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The Funnel Beaker Culture in the Lublin Region in the Light of the Excavations and Publications of Jan Kowalczyk

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The article discusses the contribution of Jan Kowalczyk to the study of the Funnel Beaker culture. The paper presents his achievements in field research on settlements and funerary sites in Central and Eastern Poland (cemeteries and settlements on the Nałęczów Plateau, settlement in Gródek in the Hrubieszów Basin) and thoughts on the methodology of searching and exploration of the Neolithic graves. The most important publications of this author were also recalled. The results of his work are placed in the context of the present state of research.

KEY-WORDS: Neolithic, Funnel Beaker culture, funerary rites, settlements, chronology, research methods.

Archaeological research conducted in the Lublin region in the first years after World War II abounded in discoveries related to the Later Stone Age. It was then that a young student and adept in archaeology, Jan Kowalczyk, came across the research issues concerning the Funnel Beaker culture (hereinafter: FBC) and Globular Amphora culture (hereinafter: GAC), during the rescue excavations of the Neolithic graves and cemeteries of Nałęczów Plateau. Later, studies on these two specific Neolithic cultures dominated Jan Kowalczyk's scientific interests.

Active participation in field work on prehistoric cemeteries in Stok and Las Stocki in the Puławy district¹, brought the researcher the necessary experience and knowledge used during writing his doctoral thesis (Kowalczyk 1951) entitled: *Obrządek pogrzebowy w młodszej epoce kamienia na ziemiach Polski* [*The funerary rite in the Late Stone Age in Poland*] under the guidance of professor Stefan Nosek. The thesis, defended in 1951, was not published for political reasons, and is currently available only as a summary (Nosek 1951; Zakościelna and Gurba 2007: 384). In 1949–1954, docent Jan Kowalczyk

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¹ This research was conducted under the direction of Stefan Nosek, together with Leszek Gajewski, Jan Gurba and Zygmunt Ślusarski (see Gajewski 1949: 3).

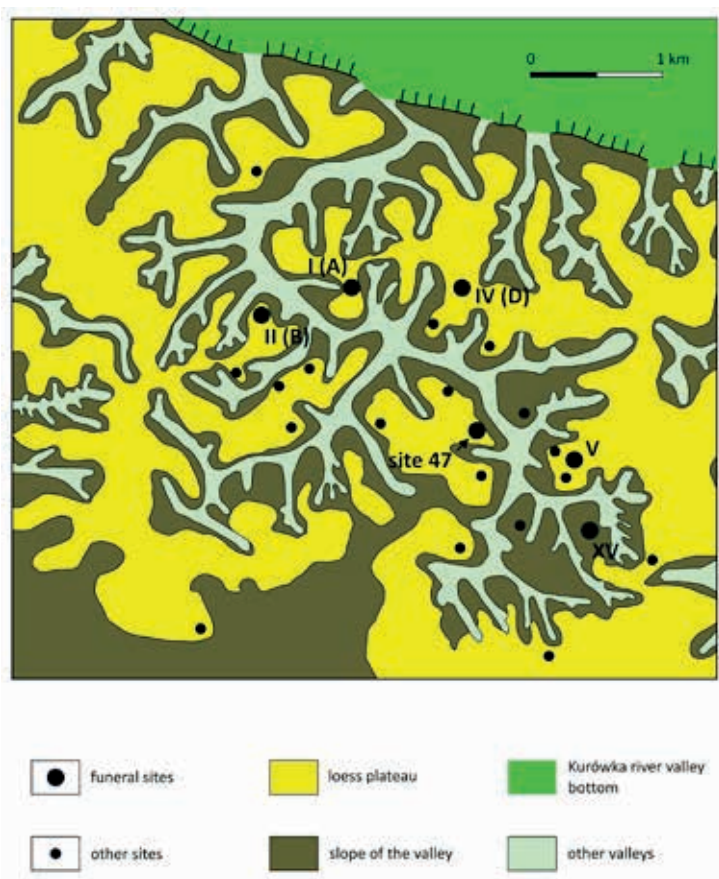


Fig. 1. Location of the FBC and GAC sites in the vicinity of Klementowice, Puławy district. According to Nogaj-Chachaj. Graphic design: S. Żorawski.

