

# Bringing the Country to Town

## *'Rurban' Landscapes in Iron Age Europe*

**ABSTRACT** Research on Iron Age agglomerations has a long tradition, but only recently have the environs of these temperate European central places begun to attract greater attention. Expanding the focus from site cores to their wider landscapes challenges the traditional dichotomies of rural and urban. This can also be observed in the internal structure of many complexes, which, despite their complexity and manifold functions, often included rural-like settlement structures. Here, we argue that the concept 'rurban' encapsulates the resemblances many Iron Age centres had with elements of farmed landscapes, and that they should be considered within the framework of low-density urbanism. We argue that comparative analogies help to expand our interpretative frameworks, while new fieldwork strategies may lead us to a better understanding of the use of space within these agglomerations.

**KEYWORDS** Iron Age Europe; *Fürstensitze*; *oppida*; rurban; low-density urbanism

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The prevailing sentiment, popular as well as scholarly, has always been to consider town and country one of the classic dichotomies of culture.

(Kostof 1989, 107)

### Introduction: Settlement Nucleation and Dispersal in Iron Age Europe

The Iron Age in central-western Europe (c. 800 BC to the beginning of the Common Era) witnessed the development of numerous large agglomerations, some of which can be classified as cities or towns. While traditionally most scholarship regarded the second- and first-century BC fortified sites, known as *oppida*, as the 'earliest towns north of the Alps' (Collis 1984), there is increasing recognition that sites with urban characteristics had already developed in previous centuries, for example some of the so-called *Fürstensitze* (princely seats) of the sixth and fifth centuries BC (Krause 2008; 2010; Fernández-Götz and Krause 2016b; Krause and others 2016; Zamboni, Fernández-Götz, and Metzner-Nebelsick 2020). Recent research has also highlighted the importance of large open agglomerations, which began to appear mainly from the third century BC and which often became important production and distribution centres (Salač 2009; Fichtl and others 2019) (Fig. 6.1).

The urban or non-urban character of temperate European agglomerations has been a matter of considerable debate. While it seems clear that not all *Fürstensitze* or *oppida* should be classified as urban and that contextual analyses are always required, research is increasingly supporting the interpretation that a significant number of these sites can be regarded as cities/towns, at least during part of their settlement biography (Fichtl 2005; Fernández-Götz, Wendling, and Winger 2014). This is based on features

**Tom Moore** (t.h.moore@durham.ac.uk) is Professor of Archaeology at Durham University. His research focuses on the western European Iron Age, and he has conducted major field projects at Iron Age *oppida* in Britain and France.

**Manuel Fernández-Götz** (M.Fernandez-Gotz@ed.ac.uk) is Reader and Head of the Department of Archaeology at the University of Edinburgh. He has published extensively on Iron Age and Roman Europe, conducting fieldwork at sites such as the Heuneburg and Monte Bernorio.



Figure 6.1. Location map showing European Iron Age sites mentioned in the text. Map by authors.

such as hosting a considerable population that can often be estimated in the thousands, providing evidence of some preconceived planning, and bringing together different categories of population and activities.<sup>1</sup> For example, the size of some *Fürstensitze* has been significantly enlarged by fieldwork results of the last two decades, with the Heuneburg (south-western Germany) extending over *c.* 100 ha in the sixth century BC with an estimated population of about 5000 inhabitants (Krause and others 2016; 2019), and Bourges (central France) reaching even larger dimensions in the fifth century BC (Ralston 2010; 2020). In the case of the Late La Tène *oppida* there has been a significant surge in the identification of

public spaces for political and/or religious purposes (Metzler, Méniel, and Gaeng 2006; Fernández-Götz 2014b; Fichtl 2016), with the sites of Corent in central France (Poux and Demierre 2016) and Titelberg in Luxembourg (Metzler, Gaeng, and Méniel 2016) probably being the best-known examples.

It is increasingly apparent from this recent research, however, that many of the large agglomerations of the European Iron Age do not follow recognized trajectories of urbanism elsewhere, nor do they simply fit models of settlement growth (see Fletcher 2007; Fletcher, White, and Dharmendra, this volume). In this sense, they are increasingly recognized, as this volume explores, as part of a wider set of large settlements and social centres that do not fit traditional concepts of ‘the city’ (Moore 2017a; Fernández-Götz 2018). It becomes increasingly important, therefore, to consider how the large

<sup>1</sup> For a summary of criteria and definitions, see Smith 2016; 2020; Fernández-Götz 2020.

agglomerations of the Early and Late Iron Age compare with other ‘urban anomalies’ and what have been termed mega-sites (Gaydarska 2017), and to what extent they may be part of broader phenomena, such as low-density urbanism. As our definitions of urbanism expand and are increasingly contextualized (Smith 2007; 2020), we focus here on ‘urban functions’ as settlements containing ‘activities and institutions [...] that have an effect beyond the borders of the settlement’ (Smith 2020, 17), although this need not define urbanism itself. More important than discussing if an individual site should be classified as urban, non-urban, or proto-urban is to acknowledge the existence of wider processes of centralization and settlement nucleation, which were often followed by periods of decentralization and deurbanization (Salač 2014; Fernández-Götz 2018). The non-linear character of Iron Age urbanization is one aspect that has attracted more attention in recent years (e.g. Stoddart 2017). A good example of ‘ephemeral’ or ‘fragile’ urbanism is the end of the *Fürstensitze* between 450 and 400 BC (Krause 2008; Ralston 2010; Fernández-Götz and Ralston 2017). These cyclical dynamics of fusion and fission are by no means exclusive to the first millennium BC (Bintliff 1997; Müller 2016), and require further exploration in order for us to understand the different push factors, as well as the structural elements, that lie behind them (cf. Fernández-Götz 2020).

We should also remember that, even in those regions and periods where larger agglomerations emerged, the European Iron Age remained a fundamentally rural world, in which most of the population continued to live in hamlets and farmsteads (Malrain, Matterné, and Méniel 2002; Cowley and others 2019). In fact, the interplay between the ‘rural’ and the ‘urban’ is key to our understanding of Iron Age societies, but still requires more extensive examination. In general terms, Iron Age research has traditionally focused predominantly on fortified hilltops and burials (particularly elite graves), whereas the analysis of rural sites, particularly smaller ones such as farmsteads and hamlets, has received less attention. This situation is changing, however, due to both the exponential rise of development-led archaeology, which has allowed for large transects of the landscape to be investigated, leading to the discovery of thousands of small rural settlements across Europe, and an increasing interest in the environs of the central places. In this paper, we will explore the interconnection between Iron Age central places and their environs, as well as challenge some of the dichotomies between what are usually considered ‘rural’ and ‘urban’ elements. In particular, we will address the following aspects:

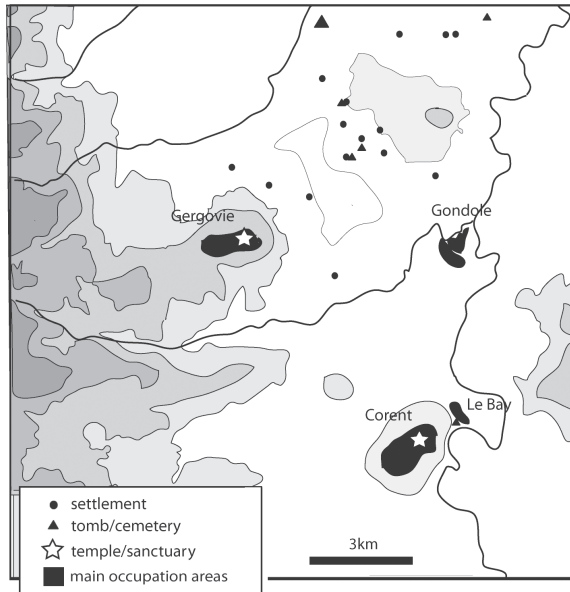
- the increasing research focus on the environs of central places, which is leading to a reconsideration of many traditional assumptions;
- the inclusion of rural-like settlement forms within large complexes, which is part of a phenomenon that we characterize as ‘rurban’;
- the practice of farming within agglomerated settlements and in their immediate vicinity, and its implications for our understanding of pre-industrial urbanism;
- the application of the concept of low-density urbanism to Iron Age complexes;
- the use of analogies with low-density examples from other parts of the world, especially Africa;
- and finally, the development of future fieldwork strategies, particularly for the investigation of apparently ‘empty’ spaces.

### Beyond Walls: Expanding Research from Sites to Landscapes

Where once the debate on Iron Age monumental complexes revolved around the extent to which they were comparable to, or influenced by, classical urbanism (Woolf 1993; Buchsenschutz 2000), recent discussions have increasingly emphasized their divergence from the supposed norms of nucleated urbanism (Fernández-Götz, Wendling, and Winger 2014; Moore 2017a; Fernández-Götz 2018). Changes in perceptions of these complexes have been both methodological and conceptual. Conceptually, an increasingly blurred distinction in the scale of Iron Age complexes, particularly regarding the similarities and differences between Early Iron Age *Fürstensitze* and Late Iron Age *oppida* (Sievers 2010), raises questions as to whether our terminologies are misleading, obscuring Iron Age settlement trajectories and some of these monuments’ commonalities that may reflect broader aspects of Iron Age societies.

Methodologically, long-standing assumptions about the form of Iron Age complexes have constrained understanding of their extents and relationship with their hinterlands. Studies of hillforts, *oppida*, and *Fürstensitze* have often assumed that their earthworks or walls clearly defined their spatial, social, and symbolic limits, drawing from Roman concepts of town walls as symbolic boundaries and from anthropological concepts of liminality. While the labour consumed in the construction of monumental earthworks and their symbolic role were potentially fundamental (Rieckhoff 2014; Fernández-Götz and Krause 2016a), the extent to which they

## Corent-Gergovie



## Bibracte

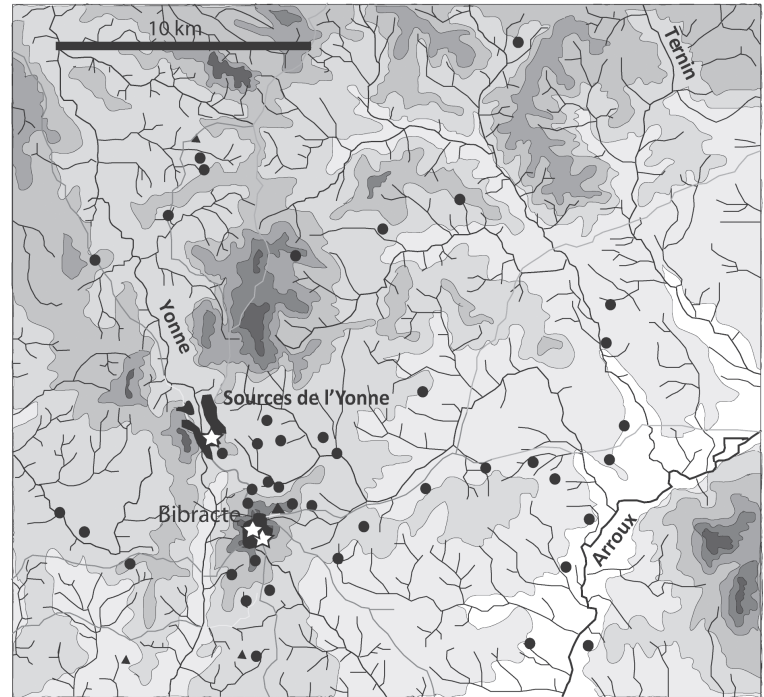


Figure 6.2. Plan of the *Bibracte* and Sources de l'Yonne complex and the apparently multipolar arrangement of Corent, Gergovie, and Gondole. Drawn by T. Moore, after Moore and others 2013 and Poux 2014.

simply defined the limits of settlements is more questionable. Since the late twentieth century, detailed surveys have sought to better understand the context of Iron Age centres, teasing out their relationships with other settlements and identifying possible sequences of nucleation and dispersal (e.g. Haselgrove 1996). Yet, only in the last few decades has systematic examination of the hinterlands of important Iron Age sites, such as the Heuneburg in south-western Germany (Krause and others 2016; Krause, Hansen, and Tarpini 2020) and *Bibracte* in central France (Creighton and others 2008; Barral and Nouvel 2012), begun to take place.

