

HOW FAR EAST DID HAMBURGIAN CULTURE REACH?

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Abstract

A serious argument against the reach of Hamburgian Culture to the eastern Vistula is the position of material from areas to the east of the Vistula, the lack of any radiocarbon dates and the unclear geochronological context.

Key words: Hamburgian Culture, Poland, Vistula, Hamburgian technocomplex, sites, Lithuania, Byelorussia.

Hamburgian Culture, the subject of our interest, was recognised in 1931 in the Hamburg area. At first, on the basis of pollen studies, it used to be dated to Dryas I, then to the Meiendorf Period; at present the dating to the Bölling Interstadial is favoured. It is believed that it could have developed up to Dryas II or even to the Alleröd Period. The radiocarbon dates oscillate between 13000–11750 ¹⁴C BP (Burdukiewicz 1987a: 107; 1992: 6; Leroi-Gourhan 1994: 495–496, 885–886). The standard assemblages contain blade blanks struck from single and opposed double platform cores. The diagnostic tools of this culture are shouldered points and Zinken perforators, usually double Zinken.

Hamburgian points (shouldered points) are produced from blades notched on one edge. They have an obliquely retouched top edge, and the shoulder (notch) is produced by concave retouch. Usually the medial part between the shoulder and a tang remains unretouched, although there are also forms with a continuous retouch on the edge. The Havelte-type point, elongated and willow-leaf shaped, is one of its variants. The tang of the shouldered points is relatively short and asymmetrical. It must be remembered that single finds of shouldered points resembling Hamburgian ones are recorded also on Magdalenian and Late Gravettian sites (Burdukiewicz 1987a: 63).

Zinken perforators are found in northern Germany within the context of Federmesser assemblages, and in southern Scandinavia within the context of Bromme Culture assemblages. Mesolithic Zinken perforators have also been registered (Jankowska 1980; Galiński 1983; Terberger, Lübke 2004). As for other types of tools, end-scrapers manufactured exclusively on blades, often with retouched edges, are numerous, as well as burins, predominantly on a truncation, truncated blades and combined tools. Hardly any short end-scrapers or arch-backed blades have been record-

ed. They are usually believed to be of later origin, although they have been discovered on well-dated sites, such as Olbrachcice 8 (Burdukiewicz 1976: 6), and on the basis of their occurrence, suggestions of the contacts between the Hamburgian and the technocomplex with backed blades are put forward.

To conclude, only a set of a number of forms and their recurrence allows us to claim the existence of a given culture on a given area. Additionally, it is the context that plays a significant part in the process of “reading” the remains of the past reality (Minta-Tworzowska 1994). A consistent spatial distribution of Hamburgian assemblages with specific inventories and in a strictly defined ecological zone was recognised only in the West European Lowlands, mainly in northern Germany and Holland (Burdukiewicz 1987a: 63). In this paper we wish to focus on the traces of Hamburgian settlement recorded to the east of the above-mentioned area.

In archaeological literature there are several dozen sites that are or were argued to have been connected with the culture in question. Three main groups may be distinguished here (compare Fig. 1). The first comprises complete assemblages, produced as the result of excavatory research, consisting of a set of diagnostic tools and located in a well-defined geochronological context; they are commonly believed to be Hamburgian. They mark the easternmost concentration of Hamburgian occupation in Poland. These are the already well-known assemblages from Siedlnica 17 (Burdukiewicz 1999; Burdukiewicz et al 1996; 1997; 1998) and Siedlnica 17a (Burdukiewicz 1981; 1984; 1985; 1987a) with three flint concentration sites, Olbrachcice 8 (Burdukiewicz 1975; 1976; 1977; 1980), together with the recently excavated site Lęgoń 5 (Burdukiewicz, Szykiewicz 2002; Burdukiewicz et al 2003), Liny 1 (Kobusiewicz 1975) and Mirkowice 33

(Chłodnicki, Kabaciński 1998; Kabaciński et al 1999). The Kragola 25 site (AUT 381) should also be included here (Kabaciński, Kobusiewicz, forthcoming). This group should probably also comprise the small assemblage from Nowy Młyn 3 (Sawicki 1936; Kozłowski, Kozłowski 1977) and a controversial assemblage from Tanowo 2 (Galiński 1987; Kobusiewicz 1999).

