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HOARDED ASSEMBLAGES FROM THE BRONZE AGE AND EARLY IRON AGE BETWEEN THE VISTULA AND THE BUG: STATE OF RESEARCH

ABSTRACT

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The paper summarises the state of knowledge on hoarded assemblages in central-eastern Poland, covering various research aspects, including the state of laboratory investigation of these assemblages. The reasons for the relatively small number of finds of this type between the Vistula and Bug rivers are analysed, as well as the nature of individual hoards (reasons for deposition), the composition of their assemblage, and chronology. The provenance of metal objects composing the individual hoards, within narrower chronological ranges, is also discussed.

Keywords: Hoards, Bronze Age, Early Iron Age, central-eastern Poland
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1. INTRODUCTION

A review of previous publications devoted to hoards from the metal ages on the territory of Poland emphatically shows that, compared to other regions, in the central-eastern zone (just like in the north-eastern zone), there are significantly fewer finds of this type (see Nosek 1957; Kostrzewski 1964; Blajer 1990; 1999; 2001; 2013; Kłosińska 2010). The

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maps compiled for monographic studies published up to 2013 reveal only 16 hoards of metal objects dated from the Bronze Age to the Early Iron Age, with most of these finds already relating to the Early Iron Age, while two have no established chronology (Nosek 1957, 270, 283; Blajer 2001, 372). This disproportion in comparison to other regions of Poland, especially in the younger phases of the Bronze Age, is particularly incomprehensible, considering the number of metal artefacts revealed so far, mainly as isolated finds, including weapons, tools and ornaments of various provenance (*e.g.*, Kłosińska 2016; 2017; Kłosińska and Sadowski 2017; Taras 2019).

The beginnings of the discovery of such assemblages date to the second half of the 19th century. Deposits were then acquired at Niewiadoma, Sokołów Podlaski District (Nosek 1957, 279; 1960; Węgrzynowicz 1973, 118; Blajer 2001, 364), Skwarne, Mińsk Mazowiecki District (Kostrzewski 1964, 26, 27, 116, pl. 2: 45; Blajer 2001, 366; Kłosińska 2013b) and Wożuczyn, Tomaszów District (Żurowski 1927, 52, 55-56, 59, note 17; Nosek 1957, 279, 280; Kostrzewski 1964, 78-80, fig. 106; Blajer 2001, 369; Kłosińska 2010, 23, photo 7). Further finds, already from the first half of the 20th century, come from Bondyrz, Zamość District (unspecified hoard of bronze objects – Nosek 1957, 283, 285), Góra, Legionowo District (Nosek 1957, 280; Kostrzewski 1964; Blajer 2001, 337), Kiełczew, Ostrów Mazowiecka District (Pasternak 1938; Kostrzewski 1964, 39; Blajer 2001, 361), Hrubieszów, Hrubieszów District (Cichoszewska 1922-1924; Żurowski 1948, 163, 164, *item* 28; Kostrzewski 1964, 34); Proszew, Węgrów District (Kostrzewski 1964, 54; Blajer 2001, 365), Zagłoba-Dratów, Opole Lubelskie District (Gardawski and Wesołowski 1956; Kostrzewski 1964, 32; Blajer 1999, 160, 161), and from Zemborzyce, Lublin District (Gurba 1961; Kostrzewski 1964, 81; Blajer 2001, 370). In the second half of the 20th century, the quantity of data on hoards was enlarged by the assemblages from Wakijów, Tomaszów Lubelski District (Nosek 1957, 279), Kisielsk, Łuków District (Kostrzewski 1964, 39, 40; Blajer 2001, 361, *item* 66), Liszki, Sokołów Podlaski District (Głosik 1993, 218, *item* 41; Blajer 2001, 262), Rzeszotków, Siedlce District (Miśkiewicz 1962; Kostrzewski 1964, 63-65; Blajer 2001, 366), Radecznica, Zamość District (Kłosińska *et al.* 2005) and Warszawa-Zacisze, Warszawa Capital District (Głosik 1983, 255, 256, *item* 135; Blajer 2001, 368; Orlińska 2016).

All discoveries of hoarded assemblages, past and present, are accidental in nature. At the end of the last century and the present one, to a large extent, such finds have been revealed as a result of deliberate searches by amateur detectorists. Most contemporary discoveries come from the south-eastern part of the Lublin region. This group includes finds from the Zamość District – from Deszkowice II (Kuśnierz 1998b; Kuśnierz and Urbański 1998), Szczebrzeszyn (Kuśnierz 2006; 2007; Nosek and Stępiński 2007), 'by the Sieniocha River' ('znad Sieniochy') (Kłosińska and Sadowski 2017) and two deposits from Śniatycze (Kłosińska 2008; Kłosińska and Sadowski 2017), from the Hrubieszów District – from Gródek 1C (Panasiewicz and Taras 2007), Kułakowice II (unpublished, mentioned – Kłosińska 2016, 158, fig. 3), as well as from Podbiel, Otwock District (Narożna-Szamałek 2013; Kurzawska 2013), and Bużyska, Siedlce District (Mogielnicka-Urban 2008, 218).

At the end of the 1990s, another deposit came to the Regional Museum in Biłgoraj. It originated from Majdan Gromadzki in the Biłgoraj District. In this case, however, the find has a precise location. It had been deposited in a small ground recess near a 'pond', which no longer exists but is marked on maps from the 19th century.

In recent years, information has come to light about another hoard from Biłgoraj District, from Czernięcin Poduchowny, dated to the HD, also with a precise location. This deposit includes only ornaments, especially large rings (https://muzeumbilgoraj.pl/skarb-z-czerniecina-poduchownego/; https://archeologia.com.pl/skarb-brazowych-ozdob-sprzed-25-tys-lat-odkryty-na- lubelszczyznie). The hoard is currently being studied by a team of researchers that, in addition to archaeologists, includes representatives from the natural and exact sciences.

Elżbieta M. Kłosińska is currently working on three hoards, excavated by amateur artefact hunters in Opole Lubelskie District, in the settlements of Adelina, Budzyń, and Trzciniec, as well as the deposit from Stara Róża in Łuków District. All these assemblages contain only ornaments, including large rings.

Deposits of non-metallic objects should be added to the collection of hoarded assemblages. These include two alleged Early Bronze Age flint axe deposits from Krasiczyn-Wojciechów, Lublin District (Libera 2003, 45-47, figs 4 and 5) and Złojec, Zamość District (Libera 2003, 45, 46, figs 1-3), as well as one deposit of crescent-shaped flint sickles from Parczew, Parczew District (Żółkowski 1988; Libera 2001, 63). Moreover, it is worth mentioning a unique find of around 1000 faience beads from Horodysko, Chełm District, deposited, together with a copper ornament, *i.e.*, a pendant, and a fragment of another one, *i.e.*, a disc, in a vessel of the Strzyżów culture (Ślusarski 1970; Robinson *et al.* 2004, 84, 104-106), as well as a cache find of 'Lusatian' pottery vessels of a ceremonial nature from Huszczka Duża, Zamość District (Gajewski 1984).

2. ANALYSIS OF CLUSTER FINDS

At present, 38 hoards, *i.e.*, assemblages consisting of at least two objects and apparently deliberately deposited at one place and time, are known from central-eastern Poland (Figs 1 and 2). They include 33 metal assemblages, where metal objects are the primary component (Table 1), and five other deposits (Table 2). It should be mentioned here that with regard to five deposits from the territory in question and dated to the Early Iron Age, doubts have been voiced as to the validity of such a classification of the finds. These included Wakijów (a human sacrifice drowned in a swamp together with ornaments?; Nosek 1957, 279), Wożuczyn (ring ornaments from a barrow?; Żurowski 1927, note 117; Nosek 1957, 279, 280), Radecznica (grave?; Kłosińska *et al.* 2005, 222, 228), Zemborzyce (grave?; Gurba 1961, 105), and Warszawa-Zacisze (grave?; Głosik 1983, 255, 256). Nowadays, as in the past, it is impossible to verify these opinions.