This recent work is radically altering our perspective on many of these complexes. Studies of individual sites are revealing that, for example, some were not focused solely on enclosed areas (Pion 2012). Thus, at the Late Iron Age *oppidum* of *Bibracte*, the discovery of the contemporary, unenclosed agglomeration of Sources de l'Yonne, extending over c. 120 ha and located 3 km to the north of Mont Beuvray (Moore and others 2013), indicates that the complex was represented by either two major foci, one enclosed and one not, or perhaps more likely a spread of occupation that existed between foci within a wider *Bibracte* complex (Moore 2017b). This can lead to new questions and interpretations, including in our assessment of information from classical sources. For example, when Caesar wrote about *Bibracte* in his account

of the Gallic Wars in the mid-first century BC, was he referring only to the fortified settlement on the mountain, currently known as Mont Beuvray, or was he encompassing within this name a much larger area that also included the site of Sources de l'Yonne (Haselgrove 2010, 100–01)? In the Auvergne, central France, recognition that in the first century BC the three *oppida* of Gergovie, Corent, and Gondole were partly contemporary suggests that they formed a single complex rather than discreet *oppida* settlements in their own right. This has been defined by Matthieu Poux (2014) as a 'multipolar town pattern' (Fig. 6.2) and by Patrick Pion (2012, 53) as an 'agro-ville'.

Elsewhere in Late Iron Age Gaul, dispersed complexes of this magnitude are not yet widely recognized. It is notable, however, that both *Bibracte* and Corent represent what were likely to have been two of the most important social centres in the first century BC, potentially constituting exceptional processes of development and acting as central places for the tribal polities of the Aedui and Arverni respectively. Nonetheless, these centres have also witnessed intense examination and many other Late Iron Age *oppida*, including those likely to have been of similar socio-political significance, such as *Uxellodunum* (Puy d'Issolud) in south-western France, are not as well understood and may yet provide similar evidence. It is also increasingly recognized that many enclosed *oppida* were related to nearby unenclosed settlements, and while most of the latter seem to have been their precursors (Barral and Nouvel 2012),

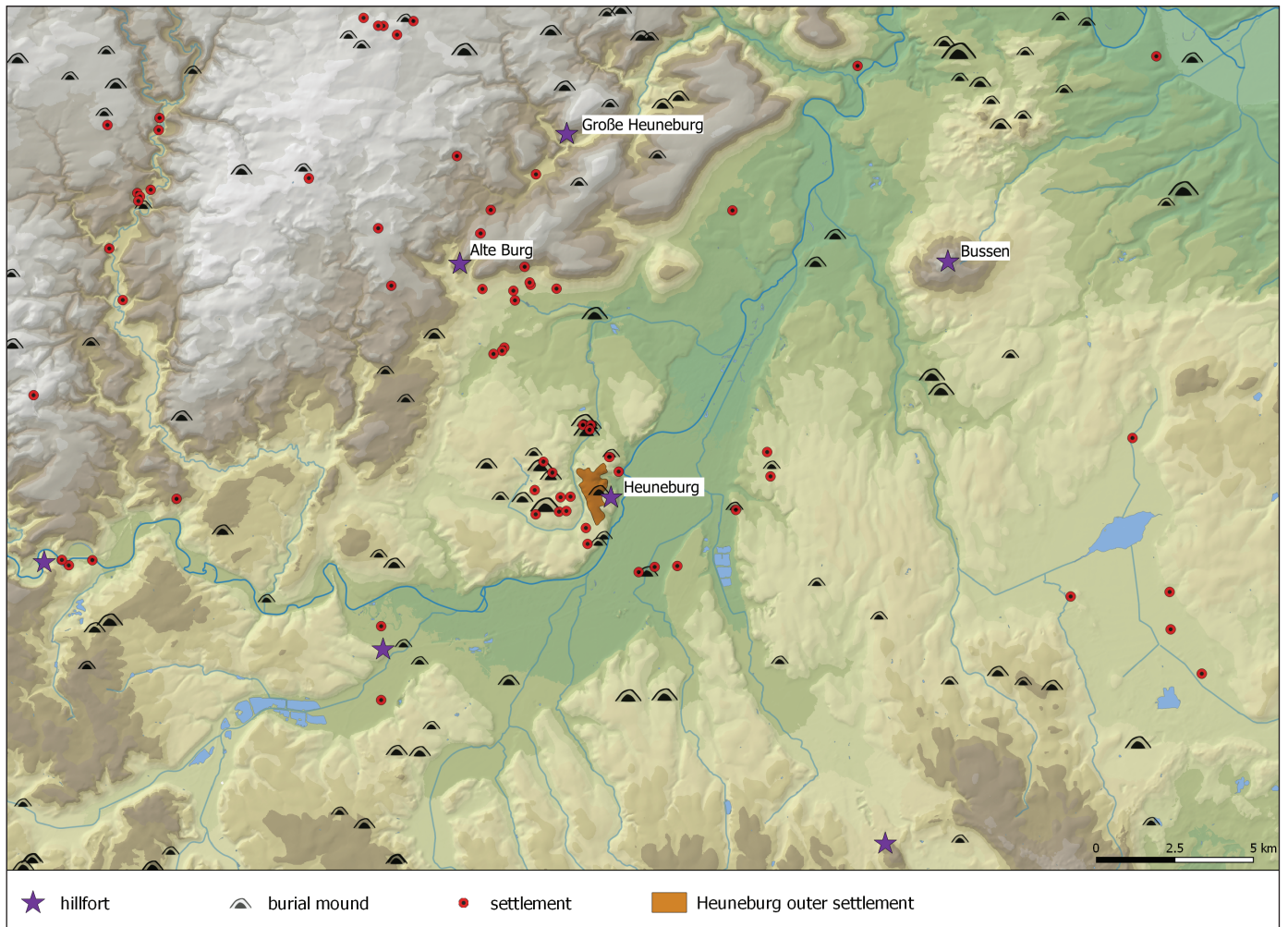


Figure 6.3. The environs of the Heuneburg with further hilltop sites, rural settlements, and burial mounds of the Hallstatt and Early La Tène periods. After Krause, Hansen, and Tarpini 2020.

more complex sequences may well emerge through detailed assessment of their chronologies and roles (Moore and Ponroy 2014).

Recognition of the more expansive nature of some complexes has also occurred at the Early Iron Age *Fürstensitze*. At the Heuneburg, research has long focused on the 3 ha of the so-called citadel or acropolis overlooking the Danube, but recent examination has revealed that the settlement complex was far larger, extending over 100 ha in the first half of the sixth century BC (Fernández-Götz and Krause 2013; Krause and others 2016). This included a complex extramural arrangement of farmstead-like compounds in the large outer settlement (*Außensiedlung*), which was separated into distinct quarters or neighbourhoods by substantial banks and ditches (Kurz 2012; Krause and others 2019). This outer settlement may have included *c.* 3500 inhabitants, the majority of the population, compared to *c.* 1500 in the enclosed area of the hilltop (*Burgberg*) and the lower town (*Vorburg*) (Krause and others 2016; 2019). Similar to Poux's suggestion for Corent-Gergovie,

it has also been argued that this and contemporary hilltop enclosures nearby (e.g. the Alte Burg, the Große Heuneburg, and the Bussen) were potentially perceived as part of an overall polity, rather than as distinct elements (Fernández-Götz 2020, 35–36; Krause, Hansen, and Tarpini 2018; 2020) (Fig. 6.3). This could suggest that dispersed, multipolar centres had deep roots in European Iron Age society.

The sixth–fifth-century BC settlement at Bourges was also much larger than previously considered. Investigation in recent decades has uncovered fundamental archaeological evidence of the Late Hallstatt and Early La Tène periods, predating in several centuries the *oppidum* of *Avaricum* described by Caesar in the mid-first century BC (Milcent 2007; Ralston 2010; 2020). In addition to the hilltop, there were contemporary settlement and production areas immediately outside the eastern ramparts and farther afield in the adjacent valley (Ralston 2020)

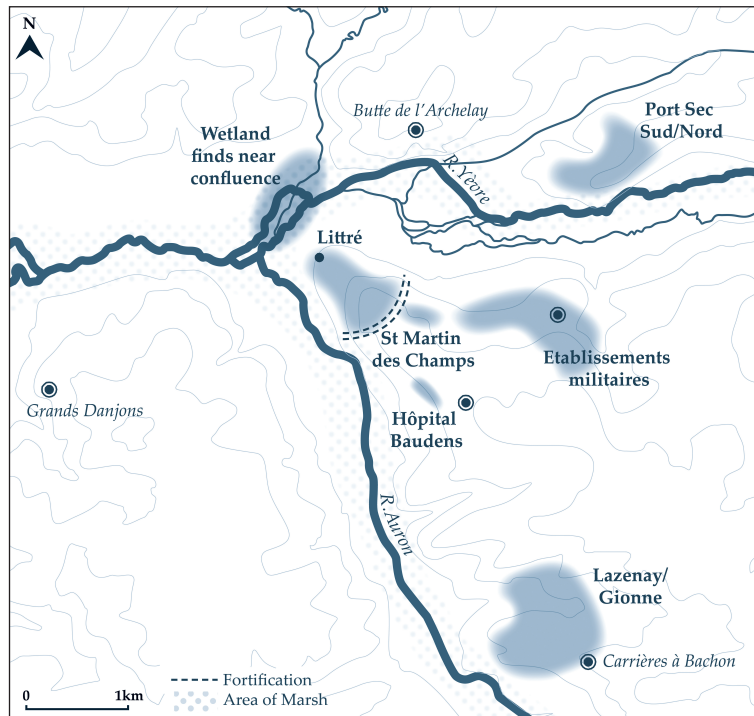


Figure 6.4. Plan of Bourges and surroundings in the fifth century BC. After Fernández-Götz and Ralston 2017.

(Fig. 6.4). Defining what was part of this complex is difficult as it included areas of marshland and other ‘open’ land between zones of occupation, but the overall area in the fifth century BC has been estimated at c. 200–50 ha, including significant evidence for craft production and trade with distant regions (Ralston 2020).

At Early Iron Age Vix, in central-eastern France, the settlement core on the plateau of Mont Lassois

was not densely settled, but dominated by a number of elaborate structures, most likely elite and/or ritual in nature (Fig. 6.5). Pierre-Yves Milcent (2014) has compared the habitation of the plateau to a grand farmstead rather than an urban or proto-urban centre. However, while there are some resemblances with rural-like estates, recent investigation of the large fortifications and evidence for settlement in nearby low-lying areas around the plateau may indicate a situation more similar to centres such as Bourges, although probably on a smaller scale (Chaume 2020). In terms of population, recent research estimates around 3500–5000 inhabitants for the Mont Lassois complex (Brun and Chaume 2021), thus being comparable in terms of demography to the Heuneburg during the mud-brick wall phase.

