The author explains the very late end of the LBK with the local resistance to change and innovation known as “Westfälische Zeitverschiebung”. However, these dates, which are at least 100 years later than the generally assumed demise of the LBK (e.g. K. Riedhammer, The radiocarbon dates from Herxheim and their archaeological interpretation. In: A. Zeeb-Lanz [ed.], Ritualised Destruction in the Early Neolithic: The Exceptional Site of Herxheim [Palatinate, Germany]. Forsch. Pfälz. Arch. 2 [Speyer 2019] 285–303), definitely deserve much more serious discussion. If they are correct, how could this community survive unchanged when most of the previous networks (data on flint raw material would be so useful here!) had collapsed?

The most important conclusions are summarised in the final chapter 8 (pp. 189–190). In the appendix one can find a catalogue of analysed variables and features as well as 74 plates with drawing of finds (pl. 1–28) and schematic profiles of features (pl. 29–75). Plans of MIDAL 30, 31 and 32 are also attached.

Regarding the bad state of research on the LBK in Eastern Westphalia a publication of this important site must be greeted positively, at least on the data level. Doubts appear at the interpretation level: the author definitely tends to spectacular but not seriously founded assumptions such as the largest settlement, the largest enclosure etc. The interpretation of the settlement history with an impressive shift of occupation also relies on very weak data. Why was the pottery from the survey not used to support the dating, which is based on a small selection of the site? Additionally, this dating relies to a large degree only on the typology of houses, which does not allow a precise assignment to one of ten phases which the author proposed. The chronological scheme by Kneipp (1998) is rejected by most researchers working on the LBK (e.g. J. Ritter-Burkert, Die Bandkeramik in Mittelhessen und angrenzenden Gebieten – Typologie, Chronologie, Kontaktszenarien [Kaarst 2019] 301–305, further references therein). The author ignores these controversies and Kneipp's work is the main reference for him, which raises additional doubts on his conclusions.

And although I am aware that I kick a man when he is down, I must stress again the bad quality of the figures in this book. They are not only confusingly imprecise (no clear general plan presented in the whole book), but sometimes also erroneous: for example, figure 113 is duplicated while figure 114 is missing. In figure 125 applied from Pollmann (2015) the author left a dashed line (the boundary of loess) without any explanation in the captions.

Summing up: even if Borgentreich-Großeneder is not the largest LBK site ever found, it is interesting and important. That is why I can recommend this book to scholars interested in the material of the LBK in Eastern Westphalia, with a remark: read with caution.
the stone artefacts referenced in this study has now been published. The double volume presents 2825 tools from 1087 sites, 1030 of which are known sites in Saxony-Anhalt. The catalogue also includes artefacts from unclear contexts (“site unknown”). The majority of the finds, 2509 out of 2825, consist of axes or axe fragments. The catalogue (pp. 307–640) includes, after a brief introduction to the structure of the catalogue and a list of sites attached as a conclusion (pp. 636–640), the most extensive compilation of Rössen period flint tools to date. With this publication, Dieter Kaufmann partially fills a gap in Central German research, since similarly comprehensive studies on either the Rössen or Linear- and Stichbandkeramik periods have yet to be published. The only exception so far has been one of D. Kaufmann’s own previous contributions to the subject, a presentation entitled “Rössenzeitliche Amphibolithgeräte aus Mitteldeutschland”, which he delivered at the 2010 International Conference on Central Europe in the 5th Millennium BC in Münster. A colour-contrasted reprint of the presentation can be found in Volume 72/V under Appendix 1 (pp. 161–182). At the time of this presentation, however, he was “only” able to include 2172 finds in his investigations. A reread of this initial publication is certainly recommendable, though it lacks an analysis of the rare Rössen-Age stone club heads (there is a brief explanation on p. 47 and 74, as well as some depictions in the plate section, pl. 30,7; 41,5; 49,3). The flat adzes which, in contrast to the aforementioned maceheads, are extremely common were also explicitly excluded from his extensive research (pp. 12; 41; 47). In this case, however, the lack of in-depth analysis is understandable due to the generally large amounts of material and the frequent occurrence of these artifacts outside of the framework of the Rössen-Age. As an exception the “senkrecht durchlochte, flachen und breiten, dickblattigen Dechseln” (vertically perforated, flat and wide, thick-leafed adzes) are presented in their own separate chapter (pp. 53–76) with their own corresponding catalogue (see below). Rather than providing a strict and exclusive definition of the Rössen Culture, the author includes chronologically and geographically adjacent phenomena (such as the late Stichbandkeramik Culture, Schiepziger and Gatersleben groups) under the umbrella of the Rössen-Age. A graphic representing this taxonomy, however, does not appear until page 34 (fig. 3; see below).