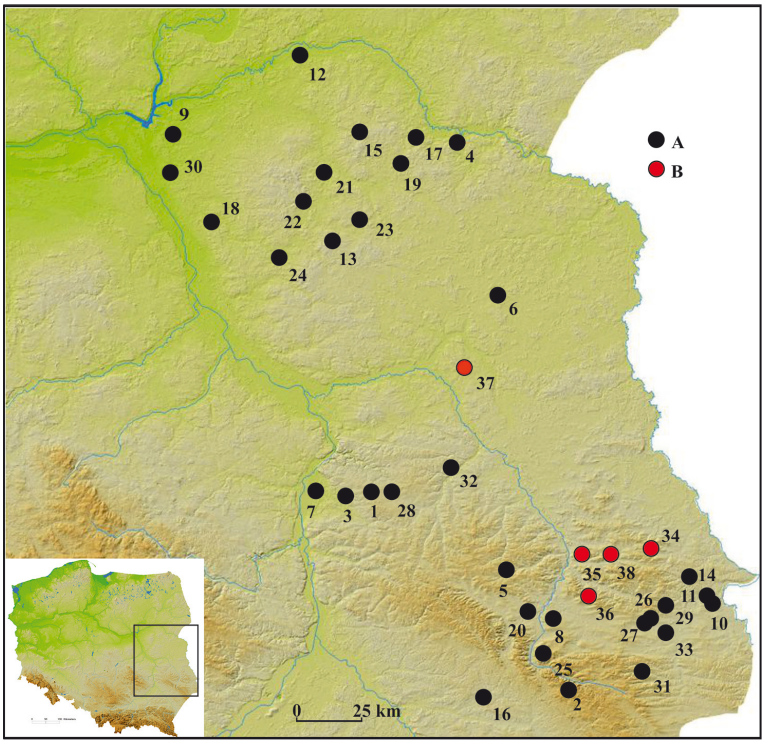

Fig. 1. Location of Bronze Age and Early Iron Age hoards in the area between the Vistula and Bug rivers: A – hoards of metal and mixed objects (predominantly metal); B – hoards of non-metal objects (base map by L. Gawrysiak 2011). The numbering of points on the map is consistent with the numbering in Tables 1 and 2

Apart from detailed classification studies, only a few of the published deposits have undergone fundamental analyses of their chemical composition. They include Zagłoba-Dratów (Gardawski and Wesołowski 1956, 66, 67), Gródek (Panasiewicz and Taras 2007, table 1), Deszkowice II (Kuśnierz 1998b, 47), Śniatycze – two hoards (Kłosińska 2008, 266-272; Kłosińska *et al.* 2017, 65-70), Radecznica (Kłosińska *et al.* 2005, 221-224), Szczebrzeszyn (Nosek and Stempiński 2007), Kułakowice II (unpublished), and Czernięcin Poduchowny (unpublished). Thus, there is an excellent capacity for improvement in this regard, all the more so as the current standards of research procedures for this type of finds far exceed the former requirements (see *e.g.*, Bayley *et al.* 2008; Garbacz-Klempka 2018). This can be well exemplified by the long series of well-published hoards, including those from Polish territory (*e.g.*, Rząska and Walenta eds 2017; Baron *et al.* 2019; Kaczmarek *et al.* 2021; Blajer *et al.* 2022; Szczurek and Kaczmarek 2022). Archaeometric analyses have been conducted, to some extent, for the deposits from Gródek and Czernięcin Poduchowny. Nevertheless, it is in this area that the hoards from central-eastern Poland need special attention.

Nature of the objects, composition of the hoards

The absolute majority of deposits, comprising exclusively metal and mixed objects, *i.e.*, 23, contain only ornaments, with the number ranging from two to over 100 items (Table 1). The largest hoards, in terms of numbers, are the mixed hoard of bronze ornaments, glass beads and Cypraeidae shells from Podbiel, and the hoard of scrap bronze ornaments from Kułakowice II. It should also be noted that most metal hoards contain 'large bronzes', in this case, a variety of ring ornaments for the neck and/or limbs, and less frequently, large disc-shaped ornaments. The latter, being the main component of two deposits from the Chodel Depression, namely from Adelina and Trzciniec, also appeared within other assemblages (Budzyń, Majdan Gromadzki). There are several deposits of ornaments, among which more than three categories of products have been identified. This applies to the entire period discussed, *i.e.*, both the Bronze Age and the Early Iron Age.

Only five hoard assemblages from the area between the Vistula and Bug rivers were of a different nature. In one case (Śniatycze, Site 89), these elements were part of a harness, and in three cases (Hrubieszów, Śniatycze, Site 94, and Bużyska), they consisted of tools. The assemblage from Szczebrzeszyn proved to be the most diverse in terms of its composition, as it included a wide range of items, such as weapons, tools, ornaments, and harness elements.

Hoards containing bronze raw material, either in the form of raw material bars or scrap metal from various products, mainly ornaments, are among the rare finds in central-eastern Poland. Such assemblages are known from Kułakowice II, as well as Kisielsk, where, apart from undamaged objects, including, *e.g.*, a neck ring, Stanomino-type leg rings, and glass beads, there are deformed multi-scroll ornaments, fragments of tutuli, and wire. Another one was found in Proszew, where, apart from ornaments, there were also pieces of wire. However, the most interesting hoard assemblage of this type originates from the site identified as 'by the Sieniocha River', which indicates a connection with a metalworking workshop. In addition to the raw material (scrap metal and bronze bars), it includes one half of a bronze casting mould for the production of socketed axes. It is the only object of this type known from this area, with distant stylistic references (Kłosińska and Sadowski 2017, 401).

Presumably, in most cases, the deposits were stashed in various containers. Most commonly, these were pottery vessels, mentioned in the case of seven hoards from the area under investigation, *i.e.*, Bużyska, Gródek, Hrubieszów, Kiełczew, Kisielsk, Liszki (?), and Niewiadoma (?). The situation could have been different in the case of assemblages deposited in water, although even this does not necessarily rule out such a procedure (see Śniatycze, Site 94; Kłosińska *et al.* 2017, 54).

More difficult to ascertain is the use of various organic containers, such as wooden boxes (assemblage from Proszew), leather or fur wrappers, or textiles. In the case of the hoard from 'by the Sieniocha River', the set of objects composing it was wrapped tightly in

Table 1. Hoards of metal and mixed objects (predominantly metal) from the Bronze Age and Early Iron Age in the area between the Vistula and Bug rivers. Legend: LB – large bronzes – Objects requiring large amounts of raw material for production (here: particularly large ring ornaments, large discs, and socketed axes); A – amber (amber beads); G – glass (glass beads); I – iron; P – pots (pottery vessels – hoard deposited inside a pottery vessel); Q – quartz (beads); S – shell (beads); BCM – bronze casting mould; BR – bronze raw material; BS – bronze scrap; CW – wooden container (hoard deposited inside a wooden cover); OOP – other organic packaging

