

## BRONZE AGE LANDSCAPES IN THE BENTA VALLEY Research on the Hinterland of Bronze Age Centres

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The research project, “Landscapes of Complexity: The Politics of Social, Economic and Ritual Transformations in Bronze Age Hungary” was generously funded by the Wenner-Gren Foundation in 2012–2013.



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*Research on the network of Bronze Age settlements and their burial grounds has always been a priority of archaeological fieldwork in Central Europe. Researchers of the past centuries tended to focus on the large central settlements such as tells and hillforts. The past decade has seen a shift in research perspectives: while the study of central settlements has lost none of its importance, interest has grown in micro-regional research and the investigation of settlements with differing function and layout. Only complex research projects can address broad issues of Bronze Age land use. We sought answers to the following questions: 1) Did differences exist between the regional and micro-regional settlement patterns during successive periods of the Bronze Age? 2) Were there genuine centres and specialised settlements during the Bronze Age in Central Europe? 3) How did a community's cultural background influence landscape use in a particular region? 4) How is social and political organisation reflected in cemeteries? The Bronze Age settlement history of the Százhalombatta area was investigated as part of an international research project.*

The Benta Valley Project is part of the Százhalombatta Archaeological Expedition (SAX). Launched in 1997, the Hungarian-Swedish-American and, later, Hungarian-Swedish-English collaborative research project focused on the excavation of the tell settlement at Százhalombatta–Földvár, one of the key sites in the Central Danube Valley. The rigorous excavation technique has contributed a wealth of new information on the layout of Bronze Age tell settlements and on how their houses were constructed, as well as on households and on the period's chronology. While still working on the tell settlement during the project's early phase, we realised that in addition to broadening our knowledge on the central settlement, the study of Bronze Age settlement patterns in the settlement's broader environs would be equally important to gain new insights into the period's social, economic and political dimensions. The findings of the international research project have confirmed that the complexity and stratification of Bronze Age societies can be correlated with the settlement hierarchy and thus one of the main directions in social archaeology focuses on settlements, with a scope ranging from individual households to entire micro-regions. One of the key questions in research projects of this type is whether there were prominent, central settlements. Another goal of these research projects is to identify possible divergences in the layout of the central settlements

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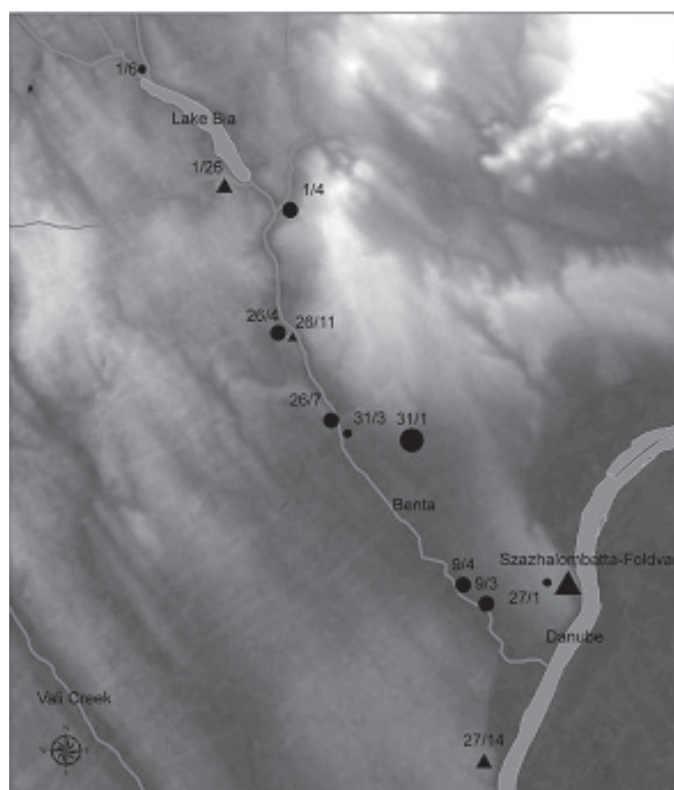
and the adjacent outer settlements, as well as in the layout of the broader area's larger and smaller open villages, and to examine the similarities and divergences in the size of the houses and the number and size of the storage pits uncovered on various settlement types. Another important issue is whether some hierarchy between the settlements reflected institutionalised social differences and political integration, or whether the settlement patterns reflect heterarchy, a settlement network made up of communities some equal in rank.

The Benta Valley is the most important and best definable geographic unit associated with the Százhalombatta settlement. Parallel to the excavation of the central settlement, we began our investigations in the valley. We followed the three-phase research design proposed by Charles L. Redman: 1) field survey, 2) determining site types, 3) excavation.

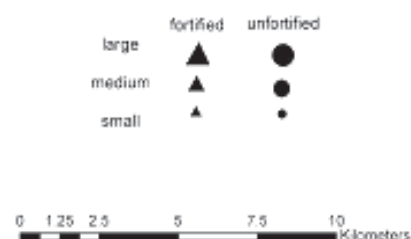
Volume 7 of *Magyarország Régészeti Topográfiaja* [Archaeological Topography of Hungary] identifies already known sites in the Benta. The sites and their broader area were revisited in 1998–1999, their location was checked and the number of Bronze Age sites grew by one. A total of thirty-two Bronze Age sites were identified in the Benta Valley, providing a firm foundation for the project's second phase.

