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

The DAAD Cambridge Symposium

Edited by Simon Stoddart
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Settlement nucleation in pre-Roman Germany

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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
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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.
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9.1 Archaeological urban attributes, with an application to the Heuneburg and Manching.
The emergence of Late La Tène oppida, during the second century BC, marks a great shift in the development of settlements and settlement structure north of the Alps (Fernández-Götz et al. 2014b). This fundamental change can not only be seen in the occurrence of new forms of architecture and the extraordinary size of those multifunctional centres, but also in the rise of a complex economic system and a newly structured society.

Factors of centralization

In the light of these facts, the factors that led or allowed the foundation of oppida need to be assessed. As a first step towards this objective, two categories of driving forces can be identified: On the one hand, there are the ‘ecological and economic factors’ which favoured the establishment of central places and accelerated the process of centralization. On the other hand, ‘socio-political and religious factors’ also played a significant role (Fig. 4.1).

1. Ecological conditions:
The decisive factors, considered ‘ecological conditions’, for the foundation of an oppidum include: the topography and landscape, the climatic conditions and the availability of water.

2. Geographical position:
Another very important factor is the geographical position of a settlement, which ensured the control of trade (Salač 2004) and territorial dominance within a regional or supra-regional area.

3. Natural resources:
The third significant factor, which has to be mentioned, is access to natural resources. Those include e.g. iron ore, salt or other raw materials (Dobiat et al. 1998). The availability of wood was also of high relevance for the foundation and function of large-scale settlements like Late La Tène oppida given the construction of dwellings, the erection of fortifications or fuelling of industrial activity. Additionally, the presence of fertile soil is also fundamental for an agricultural economy and society.

4. Collective action:
Moving on to the ‘socio-political and religious factors’ which also influenced the foundation of oppida in a significant way, the intentions of larger parts of Late La Tène society have to be made a subject of discussion. People living in rural settlements, small villages or clusters of farmsteads, had the need for periodical gatherings and meetings (Fernández-Götz 2013). The reasons are varied: Meetings could address social issues and satisfy daily needs of life. First among them would be the economic transactions. For a rural society, it is fundamental, to organize periodical markets and fairs to buy and sell products. This includes the trade of objects and animals as well as the exchange of plants and seeds. Beyond that, it is quite important for smaller communities to participate in regional or supra-regional assemblies to initiate social interactions (Metzler et al. 2006). This ensures the exchange of information and enables social alliances, such as marriages. Additionally, political gatherings and meetings had to be held for elections or votes. Last but not least, communal assemblies were very important for legal practice, mediation and the proclamation of laws and planning.

5. Ritual traditions:
Apart from those profane or mundane motivations, ritual gatherings and traditions had an important influence on the foundation of oppida. Different studies have proved, that the long-term use of sacrificial places, mostly beginning in the Early La Tène period, led during the Middle and Late La Tène time to the
foundation of important sanctuaries and centres of ancestor worship (Fichtl et al. 2000; Krausse 2006; Fernández-Götz 2014d). At the same time, these continuous ritual gatherings fostered larger communities and collective identities, which formed the basis for the later oppida societies (Fernández-Götz 2014a).

The famous oppidum of Manching (Lkr. Pfaffenhofen a. d. Ilm/D) can be cited as a principal example of this process. A small temple was excavated at the junction of the two main roads leading through the oppidum. The first phase of this building goes back to the end of the fourth century BC. Together with other ritual structures, this temple seems to have functioned as a nucleus for the foundation and development of the settlement (Sievers 2007; Eller et al. 2012; Wendling & Winger 2014). The same situation can be observed at the oppidum of Corent (Dép. Puy-de-Dôme/F). Recent research has revealed, that the central sanctuary was founded at a time, before the settlement itself developed (Poux 2011; 2012).

6. Individual interests:
As a next step, the role of individuals and their ambitions within Late Iron Age society should be analysed and discussed. Individual interests can hardly be proved or traced back to single people in prehistory. The investigation always will end up at the group level, representing a component of society, mainly the social élite. For the Late La Tène period, members of this social élite can be described as landowners, religious leaders, military rulers or representatives of aristocratic families (Guichard & Perrin 2002; Menez 2008; Wendling 2012). Their socio-political status led these individuals to be significantly involved in the foundation of oppida (Büchsenschütz & Ralston 2012). Most probably they were even the initiators of these developments. At the same time, it seems important to put some thought into groups or persons that could have blocked or resisted such processes of centralization, with the intention of preserving their social status and power by creating their own separate economic systems and residences.

Centralization vs. dispersal
Late Iron Age society was, therefore, faced with two differentiated strategies: centralization and dispersal. These two strategies were both enabled by the same

**Figure 4.1. Diagram of factors which favoured and led to a process of centralization and the foundation of oppida.**
socio-economic conditions, but differentially promoted by selective parts of society. As an example for those two options, the development of two different geographical regions in southwest Germany will be described and analysed in the following sections (Fig. 4.2).