No.	Locality	Bronze/copper objects				Other	Nature of the deposit			Chronology	Selected bibliography
		ornaments	tools	weapons	Harness		ritual	'merchant'/ metalsmith	unspecified		
1	**Adelina**, Opole Lubelskie District; **LB**	X (?)	–	–	–	–	–	–	X	IV-V EB	Unpublished – information: E. M. Kłosińska
2	**Bondyrz** – thereabouts, Zamość District	?	?	?	?	?	X?	–	–	?	Nosek 1957, 283; Blajer 2001, 372
3	**Budzyń**, Opole District; **LB**	X (?)	–	–	–	–	–	–	X	?	Unpublished – in development E. M. Kłosińska
4	**Bużyska**, Siedlce District; **LB**	X (10)	–	–	–	P (1), I (axe)	–	–	X	HD	Unpublished – mentioned: Mogielnicka-Urban 2008, 218
5	**Czernięcin Poduchowny**, Biłgoraj District; **LB**	X (14)	–	–	–	–	–	–	X	HD	https://muzeumbilgoraj.pl/skarb-z-czerniecina-poduchownego/*Archeologia Żywa* 3 (89) 2023 https://archeologia.com.pl/skarb-brazowych-ozdob-sprzed-25-tys-lat-odkryty-na-lubelszczyznie/
6	**Derewiczna**, Radzyń Podlaski District; **LB**	X (6)	–	–	–	–	–	–	X	HC-HD	Nosek 1957, 277; Kostrzewski 1964; Węgrzynowicz 1973; Blajer 2001, 370
7	Zagłoba-**Dratów**, Opole Lubelskie District; **LB**	X (23)	–	–	–	–	X?	–	–	BD	Gardawski and Wesołowski 1956; Blajer 1999, 160-161; 2001, 324; Kłosińska 2010, 23-24, photo 1-2, fig. 2
8	**Deszkowice II**, Zamość District; **LB**	X (14)	–	–	–	–	–	–	X	HD	Kuśnierz 1998; Kuśnierz and Urbański 1998; Blajer 2001, 359; Kłosińska 2010, 24, 33, photo 6, fig. 10
9	**Góra**, Legionowo District	X (2)	–	–	–	–	X	–	–	BB2-HA2	Nosek 1957, 280; Kostrzewski 1964; Blajer 2001, 337

10	**Gródek**, Hrubieszów District	X (6)	–	–	–	P (1), S (1), A (1)	–	–	X	BC/BD-BD	Panasiewicz and Taras 2007; Taras 2007, 101-102, photo 7; Kłosińska 2010, 25, photo 3, fig. 4
11	**Hrubieszów** – thereabouts, Hrubieszów District; **LB**	?	X (2+?)	?	?	P (1)	–	–	X	HB1	Cichoszewska 1922-1924; Żurowski 1949, 163-164, *item* 28; Nosek 1957, 276, fig. 36; Blajer 2001, 338; Blajer 2013, 134; Gedl 1995; Kłosińska 2010, 23
12	**Kiełczew**, Ostrów Mazowiecka District; **LB**	X (6)	–	–	–	P (1)	–	X?	X	HD	Pasternak 1938; Kostrzewski 1964, 39; Blajer 2001, 361
13	**Kisielsk**, Łuków District; **LB**	X (>20)	–	–	–	P (1), BS G (39)	–	X?	–	HD	Kostrzewski 1964, 39-40; Blajer 2001, 361, *item* 66
14	**Kułakowice II**, Hrubieszów District	X (>126)	–	–	–	BS	–	X	X	HA1	Unpublished – mentioned: Kłosińska 2016, 158, fig. 3
15	**Liszki**, Sokołów Podlaski District; **LB**	X– 2 (+?)	–	–	–	P?	–	–	X	HD	Głosik 1993, 218; Blajer 2001, 362
16	**Majdan Gromadzki**, Biłgoraj District; **LB**	X (4)	–	–	–	–	X?	–	–	HB1	Unpublished – information: K. Grochecki
17	**Niewiadoma**, Sokołów Podlaski District**; LB**	X (10)	–	–	–	P?	–	–	X	HD	Nosek 1957, 279; 1960; Węgrzynowicz 1973, 118; Blajer 2001, 364
18	**Podbiel**, Otwock District; **LB**	X (>600)	–	–	–	G (> 200), I (1), A (1), Q (>147), S (168), BS	–	X	–	HC-HD	Narożna-Szamałek 2013; Kurzawska 2013
19	**Proszew**, Węgrów District; **LB**	X (2 +?)	–	–	–	CW	–	–	X	HD	Kostrzewski 1964, 54; Blajer 2001, 365
20	**Radecznica**, Zamość District; **LB**	X (2)	–	–	–	–	–	–	X	HD	Kłosińska *et al.* 2005
21	**Rzeszotków**, Siedlce District, **LB**	X (4+?)	–	–	–	G (16+?)	X?	–	–	HD	Miśkiewicz 1962; Kostrzewski 1964, 63-65; Blajer 2001, 366
22	**Skwarne**, Mińsk Mazowiecki District; **LB**	X (4 +?)	–	–	–	–	–	–	X	HD	Kostrzewski 1964, 26, 27, 116, plate 2: 45; Blajer 2001, 366; Kłosińska 2013b

Table 1

No.	Locality	Bronze/copper objects				Other	Nature of the deposit			Chronology	Selected bibliography
		ornaments	tools	weapons	Harness		ritual	'merchant'/ metalsmith	unspecified		
24	**Sulbiny** (?), Garwolin District	X (?)	–	–	–	–	–	–	X	?	Nosek 1957, 270; Blajer 2001, 372
25	**Szczebrzeszyn**, Zamość District; **LB**	X (5)	X (1)	X (4)	X (4)	OOP?	–	X?	–	HB3-HC	Kuśnierz 2006; 2007; Nosek and Stępiński 2007; Kłosińska 2010, 24-25, 28, 30, photo 4, fig. 6-8
26	**Śniatycze, stan. 89**, Zamość District	–	–	–	X (12)	OOP?	–	X	–	HA1-HA2 (earlier HB3)	Kłosińska 2008; 2010, 25, photo 5; Kłosińska and Sadowski 2017, 396-397
27	**Śniatycze, stan. 94**, Zamość District	–	X (3)	–	–	OOP?	X?	–	–	HA2-HB1	Kłosińska and Sadowski 2017, 397-398; Kłosińska *et al*. 2017
28	**Trzciniec**, Opole Lubelskie District; **LB**	X (?)	–	–	–	–	–	–	–	HA2-HB1	Unpublished – information: E. M. Kłosińska
29	**Wakijów**, Tomaszów Lubelski District; **LB**	X (5)	–	–	–	–	X?	–	–	HD	Poklewski 1954; Nosek 1957, 279, fig. 41-44; Blajer 2001, 368; Kłosińska 2010, 34, photo 8, fig. 11
30	**Warszawa-Zacisze**, Warsaw Capital District; **LB**	X (2)	–	–	–	–	X?	–	–	HD	Głosik 1983, 255-256, *item* 135; Blajer 2001, 368; Orlińska 2016
31	**Wożuczyn**, Tomaszów Lubelski District; **LB** .	X (5)	–	–	–	–	X?	–	–	HD	Żurowski 1927, 52, 55, 59; Nosek 1957, 279-280; Kostrzewski 1964 78-80, fig. 106; Blajer 2001, 369; Kłosińska 2010, 23, photo 7
32	**Zemborzyce**, Lublin District; **LB**	X (2)	–	–	–	–	–	–	X	HD	Gurba 1961; Kostrzewski 1964, 81; Blajer 2001, 370
33	by the Sieniocha River (**Znad Sieniochy**), Zamość District; **LB**	X (2)	X	–	–	OOP, BR (2), BCM (1)	–	X	–	HB2-HB3	Kłosińska 2016, 155, fig. 4; Kłosińska and Sadowski 2017

a piece of fur and additionally tied with a string; fragments of organic material were preserved in the patina (Kłosińska *et al.* 2017, 400). The compact arrangement of individual objects sometimes suggests the organic wrapping of the deposit. This is evident in the case of both hoards from Śniatycze, specifically the elements of harness from Site 89 (Kłosińska 2008, 266; 2010, 32) and the hoard of sickles found at Site 94 (Kłosińska *et al.* 2017, 54; Kłosińska and Sadowski 2017, 397). The brown-black patina on the sickles further suggests that they were deposited in a wet environment. Finds of organic, *i.e.*, wooden and leather, cases are scarce, albeit recorded under specific environmental conditions (*e.g.*, Szczurek and Kaczmarek 2022, 137).

It cannot be ruled out that an unspecified wrapping originally surrounded the objects from Szczebrzeszyn, which, 'according to the explorers' accounts (...), lay at a depth of about 15-20 cm forming a compact pile' (Kuśnierz 2006, 215).

