A Structure of Unknown Meaning

Harald von der Osten-Woldenburg

Introduction

In 1998 Dr. Otto Braasch took some pictures of an unusual structure near the town Schwaebisch Gmuend in Baden-Wuerttemberg (fig. 1). Seven years ago this structure was situated in the fields, far away from any houses. But today it is surrounded by buildings of the local industry. In October 2005, it was possible to do some magnetic and electric mappings of this area to get some more information on this archaeological site.



Fig. 1: Schwaebisch Gmuend - Guegling: Aerial picture of the structure investigated by magnetic and electric mapping. Photo by Dr. Otto Braasch, 1998

Results

The magnetic mapping delineated some walls (fig2, top), and the first impression was that this structure, about 40m by 40m in size, could represent the remnants of a roman temple. On one side, sherds of rubbing bowls from the Roman period were detected some years ago at this site suggesting that this structure should be of the Roman period. But on the other side the entrance would be very unusual for a Roman temple. The strong anomalies which surround this archaeological object mark some trees which were planted by the administration of the town to mark the size of the monument. And the bright magnetic anomaly in the south of the structure is caused by a metallic sub-construction of a wooden platform.

We were not successful at all doing some groundpenetrating radar measurements on this site, and the results of the electric mapping showed us, why: the electrical contrasts are extremely low, and according to the resistances we have measured, the humidity and the content of clay in the soil are too high for GPR.

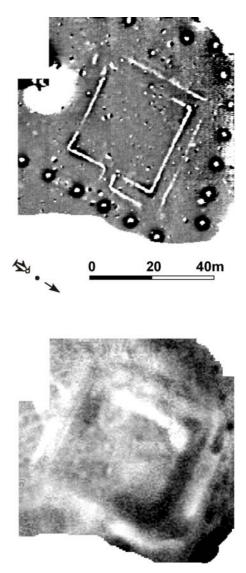


Fig. 2: Results of magnetic (top) and electrical (bottom) mapping.

What is it? A brief discussion

In spite of the low dynamic of the data of the electric mapping we were able to get some more information on this structure, especially some hints on the inner area (fig 2, bottom). Someone suggested that these structures could be typical for a minor Roman fort. But this is in contradiction to the results of the magnetic mapping. Furthermore the results of the electric mapping suggest that there was a wall surrounding the structure indicated in the magnetic mapping by walls. And according to old documents, a lot of stakes from oak wood were excavated in the year 1870, when preparing the site for gardening.

If we do a numerical combination, based on two different algorithms, of the results of the magnetic mapping (fig3, top) and the results of the electric mapping (fig3, bottom), the combined images suggest that this archaeological structure couldn't be a roman fort.

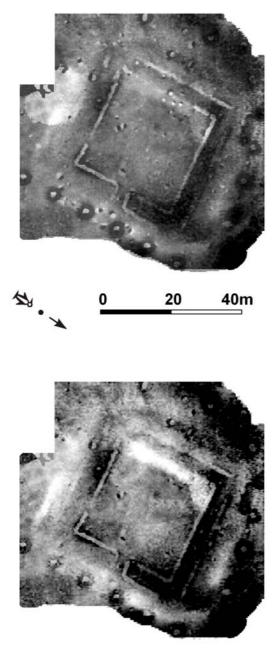


Fig. 3: Numerical combination of the results of magnetic and electric mappings of the structure near Schwaebisch Gmuend, using two algorithms.

On the other side, the area is called "Schwedenschanze" (a temporary military fieldwork constructed by the Swedish during the 30years war), which means that it could be a structure from the early 17th century. But there is no hint at all that this structure could really be a Schwedenschanze, and there is also no hint that it is a structure from the Middle Ages. We have seen aerial pictures of very similar structures (for example at Bad Wildungen, Hessen, [1]), which are assumed to be Schwedenschanzen. But we didn't find out if such a structure was investigated intensively by geophysical prospecting or by an archaeological excavation.

References

[1] Burgwuestung und Schanzen, in: Zeitspuren – Luftbildarchaeologie in Hessen. Ed.: Landesamt fuer Denkmalpflege, Hessen. 1997, p. 83