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RETURN TO KSIĄŻNICE WIELKIE NEAR KRAKÓW

ABSTRACT

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In 1964, Barbara Burchard and Anna Eker published a study of the Funnel Beaker culture materials from Książnice Wielkie, Proszowice district. These materials were obtained by Józef Żurowski, who conducted large rescue excavations in 1921-1924. He has never published the results of research, and the study by B. Burchard and A. Eker is so far the only comprehensive one of the Funnel Beaker culture settlement there. Since then, this site has not been the subject of detailed research and analysis. The huge, as yet untapped, research potential of this site has become the reason for a scientific return to Książnice Wielkie. After almost 100 years since J. Żurowski's fieldwork, the Archaeological Museum in Kraków resumed research. In 2017, magnetic prospecting was carried out, and since 2018, rescue excavations have been directed. Stone artefacts are also being studied, and radiocarbon analyses of materials obtained in the 1920s are being conducted.

Keywords: Funnel Beaker culture, Funnel Beaker-Baden assemblages, Lublin-Volhynian culture, Corded Ware culture, Globular Amphora culture

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INTRODUCTION

The site in Książnice Wielkie, near Kraków, is known to all Neolithic researchers of southeastern Poland. The history of its discovery, excavation research and material development is over a hundred years old. Although it has been known since the interwar period, we owe the introduction of Książnice Wielkie to scientific circles to Barbara Burchard, Anna Eker and Jan Machnik, who in 1964 developed and published materials from Józef Żurowski's former research (Burchard and Eker 1964; Machnik 1964). The site was discovered accidentally during World War I while digging trenches in the vicinity of the local cemetery. We owe information about archaeological features destroyed at the time and collected artefacts to priest J. Later - parson of the parish in Książnice Wielkie. A few years after the war, he described the finds of J. Żurowski, from the Archaeological Museum of the Polish Academy of Arts and Sciences in Kraków, who in 1921-1924 carried out large excavations. In an area of approximately 20 ares, he discovered about 70 Neolithic features



Fig. 1. Książnice Wielkie, site 1, Proszowice district. Location of the site (illustration by A. Zastawny)

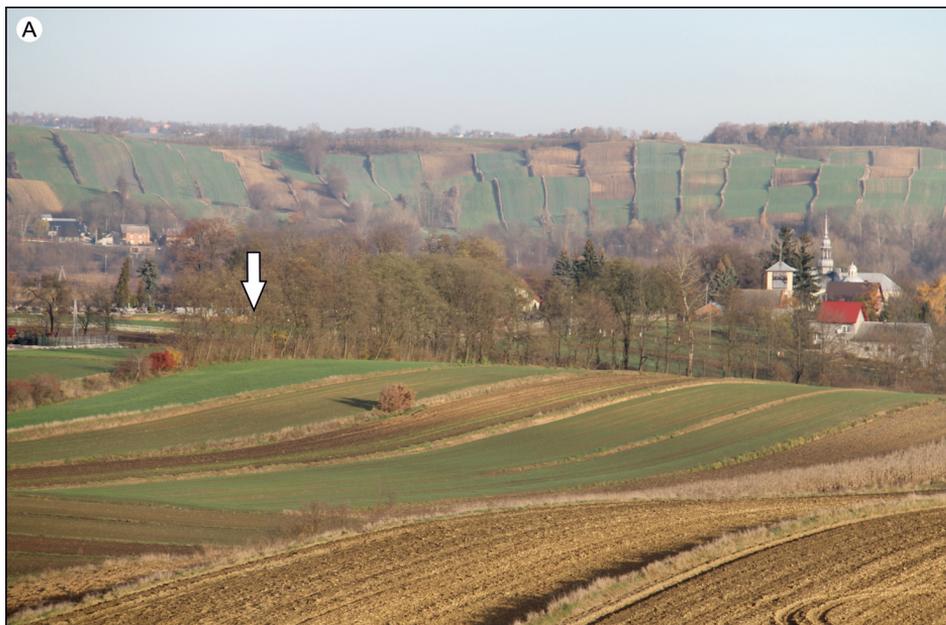


Fig. 2. Książnice Wielkie, site 1, Proszowice district. A – location of the site against the background of the Szreniawa Valley and slopes of the loess upland (view from southeast), B – view from the west of the site and contemporary cemetery (photo by A. Zastawny)

(Burchard and Eker 1964), forming the Funnel Beaker culture settlement (FBC) and the Corded Ware culture (CWC) cemetery. Materials from these studies are still stored in the collections of the Archaeological Museum in Kraków.

Since the publication of the FBC and CWC materials in the 1960s, this site has not been subject to more detailed material analysis. Its enormous, untapped research potential has become the reason for scientific return to Książnice Wielkie. Many issues still need to be re-examined (stylistics and relative chronology of the FBC pottery), and some completely new research (*e.g.* absolute chronology) is being conducted. In 2017, together with the Institute of Archaeology of Jagiellonian University, the Archaeological Museum in Kraków began work on the publication of research materials from 1921-1924. Analyses of selected pottery and flint assemblages, as well as analyses of archival documentation were carried out to reconstruct the layout of settlement pits and graves, as well as to develop an absolute chronology of Neolithic settlement. In order to verify the results of analyses on “old” materials, field research was also resumed. In 2017, magnetic prospection was carried out at the site, and since 2018 rescue excavations are being carried out (Brzeska-Pasek and Zastawny 2018; Brzeska-Zastawna and Zastawny 2019). As a result, a further part of the Funnel Beaker-Baden (FB-B) settlement and CWC cemetery were discovered, whose research began with J. Żurowski 99 years ago.

Książnice Wielkie is located 45 km east of Kraków, on the southern edge of the Lesser Poland Upland (Fig. 1). It is located on the right bank of the Szreniawa River (Fig. 2: A), not far from its mouth to the Vistula. The archaeological site is located on a hill in the central part of the village, near the parish church and cemetery. The contemporary cemetery is entirely located within the range of the site. The hill, covered with a thick layer of loess, slopes northwards towards the Szreniawa floodplain. From the east and west, they are limited by small side valleys, which are crossed by ravines (Fig. 2: B). In documentation of the *Polish Archaeological Record*, the site is marked with No. 1 (AZP 100-62/88). Administratively, Książnice Wielkie belongs to the commune of Koszyce, Proszowice district, and to the Lesser Poland Voivodeship.

J. ŻUROWSKI'S EXCAVATIONS IN THE YEARS 1921-1924

In 1920, Józef Żurowski (Fig. 3), as an employee of the Archaeological Museum of the Polish Academy of Arts and Sciences, was appointed as the Conservator of Prehistoric Monuments in Western Lesser Poland (Jakimowicz 1936). This position was directly subordinate to the Ministry of Religious Denominations and Public Enlightenment in Warsaw. One of the first tasks of J. Żurowski was to review demesnes that were subject to parceling, as well as to collect data to protect archaeological sites (Tyniec 2015). On this occasion, he visited many sites located on the lower Szreniawa, including Jaksice, Majkowiec, Witów, Sokołowice. In 1921, he came to Książnice Wielkie, where he was informed

by the parish priest, J. Later, about archaeological findings discovered during World War I in the area of the local cemetery. Then, as a gift to the Archaeological Museum, J. Żurowski was given a fully preserved CWC clay amphora, removed from a grave destroyed by war trenches in 1914 (Żurowski 1921, Fig. 11). In addition to the amphora, he also received other artefacts: spindle whorls, fragments of vessels, shells and flint products. He collected some of them himself by visiting a place he was shown in the field behind the cemetery (Żurowski 1921).

It is unclear whether excavations were started in 1921. J. Żurowski's information on this subject does not coincide with this date. In the field notebook of excavations in Książnice Wielkie, we find a record about "preliminary research" in 1921. Although he confirms this by stating that he conducted research between 1921-24 (*e.g.* Zabłocki and Żurowski 1934), in several publications he writes about the beginning of excavations in 1922 (Żurowski 1921; 1923a; 1923b). Archival documentation also points to 1922. Therefore, it should be recognized that systematic excavations were started in 1922, *i.e.* a year after the first visit of J. Żurowski to Książnice Wielkie. However, the first visit to the site, when he collected artefacts from the fields and obtained materials donated to the Archaeological Museum in Kraków (discovered during World War I), must be associated with 1921.

Based on published research reports and archival documentation, it can be assumed that the total area of the terrain surveyed in 1922-1924 was about 20 ares (Żurowski 1923a; 1925; 1929). The first trench encompassed the place from which the artefacts from the FBC settlement pit and the CWC grave came, destroyed by the trench in 1914. Traces of the buried military ditches were still visible at the beginning of excavations (Żurowski 1923b). In 1922, 26 FBC settlement pits and 6 CWC burials (including 5 niche graves), destroyed older pits and 1 destroyed grave – covering a total area of approx. 800 m² – were discovered just below the surface (Żurowski 1923a). In 1923, the research covered an area of approximately 625 m². A further part of the FBC settlement was discovered, revealing about 40 features (Żurowski 1925). In the third and last season of excavations in 1924, J. Żurowski examined an area of approximately 700 m² and explored 36 features (data from archival documentation), including another 6 graves of the CWC (Żurowski 1925). In the same season, he also discovered an Early Medieval skeletal cemetery with 21 graves arranged in rows (Żurowski 1926). After completing the research, Żurowski wrote that the total number of features discovered "reaches hundreds" (Żurowski 1925). The archival documentation contains information about features with numbers from 1 to 66. Many of these pits, however, were complexes of 2-3 features, and most of the CWC graves were discovered during the exploration of other pits. Taking this into account, and using field documentation and publications, it is possible to estimate the number of Neolithic settlement pits at approx. 90, CWC graves at 12 (or 14), and Early Medieval graves at 21. In total, this gives us over 120 archaeological features of various typologies, chronologies and cultural affiliations.

