



McDONALD INSTITUTE CONVERSATIONS

# Delicate urbanism in context: Settlement nucleation in pre-Roman Germany

The DAAD Cambridge Symposium

Edited by Simon Stoddart



Delicate urbanism in context





McDONALD INSTITUTE CONVERSATIONS

---

# Delicate urbanism in context: Settlement nucleation in pre-Roman Germany

The DAAD Cambridge Symposium

Edited by Simon Stoddart

*with contributions from*

Ines Balzer, Manuel Fernández-Götz, Colin Haselgrove, Oliver Nakoinz,  
Axel G. Posluschny, Gerd Stegmaier, Anthony Snodgrass, Peter Wells,  
Günther Wieland, Katja Winger and Caroline von Nicolai

*Published by:*

McDonald Institute for Archaeological Research  
University of Cambridge  
Downing Street  
Cambridge, UK  
CB2 3ER  
(0)(1223) 339327  
eaj31@cam.ac.uk  
www.mcdonald.cam.ac.uk



McDonald Institute for Archaeological Research, 2017

© 2017 McDonald Institute for Archaeological Research.  
*Delicate urbanism in context: Settlement nucleation in pre-Roman  
Germany* is made available under a Creative Commons Attribution-  
NonCommercial-NoDerivatives 4.0 (International) Licence:  
<https://creativecommons.org/licenses/by-nc-nd/4.0/>

ISBN: 978-1-902937-83-0

Cover design by Dora Kemp and Ben Plumridge.  
Typesetting and layout by Ben Plumridge.

Front cover: the Goldberg; back cover: the Danube at Kelheim.

Edited for the Institute by James Barrett (*Series Editor*).

---

# CONTENTS

Contributors	vi
Figures	vii
Tables	viii
<i>Chapter 1</i> Introduction SIMON STODDART (Cambridge)	1
<b>Part 1 Regional differences</b>	7
<i>Chapter 2</i> Early Iron Age <i>Fürstensitze</i> – some thoughts on a not-so-uniform phenomenon AXEL G. POSLUSCHNY (Glaueberg)	9
<i>Chapter 3</i> Urbanism of the oppida: a case study from Bavaria CAROLINE VON NICOLAI (Munich)	27
<i>Chapter 4</i> Ritual, society and settlement structure: driving forces of urbanization during the second and first century BC in southwest Germany GERD STEGMAIER (Tübingen)	41
<b>Part 2 The rural dimension</b>	49
<i>Chapter 5</i> The rural contribution to urbanism: late La Tène Viereckschanzen in southwest Germany GÜNTHER WIELAND (Esslingen)	51
<b>Part 3 The funerary dimension</b>	61
<i>Chapter 6</i> Burial mounds and settlements: the funerary contribution to urbanism INES BALZER (Rome)	63
<b>Part 4 Comparative approaches</b>	85
<i>Chapter 7</i> Quantifying Iron Age urbanism (density and distance) OLIVER NAKOINZ (Kiel)	87
<i>Chapter 8</i> Not built in a day – the quality of Iron Age urbanism by comparison with Athens and Rome KATJA WINGER (Berlin)	97
<b>Part 5 Discussion</b>	103
<i>Chapter 9</i> Discussing Iron Age urbanism in Central Europe: some thoughts MANUEL FERNÁNDEZ-GÖTZ (Edinburgh)	105
<i>Chapter 10</i> Urbanization in Iron Age Germany and beyond COLIN HASELGROVE (Leicester)	111
<i>Chapter 11</i> Urbanism: a view from the south ANTHONY SNODGRASS (Cambridge)	115
<i>Chapter 12</i> On the origins and context of urbanism in prehistoric Europe PETER WELLS (Minnesota)	117
Bibliography	120
Index	134

---

## CONTRIBUTORS

INES BALZER

Deutsches Archäologisches Institut Rom, Via  
Valadier 37, 00193 Rome, Italy.

MANUEL FERNÁNDEZ-GÖTZ

Lecturer in Archaeology, School of History, Classics  
and Archaeology, University of Edinburgh, William  
Robertson Wing, Old Medical School, Teviot Place,  
Edinburgh, EH8 9AG, UK.

