

## Book reviews - Buchbesprechungen

### Całowanie. A Final Palaeolithic and Early Mesolithic Site on an island in the Ancient Vistula Channel

Romuald Schild (Ed.) *Vetera et nova. New Studies of Archaeological Materials and Data Stored at Institute of Archaeology and Ethnology Polish Academy of Sciences. Volume 2. Institute of Archaeology and Ethnology of the Polish Academy of Sciences, Warsaw, 2014, 376 pages, Hardback, ISBN 9788363760304*

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Romuald Schild's book "Całowanie. A Final Palaeolithic and Early Mesolithic Site on an island in the Ancient Vistula Channel" published in 2014 summarizes the excavations on the multilevel site Całowanie in Masovia. Being located in the ancient Vistula channel, the spot was used from the late Palaeolithic to the Mesolithic (also with some smaller occupation events during later prehistory). Already published in summary in Polish (Schild 1975), the editor now presents the results of his excavations in a coherent and internationally more easily recognizable form. After 45 years we now have a final overview of "a key site [of the Final Palaeolithic] if one wants to understand a number of basic problems of the period".

The book is subdivided into seven chapters that were written by respective experts on each topic. R. Schild as the principal investigator of the site introduces the topic with a brief overview of the topographical situation at Całowanie. The site is located on the so-called Pękatka Hill which was formed in the last stadial as a dune. After the relocation of the ancient Vistula its former channels filled with biogenic sediments and grew over so that they finally formed extensive peat bogs. After the discovery of the site excavations started in 1962, even though the site was already damaged by quarrying and erosion. Additional trenches into the surrounding peat ought to produce organic remains. Even if the site is nowadays listed as an archaeological monument, it is still endangered by illegal sand quarries and motorsport activity (quad racing etc.). In his brief introduction R. Schild also describes the excavation techniques in adequate richness of detail so that the gentle reader gets all the information commonly underreported in archaeological literature on this topic.

The second chapter deals with the

geomorphological, stratigraphical and palaeo-ecological situation as well as the radio-chronological analyses. Here R. Schild gives more detailed insights about the formation of the sediments and describes the extensive micro-stratigraphical analyses which were conducted at the site. Having excavated c. 6'000 m<sup>2</sup>, the investigators could link several stratigraphical units all over the site, which is impressively large by the standards of late Palaeolithic excavations on the North European Plain. Several geomorphological cross-sections and maps round off the chapter before the author gets into detail and deals with the excavation itself. Extensive descriptions of the stratigraphy, connected with plans and several photos of selected aspects make it possible to comprehend the different layers of the site. In this chapter one of the most prominent positive aspects of the book is introduced: tables. The editor attached importance to provide all data in a comprehensive and summarized form through the extensive use of tables. This makes it fairly easy for others to use the data. Apart from this, he discusses the radiometric results of 39 samples from the site which are almost exclusively done on charcoal fragments or charred wood from the different layers, which is usually the only material dateable from sand sites. Apart from all biases connected to this sampling strategy, it is shown that the stratigraphical sequence ranges from the Late Pleistocene to the Early Holocene.

The third chapter announces the archaeological find materials, which are essentially lithic artefacts. The authors decided to present the inventories by level so that each previously defined chronological entity is presented consecutively. Starting with level 1, each trench with finds from the respective timespan is presented in extensive tables and discussed. Technological considerations and overview maps of each discussed trench are combined with refittings. By this, the interconnectivity of the concentrations (*kshemenitsas*) is shown. Furthermore, drawings of many artefacts provide a sufficient overview of the finds. Unfortunately, this brings up one of the criticisms that must be expressed: the orientation of the drawings changes, which is difficult because even within one plate it is sometimes the case that lateral drawings are oriented in a contradictory fashion. Also, the overview maps change their orientation so that the reader has to adjust each time a plan is considered and compare it to the overall maps. It might have been easier to grasp if the editor would have decided to orient all the plans northwards and/or include a miniature overview map. The refittings do not differ between different matching varieties, but this is

acceptable. Whereas the authors do not state if they tried refittings between the trenches, we must assume that these analyses are only done within each trench. Due to this, the juxtaposition of different concentrations as isolated chronologically distinct units could be questioned. Unfortunately, the presentation of some of the bar charts in 3D makes it difficult to read the actual values, due to projection reasons. This is the case throughout the book.

