

ANTHROPOLOGIE

• LVIII/2-3 • pp. 215-226 • 2020

MARTA POŁTOWICZ-BOBAK

EASTERN BORDER OF THE MAGDALENIAN CULTURE - AN AREA OF SETTLEMENT OR RESOURCE GATHERING?

ABSTRACT: The lands of south-eastern Poland mark the easternmost limits of Magdalenian Culture settlement. All three sites known to date are younger than Dryas I. None of those sites are of the large base camp types. Most of the raw materials for tools were drawn from areas a few tens of kilometres to the north. The questions to be answered concern the chronology of settlement, economic exploitation and forms of settlement of these territories, as well as the relations between SE Poland and the northern part of the Sandomierz basin.

KEY WORDS: Magdalenian - Eastern border of settlement - Chronology - Territory

INTRODUCTION

The areas on the right bank of the Vistula River constitute the easternmost extent of the Magdalenian Culture (*Figure 1*). To date no sites which assuredly may be identified as belonging to this cultural complex have been discovered anywhere to the east of today's Poland, with the present state of knowledge marking the San River as a sharp cut-off line. This gives rise to the question – was this line some sort of impassable barrier (Bobak *et al.* 2017, Połtowicz-Bobak 2013)?

The next question that one should ask concerns the character of Magdalenian Culture settlement along its

eastern border – was this an area used as hunting grounds and sporadically visited by parties from communities to their west, or was the area one of the population centres of the Central European Magdalenian?

Last but not least is the issue of chronology of Magdalenian Culture settlement in its eastern periphery. The question pertains to records of both its earliest and youngest episodes (Bobak, Połtowicz-Bobak 2013, Bobak *et al.* 2017).

In light of new knowledge provided by ongoing studies answering the above questions becomes increasingly difficult as well as less and less clear-cut. Newest findings, particularly from field research, keep on

Received 16 January 2020; accepted 20 March 2020. © 2020 Moravian Museum, Anthropos Institute, Brno. All rights reserved. DOI: https://doi.org.10.26720/anthro.20.03.20.1

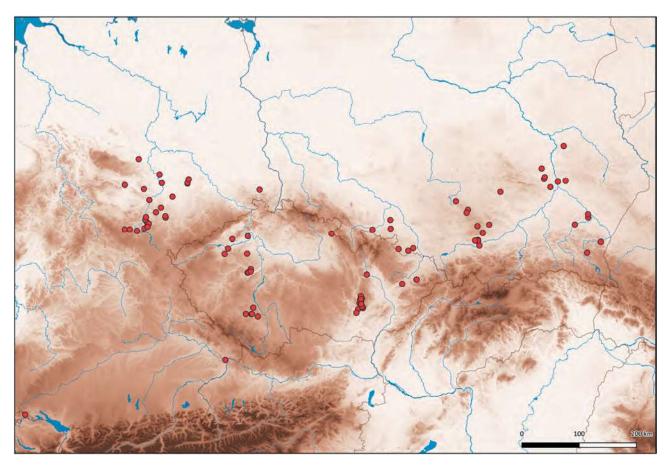


FIGURE 1: Magdalenian Culture sites in eastern part of Central Europe (by Połtowicz-Bobak 2013 ill. 34, with amendments, drawing by D. Bobak).

casting new light upon eastern Poland making this area to be of enormous interest for the analysis of processes occurring at the fringes of settlement and cultural areas.

MATERIALS

The state of knowledge today is that seven sites in eastern Poland may be definitely associated with the Magdalenian Culture (*Figure 2*). Five of these are located in the south-east of the country, in the valleys of the San or Wisłok rivers, while two lie to their north – those at Klementowice and Stare Baraki (T. Wiśniewski in this volume).

Those extreme south-easterly sites in the valleys of the San or Wisłok are Łąka, Hłomcza, Grodzisko Dolne and Wierzawice, to which one may add the loose find of a harpoon at Przemyśl (Połtowicz-Bobak 2013, Połtowicz-Bobak et al. 2014, Bobak et al. 2017, Kozłowski 1977, Łanczont et al. 2002).

This short list of sites includes several identified as doubtlessly being briefly inhabited campsites. The most important of these is Hłomcza – a small, seasonal campsite, followed by Wierzawice – a classical hunting campsite.