COLIN HASELGROVE

School of Archaeology and Ancient History,  
University of Leicester, University Road, Leicester,  
LE1 7RH, UK.

OLIVER NAKOINZ

Johanna-Mestorf Akademie / Institut für Ur- und  
Frühgeschichte, Christian-Albrechts-Universität,  
Leibnizstraße 3, D - 24118 Kiel, Germany.

AXEL G. POSLUSCHNY

Keltenwelt am Glauberg, Am Glauberg 1, 63695  
Glauburg, Germany.

GERD STEGMAIER

Institut für Ur- und Frühgeschichte und Archäologie  
des Mittelalters, Eberhard Karls Universität  
Tübingen, Schloss Hohentübingen,  
D-72070 Tübingen, Germany.

ANTHONY SNODGRASS

Faculty of Classics, Sidgwick Avenue, Cambridge,  
CB3 9DA, UK.

SIMON STODDART

Magdalene College, Cambridge, CB3 0EU, UK.

PETER WELLS

Department of Anthropology, University of  
Minnesota, 395 HHH Ctr, 301 19th Ave S,  
Minneapolis, MN 55455, USA.

GÜNTHER WIELAND

Landesamt für Denkmalpflege im  
Regierungspräsidium Stuttgart, Archäologische  
Denkmalpflege Ref. 84.1, Fachgebiet Prospektion,  
Dokumentation und Archäobiowissenschaften,  
Berliner Str. 12, 73728 Esslingen, Germany.

KATJA WINGER

Institut für Prähistorische Archäologie, Freie  
Universität Berlin, Fabeckstr. 23-25, 14195 Berlin,  
Germany.

CAROLINE VON NICOLAI

Ludwig-Maximilians-Universität München, Institut  
für Vor- und Frühgeschichtliche Archäologie und  
Provinzialrömische Archäologie, Geschwister-  
Scholl-Platz 1, 80539 München, Germany.