participated in, or conducted independent, excavations at Neolithic sites in Stok, Las Stocki and Klementowice II, Puławy district. In 1954–1957 he was working on the excavation of the FBC settlement in Gródek,² Hrubieszów district, and in 1969–1970 in the banded flint mine in Krzemionki Opatowskie³ (Zakościelna and Gurba 2007: 385). The researcher presented his ideas on the phenomena and processes observed during research in numerous reports and articles, and – in a popularized version – in

² In the literature, the incorrect name of the town was recorded – “Gródek Nadbużny”.

³ An archaeological reserve located between the villages of Sudół and Magonie in the Ostrowiec Świętokrzyski district.

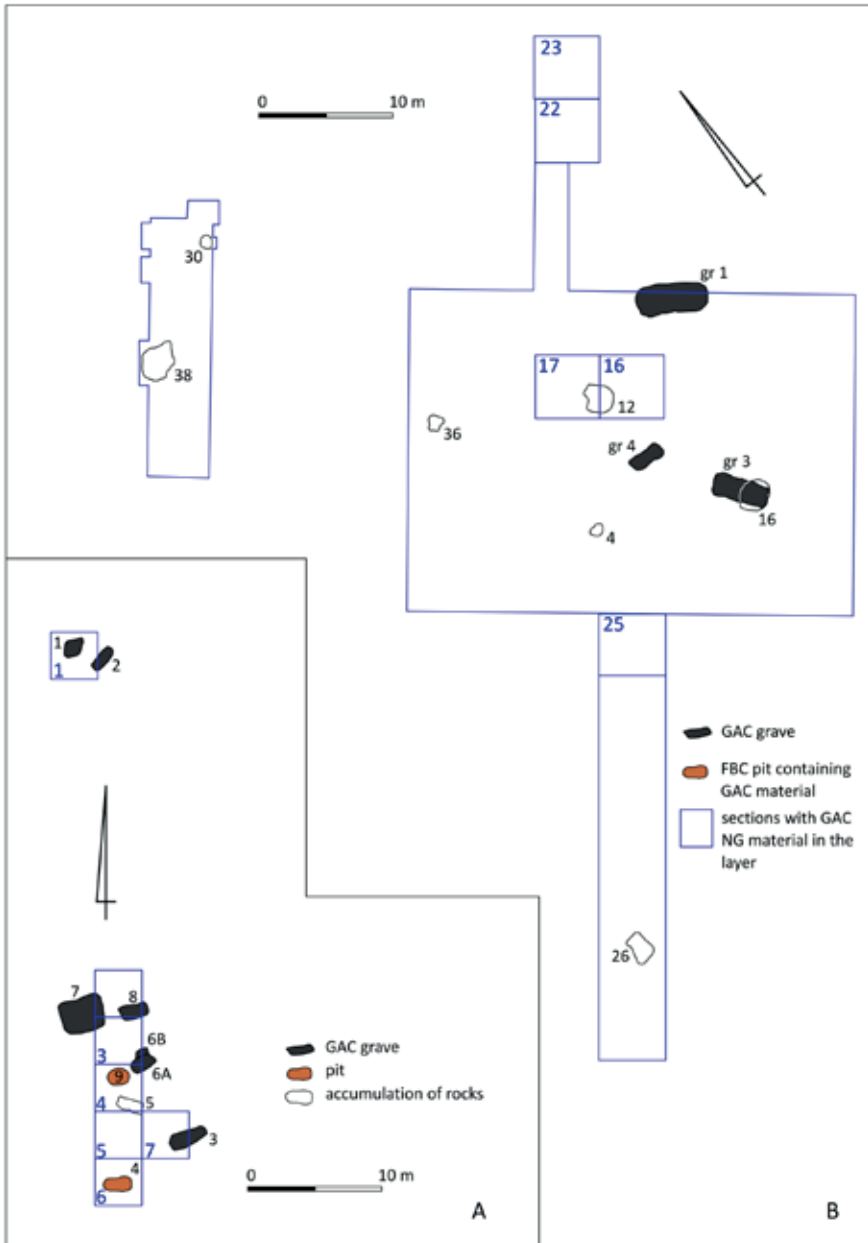


Fig. 2. Layout of GAC cemeteries at sites II (B) and IV (D) in Klementowice. According to Kowalczyk 1957; Halicki 1970. Graphic design: S. Żorawski.