Excavations at Hłomcza unearthed a small collection of flint artefacts and remains of a small construction recessed into the earth and indentified as a dwelling. The excavated inventory includes cores, debitage, plus a group of tools – almost exclusively burins (*Figure 3*). These are accompanied by small numbers of other forms such as scrapers, borers and retouched blades. A large majority of tools are made on regularly shaped – and occasionally long – blades. *En éperon* technique is represented as well. Only three backed pieces were found (Łanczont *et al.* 2002).

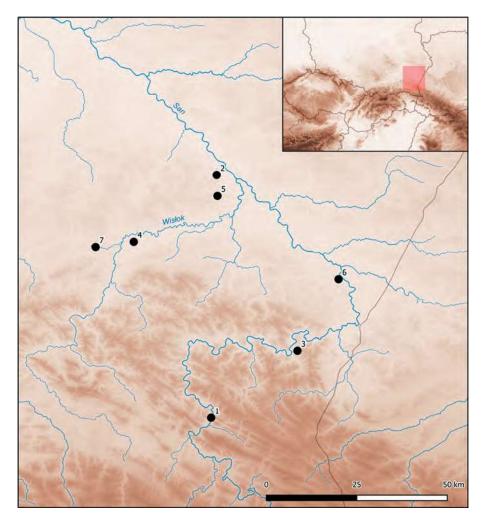


FIGURE 2: Magdalenian Culture sites in eastern Poland and other sites mentioned in the paper (Połtowicz-Bobak 2013 with later additions, drawing by D. Bobak). 1, Hłomcza; 2, Wierzawice; 3, Przemyśl; 4, Łąka; 5, Grodzisko Dolne; 6, Święte; 7, Rudna Wielka.

The site in Wierzawice is of definitely different character, occupying a small space with a single fireplace in its centre. The spatial arrangement points to the existence of several areas dedicated to different tasks, chiefly related with backed pieces production and weapon repairs (Figure 4). Signs of such activities are concentrated close to the fireplace. At a slightly greater radius (about one metre) there are places used for making blade and bladelets. At the western edges of the camp there are vestigial quantities of ochre powder mixed into the sediment. The camp's distinct features, these including the very high share of microliths (Figure 5) points to this being a typical hunting camp, a place chiefly used for the making and

maintenance of weapons as well as other tasks probably associated with the butchering of game (Bobak *et al.* 2010, 2017).

The loose find of an uniserial harpoon also is probably a record of hunting activity (Kozłowski 1977; *Figure* 6).

Much less is known about the remaining sites. The composition of the sparse inventory from Łąka (Połtowicz-Bobak *et al.* 2014; *Figure* 7) and the even smaller corpus from Grodzisko Dolne (Połtowicz 2006, Czopek 1999; *Figure* 8) strongly hints at their small seasonal camp character. The breakdown of tools, which include such typical forms like scrapers, burins and perforators points to the sites being used for various

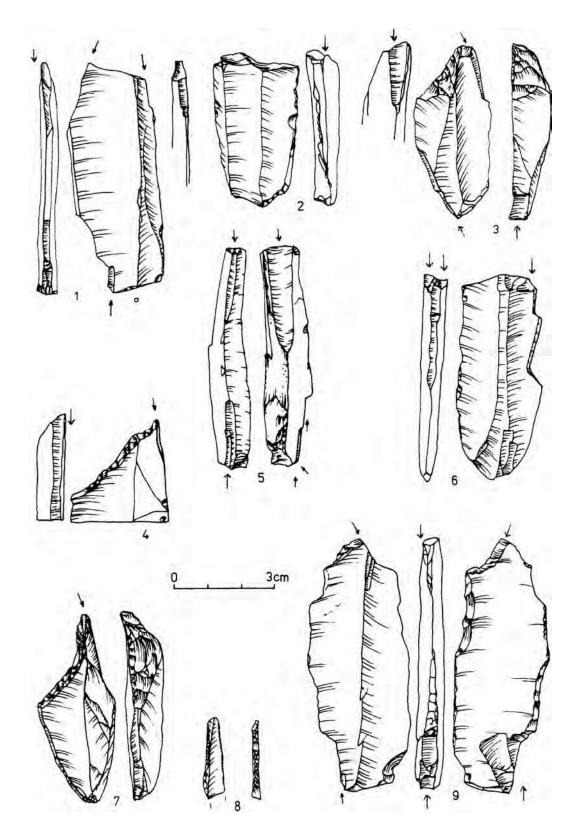


FIGURE 3: Hłomcza. Examples of tools. 1-6, 9 - burins, 7 - Lacan burin, 8 - backed bladelet (acc. Łanczont et al. 2002 ill.).

