wären zukünftig auch die Silexobjekte aus Rijckholt, Spiennes und anderen bedeutenden Silexminen stärker zu gewichten. Ähnlich wie die Gewinnung von Gesteinsrohmaterialien in Höhenlagen der Alpen, die mittels Feuer gewonnen wurden, lässt sich auch für die Untertage-Gewinnung von Silex eine religiöse Konnotation und eine Organisation durch religiös legitimierte Eliten vorstellen.

Zum besseren Verständnis eines möglichen Zusammenspiels der Tauschketten verschiedener symbolträchtiger Objekte wäre ein ähnlich großes internationales Verbundprojekt notwendig, wie das der hier besprochenen Publikation zugrunde liegende. Bereits heute dürfte klar sein, dass die forschungsgeschichtlich überwiegend auf Keramik basierenden Kultureinheiten keine Grenzen für die Distribution solcher Objekte darstellten. Wenngleich hier in erster Linie die Mobilität von Objekten nachweisbar ist, erscheinen damit verbundene religiös konnotierte Identitätsgemeinschaften am Beginn der Metallverarbeitung in Europa plausibel. Ob diese sich auf die zwei dargestellten sakralen Königtümer in West- und Osteuropa beschränken, bleibt indes zu hinterfragen. Das Rohmaterialspektrum von Steinbeilklingen ist auf vielen jungneolithischen Fundstellen Mitteleuropas recht heterogen, sodass eine der noch offenen Fragen auf das Bedeutungsgeflecht "normaler" Felsgesteinbeile und herausragend langer und flacher Jadeitbeilen abzielt. In Kapitel 10 wird hierzu beispielhaft der etwa 200 bis 250 km reichende, auf dem "down-the-line-exchange-System" basierende Verbreitungsmechanismus von Beilen aus in Plancher-Les-Mines (Dép. Haute-Saône, Frankreich) und Réquista (Dép. Aveyron, Frankreich) gewonnenen Gesteinen aufgezeigt und dem weitreichenden Verteilungsmuster der Jadeitbeile gegenübergestellt. Weitere auf Symbolwerte gestützte Machtzentren könnten, wie erwähnt, an den Abbau und die Distribution von Silexbeilen gebunden gewesen sein.

Die Fülle und Qualität der Beschreibungen und Bebilderung, insbesondere der auf dreidimensionalen Grundlagen basierenden Kartierungen und zahlreichen fotografisch und / oder zeichnerisch dokumentierten Einzelobjekte, des hier vorgestellten Werkes ist für die auf neolithische Steinbeilklingen fokussierte Montan-, Wirtschafts- und Sozialarchäologie bislang einmalig. Die präzise Dokumentation der erfassten Artefakte ist in kapitelspezifischen, bebilderten Katalogteilen vorgelegt, denen die metrischen Daten, Rohmaterialien sowie Beschreibungen der Einzelobjekte zu entnehmen sind. Der Autorenverband setzt mit diesem Werk einen ausgesprochen hohen Standard für zukünftige Arbeiten.

D-20146 Hamburg Edmund-Siemers-Allee 1 E-Mail: Britta.Ramminger@uni-hamburg.de Britta Ramminger Universität Hamburg Abteilung Vor- und Frühgeschichtliche Archäologie

REGINA SMOLNIK (Hrsg.), Siedlungsstruktur und Kulturwandel in der Bandkeramik. Beiträge der internationalen Tagung "Neue Fragen zur Bandkeramik oder alles beim Alten?!", Leipzig, 23. bis 24. September 2010. Arbeits- und Forschungsberichte zur Sächsischen Bodendenkmalpflege, Beiheft 25. Landesamt für Archäologie, Dresden 2012. € 34.50. ISBN 978-3-943770-03-2, ISSN 0138-4546. 356 pages, numerous coloured illustrations.

Compared to previous as well as subsequent archaeological cultures, the Linear Pottery Culture ("Linearbandkeramik", LBK) can be regarded as one of the best and most intensively investigated in Europe. Nonetheless, many questions remain unresolved: On the one hand, the current state of research is characterized by considerable regional differences. For example, the LBK in the Rhine-

