Fig. 16.1, 56) had been built on a road which crossed the Black Forest (Fingerlin 2006: 62–73).

The fortified site of *Tarodunum* (Fig. 16.1, 59) had been built on a flat plain between two headstreams of the River Dreisam. The construction of the fortification appears not to have been completed and, besides a few Late La Tène stray finds, no evidence of a settlement could be found. We may assume that the settlement was intended to control the road crossing the Black Forest. Its size might indicate that there had been other planned functions as well. In the case of Zarten-Rotacker (Fig. 16.1, 56), Riegel-Ortsetter (Fig. 16.1, 17) and *Tarodunum* (Fig. 16.1, 59), farming may have played a role besides crafts and trade.

The central place Ehrenstetten-Kegelriß (Fig. 16.1, 70) differed in many ways from the settlements mentioned above, suggesting that it may have performed different functions within the Late La Tène settlement organisation. Built near silver and lead deposits, it was fortified, and only some parts of the area within the fortification were actually occupied (Dehn 2005: 83, 85). The topography suggests that its construction was linked to mining operations such as the extraction of silver. Against this background, it comes as no

surprise that the settlement was enclosed by a rampart in order to protect and control the silver production.

The central places Basel-Münsterhügel (Fig. 16.1, 123), Breisach-Münsterberg (Fig. 16.1, 42) and Sasbach-Limberg (Fig. 16.1, 18) represent a separate type of settlement within the central place category (Deschler-Erb 2011; Weber-Jenisch 1995; Wendling 2012). They were all situated on the river Rhine, fortified, and located in elevated or even almost insular positions. The choice of these settlement locations was probably based on strategic considerations. They were probably intended to guard the traffic on the Rhine and the surrounding settlements.

The medium centres were mainly located in Alsace, which is probably due to the many excavations carried out in recent years. They were situated at regular intervals along the river Ill and at the foot of the Vosges, often at the entrances to important valleys. Some settlements were also situated near the Rhine. Those on Swiss soil were also located in two important valleys, the Ergolz and Birs Valleys. The settlements in this category were easily accessible and were not found in elevated regions. Within the study area, the Baden region yielded no medium centres, which probably reflects the current state of research.

The functions of these settlements cannot be defined precisely. Their distribution throughout the plains and near watercourses suggests that agricultural land and good-quality communications played a role. The settlement Sausheim-Rixheimerfeld (Fig. 16.1, 79) yielded evidence of farming in the form of agricultural implements. Certain crafts, pottery making in particular, also played an important role. Sissach-Brühl (Fig. 16.1, 150) yielded 12 pottery kilns in a very small area, which were used mainly to produce fine ware. It is unlikely that these kilns were used for the sole purpose of supplying the demand within the settlement. Perhaps the medium centres were charged with producing and distributing certain craft products. The roads which ran through Sierentz-Landstraße (Fig. 16.1, 104; Roth-Zehner 2007) and Benfeld-Ehl (Fig. 16.1, 4) are further important evidence to suggest that these settlements played a role in terms of transporting goods.

Ten of the 12 farmsteads were located in the Upper Alsace, while two were uncovered on what is today German soil. No settlements of this category have been found in Switzerland. This uneven pattern of distribution, again, reflects the current state of research rather than the ancient reality. Although the farmsteads were assigned to the same category, their appearances would not have been identical. They had dissimilar ground plans, which ranged from the different-sized rectangular enclosures in Pulversheim-Hoell (Fig. 16.1, 74) and Mengen-Abtsbreite (Fig. 16.1, 63) to the almost square enclosure in Riegel-Gehrfad (Fig. 16.1, 15) and the large complex sites of Matzenheim-Les Berges du Panama (Fig. 16.1, 3) and Hitzfelden-Munchhauser Strasse (Fig. 16.1, 69) with several enclosure ditches. This

type of settlement is undoubtedly highly underrepresented, because the sites probably served an agricultural purpose first and foremost, although this is difficult to prove. No agricultural implements were actually found among their assemblages which also, however, applies to a further 158 out of the 162 sites.

The coins as a source of information concerning settlement history

The coins in circulation during the phase Lt D1 were mainly recovered from settlements. A series of hoards and a number of individual finds have also been found (Nick 2006: 133–150). Coins were largely limited to the central places and medium centres, while the surrounding rural areas yielded very few coins. The most common coins in this phase were staters and quarter staters made of electrum or bronze. Silver quinarii, mainly of the Kaletedou type, and silver obols, which, based on their weights, may be identified as the associated quarter coins, were also in use. Potin coins were the least valuable. While the largest number of coins that can definitely be identified as foreign were found at Basel-Gasfabrik, very few came to light at any of the other Upper Rhine sites. Several sites yielded evidence of or at least tentative clues to the minting of coins.

This situation changed fundamentally during the phase Lt D2. The area on the right of the River Rhine was largely devoid of coin finds. In the other parts of the study area gold denominations and obols were no longer in use. Instead, new quinarii and potin types were now in circulation. Coin production had almost completely ceased in Lt D2. Only Breisach-Münsterberg yielded a fragment of waste possibly associated with the casting of potin (Wendling 2012: 150–151, fig. 77, 1).

Contact throughout the region

As outlined above, we assume that the central places were in contact with each other. The exact nature and closeness of the relationships can hardly be identified at this stage of the research. It is, however, possible to at least show that an exchange did indeed take place, based on a small number of find categories, including coins, quern-stones made of Rotliegend breccia and non-ferrous metal products. Isotope analyses carried out on tooth and bone samples will enhance and complete the results. The study aims to develop a model to characterise the relationships and movements of humans and animals within the region.

Some settlements from the Gasfabrik horizon (Lt C2/D1) have yielded coin sequences large enough to allow comparisons to be made. They comprised mainly Kaletedou quinarii, group A potin coins of the Sequani and some potin

coins of the Leuci. While these coin denominations were most commonly used in the study area, the rarer coins may, thanks to their unwontedness, make a contribution towards highlighting specific contact between the individual settlements (Fig. 16.2). It is thus possible to identify a series of potential direct contacts, mainly between central places (Nick 2006: 133–150; 2009: 182–186). The extensive network of contacts between Basel-Gasfabrik (Fig. 16.2, 115) and all the other contemporary central places as well as several medium centres is very clearly identifiable. Mainly due to the lack of characteristic coin types, this category of find cannot be used to prove direct contact between the settlements during the phase Lt D2.

Rotary hand querns made of *Rotliegend breccia* came from quarries in Schweigmatt near Schopfheim-Raitbach in the southern Black Forest (Fig. 16.2, 100–101, 103). Such quern-stones were found in numerous settlements throughout the study area (Hecht *et al.* 1991: 109, fig. 19), mainly central places and medium centres, but they have also been recovered from farmsteads.

We may assume that the quern-stones were transported by water, via the rivers Wiese and Rhine, to Basel-Gasfabrik, which served as a distribution point. Breisach-Hochstetten (Fig. 16.2, 45), also located on the Rhine, may have had a similar function as a distribution centre. The distribution pattern of the quern-stones is evidence of regional trade during the Late La Tène period.

The analysis of the data collected revealed that the processing of non-ferrous metals could only be identified in the central places. This allows us to draw the conclusion that non-ferrous metal objects were brought from the central places to the surrounding medium centres and farmsteads, and thus reflect contact between the centres and the surrounding areas.

A different kind of contact is mirrored by the pottery found in the Alsace region. While fine ware found in the region of Sierentz (Fig. 16.2, 104) consisted mainly of painted pottery, black burnished ware was more popular in the region around Colmar (Colmar-Houssen: Fig. 16.2, 24) (Zehner 1995). Such differences in the pottery tradition suggest that pottery was not traded throughout the entire region, but only within a very limited area.

Besides various aspects of the material culture, strontium and oxygen isotope analyses on human and animal skeletal remains can also offer clues regarding contact within the region and beyond (Bentley 2006; Knipper 2004; 2011). Such analyses are currently being carried out on tooth and bone samples taken from burials in the two cemeteries associated with the central settlement at Basel-Gasfabrik (Fig. 16.2, 115). The research project also involves creating a systematic isotope map to specifically enhance and expand the existing range of data collected from the region (Bentley & Knipper 2005; Durand *et al.* 2005; Eikenberg *et al.* 2001; Oelze *et al.* 2012). Ground vegetation, tree foliage and

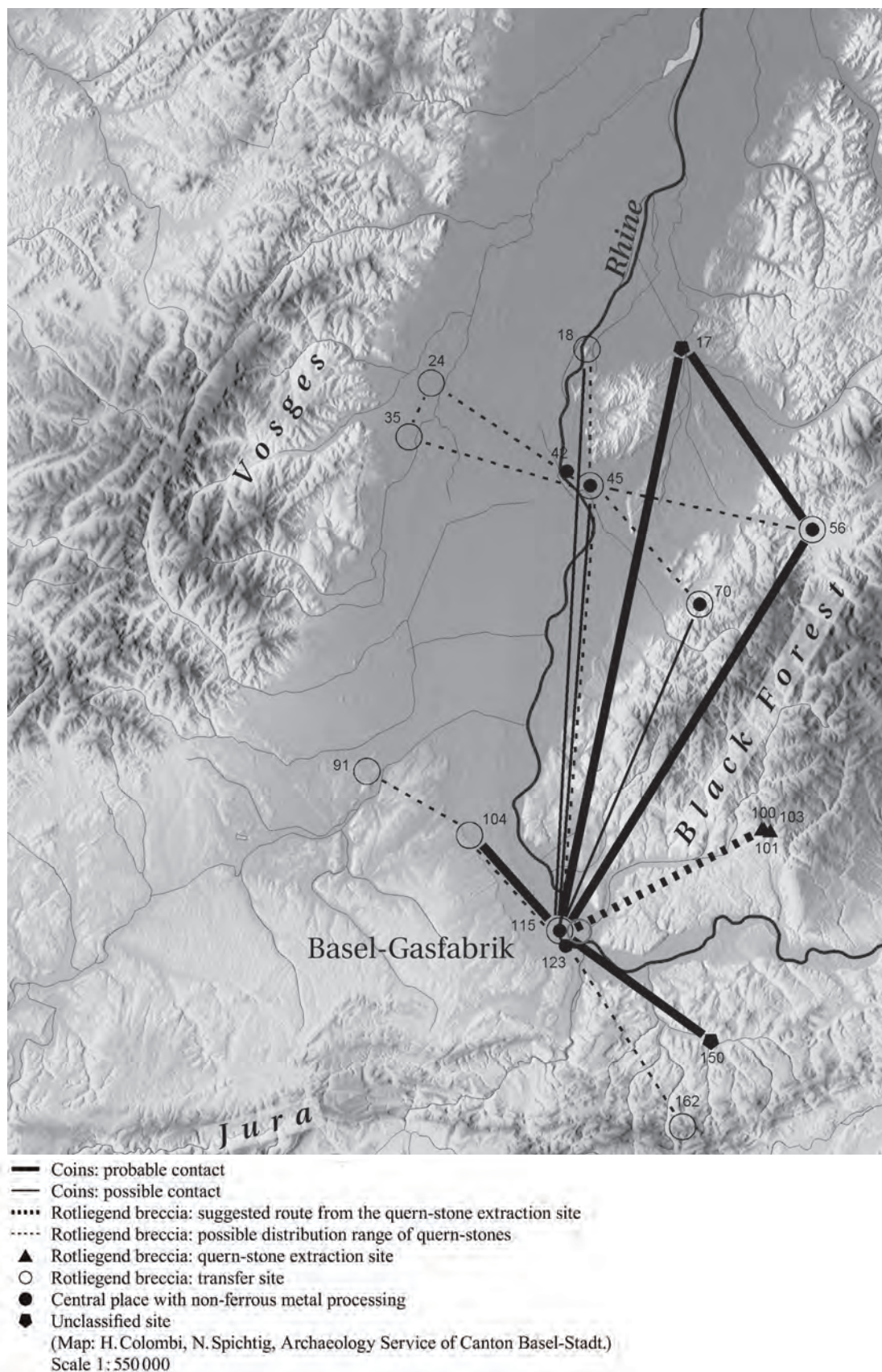


Fig. 16.2: Model of inter-site contact during Lt D1

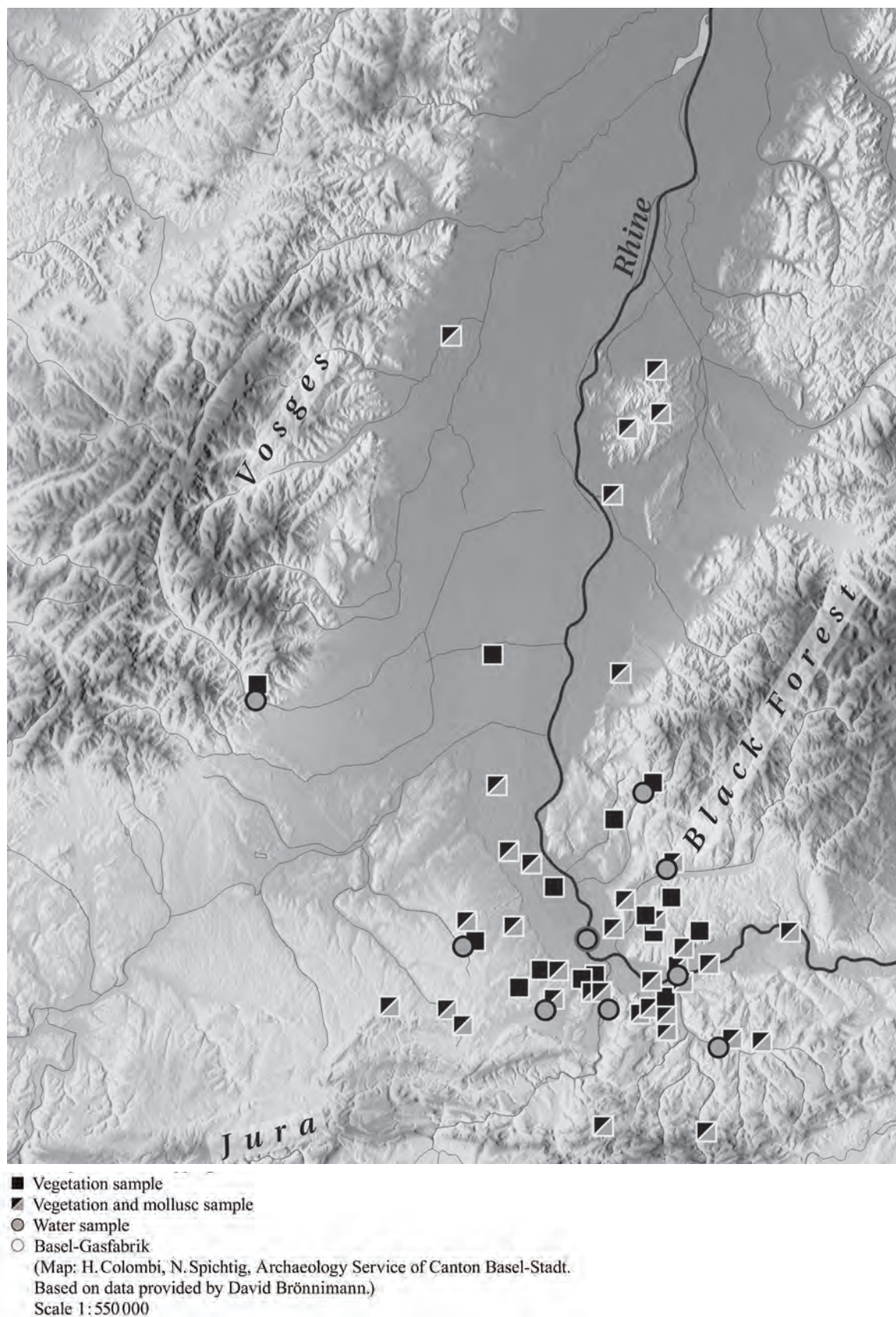


Fig. 16.3: Sampling locations of water, vegetation and molluscs for strontium and oxygen isotope baseline mapping

water from flowing watercourses are being examined from some 50 locations on the vast geological units between the northern edge of the Swiss Jura region, the southern Upper Rhine Rift and the Kaiserstuhl range, as well as the peripheral areas of the Black Forest and the Vosges (Fig. 16.3). Preliminary results indicate differences in the isotope ratios between the plants and the water depending on the locations and surrounding landscape. These may serve as a basis upon which to reconstruct the potential farmland and areas used for animal husbandry in the surroundings of the settlement at Basel-Gasfabrik on one hand and the identification of foreign individuals in the associated cemeteries on the other.

The results available thus far have identified a number of individuals whose strontium isotope ratios differ from the typical local values. These persons may have come from the Black Forest region, from the Vosges, or from other areas with geologically old rock formations in the subsoil. The majority of the inhabitants, however, appear to have been from the locality. Once the on-going research has been completed and additional oxygen isotope analyses have been carried out, we may be able to find possible links with other settlements or perhaps confirm the links already known. The isotope ratios of the domestic animals are more variable compared to those of humans and point to an economic network around the central place at Basel-Gasfabrik (Fig. 16.2, 115) involving the neighbouring settlements and farmsteads, which supplied the central place. Once the analyses have been completed, it will be one of the main tasks to assess the local, regional and supra-regional relationships comprehensively and in an integrative manner.

Supra-regional contacts

With the exception of the amphorae, Italic or Gallic imports have been found in small numbers only in the central places and in some of the medium centres. The imports generally increased from phase Lt D1 to Lt D2. Amphorae were quite frequently found; in phase Lt D1 they were almost exclusively limited to the central places, while from phase Lt D2 onwards they also appeared in the medium centres and even in some of the farmsteads.

The imports from the East were all graphite-tempered vessels. These were mainly found in the central places, with a decline from phase Lt D1 to Lt D2. The concentration in Zarten-Rotacker (Wagner 2001: 6) is probably explained by the fact that a transport route from the East via the Black Forest came to an end there.

Settlement dynamics

Land use was never static during the Late La Tène period,

but constantly changed and evolved. We would like to add a brief analysis of this dynamic. The three categories of settlement and the sites that could not be assigned to a particular category were mapped separately, based on their dating to the phases Lt D1 or Lt D2.

Thirty-two confirmed and possible settlements have been dated to the phase Lt D1 (Fig. 16.4), including six central places, three medium centres and nine farmsteads. The remaining 14 settlements could not be categorised and must include a number of farmsteads, since these appear to be underrepresented overall. The number of medium centres may also be too low. The five central places on what is today German soil stand out. Such a concentration may have different reasons, and the dating of the settlements is not sufficiently differentiated (Lt D1, Lt D2) to allow us to recognise a potential chronological sequence among the central places. The finds recovered from the individual sites do, however, point to a differentiation within phase Lt D1. A plausible scenario is that the settlement landscape emerging on the map was the result of a development which might even have begun as early as the Middle La Tène period and led via several steps within phase Lt D1 to the pattern displayed on the map (Fig. 16.4).

Moreover, we may assume that the central place category, as outlined above, can be divided into several subcategories. It turns out that the southern Upper Rhine region was a systematically structured landscape which was intended to guarantee the use and protection of the transport routes, the land itself and the natural resources for its population. The 'division of tasks' among the central places also suggests that they did not exist in isolation but were part of a network. The contacts reflected by the coins would indicate that Basel-Gasfabrik (Fig. 16.4, 115) was the highest-ranking central place where the dependencies converged.

The landscape appears to have been somewhat less densely populated during the phase Lt D2 than it had been previously. Twenty-seven settlements were dated to this phase, comprising three central places, six medium centres and seven farmsteads, while 11 sites were not assigned to any of the categories. We may assume that here, too, the farmsteads were underrepresented. The decrease in settlements can be explained mainly by the decline in the number of central places, which had halved.

