DISCUSSIONS AND POLEMICS

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UNIQUE VERSUS UNUSUAL – SOME COMMENTS ON THE GLOBULAR AMPHORA CULTURE CEMETERY AT THE ZŁOTA-GAJOWIZNA SITE

ABSTRACT

Sieradzka E. 2021. Unique versus unusual – some comments on the Globular Amphora culture cemetery at the Złota-Gajowizna site. *Sprawozdania Archeologiczne* 73/2, 365-374.

The article is inspired by the new paper (Witkowska *et al.* 2020) "The cemetery of the Globular Amphora culture community at the Złota-Gajowizna site in the light of radiocarbon analysis and dendrochronology". It delivers some remarks on the famous GAC necropolis, focusing mostly on the issues concerning the layout of the cemetery and interpretation of various funerary features.

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Over 100 years since its discovery in the early 1900s, the Złota-Gajowizna site remains one the most famous cemeteries of the central (Polish) group of the Globular Amphora culture (GAC). Yet, perhaps due to its originality or quite complicated history of research, archaeologist still struggle with explaining many complex issues concerning of the necropolis (*e.g.* Krzak 1977; Szczodrowski 2015).The recently published paper, co-written by Barbara Witkowska, Janusz Czebreszuk, Barbara Gmińska-Nowak, Tomasz Goslar, Marzena Szmyt, and Tomasz Ważny, delivers a much-needed new evaluation of the Złota-Gajowizna

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site, together with the results of radiocarbon dating and dendrochronological analysis (Witkowska *et al.* 2020). At the same time, as I will try to argue below, the presented interpretation of the features from famous cemetery overlooks a few important details, thus creating some problems on its own.

To start with, in official records the Złota-Gajowizna necropolis is listed as site no. 14 in Polanów, Sandomierz district (Witkowska *et al.* 2020, 261). The site was dubbed 'Złota-Gajowizna' to reflect its connection with three other large Late Neolithic cemeteries located less than 1 km to the south-west, in the north-western outskirts of the village of Złota. These are the sites: Nad Wawrem, Grodzisko I, and Grodzisko II (Krzak 1958; 1961; 1970; 1977). Złota-Gajowizna is not only the smallest funerary site belonging to this cluster, but also the only one containing almost exclusively GAC features – the other three necropolises were used mainly by communities of the Złota (ZC) and the Corded Ware (CWC) cultures, with some graves that were dated to the Middle Neolithic and Early Bronze Age. At the same time, with more than 32 graves and ritual pits, Złota-Gajowizna clearly diverges from other cemeteries of the central group of the GAC, consisting typically of less than three features in total (*e.g.* Szmyt 2002, 212, 213).

Another very recognizable characteristic of the Złota-Gajowizna necropolis is its layout. Most of the ritual features were organized in parallel rows, oriented NW-SE, with two complexes situated perpendicularly along the W-E axis (Fig. 1: b). While linear arrangements of human graves and animal deposits are not uncommon in the GAC milieu (e.g. Szczodrowski 2015; Balfanz 2017), for a very long time the Złota-Gajowizna site used to be the only known large GAC cemetery with multiple cases of such clusters. According to Radosław Szczodrowski (2015, 53), the unusual layout of the Złota-Gajowizna site may have been mirrored by the GAC necropolis at the site 78 in Sandomierz, located just about 7 km north-east from Polanów. We must keep in mind, however, that the latter site has been only partly excavated, making the reconstructions of both plan and range of the GAC cemetery mostly hypothetical (see Scibior and Scibior 1990). Another 'Gajowizna-like' GAC necropolis was discovered as recently as in 2015 at site 23 in Sadowie, Opatów district, about 30 km to the north-west of Polanów (Mackiewicz et al. 2016; Pasterkiewicz 2017; 2020). Archaeological work at the cemetery is still ongoing. As of late 2020, 29 Late Neolithic funerary features have been uncovered – 26 GAC graves and ritual pits and 3 graves of the ZC, arranged in parallel rows matching the layout of the Złota-Gajowizna site (personal communication by Dr Wojciech Pasterkiewicz; cf. Fig. 1: a).