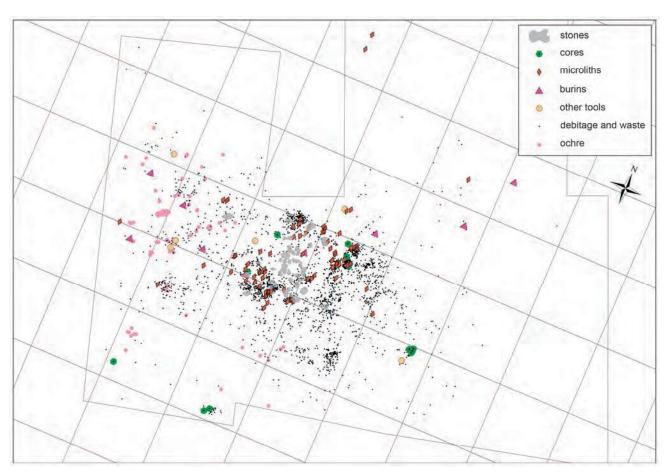


FIGURE 4: Wierzawice. Site plan (acc. Bobak et al. 2017 ill.).

forms of everyday life activity. In the case of Grodzisko Dolne one should note the presence of short scrapers and single forms with arched back, i.e. implements whose features point to their later chronology.

Within this small sample of sites we may distinguish two functions – either short lasting seasonal camps or of a difficult to determine function, and typical, ephemeral hunting camps. The differences between them are spelt out chiefly by the composition of their lithic inventories, naturally by tools in particular. It is worth noting that cores – found at all sites – are almost exclusively either exhausted or in the full reduction stage. Neither cores nor debitage provide any evidence for these sites being used for the preliminary working of raw materials. This suggests that the cores had been prepared elsewhere and arrived at those sites in at least by-product form. The existence of such a practice is further supported by the fact that an overwhelming majority of the lithics found on Magdalenian sites in south-east

Poland comes from sources located tens - if not over a hundred - of kilometres away (Połtowicz 2005, Połtowicz-Bobak 2013, Bobak, Połtowicz-Bobak 2018).

The Hłomcza campsite is the one and only site which almost exclusively uses locally acquired material i.e. Bircza flint (Łanczont *et al.* 2002). Interestingly this variety of flint was not used at other Magdalenian sites in the area in spite of its source being closer than the outcrops of flint commonly found across the discussed sites.

The main types of flint used at the aforementioned sites are chocolate, Świeciechowski and erratic flint – with only erratic flint being available locally e.g. from the Kolbuszowa Plateau. The chocolate and Świeciechowski flint come from areas to the north of the relevant sites, a distance of several tens of kilometres in a straight line.

Materials from other regions, chiefly of Jurassic origin and whose outcrops are located further to the