It is worth emphasizing that the excavations of J. Żurowski were of a rescue nature, and were carried out in the area of fields purchased by the parish in Książnice Wielkie in order to enlarge the cemetery. This is confirmed by information from Żurowski, who reports that even before the end of the investigations, the deceased began to be buried in the area already excavated. The author of the study also reports accidental discoveries while digging modern graves in the cemetery, and indicates that the area occupied by the settlement is much larger than that identified during excavations (Żurowski 1923a; 1925).

From the research of J. Żurowski, quite extensive archival documentation has been preserved, stored together with materials from excavations at the Archaeological Museum in Kraków. It consists of a field notebook and its “official” version, rewritten and divided into three parts, corresponding to the individual seasons in 1922, 1923 and 1924 (incomplete season 1924). Descriptions and sketches of the features (Fig. 3) are supplemented by approximately 40 photographs of selected artefacts (mainly whole vessels), along with photographic records of the exploration, taken during the excavations (Fig. 4). A large part of the materials are original drawings of artefacts and pits used in scientific publications. Also, tabular lists of features and artefacts discovered therein have been preserved (for 1922 and 1923), as well as inventories of artefacts, which were divided into individual types (for 1922). The remaining part of the documentation is drafts of articles and reports, as well as public appearances and official and private correspondence regarding the excavations in Książnice Wielkie. It is important to emphasize the diligence and detail of the author’s field observations. An undoubted drawback of the documentation in question is the nature of J. Żurowski’s handwriting, which makes it impossible to reproduce much of the information. The Archives of the Archaeological Museum in Kraków also contain a personal folder of J. Żurowski, in which one can find, among other things, his correspondence with parish priest J. Later.

J. Żurowski regularly described the results of the research in Książnice Wielkie in reports published mainly in “Wiadomości Archeologiczne” (Żurowski 1921; 1923; 1925; 1929). In addition to basic information, he extensively discussed problems related to the interpretation of his discoveries. He devoted most attention to the CWC niche graves and their relationship to the older FBC settlement pits in which they were discovered. He figured that the graves and settlement pits were homogeneous, had a uniform construction (graves in living quarters) and belonged to the same culture (population). He described the pottery decorated with cord impressions as reserved for funerary purposes, while the vessels with FBC and Baden features (*i.e.* according to Żurowski’s “Nordic” and “radial” ones) corresponded to the remains of dwelling pits. The combination of various elements in the ornamentation of pottery and the discovery of “grave-dwelling” features was considered unique, and were the inspiration for the proper name of this type of construction: “Książnice type of home graves” (Żurowski 1925). The author of the research in Książnice Wielkie never summed up his views. As has been said many times, he also did not publish materials from excavations. The exceptions are two pits (No. 41 and 43), in which J. Żurowski



Fig. 4. Książnice Wielkie, site 1, Proszowice district. Archival photographs from the investigations in 1924: A – „cross” exploration of settlement pit No. 48 with the FB-B materials, B – level of discovery of burials in the CWC niche graves (46/7, 46/8, 46/9), dug into the fill of FBC pit No. 46 (photo from the Archives of the Archaeological Museum in Kraków)

discovered rich and interesting paleobotanical materials. They became the basis for a very detailed study (in terms of the archaeology), with extensive descriptions and illustrations of finds (Zabłocki and Żurowski 1934). This article provides a glimpse of a publication that was never created, with the results of research in Książnice Wielkie. Much information about excavations can also be found in J. Żurowski's popular science articles, which he willingly prepared, *e.g.* for the regional press (Żurowski 1923b).

Simultaneously with the work on pottery, J. Żurowski strove to study other finds. As mentioned above, J. Zabłocki from Jagiellonian University donated paleobotanical materials, which they published together (Zabłocki and Żurowski 1934). He also conducted studies on animal bones, in which he involved specialists from the Polish Academy of Arts and Sciences and Jagiellonian University. He was particularly interested in anthropological materials. In 1926, he lent human skeletal remains from 20 graves of the CWC and Early Medieval cemeteries to researcher J. Talko-Hryniewicz from the Jagiellonian University for analysis. Żurowski asked S. Krukowski from Warsaw for an opinion on selected flint artefacts. The results of anthropological, flint and archaeological research did not become the subject of separate articles, but Żurowski used these results in articles discussing his excavations.

The excavations in Książnice Wielkie were the first major fieldworks for J. Żurowski. Three full research seasons were not only a scientific and interpretative challenge, but also organizational and technical (Jakimowicz 1936). It can be mentioned here that in each season of research, J. Żurowski changed and corrected the numbering of the explored pits. Today, this makes it difficult to locate some assemblages of artefacts and to reconstruct the pit arrangement.

At the same time, when he was conducting research in Książnice Wielkie, he organized and conducted other excavations (*e.g.* Jaksice, Witkowice, Giebułtów, Modlnica), conducted an inventory of caves near Kraków, served in the Polish army and defended his doctoral thesis at Jagiellonian University. He took full advantage of the experience he gained in his important subsequent archaeological research in Modlnica near Kraków, and then in Złota near Sandomierz.

STUDIES BY B. BURCHARD, A. EKER AND J. MACHNIK

J. Żurowski did not manage to analyze materials obtained by donation and through excavations in Książnice Wielkie in 1921-1924. That task was assigned to the next generation of Kraków archaeologists. Work on the settlement of the FBC was entrusted to Barbara Burchard and Anna Eker (Fig. 5), while Jan Machnik took over research on the CWC cemetery (Burchard and Eker 1964; Machnik 1964). A third author, Anna Dzeduszycka-Machnikowa, took part in the studies concerning the materials from the FBC settlement, whose analysis of stone products were published as a separate chapter (Burchard and Eker

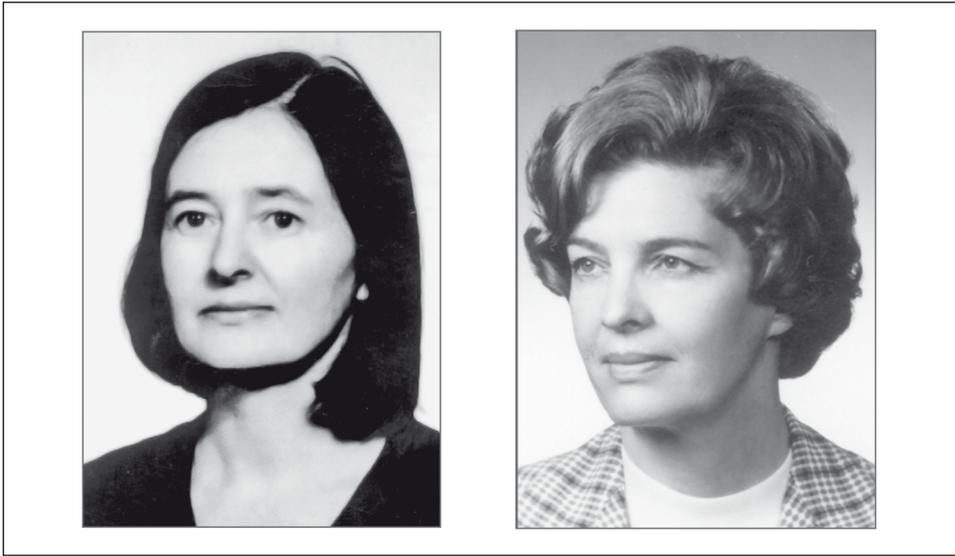


Fig. 5. Barbara Burchard (1930-2016) and Anna Eker (1920-2001). The Authors of the study of the Funnel Beaker culture materials from J. Żurowski's research in Książnice Wielkie (photo from the Archives of the Institute of Archeology and Ethnology of the Polish Academy of Sciences in Kraków)

1964, 276-282). An independent analysis of animal bone remains was carried out by L. Sych and published in volume 4 of the "Prace Komisji Archeologicznej PAN" edited by S. Nosek – the same volume in which the previously mentioned articles were printed (Sych 1964).

The study of the FBC settlement, which was conducted in the first half of the 1960s, has become partially outdated, especially in relation to taxonomic and chronological issues (Burchard and Eker 1964). At the same time, it is still a high-quality source of information on numerous archeological materials. The authors of the study presented meticulously, and in detail, the characteristics of pit inventories. In particular, the descriptions of the features, based on the original archival documentation of J. Żurowski (which was extremely difficult to read) were irreplaceable contributions. B. Burchard and A. Eker described and discussed the FBC materials from 66 settlement pits and 2 trenches from World War I, along with material from the secondary deposit. Several of these pits (features no. 4, 5, 6, 46, 47), in which the graves of the CWC found, were described in less detail by J. Machnik (Machnik 1964). Pottery, bone and stone artifacts are presented in 36 tables and grouped according to the categories and types of artefacts (including forms and types of decorations on pottery).