The function of the deposits

It is most challenging for researchers to determine, as reliably as possible, the function of the hoards and to explain the reasons for their deposition under specific conditions. This issue has an impressive literature, and the opinions stated vary and may depend on many factors, *e.g.*, the specifics of individual regions, different methodological approaches, and the individual predispositions of the researchers themselves (*e.g.*, Dąbrowski 1979, 300; Rowlands 1984; Bradley 1990; Ostoja-Zagórski 1992; Bukowski 1998, 255-261; Kristiansen 1998, 73-85; Harding 2000, 352-368; Blajer 2001, 25-28; 2010).

In addition to political reasons (social unrest) and economic reasons (hoarding of goods, hoards of so-called 'pre-monetary currency'), the presence of hoards was also explained by the activities of specific 'professional' groups – craftsmen or merchants (hoards on communication routes, deposits of raw material). For a long time, such finds have been viewed primarily in an ideological context, within the realm of spiritual culture, specifically as offerings to deities or the deceased. In these cases, the particular conditions of artefact deposition, especially in aquatic environments, as well as in elevated spots and other locations, are taken into account as arguments. The composition of the hoards and the arrangement of individual objects may also support this ritual interpretation.

The phenomenon of hoard deposition has also been viewed in a sociological context, as prestige competition, where individuals dispose of valuable objects to demonstrate their high social position. More recently, it has been examined in a settlement and cultural context (Maciejewski 2016). In the latter, the places where metal objects were deposited had been chosen according to the 'cultural norms' recognised by a given community and 'were elements of the settlement network' (Maciejewski 2016, 78). Such a perception of hoards presupposes the selection of a deposition site by recognising the relationship between the concepts of 'metal' and the 'boundary' of the known world.

Only concerning some of the deposits from central-eastern Poland, it is possible, based on their composition and location, to attempt to determine their function. A few of them are located along communication routes, so it can be assumed that they were hidden with the intention of recovering them later. This may be the case with the deposit from Szczebrzeszyn, located in a dry place on the edge of the loess plateau above the Wieprz valley (Kuśnierz 2006, 215), the one from Kiełczew, found on the bank of the Bug river (Pasternak 1938, 287), as well as the one from Podbiel, hidden on the Vistula river route (Narożna-Szamałek 2013, 210). The hoards containing raw materials (bars and scrap), *i.e.*, material intended to be melted down, could also represent caches that had been deposited temporarily. Such a type of deposit is exemplified by the large cache from Kułakowice II, Kisielsk, and possibly also the set of finds from 'by the Sieniocha River' which was hidden near a small cluster of Lusatian culture sites (Kłosińska and Sadowski 2017, 400). It should also be noted that in this area, sections of routes leading from the Dniestr region in a north-western direction intersected with routes running from the west and south-west to the east (see Kośko and Klochko 2009; Czopek 2011; Taras 2016 – for an extensive literature review).

The hoard of faience beads from Horodysko is also interpreted as a 'merchant' deposit (Robinson *et al.* 2004, 104-106).

The set of some elements of a horse harness from Site 89 at Śniatycze may have been hidden only ad hoc, although in this case a ritual sacrifice cannot be ruled out either, as the deposit was located on a small hill near a river 'and it should not be ruled out that this place was originally adjacent to a body of water of some sort, or was surrounded by wetlands' (Kłosińska and Sadowski 2017, 397). In a similar terrain configuration, namely, on a sandy hill in the middle of what was once a marshy depression, the hoard from Warsaw-Zacisze was hidden (Głosik 1983, 255, 256), as were the bronze ornaments from Wożuczyn ('in a barrow'). This may indicate both their sacrificial nature and the intention to recover the valuable objects, which were placed in a location that was easy to remember.

The unusual composition of the deposit from Zagłoba-Dratów, *i.e.*, a large quantity of raw material, large ring ornaments, and especially the presence of a tall diadem with solar symbols, as well as the location of this assemblage, may point to its ritual connotation. However, other interpretations of this find have also been proposed (Kłosińska 2010, 27).

The finds from wet environments, in our case the set of ornaments from Wakijów (deposited in the peat in the Huczwa river valley), as well as the second hoard from Śniatycze, Site 94 (consisting of sickles arranged peculiarly, wrapped with unspecified organic material and deposited within the Sieniocha river valley), most likely are of a sacrificial nature. The circumstances of the discovery of the hoard from Bondyrz, viz., during the drainage of meadows in the Wieprz valley (Nosek 1957, 283), may indicate that it was a sacrificial deposit. The ornaments from Rzeszotków (Blajer 2001, 366) and Góra (Nosek 1957, 280) were also deposited in a wet environment, namely peat meadows. Most likely, the find from Majdan Gromadzki, where metal objects were deposited in a slight depression of land that used to be a natural water reservoir, still marked on 19th-century maps, should

also be included among the deposits originating from a wet environment (Heldensfeld 1801-1804, sheet 179).

An analogous deposit, although not containing metal, is the set of two small pottery vessels from Huszczka Duża, found in a swampy depression, a former small lake, connected with the Wolica River (Gajewski 1981, 241).

Provenance of the bronze objects and chronology of the hoards (Fig. 2)

Analysis of the bronze objects constituting the hoards from the area between the Vistula and Bug rivers shows a diversity of provenance. At the same time, the variety of bronze-working traditions partly coincides with the chronology of the deposits.

In the discussed area of central-eastern Poland, there is a complete absence of hoards of bronze objects dating to the Early Bronze Age. However, a highly original deposit of faience beads, enriched with small copper objects, was discovered in Horodysko, Chełm District. It had been deposited in a vessel of the Strzyżów culture. This deposit is unlike any other, and grouped finds of metal or flint objects are scarce within this cultural circle (Sveshnikov 1974, 128; 1990, 70).

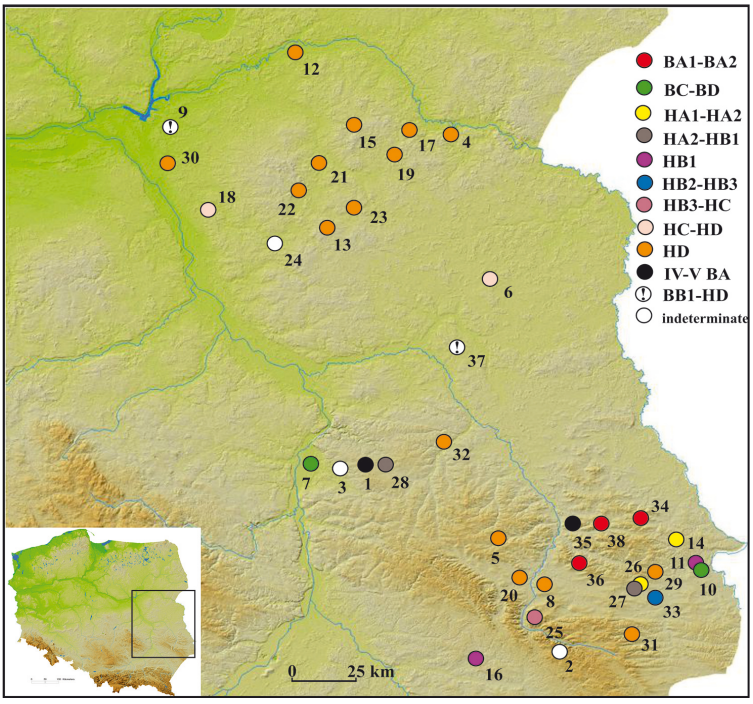

Fig. 2. Chronology of Bronze Age and Early Iron Age hoards in the area between the Vistula and Bug rivers (base map by L. Gawrysiak 2011). The numbering of points on the map is consistent with the numbering in Tables 1 and 2

Table 2. Hoards of non-metal objects from the Bronze Age and Early Iron Age in the area between the Vistula and Bug rivers