While a proper comparison of these two necropolises can be only written after a full publication of the Sadowie cemetery, it seems a bit disappointing that the paper by Witkowska *et al.* (2020) fails to even acknowledge the preliminary results of the latest archaeological research in the central part of the Sandomierz Upland. Instead of that, the new interpretation of the Złota-Gajowizna necropolis proposed in the above-mentioned article is based mostly on the available data on the features unearthed at the cemetery, with only a brief review of possible analogies (Witkowska *et al.* 2020, 265-272). In my





Fig. 1. Plans of large GAC cemeteries from the Sandomierz Upland:

a – Sadowie, Opatów district, site 2; excavation campaigns 2015-2019 (after Pasterkiewicz 2020, 56, fig. 2, with modifications); b – Polanów, Sandomierz district, site 1 – Złota-Gajowizna (after Witkowska *et al.* 2020, 273, fig. 9, with modifications)

opinion, the main weakness of this approach is the relatively poor state of preservation of finds from the famous site. In the late 1920s, when the professional excavation at the Złota-Gajowizna cemetery took place, the site had already been damaged by multiple amateur investigations (Witkowska *et al.* 2020, 261). In addition, the results of the main 1926 field campaign remained unpublished for the next 50 years (Kowalczyk ed. 1977). During the long period of storage, including the tumultuous time of World War II, a large part of the excavated material and documentation had been lost. As a result, the descriptions of features given in the long-awaited 1977 monograph (Kowalczyk ed. 1977) often lack important details, especially concerning the human and animal remains from graves and ritual pits (see Krysiak and Lasota-Moskalewska 1977; Lasota-Moskalewska 1977; Miszkiewicz 1977). For that reason, I believe that we should not underestimate the importance of aiding the fuller interpretation of the Złota-Gajowizna with observations of similar ritual complexes.

According to Zygmunt Krzak, the author of the first full analysis of the Złota-Gajowizna necropolis, ritual pits from the cemetery should be put into two main categories – human graves and so-called 'sacrificial pits' containing animal deposits (Krzak 1977). Apart from that classification, there are also a few features whose original function remained undetermined, usually as a result of prior devastation or loss of contained material (see Krzak 1977, 78, 79). However, as correctly noted by Witkowska *et al.* (2020, 261), a closer look at Krzak's paper reveals some inconsistencies. A good example of that situation would be the case of Feature 19. Based on a comment in the 1920s field journal, Krzak classified the pit as a human grave (Krzak 1977, 37). At the same time, only cattle remains were identified among the bones collected from the feature (Krysiak and Lasota-Moskalewska 1977, 86), suggesting that the pit was most likely another animal deposit (Witkowska *et al.* 2020, 271).

Hence, it seems completely reasonable that the authors of the paper opted for their own interpretation of the ritual features from the Złota-Gajowizna cemetery (Witkowska *et al.* 2020, 265-272). The main goal of the new classification was to provide a better tool for recognizing human graves. According to the researchers, such features could generally be characterized by: a rectangular outline of the pit, lack of complete animal skeletons, presence of human remains as well as grave goods such as ceramic vessels, flint axes, and amber ornaments (Witkowska *et al.* 2020, 265). Applying these criteria, as many as 18 human graves were identified, with 12 features classified as animal deposits (Fig. 1: b). The results of the new analysis differ significantly from the reading of the Złota-Gajowizna site by Krzak, who strongly believed that 'sacrificial pits' outnumbered human graves (Krzak 1977, 78, 79). Interestingly, Krzak's concept certainly is true for the Sadowie necropolis (Pasterkiewicz 2020, 55) – all four fully excavated rows of ritual features consisted of a sole human grave and 2-4 animal deposits (Fig. 1: a).

To find a reason for such striking discrepancies, we need to closely examine the criteria for distinguishing human graves accepted by Witkowska *et al.* (see above). To start with, linking the presence of grave inventory solely to human burials, in my opinion, seems a bit

disputable. While both ceramic vessels and flint axes are considered 'standard' offerings for GAC human graves, they are not uncommon in animal graves or deposits (see Kołodziej 2011, 94-97; *cf.* Witkowska *et al.* 2020, 267). For example, 'sacrificial pits' found in the Sadowie necropolis were typically equipped with at least 1-3 vessels, sometimes accompanied by flint tools or even tusks of a wild boar (Pasterkiewicz 2017, 285; 2020). At the same time, the two remaining GAC cemeteries with animal deposits from the Sandomierz Upland – Malice, Sandomierz district, site 1 (Kamieńska 1964) and the above-mentioned site 78 in Sandomierz (Ścibior and Ścibior 1990) – yielded only 'sacrificial pits' with no pottery goods. At the Złota-Gajowizna site, the latter group of features is represented by many well-preserved animal deposits (nos 3, 4, 8, 16, 22, 25, 27, 29, 31). Yet, the occurrence of pottery sherds, or even whole ceramic vessels, was confirmed for few pits containing only or almost exclusively animal remains – nos 5, 6, 7, 11, 15 and 24. For that reason, their interpretation according to the above-discussed rules proposed by Witkowska *et al.* could be a little problematic.