Chapter 4 gives room for the functional analyses conducted by Małgorzata Winiarska-Kabacińska through usewear analyses. Again, the assemblages are analysed separately by trench and layer and now also by concentration. Some irritating and difficult to explain issues of tool-type representation (e.g. differences between the drawn amounts of used tools and the bar charts) furthermore get in the way of the opportunity to show the strength of usewear analyses. The drawings which illustrate the working edges of the tools are not satisfactory as well as they are of too low resolution. This regrettably further diminishes the already difficult impression of this chapter as along with other inattentiveness regarding the illustrations (spelling mistakes, missing scales (Fig. 4.30) or units (all diagrams' y-axis)).

The contribution of deceased Jan Fiedorczuk is given room in chapter 5 which deals with the internal organization of the site based on artefact refittings. He concentrates on trench 1 and just a single level which incorporates the Final Palaeolithic and some Mesolithic admixtures. It is welcomed that the author of this chapter included a short description of his way of working and terminology and its graphic representation so that even readers without specific knowledge can understand the symbols used. Numerous maps and tables again serve as a good tool for illustrating the results. The subsequent comparison of the results of the sites at Rydno serves in many situations for underlining the results at Całowanie. Sometimes this, nonetheless, gives the impression that in this chapter Całowanie and Rydno are mainly compared instead of presenting the results of the former. This might on the other hand be related to the fact that the original author passed away before being able to finish a chapter for this book, which is why R. Schild assembled and edited it based on one of J. Fiedorczuk's earlier publications (Fiedorczuk 2006).

Lucy Kubiak-Martens and Kazimierz Tobolksi contribute to the book by their analyses of palaeo-ecological aspects. Also based on older results, the authors of this chapter analysed pollen as well as macro-botanical remains for local vegetation reconstructions and for getting insights into the plant food-component of Całowanie. The pollen and the macro-botanical samples analysed were taken at some distance from the trenches. To trace the relevant components for subsistence bulk samples from a peat trench were recovered during the 1983 campaign, sieved, and dried. While analysing these samples

L. Kubiak-Martens focused on charred remains (mainly rhizoms and parenchymas) which are seen as possible plant foods. Additionally, the authors suggest that the people at Całowanie already did some kind of vegetation management as seen at Star Carr, for instance.

Synthesizing the book, R. Schild summarises in 24 pages the results of the excavations at Całowanie. Starting with the different chronological entities and focusing on the lithic artefacts he discusses the radiocarbon dates and contextualizes the site within a wider framework drawing parallels to other contemporaneous sites in Europe as well. This part of the chapter would have been situated well at the end of the third chapter because the author is only focusing on the lithic assemblage. Eventually he draws a fuller image of the settlement, including the geomorphological and palaeo-environmental results. Being closer to a summary, this part of the chapter finalizes the book very well. Now R. Schild also acquaints the reader with a possible house which was shortly mentioned before (p. 138), including groundplan, spatial tool distribution and an artistic image how he or the illustrator imagines the hut to have looked like. In this summarizing synthesis, R. Schild gives an overarching picture of the settlements in the different chronological phases at the site of Całowanie. Herewith he includes the definition of the *Calovanian* which is defined as an early Allerød culture without any parallels in Poland (p. 349) so far.

All in all, the book leaves a mixed impression: on a positive note, the presentation of the excavation includes all the relevant information needed for understanding the interpretations of Całowanie. By presenting most of the material as drawings and including many pictures the book comprises an extensive publication of an important site of the European Late Palaeolithic/Mesolithic. This impression is also increased by including several profile drawings. The thematically clear and obvious subdivision and incorporation of specialists on each topic guarantee a high standard regarding the scientific content. Despite this, the quality of some other aspects is sometimes very poor. As already mentioned, 3-dimensional projection of bar charts are misleading with respect to the shown values even though they might look better. This, on the other hand, cannot be said of a few of the artefact drawings as here significant differences in quality are observable. The maps with their differing orientations complicate matters for the reader. In this case it might have been an easy solution to include the general plan as a miniature into each trench-close-up or add the plan as a supplement, so that the reader could compare the locations separately without searching for the necessary pages each time.

Furthermore the reader recognizes peculiarities regarding the radiocarbon datings, such as the (uncommon) use of  $\Sigma$  instead of  $\sigma$  for the standard deviation. Furthermore, the reliability of the

calibrations differs from 1  $\sigma$  to 2  $\sigma$  depending on the context without explaining why a specific range was used. Regrettably, several spelling mistakes have been overseen during the proofreading process which become recognizable at a certain point and leave the impression that there was less than adequate attention paid to publish a proper version of the book. This is particularly sad because the material and overall format of the volume follow a stringent and generally good idea.