land has been intensively investigated during the last decades, research on the LBK in Saxony or Saxony-Anhalt is just about to gain momentum. On the other hand, selected aspects (e. g. architecture, pottery production, lithic exchange systems) can be reconstructed to a certain detail while others still remain a matter of debate (e. g. the emergence and end of the LBK, social complexity, mobility patterns, burial rites). The central aspects of the book at hand – settlement structures and culture change - have been discussed for several decades. Due to the ongoing discovery of numerous new sites of the LBK, however, it is worth the effort to reconsider these issues. This was done in Leipzig in 2010 in the context of an international conference initiated by Harald Stäuble and Sabine Wolfram. Bringing together international experts on the LBK and beyond it stands in line with other international conferences on this archaeological culture that approached more general as well as more specific aspects of the LBK during the last decades. This is reflected in the title "Neue Fragen zur Bandkeramik oder alles beim Alten?!" ("New questions about the LBK or nothing's changed?!") that refers to one of the first international conferences on "Die aktuellen Fragen der Bandkeramik" ("Current topics of the LBK") in Székesfehérvár in 1970 (J. Fitz (ed.), Die aktuellen Fragen der Bandkeramik. A vonaldíszes kerámia időszerű kérdései. Pannonia Conference, Aktaí 1 [Székesfehérvár 1972]).

The book is divided into four sections: "models of the LBK settlement structure", "studies on regions and sites: structures within sites as well as settlement areas and colonisation processes", "culture change" and "ongoing projects". The magnitude of 34 articles collected in this considerable volume reflects the active and vivid research on the LBK in its whole distribution area.

The contributions in the first section focus on theoretical approaches concerning the reconstruction of the LBK settlement structure. Central to this section is the so-called "Hofplatzmodell" (yard model) that quite rightly can be regarded as the first explicit model or rather bundle of methods for reconstructing spatio-temporal developments in LBK settlements. Nonetheless, its validity is highly contested. This is also reflected in the contributions of this section. In his paper, A. Zimmermann examines the structure (by defining several "modules") and genesis of the Hofplatzmodell and briefly refers to problems and critique connected to selected aspects. O. Rück's paper is a clear statement against its validity. In his critique he systematically reviews and deconstructs underlying premises and proposes an alternative model based on the comparative analysis of various settlement plans: the "Zeilendorf-Modell" (row-settlement model). The latter primarily describes the spatial layout of LBK settlements in rows of parallel houses with their gable ends sharing a common base line that can be straight, curved or stepped. Although the model does not refer to the chronological development of a settlement, Rück suggests that a coexistence of houses might be assumed if they are characterized by a constant distance and the lack of intersections (p. 30). One of his conclusions is particularly noteworthy: on the basis of his results he suggests that villages, in the sense of planned settlements which are structured by pathways and squares, can already be documented in the early Neolithic (LBK). This question on the origins of the "village" is far from being resolved (see e. g. U. EISENHAUER, Untersuchungen zur Siedlungs- und Kulturgeschichte des Mittelneolithikums in der Wetterau. Universitätsforsch. Prähist. Arch. 89 [Bonn 2002]). It has not received wider attention in the last few years, however. In that sense, Rück's article can be regarded as thought-provoking impulse to this topic.

The subsequent articles on the settlement structure of the LBK by T. Link, E. Lenneis and J. Petrasch line up with this discussion on the evidence of spatio-temporal patterns within settlements of the Central European early Neolithic. T. Link, for example, adjusts the controversial debate on the validity of the yard model by making clear that the premises of the Hofplatzmodell were explicitly formulated as working hypotheses. Using the example of the site of Dresden-Prohlis, he illustrates that yard model and row-settlement model are not mutually exclusive, if the premise

of one single building per yard is left aside (pp. 44–45). This point is also stressed by E. Lenneis. The analysis of various settlements in Austria confirms the co-existence of different settlement structures during the LBK (p. 51). J. Petrasch pursues a different approach by analysing the development of early Neolithic settlement structures from the point of view of social structure and complexity. In his view, the assumption of segmentary societies whose members built new houses in every generation forms an important basis for gaining a wider understanding of LBK settlement structures.

