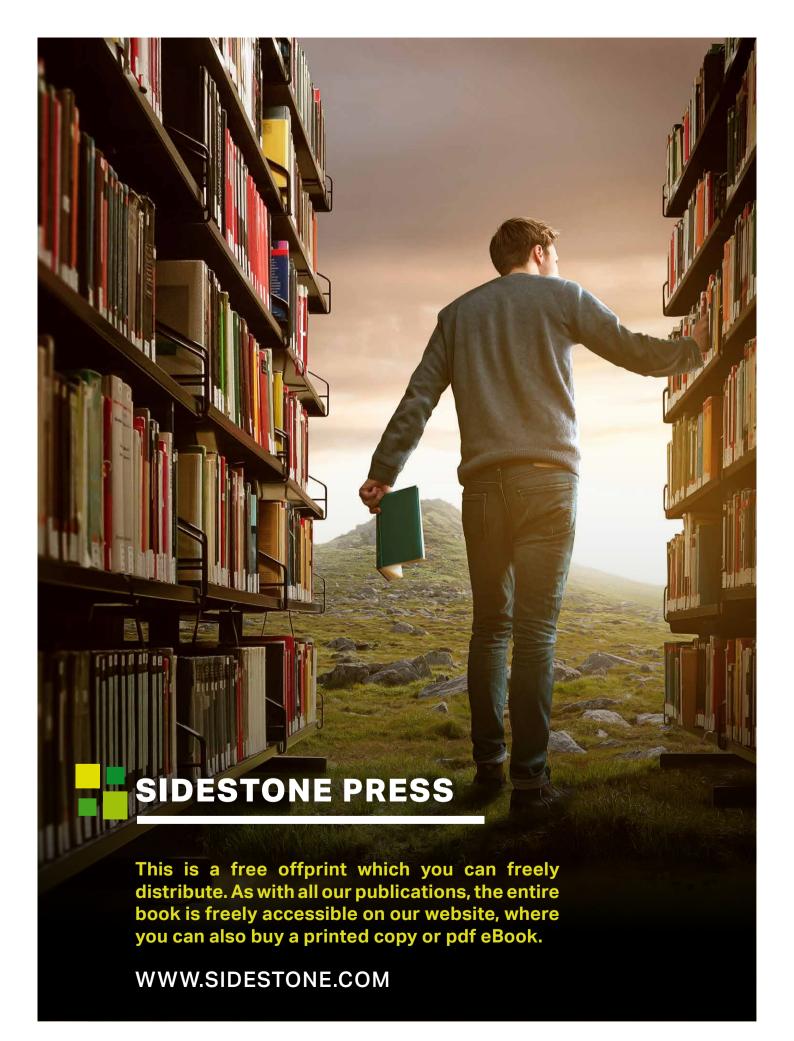


RELATING BUILDINGS, LANDSCAPE, AND PEOPLE IN THE EUROPEAN IRON AGE

edited by

Dave C. Cowley, Manuel Fernández-Götz, Tanja Romankiewicz & Holger Wendling

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# RURAL SETTLEMENT

Sidestone Press

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Cover: The cover illustration is a composite of the reconstruction of a semi-sunken structure at Josipovac-Selište in southern Pannonia, overlaid on a settlement density distribution in relation to visual coverage from hillforts in the area of Sarmizegetusa Regia, Dacia. (With thanks to Ivan Drnić (reconstruction: source Filipec, K. (ed.) 2009. Josipovac - Selište (AN 14). In Arheološke slike Slavonije. Zagreb: Odsjek za arheologiju Filozofskog fakulteta Sveučilišta u Zagrebu) and João Fonte (map)).

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# Chapter 27

# **Around the Münsterberg**

How online tools help us to rethink our data

Loup Bernard

### 27.1 Introduction

This paper presents a short case study of how online data from French and German archaeologists can help the reconsideration of a so-called *Fürstensitz*, the Münsterberg, in a broad context. In the framework of a web-GIS archaeological evidence, palaeoenvironmental data, and topography are easily combined for analysis.