No.	Locality	Faience	Flint			stone	Copper ornaments	pottery	nature		Chronology	Selected bibliography
			axes	sickles	Projectile points				ritual	unspecified		
34	**Horodysko**, Chełm District	F (> 1000)	–	–	–	–	X (2)	X (1)	–	X	BA2	Ślusarski 1970; Robinson *et al*. 2004, 84, 104-106
35	**Huszczka Duża**, Zamość District	–	–	–	–	–	–	X (2+?)	X	–	IV-V EB	Gajewski 1984 (miniature pottery vessels)
36	**Krasiczyn-Wojciechów**, Lublin District	–	X (3 +?0	–	?	?	–	–	–	X	B A 1 - BA2	Libera 2003, 45-46, 47, fig. 4-5
37	**Parczew**, Parczew District	–	–	X (8)	–	–	–	–	–	**X**	BB1-HD	Żółkowski 1988; Libera 2001, 63
38	**Złojec**, Zamość District	–	X (3)	–	–	–	–	–	–	X	B A 1 - BA2	Libera 2003, 45-46, fig. 1-3

Two deposits of flint axes (Table 2) from Krasiczyn-Wojciechów, Lublin District, and Złojec, Zamość District, probably also date to the Early Bronze Age. The third deposit of flint objects from the discussed area, viz. the deposit of flint sickles from Parczew, does not have such a clear affiliation, as crescent-shaped sickles are typical of the Trzciniec and Lusatian cultures, and in the Polish lands such finds occur over a long period of time, from the Early Bronze Age to the Early Iron Age (Libera 2001, 119, 120 and fig. 39).

The two oldest hoards of bronze objects in the area between the Vistula and the Bug rivers are correlated with the final phase of the Trzciniec culture, and are dated to the Bronze Age (phases C/D-D) at the earliest. The first of these, from Gródek, does not stylistically indicate a clear source of origin. Spiral ornaments of this type have a wide territorial and chronological range. The earliest ones are known from the Eneolithic (Adamczak *et al.* 2015; Kowalski *et al.* 2019). During the Bronze Age, they are commonly found on both sides of the Carpathian Mountains in a variety of cultural settings, especially in the Tumulus and Urnfield cultures (Mozsolics 1973, 53, 54, Taf. 50: 22; 51: 12; 76: 17; Blajer 1999, 92-94). In the case of the hoard from Gródek, the atypical chemical composition for that time is noteworthy, namely copper with a small admixture of arsenic and trace amounts of other metals and non-metals. In this context, it cannot be ruled out that older, Eneolithic, ornaments were redeposited in the Bronze Age vessel. The rich hoard from Zagłoba-Dratów represents a continuation of the metallurgical traditions of the Barrow cultures in the Trzciniec culture environment (Blajer and Szpunar 1982, 312; Blajer 1984, 48; 1999, 118-119).

The next phase of hoard deposition in the area falls within the HA1-HB1. Three assemblages mark this stage. The first of them, the most numerous and also the oldest, is the deposit of bronze scrap from Kułakowice II. It contains, among other things, a ring-shaped ornament, which (especially in terms of its ornamentation), recalls the Sieniawa-type products of the Tarnobrzeg Lusatian culture, dated to the BD/HA1-HA1 period (Blajer 1999, 124, 125). In the Lublin area, a similar ornament (isolated find) appeared in Modryniec (Kokowski 1993). A hoard of knobbed sickles from Śniatycze, Site 94, is slightly later and dated to the HA2-HB1 (Kłosińska and Sadowski 2017, 397, 398; Kłosińska *et al.* 2017). Elżbieta M. Kłosińska has recently verified the dating of a second hoard from Śniatycze, Site 89, containing elements of a horse harness. She now links his assemblage, initially dated to HB3 (2008, 290), with the impacts from the Carpathian Basin during the HA2-HB1 (Kłosińska and Sadowski 2017, 397). It should be noted that the original dating proposal has already been accepted by other researchers (*cf.*, Blajer *et al.* 2022, 52-58).

The deposits from Trzciniec and Majdan Gromadzki are most probably associated with the same chronological interval. The hoard from Trzciniec (and possibly also from Adelina – both unpublished – I owe the information to E. M. Kłosińska) contained, among other things, belt fittings consisting of large repoussé discs. The hoard from Majdan Gromadzki, also unpublished, contained six objects: two undecorated ring-shaped ornaments (a massive neck-ring made from a round-section rod with hammered ends bent into loops, and

an open ring – either a neck-ring or a leg-ring – with tapered terminals); three undecorated discs or bosses with single loops; and an undecorated socketed axe, similar to variant K of Przedmieście type (Kuśnierz 1998a, 40, 41, figs 14 and 15). This assemblage can be seen as chronologically inconsistent, as the neck-ring represents an archaic type in the context of discs/bosses, and especially in the context of the socketed axe, which can be dated to the HB1 at the earliest (Blajer 2001, 82, 83). Nevertheless, such neck ornaments, although characteristic of the Early Bronze Age episode, still appear in the Bronze Age phases B1-B2, and are exceptionally mentioned even in later hoards (see Szafrański 1955, pl. 13; Durczewski 1961, 33, 34; Blajer 1990, 40, 41). The undecorated, slightly conical discs with single loops are dated mainly within Bronze Age phase C – HA2 (Blajer 1999, 98, 99), although they are also found later, in HA2-HB1 (Blajer 2013, 74, 75). The youngest element in this assemblage is therefore the axe, which may date this entire assemblage to the HB1. The hoard from the Hrubieszów area is dated similarly (Blajer 2001, 338). Most of the objects from the deposits mentioned here are referenced in both the Lusatian Urnfield milieu (discs, sickles) and the Danubian zone (especially the axe, but also the sickles and discs) (Blajer 1999, *passim*; 2001, *passim*; 2013, *passim*).

The hoard from 'by the Sieniocha River' should be dated to the Late Bronze Age period (HB2-HB3). It is a peculiar find also due to the origin of the bronze casting mould (Kłosińska 2026, 158; Kłosińska and Sadowski 2017, 400), which is presumably an import from the Volga-Kama zone or central Sweden.

Jerzy Kuśnierz (2006, 220; 2007, 383) associates a multi-element hoard of ornaments, tools, weapons, and horse harness from Szczebrzeszyn with the beginning of the Iron Age (HC). According to Elżbieta M. Kłosińska (2010, 30), however, this hoard may be older and still correlate with the final phase of the Bronze Age, *i.e.*, HB3. According to the latter researcher, the controversy is also aroused by the incorrect, in her opinion, classification of some elements of this deposit (*ibid.*). It should be noted that this morphologically diverse composition is equally complex in terms of the origin of the individual objects, which find analogies in both the environment of the Lusatian Urnfield culture and in the North, specifically in the Baltic milieu, as well as in the Carpathian Basin and western Ukraine. The eastern direction of the influx of bronzes, especially weapons and elements of the horse harness, of Thraco-Cimmerian, and later Scythian origin (Chochorowski 1993; 1999; Kłosińska and Sadowski 2017, 398-400), coincides at this time with a new political situation caused by the pressure from nomads from the Pontic steppes. At this time, in the Lublin region (Kłosińska 2007; 2013a), as well as along the Middle San and Wisłok rivers (*e.g.*, Czopek 2008; 2019; Trybała-Zawiślak 2019, *passim*), a peculiar cultural change is observed. It is evident in the artefact inventories, the settlement model, funerary rites, and the intensification of hoarding during the HD period.

Seventeen hoards are associated with this period, *i.e.*, the HD, representing approximately half of all known deposits from the area between the Vistula and Bug rivers. This group includes exclusively deposits of ornaments, most of which were produced in the

metallurgical workshops of the western territorial groups of the Lusatian Urnfield culture. Only in one hoard, from Bużyska, ornaments were accompanied by a socketed axe (Mogielnicka-Urban 2008, 218). In the group of ornaments, large ring-shaped ornaments (twisted neck-rings, leg-rings and arm-rings) are notable, found, for example, in Radecznica, Deszkowice, Zemborzyce, and other localities. With the quantitative decline of metal imports from the south at that time, the deposit from Wakijów is a good example of bronzes with such provenance, as it is associated with the Hallstatt cultural milieu. In the Early Iron Age, the majority of metal objects flowed into this region of Poland from workshops in Greater Poland and Kuyavia (*e.g.*, leg-rings), although some of the items were likely produced in local Masovian-Podlasie workshops (Mogielnicka-Urban 2008, 220; Orlińska and Kaczmarek 2010, 92).