a little-forgotten book entitled *Zmierzch epoki kamienia* [*The Twilight of the Stone Age*], published in 1971.

Analysing the works of Jan Kowalczyk concerning the research on the FBC, it can be said that they focused on the recording of this settlements, graves and cemeteries of this culture, as well as on the problems of chronology, genesis and applied research methods.

Jan Kowalczyk was one of a group of researchers who conducted field work both on medium-sized camps, as well as on the large FBC settlements in Poland. He carried out the first excavation research on this culture settlement at the site Klementowice II. An area of 1303 m² was excavated, 43 pits connected with economic activities and three poorly preserved graves of the FBC were examined, and the results were published in the journals *Materiały Starożytne* (Kowalczyk 1957c) and in *Wiadomości Archeologiczne* (Halicki 1970). The author intended to use the results of the research for comparative analysis of various Neolithic types of settlement features of loess areas (Kowalczyk 1957c: 176).⁴ The pits left behind by the activities of the FBC population, were irregularly spaced across the area of the site and were of different sizes. The analysis of their layout enabled Janusz Kruk to postulate the hypothesis that the layout of the features represents the sites of above-ground constructions with outdoor fire pits (Kruk 1980: 99, Fig. 14; Kruk and Milisauskas 1999: 136, Fig. 38). Site II in Klementowice is regarded in contemporary archaeological literature as an example of a small, partially excavated, settlement of the FBC south-eastern group, located on the edge of the loess plateau, in the centre of which Neolithic farmland could have been located. Presumably, it was a part of a large local cluster, with a complex structure and extensive economic functions (Kruk and Milisauskas 1999: 119, 137). The site in Klementowice was also the first one in the Nałęczów Plateau and the Lublin region where simultaneous occurrence of both funerary and settlement features of the FBC was recorded (Kowalczyk 1957: 175).

Currently, small Klementowice type settlements are assigned to the second phase of FBC development (Bronocice II), which corresponds to the years 3640–2480 BC (Kruk and Milisauskas 1999: 135). Research carried out in 1987–2002 on the settlement and cemeteries in Karmanowice, located 2–3 km south of Klementowice, revealed that both sites existed at a similar time: 3700–2900 BC (Nogaj-Chachaj 1999: 27; 2004: 66).

In 1954–1957, on behalf of the State Archaeological Museum, Jan Kowalczyk continued, the study of the FBC settlement in Gródek, initiated by Konrad Jażdżewski (Jażdżewski 1958: 279; Gumiński 1989: 10). *In excavations with a total area of 15.6 ares, he discovered a particularly rich central part of the settlement, and in the surveys captured*

⁴ Additionally, as part of the rescue works on this site, he excavated four graves of the Globular Amphora culture (Bronicki 2016: 80).