The number of settlements added during the phase Lt D2 and the number of sites that continued to exist since Lt D1 were more or less balanced. Although there was a clear continuity between the phases Lt D1 and Lt D2, there were also differences. The central places Basel-Münsterhügel (Fig. 16.5, 123), Breisach-Münsterberg (Fig. 16.5, 42) and Sasbach-Limberg (Fig. 16.5, 18) were located on the river Rhine, enclosed by water and in some cases additionally fortified. By Lt D2, a protected location had become one of the main criteria for choosing a particular site. The network of several central places with different functions and

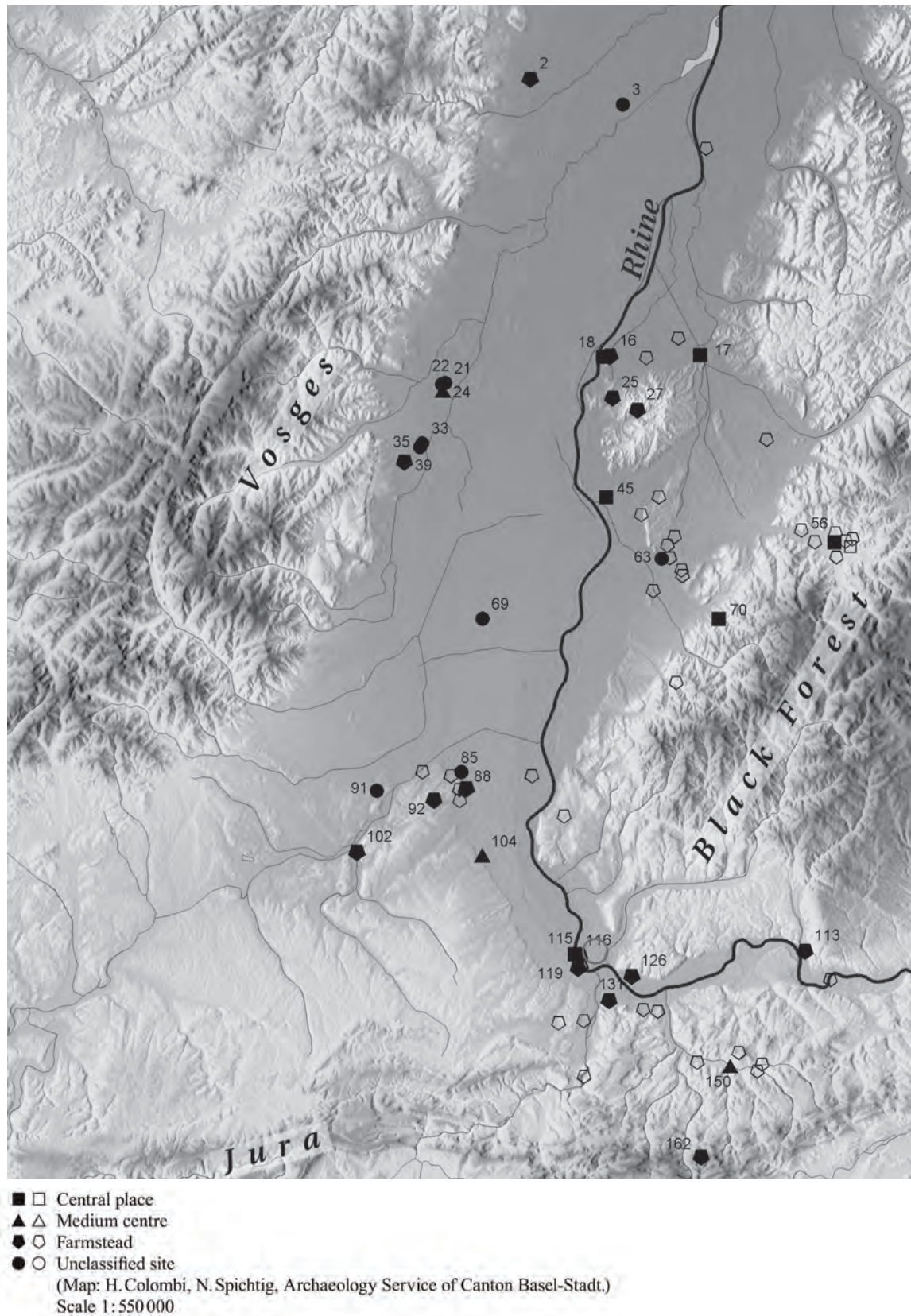


Fig. 16.4: The southern Upper Rhine region in the phase Lt D1. Filled symbols: settlements dating from phases Lt D1 or Lt D1/D2. Open symbols: settlements of unspecified Lt D age

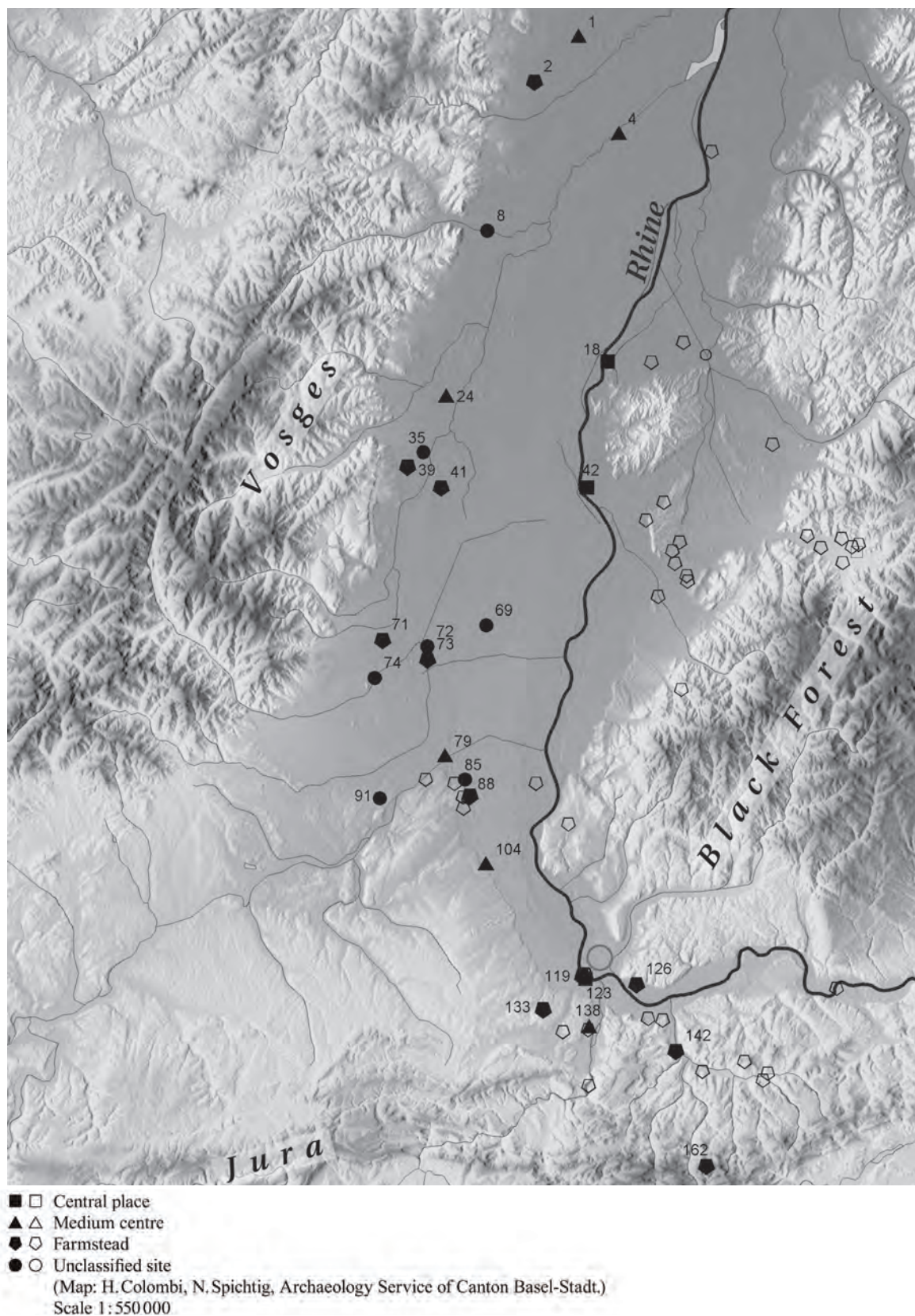


Fig. 16.5: The southern Upper Rhine region in the phase Lt D2. Filled symbols: settlements dating from phases Lt D2 or Lt D1/D2. Open symbols: settlements of unspecified Lt D age

locations that once existed now seemed to have collapsed. This was undoubtedly a radical change in the structure of the settlement landscape.

The functions of the central places were now concentrated in a small number of protected locations. It is also worth noting that the region with the silver deposits now contained no large settlements and the number of sites had generally decreased on the right bank of the River Rhine. After all, as many as four central places had disappeared there. On the left bank of the Rhine, on the other hand, the number of settlements appears to have increased.

The significant changes in the settlement landscape and the protective functions and fortified appearances of the central places suggest that events with far-reaching and long-term consequences were behind this change. It is difficult to imagine that these changes would have taken place without some kind of outside influence.

Note

- 1 English translation: Sandy Hämmerle.

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Caesar's Conquest of Gaul – A Factor of Crisis or Consolidation? The Otzenhausen Oppidum and its Environment

Sabine Hornung

The oppidum 'Hunnenring' near Otzenhausen, best known for its monumental fortifications preserved to a height of 10 m, has long been considered a symbol of Late La Tène processes of centralisation and urbanisation. Since 2006 a landscape-archaeological research project at Mainz University has been focussing on the oppidum itself and its environs, leading not only to a detailed reconstruction of settlement development, but also to the discovery of a late-republican Roman military camp nearby. Embedded in a supra-regional analysis of settlement patterns and economic change, these discoveries provide the basis for a better understanding of Caesar's campaigns in Gaul, particularly in the Treveran territory, and their impact on Late La Tène society.

Introduction

From an archaeological point of view it has long been difficult to grasp the impact of historical events like the Roman conquest of Gaul on Late La Tène society. Only against the backdrop of intensive research on the development of individual sites can supra-regional studies enable a more precise understanding of the mechanisms behind significant changes in settlement patterns and economic structures frequently encountered during the 1st century BC. In particular the development of the *oppida* seems to reflect these fundamental changes which are not yet fully understood. This is partly due to the fact that archaeological investigations usually concentrate on single sites, whereas the attempt to contextualise findings is often hampered by financial or methodological difficulties.

Since 2006 landscape-archaeological research in the environs of the *oppidum* 'Hunnenring' near Otzenhausen (Saarland) has focussed on a more detailed micro-regional analysis, investigating possible relations between different sites, and thus allowing not only a synthetical view but also further historical interpretations, particularly with regards to Caesar's conquest of Gaul. Evidence mainly comes from three different sites: the *oppidum* itself, a neighbouring

Roman sanctuary and *vicus*, as well as a late-republican military camp in the immediate vicinity (Fig. 17.1).

The *oppidum* 'Hunnenring'

LiDAR-scanning first revealed the potential complexity in the development of the *oppidum* 'Hunnenring', located on the Dollberg, a hilltop in the Hunsrück. Several structures, including an annexe, a shallow ditch and bank on the north-eastern slope of the Dollberg, and another filled-in ditch crossing the interior of the *oppidum* indicated various phases of fortification, suggesting a degree of chronological depth (Fig. 17.2). As a result five campaigns of excavations were conceived, aiming at dating the 'Hunnenring's' fortifications, determining the modes of construction, and gaining insights into settlement structures as well as the functional development of the *oppidum*.

The ditch and bank visible on the north-eastern slope of the Dollberg proved to be part of an Early La Tène fortification 10 ha in size built during the first half of the 4th century BC (Hornung & Braun 2010). However, there seem to be hardly any traces of settlement activity dating to the period, although the 'Hunnenring' has long been

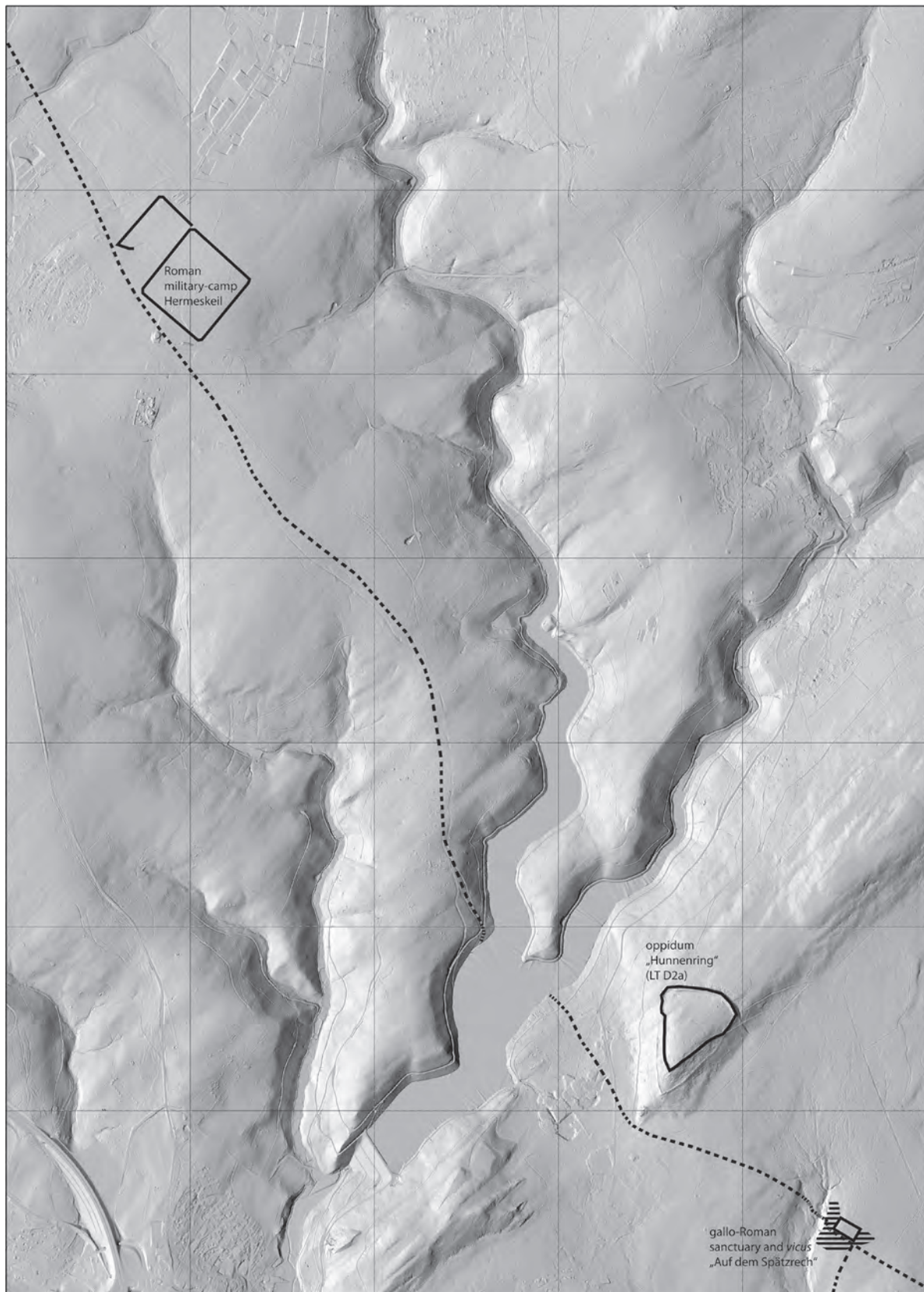


Fig. 17.1: Map of the archaeological sites mentioned in the text and the reconstructed course of the Iron Age road (S. Hornung; LiDAR-Scan: LVerGeo Rheinland-Palatinate)



Fig. 17.2: Development of the Oppidum 'Hunnenring'. White: course of the fortifications; black: area with traces of settlement activity (S. Hornung; Lidar-Scan: LKVK Saarland)

considered a potential contender for a *Fürstensitz* site, primarily because of the Schwarzenbach princely tombs located in its immediate vicinity. According to the sparse archaeological evidence, the fortification might rather have functioned as political centre, sanctuary or refuge. Even the protection of people or possible storage facilities need to be taken into account, especially since there is evidence pointing towards a change of climate early in LT B (Maise 1998). Although it is not yet possible to understand just how the Early La Tène hillfort functioned as a central place, the foundation of the Late La Tène *oppidum* ‘Hunnenring’ still seems to be a mark of continuity, probably due to the prominent topographically advantageous position of the Dollberg, although there are hardly any finds indicating that the site was frequented in LT C as well.

In LT D1b, sometime between 120 and 100 BC, the building of a rampart enclosing the hilltop on the Dollberg indicates a new cycle of social consolidation in the region, although finds of pottery from the layers underneath the fortifications indicate small-scale occupation of the site even before the construction of the walls. The latter comprised the so-called annexe, where a double-faced wall of the Ehrang type (6 m wide) was built into the slope of the hill on four shallow terraces. The more vulnerable northern side of the *oppidum* was protected by an additional ditch, 6–7 m wide and about 2.5 m deep, which had to be filled in when the fortifications were rebuilt in the same style and shifted slightly towards the north, maybe even as early as 100 BC (Hornung 2014). There are indications that on this occasion not only the northern wall of phase 1, which now crossed the interior of the phase 2/3-*oppidum*, was demolished, but that the process might also have involved a partial dismantling of the annexe. It is not yet possible to determine the reasons for this change of plan, but with the course of the walls now following the contours of the upper Dollberg plateau and encircling a more even terrain, a marked increase in settlement activity can be observed. Whereas in phase 1 of the *oppidum* only a limited number of buildings covered an area of not even 3 ha, the settlement seems to have been extended to 9–10 ha in phase 2/3. Parallel to this obvious increase in population during the first half of the 1st century BC, a more complex function of the ‘Hunnenring’ is to be expected as well. The fortifications seem to have been rebuilt a third time, probably between 80–60 BC according to a fibula of the late Nauheim type deposited in the foundations of the wall. The latter was then furnished with an interior ramp in order to stabilise the construction in the steep terrain (Hornung & Rieth 2010). By then at the latest a massive fortification of the Fécamp type, following the course of the Early La Tène rampart partly hidden in its core, was built to secure access from the adjacent mountain ridge to the north.

During the first half of the 1st century BC the ‘Hunnenring’ seems to have functioned as a centre of trade on a local or regional scale. This is indicated not only by traces of crafts

within the *oppidum* such as forging (Kronz *et al.* 2010), there is also evidence for specialised production from its environs, for example the production of querns in the quarries of Oberlöstern (Lkr. Merzig-Wadern) only 8 km from the ‘Hunnenring’ (Kronz & Hornung 2010). Food supplies, particularly grain, were at least partly imported from regions more suited to agriculture, as indicated by specific weeds discovered together with the charred remains of grain in some find complexes inside the *oppidum* (Wiethold 2010: 366). In contrast, the surrounding mountainous region itself was rather better suited to cattle breeding. Apart from this evidence, imported amphorae of the Dressel 1A and 1B as well as the Lamboglia 2 type illustrate the ‘Hunnenring’s’ position within supra-regional trade networks. There are indications that the *oppidum* also functioned as a religious and political centre in LT D. During recent excavations several ritual depositions (e.g. a gold ring, a bronze wheel model) were unearthed in the immediate vicinity of a small Roman temple (2nd/3rd century AD) in the centre of the settlement, thus indicating the existence of a sanctuary in LT D (Fritsch 2010: 44). It seems hardly coincidental that the same area had marked the core of activity ever since the foundation of the *oppidum*.

From a chronological point of view, the youngest phase of settlement activity can be connected with finds of pottery dating to LT D2a, whereas there are no indications of any further occupation in LT D2b. The coin series from the *oppidum* points in the same direction. Treveran potins (Scheers 199–201) and an eye-stater (Scheers 30/V) seem to be the youngest emissions discovered in settlement context (Fritsch 2010: 48–49; Wiegert 2002: 181–183). It is therefore quite likely that the *oppidum* was abandoned sometime around the middle of the 1st century BC. As yet there are no traces of destruction, but indications that another site nearby inherited some of the ‘Hunnenring’s’ central functions.

The Roman temple complex *Auf dem Spätzrech* near Schwarzenbach (Gem. Nonnweiler, Lkr. St. Wendel)

Only 1.3 km from the Dollberg, at the foot of the mountain ridge, lies another archaeological site closely connected to the *oppidum* itself – the gallo-Roman temple complex *Auf dem Spätzrech* near Schwarzenbach, excavated in 1984/85 by the Saarland antiquities department (Fig. 17.3). A stone-built temple of 22.8 × 21 m dedicated to *Mars Cnabetius* seems to have been preceded by a wooden structure dating back to the middle or second half of the 1st century AD, but ritual activity probably goes back even further. A large number of pottery finds dating to LT D2a/b indicates that the site was frequented from the middle of the 1st century BC onwards. This is further supported by a coin series starting with Treveran quinarii Scheers 54 and 55 – emissions from

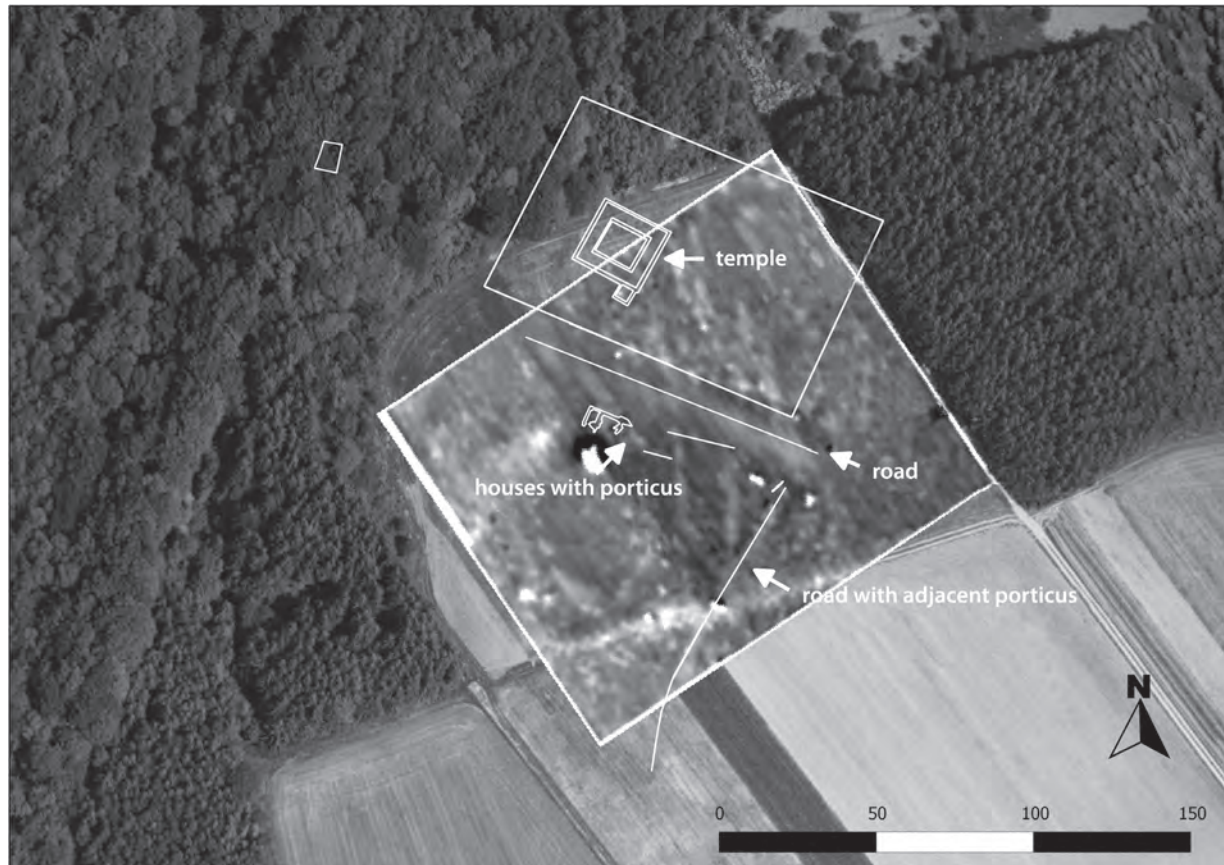


Fig. 17.3: The Roman sanctuary Auf dem Spätzrech near Schwarzenbach, Gem. Nonnweiler, Lkr. St. Wendel, and its adjacent vicus with archaeologically documented features (after Hornung *et al.* 2012)

LT D1b and LT D2a respectively (Burger 2012: 227–228). Although neither the nature of this early activity on the site of the later temple, nor its precise date can be determined, a chronological correlation with the abandonment of the ‘Hunnenring’ is still quite significant. Since pottery in LT D2b tradition amounts to almost 50% of all finds (Burger 2010: 44), it seems likely that there must have been large scale activity in the second half of the 1st century BC – even though La Tène style pottery and coins often appear in later contexts, the latter particularly in sanctuaries.