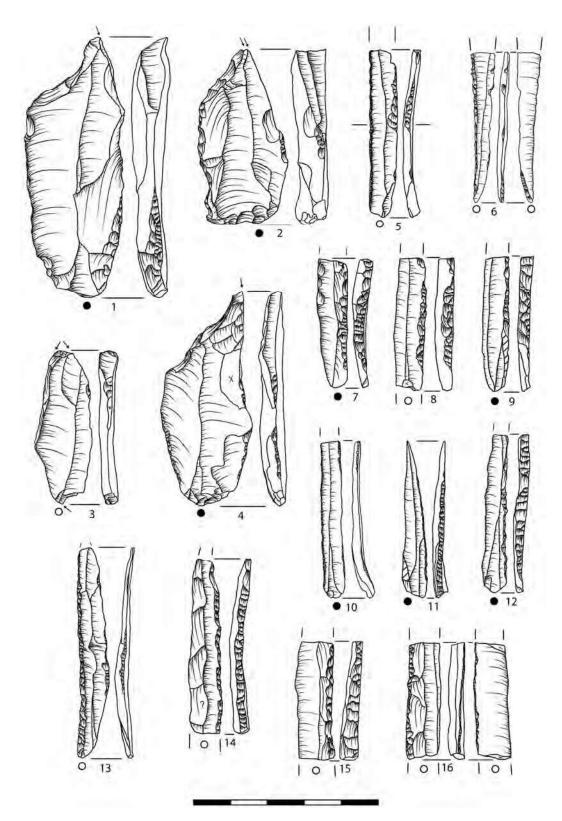


FIGURE 5: Wierzawice. Examples of lithic tools. 1, 2, 4 - Lacan burin, 3 - burin, 5-16 backed bladelets (acc. Bobak et al. 2010).

west are poorly represented – yet nevertheless are found at most of the discussed sites. Additionally, at Wierzawice and maybe at Grodzisko Dolne and Łąka as well – a few finds might be identified as being made from materials of an eastern provenance – so-called Volhynian or Dniester flint. These single finds are of great interest as their origin lies beyond the limits of Magdalenian settlement as known to date.

Frequency analysis of used materials evidently indicates strong ties between SE Poland and lands to their north (Bobak, Połtowicz-Bobak 2018). The latter were home to both large seasonal – and probably occupied over longer periods – base camps (Wilczyce, Ćmielów-Mały Gawroniec) as well as workshop sites (Podgrodzie) (R. Schild 2011, 2014, Przeździecki *et al.* 2011a, b). The valley of the San River – a tributary of the Vistula – might had served as a convenient communication route. It is at the confluence of those two rivers that we encounter several Magdalenian sites of both of the aforementioned types.

The chronology of Magdalenian settlement in SE Poland is of utmost importance. Only two of the listed five sites yielded any absolute datings, these being TL dates from Hłomcza plus 14C and OSL dates from Wierzawice (Bobak, Połtowicz-Bobak 2013, Wiśniewski et al. 2017). The remaining sites only provide pointers as to their possible placement in a chronological context.

The Hłomcza site produced a series of TL dates. The most important are two – from the topografic layer which had been the habitation level (Lub-3578: 14600±2300) and from the filling of the hypothesised dwelling (Lub-3583: 13500±2000). From Wierzawice we possess two ¹⁴C datings (Poz-36901: 11560±40 BP (13 471 – 13 300 cal. BP) and Poz-41200: 11080±130 BP (13 160 – 12 714 cal. BP); *Figure 9*), accompanied by a series of OSL datings from the living floor and underneath. Hence in both cases we are looking at dates from later than the cold Dryas I (GS-2a), i.e. from the warmer late Palaeolithic associated with the Bölling-Alleröd. Hłomcza might have been occupied between

the onset of the GI-1e and GI-1c2, while Wierzawice are a markedly younger site (GI-1c1-GI-1a).

The other sites, be it through stratigraphic (Łąka) or typological (Grodzisko Dolne, Przemyśl) extrapolation also should be related with stages younger than Dryas I - with either the Bölling or Alleröd.

In light of present state of knowledge the period of most intensive Magdalenian Culture settlement in Central Europe - Poland included - occurred during the Dryas I (GS-2.1a). Absolute datings (chiefly ¹⁴C) strongly support the hypothesis that the main stage of Magdalenian Culture settlement corresponds to Dryas I; later occupation has much weaker support in the archaeological record (Neruda 2010, Bobak, Połtowicz-Bobak 2013, Wiśniewski et al. 2017). Furthermore, in the period preceding the GI-1e warming expansion of Magdalenian Culture peoples reached its farthest eastern or north-eastern limits, as indicated by the dating from the Klementowice site (Wiśniewski 2015; Figure 9) or the Wilczyce campsite on the west bank of the Vistula (Schild 2011, 2014). That last site yielded a series of dates suggesting that it was occupied many times, during many seasons and over an extended period, including that of the warming as well. An interesting fact is that we know of Magdalenian sites from Silesia, the Sandomierz Basin and Nałeczów Plateau dated to the pre-Bölling (GI-1e) period (Wiśniewski et al. 2017, Bobak, Połtowicz-Bobak 2013). However, we have not found such sites in the southern segment of the Kraków-Częstochowa Upland (besides the Maszycka Cave) or in SE Poland. While the area around Kraków lacks Magdalenian sites with well documented chronology - and thus leading to lack of certainty as to the type of settlement in that area south-eastern Poland is the location of several sites with quite strong indicators as to their possible placement in the younger or youngest stages of the Magdalenian. What we lack is firm evidence for "Dryas I" (pre GI-1e) presence of Magdalenian peoples in the region.