its northern and southern range. In published reports from four subsequent research seasons, he raised a number of new issues (Gumiński 1989: 10). Research on this extensive and unique site completely absorbed the researcher's time. In the context of this work, there appeared the problem of explaining the existence of both such large settlements and *small semi-permanent encampments*, as the excavator of Klementowice II called the site in one of the excavation reports (Kowalczyk 1957: 50). He stated: *Perhaps, in the case of Gródek we are dealing with a "home" settlement, near which there are small camps related to livestock farming, but perhaps – the camp in Klementowice, testifying to the low life expectancy, is a reflection of the fall of the Funnel Baker culture at the end of the Neolithic period. Both hypotheses have a chance of probability, but only further research can provide more reliable data in this area* (Kowalczyk 1957a: 50). In his subsequent works, J. Kowalczyk pointed out the strong influences of the Tripolye culture, which are noticeable both in the form of technological imitation of ceramic products and in the presence of vessels directly imported from the territory of Tripolye culture (Kowalczyk 1957a: 48; 1957b: 304; Gumiński 1989: 10). In addition, he emphasized the high level of "workmanship" of artefacts discovered in this site. He also attempted to differentiate the chronology of settlement, suggesting the possibility of separating two phases of development (Kowalczyk 1956: 46). These theses were presented as reports on current field research, published in *Wiadomości Archeologiczne* (Kowalczyk 1956; 1957a; 1957b; 1957c; 1958). They also contained descriptions of the most interesting features and finds. In each of these reports, he systematically interpreted the nature of the excavated features and artefacts. In discussions, he rejected the possibility of interpreting the settlement in Gródek as a form of kraal (Kowalczyk 1958: 318). In the final phase of research on the site, he did not confirm the late age of the settlement suggested in earlier studies – which seemed to contradict a small amount of cord ornament on the FBC ceramics (Kowalczyk 1957b: 304).

From the beginning of the work in Gródek, the researcher was looking for the reasons for the collapse of a FBC settlement centre that had been so dynamically developing. He saw the cause for the abandonment in a fire and sudden destruction of the settlement. The destruction of the Gródek settlement – as he claimed – could have occurred as a result of an inter-tribal clash or the invasion of foreign tribes (Kowalczyk 1957a: 48; 1957b: 304). He realized that the proposed hypothesis required further, detailed research, so he considered it as an attempt to historically treat the archaeological problems (Kowalczyk 1957a: 48). In a later work he wrote: *In the Lublin region, stratigraphic data indicate that the first alien population that came into the area of Funnel Beaker Culture domination, were tribes of the Globular Amphora culture, so the fall of the settlement in Gródek should be related to them* (Kowalczyk 1958: 319). Perhaps a deep conviction about that conflict arose from a very good knowledge of the GAC funeral rites and the awareness of different ways of living for the population of both cultures. It is worth noting that – contrary to the views of K. Jażdżewski – he shifted the dating

of the intensive FBC settlement development to an earlier period (Kadrow 2015: 203). The crowning argument for the early chronology of the Gródek settlement was (the erroneous, as it turned out later, cf. Breuning 1987) radiocarbon data obtained for pit 13 (Kowalczyk 1968: 368; cf. next).

The research conducted in the 1990s, revealed the presence of a Lublin-Volhynian Culture settlement in Gródek, preceding that of the FBC. A similar sequence of cultural succession was also found in the Zimne settlement, Volodimir Volin's'kij region (Bronicki *et al.* 2004) and at Bronocice, Pińczów district (Kruk and Milisauskas 1999; Bronicki *et al.* 2004: 121, Fig. 4; Kadrow 2015: 203).

All these observations and results of fieldwork became the main source for creating the concept of the genesis of the FBC in Poland. These views were presented in a synthetic work devoted to the Neolithic in Polish lands, published under the editorship of Tadeusz Wiśłański (Kowalczyk: 1970). The author presents his vision of the FBC genesis against the widely discussed, popular hypotheses explaining the cause of this cultural phenomenon: *As has been said above, this culture very probably emerged on the basis of the local Mesolithic, in the 4th Millennium B.C. Judging from the C-14 figures, it reached its peak in the 3rd Millennium B.C. (vide Gródek Nadbużny, 3100±160 BC), and probability is indicated by the carbon-datings obtained for the Globular Amphora culture in the Lublin district [...]* (Kowalczyk 1970: 177).

