Book Reviews

Judit P. Barna. *The Formation of the Lengyel Culture in South-Western Transdanubia* (Archaeolingua Series Maior 39. Budapest: Archaeopress, 2017, 460pp., 107 colour and 122 b/w figures, hbk, ISBN 978-615-5766-02-2)

In recent years, thanks to rescue excavations conducted on large-scale infrastructure projects such as highways, long-standing questions about the appearance, spread, and development of the Neolithic in the Carpathian Basin and Central Europe have started to be answered. The monograph The Formation of the Lengyel Culture in South-Western Transdanubia, by Judit Barna, is a slightly modified version of her PhD dissertation, defended in 2012 at the Eötvös Loránd University in Budapest (Ch. 1). It concerns the formation of the Neolithic Lengyel culture in south-western Transdanubia in the fifth millennium BC and it is based on the newly excavated settlement sites of Sormás-Török-földek Sormás-Mátai-dűlő on the M7 and motorway in the vicinity of Nagykanizsa south of Lake Balaton in south-western Hungary, which yielded large amount of finds of the Sopot culture and subsequent earliest phase of the Lengyel culture. The first culture, named after the Neolithic tell site of Sopot in eastern Slavonia (Croatia), is dated to the end of the sixth and fifth millennia BC. The core material studied also included finds from a mass grave found in Eszergályhorváti (all sites are in Zala County in south-western Hungary).

The aim of this work is to offer a new historical narrative and to incorporate the results of different types of interdisciplinary research (Preface), in an attempt to clarify the role of the Sopot culture in the development of the Lengyel culture from the assemblages recovered (Ch. 1). This book is one of the most complete contributions to the complicated subject of the transformation and transition from the Middle to the Late Neolithic in southwestern Transdanubia and beyond. The book covers a much larger region incorporating parts of Central Europe, the Alpine regions, southern Poland, Slovakia, and Czech Republic, and southern outskirts of the Carpathian Basin, exploring their connection to the Balkan and the Adriatic. The research history of the Sopot and early Lengyel cultures is described in detail (Ch. 2-3), with overviews of their chronology, settlement types, dwelling types, circular enclosures, etc. Throughout this very detailed description parallels in other regions are given.

On several occasions, the author quite rightly states that the various levels at which research was conducted and published constitutes the main problem when compiling and interpreting data from this vast region. This is especially true for the Sopot culture in its core area in northern Croatia. Despite large-scale excavations over the last twenty years, no serious publications followed. What was published, however, demonstrates the need to change old chronologies, both relative and absolute. One of the important issues that Barna highlights is the regional difference between the eastern and western group of Sopot finds (Ch. 2), as determined by Dimitrijević (1978). Although this difference is noted in both the Sopot and Lengyel cultures, its basis eludes the author.

New research, probably published too late to be included in Barna's work (although some of it is mentioned in the Preface), shows a more complex situation in the Middle Neolithic of Sava-Drava-Danube interfluve and adjacent regions than previously thought. Ražište-style pottery (dated to the second half of the sixth millennium and the first half of the fifth millennium BC; Botić, 2017; 2018; Jákucs et al., 2016), parallel to Sopot IB/II phase according to Marković (1985), received quite different interpretation in Barna's volume regarding its chronological position. This style has been recently recognized on several new sites in Croatia (Botić, 2017; 2018) and south-eastern Baranya (e.g. at Szederkény-Kukoricadűlő; Jákucs et al., 2016) and its beginning dated to the earliest Vinča A phase in the mid-sixth millennium BC (Jákucs et al., 2016; Botić, 2018). It appears to have been in use for quite some time, spreading southwards in its later phase (Botić, 2018); but its chronological position in relation to the classical Sopot sphere in eastern Slavonia remains unclear.

At present, the chronological position of Ražište style pottery related to the Linearbandkeramik Neolithic (LBK) Korenovo culture in western Croatia is also uncertain, especially because we lack radiocarbon dates for the Korenovo culture. New excavations have uncovered late Korenovo sites around Pakrac in western Slavonia (at the eastern fringes of the Korenovo core area), from which only one partially published date is known from Kukunjevac-Brod (Beta-340932, 4940-4790 cal BC at 95% confidence). This corresponds to the period of abandonment of the western part of the settlement at Versend-Gilencsa (Jákucs et al., 2018), where the Korenovo culture was also present. Very few finds from this late phase have so far been published. This includes a decorated pedestal from Kukunjevac-Donja Kućišta, which has parallels among finds at Becsehely-Bükkaljai-dűlő in southwestern Transdanubia, dated to the period of the late Keszthely group of the LBK around 5000 BC. New finds also include red crusted painting which is found only in the last phase of Korenovo culture. The LBK Korenovo element in Transdanubia in Barna's book (Chs 2 & 5) is well presented, but the finds listed above could have been usefully incorporated, if they had been published in time for this volume.

