



Review Article

New research on Neolithic circular enclosures

François Bertemes*

* Institut für Kunstgeschichte und Archäologien Europas, Seminar für Prähistorische Archäologie, Martin-Luther-Universität Halle-Wittenberg, Halle/Saale, Germany (✉ francois.bertemes@prahist.uni-halle.de)

WOLFRAM SCHIER (ed.). 2023. *Rondels revisited: recent research on Neolithic circular enclosures in Central Europe 5000–4500 cal. BC* (Berliner Archäologische Forschungen 21). Rahden/Westfalen: Marie Leidorf; 978-3-89646-572-6 hardback €64.80.

Today, Neolithic circular enclosures are generally regarded as evidence of the first monumental architecture in Europe. They are undoubtedly a topical subject in Neolithic research and also attract great interest from a broader audience. This has not always been the case. Just over 40 years ago, the few examples known then, mainly from Bavaria and Bohemia, were regarded as exotic and of no particular importance for the cultural-historical assessment of early farming societies in Europe. Thanks to aerial archaeology, the number of known sites increased rapidly in the 1970s and 1980s in Bavaria and Lower Austria. This has also been the case, since the 1990s, in East Germany and other countries of the former Eastern Bloc when political change made systematic prospecting flights possible. In addition, the development of geophysical prospection methods provided new insights into the structure and landscapes into which the enclosures were embedded. Finally, the increasing number of rescue excavations and large-scale scientific excavations have contributed to a better understanding of such sites as a characteristic component of Middle Neolithic societies in Central Europe.

The present volume, edited by Wolfram Schier, has the promising title *Rondels revisited* and aims to provide an overview of the impressive field research carried out in the past two decades after the first international conference held in Goseck in May 2004 (Bertemes & Meller 2012). For most scholars the Goseck conference represents the starting point of a phase of targeted, systematic and, above all, networked research. This book brings together lectures held during an international online conference entitled ‘Rondel ’22: ritual arena, calendrical monument or performative architecture’ organised by Schier in January 2022. The result is 22 essays by 54 authors from Germany, Austria, Czechia, Slovakia and Hungary. All contributions are in English, which guarantees an international reception.

In the Introduction, Schier divides the history of research into four phases. An early phase (1967–1990) begins with the excavations at Těšetice-Kyjovice in Moravia and continues with the first excavations, aerial archaeology and geomagnetic prospecting in Bavaria and Lower Austria. At the time, rondels were interpreted as fortifications, even though Helmut

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Becker had already pointed out a solar orientation of the entrances. The second phase (1990–2004) is marked by an intensification of research, particularly in the countries of the former Eastern Bloc and an economic and ritual interpretation of the rondels was under discussion. The period from 2004–2010 is labelled the ‘astronomical turn’. Schier argues that investigations in Goseck and in Lower Austria led some researchers to consider rondels as ‘ceremonial places’ whose primary function was to observe astronomical phenomena. As director of the Goseck team, the reviewer would like to revise this point. In numerous contributions we clearly emphasised that circular enclosures were multifunctional monuments with a primarily ritual character, even though the annual course of the sun played a role in their construction and use—as it did for some medieval cathedrals (Bertemes & Northe 2007). The term solar observatory, often used by the media and the general public, is out of place, because such observatories were built only much later in Mesopotamia. The last period from 2010–2022 sees further intensification of field research, the publication of numerous in-depth studies formulating new hypotheses—as for example a polyfunctional interpretation—and integrating methods of landscape archaeology. He concludes with future research concerns, where the exact time of the rondel’s construction and their use will remain a challenge, and from a landscape perspective highlights a deficit in systemic visibility analyses, which should be addressed as well as more attention should be paid to social practices during construction.

The Introduction is followed by 20 contributions, each of which touches on various aspects of current rondel research. The first two contributions by Ingrid Kowatschek *et al.* and Mario Wallner *et al.* concern the triple-ditch circular enclosure and settlement of Velm, located 20km north of Vienna. The project impressively demonstrates the advantage of modern interdisciplinarity. A combination of several non-destructive prospection methods, starting with aerial photography, classical geomagnetics and including high-resolution magnetic field measurements and ground-penetrating radar (GPR), led to a detailed archaeological interpretation, revealing special features of the entrances and the adjacent three long-houses in the north-east. The conformity between the archaeological interpretation of the GPR data and the orthophotos from the excavation strikingly showcases the possibilities of modern non-destructive prospection.