The size of settlements is often held up as a yardstick for urbanism, but examination of several Late Iron Age *oppida* and Early Iron Age *Fürstensitze* cited above has not only expanded their extent, but also raised questions as to the nature of their internal organization. Many consisted of a dispersed form, incorporating zones with low-density occupation and even large areas of landscape without built structures. This raises questions as to how their limits were defined and how these complexes should be described. Should the extramural, unenclosed settlements at Sources de l’Yonne related to *Bibracte*, or that at Port Sec related to Bourges, be regarded as suburbs, satellite settlements, or part of an interlinked whole? At the complex of Corent, if we consider the three enclosed *oppida* as nodal points in a larger complex, this could have encompassed several thousand hectares in the first century BC, most consisting of unbuilt space (Poux 2014).

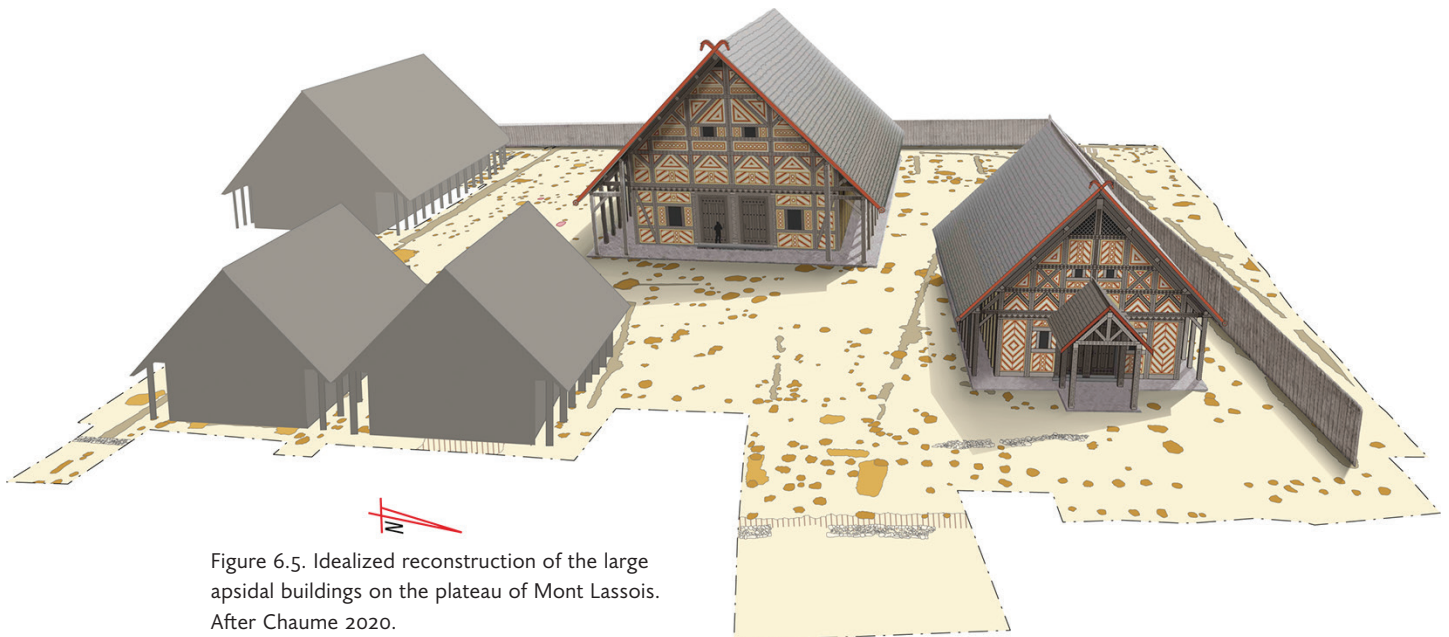


Figure 6.5. Idealized reconstruction of the large apsidal buildings on the plateau of Mont Lassois. After Chaume 2020.

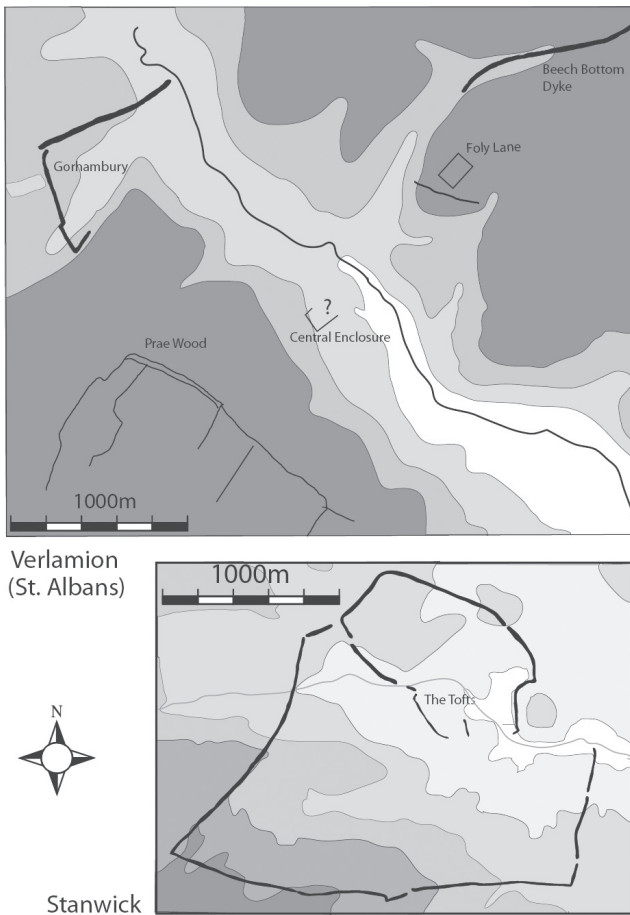


Figure 6.6. Plans of examples of polyfocal *oppida* in Britain. Drawn by T. Moore.

Open spaces, including farmland, woodland, and marsh, were in between more densely occupied areas at such complexes, although at other sites fieldwork suggests these may have sometimes included areas of settlement or activity that are hard to characterize (Moore and others 2013; von Nicolai 2017). At *Bibracte*, both Sources de l'Yonne and the settlement on Mont Beuvray appear to have developed around Late Iron Age sanctuaries (Fernández-Götz 2014b; Moore and Hoppadietz 2019). The similar material culture from both makes it hard to determine whether they had separate roles. For the complex of Corent, however, it has been suggested that the different elements served the complementary functions of an urban centre (port of trade; defensive stronghold; political and religious foci) (Poux 2014, 164). At both *Bibracte* and Corent, while different activities may have been dispersed across the different settlement areas, it is, however, hard to place these in a simple ranked hierarchy.

Similarly, at the Early Iron Age complexes it is problematic to assume that the settlement areas located outside the fortified citadels were somehow lower-status. For example, an impressive building of 320 m<sup>2</sup> floor area, interpreted as an elite building or

even 'palace', was located in the Heuneburg outer settlement (Verger 2008). At Bourges, although the unenclosed settlements included artisanal activities, such as metalworking, the presence of imported material across all parts of the complex suggests that distinctions between elite and lower-status areas may be simplistic (Ralston 2020, 369). A similar intermixing of artisan activities and (presumably high-status) imports has been recognized at Late Iron Age British *oppida* (Willis 2007, 121; Moore 2020). This reminds us that European Iron Age communities appear to have often combined feasting and ritual activities, alongside production and craftworking, without the clearly defined distinctions between high-status occupation and industrial areas that we often assume for urban centres elsewhere. While we have tended to think that open areas at such complexes were usually farmland (see below), it is also worth considering that some may have had other roles. These may have been for ritual; Milcent (2014), for example, has noted the rich finds from the wet marshy areas at Bourges. Or they may have been areas for periodic assembly, deliberately located between the more densely occupied areas, as perhaps at Corent. The implication is that many Iron Age agglomerations should be envisaged as contiguous but partly dispersed complexes, encompassing a range of settlement and activity areas that included zones of very low-density occupation as well as more nucleated elements. By their very nature, these com-

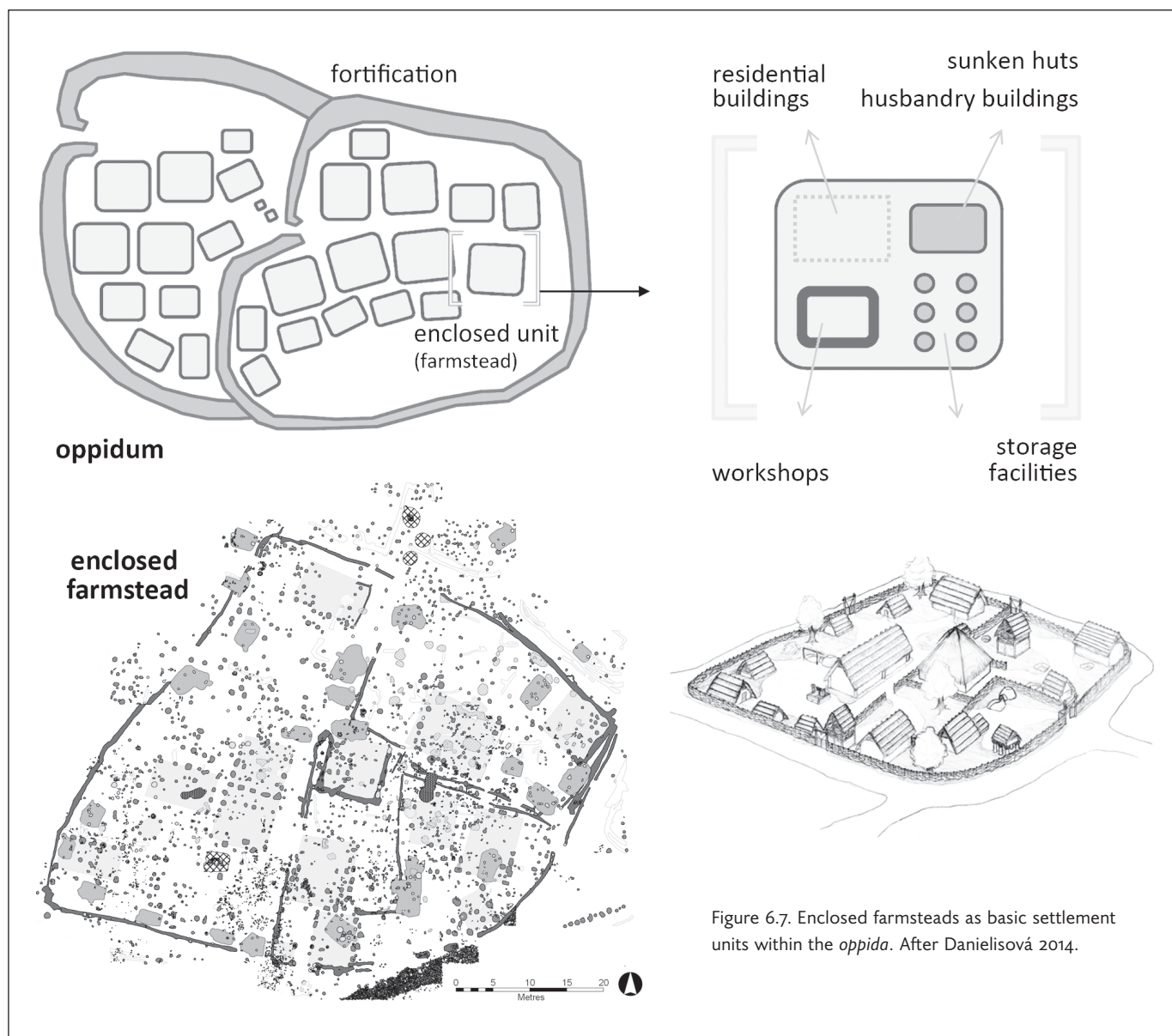


Figure 6.7. Enclosed farmsteads as basic settlement units within the *oppida*. After Danielisová 2014.

plexes blurred the division between what was rural and what was urban; what was landscape and what was settlement.