Recent prospections and excavations have revealed traces of a Roman *vicus* surrounding the sanctuary and covering an area of about 8 ha (Fig. 17.4). Due to massive erosion, even the foundations of the buildings are badly preserved and it is hardly possible to determine any structural details of the settlement. A row of houses with adjacent *porticus* seems to run parallel to the southern wall of the temple complex, lining a Roman road crossing the settlement from east to west and leading towards the road to Trier, which itself passes along the foot of the ‘Hunnenring’ (see Fig. 17.1). Another row of buildings faces a second road entering the *vicus* from a southerly direction. Isolated finds

from the first half of the 1st century AD possibly indicate that settlement activity may have started as early as the Augustan or Tiberian period, but so far not even any of the post-built structures, which clearly belong to an early phase of the *vicus*, can be dated as early (Hornung *et al.* 2012).

At any rate, it seems clear that even though the temple complex itself assumed some of the neighbouring *oppidum*’s former central functions, the development of a settlement in its vicinity has to be considered a secondary process. This leaves the question as to what happened to the ‘Hunnenring’s’ inhabitants after its abandonment and of possible reasons behind this development. From a chronological point of view some connection with the Roman conquest of Gaul has long been suspected, but until recently there was no archaeological evidence to support this theory.

A late-republican military camp at Hermeskeil (Lkr. Trier-Saarburg)

To the east of the modern town of Hermeskeil, in heavily wooded terrain, an earthen bank preserved to a height of up



Fig. 17.4: Distribution of tegulae and imbrices indicating size and structure of the vicus (after Hornung et al. 2012)

to 1 m and still over 400 m long on its southeastern side, has been regarded as a potential contender for a Roman military site ever since the 19th century. Even though its rounded eastern corner clearly pointed in this direction, not even small-scale sections on the southeastern ditch and bank directed by Hans Nortmann (Rheinisches Landesmuseum Trier) and Thomas Fritsch (Terrex gGmbH) in 2005 and 2007 (Fritsch 2011) produced any finds indicating the function and precise dating of the earthworks (see Hornung 2012a for a more detailed overview of the history of research). Only in 2010, on the basis of systematic fieldwalking directed by the author, was a widespread distribution of sherds of imported republican amphorae recorded, indicating an early date and thus necessitating further investigation. On the basis of geophysical prospections, an overview of size, shape and structure of the site located only 5 km north-west of the 'Hunnenring' and in direct view of the *oppidum* was possible for the first time. It has since delivered abundant proof of the presence of Roman troops (Fig. 17.5).

The fortifications

The slightly trapezoidal earthwork is characterised by rounded corners and covers an area of 18.2 ha. Its defences consist of a V-shaped ditch (at least 2.5 m wide and 1.65 m deep) and an adjacent bank which was probably stabilised by curves on its outer face. An internal structure resembling the outer ditch became visible during geophysical survey. It partitions off one third of the camp and during excavation proved to be a further, badly preserved ditch and bank system, although the very shallow profile of this inner ditch indicates a different function to the outer defences. Parallels from other Roman military camps seem to indicate the stationing of auxiliary troops (probably cavalry) in the smaller northern section of the camp, where they were separated from the legions (Hornung 2012a: 206–214). No traces of buildings were observed in several trenches in the camp's interior, and even recent geophysical surveys with higher resolution have produced no clear indications of the existence of more permanent wooden structures.

To the northwest the main camp was extended by an annexe covering an area of at least 7.6 ha. Its defences

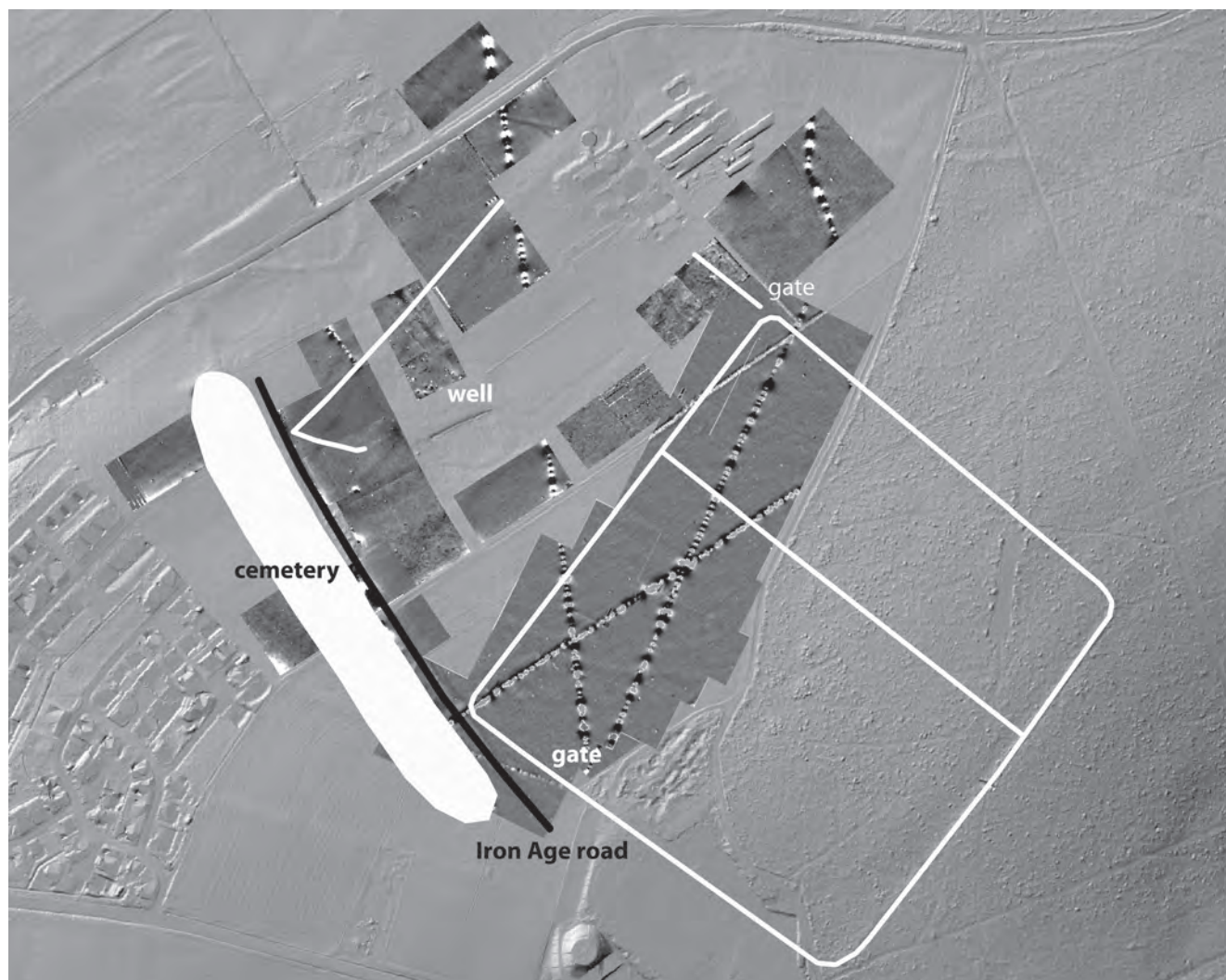


Fig. 17.5: The late-republican military camp at Hermeskeil, Lkr. Trier-Saarburg (after Hornung 2012a)

consisting of a ditch and bank enclosed a well, thus securing water supplies for the troops. In the passage between the northern corner of the camp and the annexe traces of a wooden construction – possibly belonging to a gate – were unearthed in 2012 (Hornung 2012c). On the other hand, no post-holes were visible at the southwestern entrance to the camp excavated in 2011, where the passage itself produced regularly set stone paving. The inner front of the bank seems to have been reinforced by a wooden mat construction, and a similar one can be assumed to have acted as a parapet. All wooden features were heavily burnt and indicate that the camp must have been destroyed or rather demolished when it was abandoned. Remarkably, the V-shaped southwestern ditch of the camp was up to 3.5 m wide and 2.2 m deep. This reinforcement of the defences to the southwest might be due to the fact that an ancient road passes along that side, the use of which since the Iron Age is documented by a La

Tène and Roman cemetery following its course for several hundred metres (Fritsch 2010: 64–67; Hornung 2012a: 208). The same road marks the most direct connection towards the *oppidum* ‘Hunnenring’, about 5 km southeast of Hermeskeil (see Fig. 17.1), suggesting a possible relationship between the two sites.

Archaeological findings and dating

This connection is further supported by the date of all the archaeological finds discovered during excavations and fieldwalking (see Hornung 2012a: 214–218 for a more detailed discussion of the finds). The pottery from the camp is dominated by Late La Tène wares dating to LT D2, whereas only two sherds of imitations of Campana were discovered so far. Remarkably, the spectrum of finds from various sections of the camp shows significant differences.

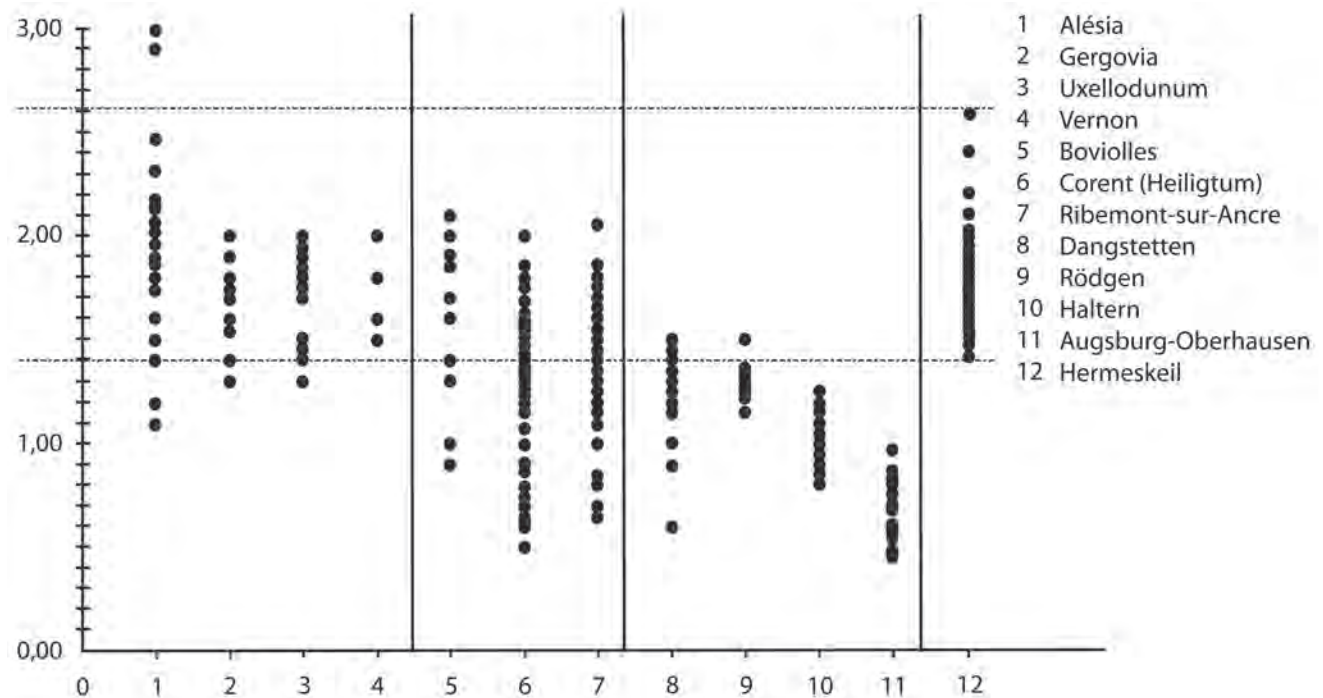


Fig. 17.6: Comparison of the size of caligae hobnails from different sites dating to the Caesarian and Augustan periods (after Hornung 2012a)

Whereas the material originating from excavations in the main camp consists to a large degree of fine wheel-thrown pottery, coarse ware and storage vessels are distributed mainly in the area of the annexe and may point towards a functional distinction between these two areas. Republican amphorae are quite well represented all across the site, and the type Dressel 1 is clearly predominant. Furthermore, some specimens of Dressel 1A as well as Dressel 2–4 potentially indicate a pre-Augustan date for the camp.

A study of the almost 80 *caligae* hobnails discovered during excavations allows for even more precise chronological fixing. The late-republican type D with cross and four studs amounts to almost 75% of all finds, which so far is the case only in camp B from Alesia (Brouquier-Reddé & Deyber 2001: 303–304; Hornung 2014). A comparison with the finds from the Petrisberg near Trier, a camp built during the revolt of the Treveri in 30/29 BC, shows that already in the Gallo-Roman horizon (GR 1), type C with a circle of studs is largely predominant. The diameter of the hobnails from Hermeskeil varies between 1.6 cm and 2.6 cm, which again compares well with other sites from the time of Caesar's Gallic Wars, and particularly Alesia (Fig. 17.6). Again, the diameter of the as yet unpublished hobnails from the Petrisberg is significantly smaller, with an estimated average of 1.5 cm or less.

Two radiocarbon dates of charred twigs originating from the mat construction mentioned above further support an

early dating of the camp. Radiocarbon ages of 2078 ± 30 and 2107 ± 30 BP seem to point towards a connection with the Roman conquest of Gaul, although a date in the 40s BC cannot be excluded. The rather limited coin series from the camp comprises Late La Tène as well as republican emissions, for example an as from the 2nd century BC. Several fragments of querns allow us to distinguish a Late La Tène type of quern manufactured in the quarries of Mayen, and a smaller and lighter type frequently found in Roman army contexts which was produced in Central France. Therefore it seems likely that the Hermeskeil troops were stationed in Gaul earlier and eventually had spent some time in *Gallia Belgica*, where they gradually replaced broken querns with local products.

Historical background

The amount of archaeological finds from the military camp seems to indicate a relatively lengthy period of occupation which probably covered several weeks or even months. This is further supported by the size and structure of the defences, as well as obvious repairs to the stone paving of the south-western gate. On the other hand, the protection of water-supplies could indicate that the Roman army was moving in enemy territory. Furthermore, the very restricted economic potential of the Hermeskeil region, as well as its infrastructure, make it rather unlikely that the site was chosen for the building of a regular garrison, for example as winter-

quarters, which were usually located next to major waterways in order to secure supplies. All these considerations need to be taken into account when reflecting on possible historical dimensions. A connection with Caesar's Gallic Wars so far seems the most likely scenario to explain the presence of the Roman army in the direct vicinity of an *oppidum* potentially abandoned around the same time.

Following political division among the Treveri and increasing resistance to Rome, the legate Titus Labienus campaigned in their territory in the summer of 53 BC. Even though his three legions were probably not up to their standard number of soldiers after several years of war, the interior of the Hermeskeil camp, with possibly only 12 ha reserved for Italic troops, seems somewhat too small to make a convincing contender for this particular campaign. Labienus revisited Treveran territory in 51 BC, this time leading only two legions that had spent several years in the *Gallia Belgica* by then – which seems a more likely connection with Hermeskeil, although there is no definite proof (see Hornung 2014 for a more detailed discussion). On the other hand the *lustratio* in 50 BC as a display of Roman power would hardly have been held in a remote place like the Hunsrück Mountains. For the following two decades historical sources indicate further upheavals in Gaul in 46/44 BC and 39–37 BC, but the involvement of the Treveri remains hypothetical and has been inferred mainly from their prominent political position within Gaul (Fichtl 1998). Therefore from an archaeological as well as historical point of view a connection of the Roman military camp at Hermeskeil with Caesar's conquest of Gaul seems the most likely scenario. Nevertheless, the question as to the extent to which the abandonment of the 'Hunnenring' could be linked to these military actions can only be answered by looking at the development of other Treveran *oppida*.

Caesar's conquest of Gaul – a factor of crisis or consolidation in the territory of the Treveri?

The first half of the 1st century BC seems to mark a phase of general consolidation in the mountainous regions west of the Rhine. Not only the 'Hunnenring' sees an increase in population and economic wealth, the same tendency can be observed for other Treveran *oppida* as well, with the centres in the northern and western parts of the tribe's territory (Martberg, Wallendorf and Titelberg) flourishing slightly later than the Donnersberg, Otzenhausen and Kastel-Staadt. Remarkably the fate of the Donnersberg (Gem. Dannenfels, Donnersbergkr.) seems to be sealed as early as 80/70 BC (Hornung 2014). Here a coin series lacking Treveran potins and younger quinarii (Scheers 55) could indicate an economic decline at about the same time as the *oppida* in southern Germany and on the right bank of the Rhine show a similar development (Wigg-Wolf 2009). What is

more, the Donnersberg is the only Treveran centre of which former political and religious functions did not survive to see the emergence of a Roman sanctuary continuing a well established role in local settlement hierarchies. This again seems to point towards a more gradual decline of the *oppidum*, where a significant number of pottery finds dating to LT D2a do indeed illustrate some settlement activity until maybe even the middle of the 1st century BC (Fig. 17.7).

In LT D2b a significant economic shift towards the west can be noted with the Titelberg (Luxembourg) now growing to become the main *oppidum* of the Treveri (Hornung 2012b; Metzler 1995). Its key role as a centre of trade is illustrated by a marked concentration of imported goods from the Mediterranean, and in particular amphorae in the *oppidum*'s immediate vicinity (Gleser 2005), whereas the areas further to the east are almost completely lacking in contemporary finds (Fig. 17.8). This development seems to be at least partly linked to the presence of Roman troops and tradesmen in the military camp on the Titelberg, which can be traced back to the middle of the 1st century BC and seems to have lasted for several decades (Metzler & Gaeng 2009: 519–528).

The Martberg near Pommern (Lkr. Cochem-Zell) is another contender for the stationing of Roman soldiers. The construction here of a rectangular enclosure with a V-shaped ditch and rounded corners 1 ha in size marks an obvious break in the otherwise continuous development of the sanctuary in the centre of the *oppidum*. Although the entrance to this enclosure seems unusually wide for military use, there is still a distinct possibility that Roman troops stayed there to control the *oppidum*. According to the finds from the filling of the ditch this episode should have taken place during the 50s or 40s BC (Nickel *et al.* 2008). Unfortunately the Martberg has delivered only few finds of military character, mainly smaller *caligae* hobnails of type C, which suggest the presence of Roman soldiers, maybe even Treveran auxiliaries, in early or middle Augustan times, and it is not yet possible to resolve this contradiction with the dating of the ditch itself. Furthermore, the Martberg's development is markedly different from that of the Titelberg. Although there can be no doubt about settlement continuities in the second half of the 1st century BC, the distribution of coins is then limited to the area of the sanctuary – possibly the sign of economic decline after the Gallic Wars, which would also explain a sudden predominance of local handmade pottery in LT D2b.

