BIRGIT REGNER-KAMLAH, Das Erdwerk der Michelsberger Kultur von Bruchsal "Aue". Eine lange Geschichte. Forschungen und Berichte zur Archäologie in Baden-Württemberg volume 19. Dr. Ludwig Reichert Verlag, Wiesbaden 2021. € 75.00. ISBN 978-95490-523-2 (Print). Propylaeum, Heidelberg 2023. Open Access. ISBN 978-3-96929-290-7 (e-PDF). doi: https://doi. org/10.11588/propylaeum.1349. 337 pages with 312 figures and 3 inserts.

The title of this book, resulting from the DFG funded project "Untersuchungen zur Siedlungsstruktur der Michelsberger Kultur im Kraichgau" (2008–14), might lead one to believe that it is a synthesis of both the excavations carried out at the Bruchsal "Aue" site and the specialised studies carried out on the remains discovered. In reality, it is limited to the presentation of the features and only mentions, but not exhaustively, the conclusions of previously published specialist research on fauna, human remains, funerary practices ceramics and lithic tools. This book, which ideally should have preceded the publication of all the specialised studies, is nevertheless fundamental, since it finally allows the partial observations that were available until now to be situated within the site as a whole.

The Bruchsal enclosure is one of the few enclosures of the Michelsberg culture (MK) to have been extensively excavated. The excavations took place between 1987 and 1993 under the leadership of Rolf-Heiner Behrends. Located on the edge of a loess plateau overlooking a small valley, the excavated area represents, according to the excavator, most of the original surface of an enclosure delimited by two concentric ditches (Befund 1 and 2) surrounding an area of about 5 ha and which abutted a natural slope to the south, giving it the shape of a half oval. A 225 m long section of a third ditch (Befund 306, called Quergraben), which follows the course of the outer ditch before diverging to the east, was also excavated. The study of the abundant ceramic material and the radiocarbon dating show that the two parallel ditches were dug as early as the early stage (I / II) of the MK (ca. 4300–4200 BC) and that the Quergraben was dug at the beginning of the late stage (MK IV), probably during the 39th century BC. The three ditches are interrupted by "entrances" (Durchlässe), seven for the inner ditch, four for the outer ditch and five for the Quergraben. The sections that develop between two interruptions are called "Komplex(e)". In the case of the two concentric ditches, early interruptions (between two and four for the inner ditch, five and seven for the outer ditch) have been erased by modifications that have occurred during the subsequent history of the monument. These ditches therefore originally had a significantly higher degree of segmentation than the synthesis plan suggests. The Quergraben, which has a much shorter lifespan than the other two ditches and is made of five Komplexes following each other over a distance of about 145 m, gives an idea of what the other two ditches probably looked like in the early part of their history. The irregularity of the layout can be explained by the fact that the ditches were divided into separate Komplexe (some of them also presenting irregular layouts, see below) of different shapes and lengths, and of course also to the different episodes of remodelling.

In addition to the three ditches, the site yielded about thirty pits, most of them circular in shape, six of which contained human deposits. Of these, five are more or less directly associated with the *Komplexe* 3 and 4 of the outer ditch. The excavations concentrated on the ditches and their immediate surroundings. A survey of about 2,000 m² inside the double ditch enclosure had suggested that there were no traces of occupation in the inner area (either destroyed by erosion or never having existed). However, geomagnetic surveys carried out in 2012 identified numerous hollow features located both inside and outside the enclosure, some of which at least probably belonging to the Michelsberg occupation.