The recognition of the more dispersed nature of some complexes has been matched by a greater understanding of the complex and dispersed use of space of another group of Late Iron Age centres, the so-called ‘territorial’ *oppida* in Britain (Haselgrove 2000; Moore 2012). These large complexes raise a further challenge. The earthworks often encompassed huge areas of landscape, but at most there is limited evidence for dense areas of occupation and much of what might be considered the ‘interior’ appears to have been given over to other activities (Moore 2020). These complexes are often referred to as polyfocal (Moore 2012),

represented by interrelated elements of activity, including areas of settlement, ritual foci, and cemeteries (Fig. 6.6).

Recent survey work using geophysics and mapping of several complexes confirms that large areas of the landscapes within and between the earthworks of the British ‘territorial’ *oppida* were devoid of significant built structures (Moore 2020). The fieldwork demonstrates that the earthworks incorporating these sites seem to have been less focused on defining an interior area of settlement from an exterior hinterland — and instead on manipulating movement of people into and through the complex. Large open areas seem likely to have been multifunctional, used for farming but also perhaps areas for temporarily assembling people and animals. Although such com-



plexes appear to have contained areas of dense occupation — some relatively substantial, e.g. c. 16 ha at Bagendon in southern England (Moore 2020) or c. 6 ha at Stanwick in northern England (Haselgrove 2016) — this was a small proportion of the extent delineated by the earthworks and probably represented permanent populations in the hundreds, rather than thousands. A somewhat similar situation may be observed at the *oppidum* of Heidengraben in south-western Germany, which encompassed around 1600 ha of which only a small percentage was effectively occupied (Ade and others 2012).

These large polyfocal complexes might better be considered as ‘powerscapes’, where a combination of landscape and activities was manipulated to convey the significance of the place and the communities that constructed and maintained the earthworks (Moore 2017a; 2020). Despite their different forms, these examples emphasize the commonality of dispersed occupation at Iron Age social centres.

### Rurban: When Farmsteads Come to Towns

An important aspect of the layout of numerous Iron Age agglomerations appears to have been replicating rural farmstead models within their bounds (Fig. 6.7). These groups of farms, with their outbuildings, indicate the transfer of rural settlement patterns to more confined areas, in other words a kind of ‘translocated landscape’ with clustered extended households that could occasionally also perform artisanal and commercial functions. This phenomenon suggests the nucleation of part of the rural population and a concentration of activities that were previously dispersed more widely across the landscape (Danielisová 2014; Moore 2017a). M. G. Smith’s (1972) term ‘rurban’ encapsulates the idea of the domination of many Iron Age agglomerations by unbuilt or scarcely occupied space, often more similar to farmed landscapes than to our traditional notions of high-density urbanism.

The beginnings of the Late Hallstatt occupation at the Heuneburg provide a good example, since during period IVc (i.e. before the construction of the famous mud-brick wall) the 3 ha plateau overlooking the Danube was occupied by several groups of farmsteads within palisaded enclosures (Fig. 6.8). In addition, during its existence the outer settlement of the Heuneburg included some enclosed compounds of c. 1–1.5 ha, most notably the big estate excavated in the area known as ‘Großer Brand’ (Kurz 2010; 2012; Krausse and others 2019, 182–86).

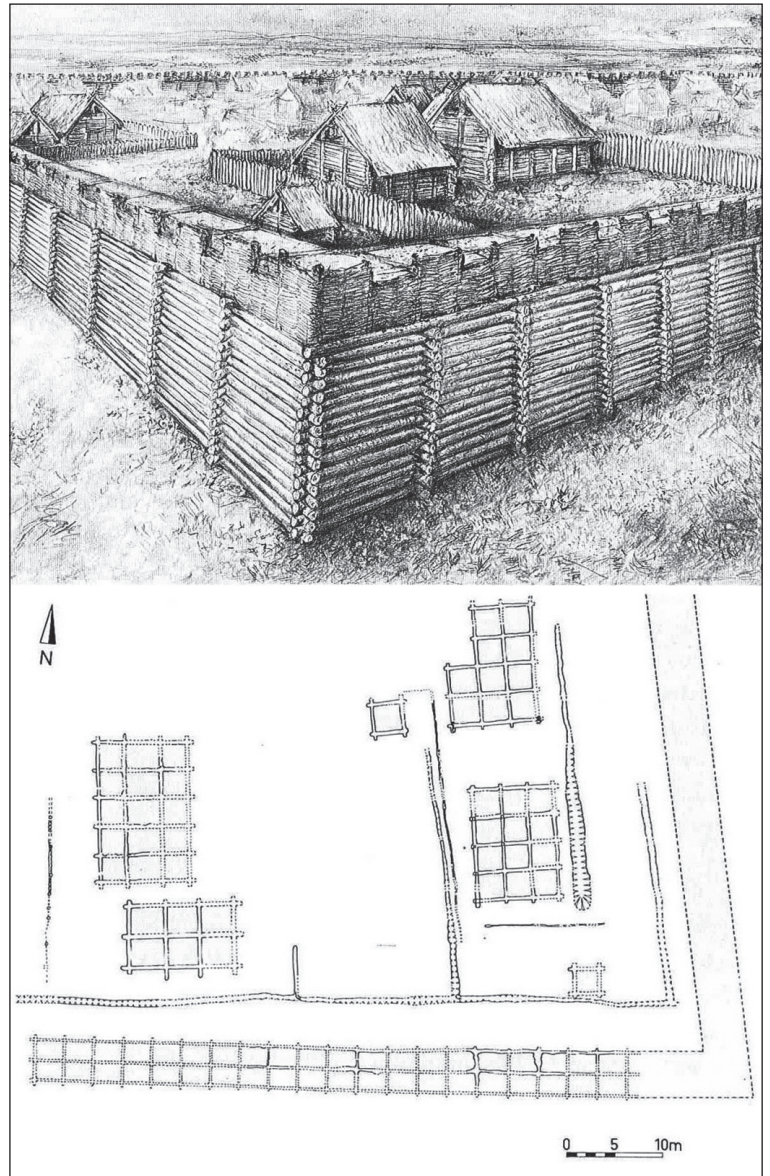


Figure 6.8. Idealized reconstruction and plan of the south-east corner of the hilltop plateau of the Heuneburg during period IVc. After Kimmig 1983.

In the Late Iron Age, at least part of the interior of the *oppidum* of Condé-sur-Suippe, in northern France, included separate ‘compounds’ aligned along roads. These were associated with an open area, interpreted as a plaza, which contained its own small rectangular building (Fig. 6.9). Although variation in functions may have existed across the complex (Henon 2016), finds and activities are represented fairly evenly across these compounds (Pion and others 1997), with each of them seemingly including storage facilities and a combination of buildings.

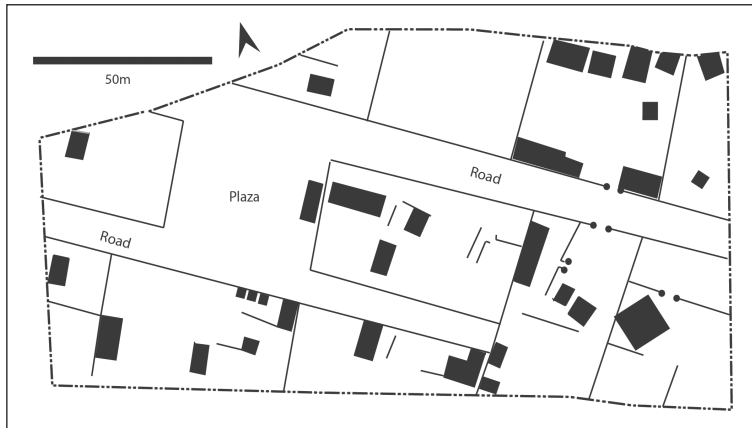


Figure 6.9. Plan of enclosure compounds from phase 1 at Condé-sur-Suippe. After Fichtl 2005, redrawn by T. Moore.

The situation at other Late Iron Age centres varies, but at Villeneuve-Saint-Germain, in northern France, separate compounds may also be visible within one of the ‘quarters’ (Ruby and Auxiette 2010), although too little of the interior of the *c.* 100 ha *oppidum* has been examined to determine how widespread this arrangement was. At Manching, south-eastern Germany, compounds with large halls have been identified in the centre of the *oppidum* (Sievers 2007; Wendling 2013). Usually regarded as elite compounds (Fichtl 2005, 102), they seem to contain storage facilities and other activity areas. Rural-like farmsteads were particularly present in the southern and northern areas of Manching, which presented a much looser settle-

ment plan (Fig. 6.10). In all cases, the arrangements seem likely to include domestic residences, storage, and areas for horticulture. Some of the compounds from Manching resembled the rural *Viereckschanzen* and *établissement rural*, which clearly shows that the urbanization process that took place at the site did not abandon, but rather included, rural-like structures (Winger 2015; Brestel 2019).

While most large complexes in Britain can be defined as ‘polyfocal centres’ (Moore 2012; see below), the *oppidum* of Silchester in southern England has revealed a well-defined street layout with associated compounds which included timber halls (Fulford and others 2018). The possible replication of these compounds across the interior, which seems likely if we project the street pattern situated around a large central plaza (Creighton and Fry 2016, 348), might indicate a similar framework to centres such as Condé-sur-Suippe, perhaps emphasizing its suggested Gallic connections. The question arises as to whether these should be regarded as elite compounds, or if they represented a relatively standard settlement form for a significant proportion of the population. Status differentiation seems likely between compounds, but rather than seeing this simply as the transfer of the elite into the *oppidum* (Wendling 2013) we can envisage a more nuanced, but not necessarily contradictory, possibility: that the compounds also represented the translocation of a considerable proportion of the rural population into the larger centres (Moore 2017a; Fernández-Götz and Garrido 2019). It is certainly notable that