These tables fail to present assemblages divided into individual features, making them more difficult to use. In the case of only a small part of the features, the authors presented

drawings of horizontal and vertical cross-sections of the pits (incomplete documentation). Due to incomplete documentation, a large number of features in catalog Nos. 48-66 also do not have descriptive characteristics. However, we can now fill this gap. Descriptions and drawings of most of the above-mentioned features have been preserved in the draft of J. Żurowski's field notebook. Perhaps the authors did not have access to it. The biggest drawback to the presentation of research on the FBC settlement, as well as the CWC cemetery, however, is the lack of plans showing the locations of the features, resulting from the poor condition of archival documentation (Burchard and Eker 1964, 192; Machnik 1964, 339). The description of the CWC cemetery included all grave complexes from J. Żurowski's research, as well as stray finds and information about destroyed graves (Machnik 1964). Twelve CWC graves were described and discussed in detail, including 7 niche graves discovered in 1922 and 1924, as well as stray vessels (cups and amphora) discovered in two further damaged graves (Machnik 1964, 339).

In the publications discussed, the question of the relation of the CWC graves to the FBC settlement pits remained basically open. The authors of the FBC settlement study excluded such features from their study, considering them to be related to the CWC (Burchard and Eker 1964, 192). As mentioned earlier, J. Żurowski interpreted FBC and CWC graves buried in them as contemporaneous (settlement pits with graves). J. Machnik disagreed with this opinion, considering the CWC graves younger, constructed immediately after the disappearance of the FBC settlement, and even partly during its existence (Machnik 1964, 364). The surprising convergence of the location of the CWC graves in FBC pits was problematic here.

The introduction of sources and interpretations of the FBC and CWC finds from Książnice Wielkie into scientific circulation was of great importance for past and present attempts to explain cultural changes in Lesser Poland in the late Neolithic. Despite the difficulties in assessing some assemblages (suspected of post-excavation mixing of materials), J.K. Kozłowski distinguished the syncretic cultural group Wyciąże-Książnice – which was to be the oldest phase of Baden culture in Lesser Poland (Kozłowski 1961, 1971) – based on materials from Książnice Wielkie. In opposition to this view, B. Burchard interpreted the elements of the Baden circle as part of the stylistic features typical of the late FBC phase (Burchard and Eker 1964; Burchard 1981). M. Godłowska also accepted this view (Godłowska 1981). Further discussion on this topic led to the attachment of an ever-greater significance to the FBC “Badenization process” and, as a result, to the separation of independent FB-B assemblages, in which Książnice Wielkie held an important place (Kruk *et al.* 1996; Burchard 1997; Kruk and Milisauskas 2018). Grave finds from Książnice Wielkie have also become the basis for the definition, by J. Machnik, of the so-called Książnice Wielkie type (vessels of the Książnice Wielkie type) of CWC as the oldest (transitional) stage of development of the Kraków-Sandomierz group of this culture, with references to the FBC (Machnik 1964; 1966).

FIELD SURVEY AND TEST EXCAVATION 1970, 1980, 1998

In 1970, field surveys were carried out by J. Rydzewski from the Institute of the History of Material Culture of the Polish Academy of Sciences in the lower Szreniawa basin (Rydzewski 1972). They also encompassed the area of the site in Książnice Wielkie, which was then designated as “site K”. During the course of this project, very few materials belonging to the Lengyel culture, the period of Roman influence and the Early Middle Ages (pottery, stone products) were obtained. Again, the field surveys were conducted under the auspices of the *Polish Archaeological Record* program. In 1998, they were carried out by B. Konieczny. The designations of archaeological sites in the area of Książnice Wielkie were ordered at that time. The site in question in this paper was designated as No. 1 (AZP 100-62/88). The documentation from these studies incorporated basic data on previous fieldwork and studies. The chronology of the finds, which were associated primarily with Neolithic cultures, as well as the period of Roman influence and the Early Middle Ages, was also summarized.

During the field survey in 1998, only 4 fragments of clay vessels were discovered (including 3 from the early Middle Ages). It is worth noting that prior to excavations, a search of the available area of the site was conducted by the authors of this article in 2018, and similarly showed the presence of only individual finds. This may indicate relatively minor damage to the top layer of the ground as a result of agricultural work and natural erosion processes.

The *Polish Archaeological Record* contains information about a little-known (unpublished) field survey at the discussed site, the documentation and materials of which are kept in the Kraków branch of the Institute of Archeology and Ethnology of the Polish Academy of Sciences (thank you to K. Tunia for providing information on these surveys). On behalf of this institution, in 1980, a small test excavation, preceded by a surface survey, was carried out by P. Radwan. In the arable field to the south of the modern cemetery, two trenches measuring 30 x 2 m (designation No. I in the EW axis) and 20 x 2 m (designation No. II in the NS axis) were placed, located perpendicular to each other at a distance of about 30 m. As a result of this research, the outlines of 8 features and the backfill of a modern trench were discovered. Fills of these pits have been documented at the level of discovery, but no further exploration has been undertaken. Numerous characteristic artefacts came from the upper parts of the exposed pits, as well as from the area between them, including a fully preserved cup of the FBC with a stamp ornament under the rim and an FBC or FB-B mug with an ear protruding over the rim.

This collection also contains rims of beakers of the FBC, ornamented with a stamp, along with fragments of vases with knobs characteristic of FB-B assemblages, spindle whorls and a fragment of an axe from Jurassic flint of variant G. Most materials come from trench I, located closer to the parish cemetery (7 features); the second of the excavations,

located further to the south, only revealed the outline of 1 pit. We were able to locate the test excavations from 1980 in the field. In addition, during the 2019 excavations, the outline of the northern border of trench I was unveiled, and one of the FB-B pits, discovered by P. Radwan, was completely excavated. The materials from 1980 will be the subject of a detailed study in reference to the results of new excavations, commenced in 2018.

RETURN TO MATERIALS FROM J. ŻUROWSKI'S FORMER RESEARCH

Since 1964 – that is, since the publication of the FBC and CWC materials by B. Burchard, A. Eker and J. Machnik – numerous and important archaeological (and other) sources from Książnice Wielkie have not been the subject of detailed studies. Materials from J. Żurowski's research between 1921-1924 certainly deserve and require republication. In this part of the article, we present a brief outline of the works that constitute the first stage of this task. So far, analyses of selected pottery and stone assemblages, as well as archival documentation, were carried out to reconstruct the arrangement of settlement and grave features. In addition, the first data for the development of the absolute chronology of Neolithic settlement at the site was obtained.

Reconstruction of the arrangement of features and excavation trenches

As previously mentioned, there are no plans with the arrangement of features from the FBC settlement and CWC cemetery among the analyzed materials from Książnice Wielkie (Burchard and Eker 1964; Machnik 1964). This is due to gaps in the archival documentation and publications of J. Żurowski, who did not leave a plan with the location of the pits. However, thanks to the detailed review of the illustrated archival documentation, field notebook, notes and working sketches of J. Żurowski, it is possible to attempt to reconstruct the site plan with the location of settlement pits and graves from excavations carried out in 1922, 1923 and 1924. The sketches of J. Żurowski, made separately for each of the research seasons, provide our starting point. These sketches can be found in various places in his extensive documentation. They show the boundaries of excavation trenches (more or less accurately), traces of the trenches of World War I, some characteristic elements of the landscape (buildings, road, cemetery boundary), a meter scale and, above all, locations of the features, marked by points (dot or schematic pit shape). On some sketches, Żurowski noted distances between individual features. The above information, combined with sketches of pit outlines and data about their shapes and sizes (Żurowski's notebook), made it possible to reconstruct the location of features within individual research excavations. This reconstruction is not yet completed. Here, we present the plan from the last research season in 1924 (Fig. 6).

