

REVIEWS AND SHORT REVIEW NOTES

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(review) Peter Stadler and Nadezhda Kotova, *Early Neolithic Settlement Brunn am Gebirge, Wolfholz, in Lower Austria 1. Early Neolithic Settlement Brunn am Gebirge, Wolfholz, Site 2 in Lower Austria and the Origin of the Linear Pottery Culture (LPC)* (= *Beiträge zur Ur- und Frühgeschichte Mitteleuropas* 88). Langenweißbach 2019: Verlag Beier & Beran. ISBN 978-3-95741-100-6. 2 volumes, 1082 pages with colour figures and tables.

Further authors: Franz Brandstätter, Otto Cichocki, Svend Hansen, Ian G. Hedley, Nadezhda Kotova, Matthias Kucera, Eva Lenné, Michaela Lochner, Alexander Minnich, Alexey G. Nikitin, Friederike Novotny, Beate Maria Pomberger, Erich Pucher, Leopold Puchinger, Anna Rauba-Bukowska, Roman Sauer, Friedrich Sauter, Julian David Schratenecker, Peter Stadler, Maria Teschler-Nicola, Kurt Varmuza, Wolfgang Werther, Silvia Wiesinger.

The field surveys in Brunn am Gebirge conducted for many years by Peter Stadler, PhD are widely known amongst the European archaeologists. These investigations have delivered a great amount of new data referring to the Linear Pottery Culture (LBK). This research has produced much significant information on the settlement, architecture, and economy of these first farming societies that, starting from the half of the 6th millennium BC, lived in and expanded over vast areas of Europe, from the Paris Basin to Ukraine. Until present, the results of these investigations have been presented in numerous articles and papers given during various scientific conferences.

The publication in question is the first of the long-awaited monographs devoted to reporting the sites in Brunn am Gebirge. It consists of two volumes addressing, in particular, pottery from the sites 2a and 2b, as well as interpretations of radiocarbon datings and certain specialised analyses (archaeobotanical, anthropological, petrographic and mineralogical), research performed on ceramic materials, thermo-chemical analysis of hearths, and chemical analysis for the remains of some organic materials.

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Volume 1/part a is arranged in 28 main chapters. Chapter 1 by R. Sauer and P. Stadler presents a brief overview of the geology and types of soils identified in the area of the sites in Brunn am Gebirge, and the following (Chapter 2, M. Kucera, A. Minnich, P. Stadler) addresses the issues of the topographical situation. Then, (Chapter 3) P. Stadler discussed the history of investigations of particular areas, namely Area 01–Area 19. The entire undertaking was launched in 1989 and was intended as a rescue survey preceding a public highway project. This area turned out to be very rich in archaeological findings, so the research was continued and ultimately completed in 2005. In the following sections of the publication, the introductory issues are discussed one by one, namely, total station surveying maps and aerial photos, then results of geomagnetic analyses and finally, the systems of the recording of the ceramics.

The main part, dedicated to archaeological artefacts, starts from Chapter 7. This is indeed an introduction to the discussion on the specialised analyses. In this section, E. Leneis characterised the basis of ceramic assemblages, describing the major forms and ornamentation of vessels as well as other artefacts made of clay. In similar style, S. Hansen discussed (Chapter 8) two clay idols.

The following sections address the issue of the Neolithic hearths from Site 2 (Chapter 9, I. G. Hedley; Chapter 10, A. Minnich). Four human graves were also encountered within the boundary of the settlement discovered on Site 2. They were described in detail in the following chapter (P. Stadler), together with presentation of radiocarbon datings and comparisons with other graves.

Chapter 12 is dedicated to the Image Database Montelius (for Building a Neolithisation Archive), created by P. Stadler especially for the purpose of processing the information from the complex of sites in Brunn am Gebirge. Step by step, this database has been extended enormously, enclosing the data from the LBK sites from the entire area of Europe. This is the first tool of this type providing very easy access to the entire published literature and allowing us to process the archaeological data in any required, multi-aspect manner. This database has been created, modified and improved for ten years, during which time over 500 thousand pieces of information from the whole of Europe have been entered. Amongst many possibilities it provides, one can name an ability to deliver data almost immediately and automatically, on the following issues: 1) analogies and typologies; 2) one's own typologies; 3) various graphical presentations of statistical analyses and comparisons, such as seriation, correspondence analysis (WinSerion); 4) maps presenting *e.g.*, distribution of types of artefacts over the territory of Europe, dispersion of archaeological sites or particular types of features; 5) the so-called global mapping (Montelius Entry GoogleCode) in cooperation with Google Maps (mapping any required data gathered for a selected part of the Google Maps); 6) the so-called local mapping enabling graphical presentation of data within the investigated archaeological site, for instance, distribution and spatial relationships between particular types of features and artefacts; 7) maps reconstructing the