In the literature on the subject, Jan Kowalczyk is widely known as a researcher of the GAC graves and cemeteries (Klementowice II, Klementowice IV). His first attempt to address the issue of funerary rites of the Neolithic cultures was the doctoral dissertation mentioned above. Later, Jan Kowalczyk paid less attention to the ways of burying the dead and funerary structures of the FBC population. He returned to this issue in a monographic article: *The Funnel Beaker Culture*, published in the book: *The Neolithic in Poland*. In this publication, he drew attention to the relatively poor equipment of graves – 60% of burials did not have any visible grave goods. If there were vessels, they were relatively poorly ornamented (Kowalczyk 1970: 161). This feature of ceramic grave inventories is specific to the FBC. Drawing attention to the poverty of the ornamentation of the burial vessels, J. Kowalczyk compared them with the opulence of ornamentation of vessels found in features associated with economic activities within the settlements (Kowalczyk 1970: 161).

Cemeteries were located mainly on uplands, and their special concentration is observed in the north-western part of the Lublin Upland: *A particularly interesting point, which has become increasingly clear in recent years, is the concentration of the cemeteries in certain parts of Poland. Post-war research has revealed a great concentration of Funnel Beaker cemeteries (over 20 of them) in the north-west part of the loess area of Lublin Upland [...], and the simultaneous absence of bigger settlements only a few camps were found* (Kowalczyk 1970: 161). In considering the FBC funeral rite, the author noticed the lack of classic graves and cemeteries in the Opatów Upland, where an exceptionally

intense concentration of the so-called large settlements and camps (Kowalczyk 1970: 161) was recorded. A similar situation was observed in Gródek and Trzeszczany in the Hrubieszów district; he was amazed and could not explain the lack of any FBC burials in this region (Kowalczyk 1970: 161). It is worth mentioning that many years later, as a result of intensive exploratory work – surface surveys conducted as a part of the Polish National Record of Archaeological Sites Program and excavations – numerous FBC graveyards and tombs have been discovered in the loess area of the Sandomierz Upland (Bargiel and Florek 2006a: 365; 2006b: 385; Florek 2006: 417; Kowalewska-Marszałek *et al.* 2006: 341). At site 1 in Malice Kościelne, Sandomierz district, four (megalithic) grave structures constructed of sandstone rows have been explored (Bargiel and Florek 2006a: 365); while at the site in Pawłów, Sandomierz district, *a large aboveground building with graves inside has been recorded. The construction of the building consisted of 37 wooden columns with diameter of 40–50 cm, constructed in two rows, they probably were the pillars of the roof and walls, which could be made of wattlework in vertical post construction with horizontal beams* (Bargiel and Florek 2006b: 385).

In the above-mentioned monographic article *The Funnel Beaker Culture*, J. Kowalczyk also wrote: *The commonly known megalithic forms of Kujavia type graves (long barrows) have recently been enriched by discoveries reaching further south and south-east into the Little Poland area* (Kowalczyk 1970: 161). In this way, the author referred to the unique tombs discovered at the turn of the 1950s and 1960s, in a palisade enclosure located on the Lublin-Sławinek site (Jastrzębski and Ślusarska 1985: 191–192). In these features, referring in form and shape to the Kujavia tombs, the kerb made of granite boulders was replaced with one of wooden posts.

Excavations carried out in 1987–2000 on one of the largest FBC cemeteries, at site 35 in Karmanowice, Puławy district – in addition to single graves – brought the discovery of five large grave structures with a stone casing and covered with a limestone pavement (Nogaj-Chachaj 1991: 629–630). Repeated surface surveys in the vicinity of the site in Las Stocki led to the discovery of both a large tomb with stone casing (Las Stocki, site 71), built on the remains of a destroyed camp of this culture (Nogaj-Chachaj 2000: 42), as well as previously unknown remains of small FBC encampments, located only on loess hills at a short distance from Neolithic cemeteries known from earlier studies (Nogaj-Chachaj 2000: 45). However, the search for FBC cemeteries near Gródek has not yet produced the expected results. The only inhumation cemetery of this culture was discovered under the Corded Ware culture barrow at the site Łubcze, Tomaszów Lubelski district (Bagińska 2006: 423). The problem of the absence of FBC graves in some areas has not been resolved. We still can observe a large, unexplained, disproportion in the distribution of cemeteries in the south-eastern FBC group. Their concentrations, exceptional for Polish conditions, are observed in the north-western part of the Lublin region (Nałęczów Plateau), however, they are missing from the eastern part of the Lublin Upland, between the Wieprz and Bug rivers.