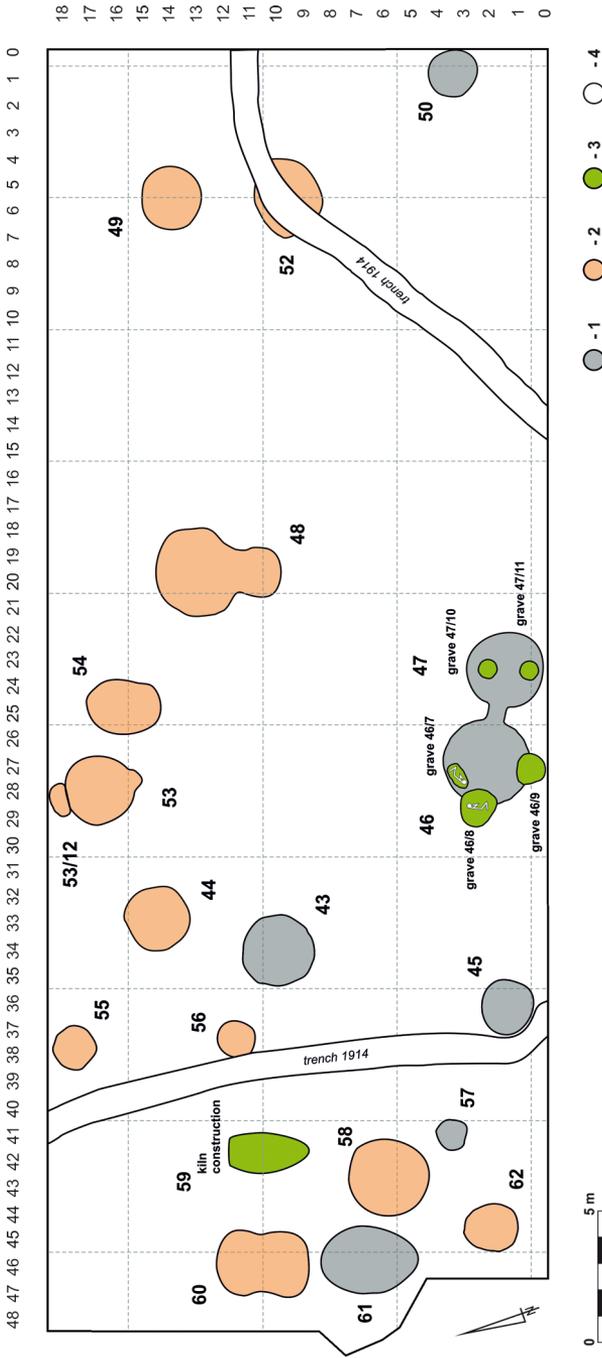


Fig. 6. Książnice Wielkie, site 1, Proszowice district. Reconstruction of the plan with the arrangement of features in the trench of J. Żurowski from 1924:
 1 – FBC, 2 – FB-B, 3 – CWC, 4 – modern period (illustration by A. Brzeska-Zastawna)

The plan presents a portion of the FBC and FB-B settlements, along with a part of the CWC cemetery. It depicts the location and appearance of 25 features (Nos. 43-50, 52-62) and two sections of the WWI trench, located in the archeological trench with an area of 702 m². These are not all the features excavated in 1924. It was not possible to locate 10 pits, which we know to have been discovered in the last research season (34-42, 64; artefacts obtained at the modern cemetery have been inventoried under No. 65 and 66), and above all 21 graves from an Early Medieval row cemetery. We do not know much about this cemetery. J. Żurowski mentions it more widely in one article with no plans or drawings (Żurowski 1926, 13-16; see also Zoll-Adamikowa 1966, 80-83). A few items (some iron knives and their fragments) from very poorly equipped graves are in the collections of the Archaeological Museum in Kraków, and human skeletons, submitted for analysis in 1926, are at the Department of Anthropology of Jagiellonian University. It is highly probable that the graves in question (arranged in three rows, according to Żurowski), in which the deceased were oriented mainly along a W-E axis, can be located in the central part of the research excavation from 1924, in the zone between structures No. 43-48, 53, 54 and the rifle trench (Fig. 6). This is indicated by information about the partial destruction of the ceiling of FBC pit No. 43 by a "row grave" with a human skeleton (Zabłocki and Żurowski 1934, 9), as well as the disturbance of one of the graves by a rifle trench (Zoll-Adamikowa 1966, 82).

The chronology of the features on the reconstructed plan (Fig. 6) was established on the basis of the analysis of materials, carried out by the authors of the article (in relation to the FBC and FB-B pits) and data from the 1964 publications (Burchard and Eker 1964; Machnik 1964). Most features were assigned to the FB-B assemblages (12), located in a fairly uniform arrangement in the northern part of the archaeological trench. The FBC materials (without Baden traits) came from 7 settlement pits. Finds related to the CWC include 6 graves with burial goods, discovered in the outline of 2 FBC pits (Nos. 46 and 47), and 1 kiln construction (feature no. 59), located at the western border of the study area (Fig. 6). The pit with the kiln construction (with a small amount of material uncharacteristic of the FBC in the ceiling of the feature) was originally assigned to the FBC (Burchard and Eker 1964). In field notes by J. Żurowski, it was presented as an oval pit with dimensions of 300 x 150 cm and a depth of about 40 cm, with a characteristic orange burn mark at the bottom part of the fill. Kiln constructions are known from several CWC grave sites in western Lesser Poland, including Modlnica 5, where the most of them (4 features) were discovered (Włodarczyk *et al.* 2011, 408, 409; Grabowska and Zastawny 2011, 422, 461), as well as from other areas (Jarosz 2017). Identifying the kiln construction in Książnice Wielkie is an interesting supplement to the arrangement of the CWC cemetery, consisting of at least two clusters of graves (Machnik 1964). It is 15 m away from the nearest grouping of niche graves No. 46 / 7-9 (Fig. 6).

The biggest difficulties during the reconstruction of the plans of research from 1922-1924 were locating the excavations themselves and attempting to indicate the location of

trenches in the modern surroundings of the parish cemetery in Książnice Wielkie. J. Żurowski indicated this place in sketches and descriptions, locating them generally in the fields just behind the southern boundary of the cemetery. The fact that research began in conjunction with plans to expand the cemetery, along with information about the construction of new tombs in the already excavated area, indicated that an expansion of the cemetery at the place of the excavations was established rather quickly. Recall that, today, the area examined by J. Żurowski is entirely within the extension of the cemetery, according to data from parish records on the increase of the area of the cemetery over the last hundred years. This belief has become established in the literature and in the documentation of the *Polish Archaeological Record*. With exactly the same conviction, the authors of this article also began excavations in 2018, which thoroughly verified the current findings.

In the 2019 excavation season, a portion of the expanse of the “old” excavation, conducted by J. Żurowski in 1924, was uncovered and examined. There was a place after excavations of the FBC pit complex (features No. 46 and 47) and the graves of the CWC (Nos. 46/7-9 and 47/10, 11) dug into them (in 2019 they were marked Nos. 14, 15, 20; see Fig. 9). The discovery of traces of J. Żurowski’s trenches is very important. On this basis, it can be concluded that only a small part of the area investigated in the 1920s is within the modern cemetery (NW part of the trench from 1924), and the area of excavations from 2018 and 2019 partly overlaps with the research area of J. Żurowski (see Figs 6 and 10). It must be added here that the parish cemetery in Książnice Wielkie has actually grown significantly over the years, not in a southerly, but a westerly direction. This is documented, on military maps from 1915, among other places. The findings also indicate a selectivity in the exploration of features by J. Żurowski, which is difficult to explain today. However, we will refer to these issues in subsequent publications about Książnice Wielkie.

The following findings summarize information on the location and size of the area investigated by J. Żurowski in 1922-1924, as well as the location and chronology of traces of prehistoric settlement and the Early Medieval cemetery. The excavated area covered approximately 20 ares (approximately 2,100 m²). It was divided into three large research excavations, established in individual research seasons: approx. 800 m² in 1922, 625 m² in 1923, and 702 m² in 1924. At least two of them were adjacent (those from 1923 and 1924), and their northern edge was the southern border of the cemetery at the time. At present, this border overlaps a considerable section of the current boundary of the old part of the cemetery (largely no longer used) with graves from the 1930s. Most of the excavated area by J. Żurowski is today within a large arable field, which is owned by the parish in Książnice Wielkie, and is intended for a new cemetery, though it is still available for investigations. The total number of features excavated in 1922-1924 is about 120, which is more than indicated in the publications. These include about 90 features forming the settlements of the FBC and FB-B, 12 (14?) graves of the CWC and 21 Early Medieval graves.

Pottery. Typological and cultural assessment

Since the publication of the study of the FBC settlement by B. Burchard and A. Eker, it has been established that sources from Książnice Wielkie are partly heterogeneous (Burchard and Eker 1964, 284; Machnik 1964; Kozłowski 1965; 1989; Zastawny 2009).

Potential mixing of pottery with different features (already during the research of J. Żurowski or in storage facilities after the excavations) is thought to be the result of interpretative problems in the scope of chronological and, above all, taxonomic assessments of the assemblages. The problem was the identification and classification of features that included vessels with Baden elements and accompanying ceramics. Such assemblages were assigned to three different taxonomic units. First of all, they were included in the early Baden Wyciąże-Książnice group, which was to be part of the oldest phase of the Baden culture of Lengyel-Polgár genesis (Kozłowski 1961; 1971). Secondly, these assemblages were associated with the late phase of the FBC with Baden elements, as in the form known from Bronocice (Burchard and Eker 1964; Burchard 1981). The third concept held that elements present in Książnice Wielkie (the so-called “rough pottery”) referred directly to the Late-Classical Zesławice-Pleszów group of the Baden culture and assemblages from the settlement in Kraków-Pleszów 17 (Burchard and Eker 1964).