To start with, the features no. 5, 7 and 11 from the Złota-Gajowizna cemetery had oval or rather irregular outlines, and, as a result, in the analysed paper they were classified as settlement pits rather than ritual deposits (Witkowska *et al.* 2020, 265). Another factor in favour of this explanation could be the location of the pits – all three of them were discovered on the outskirts of the excavated area of the Złota-Gajowizna site, at some distance from the nearest agglomerations of GAC funerary features (see Krzak 1977, 10, fig. 2). On the other hand, the published profile of the pit no. 5 reveals that it had a relatively level bottom (Krzak 1977, fig. 22), no different from well-documented ritual or funerary features found at the cemetery (*cf.* Krzak 1977, fig. 3, 24, 36, 61 and 66). Thus, we cannot completely reject the possibility of at least some of the discussed pits originally being badly damaged animal deposits. I should add that the presence of single funerary features, situated apart from regular rows of graves and 'sacrificial pits', was confirmed at the Sadowie necropolis (no. 14, 15 – Fig. 1: a).

Moving on, according to Witkowska *et al.* (2020, 262, 263, table 1), Features no. 6 and 15 from the Złota-Gajowizna site should be classified as human graves, despite the fact that there is no information whether any human remains were recovered from their fills (Krzak 1977, 21, 23, 35). Both of the pits had been looted prior to the professional excavation. In Feature no. 6 remains of a bull and at least four pigs were discovered (Krysiak and Lasota-Moskalewska 1977, 85), while Pit 15 yielded just a few fragments of cattle bones (Krzak 1977, 35). Hence, I would not abandon the original interpretation of Feature 6 as an animal deposit (Krzak 1977, 62), while the original function of Pit no. 15 should perhaps remain undetermined.

Another feature considered by Witkowska *et al.* (2020, table 1) as a possible human grave is Pit no. 24, containing the complete skeletons of at least 10 cattle individuals, as well as partial burials of three sheep or goats and two pigs (Krysiak and Lasota-Moskalewska 1977, 86, 87). Additionally, near the central part of the pit, on top of the layer of animal

bones, the remains of a child of the age of *Infans II* were uncovered (Miszkiewicz 1977, 149), alongside fragments of at least four vessels (Krzak 1977, 42; Witkowska *et al.* 2020, fig. 3). Following the criteria for identifying human graves from the Złota-Gajowizna site presented above, the authors of the paper decided that the artefacts and animal deposits could be treated as possible grave goods intended for the child (Witkowska *et al.* 2020, 267). Witkowska and her co-authors are aware of the rather controversial nature of this interpretation, as this type of human-animal grave is very atypical for the central group of the GAC (Witkowska *et al.* 2020, 267). In this province of the GAC, animals intended to be buried as an offering for a deceased human were usually placed in a separate pit dug in close proximity of a human grave, as exemplified by the above-mentioned GAC cemeteries in Sadowie, Sandomierz, or the Złota-Gajowizna itself (*see* Fig. 1: a, b). Alternatively, such deposits or burials may have been laid in a special part of a human grave – next to human remains (*e.g.* Malice, grave 33; Kamieńska 1964, 32, fig. 2) or in a second grave chamber (*e.g.* a GAC grave from Las Stocki, Puławy district, cemetery 'H'; Bronicki 2016, 144, fig. 96).

Hence, as noted by Witkowska *et al.* (2020, 267), the closest analogy for Feature 24 from the Złota-Gajowizna necropolis could be the animal grave no. 1 from the site 4 in Brześć Kujawski, Włocławek district, in northern Poland. In the eastern part of a large, rectangular pit, the excavators discovered remains of a cow and a child of the age of *Infans I*, as well as a large vessel (Gabałówna 1958, 72-75). In that case, however, the human burial is commonly regarded either as a blood sacrifice matching the ritual killing of the cow (Gabałówna 1958, 94) or even as a part of the grave inventory of the said animal (Wiślański 1969, 297).