The necessity to establish the chronology of features and phenomena related to the FBC and GAC activity led to Jan Kowalczyk becoming interested in innovatory methods of absolute dating – the use of radiocarbon methods in archaeology to measure the age of samples. The organic material obtained during the excavations was transferred to specialist laboratories in Cologne and Groningen. In this way, he became a pioneer in using this method for dating Neolithic features from the Lublin region and Poland.⁵ For many years, the obtained results have been the basis for broad and detailed discussions on the chronological sequence and origin of Neolithic and Eneolithic cultures in Poland. Performing the 14-C dating for organic materials from pit 13 in Gródek was associated with an attempt to solve the problem of this settlement chronology. The first researchers related the age of the settlement to final stages of the FBC (Jażdżewski 1958: 284). The date obtained: 5050 ± 110 BP (KN-243; Kowalczyk 1968: 368) allowed the shifting of the beginning of the FBC settlement to a much earlier period. However, this date was controversial from the beginning. Konrad Jażdżewski verbally claimed that he expected a younger age of the settlement in Gródek, compared to Ćmielów; J. A. Bakker referring to this date asked whether there were any Lengyel culture materials in the Gródek settlement (Kowalczyk 1968: 372). In the 1980s, a far-reaching correction was made by the Radiocarbon Laboratory in Cologne. Repeated age measurement resulted in a date of 4820 ± 40 BP (Kn-I.243; Breuning 1987; Bronicki *et al.* 2004: 107; Włodarczak 2006: 28).

It is now assumed that *the stage of the large FBC settlement in Gródek takes place immediately after the late phase of the Lublin-Volhynian culture settlement cessation and that it can be dated at around 3650 BC at the earliest* (Bronicki *et al.* 2004: 107). The phase Gródek I would correspond to the phase of Bronocice II and partly Bronocice III, while the phase of Gródek II to the deposits from the later stage of the Bronocice III, Bronocice IV and V phases (Bronicki *et al.* 2004, Fig. 4: 108, Table 2). In addition, the dates obtained for GAC grave No. 7 from site IV (D) at Klementowice (Kowalczyk 1968: 368) caused a lot of controversy and discussion.⁶ The author considered both of the age measurements conducted in the laboratories in Cologne and in Groningen to be correct (Kowalczyk 1968: 374). In addition, he believed that *the above figures allow two preliminary conclusions: 1/ They contradict the hypothesis of a long period of coexistence of Globular Amphora culture and Funnel Baker culture in the same areas, and they suggest the thesis about the invasion of Globular Amphora culture into the areas dominated by*

⁵ The first date, obtained for a FBC features in Poland, was the one from the pit 180 in Ćmielów, Ostrowiec Świętokrzyski district (Jażdżewski 1961: 435).

⁶ The site IV (D) in Klementowice has a unique nature. In addition to the four GAC graves, graves of the FBC were discovered there. A similar situation was observed in Klementowice II. It is worth noting that these two sites are among the few in Poland, where the graves of both cultures co-exist. In addition, on the site II in Klementowice, the only case of the stratigraphic relation between the GAC burial site and the FBC settlement pit in the Lublin region was recorded (Grave III and pit 16).

Funnel Beaker culture, which caused in the collapse of this last community. This is determined by the date from Klementowice; 2/ This date confirms the thesis about the secondary nature of the Globular Amphora culture settlement in the south-east, including the Lublin region, which excludes the possibility of locating the GAC cradle in this part of Europe (Kowalczyk 1968: 734).

