

Anatolian prehistory, at least since the Epipaleolithic period, and with the Neolithic period the scale of connectivity and distances covered makes a peak. In these developments, Chr. Schwall discovers precursors of Early Bronze Age societies with social differentiation. However, I find that the contribution of Chalcolithic networks to the establishment of socially complex societies in the 3rd millennium BC is a bit overstated. In other words, the linear reading of historical developments from the 5th to the 3rd millennium BC in western Anatolia seems to contradict archaeological evidence, as late 4th and early 3rd millennium BC communities still enjoyed social equality in the form of small, enclosed villages with unified architectural types. The major break with earlier traditions that result in social complexity seem to have started around 2500 BC with the introduction of tin-bronze, mass production of weapons, wheel-made pottery, sumptuous goods of exotic raw materials, monumental architecture, and heavy fortifications that point to external factors rather than an internal historical process. For that reason, I find it difficult to agree with this kind of representation and interpretation of western Anatolian Chalcolithic groups.

All in all, this is a superb presentation of primary data from the Late Chalcolithic site of Çukuriçi Höyük in western Turkey. The volume achieves much more than presenting excavation results – it contributes to the highly problematic discussion of Chalcolithic communities of western Turkey and eastern Aegean islands during the 5th and 4th millennia BC. The chapters on the spatial distribution of characteristic Chalcolithic traits and their implications about regional and supra-regional networks are highly significant and insightful. It is my personal wish that such high-grade studies on Anatolian prehistory keep appearing and inspiring us.

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HARALD STÄUBLE / ULRICH VEIT (eds), *Der bandkeramische Siedlungsplatz Eythra in Sachsen. Studien zur Chronologie und Siedlungsentwicklung*. Leipziger Forschungen zur Ur- und Frühgeschichtlichen Archäologie volume 9. Universität Leipzig, Professur für Ur- und Frühgeschichte, Leipzig 2016. € 24.90. ISBN 978-3-936394-22-1. 172 pages, b/w and colour images, 2 appendices.

This book (written in German) reports on excavations that took place at Eythra in the area of the open-cast lignite mine “Tagebau Zwenkau” near Leipzig (Saxonia, Germany) between 2009 and 2016. In the mining area of 1.5 × 5 km a team, coordinated by Harald Stäuble, has investigated an expanse of over 30 hectares. There, on the banks of the Weiße Elster River, the remains of about 300 Linearbandkeramik and Stichbandkeramik houses have been uncovered spanning some 600 years in the Early Neolithic. Fourteen authors in various combinations have contributed thirteen chapters to the present, generally easily-accessible and clearly written, report.

The findings from this excavation do not allow a straightforward and all-inclusive conclusion in terms of a unified model of the early local societal developments, probably because of the sheer size of the area of investigation. There are so many possibilities that every “imaginable constellation of potentially contemporaneous settlement types” can be found at Eythra (p. 161 – translations by reviewers). Thus, “there are both single and grouped buildings, and also houses set in rows; there are open spaces, too, one can even imagine a web of paths. In a detailed study of the finds from selected areas, yet to be worked out, further insights will probably emerge, maybe obviating

a revision or extension of the present conclusions” (p. 161) – please note the “yet to be worked out” (noch ausstehende detailliertere Bearbeitung des Fundmaterials’) in this quote. More details below.

Two introductory chapters by Harald Stäuble (pp. 11–18) and Christian Tinapp / Harald Stäuble (pp. 19–25), together 15 pages, cover earlier research and the topography and geology of the area – loess covered terraces on a glacial moraine along the Weiße Elster River, the latter providing an easily accessible source of Baltic flint for the local Neolithic people.

Only 15 pages are needed by Thomas Tischendorf / Denise Girardelli (pp. 27–42) to present summary statistics on the nearly 7000 Neolithic features from the excavation, among which the three earthworks encountered there (dating from the LBK, SBK, and middle Neolithic respectively) feature prominently. Here, as elsewhere in this book, the reports on the Aldenhovener Platte excavations in the 1980s have served as a model. The first earthwork discussed is a four-fold circular palisade ditch system with an outer diameter of 52 m; several LBK houses have been constructed stratigraphically on top of it suggesting LBK-ancestry. The second earthwork at Eythra consists of a single circular ditch of about 130 m diameter; probably stratigraphically overlaying SBK houses, it may have been built in later times. The third earthwork is a quite conspicuous construction of four concentric ditches with a diameter of 424 m; inside the inner ditch a twin palisade is suggested by dispersed shallow postholes. SBK origins are suggested by the distribution of the other finds and features around it, as well as by well-dated similar constructions elsewhere in Central and Southern Germany.