Similarly, the next two contributions by Klara Sauter, Matthias Kucera, Wolfgang Neugebauer and Roderick B. Salisbury concentrate on the triple-ditch circular enclosure of Hornsburg 1, Lower Austria. The investigations are part of the microregional case study of ‘Kreuttal’, where settlements and two adjacent rondels were found in a small area. These chapters are a preliminary report that provide insights into the aims of the excavation, the documentation and the evaluation. One aim was to test the advantages of using a portable x-ray fluorescence (pXRF) system directly on site and it was demonstrated that this method is well suited to quickly obtaining an overview of the composition and the genesis of strata.

David Russ *et al.* present the geomagnetic results of two new rondels of the Lengyel culture in Austria. The site at Eggendorf am Walde is a triple-ditch complex in the centre of a large settlement area, where houses are at least partly older because some of them are cut by the ditch. The other site of Niederleis is a double-ditch complex. Wolfgang Neubauer and Hannes Schiel provide information about the large-scale prospection of four enclosures in close proximity at Rechnitz, Austria, which are also located in the middle of or next to

Early and Middle Neolithic house clusters. Particularly interesting is the triple-ditch enclosure 1, adjacent to the large double-ditch enclosure 4, with an irregular, slightly oval shape which comprises numerous, partly overlapping houses. The contemporaneity of the two enclosures is questionable because typical Lengyel houses, as seen north of the double-ditch rondel 2, look different.

The contribution by Wolfgang Lobisser *et al.* provides insights gained during the experimental archaeological reconstruction of the Heldenberg of the Schlez rondel and nearby houses. Concerning temporality, observations on post lifespans are particularly relevant. For example, the inner palisade erected in 2005 had already been replaced by 2020.

Doris Jetzinger presents two infant burials of the western Lengyel Culture from Ölkam, Upper Austria, which were excavated in 1996 in two settlement pits west of a double-ditch complex and is the only chapter looking at the relation between rondels and burials. Jaromír Kovárník *et al.* deal with the dense concentration of rondels in the surroundings of Hradec Králové, Czechia. Situated in the catchment area of the river Elbe, this region apparently was an important junction for far-reaching communication routes, as evidenced by imported pottery. The results of the prospection and excavations are explained in detail and characteristic material and its typo-chronology are presented. The rondels are defined as social, economic and cult centres fulfilling important socioreligious functions and which reveal, at least in part, astronomical alignments.

Norma Henkel summarises the results of her PhD thesis on Goseck (Henkel 2023). Her interpretation focuses on the symbolism of the circle and the horizontal and vertical emphasis of the overall architecture. The ditch, bank and palisade divide the space into an exterior and an interior part, while the entrances act as transition zones. Vertically, the ‘underworld’ stands below, while the earth’s surface is to be understood as the ‘above world’ and the sky as the firmament in which the sun, moon and stars move. This architectural concept is preceded by a clear mental model which integrates mythological and cosmological ideas as well as environmental aspects.

Sabrina Hermann *et al.* report on an excavation section through the largest central German four-ditched rondel at Kyhna in Saxony, whose outer ditch has a diameter of 135m. Unfortunately, these investigations did not clarify the sequence of ditch construction nor the question of duration and their simultaneous existence. All the ditches were apparently single-phased. Nevertheless, the authors assume a short period of construction and decay during the forty-eighth century BC.

Silviane Scharl *et al.* look at the western periphery of the circular ditch phenomenon in North Rhine-Westphalia. The examples date to the local Planig-Friedberg and Rössen phases and are thus relatively late (*c.* 4750–4600 cal BC). The rondels in question have a rather small diameter and only one ditch, which does not have a V-shaped profile but a horizontal or slightly rounded base.

The next four contributions are part of the ‘Constructed Knowledge’ project carried out under the direction of Schier. The main aim was to create definitive life biographies of the rondels (construction, use, abandonment, reconstruction, reuse and final abandonment), using high-resolution models based on Bayesian modelling of stratified short-lived samples. The authors draw on data from Ippesheim and Hopferstadt in Middle Franconia and Quehlinburg I in Saxony-Anhalt, all excavated by Schier. The first contribution looks at the

impact of Bayesian modelling on previous ideas about the site of Ippesheim. The reduction from nine to six gates and the numerous re-cuttings of the ditches prove that the site is more complex than previously known and it is not possible to prove that ditch and inner palisade were built and used simultaneously. Although, 140 years of use with alternating stages of maintenance, negligence and restoration speak in favour of a complex socioreligious role of the rondel.