FIGURE 6: Przemyśl. Bone harpoon (acc. Kozłowski 1977 ill.).

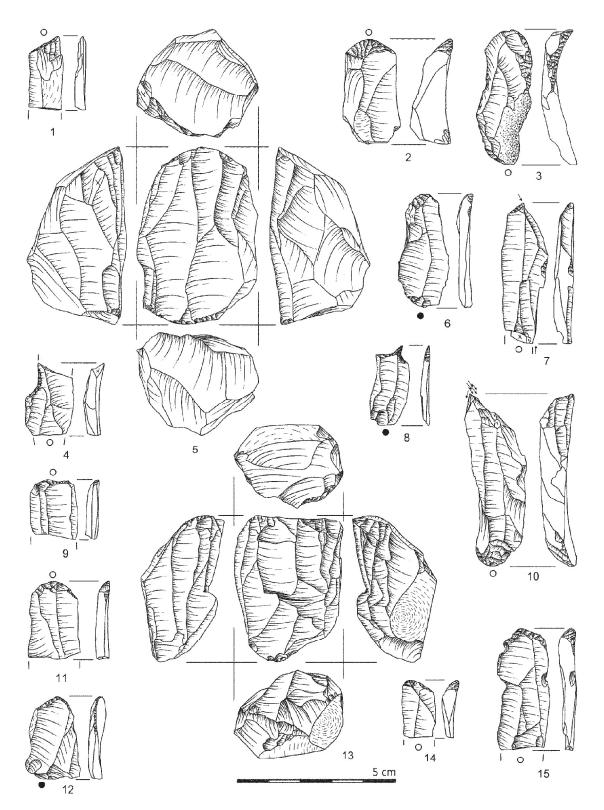


FIGURE 7: Łąka. Examples of lithic insteed of stone artefacts 1, 7 burins; 2, 3, 6, 9, 11, 12, 14, 15 end-scrapers; 4, retouched blade; 5, 13 cores; 8, perforator; 10, combinated tool (acc. Bobak *et al.* 2014).

DISCUSSION

Such data suggests that the lands of the southeastern corner of Poland (one is tempted to use the term *Rzeszowszczyzna*) may had been a periphery reached by Magdalenian Culture settlers at a relatively late point in time, yet where this population could had persisted for a long time – longer than in other part of Central Europe. Although there are some late sites known in Central Europe (e.g. cave Kůlna in Moravian Karst, layers 4 and 3 – Valoch 1988), these are single sites in areas already inhabited earlier by the Magdalenian population. In the case of the Kůlna cave, one can additionally observe clear differences between classical Magdalenian materials from layers 6 and 5 and Epimagdalenian from layers 4 and 3.

The areas of south-eastern Poland provided a level of security enabling the preservation of this cultural tradition – partly in unchanged, archetypical, "archaic"

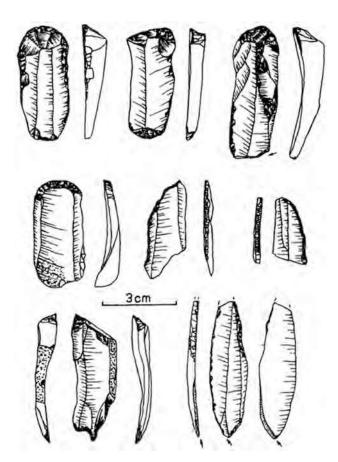


FIGURE 8: Grodzisko Dolne. Examples of stone artefacts (acc. Czopek 1999 ill.).

form – as very nicely exemplified by the Wierzawice site (Bobak *et al.* 2017). What was the underlying cause for this? We simply do not know. This region was doubtlessly the edge of Magdalenian Culture settlement, but it is difficult to establish how exactly was this area populated in the Alleröd.