In Einführung und Danksagung (Introduction and Acknowledgments, pp. 7–12), the author describes in detail which museums and collections were visited as part of the research for the catalogues (the effort must have been considerable), as well as which Central German journals and other publications were evaluated for inclusion in the catalogue. This section already contains extensive critical comments on available sources, as well as initial explanations on terminology and research history. These subjects are also elaborated upon in later chapters.

The Anmerkungen zu den Fundumständen (Notes on the context of the finds, pp. 13–23) primarily contain a comprehensive description of the various uses of adzes as “thunderbolts” in folklore contexts. These rather entertaining explanations are supplemented by an illustration of the probably oldest known literary example of a “thunderbolt” in Saxony (p. 14 fig. 1) which dates back to a text by Conrad Gessner from 1565 (for details on the subject see also: M. Meinecke, Cerauniae – Donnerkeile. In: U. Veit / M. Wöhrl / M. Augstein, Donnerkeil – Opfermesser – Thränengefäß. Die archäologischen Objekte aus der Sammlung der Leipziger Apothekerfamilie Linck [1670–1807] im Naturalienkabinett Waldenburg / Sachsen. Leipzig Forsch. Ur- u. Frühgesch. 8 [Leipzig 2014] 48–51). Conclusions regarding the frequency of finds without clear context are certainly as accurate as they are disillusioning. In-depth examinations of find contexts provide indispensable information; however, lost finds outside of settlement areas or contact finds with hunter-gatherer societies are certainly not to be dismissed out of hand. The circumstances of these types of distributions are discussed in detail later on in chapter 11 (pp. 109–119); perhaps the “thunderbolt-discussion” would have been better suited here, rather than grouped in the chapter on find contexts. In his analysis, Kaufmann suspects that some of the finds were lost during transit by river or, conversely, deposited intentionally (p. 20). The hoard finds discussed subsequently are
less problematic in their location, although here the original intention of the deposition remains open to discussion as well (pp. 20–23 fig. 2). As a side note in this chapter (p. 23) but detailed in chapter 11, the author concludes that the relative frequency of contemporaneous hoard finds could indicate specialisation and trade.  

The chapter on the context of finds is rounded off with the few stone tools which were found in burial contexts. All other early and middle Neolithic analogies (e.g. burial grounds of Linearbandkeramik in the Rhineland, Stichbandkeramik in Bohemia or Großgartach in Alsace) mentioned in this section also reflect the regular wear and tear of the grave goods (p. 23). This information is especially worth noting, as this sort of criterion can also be used to evaluate other finds from suspected burials.

As the author himself admits (p. 25), the chapter Zur Forschungsgeschichte (On the history of research) does not take into account all relevant authors, nevertheless covers the period between 1841 and the present day. Somewhat inevitably, differences in terminological, functional, technological and chronological concepts and interpretations between the authors involved are mentioned here, though the issue is also revisited their own separate chapters.

The aptly named chapter Zur Nomenklatur (On Nomenclature) is dealt with on pages 33–41. Since nomenclature always consists of terms that are strictly pertinent to a specific subject, the choice of words has a certain humorous smugness about it; precisely the confusion of terms relating to the Rössen-Age stone tools that were discussed at the beginning of the chapter. In particular, the author goes into great detail about the adjunct “Donauländisch” (Danubian) culture (pp. 33–36). For symmetrical axes, some of which also have typological features of High Shoe-last Celts (“hohe Schuhleistenkeile”), he sees connections to a distinct “Donauländisch” tradition, citing a few examples from a Lengyel cultural context and Central German parallels (fig. 4). Nonetheless, he sees a distinction between these and the broad, crooked-nosed axes, which occur in the Hinkelstein- and Großgartach-Cultures (fig. 5–6). However, in the text (pp. 35–36), it seems there is an unintended comparison drawn to Austrian / Moravian Painted Ware. Kaufmann concludes his discussion of the nomenclature of these Middle Neolithic axes and wedges, widespread in Western and Central Europe, by recommending the use of the umbrella term “Rössenzeitliche Geräte” (Rössen-Age devices). He thereby also refutes the seemingly narrow scope which the chosen title of this publication suggests.