A similar scenario has to be considered for Wallendorf (Eifelkr. Bitburg-Prüm, see Krausse 2006). Again the partial abandonment of the *oppidum* in LT D2 is suggested primarily by the distribution of coins. Even Treveran potins, minted in LT D2a, as well as ARDA and HIRTIVS bronzes are found mainly in the vicinity of an open space where two sanctuaries developed in Roman times. On the other hand, reduced settlement activity throughout the second half of the 1st century BC is indicated by a number of archaeological

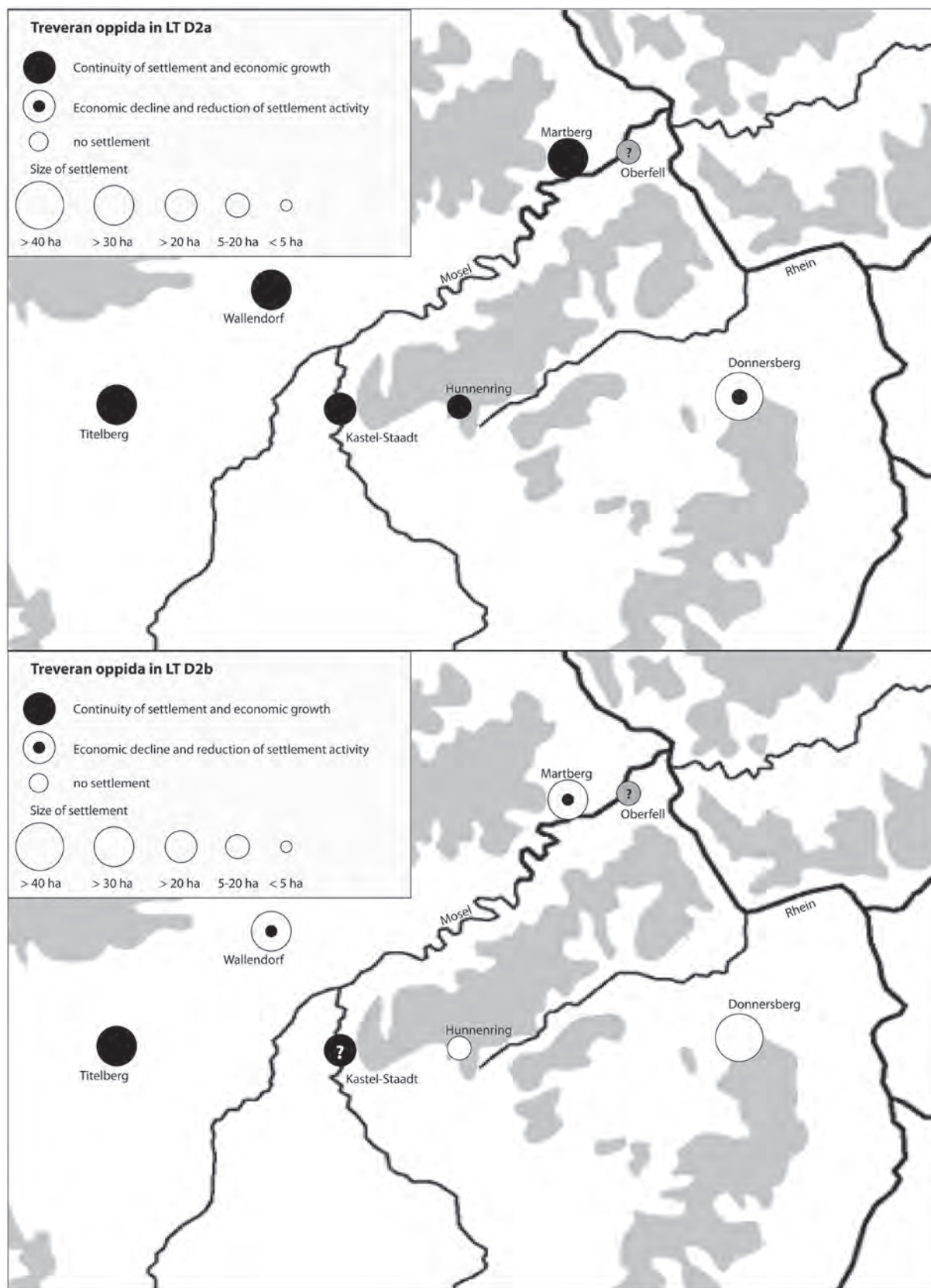


Fig. 17.7: Development of the Treveran Oppida (after Hornung 2014)

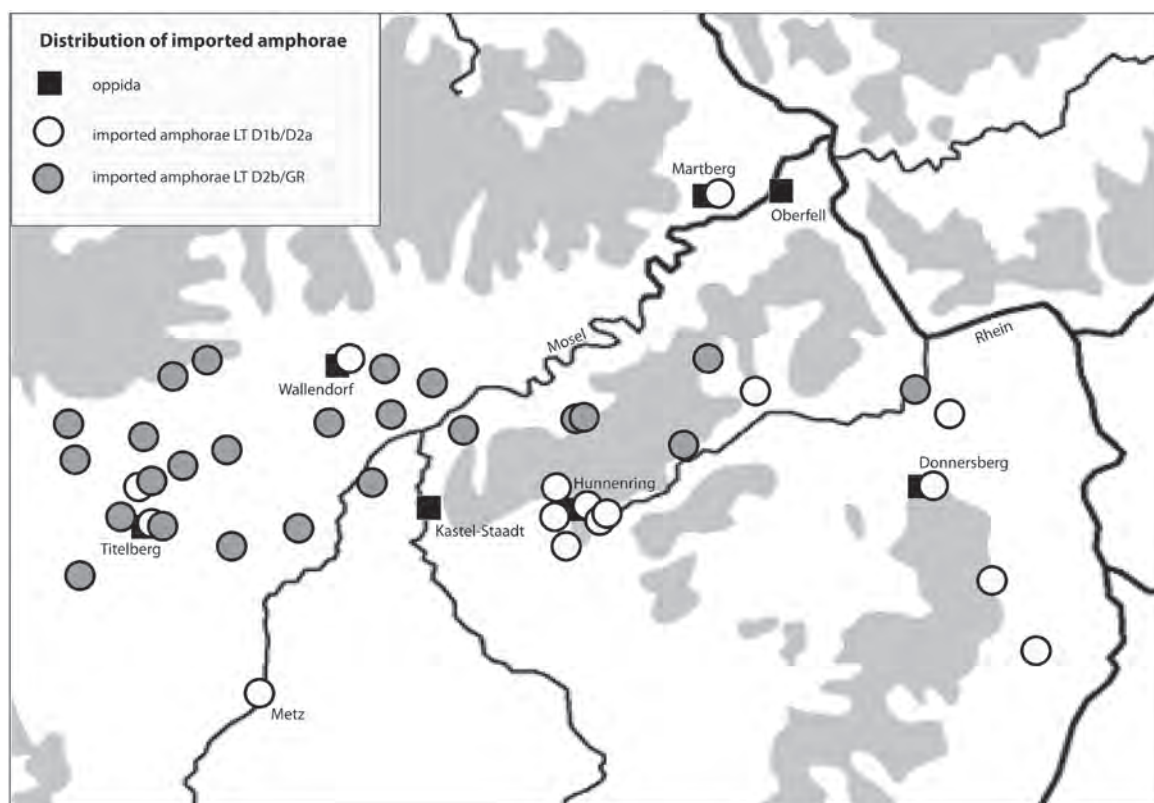


Fig. 17.8: Distribution of imported amphorae in the territory of the Treveri (after Gleser 2005, with additions)

finds, which again seems to support the picture of an economic decline of the *oppidum* rather than discontinuities.

Conclusion

Settlement archaeological evidence from the *oppida* of the Treveri points towards an economic polarisation within the tribe's territory in LT D2 – a process that seems to start well before the Roman conquest of Gaul, and therefore cannot be seen as a direct result of war. Since the development of the individual *oppida* is undoubtedly dependant on their position within supra-regional trade-networks, this shift to the west should reflect infrastructural change as a reaction to the emergence of new centres. Indeed the Rhine seems to lose its function as a major axis of trade around 80/70 BC, potentially a consequence of the decline of the *oppida* in southern Germany and on the right bank of the river, or a result of the formation of a new economic zone in Gaul. Here the rise of Late La Tène *oppida* and an intensification of trade relations with the Mediterranean are linked directly to economic consolidation following the foundation of *Gallia Transalpina*. Consequently, the Rhône-Saône-Mosel passage becomes the main axis of trade for Treveran territory in LT D2. At the same time the increasing number of *oppida* in Gaul reflects a process of consolidation, thus explaining

not only the Titelberg's growing importance in LT D2, but also the decline of the eastern part of Treveran territory.

The 'Hunnenring' is potentially the only *oppidum* of the Treveri affected directly by the Roman conquest of Gaul. The fact that it was abandoned in what seems rather a short time, and that religious activity probably shifted to a place nearby without there being any indications for the genesis of a new central settlement until at least half a century later, supports the thesis of a more acute crisis here. Nevertheless, on a supra-regional scale Caesar's conquest of Gaul, which led to trade-relations with the Mediterranean being secured and intensified, can be regarded as a factor of consolidation rather than crisis, as illustrated by the Titelberg. Only the tribes and subtribes immediately west of the Rhine suffered a loss of economic potential due to their now peripheral position within Gaul's infrastructural network. Even though this development is hardly surprising considering Roman presence in the *Gallia Transalpina* and growing efforts to exploit its immediate hinterland, the political consequences of this process should not be underestimated.

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AT THE EDGE OF THE WORLD?
IBERIA AND BRITAIN

The Emergence of Urbanism in Early Iron Age Central Iberia

Jesús R. Álvarez-Sanchís and Gonzalo Ruiz-Zapatero

In the 1st millennium BC two processes developed in ‘Celtic’ Iberia: a process of growing demography and a trend towards nucleated settlement. Both processes ended in the appearance of large fortified settlements, well known through archaeology and, at least some of them, by written sources. We know when some small settlements were founded, but the evolution of these communities into others somewhat larger and more complex is not clear. The process was not lineal and homogeneous, but rather more likely in mosaic with rhythms and settlement manners differing in each region of the Meseta. In the end, the insight offered by the process leading to the first urbanisation at the end of Iron Age is presented as a changing and multiple entity in space and time, with similarities and their own characteristics. The exploration of the relationships between settlement, demography, centralisation and urbanisation is considered in this paper.

During the Early Iron Age (800–400 BC) for first time in the central region of Iberia, some communities grew at a fast rate and were very active in the economic sphere. In previous periods, Bronze Age communities were small, living in hamlets or very small villages with fewer than one hundred people. Even throughout the Iron Age until the Roman conquest most people lived in tiny settlements and their economy reflected a dispersed settlement pattern (Almagro-Gorbea 1995).

Recently we have discovered that in Central Europe there were Early Iron Age settlements with perhaps slightly more than 1000 people (Guichard *et al.* 2000; Krausse 2010; Sievers & Schönfelder 2012) and even settlements covering areas over 100 ha, apparently similar to the Late Iron Age big *oppida* (Collis 1984; Fichtl 2012; Woolf 1993), as ambitious research projects have demonstrated at Heuneburg and Bourges (Krausse & Fernández-Götz 2012; Peyre & Buschsenchutz 2008). In this sense the first urban settlements in West and Central Europe began in the 6th century BC. In Central Spain recent research has found Late Bronze/Early Iron Age with long houses and a population estimated in the several hundreds, like Las Camas (Madrid) the best known site (Urbina *et al.* 2007;

Morín & Urbina 2012) which presents us with an unexpected type of settlement for the period just before the beginning of the Iron Age. But certainly all the above examples usually refer to just surface and/or population size and no additional elements that constitute the complex concept of ‘urban settlement’ (Attema 2004; Hansen 2000; Osborne & Cunliffe 2005; Smith M. L. 2003; Smith, M. E. 2010).

Landscape was probably an important factor. Nearly all the Meseta (Central Spanish Plateau), except the most hilly regions, can produce enough food and resources to maintain populations like those of the Iron Age communities. They were small communities with a basic diet based on cereals and dry fruits, milk and derivatives, hunting and some fish which was accessible and easy to get. In these rich landscapes, why did bigger more permanent communities with clear indicators of social hierarchy emerge? The reasons of the initial transformation are still unknown. Many scholars consider the Early Iron Age as the result of a continuous agriculture expansion, but the process details are poorly understood (Romero *et al.* 2008). One of the critical factors in the process of change was probably an increase in metal production and the number of elaborated objects (Ruiz Zapatero *et al.* 2012). Iron was widely available and

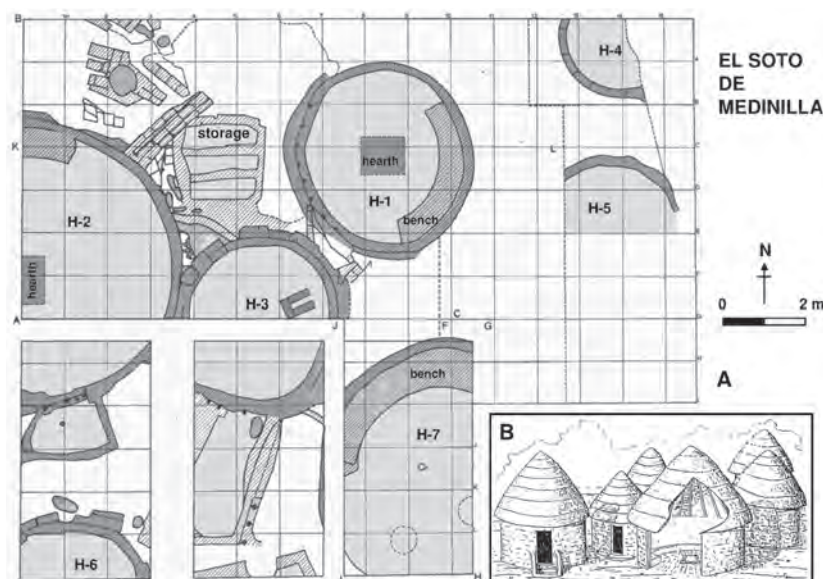


Fig. 18.1: El Soto de Medinilla (Valladolid): A) sector plan with seven round houses and rectangular storage structures and B) reconstruction attempt (after Delibes et al. 1995)

used for making new agricultural tools and related with other productive tasks.

At the beginning of the 1st millennium BC there was an important change in the natural environment, the climate became wet and rainy in the northern half of Iberia (López-Sáez & Blanco-González 2003; López-Sáez *et al.* 2009). The coincidence between this climate change and the emergence of agricultural villages along the fertile lowlands of rivers must be considered in more detail. Any landscape change, even those apparently insignificant, could have produced movements of supra-family groups through entire territories. It is possible that these unbalances could produce demographic crisis in the herding communities with traditionally imposed summer movements and an even greater impact on subsistence resources. What can be seen in the archaeological record is that a significant part of the traditional Bronze Age settlements – a few huts with wooden posts and vegetal roof – were definitely abandoned (Blanco-González 2010) and just a few sites continued to be occupied on permanent basis.

Cemeteries and habitation sites: a new model of settlement

A good number of settlements in the Duero Valley, of between 1 and 5 ha, systematically exploited the fertile lowlands (Delibes & Romero 2011). Several studies have demonstrated the existence of a forest landscape, but with clearance around settlement sites probably due to ploughing necessities for cereal agriculture specialised in wheat, barley and oat (Delibes *et al.* 1995; Romero *et al.* 2008). Charred

grains have been found on the floor of houses and inside large pottery containers, a new storage way different to the previous *silos* excavated in the soil. These groups are well known for their round sun-dried brick houses, plain pottery and Atlantic technology metallurgy, but the funerary rituals remain unknown. Nonetheless, their origin must be found in the local Bronze Age substratum (Fig. 18.1).

Around the 7th and 6th centuries BC permanent settlements appeared in the highlands of Soria and Guadalajara (Arenas 2011; 2012; Romero & Lorrio 2011) along with hilly areas of Ávila, Zamora, Salamanca and León (Esparza 2011). Most of them were defended with stone ramparts, although there are others without artificial defences but with a natural strategic position. In some areas, such as Molina de Aragón there was a significant concentration of settlements and the small Celtiberian settlements were positioned in those valleys controlling the gateways and the most fertile lands (Arenas 1999). This type of settlement endured for some time in the region developing over a long period and, in some cases, virtually until the arrival of Roman legions (Lorrio & Ruiz Zapatero 2007; Ruiz Zapatero & Lorrio 2005).

The lack of sites makes difficult to envisage the role of Bronze Age communities in the emergence of these first Iron Age settlements (Ruiz Zapatero 2007). Open lowland settlements organised with a few unstable huts, such as Fuente Estaca (Embid, Guadalajara) have led, through a detailed study of archaeological materials, to an interpretation of scattered people movements from the Ebro Valley (Northeast Spain) throughout the 8th century BC (Arenas 1999). In other sites, the type of pottery utensils found in areas such as Los Quintanares de Escobosa (Calatañazor, Soria) or Reillo (Cuenca) reflected in those

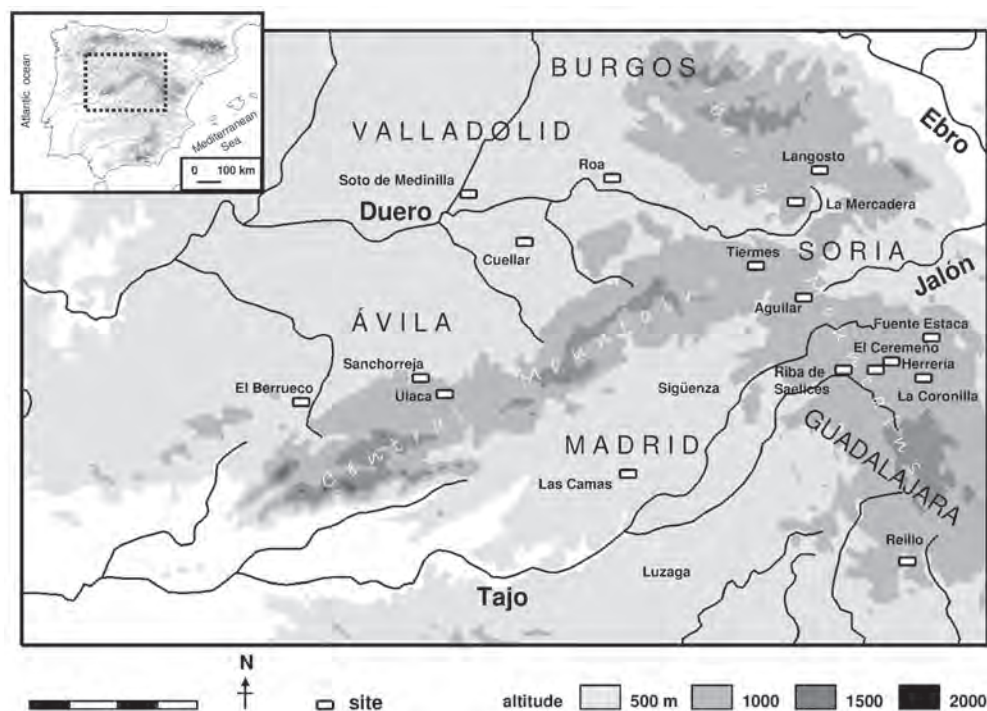


Fig. 18.2: Study area of Central Iberia and main sites mentioned in the text (authors)

discovered in Urnfields of Ebro Valley (Ruiz Zapatero 1995); however, designs and decorative techniques in the Meseta (Cogotas I culture) are clearly related with the dominating styles of the end of the Bronze Age.

Little is known of the internal structure for both kinds of sites of these settlements: residential sites and sites with a possible military or commercial function. Although sites with permanent round huts excavated into the rock have been documented (Romero & Misiego 1995), the traditional settlement constructed with rectangular houses (30–50 m² in surface) and shared walls closed to the exterior was the more typical Celtiberian pattern from the early stages (Arenas 2010). In this model of ‘closed settlement’ doors open up on a central street, revealing in this way a collective construction. This urbanism offers some characteristic features of the Urnfield Ebro Valley settlements which slowly permeated the interior territories until almost reaching the Atlantic shores. The model was consolidated quickly as is demonstrated by the houses of the ancient occupation in El Ceremeño (Guadalajara) (Cerdeño & Juez 2002). The visualisation of small groups moving along the right bank of Ebro River is consistent with the spread of the cremation funerary ritual (Ruiz Zapatero 2007: 44–46) as the older tombs in the Herreria cemetery prove (Cerdeño *et al.* 2002). Therefore, the best hypothesis is to visualise a certain cultural dualism, innovative groups moving along the main communication lines as opposed to other, more conservative, groups (Fig. 18.2).

During the 7th and 6th centuries BC a new and significant economic factor emerged in the lands of the Iberia interior: the demand of raw materials from the Mediterranean Phoenician and Greek colonies for getting supplies to a growing population and for industries in expansion. The objectives and chronology of the first colonial factories in the south (Andalucía) and Levant (Valencia) are more or less debated (Celestino *et al.* 2008; Delgado 2008), but the foundation of anchorages and ports in strategic points of access to the barbarous hinterland speaks clearly of the central roll of commerce. The import of manufactured products and luxury objects led to changes in production and social relations. The Mediterranean colonial agents imposed over indigenous elites the demand of significant products from both political and social viewpoints (bronze vessels and jars, jewellery, pottery and textiles) which created relationships based on dependence and the transformation of traditional social and economic structures.

With the intensification of these developments, the character of settlements began to change. Before 600 BC the landscape was spotted with small agricultural and herder communities quite similar in their economic activity. The development of trade and iron production facilitated the emergence of a few dominant centres (Ruiz Zapatero *et al.* 2012). The defensive aspect of some settlements can be best understood through the necessity of protecting the new richness which was generated and transported from one place to another. This influence on the landscape is

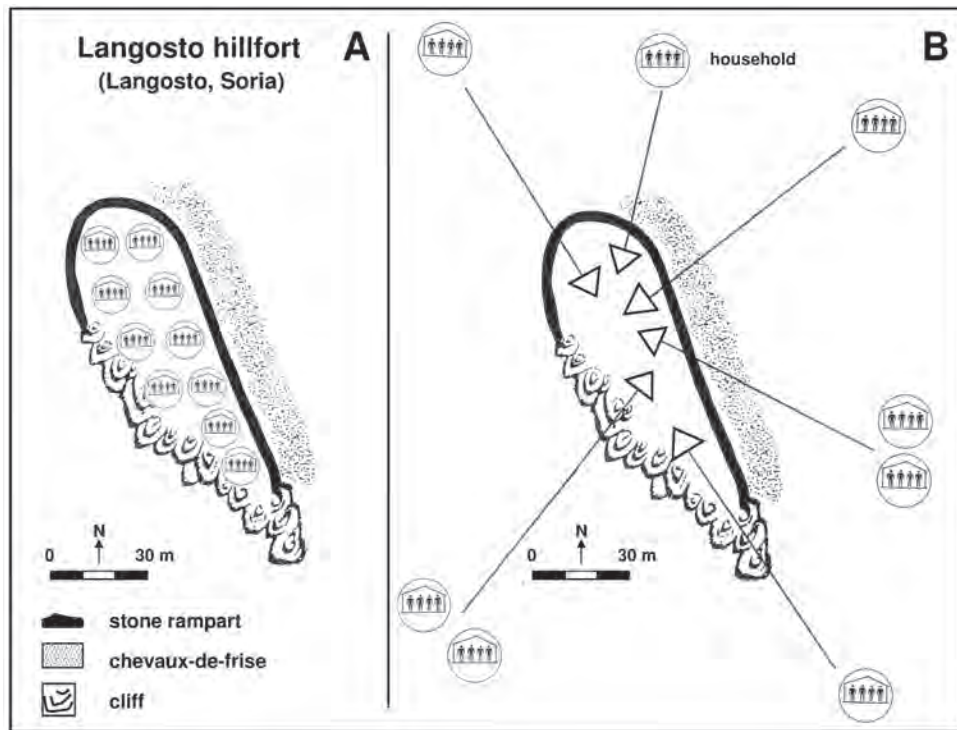


Fig. 18.3: The lack of structural elements inside hillforts offers two possible interpretations: A) the traditional assumption of people living permanently together inside the fortification and B) the hillfort as a refuge of dispersed households scattered in the surroundings (Plan of Langosto, Soria, after Taracena 1942)

especially noted in the growing distances between most relevant settlements.

All the above appears to indicate that in the first half of 1st millennium BC settlement structure was linked to that of the agricultural cycles and, as a consequence, a regular association between fortified *castros* (hillforts) and permanent sites (Álvarez-Sanchís 2000; Ruiz Zapatero 2007). The significance of these sites was marked consistently in a visual form through the creation of physical limits and ramparts. Even if we assume the domestic context of some known burials in settlements of the Duero Valley as Roa (Burgos), Cuéllar (Segovia), or Soto de Medinilla (Valladolid) (Delibes *et al.* 1995; Delibes & Romero 2011), they have an ultimate justification in the symbolic appropriation of land. It is expressed through the excavation of tombs of very young children under the floor of houses. They could symbolise a sentiment for property and land fertility (Fig. 18.3).