Region 1: Centralized power
The first region to be mentioned here is located on the western border of the Swabian Alb, close to the river Neckar. The oppidum Heidengraben (Lkr. Reutlingen/D) was founded in this region during the second half of the second century BC (Knopf 2006). With a total size of nearly 1700 hectares, the Heidengraben is the biggest fortified settlement of the pre-Roman period on the European Continent (Ade et al. 2012). The site is situated on an easily fortified highland peninsula (Stegmaier 2009a), and the walls, including eight gates, run along a length of more than 10 km (Fig. 4.3). The

![Figure 4.2. Map of southwest Germany with the two areas of investigation: 1) Heidengraben region; 2) Heuneburg region (modified after https://commons.wikimedia.org/wiki/File%3AAKarte_Baden-Wuerttemberg_physisch.png, last access 04.03.2017).](image)
centre of the oppidum, the so-called Elsachstadt, was separately fortified and covers an area of approximately 160 hectares.

The Heidengraben benefits from a number of positive geographical and ecological conditions, including: more than 2000 hectares of fertile ground that are easily accessible from the oppidum (Stegmaier 2009b; 2014; Stegmaier & Wahr 2009); its strategic geographical and territorial position, which allowed the control of traffic and the trade of goods in a broad region, most probably ensured the exaction of tolls. As a major centre of trade and crafts, the Heidengraben was located in between the main river-systems of Central Europe, the Rhine and the Danube. Large amounts of goods and Mediterranean imports reached the oppidum through these routes, and were traded farther afield. One interesting fact, in this context, is the extraordinarily high number of Italian wine amphorae, discovered in the settlement (Stegmaier 2014).

The occupation of the Heidengraben area began much earlier than the Late La Tène period. It can be shown that land use increased remarkably for the first time at the end of the Bronze Age. This can be seen for instance in the Burrenhof cemetery, located in the interior of the oppidum (Fig. 4.3). The earliest graves found there, date back to the Urnfield Culture between 1200 and 800 BC. With the beginning of the Early Iron Age, a large cemetery expanded, in the same area, with no less than 40 burial mounds. Many grave goods from these contexts were of a high quality, including amber beads and gold objects for example, providing evidence for a high standard of living (Zürn 1987, 63–5; Stegmaier 2012, 44–9). During the Middle and Late La Tène period, immediately before the oppidum Heidengraben was

![Figure 4.3. Map of the Late La Tène oppidum Heidengraben with fortification lines and the location of the Burrenhof cemetery (modified after Fichtl & Rieckhoff 2011)
Ritual, society and settlement structure

was an important place for ritual assemblies and collective commemoration, during the Late Iron Age. Furthermore, the cemetery played a key role within the foundation of the oppidum and led to the creation of a collective identity. From this perspective, the ancestor worship practised here, in the middle of the Early Iron Age graveyard with its numerous and big burial mounds, guaranteed a spiritual and socio-political legitimation for the erection of the large-scale settlement (Stegmaier in press b).

The cemetery at the Burrenhof area was not used for nearly 200 years, following the abandonment of the oppidum, in the first century BC. Evidence for reoccupation does not come until Roman times, when people settled once again next to the still visible tumuli and used them once more as places of sacrifice (Stegmaier et al. 2015).

Figure 4.4. Plan of the Burrenhof cemetery with Early Iron Age burial mounds and the complex Late Iron Age system of ditches (modified after Stegmaier et al. 2016).
In summary, it becomes obvious, that the convenient ecological conditions, the control of trade routes and the huge amount of fertile ground formed a perfect basis to build up a large-scale settlement. This led, in combination with personal interests and long-term ritual traditions, to the foundation of the Heidengrab gen oppidum.

Region 2: Dispersed power

A completely different development of settlement structure took place in the second region: This region is located on the other side of the Swabian Alb (Fig. 4.2), close to the area where the famous Fürstensitz of the Heuneburg was set up in the Early Iron Age (Krausse et al. 2016). The Heuneburg (Lkr. Sigmaringen/D) is situated approximately 60 km north of Lake Constance on the western banks of the river Danube. The 3-hectare plateau of the hillfort provides an excellent view of a long stretch of the river valley, which allowed the inhabitants of the former settlement to control the movement and the trade of goods on this very important, prehistoric traffic route. The exceptional potential of the Heuneburg region can already be seen during the Early and Middle Bronze Age, from 1600 to 1500 BC, when the Heuneburg became a regional or supra-regional centre, with a densely settled environs, for the first time (Gersbach 2006; Kurz 2007, 150–7; Stegmaier 2017). The same picture can be observed during the Late Bronze Age and the following time of the Urnfield Culture from 1300 to 1100 BC. Once again the region at the Upper Danube shows a dense settlement pattern with two important hillforts and several rich graves (Reim 2010; Stegmaier 2017).