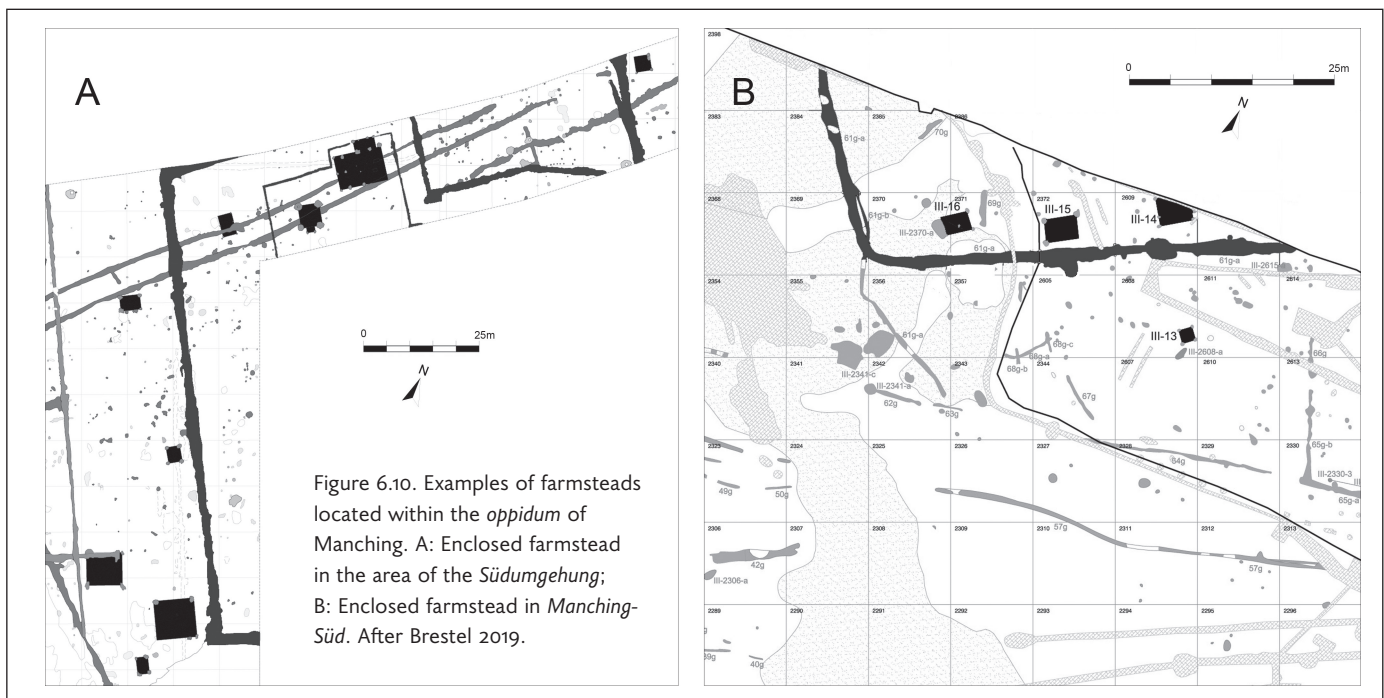


Figure 6.10. Examples of farmsteads located within the *oppidum* of Manching. A: Enclosed farmstead in the area of the *Südumgehung*; B: Enclosed farmstead in *Manching-Süd*. After Brestel 2019.

at *oppida* such as Condé-sur-Suippe the compounds correspond relatively closely to Late Iron Age farmsteads (Haselgrove 1996). At Condé-sur-Suippe the size of the enclosed compounds (c. 0.18–0.25 ha) is similar to contemporary farmstead enclosures in Gaul, which in general range between c. 0.05 and 0.2 ha (Fichtl and von Nicolai 2020, 100). There also appear to be some morphological affinities, for example internal divisions which presumably separated activity zones (perhaps domestic and craft-working) or different elements of the household/enclosure community.

Colin Haselgrove (1996, 147) has previously suggested an apparent decline in rural settlements in the immediate region of Condé-sur-Suippe, suggesting a deliberate nucleation of the rural population reproducing the rural settlement and social structure as they did so. A similar situation might be the case at the Heuneburg in the Early Iron Age, although the data about the wider environs of the site remains insufficient.

Although variation in status may have existed between compounds located within Iron Age agglomerations, they emphasize the continued independence of these social ‘household’ units, operating as semi-autonomous farming and productive units. This does not need to imply an atomized set of household entities as the sole productive and social unit (cf. Hill 1996), since both ethnographic comparisons and the integrated nature of these complexes indicate that household and clan structures cross-cut built space (see below). However, it suggests a continued focus in these agglomerations on an Iron Age rural economy where the household often remained the locus for agricultural productivity and social reproduction. The process of centralization appears to have relied, at least in its initial stages, upon replicating the social and economic independence of households within the social and physical layout of the agglomerations. In many cases, this would have adopted the form of a process of synœcism, the coalescing of rural settlements into a single community while retaining some aspects of previous physical and social divisions embedded within the pre-existing communities (Kostof 1989, 120).

That the household was not the only element of social space is clear from the arrangement of some complexes. As well as replicating the arrangement of farmsteads within the agglomerations, some other similarities are apparent, for example clusters of compounds at the Heuneburg arranged into discreet zones. In fact, the subdivision of the outer settlement of the Heuneburg into different quarters or neighbourhoods, separated by a system of banks and ditches, has been suggested as physically delin-

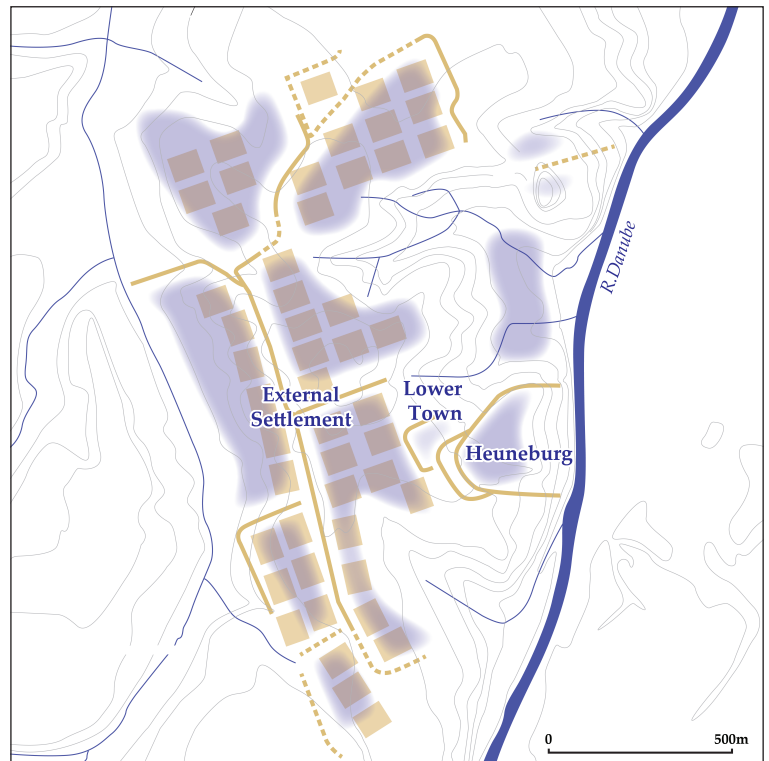


Figure 6.11. Plan of the Heuneburg agglomeration during the mud-brick wall phase in the first half of the sixth century BC. After Fernández-Götz and Ralston 2017.

eating areas inhabited by different kinship groups (Fernández-Götz and Krausse 2013; Kurz 2010; 2012) (Fig. 6.11). These different lineage groups or clans could have come together during the process of synœcism that underpinned the development of the Heuneburg agglomeration, while at the same time maintaining their distinctive identities by inhabiting separate neighbourhoods. On the other hand, at some Late Iron Age *oppida* we observe clear divisions of the inner space into different sectors, for example the quadrants recognized at Villeneuve-Saint-Germain. Although in this latter case these are argued (on the basis of differential faunal and artefact deposition) to denote different functional areas (Ruby and Auxiette 2010), such divisions may also suggest a desire to demarcate communal spaces while retaining in one quarter the domestic compounds familiar from a rural setting.

### Farming within and from the Town

Despite their diversity, the above examples imply that agricultural subsistence remained a key role for many inhabitants of Iron Age agglomerations, and that the open spaces within complexes may have often included areas devoted to farmland and horticulture (Danielisová 2014; Lodwick 2019).

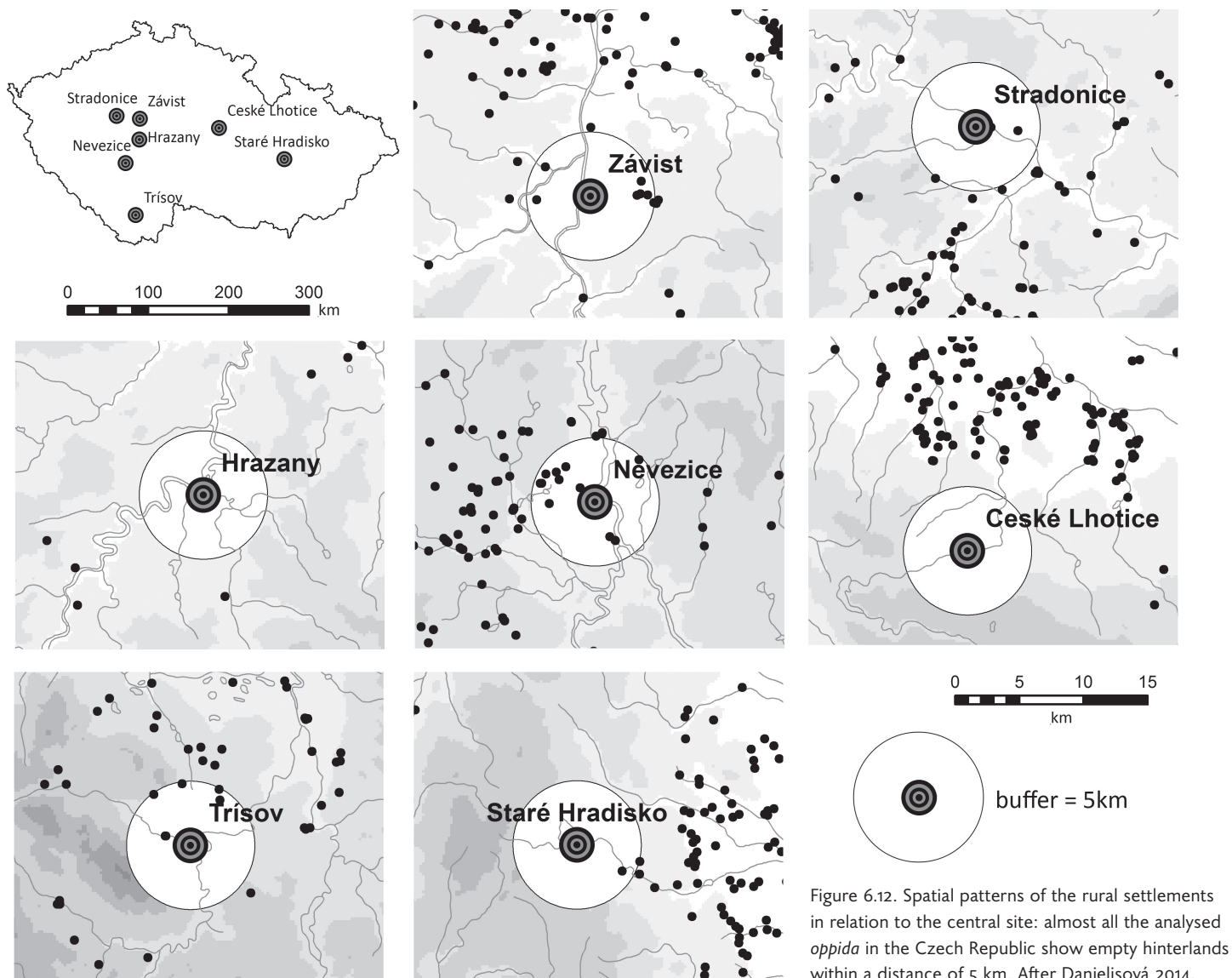


Figure 6.12. Spatial patterns of the rural settlements in relation to the central site: almost all the analysed *oppida* in the Czech Republic show empty hinterlands within a distance of 5 km. After Danielisová 2014.