Nevertheless, the efforts invested in house construction demand a better explanation. Beyond the economic impact, which implies cultivated cereals and stockbreeding, the notions of progeny, memory and continuity constitute one of the great transformations of the period (Blanco-González 2011; González-Ruibal 2006). The general impression is that Early Iron Age settlements developed independently including phases of settlement and abandonment or with more or fewer signs of activity. It is not easy to explain why

some sites were more successful than others and had a longer life. The necessity of defining new territories in the Iron Age suggests a greater significance in the productive capacity of land (Ruiz-Gálvez 1992; 1998), perhaps exacerbated by a population increase (Blanco-González 2010). If we admit that, then the development of the first Celtiberian *castros* could be associated with the *domestication* of landscape through important field subdivisions.

The first Celtiberian cemeteries epitomise clear power relationships. The most ancient cremation cemeteries are found in the Northeast Meseta (Upper Duero, Tajo and Jalón rivers), a nuclear area of Celtiberian people. In this region we find older evidence of the Celtiberian culture and the thorough archaeological study of cemeteries has permitted the formation of a long sequence beginning in the late 7th and 6th centuries BC (Lorrio 2005). These ancient Celtiberian cemeteries reflect certain homogeneity in tombs, but together with a great majority of individuals with poor grave goods there are some tombs with arms, basically spears and iron knives, which show the existence of groups with an incipient social differentiation. The process which may have occurred over the following centuries is just partially understood, but it is clear that since the 4th century BC social structure became more and more complex (Almagro-Gorbea & Lorrio 2004; Álvarez-Sanchís 2005; Lorrio & Ruiz Zapatero 2005).

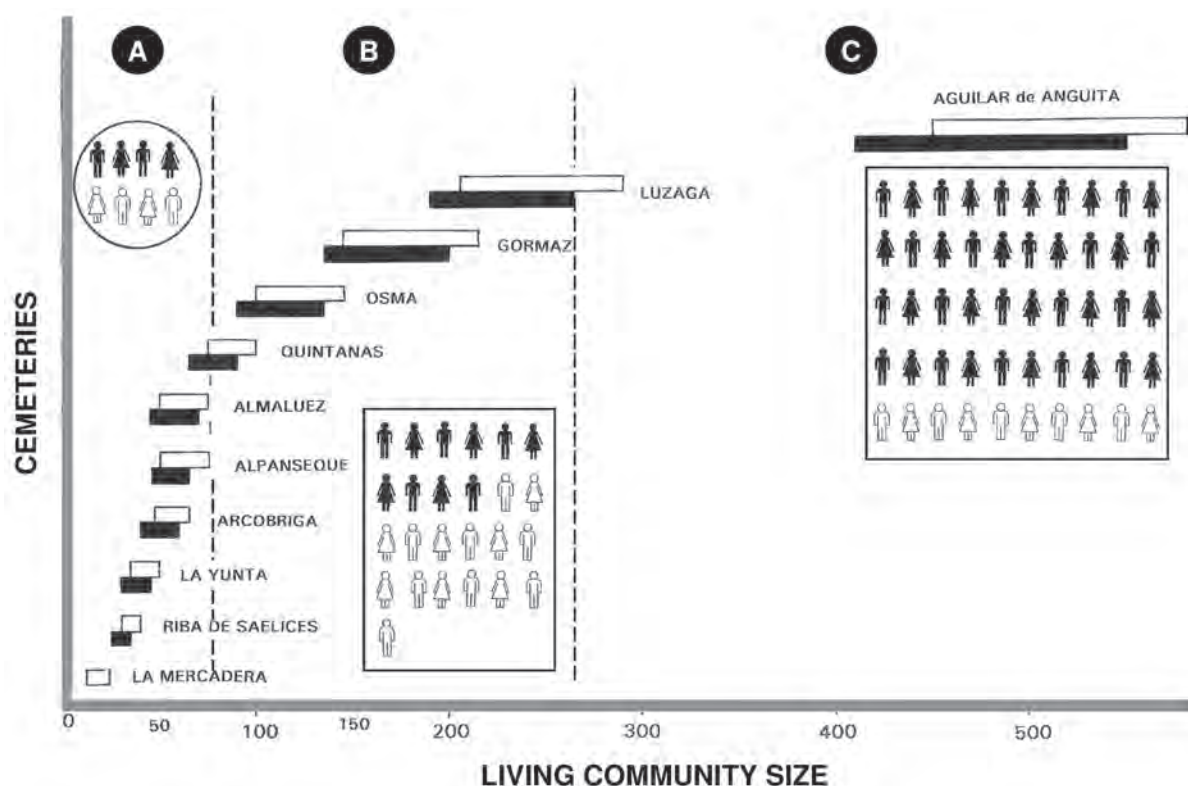


Fig. 18.4: Demographic estimates for Celtiberian cemeteries: living community size estimated from mortuary population. In black, correction factor of 10%; in white, 20%. Each figure represents ten individuals. Three demographic models have been identified: a) up to 100; b) c. 100–300 and c) up to 500 inhabitants (after Álvarez-Sanchís & Ruiz Zapatero 2001)

It is difficult to build up a general outlook of the first settlements in this period. We have good regional studies on the Early Iron Age, but we usually tend to imagine a complex mosaic of territories with different and changing characteristics as seen in other areas of temperate Europe (Cunliffe 2009; Haselgrove & Pope 2007; Sharples 2010). The number of excavated sites is high and that makes control of the archaeological record difficult, we face the temptation of maintaining ‘updated’ descriptions, but in fact they are becoming ‘old’ (Ruiz Zapatero 2011a: 95). However, through studying the number of known cemeteries it is most likely that the majority of the population lived in dispersed and self-sufficient villages. The reading of the residential record fits well with the sociological background of cemeteries: small settlements with low hierarchy. Ideally, the perception should be one of hamlets with five or six houses and villages with a maximum of 20–25 families. This was surely the more abundant type of site and was found across a good part of the rural population scene. Nevertheless, the demographic estimation of buried community sizes and its relationship with the known surface area of some villages offers relevant contrasts (Álvarez-Sanchís & Ruiz Zapatero 2001; Arenas 2010; Cerdeño & Sagardoy 2007). In large cemeteries such as Aguilar de Anguita or Luzaga

(Guadalajara), the resident population reached several hundreds of inhabitants (Fig. 18.4).

Production and exchange: new technologies

The new socioeconomic organisation of the period should stimulate the demographic growth and should lead to a progressive concentration of richness in groups controlling basic resources such as pasture land and saline outcrops, with broad expansion across the region and extremely important for cattle and human diet. Salt extraction and manipulation was in its early stages at the end of the Copper Age (Delibes & del Val 2007–2008; Guerra *et al.* 2011) but Iron Age production very much exceeded previous levels (Morere Molinero 2008). The growth of salt use for meat and fish preservation had a great impact in trading networks. At the same time the agriculture system evolved towards improved certainty because the possibility of seasonal famines was reduced to an extent.

Iron metallurgy production, favoured in some cases by the proximity to important iron mineral ores in the Iberian Mountains, allowed for the development of useful tools. Once people learned techniques for melting and forging

iron many communities had an advantage due to metal exploitation in their territories (Ruiz Zapatero *et al.* 2012). Iron was especially relevant for armour, present in the ancient Celtiberian cemeteries such as Sigüenza, Molina de Aragón and La Mercadera. While it is true that such discoveries are rare and there is no available data on iron ore extraction, patterns of use and deposition it is also true that mineral iron ores are relatively widely extended through many areas of Central Iberia. Iron use seems to have been established in Western Meseta (El Berrueco, Sanchorraja) and the middle Duero Valley (Soto de Medinilla, Cuellar) around the 8th and 7th centuries BC. Finds include knives, shaving razors, awls, chisels, axes and adzes all of which imply a certain knowledge about its function and technology, perhaps related to the figure of travelling metallurgists.

In summary, the emergence of aristocratic groups in the Meseta as inferred from the study of tombs could be, to some extent, a consequence of the evolution of dominant groups in Late Bronze Age herder societies. On the other hand, the influence could be from external demographic contributions, although we need further studies on that possibility (Almagro-Gorbea 2011). There were clear movements of people differing in nature perhaps and without relevant demographic effect, but with strong socioeconomic impact (Ruiz Zapatero & Lorrio 2007). It seems plausible that the arrival of new peoples and new products marked the beginning of a slow and gradual trend to abandon relatively stagnant ways of life. This process could be associated with the growing importance of armament and certain personal ornaments (fibulae, belt brooches, bracelets, necklaces) as new methods of ethnic identity.

It seems clear that in a patched, cultural landscape like the Meseta no political or military authority emerged to control large territories. The economic and social organisation everywhere was always on a small scale. People could interact at a local level between different communities without interferences from more organised and developed systems. The absence of a strong regional political power means that competition and conflict should have been unavoidable. In Central Iberia the development of fortified areas alongside others with open settlements could show a significant difference between the paths of territories as a result of wars and plundering in the Early Iron Age; but the possible reasons remain unknown. The existence of open settlements in the Meseta hilly sites with similar functions to that of the lowland settlements cannot be ruled out. Nevertheless, the possibility that the processes leading to regionally centralised societies occurred at different rates should be seriously considered.

Whether these sites reflect local confrontation at the level of small agricultural communities (Armit 2007) or if they are central places with the aim of building the basic structure in *affective* relationships with the surrounding people (Lock 2011) is an unexplained issue; in fact sometimes hypothesis move between extremes (Sastre 2008). There

is scarce evidence of direct attacks in these sites; however excavation of known sites proceeded with just chronological and constructive aims in mind (Wells 2011: 417). It seems reasonable that Early Iron Age people were involved in war episodes but the profound sense of war would be different in diverse and heterogeneous communities (Ruiz Zapatero 2003: 16). On other hand, with the available data it seems risky to place great emphasis on fortified sites found alongside open sites, inevitably more important and numerous than we ever have imagined (Haselgrove & Pope 2007).

Conclusions: urbanism, demography and the concept of town

The Iron Age of the Spanish Meseta is the story of numerous and diverse local societies that evolved from the Bronze Age with multiple identities. The best way to describe the central lands of Iberia is the picture of a mosaic of different agrarian societies living in *small worlds*. Some of them began to live in larger settlements from the middle of 1st millennium BC onwards. This trend accelerated in the last few centuries until the Roman conquest with the emergence of the *oppida* (Álvarez-Sanchís *et al.* 2011). Pre-roman urbanism, aside from the internal analysis of settlements, shows on the one hand the use of landscapes and on the other encapsulates the social, political and ideological structures of Iron Age people. To some extent, urbanism is another phenomenon of social history (Andreev 1989).

A multitude of definitions on urbanism have been put suggested from an archaeological perspective: 1) some have favoured checklists of urban traits (Childe 1950; Talbert 2000; Smith M. L. 2003; Smith M. E. 2009a); 2) additional studies have followed ancient classic urban features (Kolb 1984) as a reference for prehistoric contexts; 3) some have emphasised the roles of towns within landscapes and people's lives (Yoffee 2005); 4) further studies have contrasted rural and urban identities (Cowgill 2004; Rich & Wallace-Hadrill 1991) or have even introduced ecological backgrounds in that approach (Mattingly & Sterry 2013) just a few have introduced the ideological component for identifying cities in 'Celtic' Iron Age (Almagro Gorbea & Lorrio 2011); 6) others have proposed a pragmatic context-dependent definition (Fernández-Götz & Krause 2013), and finally some have dismissed the idea of defining features existing (Smith A. T. 2003).

It is clear that, although *urban* is a comfortable and useful term to classify societies and in particular for making comparative analysis, our objective is not to produce *labels* but to really understand how Iron Age societies worked and changed (Collis 1996: 223). It seems quite reasonable to accept that urban societies cannot be reduced to a single model and there are – and there have existed – different

types of *cities*, also in the European Iron Age. Perhaps the most relevant question is to explore the common elements present in the wide catalogue of past cities and to understand each case in its own terms, specifically discovering changes that they represent compared to previous settlements (Ruiz Zapatero 2011b: 298).

The key factor for understanding the meaning of the new Early Iron Age settlements is to consider what components of every day life changed. In that sense we need to look carefully at all changes which involved living in a *city* (Yoffee 2005: 61–62). There are at least five main dimensions to be considered (Fig. 18.5):

(1) Demography. The number of people living together permanently is a good reference for discussing the urban concept and many studies have enhanced the critical distance between small rural settlements and urban centres (Fletcher 1995), even if we accept Fletcher's concept of 'low-density and agrarian-based urbanism' (Fletcher 2009, 2012). Evidently there is not a clear *rubicon* limit acceptable for all cases in every region and any time, but it seems reasonable to use some flexible figure to separate rural and urban settlements from the basic point of view: the increase in problems in prehistoric face to face relationships relate to the rise in number of inhabitants as reflected in studies in modern contexts (O'Brien 2009). We suggest that big *castros* (hillforts) and open settlements in the Early Iron Age of the Spanish Meseta with probably 400 or 500 inhabitants (Almagro-Gorbea 1995) represent the upper limit for a purely agricultural settlement. In many cases the nearby large cemeteries support the settlements as centres of significant population (Álvarez-Sanchís & Ruiz Zapatero 2001). What is clear is that the Meseta communities in previous periods had never lived in such large agglomerations, this was the first time and it created new perceptions of living together in community (Cerdeño & Sagardoy 2010).

(2) Subsistence and economy. The key question is in which way urban settlements are different of rural sites in economic terms. Basically it is assumed that primary production (agriculture and livestock) is common to both kinds of sites although we can identify differences of scale and forms of subsistence. The true differences, however, must be found in the number and scale of craftsmanship accomplished in urban centres. Metallurgy and pottery were probably the most important crafts and just at the end of Iron Age with *oppida* we find potter's workshops and iron production at a supra-family level (Ruiz Zapatero & Álvarez-Sanchís 1995). That means that urban centres were involved in a redistributive function of goods and services to minor rural sites. This aspect leads us to another outstanding function: trade and exchange activities focused at urban sites and not in small sites. So in our view the true urban character must include self-sufficient feeding, diversified craftsmanship to supply the necessities of rural settlements and the role of a trading centre. We need much

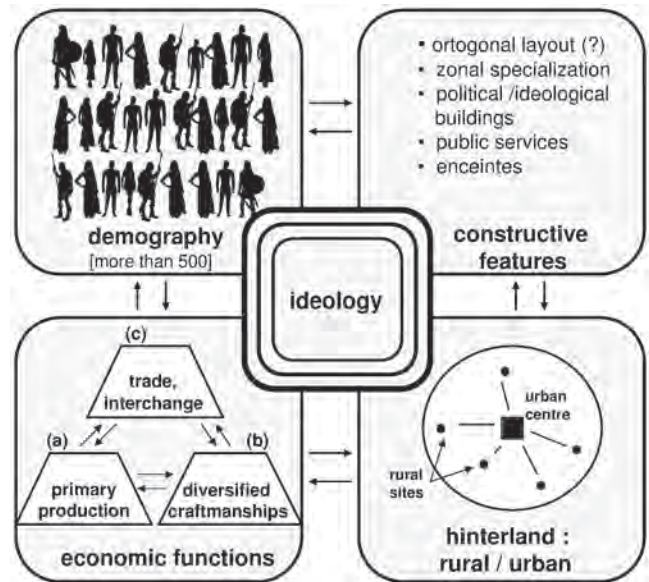


Fig. 18.5. Model of relationship between urbanism components in the Meseta Iron Age, with ideology as key uniting factor (authors)

more information on those issues to establish a clear vision of the first urban centres in the Meseta Iron Age.

(3) Territory. Cities usually control a more or less extensive territory (*chora*) including other distinct settlement categories. This implies the consideration of cities re-routing and utterly changing patterns of everyday life, generating new forms of social life and interactions with a hinterland. The lack of information on small rural settlements in the Meseta region deserves much more future investigation on this point, although the exploration in the neighbourhood of urban areas is providing interesting data as in other peninsular areas (Belarte & Plana 2012). The evolution of *castros* takes shape in the emergence of *oppida* with the necessity for controlling more and more extensive territories which set up a clear hierarchy (Burillo 2007: 251).

(4) Constructive features. Perhaps the most well known feature is the orthogonal layout of Mediterranean and Near East ancient cities (Castagnoli 1971), but it seems evident that this is just one possibility in the internal space organisation of a city, albeit the most popular. The internal zoning of a site following functional criteria is quite well known in Late Iron Age temperate Europe (Fichtl 2012) and it should be reflected in a form of spatial organising which expresses the urban condition of the settlement. We claim this case for big *castros* and *oppida* in the Meseta with internal zoning separating crafts areas and communal services from residential space. Political and ideological/religious buildings (sanctuaries) are not very common and it seems more likely a Late Iron Age feature. However, a new interpretation, taking into account the ancient sanctuary of *Termes*, may introduce an important aspect in the discussion

of ideological dimensions of Celtiberian cities as seen below (Almagro Gorbea & Lorrio 2011). Finally, the existence of public or common services like rubbish dumps or areas for temporary craft fairs and walled perimeters or enceintes are relatively well documented.

(5) Ideology. Scholars have virtually excluded ideological dimensions for explaining *oppida* in the Celtic world; nonetheless the concept of a city in Celtic Europe would essentially be ideological as it was in Greece (Morris 2006), Rome and nearly every culture in Antiquity (Gates 2003). Almagro-Gorbea has argued for this interpretation, analysing the ancient *Termes* sanctuary in Celtiberia, arguing that this sanctuary was proof of the existence of a ‘Founder-Hero’ of the city, represented here and in other Celtic cities as the mythic figure of *Teutates* divinity (Almagro Gorbea & Lorrio 2011: 155–166). It is a complex explanation with some problematic elements, but attractive for its powerful capacity to discover the profound social and political structure of Celtic communities with *rex* or *rix* holding the paramount position of a social pyramid. *Rex* or *rix* were probably politically reinforced, elite members transformed into heroes. It has been suggested that urban concept in great Celtic agglomerations should be clearly associated with legal rituals of foundation (Ryckwert 1976).

If this proposition is correct, then we have to assume that the proper notion of living in a city is, before anything else, an ideological matter. The key, encompassing aspect which covers and pervades all four previous issues: demography, economy, settlement structure and hinterland. From this point of view we cannot perhaps establish exact dates in the process of the Iron Age Meseta becoming urbanised. The process through which Meseta communities shaped a way of life in agglomerated settlements was continual and led to what would become proper cities.

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The Celtiberian Oppidum of Segeda

Francisco Burillo-Mozota

The year 154 BC constitutes a key date for the ancient history of Hispania, for it was the point at which, in the words of Polibius, “the war fought by Romans against Celtiberians and Vaccaeï” broke out. These events brought about the modification of the voting day for the Roman consuls, which was shifted from the Ides of March to January the first. However, war had not been declared against the Celtiberians, but rather against the Celtiberian city-state of Segeda (Zaragoza). The political weight of Segeda is corroborated by its monetary mints, which display the city’s name. The extension of the settlement reaches 42 ha, exceeding the area of many other oppida of the Iberian Peninsula. Outside the city walls, but near to them, it was built an outstanding sanctuary that shows clear astronomical orientations. The ‘cornerstone’ stands out due to its 120° and its quadruple orientation towards the Astronomic North, the sunset in the Summer Solstice, the Equinox and the moon standstill and Metonic Cycle.

The importance of the city of *Segeda Celtibérica* is reflected in the declaration of war by the Senate of Rome, which accused the city of breaking the covenants of Gracchus, forcing its neighbours, the *Titthi*, to become part of the city. This act of synoecism led Segeda to expand its area and build a new wall. To attack it, Rome moved the election of the consuls ahead to the *kalendae* of January in the year 153 BC, mobilising 30,000 men. Segeda allied with *Numantia*, recruited 25,000 men and defeated the Romans at the Battle of the Vulcanalia.

Segeda was a state-city of the Celtiberian ethnic group of the *Belli*. There were coins minted with its name, *sekeida*. It is located within the Iberian Peninsula, in the Valley of Jalón river, at the archaeological site of Poyo de Mara (Zaragoza). Its area expanded over 44 ha (to compare, *Numantia* had 7.2 ha); becoming the most important *oppidum* in the Northeast of the Iberian Peninsula. Archaeological excavations have revealed the great social disparity displayed by the houses across the different neighbourhoods of the city. Outside the walls, along the rampart they erected a sanctuary astronomically orientated. After its destruction,

the population built a new city, Segeda II, aligned with the ruins in Belmonte de Gracián Durón.

The Roman Senate declares the war on Segeda, an exceptional affair

The year 154 BC is a key date for the ancient history of Hispania, for it was the point at which, in the words of Polybius (3, 4, 12), “the war fought by Romans against Celtiberians and Vaccaeï” broke out. This event was adopted by Polybius himself as the heading for the last section of his oeuvre. However, war had not been declared against the Celtiberians, nor the Bellii and Arevaci, but rather against the particular Celtiberian city-state that constitutes the focus of this paper: Segeda (Appian *Iber.* 44–45; Diodorus 31, 39–41 and Florus 1, 34, 3).

Related to this declaration of war, Livy (per. 47, 13–14) cites a fact that transcends the History of Rome, since it is the reason why the current calendar begins on January 1st: “The year five hundred ninety-eight of the founding of



Fig. 19.1: Roman imperialist expansionism, mid-2nd century BC (author)

Rome, the consuls began to enter duties on the day of the calends of January. The reason for changing the date of the elections was the insurrection of Hispanics”. An event that also appears echoed by Cassiodorus (*Chron.* 384): “The beginning of the consular year was moved to January due to the Celt Iberian War”. This year 598, taking 750 as the year of foundation of Rome, corresponds to 153 BC, when Nobilior undertakes his campaign against Segeda (Villar 1995: 165) after being elected consul.