The site yielded a large quantity of remains, mainly from the ditches, including more than one ton of animal bones, around 300 human remains and 1.6 tons of ceramics. According to the

authoress, these remains come from two distinct deposit mechanisms: on the one hand, detrital deposits (with a high fragmentation index) linked to the "domestic" function of the site; on the other hand, specific deposits containing scattered human remains, including skulls, complete or sub-complete potteries, and aurochs' horns, isolated or still connected by the front part of the skull (pp. 215; 220). The composition of these deposits is varied. Skulls are over-represented among the human remains (49 remains in total, including 7 complete or sub-complete skulls, out of a total of about 300 remains). The most abundant and dense "deposit" type assemblages are found near the Komplex heads, i. e next to the interruptions. Based on stratigraphic observations, the authoress suggests that the two successive states of the enclosure (the double enclosure from MK I to MK III and later the new enclosure resulting from the digging of the Quergraben) can be divided into a succession of rather short occupations separated by long gaps during which thick filling levels generated by natural erosion were formed. The deposits of remarkable objects like skulls and complete potteries naturally also point to the existence of brief events, probably ceremonies, the remains of which were deposited in the ditches. The main phases of use of the ditches are threefold: the initial stage, which coincides with the installation of the double ditch at the time of the appearance of the Michelsberg culture in the Upper Rhine region, around 4300/4200 BC (MK I/II); a second phase around 3900 BC (MK III); and a final phase around 3850/3800, at the beginning of stage IV.

The book begins with a presentation of the excavation, the topographical context of the site and the geology of the area (pp. 11-14 and 15 f.). It continues with a description of the features (Doppelgrabenwerk, pp. 17-21; Befunde, pp. 22-196). In the following section, the authoress proposes an overall architectural analysis and a general overview of the evolution of the three ditches (pp. 197–221). This long section includes a presentation of the six pits that yielded human deposits and separate human bones (pp. 211-213; 219f.). These pits form a small complex presented as "funerary", occupying a restricted area in the north-eastern part of the enclosure, and are dated to Phases MK III and MK IV. One is a regular grave, the other five fall into the enigmatic category of "circular pit with human deposits" which some authors interpret as graves, other as non-funerary ritual features. They are either cut into the bottom or the wall of the outer ditch, or adjoin it closely. However, their absence during the initial stage of the site's history makes it impossible to attribute a funerary function to the enclosure as a whole without caution. Two sections are devoted to the presentation of the aurochs' horn deposits (pp. 215; 220). The main conclusions are then summarised in a concluding chapter (pp. 222–225). The last part of the book is a systematic catalogue of the features, richly illustrated and completed by six separate plates presenting, for the most part, longitudinal profiles with an indication of the provenance of the main categories of remains (pp. 227– 331). The absence of a large detailed general plan of the enclosure and the absence of scales on the small general plans (e.g. pp. 13 fig. 3; 18 fig. 7; 19 fig. 8) as well as on the detailed plans inserted in the text are to be regretted.

A summary (pp. 222–225) recapitulates the main conclusions. The authoress is very cautious about the function of the enclosure. She lists the following hypotheses without giving any preference: settlement, sanctuary, gathering of livestock, meeting place for festivals or markets (or both combined). However, she rightly considers that the existence of a ceremonial activity is clearly demonstrated by the presence of various types of non-domestic deposits. For her, the objects found in the ditch "would result from a combination of detrital dumping and ritual activities" (p. 224). Concerning the rhythm of occupation, the thick sterile layers (up to 90 cm) resulting from long episodes of natural filling of the ditches lead her to favour the hypothesis of a discontinuous frequentation, with real hiatuses during which no one resided near the ditches (p. 210); at least three phases are clearly identifiable within a total duration estimated at about 600 years (s. above). Ritual deposits begin in the initial phase, with complete or sub-complete vessels and aurochs' horns. The

authoress suggests that the first human remains belong to the second phase, which is contradicted by the stratigraphic data, especially those from *Komplex* 9 of the inner ditch (plan 19), where isolated human remains are associated with ceramics that undeniably belong to the MK I/II phase (she suggests, however, that some of the human remains found associated with MK III or MK IV ceramics may have come from the reworking of levels belonging to the initial MK I/II phase). However, she may only be referring to the remains found in the circular pits, the construction of which actually did not begin until Michelsberg III. The combination of human remains and ceramics, ceramics and aurochs' horns, and sets consisting solely of ceramics are also well documented; the combination of human remains and aurochs' horns is only probable.