extent of cultural groups in Europe. This tool was employed for the processing of ceramic assemblages from the settlements in Brunn am Gebirge.

A very significant element of the monograph in question is Chapter 14 (P. Stadler, N. Kotova), presenting the sequences of numerous radiocarbon datings (including from PPN, Starčevo, Körös), in comparison with those referring to the Linear Pottery Culture. Then, these dates were interpreted in the context of chronological schemes functioning in the European Neolithic (according to R. Tichý, J. Pavúk). Based on this, an ultimate periodisation of Site 2 in Brunn am Gebirge was presented in the volume's Chapter 15 (N. Kotova). The following three chapters by N. Kotova and P. Stadler are dedicated to the processing of all of the fragments of the LBK vessels collected from Site 2, starting from technology, typology of forms, ending with ornamentation and presentation of these assemblages against the European background. An extremely precise typology of vessel forms was obtained, which can now be successfully used for classification of pottery from the entire extent of the LBK; this is very useful in every present and future analysis of sites of this culture. The next two chapters contain descriptions of all other clay artefacts, such as figurines, amulets, discs, musical instruments, etc.

In the successive sections of the monograph, one can find two synthetic texts that are of great interest for researchers of the Early Neolithic. Chapter 21 (N. Kotova, P. Stadler) contains a summary and characterisation of the LBK formative phase, while the Chapter 22 (P. Stadler) is dedicated to considerations upon the relationships between the Mesolithic and Early Neolithic societies, exemplified by traces of massacres, mass graves and fortifications recorded at many archaeological sites.

The last section of the Volume 1/part a consists of a few chapters and is dedicated to several selected issues. One of these is the petrographic analysis of the LBK pottery against the background of the neighbouring regions, namely Hungary, Croatia, Ukraine and Slovenia (A. Rauba-Bukowska), as well as petrographic and mineralogical analysis of the pottery from Brunn am Gebirge, Wolfholtz (R. Sauer). Another chapter contains the analyses of charcoals from the site in question (O. Cichocki), plant remains, (S. Wiesinger), a text addressing the issue of utilisation of honey bees (P. Stadler), and finally the analysis of animal remains (E. Pucher). Most of these chapters could have been successfully published as separate articles.

The Volume 1/part b consists of 15 main chapters, enclosing further analysis and auxiliary material. Chapter 29 (M. Teschler-Nicola, F. Novotny) presents the results of the anthropological analysis of human skeletons from the graves 1-4. Then, there is an analysis of remains of dyes preserved on the surfaces of ceramic vessels performed with the use of the Scanning Electron Microscopy (F. Brandstätter), followed by a chemical analysis of organic materials preserved on the surface of one of the clay idols (F. Sauter, K. Varmuza, W. Werther, P. Stadler), chemical analysis of pitch (L. Puchinger, F. Sauter, J.D. Schratenecker), as well as radiocarbon dating of samples of birch bark pitch used as an adhesive

substance to attach decorative applications recorded on a few vessels from Brunn am Gebirge, Wolfholtz (P. Stadler). Chapter 34 (A.G. Nikitin) addresses the issue of the Anatolian Neolithic migration from the archaeogenetic viewpoint.

The following chapters, all written by P. Stadler and N. Kotowa, contain illustrative and auxiliary materials, such as: plates with ceramics, abstract, conclusions, references, catalogue of radiocarbon dates, list of authors, excavation photos from Brunn am Gebirge, Wolfholtz, Site 2.

The monograph in question constitutes a very significant contribution to the current state of research on the neolithisation of Europe and is an extremely valuable supplement to the studies upon the Linear Pottery Culture. It is an outstanding piece of work, abundantly illustrated with colourful figures, photographs, maps, tables and lists of artefacts.