# 27.2 The ArkeoGIS project

The ArkeoGIS project, which has been online since 2011 (http://arkeogis.org/en/), is a web-GIS which aggregates datasets originating from different institutions dealing with the past and the environment. Every contributor shares part or all of the spatial data, with at least one classification (e.g. settlement, grave...) and one period. While the chronological system is based on absolute dating, the interface allows inclusion of dates such as the traditional Hallstatt/La Tène system. All or part of the available data can then be queried inside the application and displayed in the browser on a map. The result of every query can be retrieved as a text file (.csv format) that can be re-used in any other software, database, or GIS, for example.

From the beginning, the project has tried to draw in colleagues from geographical studies, with pollen analysis and soil mapping listed, for example, with associated literature. While it is more and more difficult for researchers to stay up-to-date with literature in their own field of research, maintaining an awareness of associated disciplines is even harder, especially if that spans several countries and languages. Indeed, mapping of these archaeological and associated data in a common framework is important as the combination of knowledge produced by different researchers opens new questions, as well as informing planning of rescue archaeology and infrastructure projects.

# 27.3 The Münsterberg case study

The ArkeoGIS project in the upper Rhine Valley originated in 2008 as a collaboration between the Universities of Strasbourg and Freiburg-in-Breisgau, together with the regional archaeological services and companies, to share data around the river. To date this has supported the compilation of many databases describing several thousand sites that are now available for professional researchers wishing to work on this area. In illustrating the potential that this presents, two queries relating to the regional context of the Münsterberg are presented.

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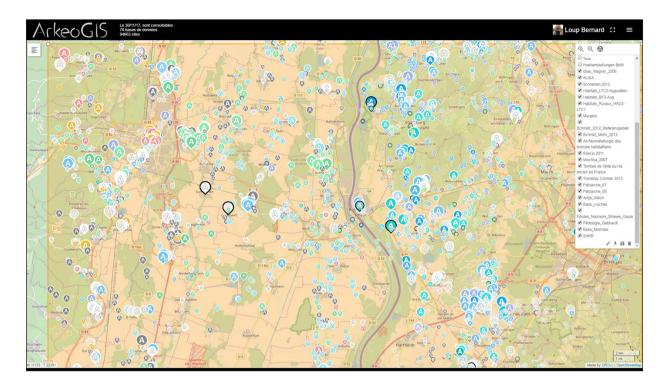


Figure 1: Archaeological and environmental data available around the Münsterberg (L. Bernard).

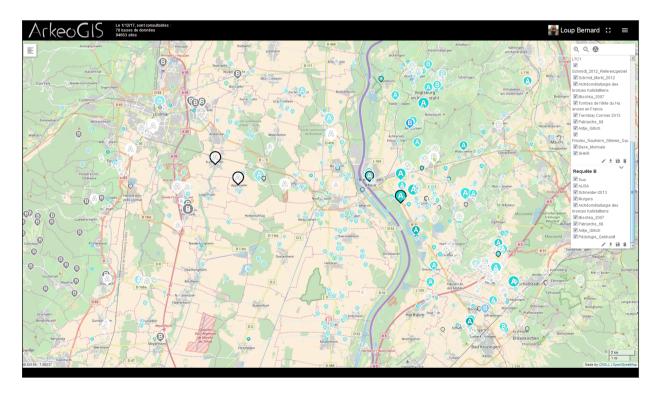


Figure 2: A) Map of Iron Age sites between the Vosges and the Black Forest, and B) the available environmental data. The queried databases are listed in the box on the right of the map. (L. Bernard).

The first query requests all available data in the area (Figure 1). The result is difficult to read because data can be redundant in ArkeoGIS if a site is present in different datasets. Nevertheless, it provides an excellent immediate picture of the current state of knowledge in the study area, depending on the available datasets. Information on the database records and the metadata for each dataset, including a digital original identifier, is available. In this example some 9,838 lines of information drawn from 22 datasets are available.