Overall, the book makes a considerable contribution to the knowledge of the enclosures of the Michelsberg culture. The interpretations defended nevertheless present some weaknesses, linked in particular to an insufficient putting into perspective, the authoress having chosen to privilege the presentation of raw archaeological facts (which she does with great honesty and all the necessary precision) and neglecting the indispensable work of comparison that one would have expected to find in a synthesis work that crowns nearly 25 years of research devoted to the Bruchsal site. A first remark concerns the internal chronology of the site and more precisely its terminal phase, which the authoress attributes to a stage IV/V of the Michelsberg culture. This hypothesis is based on the presence of a small number of Munzingen-type sherds. However, it has long been known that, far from constituting a terminal stage of the Michelsberg, this ceramic style developed in parallel with the Michelsberg culture, from stage III onwards, which has led to its interpretation either as regional facies of MK, or as a culture in its own right and with its own, separate, genesis. It therefore seems more reasonable to interpret the few Munzingen remains from Bruchsal "Aue" as exogenous objects, "imports", in a Michelsberg environment, rather than making them indications of the presence of a stage V or a transitional stage between IV and V.

The interpretation of the highly fragmented ceramics and some of the faunal remains as evidence of "profane" activities must also be qualified. First of all, it should not be forgotten that ceremonial activities produce, alongside remarkable remains directly linked to the ritual dimension, a quantity of waste of a quite "ordinary" nature generated in particular by the logistical aspects of the ceremonies. The remains concerned are therefore not sufficient to support the idea of a mixed ritual and "profane" function for the enclosure. Only the first of these functions is therefore clearly established in Bruchsal. However, this observation is obviously not sufficient to rule out the idea that the enclosure may have been permanently occupied by a village community in addition to occasional ceremonial activities spaced out over a long period of time. Although the existence of "profane" activities has not been demonstrated, it remains possible. It is known that the bearers of the Michelsberg culture made little use of the hollow structures (pits or ditches) to dump their domestic waste, and that the presence of groups of circular silo-type pits is often the only argument in favour of the hypothesis of a domestic occupation. The thick sterile levels separating the phases of ritual activity would therefore be entirely compatible with a continuation of domestic life during the corresponding periods. This would simply not have left any traces in the ditches. In this case, the existence of these thick layers generated by natural erosion would mean that the inhabitants of the site did not feel the need to maintain the ditches during these intermediate periods between the phases of ritual use. For the sake of completeness, it should be recalled that the geomagnetic surveys carried out in 2012 showed the existence, both inside and outside the double ditch enclosure, of numerous pits, at least some of which could belong to the Michelsberg culture, and thus consolidate the hypothesis of a mixed domestic and ritual use of the site. If this is the case, their excavation should make it possible to show whether the domestic occupation is continuous or whether its chronology reproduces that of the "ceremonial" stages identified in the filling of the ditches.

Another question concerns the relationship between the deposits and the *Komplexe* that host them. The deposits of the initial phase are, in general, placed on the bottom of the feature, and, even if this is more difficult to prove because of the problems linked to the reading of the stratigraphy, it is probably the same for the deposits attributed to the two other major phases of use of the enclosure (see, for example, *Komplex 3* of the *Quergraben*, with about twenty aurochs' horns and two ceramics indisputably deposited on the bottom). The fact that the deposits are sealed by thick sterile layers also shows a lack of maintenance of the features, which suggests that they are organically linked to the ritual activities whose material remains they host. In other words, the structures constituting the *Komplexe*, the nature of which we will return to later, were built with the aim of accompanying ritual practices of which they would constitute a material indicator in the same way as the deposits. The *Komplexe* (or, in some cases, the undisturbed elongated pits that form their initial state) are thus, in all likelihood, dug in a ritual context, then abandoned before being, in some cases at least, partially re-excavated in order to serve once again as a focal point for new ritual activities which, judging by the composition of the deposits, reproduce those that accompanied the digging of the first pits of the initial phase (MK I/II).