A chronological sequence of the included archaeological cultures is shown in Figure 3, along with some of the corresponding 14C-dates. The frequently mentioned Hinkelstein- and Großgartach-Cultures could have been included at this point, if only as an external or trade influence. The demarcation of “Donauländisch”, suggesting a geographically cohesive origin, is as straight-forward as it is sensible. It is, however, worth discussing whether a designation based on chronological or stylistic aspects of these cultures could potentially also offer a suitable comparison. In addition, the question remains open as to whether, for example, the “Rössen-Age” adze (see lists 5 and 9 of the appendix) can or should continue to be referred to as “Donauländisch”. The author compares his relatively neutral designations, devised and intended so as to not imply any (erroneous) function (e.g. “Plättbolzen”), to those given by Karl Heinz BRANDT (Studien über steinerne Äxte und Beile der Jüngeren Steinzeit und der Stein-Kupferzeit Nordwestdeutschlands. Münster. Beitr. Vorgesch.-forsch. Veröff. Seminar Vor- u. Frühgesch. Univ. 2. [Hildesheim 1967] 36–37). This comparison is shown in a table. A more extensive elaboration of these distinctions is given in the next section, Formen der im Katalog beschriebenen rössenzeitlichen Felssteingeräte (Forms of Rössen-Age stone devices described in the catalogue, pp. 45–47). A total of 13 categories are shown, but the graphic in Figure 9 focuses on categories 1–9, which are regarded as typical of the Rössen-Age.
The *Exkurs zu den senkrecht durchlochten, flachen und breiten, dickblattigen Dechseln* (Detour to vertically perforated, flat and broad adzes, pp. 53–76) contains a further catalogue of 104 corresponding sites, or 118 finds (pp. 56–73), with nine illustrations of individual objects (figs. 19–27) and a distribution map (p. 75 fig. 28). Maybe, the small additional catalogue would have better been integrated into the main catalogue for this volume, with only a reference list shown within the chapter. The interesting question of whether Mesolithic or Rössen-Age tool makers actually produced the devices (possibly even for Mesolithic “customers”) is discussed extensively, but – as expected – cannot be answered definitively.

The chapter *Anmerkungen zum Rohmaterial rössenzeitlicher Felsgesteingeräte* (Notes on the raw materials used for Rössen-Age stone tools, pp. 77–81) also begins with a short outline of research history, which justifiably emphasises the importance of research into the raw materials, particularly with regard to the geological origin. The author shows this innate archaeological and economic importance with his own research: the vast majority of finds (86.62% of 403 specimens) consists of North Bohemian amphibolite (p. 78). Further remarks concern the predominant practice of creating a cutting edge across the direction of foliation (p. 80). The increasing robustness of these tools proves the skills and expertise of the toolmakers, but it also raises the question, how the raw stone blocks weighing up to 20 kg were transported, which, however, is not addressed (p. 81).

Only now the core subject of the publication is discussed, *Technologische Aspekte der rössenzeitlichen Felsgesteinbearbeitung* (Technological aspects of Rössen-Age stone working, pp. 84–92). The author first reviews the work of Hans Quitta (Ein Verwahrfund aus der Bandkeramischen Siedlung in der Harth bei Zwenkau. In: Institut für Vor- und Frühgeschichte der Karl-Marx-Universität Leipzig [Hrsg.], Leipziger Beiträge zur Vor- und Frühgeschichte: Festschrift zum 70. Geburtstag von Friedrich Behn. Forsch. Vor- u. Frühgesch. 1. [Leipzig 1955] 20–59), who draws similar conclusions like Kaufmann. The following analysis describes the saw marks found on particular artefacts (pp. 83–86); an important chronological observation is that tools from the Rössen-Age, unlike those from the later Neolithic, hardly have any perpendicular saw cuts. The author also elaborates on the boreholes in axes. These were usually achieved with crown (hollow) drilling, rather than full drilling (pp. 86–91). In the latter case, a two-sided approach to drilling seems to have dominated; perforations that are continuous from one side are only found on thinner tools. For this, too, several lists with extensive examples are given.