Archaeological research carried out to date in the area of today's Podkarpackie Voievodship does not suffice to identify details of the dynamics of settlement. Nevertheless it is a fact that a major increase in number of sites is recorded only for the Swiderian (Bobak, Połtowicz-Bobak 2011). There are a few single Archbacked Point Culture sites (Rudna Wielka; Mitura *et al.* 2005), plus some single finds which could be assigned to this cultural tradition, but using them as basis it is difficult to arrive at any concrete conclusions, especially concerning the relations between the two cultures. Those two cultural traditions may have existed in parallel, especially if one goes with the theory that they are genetically connected (Połtowicz-Bobak 2013, Sobkowiak-Tabaka 2017).

So, what are we think about this region? Was this some sort of refuge where Magdalenian Culture people preserved while elsewhere this cultural tradition was retreating before expanding ABP cultures, or were these areas solely used as hunting grounds for communities whose centres of settlement were somewhere else? If the latter – *where* were those centres?

It is difficult to question the close ties between SE Poland and the northern parts of the Sandomierz Basin or the Holy Cross Mountains. This is corroborated by the materials used to make the artefacts uncovered in the discussed sites. The existence of such an axis of contact is also supported by the manner in which the sites are aligned along the San - with one, at Łaka, being located in the valley of the Wisłok, a San tributary. The Sandomierz Basin harboured large base camps. Hence, the theory that south-eastern Poland being a hunting ground, an area for resource gathering and exploited by communities located elsewhere finds strong support. Such a hypothesis is further supported by the fact that to date none of the SE Poland sites may be interpreted as being of the base camp type.

The counterargument to the above line of reasoning lies in chronological differences between those two regions. The Wilczyce camp is older – a series of datings places it mostly inside the Drays I, i.e. to a period when the discussed areas probably had not been occupied yet. The eastern settlements could be co-existent with the younger datings from Wilczyce as

Site	Lab. No	Material dated	14C date	14C cal date/TL date	Literature
Hłomcza	Lub-3578	sediment	-	14600±2300 (TL)	Łanczont et al. 2002
Hłomcza	Lub-3583	sediment	-	13500±2000 (TL)	Łanczont et al. 2002
Wierzawice	Poz-36901	charcoal	11560±40	13471-13300 calBP	Bobak et al. 2010
Wierzawice	Poz-41200	charcoal	11080±130	13160-12714 calBP	Bobak et al. 2017
Klementowice	Poz-54822	charcoal	12730±90	15485 - 14764 cal BP	Wiśniewski (red.) 2015

FIGURE 9: Absolute datings of Magdalenian Culture sites in south-eastern Poland (calibration of dates using IntCal13 curve).

long as we deem that these mark the younger chronological horizon of the site's occupation. As of today we have nothing on the chronology of settlement at Ćmielów-Mały Gawroniec.

Occupation of a large eastern site – at Klementowice – is chronologically just as old, thus eliminating that direction from our deliberations (*Figure 9*). The chronology of the Stare Baraki site has not been firmly established yet (T. Wiśniewski, in this volume).

Additionally, at both Cmielów-Mały Gawroniec and Klementowice the character of the assemblage is of a very different typological character (*Nebra type*), without analogues among material unearthed in SE Poland.

The fact remains that to date no site discovered in Rzeszowszczyzna could had been a base camp and thus a focal point for settlement. This, naturally, leads to the question - is this only the state of our knowledge today, or had there never been such a site there? It is not possible to answer this question. Most arguments seem to point to the first theory, i.e. that these lands were exploited by small bands of hunters. On the other hand chronology-based arguments, particularly those which limit the extent of occupation of these sites to the younger and youngest phases of the Magdalenian yet still preserving this cultural complex's main technological and typological features might be suggestive that there could had been some sort of population centre in that area; a centre which - albeit using imported materials - nevertheless followed its own cultural rhythm. In such a case the north-south human traffic should be interpreted not as that of dwellers of the Sandomierz area heading to their southern hunting grounds, but of people living in the Leżajsk-Przemyśl area visiting the north in order to acquire flint. Answers to such question may only be provided by further fieldwork, especially by discoveries of additional sites, as well as additional absolute dating.