In my opinion, more useful in interpreting Pit no. 24 from the Złota-Gajowizna site may be an analysis of Late Neolithic human-cattle burials known from eastern Germany. As a rule, children buried in such graves were accompanied by at least one adult (see the catalogue prepared by Valeska Becker: 2017, 118-126). An example of this type of feature is the GAC grave from Zweimen-Dölkau, Saalekreis district, cited by Witkowska et al. (2020, 267). In addition to the burial of two cattle individuals and a child of the age of Infans II that were mentioned in the discussed paper, the grave yielded remains of three people, including at least two adults, one cattle individual, as well as bones of two pigs, a horse, and a sheep or goat (Beier 1988, 132; Becker 2017, 120). On the other hand, single child burials were sometimes identified in features interpreted as animal deposits, such as Pit 62 from the Salzmünde culture barrow in Dörstewitz, Saalekreis district (Balfanz 2017). The feature contained a complete burial of a bull or an ox, together with skulls and some loose bones belonging to a cow and a calf (Balfanz 2017, 249-251). In addition, the remains of a child of the age of Infans I (2-3 years old) were placed on the abdomen of the bull/ox (Balfanz 2017, 251, fig. 19). Anthropological analysis of the human skeleton revealed many bone pathologies, indicating that the cause of death of the child may have been a serious illness. Subsequently, it has been suggested that the child may have been interred alongside the bovine as a way to ensure his or her success in reaching the afterlife (Balfanz 2017,

251). A very similar interpretation was given to the Late Neolithic human-cattle grave from Gimritz, Saalekreis district (Jarecki 2007). Inside the feature, researchers discovered a miniature stone cist laying on the abdomen of a cow (Jarecki 2007, fig. 3). Although no bone remains were unearthed in the interior of the cist, based on the size of the structure, it was deduced that it may have originally contained a burial of an infant (Jarecki 2007).

All things considered, I believe that Feature 24 from the Złota-Gajowizna necropolis fits well into the Late Neolithic horizon of animal deposits with child burials. In the context of other similar finds, neither the presence of the remains of the child nor the ceramic vessels can be regarded as definite arguments for classifying the pit as a human grave (*cf.* Witkowska *et al.* 2020, 267). Without doubt, the main difference between Feature 24 from the Złota-Gajowizna site and the above-discussed deposits from Brześć Kujawski, Dörstewitz and Gimritz is the outstanding number of animals interred in the analyzed pit – at least 15 (Krysiak and Lasota-Moskalewska 1977, 86, 87). While Feature 24 appears to be the biggest of all 'sacrificial pits' from the Złota-Gajowizna cemetery, we need to keep in mind that at least four complete cattle skeletons were discovered within as many as three other animal deposits from the site (nos 27, 29 and 31 – *see* Krzak 1977).

To conclude, it seems to me that the criteria for identifying human graves at the Złota-Gajowizna necropolis proposed by Witkowska *et al.* (2020) may have resulted in a slight overestimation of number of such features at the famous cemetery. Instead of the 18 human graves reported in the discussed paper (Witkowska *et al.* 2020, 269), I would count no more than 10-12 (nos 1, 2, 9, 10, 14, 18, 30, 32 as well as, possibly, 13 and 28; *see* Fig. 1: b). Based on the position of the possible human graves in the layout of the Złota-Gajowizna site, I suspect that most of the remaining pits from the cemetery may have been animal deposits (nos 3, 4, 6-8, 11, 16, 19, 22, 24, 25, 27, 29 and 31, *cf.* Witkowska *et al.* 2020, 271). At the same time, I do not think that the available information concerning many damaged or poorly preserved features makes an adequate basis for assigning them a specific interpretation (Krzak 1977, 64; *cf.* Witkowska *et al.* 2020, 265, 274). Furthermore, we need to keep in mind that, according to some researchers, among the finds from the Złota-Gajowizna site may have occurred other types of funerary or ritual features, such as hearths used for charring human remains (Wilk *et al.* 2011, 51, 52).

Despite my scepticism regarding some of the methods of classification of features from the Złota-Gajowizna necropolis developed by Witkowska *et al.* (2020), I believe that the discussed paper deserves a great deal of credit for including the first comprehensive retelling of Krzak's (1977) interpretation of the famous cemetery. The authors of the article correctly pointed out many of Krzak's shortcomings (see above) and managed to develop a consistent alternative theory (see Fig. 1: b). In addition, the work by Witkowska *et al.* (2020) introduces crucial new data about the Złota-Gajowizna site, including the first set of radiocarbon dates from graves and ritual deposits, as well as dendrochronological analysis of burned wooden beams from one of the features. It was revealed that the cemetery was in use in the first half of the 3rd millennium BC, most likely between 2 900 and 2 600 BC