The diversity of material and inconsistency of its classification, as outlined above, was one of the main reasons for the scientific return to materials from the former excavations of J. Żurowski. Analysis of the stylistic features of pottery and flint artefacts showed that materials from Książnice Wielkie are not so diverse and settlement “stratified” that they can correspond to three taxonomic units with Baden elements. The relationship between pottery from Książnice Wielkie and the Zesławice-Pleszów group of the Baden culture should be ruled out, as has already been pointed out by J. K. Kozłowski (Kozłowski 1965). One should also be skeptical about the possibility of the presence at the discussed site of features of both cultural (and territorial) groups, *i.e.* Wyciąże-Książnice and the late, “Badenized” FBC. M. Godłowska, who introduced the name “Wyciąże group” (instead of “Wyciąże-Książnice”), wrote many times about related doubts, and excluded the site in Książnice Wielkie from the notion of this phenomenon (Godłowska 1976; 1979). Godłowska also pointed out interesting (but also problematic in interpretation) similarities between these groups and stressed the need to study their taxonomic affiliation (Godłowska 1981; 1986). The forms, and above all the decorative style of FBC pottery from Książnice Wielkie, which refers to the Baden circle, should therefore be connected only with an FBC background. This was clearly confirmed by the results of open-area excavations in Bronocice, which contributed a huge number of stylistically and chronologically diverse materials of the FB-B character (Kruk and Milisauskas 2018; Kruk *et al.* 2018). In this regard, the current findings were closest to the original concept of B. Burchard and A. Eker, which connected most of the materials with Baden features from Książnice Wielkie to the youngest phase of the FBC (Burchard and Eker 1964, 283).

Commingling of materials from J. Żurowski's research should be assessed as fairly minimal, and it does not have a significant influence on the interpretation of finds. The fact is that the archeological material was usually put into boxes without marking the depth or the layer from which it was obtained. There are also cases of joint inventorying of artefacts from the pit fill with fragments of pottery from the plow zone above the feature (with an admixture of chronologically younger materials). However, there are no grounds to claim that there was mixing on a larger scale, *e.g.* materials from various pits, with different styles of ornamentation and chronology.

The ceramic elements of the Boleráz culture, the oldest horizon within the Baden complex, are poorly represented at Książnice Wielkie. There is, for example, no "wolf's teeth" ornament (known from Bronocice) or incised decorations, arranged in a zigzag or herringbone pattern, covering large spaces of the belly (for comments on such decorations, see below). The Boleráz style of groove and fluted technique can be observed on only a few fragments of the vessels. These are small parts of the belly with groove ornaments arranged in various motifs (parallel lines, herringbone motif), neighboring and/or overlapping (Burchard and Eker 1964, Pl. XXVII: 6). The vast majority of decorations in the Baden style are grooved and fluted in vertical, horizontal and diagonal linear systems (Burchard and Eker 1964, Tabl. XXVI, XXVII). They correspond to numerous series of materials from Bronocice, distinguished there in the form of two settlement phases – BR IV and BR V. Most of the similarities between materials from Książnice Wielkie and Bronocice can be seen in the assemblages of the BR IV phase.

While working on the interpretation of ornamentation and the cultural attribution of pottery from J. Żurowski's research, several important corrections, additions and discoveries were made. In feature No. 1, published in 1964, fragments were found of a vessel decorated with an engraved herringbone ornament on a cylindrical neck, as well as groups of oblique lines on the belly, alternately oriented, and lined from below with a row of oval impressions (Burchard and Eker 1964, Pl. VIII: 9, IX: 2). These fragments, assigned to the FBC, are in fact the upper part of the CWC broad-mouth beaker (Fig. 7: 10), which should be considered as material unrelated to the pit. Feature No. 1 was discovered in the first trench located by J. Żurowski in 1922, in the place where the rifle trench destroyed the FBC pit and CWC grave (amphora offered to Żurowski). It cannot be excluded that the vessel in question belonged to the burial goods of the destroyed grave. However, it is distinguished by ornamentation that has no analogy in any of the 12 graves of the CWC in Książnice Wielkie (see Machnik 1964).

Decoration in the form of an engraved herringbone pattern on cups is known from the CWC sites located south of the Vistula, and is more typical for settlement sites (*e.g.* camp-site in Stanisławice 9, Kraków-Bieżanów 33 and Tarnów 98; Jarosz 2015; Jarosz *et al.* 2010; Włodarczak 2012), as well as in barrow and flat graves (*e.g.* Szczytna; Jarosz and Machnik 2017). In turn, decoration of the belly is very rare on pottery from the CWC (thanks to P. Jarosz and P. Włodarczak for consultation in this matter). The ornamentation

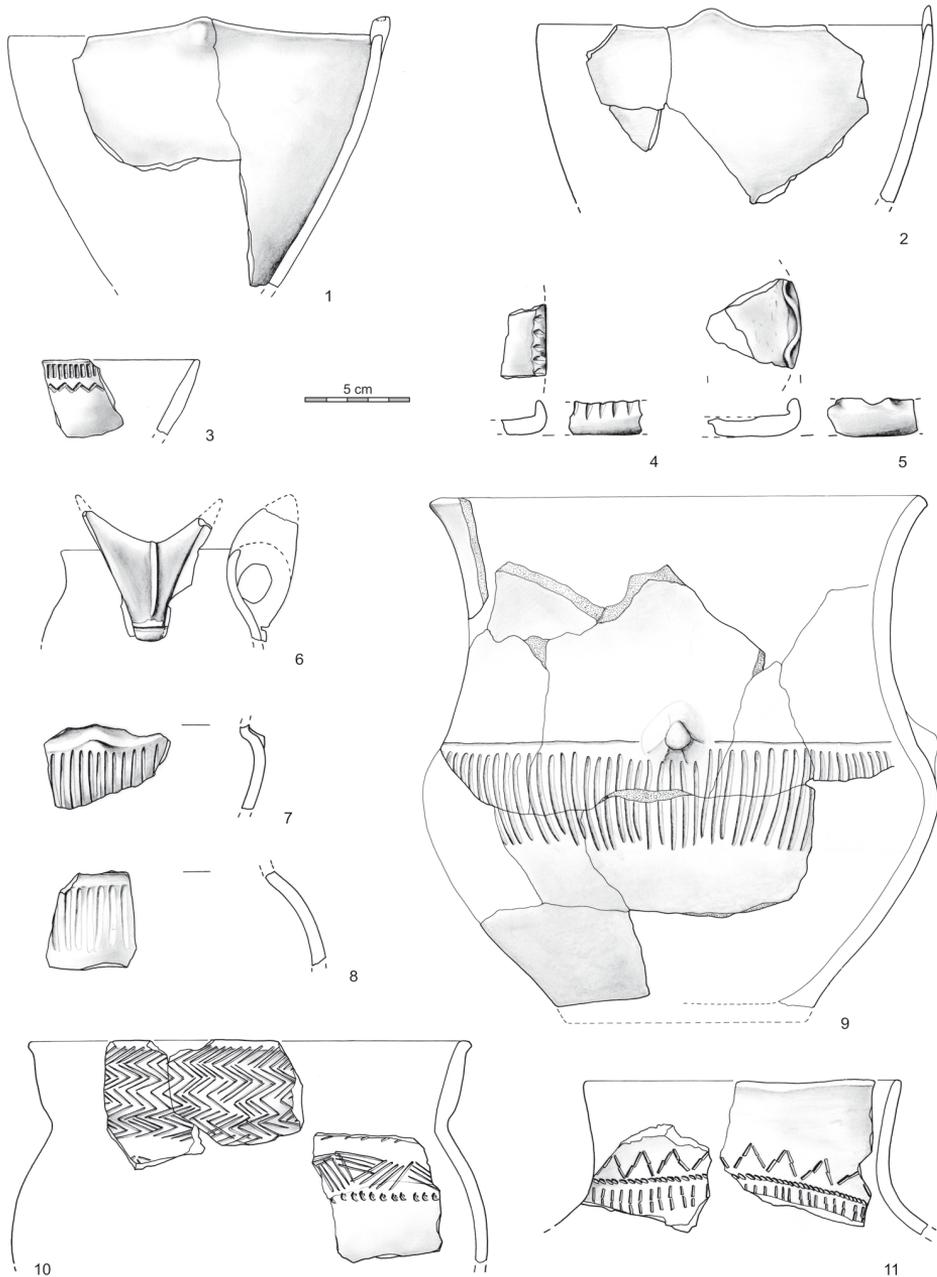


Fig. 7. Książnice Wielkie, site 1, Proszowice district. Selected Neolithic pottery from J. Żurowski's excavations: 1, 2 – Lublin-Volhynian culture, 3-6 – Funnel Beaker culture, 7-9 – Funnel Beaker-Baden assemblages, 10 – Corded Ware culture, 11 – Globular Amphora culture (illustration by A. Brzeska-Zastawna, B. Grabowska, A. Zastawny)

of the vessel in question has caused many misinterpretations and false associations with pottery of the Boleráz culture, to which the ornamentation is essentially similar (herring-bone motif and diagonal lines). The authors of the publication on the FBC settlement did not present their view on this matter (Burchard and Eker 1964, 195). On the other hand, J. K. Kozłowski strongly pointed to the connection with Boleráz pottery. He assigned this vessel to the assemblage of materials defining the oldest, Boleráz horizon of the Baden culture in Poland (Lesser Poland group), and placed Książnice Wielkie in the group of the main sites of this horizon (Kozłowski 1965, 190, Pl. I: 28). A similar position was taken by Z. Sochacki, placing this site in the early horizon of the Baden culture in Lesser Poland and in its connection with the FBC (Sochacki 1980, 48, Pl. VII.BII.24). This view and relationship with the FB-B assemblages has become established and can be found even in the latest literature (Kruk and Milisauskas 2018, fig. 26: 15).