The last question that should be asked is whether SE Poland actually marks the eastern border of the Magdalenian. The current state of knowledge leads to

an affirmative answer. At present there are no known sites from today's Ukraine which could be connected with this cultural complex. It seems that the line of the River San marked an insurmountable line. These leads to answer question, however, "why"? If people of the Magdalenian Culture were capable of crossing rivers such as the Vistula, Oder or Elbe, then why should the San be an impassable barrier? Maybe the reason was the cultural divide between the left bank - inhabited by people from the Magdalenian Culture, and the right bank - occupied by hunters from the Epigravettian. Such a hypothesis is undermined, however, by the Eppigravettian site unearthed at Święte (Łanczont et al. in press). This site not only is located on the left bank of the San but also was occupied at a period close - or even in parallel - to Magdalenian settlement in other parts of Poland; i.e. predating the arrival of Magdalenian people to the area under discussion. The materials used at that site prove that the inhabitants arrived from the east, from areas beyond the borders of the Magdalenian, from beyond the line of the River San. Hence the lands of SE Poland were not a barrier but rather a zone of contact between those two cultural traditions, an area where bands of Magdalenian and Epigravettian hunters could coexist. In light of the above it is difficult to categorically affirm that the lands on the right bank of the San could not had served as a contact zone. Nevertheless this still is only a hypothesis without support in archaeological record. Additionally the discussed area has not produced any material remains indicating cultural cross-fertilisation between the two taxonomic units. The possibility of Magdalenian Culture traditions having an impact in lands to its east was noted by Yu. Demidenko (Demidenko, in this volume). Such "inspiration" was to be evidenced by the presence of Magdalenian Culture styling in Ukrainian sites. In Polish sites the evidence of eastern influence was to be corroborated solely by single examples of imported raw materials.

Maybe there is some connection between the late settlement of the discussed area by Magdalenian people and the late settlement by Epigravettian population?

The south-eastern corner of Poland unquestionably lies on the border of Magdalenian Culture settlement. Nevertheless continuing advances in knowledge lead us to pose new and more complex questions concerning the character and chronology of this settlement, as well as its possible relations with other cultural traditions. We lack unequivocal answers to most of these questions, but it are expressly these questions which set out directions for further studies of the subject.

REFERENCES

- BOBAK D., ŁANCZONT M., MROCZEK P., POŁTOWICZ-BOBAK M., ADAM NOWAK, KUFEL-DIAKOWSKA B., KUSIAK J., STANDZIKOWSKI K., 2017: Magdalenian settlement on the edge of the loess island: A case study from the northern foreland of the Carpathians (SE Poland). *Quaternary International* 438: 158–173. https://doi.org/10.1016/j.quaint.2017.04.034
- BOBAK D., ŁANCZONT M., NOWAK A., POŁTOWICZ-BOBAK M., TOKARCZYK S., 2010: Wierzawice st. 31 nowy ślad osadnictwa magdaleńskiego w Polsce południowo-wschodniej. *Materiały i Sprawozdania Rzeszowskiego Ośrodka Archeologicznego* XXXI: 63–78.
- BOBAK D., POŁTOWICZ-BOBAK M., 2011: Osadnictwo starszej i środkowej epoki kamienia na terenach Podkarpacia w świetle badań na trasie autostrady A4 w latach 2005-2011. In: S. Czopek (Ed.): Autostradą w przeszłość. Katalog wystawy: 25-43. Rzeszów.
- BOBAK D., POŁTOWICZ-BOBAK M., 2013: Bayesian age modelling of the Magdalenian settlement in the territory of present-day Poland. *Recherches Archéologiques Nouvelle série* 5-6: 51-67.
- BOBAK D., POŁTOWICZ-BOBAK M., 2018: Variability of the Lithic Raw Material in the Upper and Late Palaeolithic sites in Southeastern Poland. *Archeologia Polona* 56: 11–21.
- CZOPEK S., 1999: Pradzieje Polski południowo-wschodniej I., Rzeszów.
- DEMIDENKO Y. E., 2020: Magdalenian in eastern Europe: is it really there? *Anthropologie* (Brno) 58, 2–3: 227–249. doi.org.10.26720/anthro.20.06.11.1
- KOZŁOWSKI S. K., 1977: Harpun ze stanowiska Przemyśl II. Acta Archaeologica Carpathica XVII: 139–143.
- ŁANCZONT M., MADEYSKA T., MUZYCZUK A., VALDE-NOWAK P., 2002: Hłomcza – stanowisko kultury magdaleńskiej w Karpatach polskich. In: J. Gancarski (Ed.): *Starsza i środkowa epoka kamienia w Karpatach* polskich. Pp. 147–187. Krosno.
- ŁANCZONT M., POŁTOWICZ-BOBAK M., BOBAK D., MROCZEK P., NOWAK A., KOMAR M., STANDZIKOWSKI