The second group comprises sites with chronologically varied assemblages where single diagnostic tools or implements, typologically similar to classic Hamburgian inventories, have been recorded. In the area of eastern Germany (Brandenburg, Mecklenburg) this group would include such sites as Buchow-Karpzow (Mey 1960; Gramsch 1987; Cziesla 2001), Dyrotz (Mey 1960; Gramsch 1987; Cziesla 2001), Gramnitz (Terberger, Lübke 2004), Glasewitz (Terberger, Lübke 2004) and Lüssow (Terberger, Lübke 2004). In the area of Poland single implements have been recorded on such sites as Olbrachcice 14 (Burdukiewicz 1987c), Siedlnica 16 (Burdukiewicz 1987c), Siedlnica 33 (Burdukiewicz 1987c), Wojnowo 2 (Kobusiewicz 1999), Żółwin 29 (Kabaciński et al 1998), Trzebic Młyn 2 (Bagniewski 2001; 2002), Rogów Opolski 9 (Kozłowski 1964; Kozłowski, Kozłowski 1977), Rzuchów 43 (Kabaciński 2004), Cichmiana 2 (Kabaciński et al, forthcoming), Nowy Młyn 2 (Schild 1975). As for Lithuania, there have been single finds recorded on the sites of Kašetos (Kaszety) (Rimantienė 1971; Szymczak 1995; Štavičius 2002), Margiai "Island" (Štavičius 2002), Maksimonys 1 (Štavičius 2002), Varėnė 2 (Štavičius 2002), Ežerynai 8 (Rimantienė 1994; Štavičius 2002), Rudnia (Rimantienė 1994) and Lake Glynas (Rimantienė 1994). Some shouldered points have been recorded in Byelorussia and Ukraine in the assemblages by Lake Odrižin (Szymczak 1995; Obuchowski 2003), Skrobicze 107 (Obuchowski 2003), Pribor 8 (Залізник 1999; Szymczak 1995; Obuchowski 2003), Сапанов (Сапанаў), concentration 1 (Bryk 1928; Szymczak 1995).

The third category of finds (not determined in number and still a matter of controversy) related to the Hamburgian comprises antler and bone artefacts. As far as eastern Germany is concerned, two finds have been recorded: a fragment of reindeer antler with traces of working from Großwusterwitz, and a bone awl from the Stimming collection (Rust 1943; Gramsch 1987; Cziesla 2001; Terberger, Lübke 2004). As for northeast Poland, the Kaliningrad area and Lithuania, we know of single fragments of worked reindeer antler from the sites of Lake Popówka Mała (Gross 1939; Okulicz 1973; Schild 1975; Szymczak 1995), Rusajny (Okulicz 1973; Szymczak 1995), Lake Wojsak (Okulicz 1973; Szymczak 1995), Wysokowa (Okulicz 1973; Szymczak 1995), and a spearhead manufactured from

aurochs bone from Abschrutten (Римантеене 1971; Okulicz 1973; Szymczak 1995).

An analysis of the distribution of these sites on the lowlands of Central and Eastern Europe shows a clear, relatively consistent spatial distribution of Hamburgian occupation in Poland. It has been exposed both on Old and Late Glacial territory in central Poland, barely crossing the line from Noteć in the north (Toruń–Eberswald ice marginal valley) to the middle Vistula in the east. In the area in question there are also sites with single implements related to Hamburgian Culture. They are separated from the consistent spatial distribution of the Hamburgian occupation on the West European lowlands by a settlement desolation, widely mentioned in literature, with a couple of single artefacts from the region between the Elbe and Oder rivers (Gramsch 1987; Burdukiewicz 1987b; Cziesla 2001; Terberger, Lübke 2004). Assemblages distributed in a consistent area in the basin of the River Nemunas in southeast Lithuania, to the north of the maximum range of the glaciation in the Pomeranian substage, comprise a separate group of finds. Single artefacts from the region of western Polesye and Ukraine occurred in the area not covered by ice during the last glaciation. Finds of antler with traces of working and a bone implement concentrate in the Late Glacial region of northeast Poland, the Kaliningrad area and west Lithuania (formerly East Prussia).