Susann Möller compares Ippesheim and Hopferstadt, the second site is attributed to the Großgartach-Rössen complex. The analysis advocates that each rondel is ultimately unique. Thus, the overall concept of the 'circular enclosure' proves to be adaptable to local conditions and the specific needs of the builders. Annabelle Chowdhury briefly presents the excavations of Quedlinburg I, while Schier *et al.* review the results of the entire project. All three sites are characterised by a short lifespan, the ditches at Hopferstadt and Quedlinburg being backfilled in less than two generations. The authors conclude that using the same method (Bayesian models based on taphonomic scrutiny and stratigraphy) on most of the circular enclosures in Central Europe would show a much shorter lifespan than expected and a much more dynamic biography.

Christina Michel uses ArcGIS to analyse the topography and the horizon profiles of Hopferstadt and Quedlinburg I in terms of visibility. Both sites show exact alignments of the entrances to prominent elevations in the surrounding area, in some cases also including solar alignments. Thus, the idea that gates of circular enclosures always had to have a solar or astronomical orientation is questionable. Georg Zotti and Wolfgang Neubauer investigate such solar and astral orientations of the excellently prospected sites in Lower Austria. On the basis of ArcGIS, precise 3D models of the circular trenches, horizon profiles and open-source astronomy simulations, the previously assumed correlations to the stars must be abandoned. The structure of the sites cannot be explained by astronomy alone. Rather, peculiarities in the landscape must have played a decisive role in choosing the building site and the orientation of the gates.

Jaroslav Řídký and Petr Květina sum up the history of research in Czechia and critically discuss older models and interpretations. Based on new data, ethnographic analogies and influenced by modern theories, such as the dual processual theory, they propose new models to be discussed in future. Both authors, however, emphasise the fact that the monuments have exceptional potential for the study of socioeconomic and power relations in Middle Neolithic societies.

Judit Barna and Gábor Kalla shed light on a topic that has received less attention so far, namely ritual agency and ritual in movement. As the rondels are generally located outside the settlements, it is postulated that during important festivals the local people moved to the circular centres in processions. These ideas are largely derived from the concept of ritual landscapes, as developed by Mike Parker Pearson for Stonehenge and its surroundings (Parker Pearson 2013). Since it is not clear what data could reveal such movements of people exactly and as there are no references to route systems, the evidence of traditional processions during antiquity and prehistory are discussed first. The authors then present convincing arguments that emphasise the performative character of the circle enclosures in their function as ritual sites. They argue that the use of rondels arises from the need to reinforce social and religious cohesion. In this context, processions are important performative acts.

The book concludes with programmatic remarks by Jörg Petrasch stressing that Neolithic rondels should not be treated separately from other Neolithic enclosures. Peculiarities can be perceived only in contrast. Circular enclosures are restricted to Central Europe, mainly to the area of the Stichbandkeramik (Stroke Ornamented Pottery) and the Lengyel culture. Although no two rondels are exactly alike, their typological variances are much smaller than those of non-circular enclosures. Following Petrasch there must have been a unifying concept throughout the entire area, which was adapted regionally. In contrast to their wide distribution, rondels were built and used within a short period of time. Petrasch assumes that circular palisades such as seen at Schalkenburg, Saxony-Anhalt, were erected after the rondel idea had vanished. The very small number of such circular palisades, however, makes it impossible to regard this as a rule.

As far as interpretation is concerned, one gets the impression that we are going round in circles. Indeed, Petrasch discusses again the pros and cons of the known interpretations (fortifications, astronomical observatories, meeting places etc.) sometimes with new arguments but without providing a comprehensive final model. In his eyes, the future of rondel archaeology lies in understanding the sites as part of the landscape in which they are embedded. Furthermore, he assumes that each individual settlement cluster had a central circular enclosure; he adds that new research should concentrate on landscape archaeology using extensive geomagnetic surveys and large-scale excavations. Thus, the nature of the relation between the rondels and the surrounding houses may be clarified, although the problem of absolute contemporaneity is not easy to solve. Due to the compatibility of the data another promising approach would be comparing the structure and dynamics of the settlement clusters of the Lengyel culture and Stichbandkeramik with those of the previous Linearbandkeramik (Linear Pottery), which did not know similar monuments.

The book is well designed and all the illustrations and photographs, mostly in colour, are of high quality. It provides an excellent overview of the present state of research, highlights the many new methods of investigation that allow nuanced interpretations, but the question of function seems still inconclusive. It is a must-have for all scholars who are interested in the Neolithic period.

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