The existence of juxtaposed segments (some of which are the result of remodelling of an enclosure whose degree of segmentation was clearly higher at the outset), the majority of which yielded remains of ritual activity, raises the question of the mode of arrangement of the enclosure. The discussion around the question of the so-called "pseudo-ditches" (cf. JEUNESSE 2018 – with history of research and bibliography), introduced, for the first time on the basis of detailed observations (further studies showed that these observations converged at least partially with those of N. H. AN-DERSEN [e. g. 1997] on the Funnel Beaker Culture enclosure of Sarup), the hypothesis that at least part of the enclosures with discontinuous ditches (i.e. the "causewayed camps") may result from successive digging, in the course of several generations and in a ritual context and by different social segments, of separate elongated pits. Their association came only later, once the entire predetermined layout had been occupied by pits, to resemble what are conventionally called enclosures. The Bruchsal *Komplexe* would, in this hypothesis, either be made of elongated pits preserved in their original state, as, obviously, in the case of *Komplex 3* of the *Quergraben*, or segments, necessarily longer, generated by the intersection of these pits with new elongated pits sharing the same axis, as is strongly suggested by the processes of erasure of old interruptions described by the authoress.

In her view, this hypothesis, which would imply that even the initial phase (MK I/II) of development was spread over a significant period of time (several generations), is not relevant to the Bruchsal enclosure. She therefore defends the scenario of an early Michelsberg enclosure built in one go and then partially reworked during stages III and IV. However, the arguments she develops do not seem to be sufficient to exclude a priori the pseudo-ditch model. Several clues constitute a powerful set of arguments in favour of this hypothesis: the existence of multiple interruptions and of reworking consisting of digging new pits while respecting the lines of the ditches of the initial enclosure; morphological variability of the pits (with, in particular, the existence of two very distinct profiles, one with a flat bottom, the other with a bowl-shaped bottom), some of which show specific architectural patterns (for example pit 3 of the Quergraben, which forms a very regular quadrilateral that distinguishes it from the rest of the elongated pits); the presence of both types of profiles within the same Komplex; clear differences in the shape and width of opposite Komplex ends (figs 29 p. 39, 76 p. 78, 103 p. 120). Added to this is the general irregularity of the layout, well observed by the author, who deduces that the enclosure was probably laid out by several teams of workers. The continuous appearance of long portions of the two concentric ditches should not deceive us since it is, in the author's opinion, the result of remodelling that has concealed previous interruptions. The Quergraben, whose history is clearly shorter than that of the other two ditches,

gives us a picture of how the latter looked at the beginning of their evolution (the plans of the Neckarsulm-Obereisesheim "Hetzenberg" and Ilsfeld "Ebene" enclosures, which are also Michelsberg, give an idea of what the ditch looked like before it was reworked [SEIDEL 2008]; among other things, Ilsfeld shares with Bruchsal the existence of remodelling actions that led to the removal of former interruptions).

This review is obviously not the place to return to this discussion in detail. We will therefore conclude with two brief remarks. The first is of typological nature. The numerous reworking of the two concentric ditches, which we interpret as the result of the digging of new elongated pits intersecting the old ones in such a way as to respect the initial layout of the ditch, makes Bruchsal a representative of the first of the two types of pseudo-ditches, illustrated by the LBK ditch of Rosheim (Alsace), the study of which was at the origin of the creation of the concept of pseudo-ditch. The Early Michelsberg ditch at Bazoches-sur-Vesle (Northern France) is the most spectacular example of the second type, in which the need to constantly build new pits is not associated with the obligation to dig them all on one or two tracings defined at the beginning of the cycle. The solution adopted in this case being to multiply the tracings (up to five) in order to perpetuate the ritual function of the site. My second remark concerns the chronology. The stylistic homogeneity of the ceramics from the deposits of the initial phase could be seen as an argument in favour of the simultaneous excavation of the different segments. To this, it will be answered that stylistic phases can have very variable durations and that a scenario based on the idea that a ceramic style can remain globally stable during several generations should not shock anyone among the members of the Neolithic research community.