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(Witkowska *et al.* 2020, 281). Without doubt, establishing a chronological framework for the famous cemetery makes a vital contribution to the ongoing discussion concerning the time-frame of the GAC in the Sandomierz Upland (*e.g.* Włodarczak 2017, 284, 285; Pasterkiewicz 2020). The absolute chronology of the Złota-Gajowizna site matches the radio-carbon dates obtained for the ZC graves from the nearby necropolises at Złota-Nad Wawrem and Złota-Grodzisko I (see above), revisiting a century-old question about the nature of the relationships between GAC and ZC communities. All things considered, I strongly believe that the discussed paper Witkowska *et al.* (2020) could open a new chapter in research of the Late Neolithic funerary rituals in southern Poland.

References

- Balfanz K. 2017. Ein Grabhügel der Salzmünder Kultur in Dörstewitz, Saalekreis. In H. Meller and M. Becker (eds), Neue Gleise auf alten Wegen II. Jüdendorf bis Gröbers. Band II (= Archäologie in Sachsen-Anhalt Sonderband 26). Halle (Saale): Landesamt für Denkmalpflege und Archäologie Sachsen-Anhalt, Landesmuseum für Vorgeschichte, 244-256.
- Becker V. 2017. Spätneolitische Rinderdeponierungen. Archäozoologie und Kontext. In V. Brieske, A. Dickers and M. M. Rind (eds), Tiere und Tierdarstellungen in der Archäologie. Beiträge zum Kolloquium in Gedenken an Torsten Capelle, 30.-31. Oktober 2015 in Herne (= Verröffentlichungen der Altertumskomission für Westfallen Landschaftsverband Westfallen-Lippe 22). Münster: Aschendorff Verlag, 101-129.
- Beier H.-J. 1988. Die Kugelamphorenkultur im Mittelelbe-Saale-Gebiet und der Altmark (= Verröffentlichungen des Landesmuseums für Vorgeschichte in Halle 41). Berlin: Der Deutscher Verlag der Wissenschaften.
- Bronicki A. 2016. Obrządek pogrzebowy społeczności kultury amfor kulistych na Wyżynie Lubelskiej. In P. Jarosz, J. Libera and P. Włodarczak (eds), *Schylek neolitu na Wyżynie Lubelskiej*. Kraków: Instytut Archeologii i Etnologii Polskiej Akademii Nauk, 45-256.
- Gabałówna L. 1958. Pochówki bydlęce kultury amfor kulistych ze stanowiska 4 w Brześciu Kujawskim w świetle podobnych znalezisk kultur środkowoeuropejskich. Prace i Materiały Muzeum Archeologiczno-Enograficznego w Łodzi 3, 63-108.
- Jarecki H. 2007. Steinkiste und Rind: eine nicht alltägliche Bestattung. Fund des Monats November 2007. https://web.archive.org/web/20190515113308/http://www.lda-lsa.de/nc/de/landesmu-seum_fuer_vorgeschichte/fund_des_monats/2007/november/. Accessed 20.03.2021.
- Kamieńska J. 1964. Sprawozdanie z badań archeologicznych na stanowisku neolitycznym w Malicach, pow. Sandomierz, w 1962 r. *Sprawozdania Archeologiczne* 16, 31-33.
- Kołodziej B. 2011. Pochówki zwierzęce w neolicie na terenie ziem Polski. *Materiały i Sprawozdania Rzeszowskiego Ośrodka Archeologicznego* 32, 55-106.
- Kowalczyk J. (ed.) 1977. *Cmentarzysko kultury amfor kulistych w Złotej sandomierskiej*. Wrocław, Warszawa, Kraków: Instytut Historii Kultury Materialnej PAN.