The second section constitutes the most comprehensive part of the book. It comprises 15 contributions, subsumed under the heading "Studies on regions and sites: structures within sites as well as settlement areas and colonisation processes" that span a geographic area reaching from France to Poland and Hungary. Furthermore, not only sites of the LBK but also of the subsequent period (SBK [Stroke-Ornamented Pottery] and Lengyel) are treated. Due to this broad overall topic, this section is the most inhomogeneous. Nonetheless, it is the central part of the book since current research on various aspects of early Neolithic settlements is presented here. Compared to section 4 (ongoing projects), most of the works presented here are either finished or already well advanced. Broadly speaking, the contributions are arranged geographically. The first article by M. llett analyses settlement structures of the LBK and subsequent Blicquy and VSG groups in the Aisne valley (France) and its environs. The latter groups are not very well understood, since largescale excavations of settlements are still missing. Therefore, the site of Bucy-le-Long "Le fond du Petit Marais" can be regarded as an exception that helps to illuminate the development of settlement structures from the LBK to the subsequent period. As the analysis of this site shows, the architecture of the following period is characterized by continuous developments while the overall settlement pattern reflects a major reorganization of subsistence strategies. V. Blouet et al. present the current state of research on the LBK in today's region of Lorraine (France). The discovery of numerous settlements caused by major building measures since the 1990s facilitates conclusions on settlement and population dynamics. These are modelled on the basis of intensive field surveys and excavations in the region of Ay-sur-Moselle / Trémery. New data on the early phase of the Hesbayen LBK (Belgium) is analysed by D. Bosquet and M. Golitko. The focus is on five settlements that are characterized by so-called pioneer houses. The latter can be dated to the first phase of the settlements and differ from later houses because of their isolated position and exceptional finds (e. g. imports of exotic raw material or pottery). D. Hofmann et al. present current research on the LBK in Lower Bavaria (Germany). On the basis of recent excavations in the settlement of Niederhummel (first phase of the LBK), questions on cooperation and differentiation in the daily life of the inhabitants are examined. Stable isotope analysis on human bones from the LBK cemetery of Aiterhofen in combination with archaeological and anthropological analysis are applied to make inferences on diet, lifetime mobility, individual identities and social relations. First results show that there is a remarkable similarity in dietary practices between males and females while differences in their mobility patterns are clearly recognizable. The articles of J. Kuhn and J. Pechtl focus on two extensive LBK settlements in Bavaria (Germany) – Buchbrunn and Stephansposching - that have been excavated to a large extent. Based on enormous data, they observe what T. Link and E. Lenneis have already emphasized in their contributions: LBK settlements do not exhibit uniform, clearly structured spatio-temporal patterns. In Buchbrunn, for example, J. Kuhn reconstructs a quite dynamic development including row-settlement patterns but also "zig-zag" patterns (pp. 126-127). In Stephansposching, e. g., pairs of houses played a special role. Moreover, the substantial data facilitates calculations of population density and the reconstruction of regional aspects. M. Cladders et al. present a first rough outline of the settlement development at the LBK and SBK site of Eythra in Saxony (Germany). The investigation of this enormous site that is funded by the German Research Foundation (DFG) gives reason to expect highly interesting results on various aspects of the early Neolithic in Central Europe. So far 324 potential houses have been documented next to a LBK enclosure, a SBK rondel, two LBK wells and numerous other features and finds. During the last two decades, in many regions of the LBK distribution area countless new sites have been discovered in the course of extensive building measures. This considerable data set stimulates new research and the reassessment of the old picture. In the course of emergency excavations in Kuyavia (Poland), for example, the site of Ludwinowo 7 was discovered (J. Pyzel). As it is the only known settlement with more than one house in this area, it facilitates first conclusions on settlement structures of the LBK in Kuyavia. The documentation of previously unknown settlements enables the analysis of settlement patterns on a regional scale in eastern Bohemia (M. Končelová), central Moravia (P. Kalábková), eastern Austria (F. Pieler) and central and southern Transdanubia (T. Marton / K. Oross). Approaches from settlement and landscape archaeology help to reconstruct a detailed picture on a regional scale which again forms the basis for future research.

This detailed picture in section 2 is complemented by further contributions on the subsequent period and on sites with special function. J. Ridky, for example, presents a microregional analysis of the development of the SBK in the area of the river Uneticky. Detailed research on settlement structures of this period in this area has not been done so far. B. Ramminger and P. Sida investigate the relations between the quarry sites of actinolite-hornblende-schist for adze-blades in the northeast Bohemian Jizera mountains and neighbouring settlement sites and rock shelters. And W. Schier presents first results of his research on the SBK rondel at Quedlinburg in Saxony-Anhalt (Germany).