## Figures

1.1	<i>Principal region of study.</i>	2
2.1	<i>Map of Princely Sites mentioned in the text.</i>	10
2.2	<i>Area of the magnetometer survey on the Glauberg.</i>	11
2.3	<i>The bronze Celtic style Schnabelkanne from the Princely burial 1 from the Glauberg.</i>	12
2.4	<i>The bronze Celtic style Röhrenkanne from grave 2 from the Glauberg.</i>	13
2.5	<i>Bronze double mask fibula from grave 3 from the Glauberg.</i>	13
2.6	<i>Life-size sandstone statue from a ditch at burial mound 1 from the Glauberg.</i>	14
2.7	<i>Model of a settlement hierarchy for the Early Iron age and alternative hierarchical model</i>	15
2.8	<i>20-km viewsheds from the Heuneburg and Bussen mountain.</i>	17
2.9	<i>Viewsheds of the Hallstatt settlements and Early La Tène settlements in the area around the Glauberg.</i>	18
2.10	<i>Slope based least cost path model of possible routes connecting sites with line-decorated pottery, also found on the Glauberg.</i>	19
2.11	<i>Location of the Princely grave on the Glauberg.</i>	20
2.12	<i>Sizes of the catchment areas that are reachable on foot within a one hour from a settlement.</i>	22
2.13	<i>Core settlement areas of the Marienberg environs in the Urnfield and the Hallstatt periods.y.</i>	23
2.14	<i>Core settlement areas of the Glauberg environs in the Urnfield and the Hallstatt periods.</i>	23
2.15	<i>Early Celtic style Fürstensitze and their relation to the borders of larger regions and major rivers.</i>	24
2.16	<i>Share of settlement sites per 100 years for the Late Bronze Age the Early Iron Age Hallstatt and the Early La Tène period.</i>	25
3.1	<i>Oppida and open agglomerations in the modern federal state of Bavaria.</i>	28
3.2	<i>Manching.</i>	29
3.3	<i>Kelheim.</i>	30
3.4	<i>Fentbachschanze.</i>	31
3.5	<i>Schwanberg.</i>	32
3.6	<i>Berching-Pollanten.</i>	34
3.7	<i>Passau.</i>	35
3.8	<i>Straubing.</i>	36
4.1	<i>Diagram of factors which favoured and led to a process of centralization and the foundation of oppida.</i>	42
4.2	<i>Map of southwest Germany with the two regions of investigation: Heidengraben and Heunebur.</i>	43
4.3	<i>Map of the Late La Tène oppidum Heidengraben.</i>	44
4.4	<i>Plan of the Burrenhof cemetery with Early Iron Age burial mounds and the complex Late Iron Age system of ditches.</i>	45
4.5	<i>Diagram of individual interests that influenced the process of centralization and dispersal during the Late La Tène period.</i>	47
5.1	<i>Aerial view of the well preserved Viereckschanze of Westerheim.</i>	52
5.2	<i>Ground plans and orientation of Viereckschanzen from Baden-Württemberg.</i>	53
5.3	<i>Plan and drawing of the finds from the excavation of K. Schumacher at the Viereckschanze of Gerichtstetten.</i>	54
5.4	<i>Example of a very well preserved rampart at Gerichtstetten.</i>	55
5.5	<i>Range of functional features of the Viereckschanzen.</i>	56
5.6	<i>Plan of the Viereckschanze of Königheim-Brehmen.</i>	57
5.7	<i>Plan of the excavated Viereckschanze of Ehningen.</i>	58
6.1	<i>Magdalenenberg.</i>	65
6.2	<i>Kappel am Rhein.</i>	65
6.3	<i>Burial mounds of Ha D1 to Ha D3 in the region of the Heuneburg and the Hohmichele and other burial mounds.</i>	66
6.4	<i>The Außensiedlung near the Heuneburg.</i>	67
6.5	<i>Clans drawn in from peripheral settlements to the Heuneburg and Außensiedlung and the settlement structures of the Heuneburg.</i>	68
6.6	<i>The Münsterberg of Breisach.</i>	69
6.7	<i>The occupation of the Münsterberg in Breisach.</i>	70
6.8	<i>The Heuneburg and the rebuilt Gießübel-Talhau-Nekropole.</i>	71
6.9	<i>The Hohenasperg.</i>	72



6.10	<i>The Hohenasperg near Stuttgart: Princely tombs.</i>	73
6.11	<i>Settlements of the Iron Age in the region of the Hohenasperg.</i>	74
6.12	<i>The Ipf near Bopfingen: digital terrain model with the fortification-system.</i>	75
6.13	<i>The two hillforts Ipf and Goldberg.</i>	75
6.14	<i>Niedererlbach.</i>	76
6.15	<i>Glauburg-Glauberg.</i>	78
6.16	<i>Glauburg-Glauberg: Tumulus 1 and environs.</i>	79
6.17	<i>Glauburg-Glauberg. Tombs 1 and 2 of Tumulus 1 and the sandstone statue.</i>	80
6.18	<i>Korntal-Münchingen Lingwiesen excavation.</i>	81
6.19	<i>Glauburg-Glauberg: aerial photo of the rebuilt Tumulus 1 and the ditch-system.</i>	82
7.1	<i>Global temperature, colluvial layers in southwest Germany, the Heuneburg population and the number of sites in the Heuneburg area mapped onto the same graph.</i>	92
7.2	<i>Factors influencing the behaviour of the two types of actors in the two agent based models.</i>	93
7.3	<i>Populations of some settlements and interpretation according to one simulation run of abm 2.</i>	93
7.4	<i>An alternative narrative of the Heuneburg development.</i>	94
8.1	<i>Ground plan of the acropolis of Athens and idealized 'drone' image of the acropolis of the Heuneburg.</i>	98
8.2	<i>Ground plans of Rome with the area surrounded by the Servian Wall marked in yellow and the oppidum of Manching with the main excavations.</i>	100
8.3	<i>Diversity of building structures in the northern part of the 'Südumgehung' at Manching.</i>	101
9.1	<i>Theoretical diagram of relations between the oppidum and its surrounding rural territory, based on the data of the Titelberg area during La Tène D.</i>	107
9.2	<i>Two examples of Iron Age low-density urbanism. A) Heuneburg; B) Bourges.</i>	108
9.3	<i>Idealized model of the Heuneburg agglomeration.</i>	109
9.4	<i>Idealized reconstruction of the centre of the oppidum of Corent.</i>	110