It is Apian (*Iber.* 44–45) who best describes these events in detail, in the translation of J. S. Richardson (2000: 51–53):

“Segeda is a large and powerful city, belonging to those Celtiberians called the Belli, and it was included in Sempronius Gracchus treaties. This city caused smaller towns to move to its site, and built a wall of some forty stadia in circumference around itself, and forced the Titthi, another neighbouring tribe, to join with it. The senate learned of this and forbade them to build the wall and demanded from them the laid down taxes by Gracchus and ordered them to provide troops to fight with the Romans, since this was required by Gracchus treaties. They replied that, so far as the wall existing ones; and as to the taxes and the recruitment, they said that they had been released from these by the Romans themselves after the time of Gracchus. And, in fact, they had been released from these obligations, but the senate, in giving such concessions, always adds that they shall be in force for so long as seems good to the senate and the people.

Therefore Nobilior was sent as general against them with an army of not far short of thirty thousand men. When the Segedans heard that he was coming, since they had not yet completed the wall, they fled to the Arevaci with their women and children and begged the Arevaci to take them in. They did

take them in and chose Carus, one of these very Segedans and a man renowned for his skill at warfare, as their general. On the third day after his election, he set a foot of twenty thousand men and five thousand horses in ambush in a wood and attacked the Romans, who were in column of March. Though the battle was for a long time evenly balanced, he won decisively and killed six thousand Roman citizens, so that on that day the city of Roma was afflicted with a great disaster”.

For Pina (2006), this episode of war marks the commencement of the Roman imperial policy, mid-2nd century BC. By sending troops to Segeda in the year 153 BC, the Celtiberian war starts and culminates in the fall of *Numantia* in 133 BC; the Roman advance into Hispania continued though. The same senate of Rome turned Macedonia into a Roman province in 148 BC and also looted Corinth and destroyed Carthage in 146 BC, thus continuing its imperialist expansion in the eastern and central Mediterranean territory (Fig. 19.1).

The mintage of Segeda coins

Segeda minted coins because of the changing processes arising from the Roman conquest of the Ebro Valley in the first quarter of the 2nd century BC; these changes were coming from the covenants imposed by Gracchus (Burillo 2001). The study of the issue of these coins was Gomis’ doctoral thesis (2001).

The presence of the name of the city on the coins, *sekeida*, is an obvious indication of political autonomy of the Segedian city-state. The existence of various mints associated with the ethnic group of the Belli is the clearest

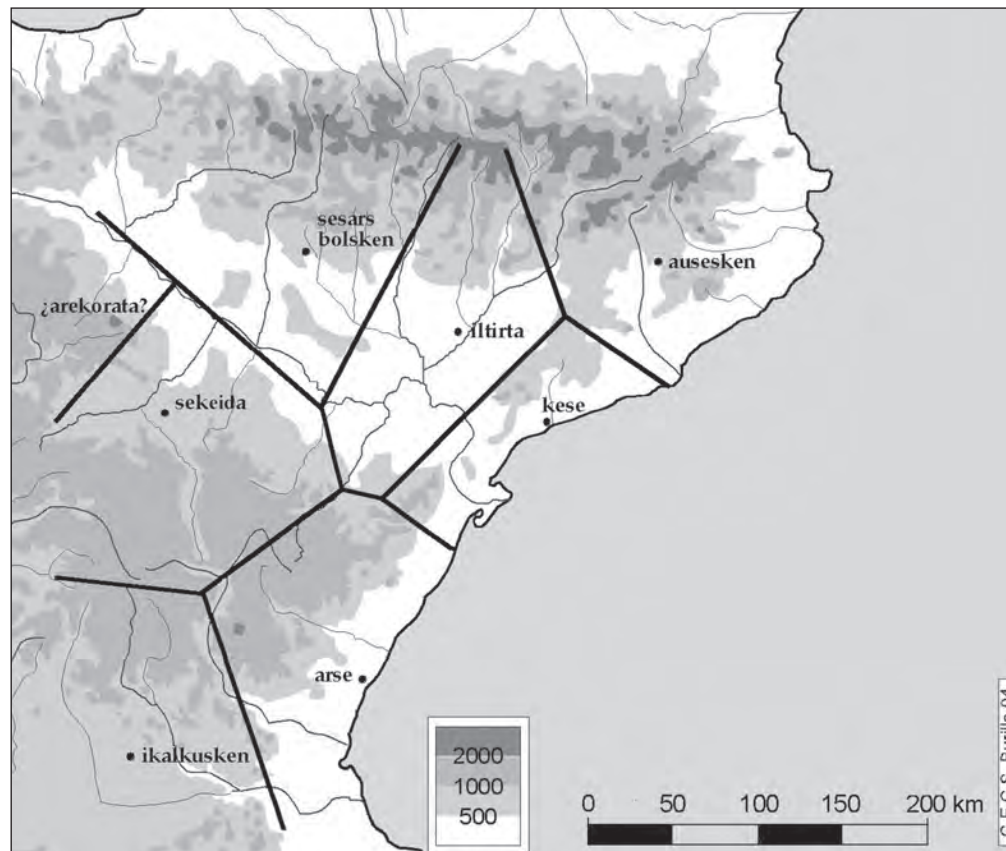


Fig. 19.2: Silver coin mints prior to the year 153 BC (author)

evidence that no state unity of ethnic nature or a Celtiberian setting is superior to this city.

The minting of denarii

Segeda is part of the select number of *oppida* that coined silver in *Hispania Citerior*. The fact that this metal was being coined in *Hispania Ulterior* shows the variety of tax systems created by Cato in Spain during the beginning of the 2nd century BC. (Garcia-Bellido/Blázquez 2001: II, 64). The territorial distribution of the few cities that coined denarii is not random. Rome chose the most important *oppida* to be mints, those with a strategic location in the conquered territory (Fig. 19.2).

The first mintage of the *Sekeida* denarii was carried out in a stage where there is no war, between 153 BC and Gracchus's so their earmark has to be related to the allowance payment to which Appian refers (*Iber.* 44). The sources about the substantial revenues derived from the Celts and their allies are perceptible, Gracchus himself contributed 40,000 pounds of silver (Livy, 41, 7) and then, in 175 BC, Claudius contributed 10,000 pounds of silver and 5000 of gold (Livy, 41, 28) (Fatás 1973).

Although the existence of silver mines in the Iberian

Mount range Ebro Valley (Garcia-Bellido 1993: 111; Knapp 1977: 469) has been denied, more recent research has just showed the opposite (Burillo 1997; 2007: 350). In fact, silver from *Hispania Citerior* became cheaper than the rest of the Western Mediterranean silver. Its ratio was 1:80 compared to copper, while in Rome it reached 1: 120 (Garcia-Bellido 1999: 384).

Bronze minting, monetary economy

There is certain unanimity among researchers noting that numanistic emissions in bronze were intended to cover needs of a local nature, to solve the inquiry of transactions internally generated from the cities. *Sekeida* coined aces (Fig. 19.3) and a set of dividers: semis, triens, quadrans... which shows the implementation of a complete monetary system, adapting the most developed *kese* and *iltirta*, which up to five different types of dividers (Villaronga 1994: 176, 160). The development of these dividers allows making small payments and, therefore, results in a population that cannot use barter as a trading system.

However, why is the population sector of Segeda I adopting a monetary economy from the earliest stages of development of coinage? The answer concerning the mint



Fig. 19.3: As coined by the city-state of Segeda (author)

of *kese* is given by Campo (2002: 79), who sustains that the organisation of coin production was for the people, settled in Roman *Tarraco*, to acquire the staples in this Iberian city. We can use this criterion to refer to *Segeda I*; in which case, the coin production would be to meet the needs of the Roman troops stationed in the newly conquered territory.

The urban development of the oppidum Segeda I

Schulten (1937) identified Segeda at the archaeological site of Belmonte de Gracián Durón. However, further research locates, in this particular place, the second phase of this city built from scratch after ‘the abandonment of the Segeda’ cited by sources and located in the adjoining Poyo de Mara (Burillo 2006b; Burillo & De Sus 1991; Burillo & Ostalé, 1983–84).

Segeda I was built around the hill of El Poyo, situated on the right bank of the river Perejiles which flows into the river Jalón, opposite the upland of Bámbola, where the city of *Italica Bilbilis* lies. Its topographical features give it an undoubtedly strategic role. These features, together with its position at the crossroads connecting the interior of the Central Iberian Range and communicating with the central Ebro basin, help explain its emergence and development (Fig. 19.4).

The project Segeda began in 1998 and is still active. The first stage of the project was the systematic survey of the two cities and the Roman camp that besieged the earliest one. The completion of the archaeological excavations has been restricted by the heritage management of this city due to continued demand for shifting cultivation. This has allowed us to proceed in different places and obtain an initial knowledge of the city, its development and urbanism (Burillo 2002) (Fig. 19.5).

In area 1, at 4 m depth, an occupation from the Bronze Age, 2100–1950 BC calibrated dates, has been identified (Picazo 2006). On the *El Poyo* hill of Mara, turned into a

real acropolis with an area of 5 hectares, there is surface evidence from the Late Bronze Age.

Excavations on the eastern hillside (area 2) have discovered an early 5th century BC occupation, upon which there is a restructuring of the city with large terracing. The city extended towards the southeast, reaching an area of approximately 11/12 ha (areas 4 and 7). An expansion over the sedimentary area towards the northeast has been linked to the settlement of *Titthii* and involves a minimum length of 6/7 ha (area 3). A section of the rampart (which caused the declaration of war by Rome) has been found, 900 m from the acropolis; as well as different Celtiberian settlements next to it. The most important is a sanctuary aligned with astronomical orientations (area 5). This shows that the city of Segeda reached, at least, an area of some 44 ha.

The House of the Winery

All slopes of the acropolis show some signs of terracing; these indicate the existence of an urban design. Given the tons of displaced and quarried stones for its construction, we can speak of a true state-sponsored work involving a large investment.

Two houses, partially excavated (area 2), are two-storey buildings measuring 90 m². A *lagar* made of plaster (a small room where they produced wine for own consumption, winery) was found in one of the buildings, in the corner of a room of 20 m², with surviving walls of 2.60 m. The construction of these homes shows the hand of specialists, stonemasons, at least, who worked blocks of limestone and gypsum ashlar; as well as builders who master the production of gypsum used in different manners: in the wine press and the pavement – as well as the manufacture of lime used as white wash for the walls.

The very size of the living space in the ‘House of the Winery’ contrasts with the dwellings in the *Titthi* area and displays the social status of its owner. The presence of the

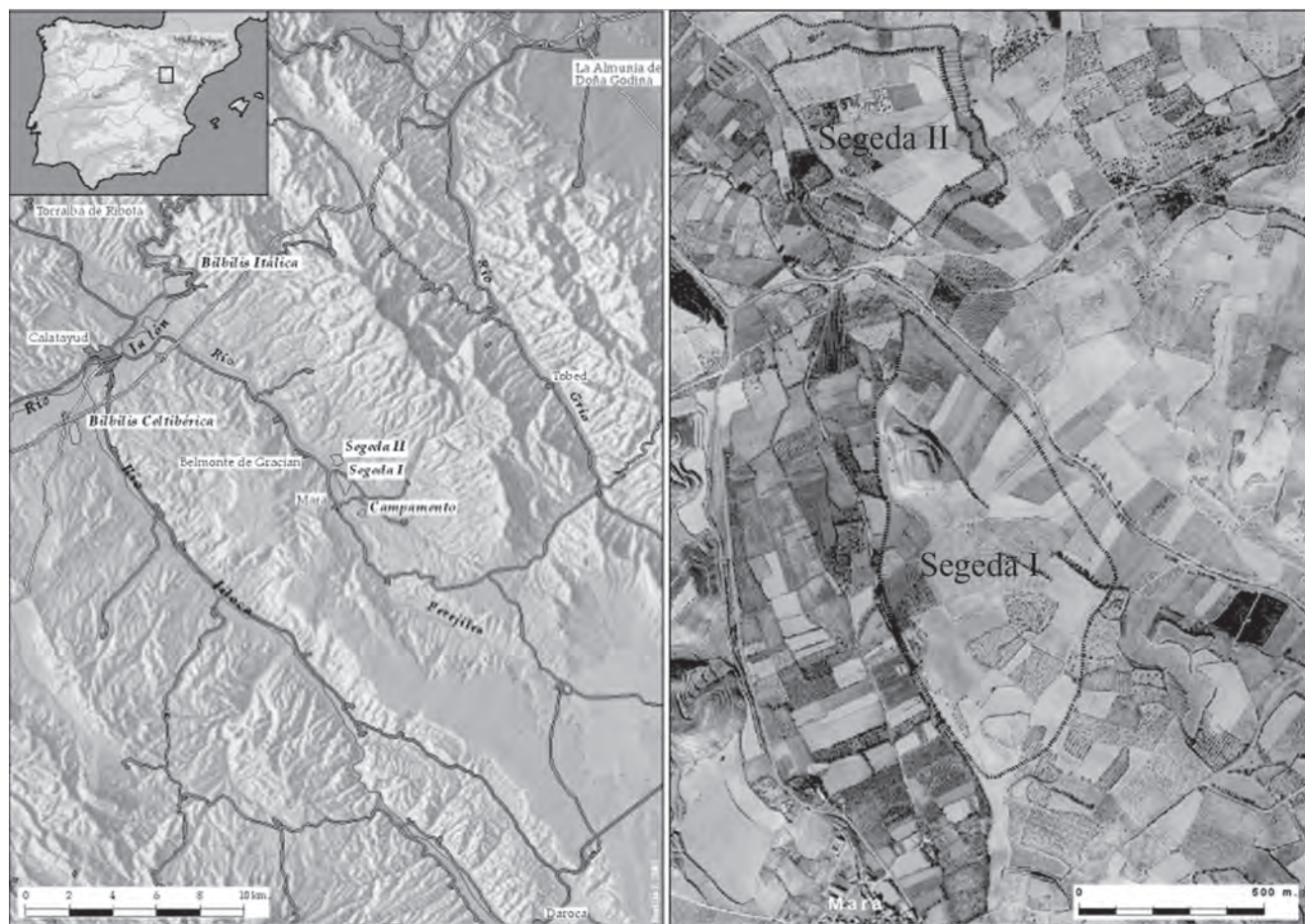


Fig. 19.4: Location of Segeda (author)

winery indicates that it was the residence of a landowner, owner of vineyards, who produced wine at home in sufficient quantities for its commercialisation (Burillo & Alzola 2005). This winery has been taken as a pattern for its reconstruction in Nova Segeda space, where we are investigating the Celtiberian wine making traditions (Burillo 2010a) (Fig. 19.6).

The House of the Blacksmith

In area 4, the three houses discovered have one floor, an area of about 48 m², inner rooms and access to an open courtyard. The hearth made from fired clay is still preserved. Next to it is a *tahona* or oven for the production of bread; there are parallels for this oven in the Iberian settlement of Castellet de Bernabeu and some others, currently in use in North Africa (Guerin 2003: 245). A blacksmith forge and tools have also been identified.

The walls and floors of these homes were constructed simply which suggests the absence of specialists. However, certain architectural features, such as the pillar bases, are made of plaster. This indicates a care in the building of

houses and a search for the most suitable materials by their builders, who were probably the owners themselves.

The Strigil House: Hellenistic floor housing

The excavations carried out in area 7, 300 m south of El Poyo, revealed a house of 283 m² (Burillo *et al.* 2008). The house has a central courtyard of 35 m² covered by a pavement of large gypsum flagstones, with a system used to supply drinkable water. Its pavement conceals a reservoir and the leftover rain water from the roofs is channelled to the outside by a pipeline.

The courtyard is surrounded by 11 rooms, whose pavements vary in their composition according to their function: clay was used for storage areas (E 1), the kitchen (E7) or iron metallurgical activities (E 6). Gypsum mortar is used in residential rooms (E 3, 4 and 5) (Fig. 19.7).

This house has been remodelled, a forge was reused (E 12) to build the stone base of a wooden ladder and build a second floor on the northeast wing of the house. The strigil discovered here is, most probably, the earliest found in Spain. Its presence indicates the adoption of Hellenic hygiene modes

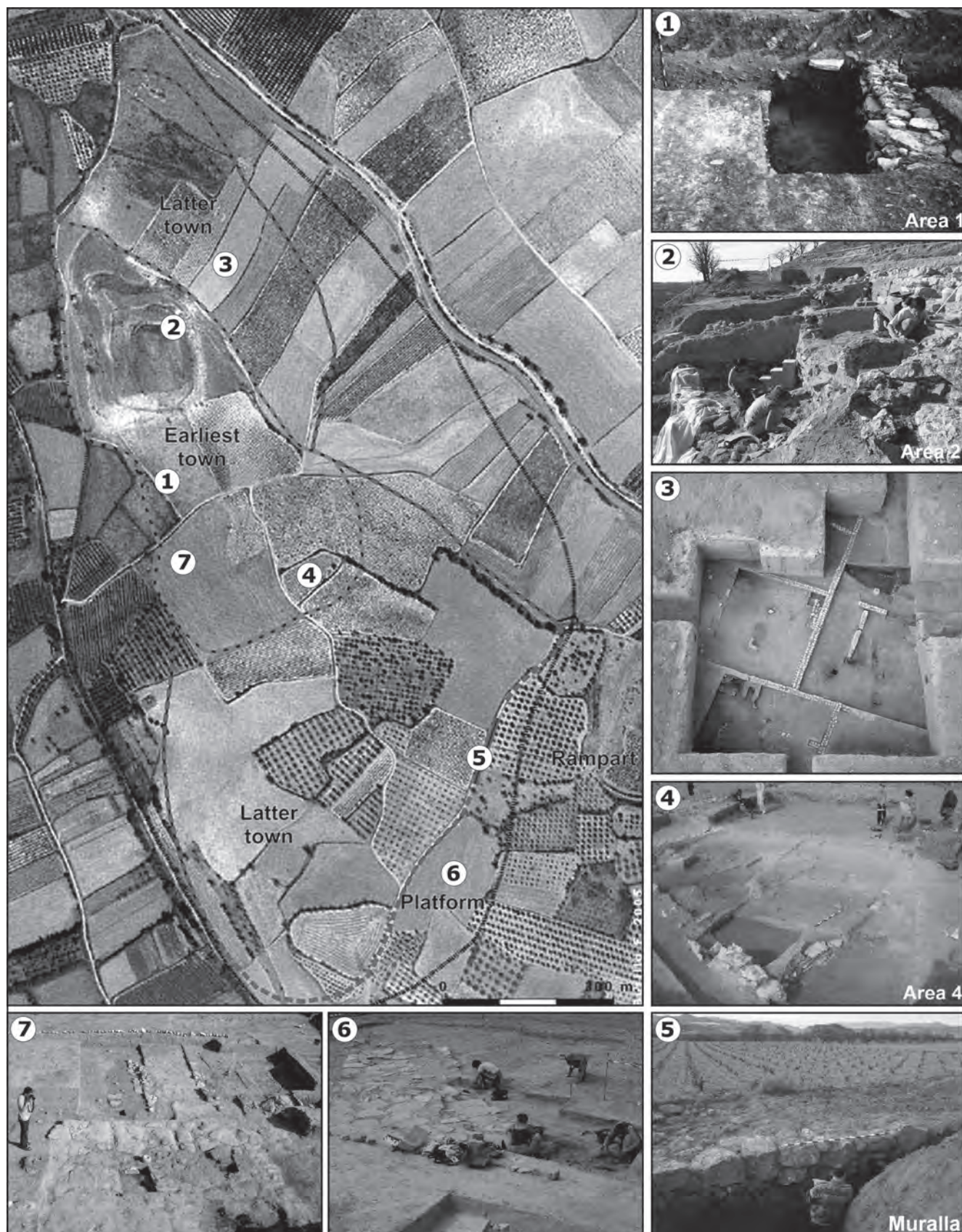


Fig. 19.5: Excavated areas in Segeda I (author)

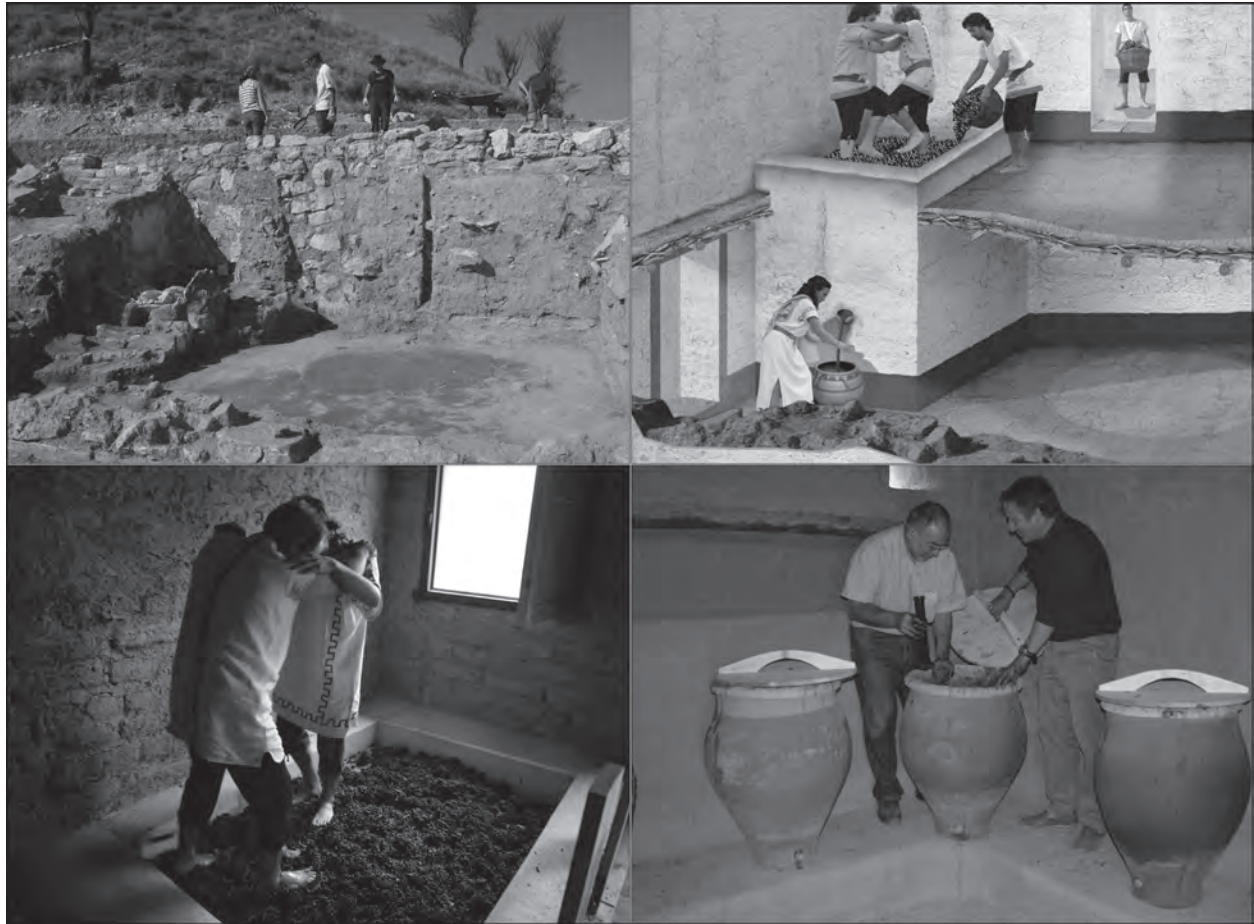


Fig. 19.6: Lagar discovered in area 2 of Segeda. Virtual reconstruction. Wine cellar and Winery built in Nova Segeda (author)

by the inhabitants of the house (Burillo 2010c). The house is modelled after the large Hellenistic courtyard houses that spread across the Mediterranean – for example in Lattara and Massalia (Py 2011: 112–126) – and that were developed in Pompeii, leading to the first Pompeian style in 150 BC (Maiuri 1978: 12). Unlike the latter, which used lime mortar and stucco, people used lime and gypsum in the houses of Segeda. This large house was the residence of a member of the elite of the city. Its large size contrasts with the small houses discovered in the neighborhood of the Titthi, Area 3, or those in the zone of the Forge, area 4; it shows that there is some social difference in the city of Segeda.