Maria Cladders uses 17 pages to discuss the evolution of the shape of the three hundred Neolithic houses at Eythra (pp. 43–60). Although these changes over time in their plans (from rectangular, over trapezoid, to pot belly outlines) and structure (heavy three-post-rows gradually giving way to lighter constructions) also have been derived previously from different digs, at Eythra they could be observed at a single site. Remarkably, Type 1a houses and their successor constructions are fully missing at Eythra. The exceptionally long (54 m!), but otherwise regular LBK house which was then rebuilt in the same location during the SBK times is also noteworthy.

The largest chapter in this book (51 pages), by Christiane Frirdich, is on the evolution of the pottery decoration at Neolithic Eythra (pp. 61–112). It also reports a disappointment, since even here at Eythra no continuity from LBK to SBK can be established: neither in a correspondence analysis nor conceptually can decorative schemes be dovetailed one into another.

In connection with this difficulty, Frirdich expands her discussion to include the *Hofplatzmodell*, a model to which she takes exception. In that model, (LBK) houses found nearby to each other are assumed to succeed one another through time; their sequence is indicated by the associated pottery such that if the latter shows gaps or disjunctions and the former are not all associated with pottery, a continuity of the occupation of the plot is taken for granted. Whereas in the original model the pottery seriation is taken rather loosely, Frirdich wants a conscientious sequencing. At Eythra house plots cannot easily be delimited because of the sheer density of the houses; therefore, Frirdich groups well-seriated finds found at distances of less than eight metres into “inventory areas” or areas of high interaction. Nearby non-pottery houses are drawn in to fill chronological gaps – the 23 resultant groups are found mainly in the northern area of the excavation and mutual distances are in the order of 25 metres. If this is not a local application of the *Hofplatzmodell*, what else? SBK houses occur mainly in the southeastern area of the excavation at Eythra, and because of their non-seriatable pottery, they cannot be included in the analysis.

In a three-page chapter, three authors (Oliver Mecking, Isable Hohle, Sabine Wolfram) present chemical analyses of 153 Neolithic pottery sherds (pp. 113–115), indicating clays with iron mineral

components in the older periods giving way to feldspar ones in SBK times. While there is a gradual transition between the *Älteste* and *Ältere Bandkeramik*, more major changes take place from the LBK to the SBK.

Two LBK water wells have been found at Eythra, they are concisely described by Henry Gärtner, Maria Cladders, and Harald Stäuble (pp. 117–125). The older well started out as a hollow tree trunk with a ^{14}C date of 5200 BCE, which was later reconstructed with a square casing (c. 5130 BC). Sherds of bottles, fragments of rope, a rope-wrapped unfragmented bottle, and a complete bast fibre bag (*Bastbeutel*) have been recovered here. The younger well is situated 30 to 40 m from LBK houses; it was dug almost four metres deep into the underlying gravel-sand moraine, and secured with a square casing. In the excavation, nearly two hundred sherds were recovered from it; grinding stones, silexes, 127 000 generally not-charred plant remains, five pails, fragments of rope, etc. were also secured. The wood of the casing indicates that it has been cut in the winter of 5098–5097 BCE.

Birgit Fischer briefly reports on the 10 000+ flints from this excavation (pp. 127–129) ‘Neolithically’ mined from the local Baltic moraine subsoil exclusively. LBK ‘smiths’ preferred flakes over blades, their SBK successors rather the other way around. Corresponding with conclusions from other find categories, the near-absence of arrowheads attests to the unimportance of hunting to these villagers. Given the recent discoveries of distinct changes in procurement and production over time in the LBK occupation of the Limburg loess area in the Netherlands, it would be interesting to see whether a future, more detailed analysis of this impressive assemblage would yield similar results, especially when compared on a regional scale.

Coarsely surveying the non-flint stone finds (pp. 131–135), Silvio Block singles out the description of a small depot of adzes (three large, flat adzes encountered together in one “posthole”) and an attempt at re-shaping a broken adze. Adze heads, grinders, and milling stones still have to be analysed.