In the conclusion of a recent paper I insisted on the fact that of the two theoretical categories of Neolithic discontinuous ditches (the "true" ditches whose segments were dug simultaneously and the pseudo-ditches whose construction dynamics result in the ditch never being completely finished), only the existence of the latter could be considered as clearly demonstrated, adding that "paradoxically, it is therefore today the interpretation that remains the most widely accepted that must be considered as a simple working hypothesis and, conversely, the one that is still not widely accepted that can be considered as consolidated" (JEUNESSE 2018, 229). Finally, it must be stressed that Bruchsal "Aue" is not unique within the corpus of Michelsberg enclosures for which we have precise descriptions. It shares its main characteristics with the Neckar Valley sites of Ilsfeld "Ebene": long existance covering most of the duration of the MK; creation coinciding with the appearance of the MK in the corresponding region; alternating phases of activity and phases of apparent abandonment; reworking resulting in the excavation of new pits and the erasure of existing interruptions; deposition of complete or sub-complete skulls and vessels. The creation of the two sites during the MK I or MK I/II chronological phases is clearly linked to the foundation of a new settlement area in their respective regions by the bearer of the MK. This would explain, among other things, why comparable sites are not found in the later occupied secondary settlement areas, some of which, like Alsace, are completely devoid of enclosures.

However, these few critical remarks do not detract from the overall remarkable quality and great interest of the book. After all, they concern interpretations in areas where the discussion remains open, especially because, for the *Jungneolithikum* in particular, there are too few field observations as precise as those made at Bruchsal. And this is where the great interest of Birgit Regner-Kamlah's contribution lies: in having been able to highlight with rigour and precision the results of an excavation that is otherwise quite remarkable in terms of its scope and the finesse of the observations made. This is why this publication, together with the specialised studies that preceded it and of which it is in a way the crowning achievement, constitutes a document of primary importance for the knowledge of the Michelsberg culture, but also of Neolithic enclosures as a whole.

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CARLA DRUMMER, Vom Kollektiv zum Individuum. Transformationsprozesse am Übergang vom
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€ 55.00. ISBN 978-9-46427-012-9 (Paperback). Open Access. ISBN 978-9-46427-014-3 (E-Book). 348 pages with 148 illustrations.

What happened in the 4th and 3rd millennium BC in Europe, how societies were structured and interconnected represent challenging questions for archaeologists, particularly for those concerned with the Neolithic of central, western, and northern Europe. This is partly due to the fact that the archaeological record is generally patchy, with a lack of burials for some regions and periods, or of settlements in others, but likely also to the fact that local and supra-regional phenomena may have coincided or diverged in different aspects and at different levels, and potentially all at the same time. Moreover, the observations drawn from different disciplines concerned with this particular context, spanning 'traditional' archaeology and more specialised foci - such as archaeometallurgy, -thanatology, -zoology and -botany, genetics - partially diverge and lead to heated discussions. For example, to what extent migrations from the steppes may have triggered the homogenisation of some aspects of material cultures in the 3rd millennium BC (e.g. ceramic vessel shapes and decorations) in central and western Europe? How did the seemingly radical transition from collective to single inhumation burial practices, the increase in visibility of social differentiation within communities, or yet, the variability of genetic mark-ups play out? These are just some of the most controversial topics (e.g. see FURHOLT 2018, and following discussion). And these are precisely the challenging topics that Clara Drummer chooses to tackle in her book, by testing existing hypotheses on the 4th and 3rd millennium BC archaeological record in the Central German Highlands in Germany. The work under review (From the Collective to the Individual. Transformation Processes at the Transition from the 4th to the 3rd Millennium BC in the zone of the Central German Highlands, in English) is the published manuscript of a PhD thesis that was initiated and completed in the scope of the subproject D2