It is widely believed that Hamburgian people lived predominantly on the border of shrubby and park-like tundra and specialised in reindeer hunting, based on seasonal migrations (Burdukiewicz 1992). However, recent ecological studies point to the great local differentiation of the natural environment in the Bölling Interstadial on the European lowlands. According to some researchers, climate change during the Bölling Period, with the climate becoming warmer and probably more humid, was not explicit everywhere (Sulgostowska 1989; Madeyska 1995). In the area of Poland the Bölling Interstadial (dated generally to 13000–12000 ¹⁴C BP) is marked by the gradual transition of the former environment of shrubby tundra into park-like communities or light forests with the domination of birch (*Betula*). Pollen diagrams from organic sediments¹ show the spread of forests of the temperate cool climatic zone (Lindner 1992; Kozarski, Nowaczyk 1999; Ralska-Jasiewiczowa 1999). To the north the temperatures were probably lower (Schild 1973; Kobusiewicz 1999). An analysis of the isopolar map implies that in the zone of central Poland, sparse and light birch forest predominated, with pine and patches

¹ Data from 12 sites, mainly from west and central Poland (Madeyska 1995; Ralska-Jasiewiczowa 1999).

of photophilous plants occupying a subordinate place², whereas in northern and eastern Poland clusters of birch trees were widespread within the tundra, thus constituting a landscape of forest tundra (Madeyska 1995). The environmental conditions in the region of Lithuania, Byelorussia and northwest Russia resembled those of northeast Poland (Kabailienė 1998; Калечыц 2001; Лисицин 2003). Forest tundra was widespread, with zones of birch and pine together with herbaceous plants, mostly of grass type (*Poaceae*) and plants of the Cyperaceae family (*Cyperaceae*) (Kabailienė, Raukas 1987; Kabailienė 1998).

Almost all large sites, concentrating in the central part of western Poland, well dated (radiocarbon dating and pollen analysis), yielded numerous assemblages with all tools regarded as diagnostic for Hamburgian Culture. Sometimes they also produced mammal and fish remains (Kabaciński et al 1999), as well as some permanent features, eg hearths (Mirkowice 33, Kabaciński et al 1999: 235) or even the remains of a dwelling structure (Olbrachcice 8, Burdukiewicz 1992: 102). The Tanowo 2 site is exceptional in this case, because although it produced some classic implements, such as an end-scraper on a blade with retouched edges and a Zinken-like perforator, no shouldered points were recorded. The isolated location of this site also raises some doubts: it is situated hundreds of kilometres from the zone of dense Hamburgian occupation, which hardly ever crosses the limit to the north and east of the maximum range of the ice sheet in the Pomeranian stadial. What is more, this phenomenon has been recorded only in the region most densely occupied by Hamburgian people (compare Burdukiewicz 1981, map; Hølm, Rieck 1983; Hølm 1996). The author himself is not certain as to such an early chronology of the site (Galiński 1983).

The sites that produced a few characteristic implements (Zinken perforators or shouldered points) discovered as single finds or among chronologically different assemblages in Poland are situated a relatively small distance from the large sites located in quite a densely occupied area (compare the map). Some of them could be traces of temporary camps, “caches” etc (Binford 1980: 12; after Burdukiewicz 1992: 102). However, it is not unlikely that some of them are only Hamburgian-like in terms of typology, not being in any way related to this culture (eg in Cichmiana 2 among a couple of thousand Swiderian artefacts, four implements typologically Hamburgian-like were registered; compare also Libera 1995). What is more, the sites in

question do not extend beyond the above-mentioned Noteć–Vistula line, which additionally confirms the possibility of Hamburgian penetration of these sites from the region of dense occupation.