In many cases, we can speak of veritable ‘agro-urban landscapes’ (cf. Isendahl 2012). At the same time, however, the increasing discovery within numerous Iron Age centres of public spaces of regional or supraregional importance, and evidence for specialized production and trade with distant regions, distinguishes many *Fürstensitze* and *oppida* from medieval and early modern ‘agrotowns’. The latter lacked these central place functions and had low levels of social complexity (cf. Smith forthcoming).

Definitions of urbanism frequently focus on the importance of a settlement’s relationship to the hinterland (Smith 2007; 2020, 17). Part of that revolves around the extent to which an urban centre was reliant on agriculture subsistence from settlements in its environs or was agriculturally self-sufficient, with the community farming from the site. Studies of other urban centres have noted that unbuilt areas often

appear to have been reserved for orchards and gardens (Baker 2009), and discussions of low-density urbanism emphasize the role of agriculture within the bounds of the urban complex (Fletcher 2012). The myth of urban life as being largely detached from agricultural production has been dismantled or at least nuanced in multiple works on pre-industrial societies around the world. This includes Fernand Braudel’s influential monograph *Civilisation matérielle et capitalisme* (1967), in which he observed that in the early modern period, town inhabitants often continued to perform farming in the surrounding lands. A similar situation can be found in other periods and regions, with one of the most notable examples being the Mesoamerican megalopolis of Teotihuacan, which included extensive open areas for agriculture (Cowgill 2015). As expressed by Christian Isendahl (2012, 1123) in his discussion

of agro-urban landscapes in the Maya lowland cities: 'agricultural production is not necessarily the antithesis of "the city," but may in some cases be an intrinsic and empowering urban activity'.

Although our understanding of the subsistence basis of many Iron Age complexes remains surprisingly limited, some case studies suggest that at least certain *oppida* appear to have been largely agriculturally self-sufficient with populations undertaking farming from the central site. The picture is likely to have been complex, however, with some undertaking mixed arable and pastoral farming, and others undertaking only certain aspects, while importing some foodstuffs. Examination of the immediate environs of *oppida* in the Czech Republic, for example, emphasizes that many were relatively empty of farmsteads, with inhabitants likely to have been undertaking both arable farming and animal husbandry in their immediate surroundings, and that this was sustainable at these centres (Danielisová 2014; Danielisová and others 2015) (Fig. 6.12). In the aforementioned case of Condé-sur-Suipe in France, it seems that households were conducting mixed farming in the immediate vicinity of the *oppidum*. At *Bibracte* the situation was likely to be more complex. Here environmental evidence suggests that the immediate environs were largely given over to agriculture, although this was likely to have been predominantly pastoral in nature, with significant quantities of cereal crops assumed to have been imported (Wiethold 2011; Petřík and others 2021) despite, as at many other *oppida* (Danielisová and others 2015, 191), limited evidence for centralized storage capabilities. Crop production at *Bibracte*, and in some other centres like Manching, does suggest however that small-scale farming was still a significant activity within the communities living in the larger complexes.

For the polyfocal complexes in Britain the situation seems similarly uncertain. Some British sites reveal evidence for contemporary field systems within the dyke system, for example at *Camulodunum* (Colchester) (Truscoe 2021). The relatively small permanent populations within such complexes mean that the need for large-scale importation of foodstuffs would not always have been necessary, although evidence from Bagendon (Moore 2020) and Silchester (Lodwick 2017) suggests some was coming from a distance.

For most Iron Age social centres, the dynamic between populations residing within the complexes (a significant proportion of whom were probably also producing food to a greater or lesser degree), and those outside the centres, was clearly complicated. In many cases, the evidence suggests it was

not as simple as 'urban centres' as 'consumers' separated from a hinterland of 'producers' (Small 2006, 318). In addition, some new studies suggest that the low-density nature of many Iron Age agglomerations and the existence of areas for food production within the complexes might be an important factor to consider when trying to understand their relatively 'ephemeral' nature. As expressed by Amy Styring and others (forthcoming), 'the fact that agriculture was less land-limited means that hold over power was less stable and more vulnerable to other, external, factors'.

## Low-Density Urbanism in Iron Age Europe

Despite their varied morphology and complexity, the temperate European centres have some similarities, most notably a common tendency toward low-density occupation, the importance of open spaces in their interior, and a complex interrelationship with the rural world. Whether or not we wish to describe them as 'urban', these complexes served as central places to a wider group of communities (Moore 2017a, 201; Fernández-Götz and Garrido 2019). More important than the population that lived permanently within the (open and/or fortified) agglomerations was the role that these centres played in a much larger territory, acting as central places for political, religious, economic, and potentially also defensive purposes (Fernández-Götz 2017; 2019). Although the specific temporal and geographic context of these developments is significant, these Iron Age societies were undergoing similar social upheavals, including probable population increase, which required the managing of social interaction and competition within society, as well as interaction with external societies, through trade and conquest (Haselgrove 2006; Fernández-Götz 2014a; Moore 2017a). These aspects suggest it is worth considering why Iron Age centres took the physical forms they did, and if comparanda exist elsewhere that might help explain these phenomena.

Even in the contemporary world, the need to compare varying forms and concepts of urbanism is not always a given, with, for example, the cityscapes of the Global South often underrepresented in urbanism debates (R. McIntosh 1999; Myers 2020, xix). Studies of contemporary cities emphasize the problem of Western universalism that can also be seen in the study of Iron Age temperate Europe, where a yardstick of Mediterranean urbanism often dominates perspectives (Collis 2014; Fernández-Götz 2017). Rather than seek to chart the levels of urbanism in Iron Age centres against criteria developed for the

classical Mediterranean, it is worth expanding the perspective to other periods and parts of the world.

The need for greater comparative approaches to urbanism has been emphasized recently (Smith and Peregrine 2012; Gyucha 2019; Smith 2020). Although Iron Age centres have often been excluded from such debates, exploring them within a wider context of both urban and other agglomerations is increasingly recognized as fruitful. This does not seek direct analogies, but highlights the varied ways in which societies can order large agglomerations and social spaces in ways that diverge from Western concepts of urbanism, and relate sometimes to social forms that vary from traditional hierarchy (Moore 2017a; 2017b; Fernández-Götz 2018). This does not undermine the importance of contextualism (Chirikure 2020), but recognizes that taking an approach which emphasizes solely the need for social, economic, and geographic similarity may constrict our ability to examine human actions (Smith 2020, 23). In Iron Age studies the use of analogy remains controversial, with a distinction between those using comparisons from ethnographies of African societies or evidence from early medieval Europe (Moore and Armada 2011; Fernández-Götz and Garrido 2019). Here we seek to move beyond such dichotomies to recognize the role of relational analogy (Wylie 1985) in seeking to understand the complexity of the archaeological record of Iron Age temperate Europe. While wary of equating similarities in settlement form with social organization (R. McIntosh 1999, 62), we wish to explore how they may help to explain the spatial organization, trajectories, and relationships of Iron Age complexes to wider settlement landscapes. With these caveats in mind, what might the comparison of Iron Age social centres with examples elsewhere in the world tell us?

As we have explored above, temperate European Iron Age complexes emphasize a dynamic and often blurred relationship between aspects which are frequently perceived as rural and urban (Cowley and others 2019). As such, one of the common aspects of many Iron Age complexes is their low density of occupation leading to the suggestion that they might be examined within the context of a broader spectrum of low-density urbanism (Moore 2017b). The notion of low-density urbanism provides an alternative to V. Gordon Childe's (1950) idea of concentrated, densely occupied cities that was mainly based on examples from the ancient Near East and the classical Mediterranean, such as Ur, Uruk, and Rome. But urbanism is a much more complex phenomenon, and there is increasing recognition that throughout history many urban sites across the world have been characterized by large areas and manifold functions

but also by rather low-density occupation of often fewer than 50 inhabitants per hectare (Fletcher 2007; 2009; 2012; see also Hawken and Fletcher 2021). This stands in contrast to, for example, a likely density of *c.* 200–300 people per hectare for Early Imperial Rome and, more commonly, around 100–50 per hectare for most towns in the Roman Empire (Storey 1997, 975–76; Moore 2017b, 291).

Notable examples of low-density urbanism include Angkor and Co Loa in South-West Asia, Cahokia in North America, and Great Zimbabwe in Africa (Fletcher 2009), but a significant number of prehistoric European sites can also be added to the list. This probably includes the fourth-millennium BC Trypillia mega-sites from Ukraine (Chapman and Gaydarska 2016), as well as the Late Iron Age *oppida*, which Roland Fletcher himself suggested were likely part of the phenomenon (e.g. Fletcher 2009; 2019). Recent discussions on low-density urbanism have stressed its heterogeneity, but also emphasized how these centres are defined by dispersed activities and the frequent blurring between rural and urban space, with the limits of the settlements often being hard to define. How does this compare to Iron Age complexes in terms of the density of their settlements? Crucial for assessing this is determining the levels of unbuilt space within these complexes and defining what constitutes part of the complex at all (cf. Fletcher 2012). In addition, demographic estimates at the larger sites are hindered by the rather small percentage of excavated areas in relation to the total size of the sites. For some more nucleated centres then, such as Condé-sur-Suippe, if the settlement compounds of *c.* 0.25 ha had an extended household of perhaps ten people and were replicated across the interior, we might tentatively suggest an overall population of around 5000 people. A similar situation is argued for at Villeneuve-St-Germain (Brun, Chartier, and Pion 2000, 85). This would suggest population densities of *c.* 40–50 people per hectare, although taking into account large open areas within these centres it is likely to have been much lower. At *Bibracte* we might envisage perhaps 30 people per hectare — at least for the more densely occupied foci on Mont Beuvray and at Sources de l'Yonne (Moore 2017b) — whereas at Manching 13–26 people per hectare can be proposed (Smith 2016; Fernández-Götz 2019) and at Ulaca in central Spain *c.* 25 inhabitants per hectare (Ruiz Zapatero 2005). For the Early Iron Age Heuneburg, if we follow the proposal of *c.* 5000 inhabitants within the 100 ha settlement complex of the mud-brick wall phase, this would result in an average of *c.* 50 people per hectare. However, substantial differences in density would have existed between the citadel

and some areas of the outer settlement (Krause and others 2019). The British polyfocal complexes are even harder to gauge. There is little to suggest that more than perhaps a few hundred people were spread over the c. 200 ha at Bagendon, representing a population density of around 2–3 people per hectare, similar to that in rural areas. Sometimes occupation was clustered in higher densities within these complexes, with perhaps a few hundred within the 16 ha core of the Bagendon complex (representing a density of 10–15 people per hectare) (Moore 2020).

### Analogies for Iron Age ‘Empty’ Urban Spaces

Accepting evidence that many Iron Age agglomerations reflect the broader patterns of low-density urbanism, seen elsewhere in the world, it may be useful to compare with examples of low-density urbanism in other regions to explain the arrangement of some Iron Age complexes. Population size of low-density complexes varies enormously from thousands to hundreds of thousands, as do residential densities, which range from c. 50 people per hectare for some Mesoamerican cities (Isendahl and Smith 2013) to as few as 4 people per hectare for West African (so-called) ‘giant-villages’ (Kusimba, Kusimba, and Agbaje-Williams 2006). While some of the density of occupation may be comparable, whether Iron Age examples really compare with concepts of low-density urbanism is more complex. They are not on the scale of Mayan low-density urbanism, Angkor, or the massive Cahokian complexes. They do, however, share some affinities that may be pertinent to understanding why these complexes were dispersed in this way. The seemingly multipolar or polyfocal sprawling complexes at *Bibracte* and *Corent*, and earlier Iron Age *Bourges*, included separate ritual foci and what appear to have been semi-autonomous settlement areas, within an overarching single complex. This reflects some of the similarities claimed for low-density urbanism: impressive monuments, scattered occupation sites, and ritual monuments within a larger modified landscape (Fletcher 2012, 290). Mayan centres, for example, have been noted as operating in a similar light (Isendahl and Smith 2013), although their scale is far larger than their Iron Age European counterparts.