The expansion of the city: the neighborhood of the Titthi

East of the hill of *El Poyo*, there is a wide sedimentary area next to the ravine of *Orera*. The interventions of archaeological remains show that it extends, at least, over 6/7 acres, buried under a sediment layer whose thickness ranges from 1 m, 60 m, 2 m, 40 m (Burillo 2001–2; Cano *et al.* 2001–2).

In 2011, excavations of a 201 m² area uncovered part of a block of houses. The presence of three households permitted us identifying as many domestic units. These are one storey houses, but unlike those from the area 4, these show constructive simplicity. The homes have no internal layout and their extension is just over 40 m². They have mud walls that rest on small pedestals made of cobbles. Their floors are just excavated in the ground. Associated with one of the houses, there appeared an open-air elongated space, on whose soil we found a furnace and at the end of it, a cistern.

The location of the housing, its urban planning and design, show a rapid expansion of the city's main core. The reticular layout of the walls indicates the existence of a planning, a smooth urban program that uses homes built by very simple shapes. All of this has led to the conclusion that we are facing the archaeological testimony of synoecism exerted by Segeda (Burillo 2003).

The Sanctuary aligned with astronomical orientation

In area 5 of Segeda, a large building of 312 m² was also

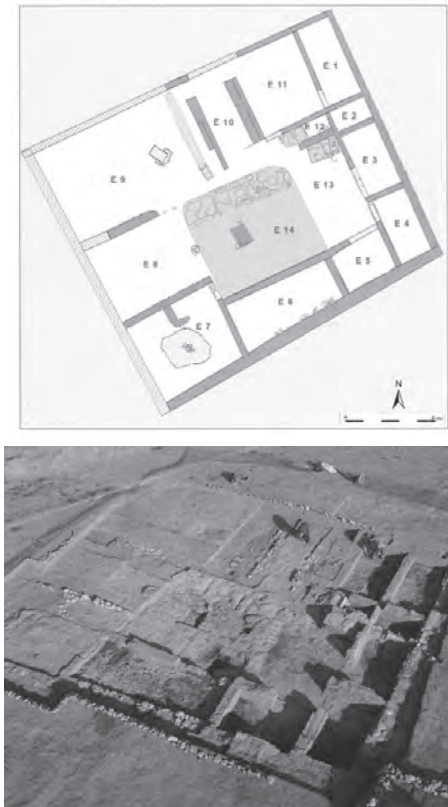


Fig. 19.7: Strigil House (author)

discovered, made up of two walls built of large gypsum blocks that join at an angle of 120° .

The walls are only two courses; the internal space is filled with gypsum and limestone slabs and locked with clay. Walls and flagstones were leveled and covered by a platform of bricks. This horizontal structure is isolated and located in a very prominent topographic area, at a site adjacent to the wall that surrounded the city. The archaeo-astronomical study of this structure (Burillo *et al.* 2009), originally called ‘Monumental Platform’, showed that the smaller easternmost side of the platform has a north-south orientation and the construction was carried out to achieve the following orientations from the cornerstone:

Summer Solstice. The bisector of the angle of the cornerstone of 120° is aligned with the summit of *La Atalaya*, a hill located northwest; and, at the same time, with the solar sunset at summer solstice.

Equinoxes. The 90° angle of the cornerstone, whose side is north-south, is oriented towards Mount *Valderrando*, another prominent hill on the horizon, and the sunset in autumn and spring equinoxes.

Metonic Cycle. The longest side of the ‘Platform’ displays an astronomic azimuth direction 58° , which coincides with the rising of the full moon when it stops along the winter

solstice. This astronomical event, which is repeated every 19 years, is known as the Metonic cycle, since it was the Greek astronomer Meton, in the 5th century BC, who accurately determined the adaptation of the lunar cycle to the solar year, leading to the Attic calendar (Bourgeoning 2000: 22).

This construction was built to create a ‘horizon calendar’ and it demonstrates great knowledge of astronomy. But, to achieve this, they could have used simple poles, as it was done in the German *Fürstensitz* of Glauberg (Baitinger & Herrmann 2007). In the case of Segeda, they built a monument to make possible the performance of rituals. Its isolated location outside the city allowed large numbers of people to gather in its surroundings. It is therefore a sanctuary with construction features unprecedented hitherto, which contrast with ritual known in Mediterranean cultures, in which temples dominate. The structure of this sanctuary in Segeda is open, lacking a roof; and its construction has been done with an evident orientation to the sunset, in the summer solstice as well as at the two equinoxes.

Segeda is thus sharing the important role played by the sun in Celtiberian religion, as witnessed by the iconography of rotary embossed plates located in the necropolis of *Numantia* and *Arcóbriga*, and by the decorations in the pottery of *Numantia* (Burillo & Burillo 2010).

Perimeter and inhabitants of Segeda

According to Appian, the length of the defensive wall of Segeda was 40 stages, which, at 185 m per stage, equals a perimeter of 7.4 km, a figure that is clearly an exaggeration, as it would represent a city area of over 300 ha. We also find this lack of precision about *Numantia*, to which he attributed a 24 stadium perimeter (Appian Iber. 90). According to Schulten (1937: 75) this would be equivalent to 4.4 km and an area of approximately 120 ha, much larger than the 7.2 ha calculated by Jimeno and Tabernero (1996: 422). One fact is clear from the text of Appian: he assigns the wall of Segeda a perimeter that is 60% higher than the one of *Numantia*, thereby indicating the largest city. Archaeological analysis from Segeda shows an urban area of approximately 44 ha; with the population concentrated in a 17/18 ha area.

There is no information about the number of inhabitants of Segeda in the classical sources, but there is some about *Numantia* at the time of its siege by Rome. The existing data are contradictory. Florus (1.34) and Livy (Per. 55) indicate 4000 Celtiberians; Appian (Iber. 76, 97) indicates that there were no more than 8000 in peacetime and Velleius (2.1.3) says more accurately that he had never armed more than 10,000 of his own men. There have been various estimates of the actual population that inhabited the city. However, the most successful are those by Jimeno and Tabernero (1996: 429–431), that rate an average of 243 inhabitants/ha, which leads them to propose a population of nearly 1800 inhabitants. If we apply this ratio to *Segeda I*, it might have

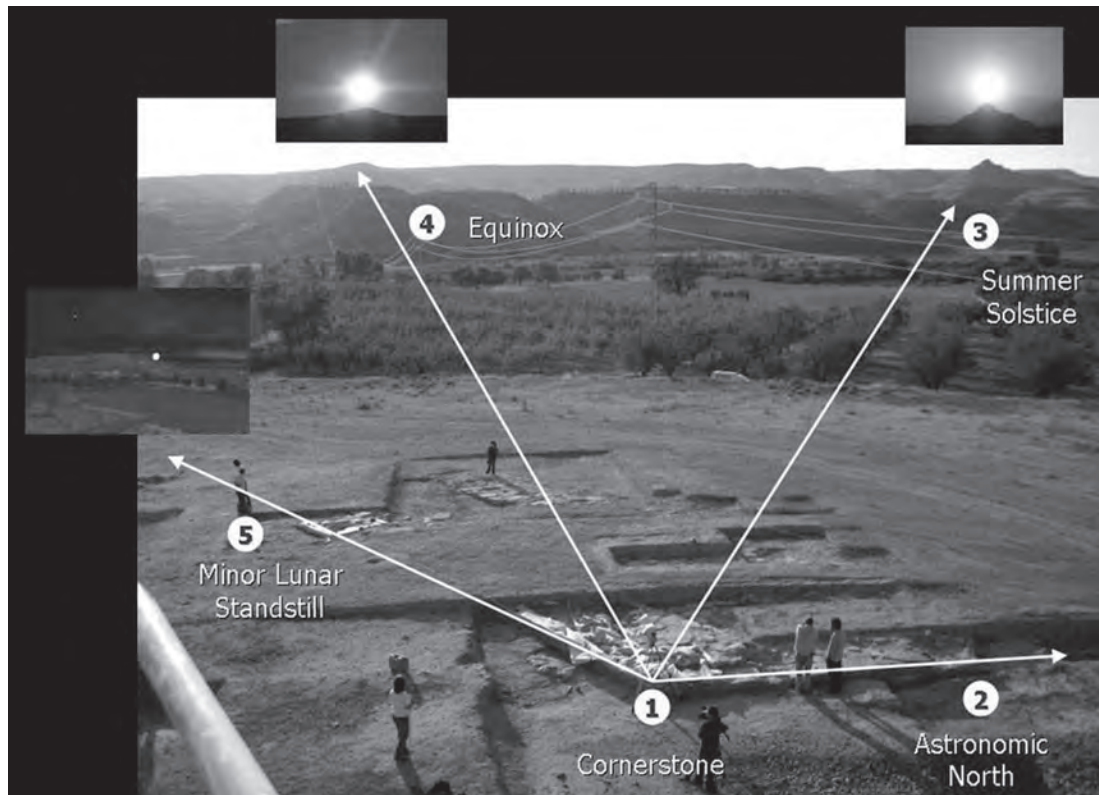


Fig. 19.8: Sanctuary of Segeda (author)

had about 4000 inhabitants at its peak (Burillo 2005). A different issue would be the number of people living in the broader territory belonging to these city-states.

The political structure of the city-state of Segeda

As archaeological surveys have shown (Burillo 2006a), the Celtiberian *oppida* and those of the Northeast of the Iberian Peninsula had a political structure characteristic of city-states, with small towns and most of the population living in the countryside.

The bulk of the population in the Celtiberian city-state were free and armed peasants (Burillo 2010c); only in this way, we can understand that, at the time that Rome declares war on Segeda, this town can recruit immediately, in alliance with *Numantia*, an army of 5000 horsemen and 20,000 infantry and defeat 30,000 Romans at the Battle of Vulcanalia, August 23rd, 153 BC (Quesada 2006).

According to Appian, the ratio of rider/to infantryman in Celtiberian troops was 20%. This means that one in every five soldiers was a rider. This ratio will be fulfilled in *Numantia* in the year 139, when 4000 Celtiberians are recruited and 800 horses are delivered to the Romans (Diodorus 5, 33, 16). This proportion is ratified by archaeological data from the necropolis of *Numantia*, where the proportion of riders

buried among the warriors is 24% (Jimeno *et al.* 2004).

When we apply these ratios to the cities in coalition in the year 153, we find that, thanks to its 1800 inhabitants, *Numantia* could provide between 450 and 360 men, 90 or 72 of them would be riders. In addition, Segeda, with its 4000 inhabitants, would provide around 1000 and 800 men of which 200 or 160 would be riders. That is, between 94.2% and 95.3% of the army came from outside these cities, other *oppida* and, especially, rural settlements where the majority of the population lived (Burillo 2006a: 58).

In this regard, it is pertinent to quote Aristotle, since, with regard to participation in the war, there seems to be no difference between the inhabitants of the Greek *poleis* and the Celtiberian ones: “indeed it often happens that those who carry weapons and cultivate the fields are the same” (*Politics*, IV, 4, 15).

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Are the Developed Hillforts of Southern England Urban?

Niall Sharples

In recent years the hillforts of Britain are not normally incorporated into discussions of European urbanisation. Their role as central places and redistribution centres has been the subject of sustained and detailed criticism by a variety of scholars. This should not obscure the fact that some British hillforts are very large, densely packed settlements that were occupied for many generations. They control large agricultural hinterlands which appear to be devoid of contemporary settlements. To most casual observers these sites would appear to be more similar to contemporary towns than any other form of settlement. These hillforts therefore challenge our understanding of what a town might be and should direct our attention away from the simplistic evolutionary approaches to urbanisation that dominate many discussions. This paper will consider the issues involved by examining the 'developed' hillforts of Southern England and will look in particular at the evidence from Maiden Castle, Danebury, Hambledon Hill and Ham Hill.

Introduction

There are two principal stimuli for this paper. The first is my current participation in the exploration of the hillfort at Ham Hill in Somerset. The second is the increasing number of new detailed surveys of developed hillforts in Southern England. Both these stimuli are providing a wealth of information on the nature and significance of the hillforts of Southern England.

Ham Hill is the largest hillfort in Britain (Forde-Johnston 1976: 93) and at 88 ha is more than double the size of the hillforts at Maiden Castle, Hod Hill and Hambledon Hill, which are considered to be amongst the most substantial and impressive in Britain (Sharples *et al.* 2012). A naturally well defined plateau and spur was completely enclosed by ramparts which in places consist of up to three lines of bank and ditch. In their best preserved locations the difference in height from the base of the infilled ditch to the top of the eroded rampart is over 3.5 m (RCHME 1997). Excavations have revealed at least four major phases of construction existed and that these include elaborate dry stone revetments

and in the final phase a stone wall. The circuit of the inner rampart was just under 5 km and indicates the construction of this hillfort was a major undertaking which required the mobilisation of a substantial number of people.

The relatively flat plateau that forms the summit of the hill appears to be extensively occupied (Fig. 20.1). A geophysical survey, begun by GSB Prospection Ltd and recently completed by English Heritage, revealed a dense concentration of features which can be broken down into several distinct phases. The earliest structures appear to be field boundaries which form a coaxial system that sweeps across the plateau area. This is overlain by features, such as circular houses and grain storage pits, which are associated with the occupation of the hillfort. This occupation is divided by a major road which runs between the two hillfort entrances, additional roads appear to swing out from this principal road to allow access to the areas closest to the northern and southern ramparts. Oriented on the road system are a number of enclosures and these are clearly contemporary or later than the hillfort occupation.



Fig. 20.1: An interpretive plan of the internal occupation of Ham Hill, Somerset (author)

Excavation in the southwest corner (Leivers *et al.* 2006; McKinley 1999; Slater & Brittain 2011) has confirmed that the interior is densely occupied. Settlement evidence includes large numbers of grain storage pits frequently found in clusters, roundhouses defined by eaves drip gulleys, and isolated post-built structures. These mostly belong to the 2nd–1st centuries BC and are contemporary with one of the large rectangular enclosures which despite an elaborate entrance appears to be unoccupied. The evidence indicates a dispersed settlement which though not as dense as found in some hillforts, nevertheless indicates the complete occupation of the enclosed area. The enclosures appear to be contemporary and indicate differentiated space that had a special significance.

On a European scale Ham Hill has to be considered a major settlement (Fig. 20.2). A comparison with the well known *oppida* of the Titelberg in Luxembourg, Hrazany and Stare Hradisko in the Czech Republic indicates that these

settlements are substantially smaller than Ham Hill and are only slightly larger than the hillfort at Maiden Castle. Only the exceptionally large *oppida* such as Mount Beuvray, Stradonice and Manching are substantially larger than Ham Hill (Collis 1984).

The scale of the hillfort at Ham Hill suggests a reconsideration of the status and significance of the developed hillforts of central southern England is necessary. In recent years these settlements have normally been excluded from the discussion of the origins of urbanism in non-Mediterranean Europe. Collis considers “these sites to be below the urban threshold, representing a ‘dead-end’ rather than a stage in the process towards urbanisation” (Collis 1981: 68). Attention has most often been focused on the continental *oppida* that appear in the last two centuries BC but in recent years the Late Hallstatt *Fürstensitze*, such as the Heuneburg, have been considered to fulfil many of the requirements of an urban settlement.

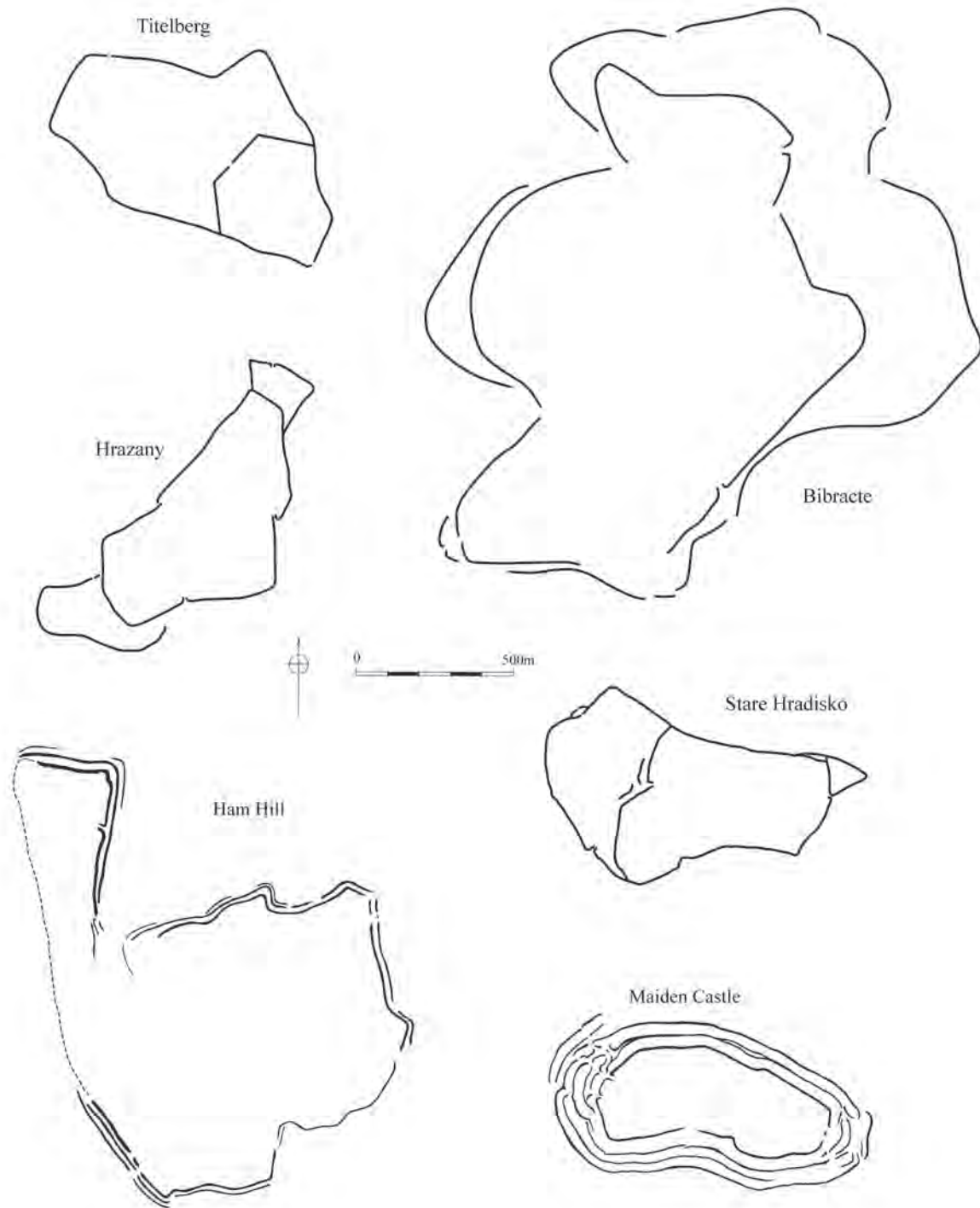


Fig. 20.2: A comparative plan of developed hillforts of Maiden Castle and Ham Hill and the Oppida of Titelberg, Hrazany, Stare Hradisko and Bibracte (author)

The dismissal of hillforts as a dead-end by Collis seems bizarre as most of the accepted urban phenomenon of the succeeding millennia could also be dismissed as dead ends. In Britain Roman towns were systematically abandoned in the 5th century AD and do not seem to have formed a

prototype for later Anglo-Saxon towns. Similarly medieval towns were very different to the industrial towns that developed in the 18th and 19th centuries and these likewise have had to be transformed and in some cases completely rebuilt to function in the post-industrial age we currently

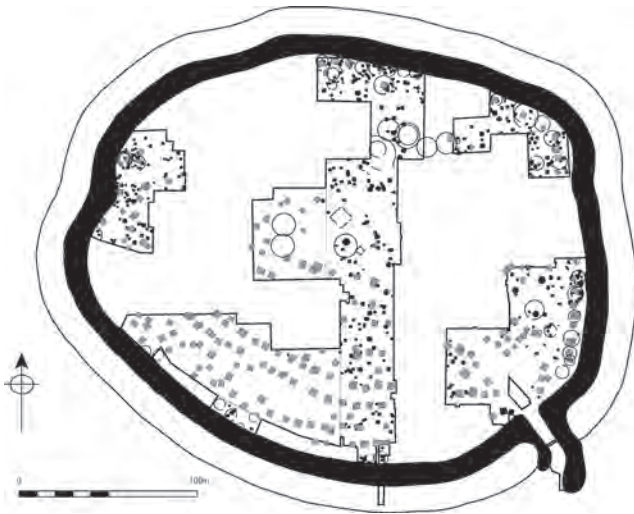


Fig. 20.3: A plan of the Middle Iron Age occupation of the developed hillfort of Danebury, Hampshire (after Cunliffe 1995)

inhabit. As Collis himself notes ‘If hillforts are towns, they are as far removed from the pre-industrial town as the pre-industrial town is from the post-industrial’ (Collis 1984: 2). I think we should reconsider the significance of large hillforts because even though many people may not accept that they conform to a template of urbanism as a central place that does not preclude their being related to a broader concept of the urban.