## Tables

2.1	<i>Functions of Central Places and their appearance at Early Iron Age Fürstensitze.</i>	16
3.1	<i>Comparison of urban attributes of the sites.</i>	33
7.1	<i>The effect of some kinds of complexity reduction on two community size thresholds.</i>	91
9.1	<i>Archaeological urban attributes, with an application to the Heuneburg and Manching.</i>	106

---

## Chapter 10

# Urbanization in Iron Age Germany and beyond

Colin Haselgrove (Leicester)

Since large-scale excavations began in the 1950s at the *Heuneburg* and *Manching*, these two southern German sites have been pivotal in shaping our understanding of the profound changes in settlement and society that occurred during the Iron Age. New interventions have kept them both at the forefront of our research agenda, although now tempered by a better appreciation of the extent to which sites and landscapes in other parts of Germany may – or may not – conform to the overarching models of *Fürstensitze* and *oppida* that we have developed largely from their evidence. The papers presented at the workshop offer an excellent overview of current thinking about Iron Age urbanism on the part of a new generation of German archaeologists, so rather than attempt to summarise the many interesting ideas in the individual contributions, I will focus on three themes which seem to me especially relevant. First, however, a word about terminology.

### Terminology

It is important not to confuse definitions and terminology with explanation. Many archaeologists still seem to treat classification as an end in itself, whereas, as Oliver Nakoinz notes, our aim should be to uncover underlying mechanisms. Terms like *oppidum* and *Fürstensitz* are a useful shorthand, but are now largely meaningless as a result of modifying the templates to accommodate new evidence. Trying to devise detailed criteria for recognizing urban centres quickly comes up against the absence of good quality evidence at all but a handful of sites. We see this in Caroline von Nicolai's frank discussion of which Iron Age settlements in Bavaria can be considered urban using a long list of 'archaeological urban attributes' which aim to capture 'the degree of urban development and the nature of urban processes.' *Manching* – the only site to meet all 14 of her criteria – is not only the most extensively explored,

but also stands apart from the other so-called *oppida* in Bavaria in occupying a lowland position. Quickly we are driven down the well-trodden archaeological path of polythetic definitions: how many criteria must a site fulfil to be admitted to a particular class? Should we give more weight to some attributes than others?

Many papers emphasise the need to escape from Mediterranean-centric models. Twenty-five years ago, Greg Woolf (1993) presciently argued that *oppida* might represent a specifically European form of urbanism, in contact with, but distinct from the Classical world. A resort to medieval analogies to produce urban trait-lists (Metzler et al. 2016, 406–11) is equally questionable. On the other hand, concepts such as 'low-density urbanism' drawn from other cultural contexts – whilst helpful in opening our eyes to the wider possibilities, and probably apt for many Iron Age sites (Moore 2017; Fernández-Götz this volume) – are still devoid of much explanatory value. The onus remains on us to uncover the processes that generated and sustained such complexes at different times and places. Like other contributors, I see Michael Smith's looser functional definition of urban settlements as 'centres whose activities and institutions – whether economic, administrative or religious – affect a larger hinterland' (Smith 2007, 4) as well-suited to archaeological purposes, although like von Nicolai, I am inclined to retain a significant density of people living together as a relevant attribute, albeit one that many Iron Age centres met for only part of their lifetime or at certain times of year. In addition, I would consider 'living together' as applying to the populations of polyfocal complexes spread out over a wider territory (Haselgrove 2010, 101–2; Poux 2014).