Closer potential analogies are some African centres. At Jenné-Jeno (Mali), which developed over the first millennium AD, at its greatest extent a central settlement of 33 ha was accompanied in close proximity by c. twenty-five other settlement foci in a 1 km radius. At least part of this complex had

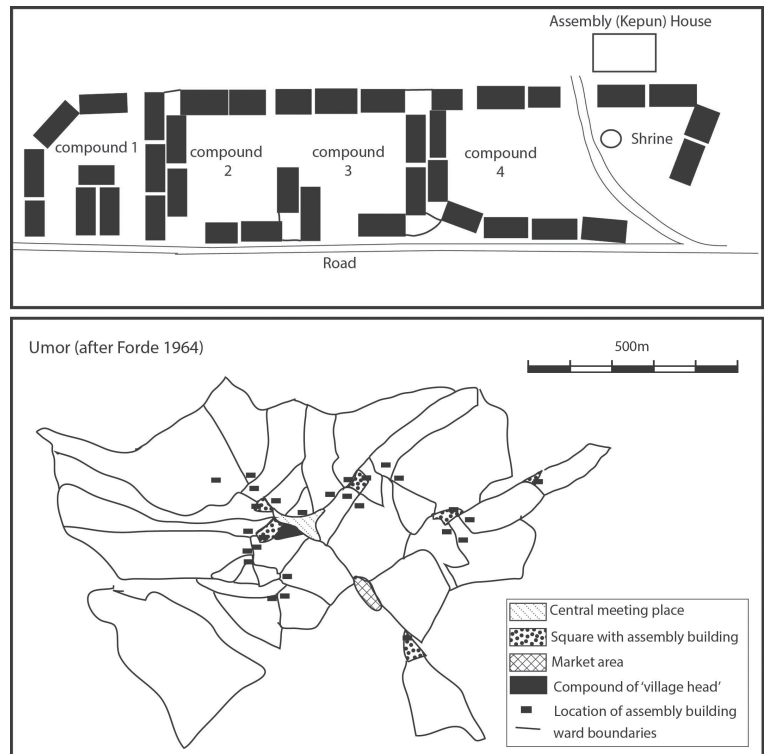


Figure 6.13. Schematic plan of compounds and the overall plan of the settlement at Umor, Nigeria, showing wards, assembly places, and houses. Both after Forde 1964, redrawn by T. Moore.

a wall defining the main mound (Monroe 2018), but these settlements were interrelated in what has been called a ‘poly-nucleated sprawl’ with a population claimed to have been c. 10,000–22,000 (S. K. McIntosh 1999; Monroe 2018) on all the mounds (totalling c. 137 ha). This is based on densities of between c. 97 and 195 people per hectare, derived from ethnographic comparison (S. K. McIntosh 1999, 73). Factoring in the ‘open’ space between more densely occupied mounds, the complex at Jenné-Jeno — depending on how defined — covered an area of c. 16 km<sup>2</sup>, which would equate to closer to 18 people per hectare. There are some similarities to the way in which the multipolar complexes like *Bibracte* or *Bourges* included enclosed and unenclosed elements that were spatially separated. Similar to the phenomenon in Iron Age Europe, the process of expansion of the complex at Jenné-Jeno took place as craft specialization and long-distance exchange were increasing, although — as seems the case with some of the Iron Age European centres — evidence for social hierarchy is scarce despite this and other centres in the region being undeniably ‘urban’ (Monroe 2018).

Similarities with some of the Iron Age phenomena may also be seen in complexes in western and central Africa sometimes referred to as ‘giant-villages’ (de Maret 2000; Kusimba 2008) despite their popula-

tions being in the thousands (Forde 1964; Kusimba, Kusimba, and Agbaje-Williams 2006). The example of Umor, eastern Nigeria, provides some interesting comparisons to Iron Age complexes such as Condé-sur-Suippe. Umor covered (by the 1930s) around 60 ha, with a farming territory of 12,000 ha and a population of c. 11,000 inhabitants (Forde 1964, 4). The density of population is given as c. 1.5 people per hectare or even fewer (*ibid.*), factoring in the farmland around the centre, which it subsisted on, with some areas far more densely occupied. The settlement was arranged into districts (*Kepun*) representing kin groups and consisting of a set of compounds for each family group (Fig. 6.13). As well as a central meeting area, each district contained its own assembly places with buildings for negotiations.

Despite the scale of the population and its relative density, the complex at Umor remained an essentially rural one. Every household was a farming unit with the settlement community farming the immediate environs rather than relying on supply from a rural hinterland. The spatial arrangement of the settlement reflects its complex governance which was heterarchical, with power dispersed and negotiated at different levels (Forde 1964, 166). The kin groups managed access to farmland in a nested set of relationships which cross-cut some of the village wards. Households too were complex and heterogeneous, with adoption and intermarriage (Forde 1964, 80), meaning that the compounds were not simply independent units, despite their importance in farming. In this rural-based society, the farmland of those of higher status was no larger than that of other members of society, and the accumulation of foodstuffs was not a way in which wealth was measured. This close relationship between the communities of some of the more ‘urban’ centres farther west in Yoruban West Africa and farming processes, without a clear distinction between the two, has also long been recognized (Bascom 1955).

Umor’s spatial arrangement, where the dispersed layout reflected the dispersed nature of power, was far from unique, with a number of somewhat different low-density ‘urban’ centres recognized elsewhere in western and southern Africa. Farther west and earlier in date to Umor, centres at Old Oye and Ile-Ife included significant farming land within their bounds as well as low-density population (Kusimba, Kusimba, and Agbaje-Williams 2006), although the social structures here were markedly different to centres such as Umor. Jenné-Jeno was also part of a wider phenomenon of settlement clusters seen in the Niger Delta (McIntosh and McIntosh 2003). Even at one of the largest centres at Great Zimbabwe, one which engaged in complex long-distance exchange,

the distributed rather than concentrated nature of power has been stressed. In fact, a similar range of imports and material culture was distributed across the complex, not just in apparently high-status zones (Chirikure and others 2018), a phenomena recognized at some Late Iron Age *oppida* (see above).

While the low-density ‘giant-villages’ of Africa represent one analogy, the interconnected nature of rural and urban living can be seen elsewhere. The division of a single ‘urban’ site into a composite of divided areas has been recognized in the Islamic oases centres for example, which can be regarded as ‘composite cities’ (Kostof 1989, 120). The composite groupings of divisions to make agglomerated urban centres has also been observed at Benin in West Africa (Monroe 2018). The ‘town-and-land’ model from medieval Spain also shows an interesting parallel of the ways in which elements of communities could be connected across urban and rural space (Fernández-Götz and Garrido 2019). Crucial in all these analogies is the blurring between more densely settled agglomerations, sometimes considered urban, and their hinterlands.

How then do these case studies relate to European Iron Age examples? None of these should be regarded as a direct analogy for Iron Age settlements, but they emphasize similar characteristics whilst marking a comparable process whereby as the centres grew in areal extent, the density of their occupation declined (Fletcher 2000). In all cases they retain elements of connection to rural farming while agglomerating communities into a central social and political centre. The African ‘giant-villages’ have also been argued as requiring low-density living to manage the aggregation of large numbers of people where writing and central authority did not exist. Perhaps most significantly, they all focus on maintaining the household independence as a socially productive unit within a larger settlement and supra-kin group, marked out in the spatial arrangement of the settlement, but one that cooperated in the farming cycle (cf. Lodwick 2019). These separate settlement areas also maintained their own ritual and social foci within the complex, denoting a heterarchical dispersal of power structures despite also containing central assembly places and central authorities. Spiro Kostof (1989) saw this as the result of the agglomerations developing from synœcism, distinct rural settlements which retained their rural separation as they combined. It seems highly likely that the process of some Iron Age centres can be explained in a similar fashion — retaining the autonomy of the rural, while coalescing towards larger social centres, as proposed for example for the outer settlement of



the Heuneburg and its different quarters or neighbourhoods (Kurz 2010; Krause and others 2016).

At the extreme end of the low-density nature of Iron Age mega-sites are the huge polyfocal complexes found in Late Iron Age Britain (Haselgrove 2000; Moore 2012). As discussed earlier, the extent of the earthworks, encompassing hundreds of hectares, suggests they should be considered more as landscapes than as clearly defined settlements (Fig. 6.14). Despite their differences to many of the complexes discussed above, they too indicate an important relationship between the rural hinterland and the centres that performed urban functions. Although the scarcity of large-scale permanent settlement at these complexes has been regarded as indicating their lack of urbanism, and by extension social complexity, compared to more densely occupied *oppida* on the continent, this may in reality say more about the ways in which power operated in these Iron Age societies in Britain (Moore and González-Álvarez 2021). The focus at these complexes on providing residence for small elements of the population suggests that while these were places where power was enacted, the power of the populace remained in the rural farmsteads and was manifest only on certain occasions at the larger centres. This has led some authors to view such complexes as akin to ‘royal sites’ in Ireland (e.g. Hill 1995), places for the anointing of kings and ritual practices. This may obscure, however, more complex roles of these sites and simplify a more heterarchical social structure (Becker 2019).

In terms of analogies, one possibility is considering Britain’s polyfocal complexes as an example of Richard G. Fox’s (1977) ‘regal-ritual’ centres. He considered these sites an aspect of segmentary societies where power was dispersed. One of the examples provided by Fox is that of Swazi elite homesteads in southern Africa in the nineteenth century. The Swazi elite homestead was of similar form to other farmsteads but was differentiated in having a large cattle corralling area and ritual centre (Marwick 1940, 26). These locales were only filled with larger numbers of people during periodic festivities and ceremonies (Fox 1977, 53). Another comparison might be the large temporary social centres identified in Ethiopia which swelled at certain times of year, whereas at other times royal administration was peripatetic (Horvarth 1969).