Less than 1000 fragments of bones and teeth were recovered at Eythra, half of which could be assigned to a species, most of them domesticated; in her analysis, Carola Oelschlägel concludes the importance to the people of Eythra of animals as suppliers of meat rather than muscle power (pp. 137–143). This conforms to the quantitatively low importance of hunting.

As described by Harald Stäuble, 40 radiocarbon dates have been obtained from the Eythra excavations (pp. 145–148). There are, however, no better results than that the general LBK sequence was confirmed; even the dendrochronological data do not really agree with the associated ^{14}C dates.

In the final chapter, Maria Cladders, Christiane Frirdich, Harald Stäuble, and Ulrich Veit present their general ideas about the Bandkeramik settlement at Eythra (pp. 149–161). Understandably, most attention is paid to the dating of the houses or, rather, the conglomerations. For, given the density of finds and houses in this excavation, it is inconceivable to break the chronology into small patches in the order of 25–40 years, as would be needed for an application or refutation of the *Hofplatzmodell*. “Finds in pit fillings are a necessary though insufficient condition for the establishment of a local chronological series” (p. 149) – of the 236 securely Neolithic houses in Eythra, only 42 had sufficient numbers of (unmixed) datable material in their lateral pits. Also, as the sherds and the dendro-dates from the wells demonstrate, there may be important chronological differences between construction and use.

In the text there is a preliminary partition of the excavated area into six zones (*Fläche*) to facilitate description of the prehistoric processes. The early Neolithic built environment at Eythra shows

geographical shifts of habitation over time; however, the architectural typology is too generalised to obtain a sharp view of the distribution of the houses at any single moment. Instead, larger time segments are employed – the general succession from LBK II, over III, IV, and V into the SBK Early and Late periods – each approximately one hundred years; plans of the area showing the likely occupation per period accompany the text. In every such period the habitation has one or two foci, which shift from stage to stage; the apex of the settlement is reached in LBK III, before and after which fewer houses have been constructed. SBK houses are mainly found in the SE zone of the excavation. Clearly, many sherds (as well as all kinds of other artefacts) from previous periods were lying around on house floors, freely mixing with current occupation remains, severely interfering with our present effort at interpretation. Even worse, LBK V is only represented by three groups of finds, rendering it difficult to come to grips with the transition to the SBK. Nevertheless, it is likely that the SBK occupation of the zone started at some distance from the, then current, LBK occupation – at any rate spatially, but possibly also chronologically: “... at least in the excavated area there has been no spatial continuity from the LBK into the SBK” (p. 151). The construction of the Earthworks (LBK, SBK, and middle Neolithic) also contributed considerably to the present difficulties of interpretation.

There is one sentence in this chapter which remains puzzling to these reviewers: “In the seriated inventories there are at least [*immerhin*] 45 finds which occur in the LBK as well as in the SBK developmental series” (p. 159). As we understand it, this could have the potential to lead to a seriation encompassing both series. It also establishes at least a local continuity LBK–SBK of some form, which is emphatically denied by Frirdich in her chapter on the typology of decorated pottery, as well as here in the conclusions.

As a general remark, Eythra is one of the few places that offers an opportunity to study both LBK and SBK occupation on a single site, with no or only a small gap in occupation. While it is clear that the ceramic characteristics and their seriation, the house typology, the spatial distribution of *Hofplätze*, and the development of the settlement are important chronological anchors to read these sites, they are insufficient for developing an understanding of the transition from the LBK to SBK. We feel that this should incorporate a much wider and more integrated approach. Some of the data for this have already been provided here, for instance in the lithic chapter and in the chemical analysis of the ceramics. In this respect, apart from the reconstruction of the chronological characteristics of the pottery and the spatio-temporal developments of the settlement, more attention should be given to the practices and behaviours involved. What really changed at the level of traditions, in the *chaînes opératoires*, the articulation in raw material procurement, the density of occupation, in regional and inter-regional contacts etc. and subsequently, how fundamental were these / were these really different from the LBK? Clearly the current study provides a sound basis for further investigations that focus more on the practices involved than on the archaeological attributes as such.