Danebury

I will begin by providing a brief outline of the characteristics of the developed hillforts of Southern England. This term was created to distinguish the more massively defended hillfort that characterise the Middle Iron Age in Southern England (Cunliffe 1984a: 24–27). They were defined as having “a strongly-constructed defensive circuit, adopting the Glacis principal ... and an entrance approached by a long corridor usually ... created by turning the rampart-ends inwards and siting the gate at the inner end. Some forts were, however, more elaborate with multiple lines of defence and complex entrance earthworks and ... there was also a considerable variation in size” (Cunliffe 1984a: 27). Some of the hillforts derive from simple small Early Iron Age hillforts but others are new foundations in the Middle Iron Age.

The best documented hillfort in Southern England is Danebury in Hampshire, which was extensively excavated by B. Cunliffe throughout the 1970 and 1980s (Cunliffe 1984b; 1996; Cunliffe & Poole 1991). This is not the largest or most elaborately defended hillfort in Southern England. It qualifies as a developed hillfort because it has an elaborate entrance, a substantial heightened inner rampart and an

additional outer rampart. However, the inner rampart only encloses an area of 5.3 ha and the much larger area enclosed by the outer rampart appears to be unoccupied. It is not the smallest developed hillfort in England but it is certainly among the smaller examples of the form.

The other reason for including this hillfort in the category of developed hillforts is the density and nature of the settlement evidence from the interior (Fig. 20.3). In contrast to many simple Early Iron Age hillforts this hillfort was packed with the evidence for settlement; in particular grain storage pits, rectangular post built structures (4-posters) and roundhouses. The density of features was so great that the proposed total excavation of the hillfort had to be abandoned. Not only is the settlement densely occupied but the site has produced one of the largest assemblages of artefacts and ecofacts from the British Iron Age. The quality of the database makes this the one of the key sites for interpreting the European Iron Age (Kristiansen 1998: 302–305).

The size of the excavated area is important because it allows us to talk with confidence about the layout of the settlement, to quantify the principal settlement features and to identify unusual features, such as potential shrines in the centre of the enclosure. The size of the finds assemblage is also important as it enables us to chart significant changes through time (Osgood in Cunliffe 1995: 204–206). The principal features which were highlighted by the excavations are the increasingly structured and ordered settlement. This is very clearly depicted in the plan (Fig. 20.3), which shows the concentration of 4-post structures arranged along the roads that transect the southern part of the interior and the lines of houses that are found in the area immediately behind the northern rampart. The uniformity of the houses found in these rows is one of their most striking features as is the relatively unimpressive nature of the structural elements. Most houses have an outer wall diameter that lies between 4.5 m and 10.5 m and they are largely woven wattle without any substantial timbers (Sharples 2010: 196, 204–205). There are no substantial houses that could be regarded as high status residences within the hillfort at Danebury, though there is evidence for a cluster of unusual buildings, possibly shrines, near the centre of the hill.

Cunliffe has undertaken some analysis of the population that might have occupied the hillfort. He suggests two formulas that can be used to estimate population size. One estimate is based on the size of the settlement and suggests “that $P=146\sqrt{A}$ where P is population and A is the total area of the settlement in hectares” (Cunliffe 1983: 106). An alternative method is based on the number and size of the houses $P=A/10m^2$ “where A is the total floor area of all contemporary dwelling units in square metres” (Cunliffe 1983: 106) based on the estimated presence of 53 houses and the average floor area of the houses of 38.5 sq m. The former estimate provided a figure of 335 people the latter a figure

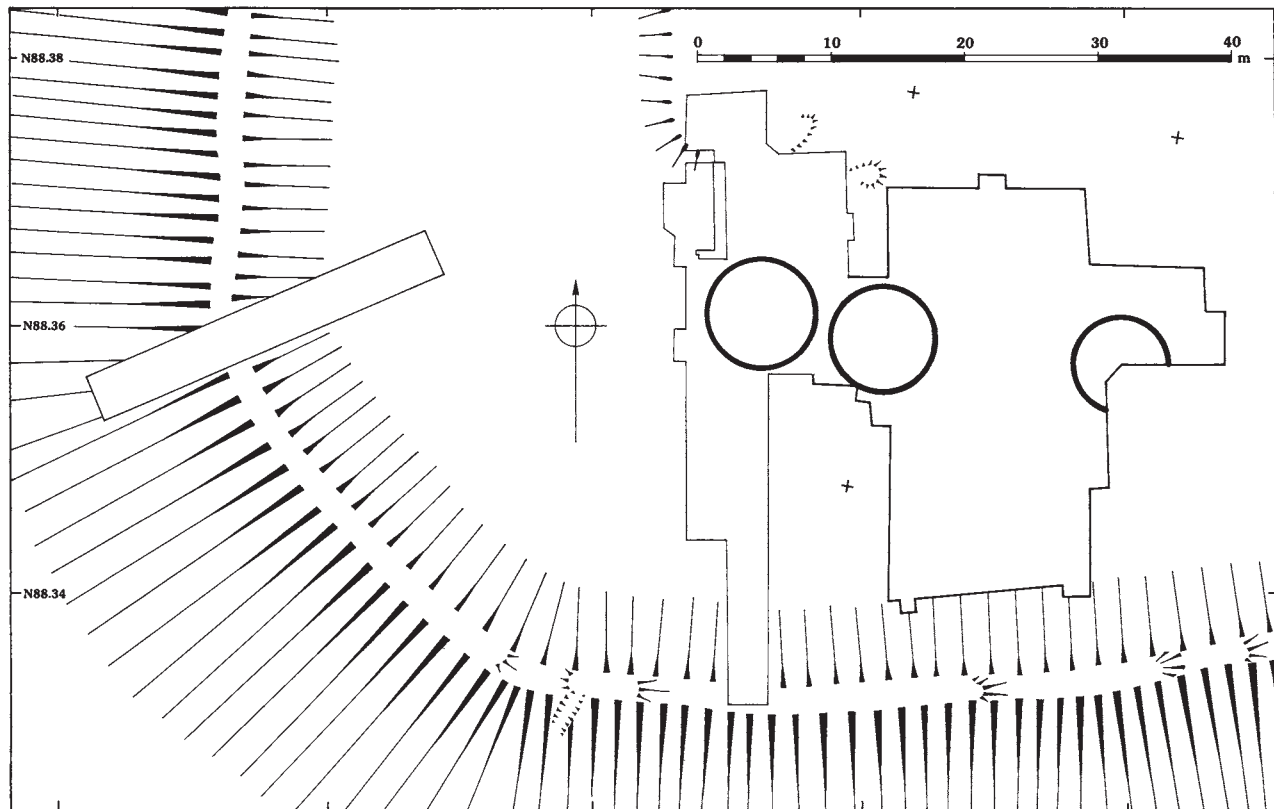


Fig. 20.4: A plan of the area excavation in the south west corner of Maiden Castle (after Sharples 1991a)

of 204 people and Cunliffe tends to refer to the population as lying somewhere between the two around 270 people.

This figure may be a bit low. The formula used by Cunliffe to calculate the number of people occupying a house was based on an estimate of one person per 10 sq m worked out by Narrol (1962) and this is now generally regarded as too low. More recent and more extensive analysis has come up with figures that tend to cluster round 6 sq m per person (Cassellbury 1974). If this figure is used to recalculate the Danebury population then it increases the estimate of the number of people occupying the hillfort to around 340, which is very similar to the estimate of 335 people based on the area enclosed.

This is probably the most accurate population estimate we have for a hillfort in Southern Britain but it is important to remember Danebury is a very small hillfort. Most of the developed Middle Iron Age hillforts are much larger and recent work has revealed the density of houses in these sites is as great if not greater than we see at Danebury.

Recent surveys

Large excavations of developed hillforts are comparatively rare in Southern England and very few of the largest hillforts

have been extensively excavated. One of the largest and most elaborately enclosed hillforts is Maiden Castle in Dorset. This hillfort started life as a small 6.4 ha hillfort in the Early Iron Age and was considerably expanded in the Middle Iron Age to 19 ha when it was surrounded by three to four lines of substantial ramparts and ditches.

The excavation of the interior has been relatively limited comprising two areas; in the centre of the original Early Iron Age hillfort and in the southwest corner of the expanded Middle Iron Age fort (Sharples 1991: fig. 45). Both revealed dense settlement evidence and the density of settlement is confirmed by many small trenches scattered across the interior. A geophysical survey also conclusively demonstrated that the whole of the interior was densely occupied (Sharples 1991: fig. 30). The most coherent pattern of occupation was visible in the southwest corner of the hillfort where a row of small houses very similar to those visible at Danebury was identified in the 2nd century BC. The pattern in this area suggests three houses would occupy an area approximately 50 × 50 m (Fig. 20.4). We might therefore expect about 207 houses in the hillfort and, assuming the average house size is comparable to that identified at Danebury, approximately 1300 people might be present. This seems a bit of an underestimate to me.

Hambledon Hill is an exceptionally well preserved



Fig. 20.5: An interpretive plan of the Developed Hillfort of Hambledon Hill (after RCHME 1996)

hillfort located in central Dorset on the northern edge of the chalk overlooking the Blackmore Vale and the river Stour. The site is almost completely unexcavated but it is exceptionally well preserved. The narrow sinuous form of the promontory on which the hillfort was built limited the amount of flat land present and restricted cultivation in the medieval period. The steep slopes required that houses were constructed on artificial terraces cut into the slope of the hill. These terraces survive as visible earthwork features and provide a reasonably clear indication of the distribution and number of houses in the interior of the fort (Fig. 20.5).

A detailed survey was completed in the 1990s (RCHME 1996). The hillfort enclosed an area of 12.3 ha and comprises at least two or possibly three phases of expansion. A minimum number of 365 building platforms were identified and using the calculations detailed above this could indicate a population as high as 2296 people. However, this figure is open to much more uncertainty than the estimates from Danebury and Maiden Castle. It is impossible to estimate the number of contemporary structures and as the expansion of the hillfort indicates a prolonged period of occupation it is possible that the platforms were not all occupied at one time, though it is theoretically possible. It is also possible that platforms were created that were not occupied by houses or even structures. Nevertheless, the continued expansion of the hillfort suggests a desire for extra space to accommodate an ever increasing population.

The hillfort at Hod Hill lies only 1.5 km to the southeast

of Hambledon Hill and I have previously argued that it may represent a relocation of the community of Hambledon Hill who found the sinuous nature of that hill inhibited the development of that settlement (Sharples 1991b). The two ramparts and ditches enclose a rectangular area of 22 ha. The site was partially occupied by a small Roman fort and this destroyed the northwest corner of the hillfort. A large part of the interior was ploughed in the early 20th century and visible archaeology survives only in a small segment of the southeast corner. Nevertheless, many houses, pits and enclosures are identifiable as upstanding features in this area. A limited amount of excavation was undertaken by Richmond in the 1950s (Richmond 1968) and this suggests that these features belong to an occupation in the last two centuries of the 1st millennium BC.

Our understanding of this hillfort has been transformed by a recent geophysical survey (Stewart 2008). This survey provides a very detailed picture of the eastern half of the hillfort; the western half appears to have been substantially damaged by cultivation, the construction of the Roman fort and by large scale terracing possibly associated with the creation of a parade ground. The survey confirms the evidence of upstanding archaeology and the clarity is sufficient to reveal the post-holes of granaries that lined the main road across the interior (Stewart 2008: fig. 4). The layout on the east side was clearly planned and comparable with what we have seen at other sites with houses and granaries arranged in lines along routes that traverse the interior. I estimate approximately 100 independent houses survive in the east half of the hillfort (Fig. 20.6). If we assume a similar number of houses were originally present in the west side then using the estimates discussed above a population of approximately 1258 people appears to have occupied this fort.

Hamlets, village or town

It is clear therefore that the Developed Hillforts of Southern England are significant settlements. They are densely occupied and have substantial populations of people living within the boundary. They also have a dependent population in the surrounding region who probably came to the hillfort on an annual basis and whose food reserves are stored here. The economic basis of these communities is resolutely agricultural and is based on an increased production of cereals and the maximisation of sheep herds (Jones 1996; Maltby 1996; Stevens 2003). Furthermore, for most of the hillforts occupation there is little sign of specialist production of complex objects (*contra* Cunliffe 1984a), exchange networks are strictly limited and internal hierarchies are suppressed (Marchant 1989; Sharples 2010; Stopford 1987). Competitive symbolic behaviour appears to be restricted to the construction of larger and more complex hillfort defences (Sharples 2007).

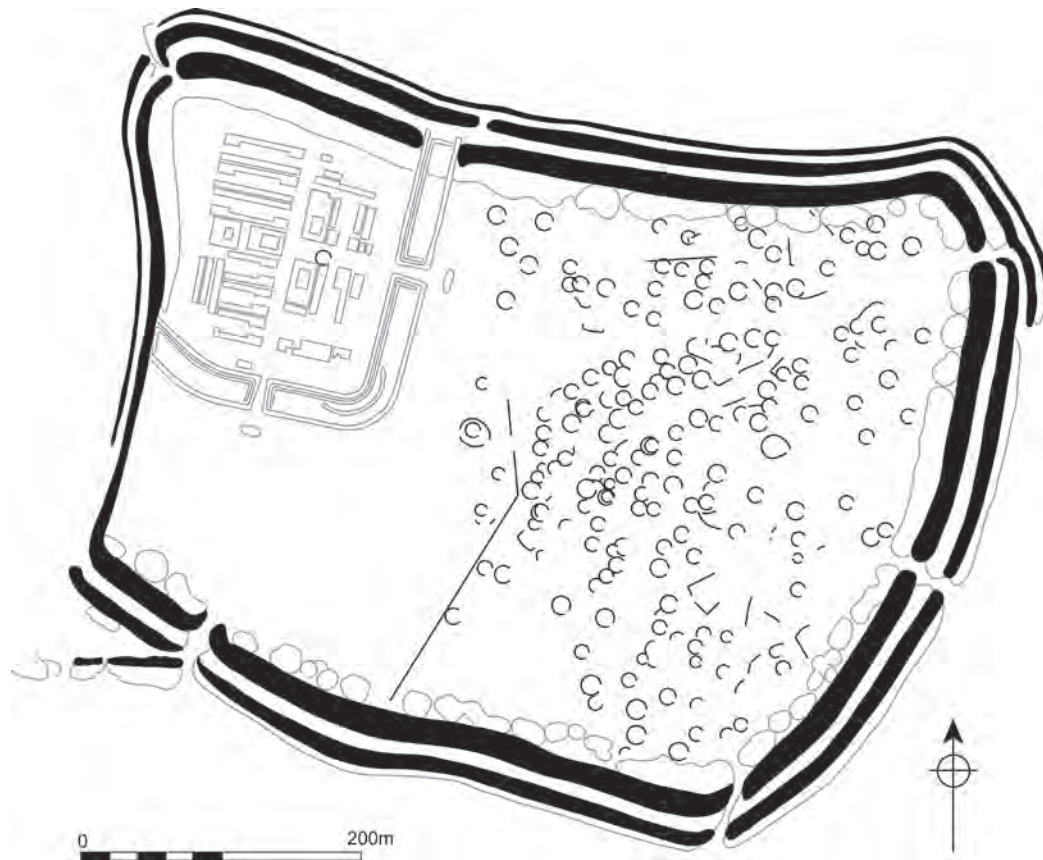


Fig. 20.6: An interpretive plan of the Developed Hillfort of Hod Hill (based on information in Stewart 2008 and Richmond 1968)

These characteristics clearly place Developed Hillforts in an ambiguous position vis-à-vis the idea of urbanism. Commercial exchange and specialised craft production is often regarded as critical when it comes to defining a town (Childe 1950) as these provide evidence that the town acted as a central place and served the surrounding populations who were dependent on it for access to critical resources. Evidence for complex exchange patterns and specialised industry is searched for, and argued over, when we discuss the urban character of the *oppida* in the Late Iron Age and the *Fürstensitze* of the Early Iron Age (Collis 1984: 2–4). The lack of evidence for exchange and production in Developed Hillforts has been used to exclude hillforts from the debate.

If we exclude Developed hillforts from the class of settlements labelled towns it leaves us with the problem of defining what they are. How should they be classified? The density and permanence of settlement is much greater than preceding settlements and is on a different scale to settlement in the surrounding landscape. Furthermore, any individual who walked into a hillfort in the Iron Age would have been swamped by a barrage of sounds, smell and sights that would have overwhelmed them. The sensory experience

of a Developed Hillfort contrasted dramatically with the relatively homogeneous and unoccupied countryside that surrounded the hillforts.

The contrast between the sensory overload of the hillfort interior and the deserted calm of the surrounding countryside was exacerbated by the design of the Developed Hillforts. The ramparts were deliberately placed to restrict visual access to the interior and the increasing complexity of the entrance deliberately extended the transition from exterior to interior perhaps to provide time that enabled the visitor to brace themselves for the stimulus of the interior or perhaps to prolong the nervous tension that entrance entailed. It also provided an opportunity to monitor the visitor and assess their threat to the community.

In any view of these settlements the contrast between a developed hillfort and a normal farmstead must be seen as dramatic and enormous and it warrants the consideration that these settlements are of a different order of significance. The problem is to place them in a framework that moves from hamlet to village to town to city which envisages that each stage is a sign of evolutionary complexity which inevitably leads to an ideal form of human dwelling the contemporary city. To do so assumes a homogeneity in the

different settlement types which is problematic and that each stage leads automatically to the next and cannot be reversed or abandoned without it being a collapse that reflects the inadequacy of the settlement form.

The ancient town

The idea of the homogeneity of the ancient town has been challenged by a number of authors. G. Woolf (1993) demonstrated that there was a fundamental variability in the nature of the archaeological evidence from the different *oppida* scattered across Western and Central Europe in the Late Iron Age. Large numbers of these *oppida* failed to demonstrate evidence for: long distance exchange networks, industrial activity that was markedly different from that present in smaller settlements in the surrounding areas and evidence for public spaces where the body politic could meet and make decisions. He concluded that *oppida* could not be regarded as a coherent category of sites and failed to meet many of the key criterion of urbanisation.

Woolf essentially uses two criteria to define the urban qualities of continental *oppida*. First that they must be part of a settlement system which “must exhibit a degree of functional differentiation and specialisation between sites” ... “specialisation must involve a degree of ranking which expresses power differentials within society connected with the production and consumption of goods”; second “intra site organisation be different from that of other sites, and that any differences reflect a hierarchical distribution of functions within the settlement system, rather than a heterarchical one” (Woolf 1993: 227). However, he acknowledges that “this reflects a search for the familiar features of classical cities and medieval towns ... and as such is ethnocentric” (Woolf 1993: 227). Furthermore, these assumptions are based on an idealised Mediterranean city, which has largely disappeared in recent years due to an increasingly detailed work of archaeologists and historians.

Recent work on Mediterranean cities has demonstrated that these vary enormously in size, the degree of planned layout, the relative significance of agriculture and manufacturing and the importance of trade (Morgan & Coulton 1997: 128–9). Hansen (2006: 73) has argued that the average size of a Greek *polis* is 65 ha and a median size of 40 ha with some examples as small as 4 ha. The large city states such as Athens and Sparta are diametrically opposed in many of their fundamental characteristics but neither can be seen as particularly typical of the Greek city. Both cities are exceptional in having a large element of the dependent population living in the surrounding countryside. In most Greek cities the bulk of the population of the *polis* lived inside the city and survived by agricultural production in the surrounding countryside (Hansen 2006: 71). They were generally self-sufficient and markets were largely concerned

with the internal distribution of food and tools and not the import and export of commodities. Many of the other supposedly classic requirements of an urban centre are also clearly not visible in many *poleis*, including a grid layout, separation into functionally distinct areas, elite centres and communal meeting places.

Perhaps we should discard the notion of an ideal urban community and stop trying make our settlements conform to this ideal. The diversity is simply too great and it would be better to seek out much simpler common denominators. To my mind the key distinction is the relative size of the community and this brings me to the sociological definition of a city as “a relatively large, dense and permanent settlement of socially heterogeneous individuals” (Wirth quoted in Dickens 1990: 45). The crucial point of urban communities was to bring people together who had previously lived in dispersed settlements scattered throughout the landscape. The urban communities were primarily designed to create a new way of living.

The crucial point of similarity between developed hillforts, *oppida* and the Greek *polis* is the dramatic contrast between the densely occupied inside and the sparsely populated countryside. In such a situation we have to consider the social mechanisms that enable people to live in such close proximity to each other. This to my mind is the really significant issue and challenges the latter part of Wirth’s definition. It is clear that in many early urban communities there is a conscious reduction of obvious hierarchical differences and this is particularly clear in the Developed Hillforts, such as Danebury. Instead of social heterogeneity we see social homogeneity. A similar pattern is also visible in the regimented rectangular houses that fill the interior of settlements, such as Biskupin in Poland and Entremont in France (Armit *et al.* this volume). In the historical society of Ancient Greece the development of communal decision making, or democracy, becomes a defining feature of the *polis* but it is possible that similar decision making processes existed in Developed Hillforts.

If we get away from the concern with the classic definition of a city we might be better able to discuss the mutual similarities that link these settlements. Indeed, there are many similarities between the Developed Hillfort and the *polis* and a detailed comparison would help to illuminate the characteristics of both areas.

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