From my point of view it would have been nice if the editor did give palaeo-environmental investigations more space. Bog-sites like Całowanie usually have great potential for extensive analyses of this kind which are underrepresented in this book. The presentation of the lithic assemblage is thorough and completely satisfactory. All in all the volume presents the multi-level site Całowanie (especially in terms of the lithic inventories) in an adequate way. Nevertheless, a great deal of potential was squandered regarding modern palaeo-environmental studies for this location and including it into a holistic presentation of the prehistory of Pękatka Hill. This might be because the excavation was some decades ago and the chosen approach was more artefact-related, but it nevertheless leaves a rather antiquated impression. Apart from that, it has to be stressed that the book is and will be of high relevance to any chrono-typological study in the Late Palaeolithic and early Mesolithic of the Northern European Lowlands and adjacent areas.

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### Mit Einbaum und Paddel zum Fischfang. Holzartefakte von endmesolithischen und frühneolithischen Küstensiedlungen an der südwestlichen Ostseeküste.

Stefanie Klooß, *Untersuchungen und Materialien zur Steinzeit in Schleswig-Holstein und im Ostseeraum, Band 6*. Wachholtz Verlag – Murmann Publishers, Kiel/Hamburg, 2015, ISBN 978 3 529 01858 9

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Going fishing with a dugout boat (canoe?) and paddle in the late Mesolithic and Early Neolithic – such is the

author's concept for this book on the use of wooden objects at coastal settlements along the south-western Baltic coastline. The research area is the German Baltic coastline, with a concentration of sites along Wismar Bay and the island of Rügen. Due to tectonic movement, the coastal area has been subject to sinking, by as much as 4 m. The time-span covers a number of excavated sites, both above and below the present waterline, dated to the interval 6'000 - 4'000 calBC, which corresponds to the Ertebølle Culture. As the sites are located at or near the former seashore, fish was of major importance in the diet. Since a number of the finds dating from the transition to the Neolithic or from the Early Neolithic are included in the research, it would have been useful for the reader to obtain some knowledge of these periods as well.

In the second part of the publication, thirteen sites altogether are presented, with finds of various categories of wooden objects. Klooß provides basic information about the position of the finds within the trenches and stratigraphy, the number of finds, measurements etc., and this information is supported by high-quality illustrations, mainly in the form of drawings. Leister prongs constitute one of the most numerous forms of tool remains. The state of preservation, wood species, presence or absence of a notch as well as use wear are documented. Fragments of spears also form a sizeable group. However, the total number is difficult to estimate due to their fragmentary condition. Paddles have also been found but in a small number, as have fragments of bows and arrows. The points of arrowheads are rarely preserved. However, the type with a club-shaped tip used for hunting fur animals is rather common. As on almost all Mesolithic sites of Northern Europe, the number of bow finds generally exceeds that of arrows.

Various types of shafts for inserting flint as well as stone axes are present, and fragments of shafts have been found in antler axes. Due to the location of the trenches and the position of the sites at the shoreline, some sites also produced parts of wicker fish traps. Worked and unworked pieces of wood are documented. However, there may be differences in the numbers of the former that were recovered due to the number of finds and the excavation conditions. The species, thickness and number of tree rings are given for pointed sticks. The documentation also includes the number of cut marks. Less numerous are fragments of dugout boats, but even the tiniest parts are of interest, as they may show traces of how the boat was hollowed. There are a number of rarer finds, such as a spoon.

The information from the different sites is of interest. However, it is the third part of the publication, with an evaluation of the find material from all sites, that is of special importance. Starting with dugout boats, a basic issue that is dealt with concerns the problem of identifying boat fragments. Here one might interject that no other large wooden objects

that could be made by hollowing, such as containers or drums, have so far been identified. An experiment with a small dugout boat by the reviewer demonstrated that it could serve rather well as a large drum.

Within the research area a total of 44 finds have been identified as dugout boats. Two of these finds are intact; they measure from 8 to 9 metres and date from the early Ertebølle Culture (4800/4700 BC). They show traces of hearths within the vessel. The third, with a length of 12 m, dates from the Early Neolithic (about 3850 BC), and in contrast to the other finds, made of lime, this one has been shaped from the trunk of a maple. Finds with traces of fire that have partly destroyed the boat as well as parts with more or less regular perforations are evident. The latter might be traces of repairs.

The earliest dugout boats, made of pine, date from about 7000 BC, represented by finds from France as well as northern Germany. However, the major finds date from the middle and late Ertebølle Culture, and the Early Neolithic. The longest might have been 12 - 14 m in length and with a hull 1 - 4 cm in thickness. The boats have a truncated end, where a separate plank has been fixed in place in a groove and with binding.

All dugout boats dating from the Mesolithic have been found on coastal sites, while the Neolithic finds originate from bogs in inland Denmark. The shape is the same, but the board is of double thickness and generally made of alder. The manufacture as well as use and repair of dugout boats are discussed.