Finds of worked antler from Lake Popówka Mała, from the vicinity of Lake Wojsak, Rusajny, Wysockowo, regarded as the oldest, and thus regarded as connected with the presence of Hamburgian Culture, are dated to the period generally before 16000 ¹⁴C BP. Such a chronology is accepted by some archaeologists (Schild 1975), although the abilities and knowledge of the author of the pollen analysis, namely Gross, were discredited by his contemporaries (Gripp 1939–1940, after Burdukiewicz 1987a). Even if the chronology is accurate, it refers to the period preceding the Hamburgian settlement of the lowlands. What is more, the time span of the occurrence of these artefacts is wide (it refers particularly to the ornament), from the Upper Palaeolithic up to the Mesolithic (Terberger, Lübke 2004). The chronology of the spearhead from aurochs bone (*Bos primigenius*), dated to the Bölling Period (Rimantienė 1971), is doubtful. This animal appears in Poland circa 12000 years BP (Pawlowski 1999), and even later in other areas of the European lowlands (Aaris-Sørensen 2001). The cultural affiliation of the antler with traces of working from Grosßwusterwitz and the bone awl from the Stimming collection from the region of Germany, with well-established analogies from classic Hamburgian sites, is still under discussion (Cziesla 2001; Terberger, Lübke 2004). As for the implement from Dyrotz, it is probably of Mesolithic or even later origin, whereas already Taute argued that the artefacts from Buchow-Karpzow belonged to Federmesser Culture (Cziesla 2001: 38). Although the points from Gramnitz 4 and Glasewitz 10 are formally Hamburgian, their later origin cannot be neglected (Terberger, Lübke 2004).

Traces of Hamburgian settlement to the east of the Vistula, namely a few single artefacts regarded as diagnostic tools, come predominantly from surface or museum collections (Obuchowski 2003; Štavičius 2002; Sulgostowska 1989). Apart from the technological aspect, one of the criteria relating them to Hamburgian Culture is the presence of a white (bluish) patina, which testifies to the relatively older age of these artefacts. As for the form of the implements from Lithuania, resembling shouldered points, we must take into consideration the fact that they are usually fragmented artefacts, broken either in the distal or proximal part, which makes the reconstruction of the proper form much more difficult. What is more, there is no agreement as to the cultural affiliation of these forms, even among those specialising in the archaeology of the region (compare Butrimas, Ostrauskas 1999: 268; Štavičius 2002: 182; Zal-

² Particularly in the western part of Poland, in drier and more sandy places, pine forests were also present, eg the Warsaw-Berlin ice marginal valley (Tobolski 1966; Ralska-Jasiewiczowa 1999).

iznyak 2000: 32). On the other hand, the patina is a kind of a post-depositional modification of the surface as a result of the flint deposition in the earth. Depending on the pH type of the soil, the effect of the sun, chemical processes in the soil and the presence of various minerals, artefacts can have a patina in different colours, namely white (initially bluish), colourful, and in the form of a glossy surface. The experiments carried out (by Schmalz 1960, and Pilsson 1985, after Winiarska-Kabacińska 1996) point out that with various alkaline solutions, it is possible to obtain a white patina in a short period of time. The white patina is formed in soil with a pH of 10 or more, for example podsols on eolian cover sands, or even peat. Additionally, its formation is also dependent on the influence of the sun (Winiarska-Kabacińska 1996: 28). On no Hamburgian site excavated so far, have a massive amount of artefacts with a patina been recorded yet. The example of a broken retouched blade (of Magdalenian Culture) is striking here: after matching together, it turned out that one part of it was covered with a patina, whereas the other was not (Winiarska-Kabacińska 1993: 241).

A serious argument against the above-mentioned chronological position of material from areas to the east of the Vistula is the lack of any radiocarbon dates and the unclear geochronological context. We argue that this provides additional arguments against far-reaching conclusions, such as the division of artefacts into chronologically differentiated assemblages (Štavičius 2002: 182). Although in Lithuania, Byelorussia, Ukraine and northwest Russia the environmental conditions were favourable enough for settlement to appear as early as the Bölling Period, no traces of it have been registered. Some archaeologists believe that the earliest period for settlement to appear is the Alleröd Interstadial (eg Калечыц 2001; Лисицин 2003), with its warming of the climate at the time in question and the succession of birch forests (in the first phase) and birch-pine forests (in the second phase). This phenomenon permitted a permanent and continuous process of occupying the Lowlands of Central and Eastern Europe. In western Byelorussia in the Nemunas valley, and the upper part of the Pripets valley, this settlement is related to Lynby Culture, but in eastern Byelorussia to Grensk Culture (Калечыц 2001).