One very interesting observation in the study of old materials of J. Żurowski was the presence of fragments of three vessels of the “Tisa” character (Burchard and Eker 1964, 200, 266, Pl. XXVI: 1; Machnik 1964, 352, Pl. V: 11). Material verification allows us to assign them to the Lublin-Volynian culture. All fragments come from vessels of a similar type, *i.e.* flower-pot vessels with upwardly widening walls and triangular thickening or protrusions on the edge. None of them comes from a feature that could be considered a pit of the Lublin-Volynian culture. The fragments of the vessel with a large triangular protrusion on the edge (Fig. 7: 2) come from a stray find. A vessel with a raised edge, ending with a small protrusion with stamp impressions (Fig. 7: 1), was discovered in a secondary deposit in pit No. 2, with FBC and FB-B materials. The third vessel was discovered in feature No. 46, associated with the FBC, into which three niche graves of the CWC were dug (Machnik 1964, 352). These finds, with an unclear context (settlement or grave), should be treated as evidence of a settlement. The existence of a settlement of the culture in question here, on which younger settlements accumulated, is supported by the discovery, during excavations in 2018, of a single pit with pottery material (information later in the article). Remains of the Lublin-Volynian culture settlement have not yet been recognized at Książnice Wielkie.

Fragments of a Globular Amphora culture vessel constitute a completely new and surprising discovery made during the review of materials from investigations of the 1920s (here we want to thank M. Szmyt for consultation regarding these materials). These fragments form the upper part of (presumably) an amphora with a low, slightly everted neck, and a partially preserved transitional section into a clearly separated belly (Fig. 7: 11). An omnidirectional horizontal ornament in the technique of stamp-and-cord imprints was made at the transition between the neck and the belly. Its upper part is occupied by a horizontal zigzag made with rectangular stamp impressions. Under it runs a single line impressed with a cord, and below, a row of vertical lines made with a weakly visible stamp. The whole linear arrangement lowers in one place, probably towards the absent handle. The described fragments are stray finds, originating from a trench from 1924. Thanks to

them, Książnice Wielkie joins a group of few, taxonomically confirmed sites on the map of settlements of Globular Amphora cultures in western Lesser Poland (Rosiejów, Tunia 1997; Bronocice, Kruk and Milisauskas 2018; Koszyce, Przybyła *et al.* 2013). Książnice Wielkie is separated from Bronocice – where individual fragments of pottery as well as stone materials were also found – by a distance of 28 km, while Koszyce, where a collective grave was discovered, lies only 4 km away.

In the assemblage of materials of the FBC from Książnice Wielkie, it is worth pointing out the categories of pottery, which in the publication from 1964 were not given much attention. In the first place, they include clay plates (Fig. 7: 4, 5). These are represented by several forms, preserved in small fragments. They were listed in the inventories of several features, and some of them were illustrated (Burchard and Eker 1964, Pl. XXVI: 4, XXVII: 9). Plates are rare forms in the FBC assemblages in Lesser Poland (see Kruk and Milisauskas 2018; Zastawny *et al.* 2011). They are considered to be an important chronological indicator associated with the oldest stages of the FBC (*e.g.* Papiernik and Płaza 2018). In the final assessment of the relative chronology of the FBC settlement in Książnice Wielkie, they will have a diagnostic significance. The second group of pottery, which is much more diverse, includes fragments of vessels for salt production, described in the publication as heavily fired “rough ceramics” of unspecified purpose (Burchard and Eker 1964, 274). This category includes the bottoms of narrow-diameter vessels with widening upward walls (Burchard and Eker 1964, Pl. XXVI: 6) and small bowls with an inwardly bent edge (Burchard and Eker 1964, Pl. XXVI: 3). It was this type of ceramics that was mistakenly assessed as a close analogy to pottery from the settlement of the Zesławice-Pleszów group of the Baden culture from Kraków-Pleszów 17, where salt-production pottery was also found (Bielenin 1959; Rook 1971). It should be clarified that such vessels in the late FBC assemblage were not known at the time of publication of the materials in 1964. The presence of salt pots in Książnice Wielkie is another feature with close analogies to the FBC and FB-B materials from the Bronocice site (Kruk and Milisauskas 2018, Ill. 75, 109, 139).

The correctness of the presentation of materials, which are the basic source for analysis, especially in relation to collections from old studies, has a great influence on the assessment of pottery from Książnice Wielkie. Verification of pottery as well as flint assemblages indicated the need for thorough additions in this respect (*cf. e.g.* Fig. 7: 9 and Burchard and Eker 1964, Pl. XXVI: 8, as well as fig. 7: 10 and Burchard and Eker 1964, Pl. XVIII: 69, IX: 2). In the course of further analysis, it will be necessary to reconstruct and illustrate the FBC and FB-B materials again.

Flint products

As in the case of ceramic materials, a new view and new analyses require a set of stone products obtained from the FBC and FB-B features (see study: Burchard and Eker 1964, 276-282). Works on selected issues in the field of the manufacture and use of stone tools

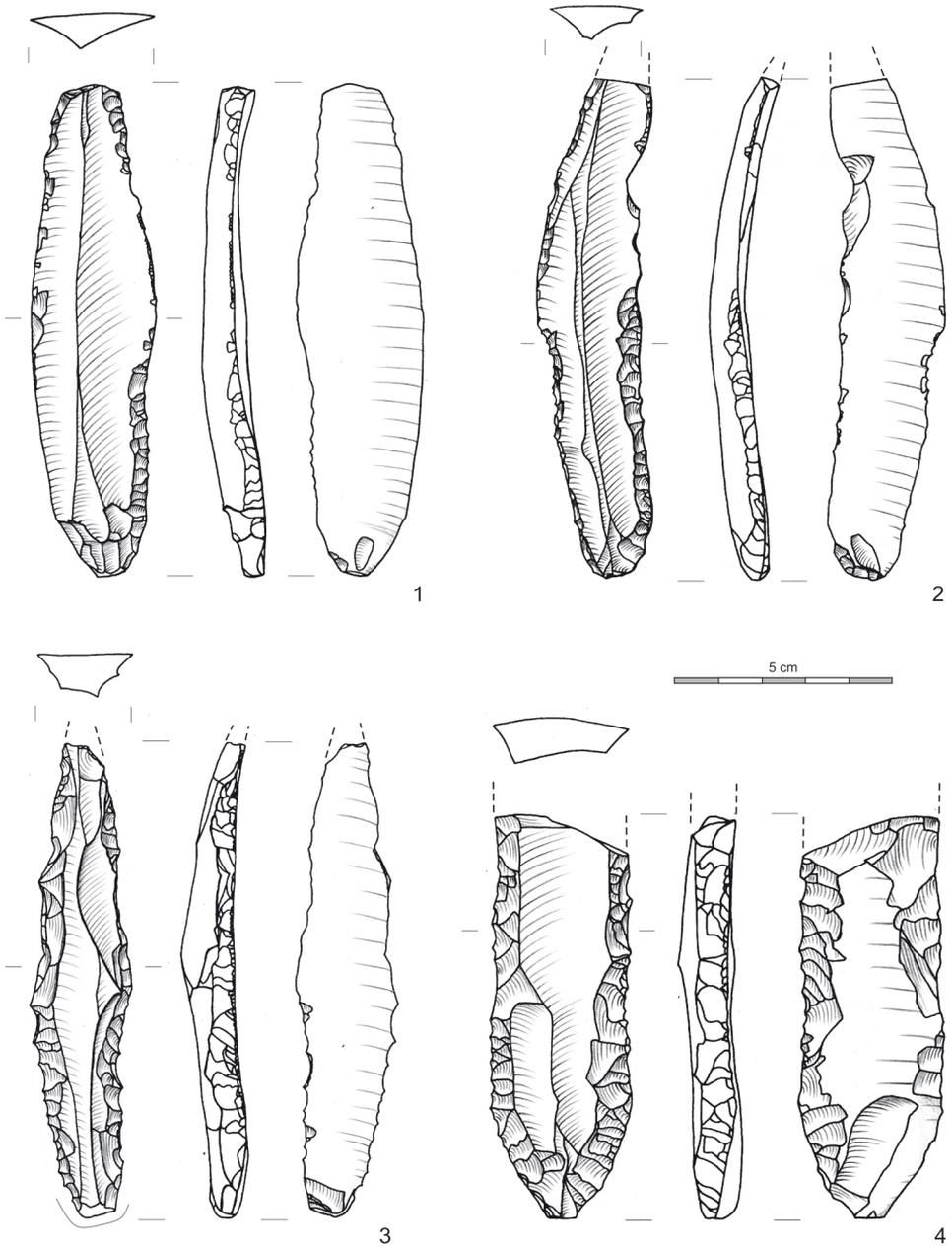


Fig. 8. Książnice Wielkie, site 1, Proszowice district. Selected retouched blade tools made from Jurassic G flint from J. Zurowski's excavations: 1, 2 – Funnel Beaker culture/Funnel Beaker-Baden assemblages, 3, 4 – Funnel Beaker-Baden assemblages (illustration by A. Brzeska-Zastawna)