- K., in press: On the edge of eastern and western culture zones in the early Late Pleistocene. Święte 9 a new Epigravettian site in the south-east of Poland. *Quaternary International*: doi.org/10.1016/j.quaint.2020.08.028
- MITURA P., PASIEKA A., SŁOWIK K., 2005: Late Palaeolithic materials from site 4 in Rudna Wielka, Świlcza commune, podkarpackie voivodship. *Sprawozdania Archeologiczne* 57: 421-441.
- NERUDA P., 2010: Chronologická pozice paleolitického osídlení jeskyně Balcarky ve středoevropském kontextu. In: Z. Nerudová (Ed.): *Jeskyně Balcarka v Moravském krasu*. Anthropos 31 (N. S. 28). Pp. 83–95. MZM, Brno.
- POŁTOWICZ M., 2005: Wykorzystanie i dystrybucja surowców kamiennych w paleolicie Polski południowo-wschodniej. In: M. Kuraś (Ed.): *Archeologia Kotliny Sandomierskiej.* Rocznik Muzeum Regionalnego w Stalowej Woli 4: 183–193. Stalowa Wola.
- POŁTOWICZ M., 2006: The eastern borders of the Magdalenian culture range. *Analecta Archaeologica Ressoviensia* I: 11–28.
- POŁTOWICZ-BOBAK M., 2013: Wschodnia prowincja magdalenienu, Rzeszów.
- POŁTOWICZ-BOBAK M., BOBAK D., GĘBICA P., 2014: Nowy ślad osadnictwa magdaleńskiego w Polsce południowo-wschodniej. Stanowisko Łąka 11–16 w powiecie rzeszowskim. *Materiały i Sprawozdania Rzeszowskiego* Ośrodka Archeologicznego, XXXV: 237–248.
- PRZEŹDZIECKI M., MIGAL W., KRAJCARZ M., PYŻEWICZ K., 2011a: Ćmielów, st. 95 ("Mały Gawroniec"), woj. świętokrzyskie. Badania w roku 2009. Światowit VIII (XLIX) (2009-2010), nr. B: 191–193.
- PRZEŹDZIECKI M., MIGAL W., PYŻEWICZ K., 2011b: Badania nad osadnictwem paleolitycznym północnego obrzeżenia Wyżyny Sandomierskiej. Światowit VIII (XLIX) (2009-2010), nr. B: 27-34.
- SCHILD R. 2011: Wilczyce, un campement de chasseurs du Magdalénien supérieur en Pologne centrale, [w:], Mille et une femmes de la fin des temps glaciaires, s. 121–131, Paris.
- SCHILD R. (editor), 2014: Wilczyce. A Late Magdalenian Winter Hunting Camp in Southern Poland. Warszawa.
- SOBKOWIAK-TABAKA I., 2017: Rozwój społeczności Federmesser na Nizinie Środkowoeuropejskiej. Poznań.
- VALOCH K., 1988: *Die Erforschung der Kůlna Höhle 1961–1976*. Anthropos 24 (N.S. 16), MZM, Brno.
- WIŚNIEWSKI A., POŁTOWICZ-BOBAK M., BOBAK D., JARY Z., MOSKA P., 2017: The Epigravettian and the Magdalenian in Poland: New chronological data and an old problem. *Geochronometria* 44, 1: 16–29. https://doi.org/10.1515/geochr-2015-0052
- WIŚNIEWSKI T., (Ed.) 2015: Klementowice. A Magdalenian site in eastern Poland. Lublin.
- WIŚNIEWSKI T., 2020: Stare Baraki. A new Magdalenian site in eastern Poland. *Anthropologie* (Brno) 58, 2–3: 303–320. doi.org.10.26720/anthro.20.06.12.2

Marta Połtowicz-Bobak* Instytut Archeologii UR Ul. Moniuszki 10 Pl-35-015 Rzeszów Polska E-mail: mpoltowicz@lithics.eu

*Corresponding author.