Regarding sites situated to the east of the Vistula, the nearest well-documented Hamburgian site has been recorded in Krągola 25 (AUT 381) (about 100km to the east of Poznań, Kabaciński, Kobusiewicz, forthcoming) in Poland. So far there is no, even questionable, proof (compare the situation in northeast Germany) to talk about a Hamburgian occupation to the east of the Vistula. A field survey directed by J. Siemaszko (we would like to thank him for this personal com-

ment) revealed that in the investigated area of northeast Poland, among a couple of thousand sites registered (identified predominantly on the basis of surface finds), settlement earlier than from the Alleröd Period has not been recorded. It goes without saying that the deposition of flint implements much deeper is possible (eg in Mirkowice 33 traces of Hamburgian settlement were registered 50–60cm below the present ground level, Chłodnicki, Kabaciński 1997: 5). Strong erosion may account for their presence near the surface of the ground, or it might also be explained, quite to the contrary, by the lack of erosion of layers older than Allerödian ones (information from J. Siemaszko).

We assume that the technocomplexes distinguished so far (with shouldered points, backed blades and tanged points) reflect ways of adaptation of societies to different ecological niches. Theoretically speaking, it is possible that herds of reindeer travelled considerable distances, and that people followed them (Kierdorf 1996: 101). The distribution of plants such as sea-buckthorn (*Hippophaë rhamnoides*) and mountain avens (*Dryas octopetala*) (Ralska-Jasiewiczowa 1999; Kabailienė 1998), tolerating thin and not permanent snow cover, further confirms the possibility of the existence of reindeer in the area in question.

However, it must be reemphasised that from the areas to the east of the Vistula, where the Hamburgian occupation is supposed to have existed, there are no radiocarbon dates which would permit the association of given materials with occupation in the Bölling Period. The need for better evidence for such early dated settlement, as well as for data on the economy of the Late Palaeolithic, has already been expressed in archaeological literature (Sulgostowska 2000: 268). Arguments for the occurrence of a Hamburgian occupation in the Nemunas valley, up to the Upper Dnieper and Pripets during the Bölling Period and in the Older Dryas, seem unacceptable to us. The environmental conditions may account for it. We may observe here the impossibility or reluctance of Hamburgian societies occupying the zone of open forest in Poland to settle in a different environment (with a relatively harsher climate). Thus, the territory to the east of the border mentioned could have been an area that was not possible for Hamburgian societies to settle until the warm Alleröd Interstadial.

It is difficult to point out the routes of migrations, particularly to such distant areas in relation to the area of the consistent spatial distribution of Hamburgian sites in Poland assumed to be a point of departure for the migrations of Hamburgian settlers to Lithuania, Byelorussia and Ukraine (Štavičius 2002; Залізняк 1999). The above-mentioned complete settlement desolation during the Bölling Period in Poland to the east of the Vis-



Fig. 1. Map of Hamburgian sites and sites related to Hamburgian recorded in the middle and east of the European lowlands ■ concentrations of Hamburgian sites after Burdukiewicz 1987a; ▣ Hamburgian sites; • single “Hamburgian-type” finds; √ antler and bone artefacts; ○ maximum range of the ice sheet in the Pomeranian stadial

tula, and the total lack of sites in Poland that could be dated to the Older Dryas, testify against such ideas. We must remember that this period (12000–11800 ^{14}C lat BP) is marked by some change in the climate, which became colder, with a possible regional intensification of droughts^K, which resulted in a regression or even a decline in the growth of forests. These processes are well observed in the stratigraphy of site 33 in Mirko-wice (Kabaciński et al 1999: 215). So strong was the deterioration of the climate in northwest Poland, that a perennial permafrost was formed and open communities with Dryas flora and numerous heliophytes returned (Madeyska 1995). In Lithuania, Byelorussia and northwest Russia, shrubby tundra was widespread in the Older Dryas (Kabailienė, Raukas 1987; Kabailienė 1998; Калечыц 2001; Лисицин 2003). The successive process of occupying central and eastern Poland took place not earlier than in the Alleröd Period, whereas the large-scale migration happened in the Late Dryas (Libera 1995: 51).