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- Krysiak K. and Lasota-Moskalewska A. 1977. Groby zwierzęce na "Gajowiźnie". In J. Kowalczyk (ed.), *Cmentarzysko kultury amfor kulistych w Złotej sandomierskiej*. Wrocław, Warszawa, Kraków: Instytut Historii Kultury Materialnej PAN, 83-96.
- Krzak Z. 1958. Cmentarzysko kultury złockiej na stanowisku "Grodzisko II" we wsi Złota, pow. Sandomierz. Archeologia Polski 2, 329-388.
- Krzak Z. 1961. Materiały do znajomości kultury złockiej. Wrocław, Warszawa, Kraków: Instytut Historii Kultury Materialnej PAN.
- Krzak Z. 1970. Cmentarzysko kultury złockiej "Nad Wawrem" w Złotej. Wrocław, Warszawa, Kraków: Instytut Historii Kultury Materialnej PAN.
- Krzak Z. 1977. Cmentarzysko na "Gajowiźnie" pod względem archeologicznym. In J. Kowalczyk (ed.), *Cmentarzysko kultury amfor kulistych w Złotej sandomierskiej*. Wrocław, Warszawa, Kraków: Instytut Historii Kultury Materialnej PAN, 9-82.
- Lasota-Moskalewska A. 1977. Ocena morfologiczna kości bydlęcych z "Gajowizny". In J. Kowalczyk (ed.), *Cmentarzysko kultury amfor kulistych w Złotej sandomierskiej*. Wrocław, Warszawa, Kraków: Instytut Historii Kultury Materialnej PAN, 97-132.
- Mackiewicz M., Pasterkiewicz W. and Myślecki B. 2016. Badania geomagnetyczne w obrębie poźnoneolitycznego kompleksu sepulkralno-obrzędowego w Sadowiu. In M. Furmanek, T. Herbich and M. Mackiewicz (eds), *Metody geofizyczne w archeologii polskiej 2016*. Wrocław: Instytut Archeologii Uniwersytetu Wrocławskiego, Fundacja Nauki "Archaeologia Silesiae", 73-76.
- Miszkiewicz B. 1977. Analiza antropologiczna kości z "Gajowizny". In J. Kowalczyk (ed.), Cmentarzysko kultury amfor kulistych w Złotej sandomierskiej. Wrocław-Warszawa-Kraków: Instytut Historii Kultury Materialnej PAN, 133-153.
- Pasterkiewicz W. 2017. Wyniki badań archeologicznych na cmentarzysku z późnego neolitu w Sadowiu koło Opatowa. Materiały i Sprawozdania Rzeszowskiego Ośrodka Archeologicznego 38, 281-289.
- Pasterkiewicz W. 2020. The first radiocarbon dates for the Globular Amphora culture cemetery in Sadowie in the Sandomierz Upland. *Analecta Archaeologica Ressoviensia* 15, 53-75.
- Szczodrowski R. 2012. Spatial Aspects of Globular Amphora Culture Funeral Rites with Animal Deposits in Poland. In A. Pluskowski (ed.), *The Ritual Killing and Burial of Animals*. European Perspectives. Oxford: Oxbow Books, 51-60.
- Szmyt M. 2002. Kugelamphoren-Gemeinschaften in Mittel- und Osteuropa: Siedlungsstrukturen und soziale Fragen. In J. Müller (ed.), Vom Endneolithikum zur Frühbronzezeit: Muster sozialen Wandels? (Tagung Bamberg 14. – 16. Juni 2001) (= Universitätsforschungen zur prähistorischen Archäologie 90). Bonn: Rudolf Habelt, 195-233.
- Ścibior J. and Ścibior J. M. 1990. Sandomierz 78 wielokulturowe stanowisko z przełomu neolitu i epoki brązu. Badania ratownicze w 1984 r. *Sprawozdania Archeologiczne* 42, 157-201.
- Wilk S., Haduch E., Szczepanek A., Koszowska E. and Trąbska J. 2011. Groby z nadpalonymi szkieletami z cmentarzyska kultury złockiej w Książnicach, woj. Świętokrzyskie. In A. Michalak and A. Jaszewska (eds), Ogień – żywioł ujarzmiony i nieujarzmiony, VI polsko-niemieckie spotkania archeologiczne. Materiały z konferencji w Garbiczu 5-6 września 2008 r. (= Biblioteka Archeo-

logii Środkowego Nadodrza 4). Zielona Góra: Stowarzyszenie Naukowe Archeologów Polskich Oddział Lubuski, 23-54.

- Wiślański T. 1969. Podstawy gospodarcze plemion neolitycznych w Polsce północno-zachodniej. Wrocław: Instytut Historii Kultury Materialnej PAN.
- Witkowska B., Czebreszuk J., Gmińska-Nowak B., Goslar T., Szmyt M., Ważny T. 2020. The cemetery of the Globular Amphora culture community at the Złota-Gajowizna site in the light of radiocarbon analysis and dendrochronology. Sprawozdania Archeologiczne 72/2, 259-284.
- Włodarczak P. 2017. Battle-axes and beakers. The Final Eneolithic societies. In P. Włodarczak (ed.), The Past Societies 2. Polish lands from the first evidence of human presence to the Early Middle Ages: 5500-2000 BC. Warszawa: Instytut Archeologii i Etnologii PAN, 275-336.