Paddles are easier to recognize, even in a fragmentary state. Altogether, 31 finds from five sites have been identified, all in fragmentary state. All are made of ash. Despite the low thickness of 0.6 - 2.1 cm, one side is slightly curved and the other straight. The classification includes fifteen types, but these can be reduced to two groups – paddles in the form of a long leaf and paddles with a broad spade-shaped end having a marked shoulder at the transition to the shaft. The long leaf-shaped group is known from the Early Mesolithic, while both are used in the late Mesolithic. The fracture patterns indicate that a number of paddles broke from heavy use. Simple engravings, only, are visible on one of the finds, not complex ornaments, as on some of the Danish finds. There is also a short discussion on the use of different paddle types in the open sea and coastal waters.

The number of finds, 369 from eight sites, proves the frequent use of leister prongs for fishing. As the leisters have a rather uniform shape, even small fragments can be identified. The marked difference in the number of finds per site leads to the question of whether the number of leisters reflects the quality of excavation or the importance of eel fishing. The latter explanation seems to be the most plausible. The sites with the largest numbers of eel bones also have the highest percentage of leisters. The variation in the

matrix of the find-bearing layers, namely peat or sand, might also improve or reduce the possibility of finding intact leister prongs.

There is marked variation in the pointed parts of the leisters, with clustering of short (5 - 9.5 cm) and long (25 - 30 cm) examples. Two different types are identified – one with a straight shaft and the other with a slightly curved shaft. The former is the most common in the research area. Altogether, 40 finds have been identified as semi-manufactured pieces. The majority of finds are made from hazel, just like the finds of the finished products.

A previous statement that leister prongs with a short tip were used in waters with a hard bottom and the long ones in water with a softer bottom is tested and supported by the documentation regarding the character of the bottom in the waters close to the sites. In addition, traces of use are much more obvious on the short-tipped leister prongs, which might hit a hard bottom more often than those with a long tip. Unfortunately, finds of the binding are rare on these sites. However, Danish and Lithuanian finds show that a pair of prongs, in some cases with a bone point in between, were fastened to the end of a long shaft.

Finds of permanent fish traps are encountered on a number of Mesolithic coastal sites. Most common are pieces of wicker traps made from stems of common dogwood or guelder-rose, bound together with roots of alder, or less commonly with roots of pine. The wood used for the wicker is in the form of split stems.

Finds of pointed stems of hazel with an average diameter of 3 cm have been interpreted as parts of fish weirs. Most have been washed onto the shoreline. However, on two sites, stepping-stones and more regularly placed stems indicate parts of standing fish weirs stretching outwards from the beach. Depending on the thickness, the points were shaped by using a flint blade or an axe. Either the stem was broken and then partly pointed, or the stem was cut right the way across. The fish weir finds from northern Germany are all small fragments. Larger parts have been found in Denmark, but these have been dated to the Neolithic. Major constructions of up to 40 m in length are made of thicker stems and also of a wider variety of tree species.

Organic material for binding is preserved. The best-known example is a flint blade fastened to a short transverse handle, covered by a complicated binding consisting of a thread made of bast, forming a tool in the shape of an inverted "T". Another find consists of two stems tightly bound together, forming parts of an unknown object that might have been a bag net. Several fragments of nets from one of the sites have not yet been analysed. That nets were used on other sites is proved by finds of net floats.

On the various sites, 117 fragments of spears have been recognized altogether. They have an oval cross-section with a width of about 2 cm and, with a few exceptions, are made of ash. They have been shaped



from much thicker trunks. The function is not understood. Their use as shafts for leisters is rejected, as no remains of binding have been found. But where, then, are the large number of shafts, almost two hundred, that were needed for all the leister prongs?

A couple of finds have been interpreted as possible boomerangs. This tool has been identified at a small number of Danish sites. Compared to the Mesolithic finds from south Scandinavia, the number of bow fragments is small: just four pieces of bows have been recovered, all of the Holmegaard type, which means a long bow with a D-shaped cross-section and a marked handle in the middle, a type used throughout the Stone Age. With a few exceptions, stems of elm have been used for manufacturing them. Arrow fragments have been found on just one site: this is accounted for by the difficulty of identifying fragments. One of these is a point with fragments of a flint arrowhead preserved.

Concerning what has been left in the refuse and what is missing, perhaps we should give more attention to the application of the items than has been done hitherto. Of course, there are taphonomical processes that can explain the presence/absence of certain groups of objects. But is this the whole story? On most sites the number of bow finds is larger than that of arrows, although the number of arrows should have been much larger than that of bows. Might the representativity be distorted by special rules on how different objects were handled after they went out of use? Some may have been thrown away while others were burned or treated otherwise.