The second central issue of the book at hand – culture change – is treated in the third section. It comprises contributions of different methodological approaches, spatial scale and chronological section. To a certain degree, the issue of culture change is immanent to the LBK, since the emergence of this archaeological culture is related to one of the most influential economic, social and cultural changes in prehistoric Central Europe: the beginnings of food production. While this aspect is left aside, however, the focus is on transformations and cultural developments in later stages of the LBK and during the early Neolithic-middle Neolithic (LBK-SBK / Lengyel) transition. D. Gronenborn, for example, examines the end of the LBK in the light of climatic changes. He proposes an explanation based on Gunderson's and Holling's adaptive cycles model, borrowed from resilience theory in ecological sciences. W. Hoppe analyses the transition from the earliest LBK to Flomborn, the second chronological phase of the LBK, in today's region of Hesse, which is still a matter of debate. Data from recent excavations at Ebsdorfergrund-Wittelsberg – architecture as well as pottery - clearly attest continuous developments. O. Mecking et al. also work on this transitional stage, their focus is on geochemical and technical analysis of pottery from two LBK settlements in Saxony, however. First results hint at a process of standardization in pottery production during this timespan. At the same time, the scientific potential of this approach becomes evident, stimulating future research. The articles by T. Link and H. Kowalewska-Marszałek focus on the transition from LBK to subsequent archaeological cultures. T. Link presents results of his research on the settlement of Dresden-Prohlis where the transition to the subsequent SBK is documented comparatively well. The analysis of architectural elements and pottery types clearly hint at continuous developments from the LBK to the Post-LBK period. The same goes for the transition from LBK to Lengyel on the Sandomierz Plateau (Poland). H. Kowalewska-Marszałek conducted GIS-aided settlement analysis for both periods in this key area of Neolithic settlement. The section closes with J. Pavúks contribution on the beginnings of the late LBK that is analysed in a detailed regional survey on types of pottery decoration. He concludes that the Austro-Moravian phase Ib was contemporary with the Transdanubian Keszthely group and belonged to an early phase of the late LBK. According to Pavúk, the same goes for Flomborn, i. e. the latter was not contemporary with the earliest LBK, as it is discussed on the basis of ¹⁴C-dates, but has to be regarded as subsequent phenomenon.

The last section comprises ongoing projects on the LBK in Central Europe. In short, preliminary report-like articles of eight junior scientists present first results of their master's and doctoral theses. Compared to the preceding sections, they naturally cannot present any final results. Nonetheless, this section clearly demonstrates that on the one hand many questions are still a matter of debate and on the other hand research on the LBK is remarkably vivid in all areas of its distribution.

All contributions are written in German or English, supplemented by a short summary in English respectively German. Most articles are short but of high information density. Thus, the reader gets a quick and informed overview on the current state of research (i. e. regional as well as methodological) regarding settlement structures and culture change during the LBK and beyond. The results presented in the book at hand come from a vast area spanning almost the whole distribution area of this archaeological culture. At the same time, regional characteristics and the peculiarities of single settlements are examined and a variety of methodological approaches is presented. This has not been done so far as former conferences on the LBK – e. g. "LBK dialogues" (A. LUKES / M. ZVELEBIL [eds], LBK Dialogues. Studies on the Formation of the Linear Pottery Culture. BAR Intern. Ser. 1304 [Oxford 2004]) or "Die Bandkeramik im 21. Jahrhundert" (J. LÜNING (ed.), Die Bandkeramik im 21. Jahrhundert. Symposium in der Abtei Brauweiler bei Köln vom 16.9.—19.9.2002. Internationale Archäologie 7 [Rahden / Westf. 2002]) – do not treat selected topics to this extent. All in all, the present book is an enormous compilation of research on both issues. Therefore, it is definitely a basic and essential "update" concerning research on the LBK on a large scale.

D-50931 Köln

Weyertal 125

E-Mail: sscharl@uni-koeln.de

Silviane Scharl

Institut für Ur- und Frühgeschichte

Universität zu Köln

Luc Winand Sophia Wilhelm Amkreutz, Persistent Traditions. A Long-term Perspective on Communities in the Process of Neolithisation in the Lower Rhine Area (5500–2500 cal BC). Sidestone Press, Leiden 2013. € 44,95. ISBN 978-90-8890-203-1. 545 Seiten, Farb- und s/w-Abbildungen.

"Persistent Traditions" behandelt den Neolithisierungsvorgang um den Unterlauf des Rheins und im Rheindelta ("Lower Rhine Area", LRA) in den heutigen Niederlanden, den angrenzenden Regionen Belgiens sowie Deutschlands einschließlich der Niederrheinischen Bucht. So wird das Arbeitsgebiet auf S. 39 umrissen, tatsächlich konzentriert sich das Werk im Wesentlichen auf den niederländischen Teil der Region, greift in den theoretischen Aspekten allerdings weit darüber hinaus.

Das Buch ist schön geschrieben, in englischer Sprache, mit nur wenigen Fehlern. Trotz des sehr dichten Inhalts hat es gelegentlich auch literarische Qualitäten, viele Passagen lesen sich leicht und sind unterhaltsam. So eröffnet Amkreutz mit einer Protagonistin, "Trijntje" (S. 17), einer älteren Frau aus dem späten Mesolithikum, bestattet wohl kurz vor Ankunft der ersten Bauern im südlichen Teil der Niederlande. Leider begegnen wir ihr im Verlaufe des Werkes nicht wieder, sie hätte dem Leser im letzten Kapitel noch einmal zuwinken können ...