### Approaches

Adopting Smith's definition, coupled to the heterogeneity of the *Fürstensitze* and *oppida*, dictates that

we start from individual sites and complexes in their cultural and regional context. At the same time, the synchronicity and similarity of changes in different parts of Europe argues for a comparative approach at a continental scale. A key point – taken on board in the DFG ‘*Fürstensitze*’ programme (Axel Posluschny, this volume) – is to consider regions that do not manifest a particular phenomenon as well as those that did, asking how they differ in terms of economy, society and environment. The value of this approach is apparent in Gerd Stegmaier’s analysis. In southwest Germany, he suggests the complementary distributions of *oppida* and *Viereckschanzen* may reflect different social strategies and choices on the part of the elite. A similar dichotomy is apparent in Iron Age Wessex, where zones dominated by multivallate hillforts are interspersed with areas with high densities of banjo enclosures (Haselgrove 1994). In Britain, archaeologists are relatively comfortable with the idea that contrasting settlement patterns indicate deeper social and cultural divisions, but on the continent this kind of thinking is often inhibited by the blanket belief in a ‘*Celtic*’ Europe.

In Germany, our relative ignorance of the hinterlands of urban centres presents a serious obstacle to contextual analysis. Although knowledge of rural settlement has advanced in recent years (Günther Wieland, this volume), it lags behind many parts of Europe. Different frameworks for development-led archaeology have played a major part in this (Bradley et al. 2015). In France, where we can now chart rural site numbers on a timescale of 1–2 generations, the maximum occupancy of *oppida* coincides with a sharp decline in rural site numbers. Whilst other factors no doubt contributed to the hiatus, not least the Caesarian invasion, the evidence from several areas points to sudden aggregation of dispersed populations into these newly founded defended sites (Haselgrove and Guichard 2013).

For the earlier Iron Age, the disciplinary divide between the Mediterranean and Europe north of the Alps is deeply unhelpful. For a short period at least, a minority of late Hallstatt centres were every bit the equal of leading sites in the Mediterranean. As Katja Winger’s illuminating comparison of pre-Classical Athens and the *Heuneburg* underlines, we would benefit from a pan-European perspective – which should extend to contemporary mega-sites in Ukraine, such as *Zhabotin* and *Belsk* (Reinhold and Mordvintseva 2017). Rather than viewing one zone primarily through the rose-tinted spectacles of the Classical *polis*, we would do better to compare urbanization processes through the level playing field of archaeology. Admittedly many Archaic cities in Greece or Italy remain largely inaccessible under their successors, but characterizing them

using language and concepts embedded in written sources is bound to create an impression of differences, which might not have been so apparent or important to people in the past. Winger’s further comparison of *Manching* and *Rome* usefully makes the point that even in the later first millennium BC, many Mediterranean ‘towns’ and ‘cities’ were not physically dissimilar to equivalent centres north of the Alps, if only we could force ourselves to view them all through the same lens.

### Open agglomerations

In recent years, the accolade ‘earliest/first towns north of the Alps’ has passed from *oppida* (Collis 1984) to the earlier *Fürstensitze* (Krauss et al. 2016), but this essentially rests on the *Heuneburg* and the French sites of *Bourges* and *Mont Lassois*, added to which both early and late horizons of Iron Age fortified sites are characterized by chronic instability. Indeed, Fichtl and Guichard (2016) argue that *oppida* were a response to a crisis affecting the entire ‘Celtic’ world, comparing the eruption of rampart building in the late second century BC with the *incastellamento* of feudal Europe at the end of the first millennium AD. In my view, we should focus more on changes between the fourth and second centuries BC. At this period, large unenclosed agglomerations – many of them of an overtly industrial character, some deliberately laid out – proliferated over a zone extending from the Atlantic to Hungary and southern Poland. They mostly occupy low-lying locations, and are often near major routes. Compared to *Fürstensitze* or *oppida*, there has been surprisingly little discussion of how and why these centres formed (including at the Cambridge workshop), but the centuries in question are marked by agricultural intensification, settlement expansion, increased specialization of production and population growth, driven or enabled by a developed iron technology. All of these factors must have contributed, along with the adoption of coinage, which within a few generations was used extensively at many of them.