Henceforth, the conclusions formulated by Wojciech Blajer a quarter of a century ago, relating to the nature of hoarding in the Early Iron Age (2001, 65-71), remain valid in light of more recent finds from the area between the Vistula and Bug rivers.

3. CONCLUSIONS

The present distribution of hoards within the area between the Vistula and Bug rivers likely does not accurately reflect their actual spread during the Bronze Age and Early Iron Age. The clusters visible in the Chodel Depression and the south-eastern part of the Lublin region may be partly related to the activities of local amateur metal detectorists. This is not the only reason for their existence, though, given the location of these deposits within the areas of increased settlement activity and the fact that transport routes run through these areas. The clustering of Early Iron Age hoards in south-eastern Masovia and western Podlasie documents the relationship between these areas and the Kuyavian metallurgical centre/or the potential formation of a secondary bronze-working centre in this region.

The few hoards from the early phase of the Bronze Age consisted primarily of bifacial flint tools, with faience beads appearing only exceptionally. The beginnings of valuable bronze object deposition are associated with the community of the late Trzciniec culture. During the early phase of the Lusatian Urnfield culture, bronze artefacts from various regions made their way to the Lublin region, especially its southern part. The main direction of this influx was from the south, although only a portion of these imports were deposited. The nature of such hoards still requires further study, and a promising line of research may be the investigation of their placement in relation to settlement microregions. It also seems necessary to re-examine hoards that have long been known, in order to subject them to comprehensive – and in some cases repeated – laboratory analyses, now made possible by advances in the hard sciences. The chronological framework of these hoards also seems to remain an open question.

The unveiling of new discoveries remains a matter of time. It is only to be hoped that the monitoring of amateur artefact hunting will be better and... that the effectiveness of obtaining funds for future analyses will increase.

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References

Adamczak K., Kowalski Ł., Bojarski J., Weinkauf M. and Garbacz-Klempka A. 2015. Eneolithic metal objects hoard from Kałdus, Chełmno commune, kujawsko-pomorskie voivodeship. *Sprawozdania Archeologiczne* 67, 199-219.

Bayley J., Crossley D. and Ponting M. eds 2008. *Metals and Metalworking. A research framework for archaeometallurgy* (= *HMS Occasional Publication* 6). London: Historical Metallurgy Society.

Baron J., Maciejewski M., Jarysz R., Kuzìbik R., Łaciak D., Łucejko J. J., Mackiewicz M., Miazga B., Nowak K. and Sych D. 2019. *Phenomenon of repetition: deposits from Karmin*. Wrocław: Instytut Archeologii Uniwersytetu Wrocławskiego.

Blajer W. 1984. *Die Arm- und Beinbergen in Polen* (= *Prähistorische Bronzefunde* X/2). München: C.H. Beck'sche Verlagsbuchhandlung.

Blajer W. 1990. *Skarby z wczesnej epoki brązu na ziemiach polskich* (= *Polska Akademia Nauk – Oddział w Krakowie, Prace Komisji Archeologicznej* 28). Wrocław, Warszawa, Kraków, Gdańsk, Łódź: Zakład Narodowy im. Ossolińskich.

Blajer W. 1999. *Skarby ze starszej i środkowej epoki brązu na ziemiach polskich* (= *Polska Akademia Nauk – Oddział w Krakowie, Prace Komisji Archeologicznej* 30). Kraków: Wydawnictwo Naukowe DWN, Wydawnictwo Oddziału PAN.

Blajer W. 2001. *Skarby przedmiotów metalowych z epoki brązu i wczesnej epoki żelaza na ziemiach polskich*. Kraków: Instytut Archeologii UJ.

Blajer 2010. Skarby w archeologii. In E. Banasiewicz-Szykuła (ed.), *Skarby Lubelszczyzny* (= *Skarby z przeszłości* [11]). Lublin: Wojewódzki Urząd Ochrony Zabytków w Lublinie, 5-8.

Blajer W. 2013. *Młodsza epoka brązu na ziemiach polskich w świetle badań nad skarbami*. Kraków: Instytut Archeologii UJ.

Blajer W., Bochnak T., Cywa K., Garbacz-Klempka A., Glinianowicz G., Jurecki P., Kotowicz K., Kuropka P., Łucejko J. J., Marcin Maciejewski M., Mueller-Bieniek A., Nowak K., Przybyła M. M. and Skowron K. 2022. *Ku czci bogów i ludzi. Skarby z okolic Sanoka. Studium interdyscyplinarne*. Sanok, Lublin: Muzeum Historyczne w Sanoku, Wydawnictwo UMCS.

Blajer W. and Szpunar A. 1982. O możliwościach wydzielania horyzontów skarbów brązowych na obszarze Polski. *Archeologia Polski* 26 (1981), 295-320.

Bradley R. 1990. *The Passage of Arms. An archaeological analysis of prehistoric hoards and votive deposits*. Cambridge: Cambridge University Press.

Bukowski Z. 1998. *Pomorze w epoce brązu w świetle dalekosiężnych kontaktów wymiennych* (= *Prace Komisji Archeologicznej* 12). Gdańsk: Gdańskie Towarzystwo Naukowe.

Chochorowski J. 1993. *Ekspansja kimmeryjska na tereny Europy środkowej*. Kraków: Wydawnictwo UJ.

Chochorowski J. 1999. Żelazny oręż barbarzyńców – wczesna epoka żelaza poza zasięgiem cywilizacji klasycznych. In J. K. Kozłowski (ed.), *Prehistoria* (= *Encyklopedia Historyczna Świata* 1). Kraków: Agencja Publicystyczno-Wydawnicza Opres, 304-395.

Cichoszewska H. 1922-1924. Nowe nabytki Muzeum Wielkopolskiego w latach 1911-1921. *Przegląd Archeologiczny* 2, 132.

Czopek S. 2008. Uwagi o sytuacji kulturowej we wczesnej epoce żelaza na terenie południowo-wschodniej Polski. In M. Mogielnicka-Urban (ed.), *Opera ex aere. Studia z epoki brązu o wczesnej epoki żelaza dedykowane profesorowi Janowi Dąbrowskiemu przez przyjaciół, uczniów i kolegów z okazji siedemdziesięciolecia urodzin*. Warszawa: Instytut Archeologii i Etnologii PAN, 159-167.

Czopek S. 2011. Rola szlaku Dniestr – San w epoce brązu i we wczesnej epoce żelaza. In M. Ignaczak, A. Kośko and M. Szmyt (eds), *Między Bałtykiem a Morzem Czarnym. Szlaki Międzymorza IV-I tys. przed Chr*. Poznań: Wydawnictwo Poznańskie, 453-463.

Czopek S. 2019. Enklawa scytyjskiego kręgu kulturowego w południowo-wschodniej Polsce. *Przegląd Archeologiczny* 67, 119-148.

Dąbrowski J. 1979. Struktury społeczne. In J. Dąbrowski and Z. Rajewski (eds), *Od środkowej epoki brązu do środkowego okresu lateńskiego* (= *Prahistoria Ziem Polskich* 4). Wrocław: Zakład Narodowy im. Ossolińskich, Wydawnictwo PAN, 290-308.

Durczewski Z. 1961. Skarby halsztackie z Wielkopolski. *Przegląd Archeologiczny* 13 (1960), 7-108.

Gajewski J. 1984. Ciekawe znalezisko z bagna w miejscowości Huszczka Duża, gm. Skierbieszów, woj. Zamość. *Wiadomości Archeologiczne* 46/2 (1981), 240-241.