Looking back on Jan Kowalczyk's publications from the perspective of the years, we can see significant and numerous reflections on the methodology of excavations and searching for archaeological sites in them (Kowalczyk 1962: 301). He knew the need to use field surveys before starting systematic excavations. His tips and suggestions on the contextual recognition of the FBC sites and the GAC graves are also valuable. He suggested conducting the observations around the sites, which would allow the discovery of new features, including graves. He also paid attention to the continuous and systematic observation of clusters of limestone raised by ploughing in the fields, which would enable the recording of all of the graves in the studied area (Kowalczyk 1962c: 303). It is also worth noting that all of the source-data publications at that time contained – presented in parallel – detailed archaeozoological analyses of discovered bone materials (Krysiak 1956; 1957). J. Kowalczyk was also a great advocate of the development of research on the Neolithic flint-work of Polish lands and skillfully encouraged the young generation of archaeologists to address these issues (Czerniak 2000: 97).

For many years, docent Jan Kowalczyk conducted intensive excavations in two areas of the Lublin region: on the Nałęczów Plateau (Klementowice, Las Stocki, Stok) and in the Hrubieszów Basin (Gródek, Trzeszczany). In the case of the north-western part of the Lublin Upland, they were of a rescue nature, in the case of the Hrubieszów Basin, they were initially associated with the activities of the “Research Commission on the Cherven Cities (or Grods)”, and then with the excavations at Gródek (Zakościelna and Gurba 2007: 385). All these sites and the results of the research proved to be important for further deliberations and discussions on the development of Neolithic cultures in Poland and provided sources for new synthetic studies. In addition, J. Kowalczyk, on the basis of old and new materials, created original concepts regarding Neolithic issues. A good summary of this researcher's achievements is the statement by Lech Czerniak, in which he concludes that his work is characterized by *criticism of the existing knowledge and – above all – the perception of archaeological interpretation as a procedure involving the gathering of as many facts as possible, but mainly on the conscious use of theoretical knowledge for their ordering and interpretation* (Czerniak 2000: 96).

Some of the hypotheses and concepts presented at that time (concerning the destruction of the FBC population as a result of the GAC invasions, tribal affiliations and contacts) are now seen as somewhat archaic. However, they are situated in the contemporary research paradigm of cultural diffusionism, customary in the archaeology of the 1950s and 1960s. Careful reading of Kowalczyk's works allows us to notice

non-standard interpretations of the phenomena or interest in new research techniques and their application in archaeology (like the radiocarbon method) that may be a herald of the emerging mainstream of processualism. It is worth noting that J. Kowalczyk belonged among the pioneers of using the radiocarbon method in dating Neolithic features of the Lublin region and Poland, which gave grounds for establishing the absolute chronology of the FBC and GAC. He referred the chronology of FBC to the third millennium BC, indicating the seniority of the FBC and its parallelism with the youngest phase of the Tripolye culture and partly with the Corded Ware culture. Kowalczyk very much took on board the remarks formulated at the symposium in Prague (in 1959) that *excavations of the Funnel Beaker culture in Poland have quantitatively increased material referring to economic and social issues, but have not produced any data for the systematisation of cultural groups* (Kowalczyk 1962b: 272). Impressed by the discussion in Prague, the author wrote a postdoctoral thesis on the beginnings of the Neolithic period in Poland (Kowalczyk 1969).

Describing Kowalczyk's achievements in research on the FBC, it is difficult to relate and deal only with the subject of this one culture. The researcher himself was fascinated by the contacts between FBC and GAC, their diversity observed both in the ceramic and flint production, as well as in the settlements.

Throughout his professional life, J. Kowalczyk was aware that: *What is happening in the field of research on many Neolithic issues, can be described as a true revolution* (Kowalczyk 1962: 271). In field and office studies, he was guided by the thought that *the greatest even subjectivity of the single assessment, if it caused criticism, contributed to the formation of proper views* (Kowalczyk 1962: 271). He considered FBC as a unique civilisation phenomenon: *The Funnel Beaker culture played a very important role in the prehistory of our country. Post-war research has shown that in most districts this was decidedly the dominating culture. The large number of sites discovered, including large and prosperous settlements, the high level of civilization, and the extensive cultural contacts with other areas, all stress the high rank of this culture* (Kowalczyk 1970: 177).

The publications of Jan Kowalczyk brought new light on the FBC in Poland, and the results obtained from excavations at sites in Gródek and Klementowice became a reference point for many generations of archaeologists.

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