During the Early Iron Age, the Heuneburg developed into one of the most famous hillforts of this time, featuring numbers of rich burials and huge burial mounds in the surrounding landscape (Krausse et al. 2016). From 600 to 530 BC, the settlement reached its maximum size of more than 100 hectares. Approximately 5000 people inhabited the settlement, which could be divided into the fortified hilltop, the lower town and the outer settlement (Kurz 2010). Beyond that, the extraordinary status of the Heuneburg is demonstrated by the emergence of monumental architecture like the mudbrick wall on the hilltop, with its rectangular towers, or the impressive 16 m long and 10 m wide gatehouse of the lower town, both built on precisely constructed, limestone foundations (Krausse et al. 2016, 80–2). Apart from these exceptional architectural features and the immense size of the settlement, the Heuneburg was an important centre of craft and trade. This can be seen e.g. in the distribution of white ground pottery for which the Heuneburg was the main production site in southwest Germany (Stegmaier 2016; Stegmaier in press a).

During the following La Tène period, this well-known picture of a centralized settlement pattern around the Heuneburg changed completely. From the Early La Tène period onwards, the hilltop remained unoccupied. Instead, fortified farmsteads emerged during the Middle and Late La Tène period in the area surrounding the former hillfort. Those so called Viereckschanzen are rectangular enclosures with a v-shaped ditch, an earthen rampart and a wooden palisade on top (Bittel et al. 1990; Wieland 1999c; this volume). It is most likely that these farmsteads belonged to the already mentioned social élite of the Late La Tène period. This becomes apparent from the high quality of objects and Mediterranean imports, like amphorae, or from the size of the representative buildings, which were regularly found inside of those Viereckschanzen (Wieland 1999c). As residences of the late Iron Age élite, they represent small seats of local power.

Focusing on the Heuneburg region, a strong concentration of Viereckschanzen in a small area becomes visible. Five of them are located within a radius of less than 5 km. Extending the radius up to 18 km, another three can be added. This extremely high density of Viereckschanzen is very unusual in such a small area. It underlines again the above average ecological and economic potential of this geographical region, which also would have been efficient enough to ensure the business and the daily life needs of a large-scale settlement such as an oppidum. Nevertheless, there is no apparent evidence to show that the local population intended to develop a central settlement (Wieland 1999b). On the contrary, the strategy was one of dispersal.

The reason for this dispersed settlement pattern, with separated Viereckschanzen most likely goes back to the interests of the social élite, living in those fortified farmsteads. It seems that they had, in contrast to the area of the Heidengraben or in other regions, no intention to build a common settlement or centre. Instead they continued to live and wield power on their own farmsteads, as local rulers.

Leaving the region of the upper Danube and having a closer look at the distribution of Viereckschanzen and their appearance in the area of large-scale settlements in general, it becomes clear, that Late La Tène oppida and Viereckschanzen have a mutually exclusive distribution. There is currently no known oppidum with a Viereckschanze inside its walls. It should be noted that two rectangular earthworks inside oppida, were interpreted as Viereckschanzen for a long time, but can now be differently interpreted.

The first one is a 98 m long and 66 m wide structure (Engels 1976; Zeeb-Lanz 2012, 224–5) on the summit
In summary, it is highly unlikely that oppida and Viereckschanzen occurred together at the same place in southwest Germany. They were founded with different motivations, probably on the basis of different interests of the Late Iron Age élite (Fig. 4.5). At the same time, there are many parallels between the function and foundation of oppida and Viereckschanzen. One is the ritual tradition which was important for the legitimation of both settlement types.

An impressive example of this can be found in the Heuneburg area. As mentioned before, the landscape here is characterized by a large number of burial mounds, of which most date to the Early Iron Age (Kurz & Schiek 2002). The so-called Hohmichele is the largest, with an unusual height of 13.5 m and a diameter of 78 m (Riek & Hundt 1962; Kurz & Schiek 2002, 77). A Viereckschanze was founded in the Middle or Late La Tène time (Hansen et al. 2015, 510–14; Hansen 2016) directly beside this monumental burial mound. Similar phenomena are known from several other regions where Viereckschanzen also occur next to older burial mounds (Bittel 1978; Schiek 1982; Bittel et al. 1990; Wieland 1999c).
The close connection and relation of these features leave little doubt that the tumuli served as loci for the veneration of ancestors and as symbols for a spiritual legitimation of the people living and wielding power there during the Late La Tène time. The founders of the Viereckschanzen surely wanted to show that they were the inheritors and descendants of the heroic ancestors, buried in those Early Iron Age mounds.

Conclusion

Drawing on the evidence of these two trajectories, two different models of settlement development can be described for the Late Iron Age in southwest Germany. The first is characterized by a process of centralization and leads to the foundation of large-scale settlements such as oppida during the second half of the second century BC. The driving forces are economics, socio-politics, ritual traditions and individual interests. The second type of settlement pattern can be seen as a process or rather a state of dispersal, based on self-sufficient units, which are represented, in southern Germany by the manor-like Viereckschanzen. As residences of the late Iron Age élite they functioned independently. However, a dense cluster of such settlements, as can be seen in the Heuneburg region, may have worked together to form an alternative system in competition with the centralized settlements of the oppida.

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