Garbacz-Klempka A. 2018. *Synteza badań archeometalurgicznych artefaktów z epoki brązu. Eksperymentalna rekonstrukcja stopów miedzi i technologii*. Kraków: Wydawnictwo Naukowe 'Akapit'.

Gardawski A. and Wesołowski K. 1956. Zagadnienia metalurgii kultury trzcinieckiej w świetle 'skarbów' brązowych z Dratowa, pow. Puławy i Rawy Mazowieckiej. *Materiały Starożytne* 1, 59-103.

Głosik J. 1983. Katalog Pogotowia Archeologicznego za lata 1973-1976. *Materiały Starożytne i Wczesnośredniowieczne* 5, 229-263.

Głosik J. 1993. Katalog Pogotowia Archeologicznego za lata 1977-1981. *Wiadomości Archeologiczne* 52 (1991-1992), 209-234.

Gurba J. 1961. Brązowe nagolenniki z Zemborzyc, pow. Lublin. *Sprawozdania Archeologiczne* 12, 103-105.

Harding A. F. 2000. *European Societies in the Bronze Age*. Cambridge: Cambridge University Press.

Kaczmarek M., Szczurek G. and Krzysiak A. eds 2021. *Kaliska I. Skarb przedmiotów metalowych z późnej epoki brązu na Pomorzu* (= *Hyperborea* 6). Poznań: Wydawnictwo UAM.

Kłosińska E. M. 2007. Lubelszczyzna i Ukraina w młodszych odcinkach epoki brązu i we wczesnej epoce żelaza – pytania o losy wspólne i niewspólne. In L. Bakalarska (ed.), *Wspólnota dziedzictwa archeologicznego ziem Ukrainy i Polski. Materiały z Konferencji zorganizowanej przez Ośrodek Ochrony Dziedzictwa Archeologicznego, Łańcut 26-28 X 2005*. Warszawa: Krajowy Ośrodek Badań i Dokumentacji Zabytków w Warszawie, 226-249.

Kłosińska E. M. 2008. Einmalige Funde der Kopfgestellverzierung aus dem südöstlichen Lublin-Land. *Sprawozdania Archeologiczne* 60, 265-294.

Kłosińska E. M. 2010. O znaleziskach gromadnych przedmiotów metalowych z epoki brązu i wczesnej epoki żelaza. In E. Banasiewicz-Szykuła (ed.), *Skarby Lubelszczyzny* (= *Skarby z przeszłości* [11]). Lublin: Wojewódzki Urząd Ochrony Zabytków w Lublinie, 21-35.

Kłosińska E. M. 2013a. Research problems of the Lusatian culture in the early Iron Age in the Lublin region in the light of new archaeological findings, In J. Kolenda, A. Mierzwiński, S. Moździoch and L. Żygadło (eds), *Z badań nad kulturą społeczeństw pradziejowych i wczesnośredniowiecznych. Księga jubileuszowa dedykowana Profesorowi Bogusławowi Gedidze w osiemdziesiątą rocznicę urodzin przez przyjaciół, kolegów i uczniów*. Wrocław: Instytut Archeologii i Etnologii PAN, 424-449.

Kłosińska E. M. 2013b. Zapomniany skarb ozdób brązowych z miejscowości Skwarne, pow. Mińsk Mazowiecki. *Materiały i Sprawozdania Rzeszowskiego Ośrodka Archeologicznego* 34, 139-147.

Kłosińska E. M. 2016. Metallurgical production of the Lusatian culture in the Lublin region – discussion questions. *Materiały i Sprawozdania Rzeszowskiego Ośrodka Archeologicznego* 37, 153-164.

Kłosińska E., Kurzątkowska U. and Nogaj-Chachaj J. 2005. Dwa brązowe naszyjniki tordowane z Radecznicy, pow. Zamość. *Archeologia Polski Środkowowschodniej* 7, 222-230.

Kłosińska E. M., Orzeł J. and Sadowski S. 2017. Z badań nad znaleziskami brązowych sierpów z guzkiem na Lubelszczyźnie i na terenach ościennych. *Materiały i Sprawozdania Rzeszowskiego Ośrodka Archeologicznego* 38, 49-72.

Kłosińska E. M. and Sadowski S. 2017. Long distance connections of the south-eastern peripheries of the Lublin region at the time of the Lusatian culture in the light of archival and newly discovered materials. *Sprawozdania Archeologiczne* 69, 109-126.

Kokowski A. 1993. Znalezisko z Modryńca w woj. zamojskim. In F. Rożnowski (ed.), *Miscellanea archaeologica Thaddaeo Malinowski dedicata que Franciscus Rożnowski redigendum curavit*, Słupsk, Poznań: Wydawnictwo Sorus, 207-214.

Kostrzewski J. 1964. Skarby i luźne znaleziska metalowe od eneolitu do wczesnego okresu żelaza z górnego i środkowego dorzecza Wisły i górnego dorzecza Warty. *Przegląd Archeologiczny* 15 (1962), 5-133.

Kośko A. and Klochko V. I. 2009. Transit routes between the Baltic and Black Seas: early development stages – from the 3rd to the middle of the 1st millennium BC. An outline of research project. *Baltic-Pontic Studies* 14, 9-18.

Kowalski Ł., Adamczak K. Garbacz-Klempka A., Degryse P., Stos-Gale Z., Kozicka M., Chudziak W., Krzyszowski A. and Jedynak A. 2019. Back to the Eneolithic: Exploring the *Rudki*-type ornaments from Poland. *Archaeological and Anthropological Sciences* 11, 4355-4377.

Kristiansen K. 1998. Europe before History. Cambridge: Cambridge University Press.

Kurzawska A. 2013. Muszle porcelanek w skarbie z Podbieli, pow. otwocki. *Fontes Archaeologici Posnaniensis* 49, 213-221.

Kuśnierz J. 1998a. *Die Beile in Polen III (Tüllenbeile)* (= *Prähistorische Bronzefunde* IX/21). Stuttgart: Franz Steiner Verlag.

Kuśnierz J. 1998b. Skarb brązowy z Deszkowic II, gm. Sułów, woj. Zamość. *Materiały i Sprawozdania Rzeszowskiego Ośrodka Archeologicznego* 19, 47-51.

Kuśnierz J. 2006. Skarb wyrobów brązowych ze Szczebrzeszyna w powiecie zamojskim jako przykład powiązań grupy ulwóweckiej z kulturą wysocką. *Materialy i dozlidzhenia z arkheologii Prikarpattia i Volyni* 10, 215-224.

Kuśnierz J. 2007. Skarb wyrobów brązowych ze Szczebrzeszyna w powiecie zamojskim. In J. Chochorowski *(*ed.), *Studia nad epoką brązu i wczesną epoką żelaza. Księga poświęcona Profesorowi Markowi Gedlowi na pięćdziesięciolecie pracy w Uniwersytecie Jagiellońskim*. Kraków: Wydawnictwo UJ, 371-402.

Kuśnierz J. and Urbański A. 1998. Skarb wyrobów brązowych kultury łużyckiej z okresu halsztackiego D odkryty w Deszkowicach II, woj. zamojskie. *Archeologia Polski Środkowowschodniej* 3, 279-280.

Libera J. 2001. *Krzemienne formy bifacjalne na terenach Polski i zachodniej Ukrainy (od środkowego neolitu do wczesnej epoki żelaza)*. Lublin: Wydawnictwo UMCS.

Libera J. 2003. Znaleziska gromadne siekier krzemiennych z Lubelszczyzny. *Wiadomości Archeologiczne* 56 (2002-2003), 45-50.

Maciejewski M. 2016. *Metal – granica – rytuał. Badania nad depozytami przedmiotów metalowych w kontekście sieci osadniczej* (= *Archeologia Bimaris. Monografie* 7). Poznań: Wydawnictwo Nauka i Innowacja.

Miśkiewicz J. 1962. Skarb halsztacki z miejscowości Rzeszotkowo, pow. Siedlce. *Światowit* 24, 231-234.