The next chapter 9 (pp. 93–99) deals with the uses for axes and stone wedges. The fact that many axes are broken along the shaft hole indicates extensive use. This is also supported by frequent reworking and reshaping seen on many of these tools (examples on p. 96). An exhaustive discussion on their potential use as splitting wedges, as well as felling devices, is ultimately fruitless; likewise without resolution is the proposition of the tools as status symbols and offerings. “Woodworking” as a commonplace explanation remains a recent theory. Unfortunately, one must agree with the author when he says that there are still more questions than useful answers (p. 97).

The last two chapters 10 (pp. 101–107) and 11 (pp. 109–119) both discuss the chronology of Rössen-Age stone tools. While the focus is initially limited to finds from closed Central German settlements, the last chapter also deals extensively with the distribution of stone tools outside of rural settlement areas; here, however, the reviewer would have liked to see referenced the work of Leo Verhart (Contact in stone: adzes, Keile and Spitzhauen in the Lower Rhine Basin. Neolithic stone tools and the transition from Mesolithic to Neolithic in Belgium and the Netherlands, 5300–4000 cal BC. Journal Arch. Low Countries 4,1, 2012, 5–35). With regard to the chronological classification, the reader can find a large number of relevant references (e.g. that symmetrical axes are first found in the late Stichbandkeramik Culture, that large stone wedges [...] enjoyed a special preference at the end of the Rössen Culture [p. 102], the use of flat adzes and high, non-
pierced adzes [shoe last wedges]) during the Rössen Cultural development can be explained with long-lasting Bandkeramik traditions [p. 105] etc.). Here, however, apart from the inventories listed (figs. 34–38), a graphic representation of the tool types with potential timelines and distribution would have been a helpful complement. Some distribution maps would have been another useful addition to the remarks on export goods (figs. 39–44).

The text concludes with some thought- and discussion-provoking considerations on possible trading posts and the influence of logistical connections via water and / or land routes during the process of Neolithisation. This is followed by the list of abbreviations (p. 120), the bibliography (pp. 121–128) and the list of figures (p. 129), as well as the appendix with 29 thematic lists referred to in the text (pp. 132–160), the above-mentioned reprint (pp. 161–182), and the plate section (pp. 184–304).

Overall, it can be said that the extensive references to further finds and sources supplied in the text form a good basis for further research and that the extensive, critical, and knowledgeable discussion of individual aspects made a positive impression on this reviewer. On the other hand, precisely this vast scope requires some prior knowledge on the subject in order for the reader to maintain context. It is therefore not a monograph suitable for “beginners”. For this reason, in the reviewer’s opinion, a summary at either the beginning or end of the text is necessary to provide helpful background information for the reader. This reviewer would have also preferred a slightly differently structured text and less bulky headings, in order to optimise readability; but personal stylistic preferences are not the deciding factor in this context. Conclusion: the wealth of details, technical facets and dissemination aspects provided within this publication speak to the fact that here – at long last – we have a strong body of work that has been long overdue. The monograph arouses the hope of serving as a suggestion to other colleagues to close further knowledge gaps in the subject area.

In light of the great effort the author had to make to complete these volumes (and thankfully he did), the need to further simplify and facilitate the accessibility of primary sources (e.g. N. Kemle / L. Reichel, Open Access in der Archäologie – Rechtliche Voraussetzungen und Rahmenbedingungen. Kunstrechtsspiegel 1, 2018, 2–10. doi: https://doi.org/10.11588/krsp.2018.1.72813), which are so fundamentally important for research in the future, becomes clearly evident.

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MILENA VASIĆ, Personal Adornment in the Neolithic Middle East: A Case Study of Çatalhöyük.