have already been partially summarized in several publications, mainly in relation to the use and reutilization of flint axes (Brzeska-Zastawna 2018; Brzeska-Zastawna 2020; Brzeska-Zastawna and Zastawny *in print*). Flint products from Książnice Wielkie are extremely important and valuable materials for comparative analysis for several reasons. First of all, the FBC settlement is represented here from the earliest stages of this culture in Lesser Poland to the younger horizon of the FB-B assemblages (BR IV/V), not to mention the Lublin-Volhynian settlement. There are no older cultures (aside from individual Linear Pottery culture finds from the village of Książnice Wielkie with no known location). Therefore, it is possible to perform a comparative analysis between the inventories of the FBC and FB-B; and, hopefully, future research will uncover Lublin-Volhynian flint artefacts, because we have so little data on the flint production of this culture in western Lesser Poland. Perhaps it is research on the diversity of the inventories of these cultures that will help answer questions about the transformation occurring in the 4th millennium BC in western Lesser Poland. Preliminary studies on the variability of these products from different phases of the FBC and FB-B are already promising at this stage. Secondly, Książnice Wielkie is the site furthest from the Jurassic flint G outcrops among all known FB-B settlements. Contrary to appearances, this is not *in minus* for the study of inventories in this case. Inventories are mostly selected products, often macrolithic (Fig. 8: 1-4), and sometimes heavily processed, *e.g.* by secondary retouching (Fig. 8: 3). However, inventories give the impression of being compact and with very distinct typo-technological features. Sometimes, such variation is difficult to grasp when analyzing very large series of stone products. Flint products from Książnice Wielkie have great potential and can provide interesting observations on the relationships between communities developing in the late Neolithic of western Lesser Poland.

Absolute chronology

Up until now, materials from Książnice Wielkie had never been a source for research on the absolute chronology of the FBC settlement at this site, nor on the chronology of the settlement of this culture in western Lesser Poland, in general. This is surprising, because datable materials (animal bones) are well preserved here, and are represented in large numbers. Perhaps the reason was the previously-mentioned opinion about the heterogeneity of artefacts in the features. During the stylistic and chronological analyses of the materials, carried out by the authors of the article, several features for radiocarbon research were selected. Consistency of the stylistic features of pottery was the primary criterion here.

The presence of animal bones in features with materials with “classic” FBC elements, as well as pits with FB-B inventories gave an additional opportunity to obtain data for the reconstruction of chronological phases of settlement at the site. In the first stage of analysis, carried out at the Poznań Radiocarbon Laboratory, AMS dates were obtained for 3

features, excavated by J. Żurowski in 1923 and 1924: feature Nos. 14 (FBC), 31 and 41 (FB-B). A detailed discussion of the results of this dating will be the subject of a separate article (Brzeska-Zastawna and Zastawny in print). It can be mentioned here that in terms of the duration of settlement (the total time interval of age measurements) and the variability of cultural features (FBC and FB-B), Książnice Wielkie has clear analogies to Bronocice, site 1 (Kruk *et al.* 2018), which represents settlement within the chronological range from phase I to BR IV/V.

NEW EXCAVATION AND FIELD WORKS 2017-2019

In parallel to the commencement of work on materials and documentation from the former excavations of J. Żurowski, efforts were made to obtain funds to start a new stage of field investigations in Książnice Wielkie. The purpose of the new excavations was to obtain data for the verification of previous findings on many aspects of the issue of Neolithic settlement (and not only). This included locating research excavations from 1922-24, developing the relative and absolute settlement chronology, assessing the size and structure of the FBC and FB-B settlements and the CWC cemetery, examining mutual stratigraphic relationships between CWC graves and older features, and verifying the location of the Early Medieval cemetery discovered and examined by J. Żurowski in 1924.

In 2017, a threat to the archaeological sites was identified during a site visit. While constructing a modern tomb in the new part of the cemetery, a prehistoric grave was partially destroyed (affecting the lower part of the human skeleton in the grave pit). The location of this tomb lay at the beginning of the expansion of the parish cemetery in Książnice Wielkie towards a southern direction. The new area is about 1 hectare. It is fenced, but still used for agriculture (arable field, parish ownership). In agreement with the current parish priest in Książnice Wielkie (priest W. Baran), a plan was drawn up to conduct geophysical surveys in the danger zone. They were to reveal the location of archaeological features, and then help take action to protect them.

Non-invasive geophysical surveys using the geomagnetic method were carried out by the DOLMEN company from Kraków in autumn 2017 (by M. M. Przybyła), commissioned by the Archaeological Museum in Kraków. The surveys were financed by the Provincial Heritage Protection Office in Kraków (Brzeska-Pasek and Zastawny 2018). Not all zones at the cemetery were suitable for investigation. The area in the immediate vicinity of the headstones, as well as at the metal fence in the new part of the cemetery, showed numerous disturbances with modern objects. As a result, a total area of 1.22 ha was examined and divided into two zones: one within the outline of the fenced part of the new cemetery (Fig. 9: A), and the other outside the fence (south of the first zone). The results of the measurements clearly confirmed the supposition that archaeological features continue south of the line marking the current border of the cemetery. The graphic image of geophysical



Fig. 9. Książnice Wielkie, site 1, Proszowice district. Field research in 2017-2019 in the central part of the site (new cemetery): A – geomatic survey area in 2017 with visible outlines of archaeological features, B – map with the area of rescue excavations in 2018 and 2019 (illustration by A. Zastawny)

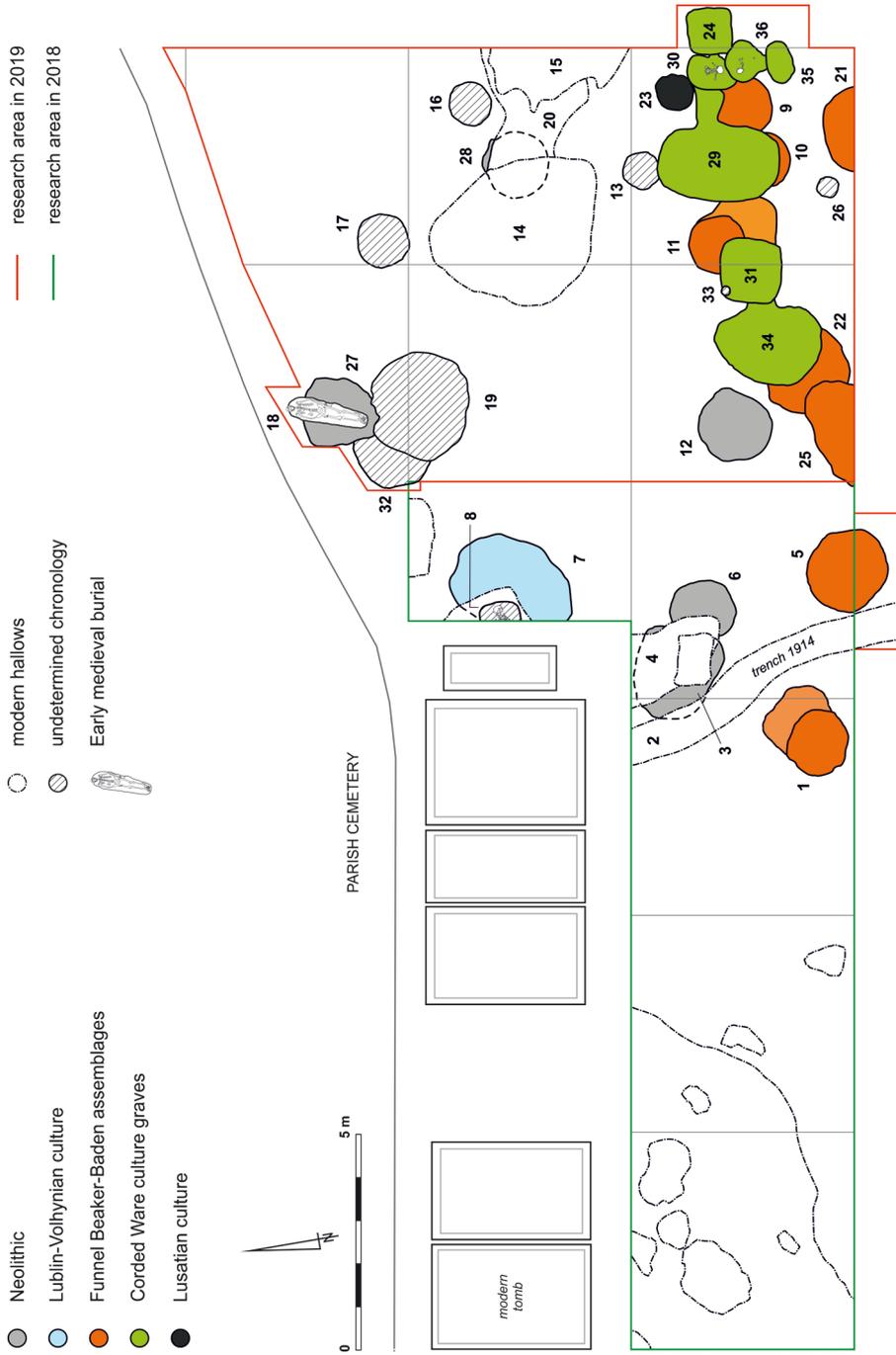


Fig. 10. Książnice Wielkie, site 1, Proszowice district. Rescue excavations at the site in 2018 and 2019 (illustration by A. Zastawny)

research revealed numerous settlement traces, with the largest clusters of pits at the site of the highest elevation of the area. Interpretation of magnetic investigations indicated a large variety of features: settlement pits, settlement pits with traces of thermal processing (hearth, daub), grave features (including complex elements, such as niche construction), as well as features with ambiguous interpretations, *e.g.* circular structures, which may be natural formations or traces of barrows.