These open settlements take a range of forms. Religious sanctuaries are a prominent feature of many, or in some cases precede them. Filet (2014) identifies up to six different types of agglomeration based on their centrality to regional settlement networks. The intensity of economic flows between them was arguably a key factor in their growth (Filet 2017), making this a possible instance of peer-polity interaction (Renfrew and Cherry 1986). Last but not least, these sites represent the first densely occupied settlements attested at or near the heart of many modern cities north of the Alps (e.g. *Basel*, *Berne*, *Geneva*, *Orleans*, *Paris*, *Toulouse*). Modern German towns with such antecedents include

*Bad Nauheim, Passau and Straubing*; further east, we might cite *Bratislava, Budapest or Vienna*.

Why do such sites not figure more prominently in debates about pre-Roman urbanism? The fact that the best documented of these agglomerations – *Manching* – is also something of an exception to the rule is partly to blame. It had no direct successor, but above all, the early unenclosed phase has been very much eclipsed by the later defences, the defining feature of an *oppidum*, and – because the discipline long equated the two – of urban status. More generally, we have been blinkered by the idea that Iron Age urban sites should share the same tight foci as Mediterranean cities and display continuity at a specific point in the landscape. In fact, whilst many agglomerations declined or were abandoned in the late Iron Age, the latter often took the form of temporary relocation to a more defensible location, with the inhabitants later returning to their original site, or to a new one nearby in the Roman period. *Levroux* is the best known example of this looser kind of continuity, but many sites follow a similar pattern. In other cases, the longevity is more subtle, because of the polyfocal nature of many Iron Age complexes (*Auvergne, Bobigny/Nanterre/Paris*). At this kind of ‘centre’, successive phases appear to wander over a wider landscape, which we are reluctant to accept as continuity. We should also bear in mind that Iron Age communities may have understood place in a very different way to ourselves, perhaps identifying with a tract of landscape rather than a particular built environment.

### What was it like to be urban?

A final topic that deserved more discussion at the workshop concerns the nature of Iron Age urbanism in the sense of ‘the way of life developed in dense urban communities’ (Von Nicolai). What effects did living in larger groups have on the inhabitants? What changes in their lifestyles do we see over time, and were they for better or worse? Were they self-sufficient or did they have to bring in food from elsewhere? Do we see changes in agricultural production to meet rising demand? Was there a higher incidence of human (or animal) mobility at urban sites? Did places suffer pollution as a result of manufacturing metals or glass on an industrial scale? Did this activity make a mark on the wider environment? Did rural populations on

average live longer than town dwellers? How does the age structure of Iron Age urban dwellers compare to other pre-industrial societies? Was there a higher incidence of disease in densely populated aggregations? The list of questions is potentially endless.

For a long time, archaeologists have largely avoided such questions as unanswerable, with some justification. The mortuary evidence from open settlements and *oppida* – our most direct way into the lives of their inhabitants – still leaves much to be desired. However with the data and techniques now available (e.g. stable isotopes, ancient DNA, simulation), we can start to pursue some of these issues. Agriculture is an obvious area where some headway has already been made. The research in the Czech Republic on the sustainability of food production in different environmental settings with a growing population is one example (e.g. Danielisová et al. 2013; Danielisová and Hajnalová 2014). Turning to France, I have long regarded the Aisne valley sites of *Condé-sur-Suippe* and *Villeneuve-Saint-Germain* as a prime example of short-term nucleation into fortified *oppida* at a time of crisis, but new analysis of their faunal assemblages reveals marked differences between them and rural sites, along with a focus on pork production, and import of animals to the larger sites (Paris 2016). Another example comes from Britain, where Lodwick (2016) has identified a series of agricultural innovations following the foundation of *Silchester*, the timing suggesting a response to, rather than a driver of, urbanization. Changes include intensified fodder management and stabling (perhaps freeing land to expand cereal cultivation) and the (re-) introduction of flax cultivation.

In his introduction, Simon Stoddart contrasts the relative instability of urban centres north of the Alps with a greater attachment of Mediterranean cities to fixed points, suggesting this implies ‘radically different’ social structures in the two zones. I agree with him on this last point, but, as will be clear from the above, I feel that to measure Iron Age urbanism in this way is to impose a Mediterranean straight-jacket. In future, in seeking to understand the essence of Iron Age centres we need to be more alive to the cultural variability of pre-industrial urbanism and pay greater attention to the possible agency of urban living itself in further transforming pre-Roman societies.