The use of defined places in the landscape, deliberately devoid of built structures, for the administration of power is a facet of societies geographically and temporally closer to Iron Age societies. Early medieval assembly places in northern Europe required locales for transient activity, for communal decision-making, anointing kings, but rarely permanent

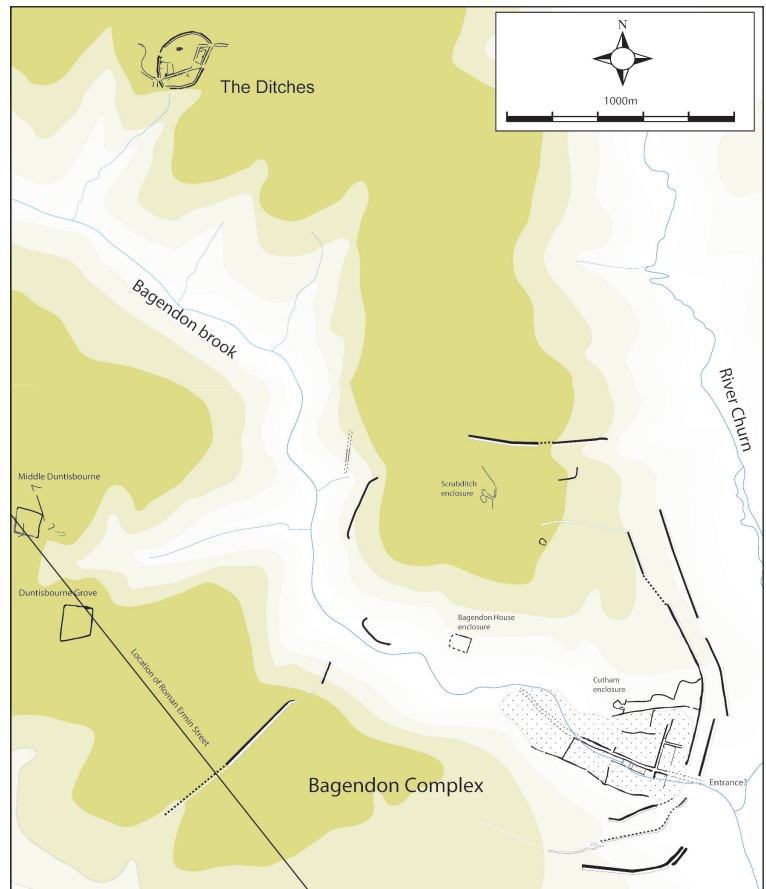


Figure 6.14. Plan of dispersed complex at Bagendon, typical of polyfocal *oppida* in Britain (the dappled area is the zone of dense occupation). Drawn by T. Moore.

places of settlement for significant numbers of people (Semple and others 2020). These places could include associations with feasting sites and burial monuments, some of which predated the assembly site itself (Semple and others 2020, 252). The assembly traditions of much of northern Europe did not necessarily emerge directly from the role of *oppida* as meeting places in the Iron Age, however the need for larger social entities for places to negotiate and confer power seems to have been common across these two periods (Fernández-Götz 2013).

Despite their heterogeneity, in the majority of temperate European Iron Age societies the power of the leaders appears to have been largely negotiated (Thurstun 2010; Arnold 2021), while at the same time power continued to reside in the dispersed rural communities that enacted it through periodic gathering at the larger centres (Metzler, Gaeng, and Méniel 2006; Fernández-Götz 2014b). The large open expanses at the polyfocal complexes in Britain imply periodic assembly of large numbers of people and perhaps also animals, but with

very small permanent populations, while the way in which they manipulated space suggests an emphasis on the procession of people to and through these centres (Moore 2017a). The mobilization of labour for the creation of earthworks may well have been a demonstration of communal activity and the power of the leaders to mobilize communities. However, the fact that most of these communities did not reside permanently at the large centres suggest that power relationships were negotiated and needed to be periodically re-enacted, probably through assemblies and sometimes also the rebuilding of ramparts. In the British polyfocal centres we do not see the replication of the household within the complex, as mentioned previously for continental *oppida* such as Condé-sur-Suippe. Instead, they remained in the rural hinterlands, maintaining their social and economic significance and semi-independence, and only occasionally sending representatives to the social centres. In short, we almost have an ‘outside-in’ and ‘inside-out’ form of rurbanism contrasted between more densely occupied centres, such as Condé-sur-Suippe, and the more open dispersed sites, like Bagendon.

### Working on Empty – Future Fieldwork Strategies

Despite the varied nature of many Iron Age agglomerations, there are aspects that suggest they represented common solutions to the similar problems many Iron Age societies faced. Recent assessments of both *oppida* and *Fürstensitze* suggest that many of them were part of a broader phenomenon of low-density socio-political centres, which often performed the roles of urbanism.

Hindering our appreciation of why numerous Iron Age centres took this low-density form is our limited understanding of the arrangement of space within many of the complexes. Despite considerable research on *oppida* and *Fürstensitze*, in most cases we remain remarkably ignorant of their spatial organization and the density of settlement across many complexes. This is to some extent the result of limited investigation, in part due to the huge scale of some complexes. It is also impacted by the fact that some Late Iron Age *oppida* are situated beneath Roman and modern urban centres making it difficult to examine their earliest spatial layouts. Even at those complexes where we have a reasonably good understanding of spatial organization, investigation has been rather limited relative to the large size of the complex. For example, at Condé-sur-Suippe, the combined excavations account for *c.* 3.3 ha, representing *c.* 2 per cent of the interior. At two of the best

explored Iron Age *oppida* discussed earlier, Corent and *Bibracte*, around 2 and 4 per cent, respectively, have been excavated. For the latter, this is limited to the area on Mont Beuvray, with only very small excavations at Sources de l’Yonne so far (Moore and others 2013; Moore and Hoppaditz 2019). At Manching, perhaps the most extensively examined *oppidum* in Europe, nearly 10 per cent of the 380 ha of the site has been excavated, making it arguably one of the few with a relatively representative sample (Wendling 2013; Winger 2015). In Britain, at the intensively examined *oppidum* of Silchester *c.* 1.2 per cent of the area within the defended core has been excavated (Fulford and others 2018), with a poorer picture for the extremely large, dispersed complexes such as Bagendon and Stanwick where *c.* 0.12 and 0.1 per cent, respectively, have been excavated.

Only two complexes in Britain (Bagendon and Silchester) have seen detailed geophysical surveys to assess land use within their interior (Creighton and Fry 2016; Moore 2020). In France, few complexes have seen systematic geophysical prospection, the exceptions being large-scale surveys of *Alesia* (de Cazanove and others 2012), Corent (Poux 2012), and increasingly at *Bibracte*, where *c.* 7.6 per cent has been surveyed using GPR (Golánová and others 2020). The problem for many of these sites is that later Roman occupation at centres such as *Alesia* and Silchester means that the Iron Age spatial layouts are hard to disentangle without excavation. While this compares with difficulties in examining many low-density settlements across the world, the rigorous surveys of the Trypillia mega-sites (Chapman and others 2014) and the ability of LiDAR to provide spatial arrangements of the well-preserved structures of Mayan and other low-density settlements (e.g. Evans and others 2013) make Iron Age *oppida* poorly understood by comparison. The ephemeral nature of many of the earlier structures on Iron Age settlements, with their widespread use of wooden architecture, also means that many techniques such as LiDAR and geophysics may not reveal areas of occupation. Recognition at some British *oppida* (Moore 2020) and in the extramural settlements at Bourges (Milcent 2014, 46) that many Iron Age buildings did not leave earthfast traces may challenge assumptions about the lack of buildings in some areas of these complexes.

While investigation levels are one concern, the other is perceptual. Despite recognition of the presence of open spaces within the *oppida*, they have rarely been the focus of investigation. Until recently, the open areas identified through remote sensing were those avoided for excavation, assumed to be unproductive in addressing crucial questions on the

roles of Iron Age centres. Open spaces are, however, seldom likely to be truly ‘empty’ (Campana 2017), and cross-cultural comparisons indicate that even areas that remain completely unbuilt can play a fundamental role for the communities (Woolley 2003; Smith 2008; Stanley and others 2012; Jarvis and others 2021). This could include a range of potential, sometimes complementary, uses such as serving as spaces for political and religious gatherings, temporary fairs, animal husbandry and agriculture, or places of refuge for the rural population in case of conflict (Fernández-Götz 2017; von Nicolai 2017). These ‘spaces in between’ may be as instructive as the structures they demarcate for our understanding of the social and functional layout of Iron Age complexes.

A focus on assessing the empty spaces within *oppida* is thus called for, applying a battery of scientific methodologies to examine these areas (Goláňová and others 2020). Similar methodologies are being applied to the open areas of urbanism in East Africa (Wynne-Jones and others 2020). Examination of the open areas at centres such as *Bibracte* (Goláňová and others 2020) and *Corent* (Poux 2012) is revealing that these were more complex, multifunctional spaces. Recent combinations of geophysics and geoarchaeological study are confirming that certain areas were indeed lacking built structures at *Bibracte*. Their functions remain somewhat unclear, but a lack of evidence for animals in these areas suggests that roles for periodic assembly or open-air ritual are most likely (Goláňová and others 2020). In Britain, large-scale geophysics at Bagendon has allowed greater confidence in identifying structures within areas previously assumed to be empty (Moore 2020), although more systematic sampling, using coring and test-pitting, of those areas seemingly devoid of archaeological features is required.

Through intensive and extensive studies we may begin to arrive at a clearer understanding of what these ‘empty’ areas truly represented. Were they areas of occupation with forms of architecture that were more ephemeral? Were they focused on horticulture related to subsistence agriculture based on household/clan farming or larger-scale agriculture by the community? Were they areas for corralling livestock (and/or people), for exchange or tribute, or the sites of periodic markets or places for ritual activity? Were they mass assembly areas (for social, political, or military events) or occasionally even, as perhaps at *Bibracte*, areas dedicated to the extraction of natural resources such as mining (Petřík and others 2021)? Many areas may have had multiple functions or changed their roles over time; understanding this requires the application of detailed micromorpho-

logy and palynological analyses to attempt to create detailed assessment of their roles (cf. Goláňová and others 2020). Through this we may also be able to arrive at more robust estimates of settlement populations allowing for more sophisticated comparison with low-density settlements elsewhere, both in Iron Age Europe and beyond.

Addressing the relationship between these complexes and their rural hinterlands also requires greater understanding of the dynamic between these centres and their environs. The innovative work of the 1980s and 1990s that suggested phases of settlement nucleation and dispersal (Collis 1984), as well as recent work around complexes like *Bibracte*, demonstrates that the roles and nature of Iron Age dispersed, low-density agglomerations can only be understood in relation to the wider landscape. Despite the wealth of investigations in many regions, often the result of developer-led archaeology, the chronological resolution of rural settlements often remains poor (see Moore 2020, 493–540), making periods of nucleation and the relationship between agglomeration development and rural settlement difficult to chart. The short lifespan of some *Fürstentum* and *oppida* complexes (Fichtl 2005; Fernández-Götz and Ralston 2017) also means that detailed chronological models for both the large sites and the settlements elsewhere are required to disentangle the relationship between centres and their hinterlands. In general terms, systematic surveys of the environs of Iron Age centres remain limited; until this happens, we will struggle to determine the processes of the rise and fall of these sites and how that might relate to broader demographic or environmental changes at a regional and macro-regional scale.

## Conclusion

The growing attention paid to the environs of central places, as well as open spaces within them, is leading us to rethink the very nature of many Iron Age agglomerations. While the existence of processes of centralization and urbanization is still observable and in some cases reinforced by new research, the traditional understanding of a sharp dichotomy between the ‘rural’ and the ‘urban’ is increasingly being challenged, with the term ‘rurban’ providing a fruitful conceptual alternative. The existence of farmstead-like structures within numerous centres suggests the frequent transfer of rural settlement patterns to more confined areas. These ‘translocated landscapes’ with clustered habitation units were the manifestation of social systems that emphasized the autonomy of households and lin-

eages despite the centralizing attempts related to the emergence of early urban centres. The represented social units remained the essential building blocks of the communities, even if they were more closely aggregated. This might at least partly explain the frequent episodes of fission that took place in moments of increased scalar stress (cf. Fernández-Götz 2018). The comparison with examples of low-density urbanism in other parts of the globe

can help to expand our horizons, and move away from Mediterraneo-centric perspectives focused on high-density urban models. While more work and new strategies are required to improve our understanding of Iron Age complexes, appreciation of the interconnectivity with their immediate and wider environs, and a more detailed examination of supposedly open spaces, show promising avenues for future research.

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