Based on the positive results of the geomagnetic investigation, it was decided to undertake rescue excavations at the site, which were started in 2018 and continued in 2019 (Fig. 9: B; 10). These works were financed by the Provincial Heritage Protection Office in Kraków. The research was carried out on behalf of the Archaeological Museum in Kraków in cooperation with the Institute of Archeology of Jagiellonian University (Brzeska-Zastawna and Zastawny 2019). In 2018, the works were even conducted in connection with the construction of new headstone (Fig. 11: A). In both research seasons, excavations covered the area located in the immediate vicinity of the modern cemetery (Fig. 11: A, B). In total, an area of 258 m² was tested (Fig. 9: B). Thirty-two archeological features and several modern ones were discovered within this relatively small area. Among the latter (apart from excavations related to the functioning of the modern cemetery), the outline of one of the sections of the rifle trench line from 1914 – which was already found during excavations in 1921-1924, as well as during a test excavation in 1980 – was unveiled.

As a result of the excavations undertaken, a further part (previously discovered and partially investigated by J. Żurowski) of the FB-B settlement and the CWC cemetery was uncovered. The most numerous finds are related to the FB-B settlement. Eight settlement pits (features Nos. 1, 5, 9, 10, 11, 21, 22, 25) were found within an area of 15 x 5 m (Fig. 10). Pits that are oval in horizontal projections, as well as those that are trapezoidal and hemispherical in transverse profiles predominate. Two of them were accompanied by small, shallower entrance annexes (No. 1, No. 11), to which J. Żurowski has already drawn attention. Abundant ceramic material, along with numerous bone tools, spindle whorls and loom weights, well-preserved animal bones (and large fragments thereof), and construction daub were obtained from the fill of the pits. A relatively small number of flint artefacts is associated with the site, which is fairly distant from the nearest outcrop of Jurassic flint G (about 80 km). Feature No. 5 is distinguished here (Fig. 12), in which several whole or reconstructable vessels with FB-B features were discovered, including a jug with knob ornamentation, two amphorae with groove ornamentation on the belly, a cup with a strap-like handle extending above the rim, and a vase with a groove-knob ornament. The outlines of this pit were partially exposed during surveys in 1980, but exploration was not undertaken at that time. Of particular interest is a pit with traces of animal-bone processing and the production of bone tools (No. 11), in which finished awls and chisels were found, along with semi-finished products for their manufacture (*e.g.* ribs with traces of cutting and breaking). Several FB-B settlement pits have been partially destroyed by the CWC niche graves.



Fig. 11. Książnice Wielkie, site 1, Proszowice district. Excavations in 2018 and 2019. A – outlines of Neolithic features and the rifle trench from 1914, explored in 2018 (view from S), B – excavations from 2019, view from the northeast (photo A. Zastawny)



Fig. 12. Książnice Wielkie, site 1, Proszowice district. Excavations in 2019. Documentation and exploration of pit No. 5 with the FB-B materials (photo A. Brzeska-Zastawna, A. Zastawny)



Fig. 13. Książnice Wielkie, site 1, Proszowice district. Excavations in 2019. Exploration of a double, niche grave of the CWC; No. 29. At the bottom, visible elements of burial goods of one of the two symbolic burials: amphora, beaker; flint axe (photo A. Zastawny)

A very important result of the research undertaken was the discovery in 2019 of a cluster of 4 CWC niche graves, located at the site of the largest accumulation of prehistoric features (Fig. 10). The graves occupied a small space of 9 x 4 m. Without exception, all of them disturbed the older FB-B pits. The grave chamber of the largest of the graves of the CWC (No. 29) disturbed the fill of 3 adjacent pits with FB-B material (Nos. 9-11). The placement of entrance pits into graves and grave niches, themselves within the outlines of older (FBC or FB-B) settlement pits, is a characteristic feature of the CWC cemetery in Książnice Wielkie (see description of J. Żurowski's research). In 2019, 2 children's graves (niche Nos. 30 and 36 with entrance pit Nos. 24 and 35), 1 double symbolic grave (grave niche No. 29) and 1 single grave (grave niche No. 34 and entrance pit No. 31) were discovered. The skeletons are poorly preserved. In both children's graves, skulls and fragments of long bones and ribs were discovered partially out of anatomical order. In the niche of a single grave (No. 34), only very damaged human bones and individual teeth were found. At this stage of research, it is difficult to assess whether they are the remains of the deceased buried there, or whether they ended up in the fill of the grave by accident. Grave No. 29 did not contain human remains. Two analogous sets of burial goods, deposited in two opposite parts of the grave chamber, indicate that it is a symbolic grave, prepared for two people (Fig. 13). With the exception of one of the children's graves, with a niche and an entrance pit oriented along a N-S axis (Nos. 35 and 36), the remaining constructions were aligned on a W-E axis. The CWC burials included rich burial goods, consisting of clay vessels (amphoras, cups), stone tools (battle-axes, flint arrowheads, axes, blades, flakes), bone and horn tools (awls, wedge), and ornaments in the form of bone pendants, antlers, animal teeth, shell beads, boar tusk, and a so-called tourniquet ornament made from a rib with a hole in the thickened central part. In total, 45 grave goods were found among the 4 burials.

The CWC graves discovered in 2019 are part of a larger cemetery, probably composed of several burial groups. Together with the graves examined by J. Żurowski (12 certain and 2 presumed), it consisted of at least 18 burials. The newly discovered graves belonged to a larger grouping of features, forming a separate cluster. Only 2.5 m north of grave Nos. 29 and 30, buried cavities (Nos. 14, 20, 15, Fig. 10) were discovered after exploration of graves 46/7 (in 1924), 46/8, 46/9 and 47/10, 47/11, and were examined in 2019 (Fig. 6). Therefore, the whole group consisted of 9 graves, including 3 for children (Nos. 47/11, 30, 36), 5 individual burials of adults (Nos. 46/7, 46/8, 46/9, 47/10, 34) and 1 symbolic double grave (No. 29). It cannot be excluded that in the next season of excavations, this cluster will increase by further burials.

A new element in the history of Neolithic settlement in Książnice Wielkie is the discovery of the settlement pit of the Lublin-Volhynian culture (Fig. 10). The presence of traces of this culture at the site has so far been confirmed by only two fragments of vessels (identified as the pottery with "Tisa" character), discovered during J. Żurowski's research on the secondary deposit, in the fills of younger pits (Burchard and Eker 1964; Machnik 1964).

The pit in question (No. 7) was heavily damaged in the upper portion by modern trenches and a grave (No. 8) of unknown chronology (without burial goods). Its bottom portion has survived with a dark layer of soil from which the characteristic ceramic material originated (*e.g.* flower-pot vessels with triangular shaping of the lip rim and a small pot with two handles on the edge).

A small pit of the Lusatian culture (No. 23), in which lay a completely preserved vessel, was an isolated find. This is the only feature in previous research (including excavations from 1922-1924) representing the Bronze Age. Another single find is a burial from the Early Middle Ages (No. 18), with a very well preserved human skeleton, deposited in a strongly elongated, oval burial pit (Fig. 10). The deceased was equipped with only one item – an iron knife placed in the left hand. This burial must certainly be associated with the row cemetery, which J. Żurowski found in 1924.

FINAL REMARKS

Ninety-nine years ago, Józef Żurowski acquired the first archaeological materials in Książnice Wielkie, introducing this site to the archeological map of Lesser Poland. It was permanently preserved in the scientific literature thanks to the studies of B. Burchard, A. Eker and J. Machnik from 1964. Since then, views on many issues have changed, in which materials from Książnice Wielkie played a leading role (Wyciąże – Książnice Wielkie group of the Pre-Baden horizon; Książnice Wielkie type in the CWC; late phase of the FBC with Baden elements). The requirements and standards of contemporary source studies and auxiliary analyses have also changed. The definition of the relative chronology of features and their arrangement requires clarification and reconstruction as well as further research. The study of an absolute chronology of settlement will be a completely new and important issue. The return to materials from Książnice Wielkie is fully justified, and research potential of this site is still untapped. The results of the study on J. Żurowski's materials will also be able to be verified in comparison with the results of new excavations, resumed at the site in 2018. Fieldwork and laboratory studies will be continued, and their results will be published.

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