To end this review, we are impressed by the fast reporting of these excavations and the quality of the book; not only this speed, but also the contents should become a standard in Neolithic archaeology, if possible. Herein we concur with the extended review of these texts by Nadia BALKOWSKI / Andreas ZIMMERMANN (Arch. Inf. 40, 2017, 455–462. doi: <https://dx.doi.org/10.11588/ai.2017.1.42531>). At the same time, as witnessed in current commercial archaeology in general, but also for instance in the recent LBK excavations at Arnoldsweiler (Nordrhein-Westfalen; s. E. CZIESLA / Th. IBELING [eds], *Autobahn 4. Fundplatz der Extraklasse. Archäologie unter der neuen Bundesautobahn bei Arnoldsweiler* [Langenweißbach 2014]), this means that choices have to be made, both in the field regarding documentation and also regarding the dissemination of the results. While we therefore applaud the swift publication and its benefits, we do hope that the

more detailed description promised in the introduction (p. 9) will indeed follow to provide a basis for comparative and regional research.

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PETER STADLER / NADEZHDA KOTOVA, Early Neolithic Settlement Brunn am Gebirge, Wolfholz, Site 2 in Lower Austria and the Origin of the Western Linear Pottery Culture (LPC). Mit Beiträgen von Franz Brandstätter, Otto Cichocki, Svend Hansen, Ian G. Hedley, Nadezhda Kotova, Matthias Kucera, Eva Lenneis, 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 Schrattenecker, Peter Stadler, Maria Teschler-Nicola, Kurt Varmuza, Wolfgang Werther, Silvia Wiesinger. Early Neolithic Settlement Brunn am Gebirge, Wolfholz, in Lower Austria Volume 1. Beiträge zur Ur- und Frühgeschichte Mitteleuropas Band 88. Verlag Beier & Beran, Langenweißbach 2019. 2 Bände. € 99,-. ISBN 978-3-95741-100-6. 1082 Seiten mit vielen farbigen Abbildungen und Tafeln.

Viele Jahre lang warteten die Forscherinnen und Forscher des mitteleuropäischen Neolithikums auf die ausführliche Publikation des Fundplatzes von Brunn am Gebirge und der Ergebnisse der ausgedehnten Rettungsgrabungen, die 1989–2005 vor dem Bau der Autobahnstrecke A 21 um die Stadt Wien durchgeführt wurden. Dieses mächtige Opus in zwei dichten Bänden und mehr als eintausend Seiten umfasst Daten zur ältesten Periode der bandkeramischen Siedlung (Fundstellen 2a und 2b), mit Beiträgen von zahlreichen Expertinnen und Experten, allerdings ohne eine detaillierte Erörterung der Gebäude und auch ohne Silex-Material, da diese in künftigen Monographien erscheinen werden. Weitere Bände über die Keramik der Fundstellen 1, 3, 4 und 6 sind geplant. Zu Fragen über die Entstehung der ersten bäuerlichen Zivilisation in Mitteleuropa sind aber die hier vorgelegten Siedlungsteile, die Fundstellen 2a und 2b, ausschlaggebend.

Band 1 enthält insbesondere Beiträge zur Keramik der Fundstellen 2a und 2b und zur Interpretation der absolut-chronologischen Daten sowie einige naturwissenschaftliche Analysen wie z. B. zu botanischen Resten (Silvia Wiesinger, Kapitel 26), zur Honigbiene im Neolithikum (Peter Stadler, Kapitel 27) und zur Archäozoologie (Erich Pucher, Kapitel 28). Band 2 wiederum enthält die anthropologische Untersuchung der Skelette (Maria Teschler-Nicola und Friederike Novotny, Kapitel 29), Überlegungen zur frühneolithischen Migration anhand der Archäogenetik (Alexey G. Nikitin, Kapitel 34) sowie diverse archäometrische Analysen, u. a. die petrographische Analyse des Keramikmaterials, thermochemische Untersuchungen von Feuerstellen und Öfen und chemische Untersuchungen einiger organischer Materialreste.

Das Opus ist aber kein Sammelband, sondern ein Autorenband, der vom Ausgräber, Peter Stadler, und Nadezhda Kotova, einer Langzeit-Mitarbeiterin bei der Aufarbeitung der Keramik, zusammengestellt wurde. Dabei wird die ganze Publikation von zwei zueinander in Kontrast stehenden Hypothesen der beiden Hauptautor*innen über die Entstehung der bandkeramischen Siedlung Brunn und die Herkunft ihrer Bewohner und in einem weiteren Sinne damit auch der Bandkeramik in Europa bestimmt. Hierzu gleich mehr.