In this case the history of research introduces complex bias that needs to be taken into account. For example, the area surrounding Freiburg-in-Breisau has been examined in several PhDs and research grants (the SHKR, for example: Siedlungshierarchien und kulturelle Räume, https://www.jma.uni-kiel.de/en/research-projects/ data-exchange-platform/shkr) over the years. Thus the density of Iron Age sites (blue dots) is because Iron Age datasets were the first to be integrated in ArkeoGIS, and because of the long tradition of pre- and protohistory (Vor- und Frühgeschichte) study in the city. On the left bank of the river, the rapid development of the French city of Colmar is evident, with the clear contribution that rescue archaeology provides in several transects following the lines of road development around the city. More interesting, the amount of data makes the empty gaps between site distributions significant, as these can correspond to forested or ploughed areas, in contrast to areas of known settlements or cemeteries. Crossreferencing of datasets, such as soil mapping and pollen analysis, is easily undertaken with the map interface being the key medium for integration. The distribution of archaeological sites also clearly indicate where and when the channel of the Rhine riverbanks has migrated.

The second query (Figure 2) of Iron Age sites between the Vosges and the Black Forest provides 2,637 returns from 20 different sources. However, only 618 sites from nine datasets provided a more precise date range (Ha D3/LT A), due to the precision of the original databases which were not all designed by protohistorians.

Any user can get direct access to the coordinates, characteristics and literature for the area within a few mouse clicks. This represents a huge improvement compared to the situation a few years ago, when researchers would have needed several months of work going through French and German literature in different libraries and institutions in order to get the same information (see the maps in Brun & Chaume 1997, 377-8 for example). This integration within a common web-GIS also supports a better understanding of the data that has become available over the last few decades, as

the databases from the different PhDs for example, each reflect the state of knowledge at a given time.

### 27.4 Discussion

Moving back to the two examples of the utility of ArkeoGIS, for the Münsterberg, it is clear that the hillfort is definitely not only surrounded with sites on the right riverbank (as it appeared in Pauli & Stork 1993, 103, 104), but also by dozens of farms, villages and several productions sites in the mountains and on the left riverbank. Although the state of research in the Vosges area is comparatively poor and is mostly from 19<sup>th</sup> century investigations, new work is starting to provide more data (Walter 2016), such as the large number of open settlements, such as in Geispolsheim, on the west riverbank (Landolt & Fleischer 2011).

The cooperation with palaeo-environmentalists (Bernard *et al.* 2015) also opens new possibilities, as human impact can be read in some areas at certain scales. Having a mapping of known sites can help to understand taphonomic processes (*e.g.* selective erosion or burial of sites) which are vital elements in attempting to understand Iron Age landscape and society.

Note: All detailed metadata regarding the datasets will be online in arkeogis.org as soon as this paper is published. The shared databases are open to any professional archaeologist on request at http://arkeogis.org/demande-dacces/.

### 27.5 Bibliography

Bernard, L., Ertlen, D. & Schwartz, D. 2015. ArkeoGIS, Merging Geographical and Archaeological Datas Online. In F. Giligny, F. Djindjian, L. Costa, P. Moscati, & S. Robert (eds). Concepts, methods and tools. Proceedings of the 42nd Annual Conference on Computer Applications and Quantitative Methods in Archaeology. 401-6. Archaeopress: Oxford,

Brun, P. & Chaume B. (dir.) 1997. Vix et les éphémères principautés celtiques: les VIe et Ve siècles avant J.-C. en Europe centre-occidentale. Actes du colloque de Châtillon-sur-Seine (27-29 octobre 1993). Paris: Errance.

Landolt, M. & Fleischer, F. 2011. Les occupations d'Entzheim "In der Klamm "et de Geispolsheim "Schwobenfeld "(Bas-Rhin) du Hallstatt C à La Tène B (fouilles 2006 à 2009). Bulletin de l'Association française pour l'étude de l'âge du fer, AFEAF, 29, Paris, 13-7.

Pauli, L. & Stork, I. 1993. *Der Münsterberg in Breisach. II / Hallstatt- und Latenezeit*. München: C.H. Beck Verlag. Walter, M. 2016. Les sites de hauteur du massif vosgien. Actualisation des données et modalités d'implantation (Néolithique récent – X° siècle), Archimède 3, 20-36.