Elements of the Korenovo culture are present in the same geographic region in the subsequent Brezovljani type, a regional manifestation of the Sopot culture after 5000 BC. This so-called western group of the Sopot culture developed from a very strong LBK substrate and carried elements of vessel shapes and decoration quite different from those of the classical Sopot culture. This is made clear in the typological tables in the volume under review: mottled decoration already appears in the early Ražište style and the Korenovo culture but not in classical Sopot; red painting appears in late Korenovo, Ražište style, and in the Brezovljani type, while it is barely present in classical Sopot assemblages under late Vinča culture influence; vessel shapes, especially bowls, can be linked to the Brezovljani type; anthropomorphic figurines and the so-called altars (present at Type T. X-XI) appear at the eponymous site of Brezovljani (they have the same shape as the ones from Korenovo culture but without decoration), while altar shapes in classical Sopot are quite different with a strong Vinča influence. Butmir-style pottery (its core area was central Bosnia), present at southern Transdanubian sites according to Barna (Type T. XII), has also been found at Gornji Brezovljani as well as and yellow painted fragments red (Marković & Okroša Rožić, 2017). Two (in 2013 and 2017) exhibitions on Brezovljani type pottery and its world with

connections to wider spheres of influence, from central Bosnia (Butmir style) and the Adriatic to western Hungary (Marković & Okroša Rožić, 2017 with reference to the first exhibition), have demonstrated the complexity of this period. Only two dates are known from the settlement of Gornji Brezovljani near Križevci in western Croatia (DeA-5160, 5809 ± 36 cal BP, 4767–4550 cal BC at 95.4% confidence; DeA-8334, 5971 ± 31 cal BP, 4945–4777 cal BC at 95.4% confidence; Botić, 2017).

Relative and absolute chronology of the early Lengyel phase presented in this volume (Ch. 5-6), which was most probably contemporary with the late Sopot and Vinča C phases in the early fifth millennium BC, raises questions regarding the Sopot culture phases (Dimitrijević, 1978) dating in general. Most of the dates of the classical Sopot culture fall into a large group of dates in eastern Slavonia which appear around or after 5000 BC (Botić, 2017). Older dates, known from Dubovo-Košno, should be re-examined and their use in dating the classical Sopot phases questioned (Obelić et al., 2004) because it is not possible to link them to any specific feature from published papers. At present, an absolute dating of the classical Sopot phases in general is not possible, since so few reliable dates are published.

Classical Sopot houses in eastern Slavonia had timber framed construction; but, unlike house types found in Sopot and Lengyel settlements at Sormás-Török-földek and Sormás-Mátai-dűlő (Chs 2–3) or in previous LBK settlements, these houses had thick clay floors. This is another element to be taken into consideration when examining differences between the eastern and western groups of the Sopot culture which is not addressed by Barna. House types at Dubovo-Košno and two more sites in the Sava river valley were all of the same type as those found in south-western Transdanubia. This forces

us to question their assumed origin in the classical Sopot culture (portable finds have not yet been published). The same house type is present in the Ražište style, Korenovo culture, and Brezovljani type, however (Botić, 2017; 2018). This kind of construction most probably has its roots in earlier LBK house types, while classical Sopot culture houses bear strong Vinča culture influence.

Enclosures are presented at great length (Ch. 2-3) for both the Sopot and Lengvel cultures. Barna describes the Sopot culture tells and flat sites surrounded by defensive ditches of irregular shapes (Ch. 3). However, some settlements were not fortified, such as Novi Perkovci-Krčavina, used as a parallel in this volume. A detailed study of Lengyel and previous LBK circular enclosures, their construction, astronomical orientation, and possible symbolic meaning, is particularly important (Ch. 3), especially for defining what can and should be classified under this category. The very short period in which these enclosures were constructed and used (the first half of the fifth millennium BC) and their appearance only in the early Lengyel culture or contemporaneous cultures in the wider region (Ch. 3) raise questions about recent research based on aerial photography conducted by some Croatian colleagues (Kalafatić & Siljeg, 2018).

Also important is a thorough study of finds in Chapter 4. The last part of the book consists of appendices with contributions by Katalin T. Biró (Appendix 1: Stone artefacts and raw materials), Beáta Tugya and László Lichtenstein (Appendix 2: Archaeozoology), and Pál Sümegi and Katalin Náfrádi (Appendix 3: Results environmental historical analysis). of Appendix 4 presents author's results of the analysis of the anthropological finds at the Sormás-Török-földek site. The book is complemented by an extensive reference list.

In sum, the volume reviewed here is a valuable contribution to understanding the formation of the Lengyel culture and the role the Sopot culture played in a complex web of cultures, types, and styles in southwestern Transdanubia at the turn of the sixth and fifth millennia BC. In addition to summarizing previous research of varying quality, which was meticulously done, the author is to be congratulated for including extensive new data from recent rescue excavations. This book is essential in any future study of questions relating to chronology and typology of the late Neolithic, not only in south-western Transdanubia but in the Carpathian Basin and regions beyond. As has been made clear here, questions relating to chronology still loom large in the archaeology of Neolithic Transdanubia.

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Valentine Roux, in collaboration with Courty M.-A. Ceramics and Society: A Technological Approach to Archaeological Assemblages. (Springer: Switzerland, 2019, 329pp, 46 b/w illustrations, 102 in colour, hbk, ISBN 978-3-030-03972-1)

This book encourages archaeologists to approach processing and recording pottery assemblages differently, moving away from a focus on typology towards understanding pottery from a technological perspective, framed around the *chaîne opératoire* approach. The *chaîne opératoire* concept was first put forward by Leroi-Gourhan, who, as a student of Marcel Mauss, was particularly interested in how human behaviour was interconnected with the different physical, symbolic, environmental,