There are a number of finds indicating different modes of shafting axes. Sleeves with a socket for the axe combined with a perforation for a shaft are present as well as short, almost L-shaped shafts. Of the unworked wood from all the sites, hazel is the dominant species, with oak as the second, along with a number of species present in smaller, almost equal percentages. It is remarkable that oak, widely utilised in the Neolithic, is seldom used for making tools, despite its high representation among unworked wood. Among this kind of wood, 39 % shows traces of fire, but variation between sites is apparent. Some analysis of the charcoal would have been of interest, in order to compare this with the unworked finds and to obtain a wider knowledge about the environment than is presented by the unworked wood. Another type of analysis that might have provided valuable information is determination of when during the growing season stems and branches were cut. This could have given an insight into the use of the sites, hopefully providing a basis for discussion of seasonal or permanent settlement.

The publication also includes a chapter about the choice of wood for the different objects, already indicated earlier, and a chapter about the distinguishing characteristics, growing conditions, use and qualities when worked for all the wood species found in the research area.

The detailed presentation of the finds and find circumstances make the publication most useful for those who seek to obtain a deep insight into Mesolithic woodworking.

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## Inhalt - Contents

- The De Nadale Cave, a single layered Quina Mousterian site in the North of Italy**  
*Die De Nadale Höhle, eine einphasige Fundstelle des Moustérien vom Typ Quina in Norditalien*  
**Camille JÉQUIER, Marco PERESANI, Matteo ROMANDINI, Davide DELPIANO, Renaud JOANNES-BOYAU, Giuseppe LEMBO, Alessandra LIVRAGHI, Juan Manuel LÓPEZ-GARCÍA, Marija OBRADOVIĆ & Cristiano NICOSIA.....7-21**
- Stone tool analysis and context of a new late Middle Paleolithic site in western central Europe – Pouch-Terrassenpfeiler, Ldkr. Anhalt-Bitterfeld, Germany**  
*Eine neue spätmittelpaläolithische Fundstelle im westlichen Mitteleuropa – Pouch-Terrassenpfeiler, Ldkr. Anhalt-Bitterfeld, Germany. Steinartefaktanalyse und mitteldeutscher Kontext*  
**Marcel WEISS.....23-62**
- Quantification of late Pleistocene core configurations: Application of the Working Stage Analysis as estimation method for technological behavioural efficiency**  
*Über die Quantifizierung spätpleistozäner Kernkonfiguration: die Arbeitsschrittanalyse als Methode der Bewertung technologisch effizienten Verhaltens*  
**Andreas PASTOORS, Yvonne TAFELMAIER & Gerd-Christian WENIGER.....63-84**
- Sharing the world with mammoths, cave lions and other beings: linking animal-human interactions and the Aurignacian “belief world”**  
*Als Menschen sich die Welt mit Mammuts, Höhlenlöwen und anderen Wesen teilten – Zur Verkettung von Tier-Mensch-Interaktionen und der “Glaubenswelt” des Aurignacien*  
**Shumon T. HUSSAIN & Harald FLOSS.....85-120**
- Chronology of the European Russian Gravettian: new radiocarbon dating results and interpretation**  
*Die Chronologie des Europäisch-Russischen Gravettien: neue Radiokarbon-Ergebnisse und deren Interpretation*  
**Natasha REYNOLDS, Sergey N. LISITSYN, Mikhail V. SABLIN, Nick BARTON & Thomas F. G. HIGHAM.....121-132**
- Standing upright to all eternity – The Mesolithic burial site at Groß Fredenwalde, Brandenburg (NE Germany)**  
*Aufrecht in die Ewigkeit – Der mesolithische Bestattungsplatz von Groß Fredenwalde, Brandenburg (Nordostdeutschland)*  
**Thomas TERBERGER, Andreas KOTULA, Sebastian LORENZ, Manuela SCHULT, Joachim BURGER & Bettina JUNGCLAUS.....133-153**



**Neolithic transition and lithic technology: The Epipalaeolithic and Early Neolithic assemblages of Ifri Oudadane, NE-Morocco.**

*Neolithisierung und Steingeräteherstellung: Epipaläolithikum und Frühneolithikum der Ifri Oudadane, Nordost-Marokko.*

**Jörg LINSTÄDTER, Gregor WAGNER, Manuel BROICH, Juan GIBAJA BAO, Amelia del Carmen RODRÍGUEZ RODRÍGUEZ.....155-184**

**Book reviews**

*Buchbesprechungen.....185-189*