The goal of the second phase between 2003 and 2007 was to determine the different site types and the nature of the occupation. Each settlement was shovel tested on a 50 m grid across its area to determine size and 1 m × 1 m × 0.30 m soundings were opened in locations that suggested settlement activities. The thirty-two Bronze Age sites could be assigned to different categories based on the finds recovered from the shovel tests and the soundings, and we could also prepare a tentative reconstruction of the Bronze Age settlement network (*Fig. 1*). More information on the layout of these settlements will be gained from future investigations – through remote sensing and archaeological excavation – in the project's third phase.

Preparations for the project's third phase were begun in 2012 with a grant from the Wenner-Gren Foundation. Our goal was to conduct a magnetometer survey on three different settlement types, selected from among the sites that were visited and surveyed during the project's second phase (at Tárnok 31/1, an open site; at Sósokút 26/4, an outer settlement adjacent to a fortified settlement; and at Bia 1/26, a small fortified settlement). The comparison of the geophysical survey with the fieldwalking data would enable the identification of households. Our ultimate objective is to compare the layout of the settlements and to identify similarities and divergences between them.



*Fig. 1: The Bronze Age settlement network in the Benta Valley (after Earle et al. 2011, Fig. 1)*



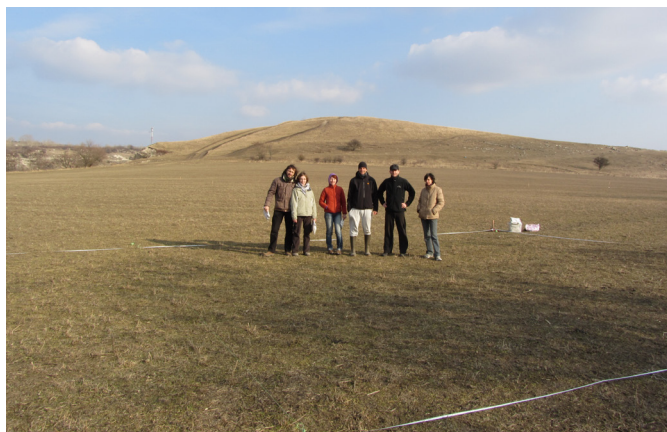


Fig. 2: Magnetometer survey at Sósút in Spring 2012



Fig. 3: Sósút-Kálvária, with the outer settlement, early Autumn 2012

In the spring of 2012, we performed the magnetometer survey at two sites, Sósút 26/4 and Bia 1/26 (Fig. 2). A roughly 2.5 hectares large area was surveyed at both sites. Parallel to the magnetometer survey, we also conducted a systematic grid walking in 10 m by 10 m units.

The results of the magnetometer survey were tested in two smaller, 4 m by 4 m trenches at Sósút (Fig. 3). The geophysical surveys did not indicate the remains of timber-framed houses and neither were the anomalies perhaps indicating burnt houses too convincing. In the lack of house remains, we examined the “empty” areas enclosed by smaller and larger pits where we noted a concentration of finds during the fieldwalking (Fig. 4). After carefully excavating Trench 2, divided into 1 m by 1 m squares, and sieving the removed soil (Fig. 5), we found a Bronze Age occupation deposit enclosed

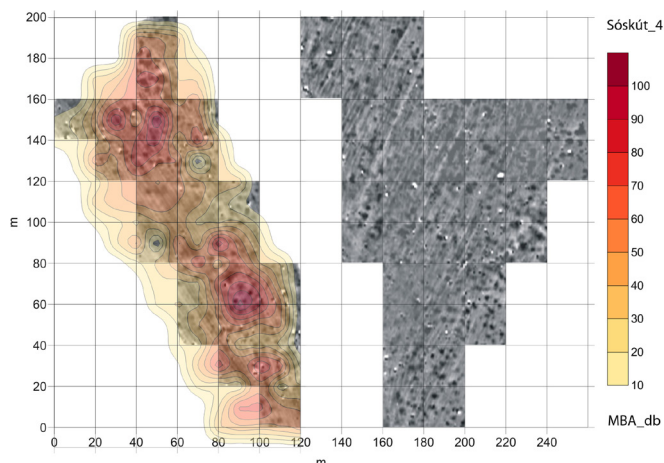


Fig. 4: Magnetometer survey of the Sósút 4 site and the scatter of the Middle Bronze Age finds



Fig. 5: Excavating the grids in Trench 2 of the Sósút site



Fig. 6: Bronze Age occupation level enclosed by post-holes at Sósút



Fig. 7: Burial in one of the settlement's pits at Sós-kút



Fig. 8: Members of the excavation team

by several pits and post-holes (Figs 6–7). Although this occupation deposit may in fact represent the remains of a house, no conclusive proof exists because the house was not destroyed by fire and thus its floor and upright walls had not burnt down. The remains of the building, which could barely be identified even using the most rigorous excavation techniques, also explain why so few Early and Middle Bronze Age buildings were found during the large-scale salvage excavations conducted over the past decades. The preliminary results are very promising. The research project will be continued at Bia and Tárnok in early spring this year (Fig. 8).

We described the methodological background and the findings of our project to the university students from Pécs participating in the projects and our colleagues from other institutions during the workshop discussions preceding the sounding excavation. We also included a field presentation of the magnetometer survey.

As in the case of all teamwork, many people assisted our work. We would like to thank Magnus Artursson (Swedish National Heritage Board), Eszter Fejér (Institute of Archaeological Sciences, Eötvös Loránd University) Eszter Melis (Field Service for Cultural Heritage, Hungarian National Museum), István Greman, the archaeology students of Pécs University and Péter Lakatos for their assistance. Special thanks are due to Magdolna Vicze (Matrica Museum, Százhalombatta), the staff of the Directorate of Pest County Museums and the Sós-kút local government for their support.

#### RECOMMENDED READING

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