Mogielnicka-Urban M. 2008. Nagolennik typu stanomińskiego z Biejkowskiej Woli k. Biejkowa, gm. Promna, pow. białobrzeski, woj. mazowieckie na tle innych znalezisk tego typu w Polsce. In M. Mogielnicka-Urban (ed.), *Opera ex aere. Studia z epoki brązu o wczesnej epoki żelaza dedykowane profesorowi Janowi Dąbrowskiemu przez przyjaciół, uczniów i kolegów z okazji siedemdziesięciolecia urodzin*. Warszawa: Instytut Archeologii i Etnologii PAN, 211-222.

Mozsolics A. 1973. *Bronze- und Goldfunde des Karpatenbeckens. Depotfundhorizonte von Forró und Ópapáyi*. Budapest: Akademiai Kiadó.

Narożna-Szamałek U. 2013. Skarb ozdób z Podbieli, pow. otwocki. *Fontes Archaeologici Posnaniensis* 49, 193-210.

Nosek E. and Stępiński J. 2007. Badania metaloznawcze wybranych zabytków brązowych ze Szczebrzeszyna. In J. Chochorowski (ed.), *Studia nad epoka brązu i wczesną epoka żelaza. Księga*

poświęcona Profesorowi Markowi Gedlowi na pięćdziesięciolecie pracy w Uniwersytecie Jagiellońskim. Kraków: Wydawnictwo UJ, 391-402.

Nosek S. 1957. Materiały do badań nad historią starożytną i wczesnośredniowieczną międzyrzecza Wisły i Bugu. *Annales Universitatis Mariae Curie-Skłodowska* F6 (1951).

Nosek S. 1960. Zabytki brązowe z Niewiadomej w powiecie sokołowskim na Podlasiu. *Materiały Archeologiczne* 2, 333-347.

Orlińska G. 2016. Ozdoby z Warszawy-Zacisza świadectwem starożytnego brązownictwa sprzed 2500 lat. In M. Bryl and A. Badach (eds), *Brązy warszawskie. Dzieła, twórcy, kolekcjonerzy i badacze*. Warszawa: Stowarzyszenie Historyków Sztuki, 9-13, 102-106.

Orlińska G. and Kaczmarek Ł. 2010. Niepublikowane nagolenniki typu stanomińskiego. *Wiadomości Archeologiczne* 61 (2009-2010), 81-94.

Ostoja-Zagórski 1992. Rola wymiany w pradziejach Europy Środkowej (na przykładzie epoki brązu). *Kwartalnik Historii Kultury Materialnej* 40/2, 119-135.

Panasiewicz W. and Taras H. 2007. Depozyt ozdób brązowych ze stan. 1C w Gródku, pow. hrubieszowski. *Archeologia Polski Środkowowschodniej* 9, 265-272.

Pasternak J. 1938. Brązowy skarb halsztacki z Kiełczewa. *Światowit* 17, 287-292.

Poklewski 1954. Halsztacki zespół ozdób brązowych z Wakijowa, pow. Tomaszów Lubelski. *Wiadomości Archeologiczne* 20, 267-275.

Robinson C., Baczyńska B. and Polańska M. 2004. The Origins of Faience in Poland. *Sprawozdania Archeologiczne* 56, 79-154.

Rowlands M. J. 1984. Conceptualising the European Bronze and Early Iron Age. In J. Bintliff (ed.), *European Social Evolution – Archaeological Perspectives*. West Chiltington, Sussex: Chanctonbury Press, 147-156.

Rząska H. and Walenta K. eds 2017. *Brązy ukryte w ziemi… Łużycki skarb z Charzyków*. Chojnice: Muzeum Historyczno-Etnograficzne im. J. Rydzkowskiego w Chojnicach.

Szafrański W. 1955. *Skarby brązowe z epoki wspólnoty pierwotnej (IV i V okres epoki brązowej) w Wielkopolsce* (= Biblioteka Archeologiczna 6). Warszawa, Wrocław: Zakład Narodowy im. Ossolińskich.

Sveshnikov I. K. 1974. *Istoriia naselennia Peredkarpattia, Podillia i Volyni v kintsi III – na pochatku II tysiacholittia. do n.e.* Kyiv: Naukova dumka.

Sveshnikov I. K. 1990. Stzhizhovskaya kultura. In A. P. Chernysh (ed.), *Arkheologiya Prikarpattya, Volyni i Zakarpatya (eneolit, bronza i rannee zhelezo)*. Kiev: Naukova dumka, 68-74.

Szczurek G. and and Kaczmarek M. 2022. *Kaliska I. Skarb przedmiotów metalowych* z późnej epoki brązu na Pomorzu (= *Hyperborea* 7). Poznań: Wydawnictwo UAM.

Ślusarski Z. 1970. Dépôt de perles de faïence, Horodysko, distr. de Chełm, Pologne. In W. Hensel and K. Jażdżewski (eds), *Le néolithique et le bronze ancien dans le sud-est de la Pologne* (= *Inventaria Archaeologica* 25/159). Warszawa.

Taras H. 2007. Stabilizacja osadnicza w czasach panowania kultury trzcinieckiej (1750-1100 lat przed Chr.). In E. Banasiewicz-Szykuła (ed.), *Pradzieje południowo-wschodniej Lubelszczyzny* (= *Skarby z przeszłości* [17]). Lublin: Wojewódzki Urząd Ochrony Zabytków w Lublinie, 13-24.

Taras H. 2016. Drogi i szlaki w pradziejach. In E. Banasiewicz-Szykuła (ed.), *Drogi i szlaki w pradziejach* (= *Skarby z przeszłości* [11]). Lublin: Wojewódzki Urząd Ochrony Zabytków w Lublinie, 95-105.

Taras H. 2019. Brązowe sztylety proweniencji wschodniej na ziemiach polskich w epoce brązu. In M. Szmyt, P. Chachlikowski, J. Czebreszuk, M. Ignaczak and P. Makarowicz (eds), *Vir Bimaris. Od kujawskiego matecznika do stepów nadczarnomorskich. Studia z pradziejów międzymorza bałtycko-pontyjskiego dedykowane Profesorowi Aleksandrowi Kośko* (= *Archeologia Bimaris. Dyskusje* 5). Poznań: Wydawnictwo UAM, 485-494.

Trybała-Zawiślak K. 2019. *Wczesna epoka żelaza na terenie Polski południowo-wschodniej – dynamika zmian i relacje kulturowe*. Rzeszów: Wydawnictwo Uniwersytetu Rzeszowskiego.

Węgrzynowicz T. 1973. Kultura łużycka na Mazowszu Wschodnim i Podlasiu. *Materiały Starożytne i Wczesnośredniowieczne* 2, 7-120.

Żółkowski S. 1988. *Materiały do badań nad osadnictwem pradziejowym i wczesnośredniowiecznym na obszarze dzisiejszego województwa bialskopodlaskiego*. Biała Podlaska: Podlaskie Towarzystwo Społeczno-Kulturalne.

Żurowski J. 1927. Skarby halsztackiego okresu z doliny Dunajca. *Prace i Materiały Antropologiczno-Archeologiczne i Etnograficzne* 4, 3-112.

Żurowski J. 1949. Zabytki brązowe z młodszej epoki brązu i wczesnego okresu epoki żelaza z dorzecza górnego Dniestru. *Przegląd Archeologiczny* 8 (1948-1949), 155-247.

Internet sources

https://muzeumbilgoraj.pl/skarb-z-czerniecina-poduchownego/ (published 20.06.2023)

https://archeologia.com.pl/skarb-brazowych-ozdob-sprzed-25-tys-lat-odkryty-na-lubelszczyznie [published 27.06.2023].

von Heldensfled A. M., *West Gallicien (1801–1804) – First Military Survey*, Arcanum Maps: https://maps.arcanum.com/en/map/europe-18century-firstsurvey/?layers=osm%2C163%2C165&bbox=2521839.6317437827%2C6544789.3249530345%2C2530940.415423986%2C6548176.440768922 [published: 28.07 2025].