In the light of the present state of research, we propose that the eastern and northeastern border of the Hamburgian expansion on the lowlands of Central and Eastern Europe was limited by the line of the Noteć and the middle part of the Vistula. We think that the typologi-

cal aspect (with no other data available) cannot be decisive. The diagnostic tool on the area of dense occupation of a given culture does not have to be diagnostic beyond it. This may be exemplified by the (relatively remote) phenomenon of finds of classic arrowheads of Ahrensburg type in the Late Neolithic assemblages from the Western Desert in Egypt and in Turkey (Borbrowski, research; Kobusiewicz, kind information).

Although we do not definitely reject the possibility that Hamburgian Culture existed east of the Vistula, we argue that we should remain cautious while drawing the final conclusions, until we identify homogenous Hamburgian sites and acquire radiocarbon dates. Such was the case in Poland in the 1960s (compare, for example, Schild 1964: 227).

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Table 1. List of Hamburgian sites and sites related to Hamburgian sites recorded in the middle and east of the European lowlands

Number on the map	SITE district/ country	Type of investigation	Evidence category	References
1	GRAMNITZ Ludwigslust/ Germany	survey research	Shouldered point	Terberger, Lübke 2004
2	GLASEWITZ Güstrow/ Germany	survey research	Shouldered point ?	Terberger, Lübke 2004
3	LÜSSOW Güstrow/ Germany	excavations	Zinken-perforator	Terberger, Lübke 2004
4	BUCHOW- KARPZOW Nauen/ Germany	survey research	“Type of shouldered point”	Mey 1960; Gramsch 1987
5	DYROTZ Nauen/ Germany	survey research	3 Zinken-perforators	Mey 1960; Gramsch 1987
6	„STIMMING COLLECTION”/ Germany	stray finds	Rod with sculptured end and geometric decoration	Gramsch 1987; Cziesla 2001; Terberger, Lübke 2004
7	GROßWUSTERWITZ Potsdam/ Germany	stray finds	Fragment of reindeer antler with traces of incision	Terberger, Lübke 2004
8	TANOWO 2 Police/ Poland	excavations	Type of Zinken-perforators, end- scrapers on blade and Tarnowa-type, truncations, cores	Galiński 1987
9	ŻÓŁWIN 29 Międzyrzecz/ Poland	excavations	Shouldered point	Kabaciński et al 1998
10	LINY (LAKE) 1 Wolsztyn/ Poland	survey research and excavations	About 1100 flint artefacts from surface collection lost. Ca. 932 flint finds from excavations (cores, shouldered points Zinken-perforators, end-scrapers, burins, microtruncations, <i>Mikroformen</i>); some stone artefacts	Kobusiewicz 1975; 1999
11	WOJNOWO 2 Zielona Góra/ Poland	excavations	shouldered point, not numerous debitage	Kobusiewicz 1999
12	ŁĘGOŃ 5 Nowa Sól/ Poland	excavations	Ca. 263 Hamburgian and Federmesser artefacts	Burdukiewicz, Szynkiewicz 2002
13	OLBRACHCICE 8 Wschowa/ Poland	excavations	Ca. 5645 and 312 stone artefacts, 400 animal remains	Burdukiewicz 1975; 1976; 1977; 1980; 1983; 1987a
14	OLBRACHCICE 14 Wschowa/ Poland	excavations	Shouldered point	Burdukiewicz 1987c; 1986
15	SIEDLNICA 17 Wschowa/ Poland	excavations	More than 3000 Hamburgian flint artefacts; stone and amber artefacts	Burdukiewicz 1999; Burdukiewicz, Herman, Vermeersch 1996; 1997; 1998; Burdukiewicz et al 1996
16	SIEDLNICA 17a Wschowa/ Poland	excavations	About 6000 Hamburgian flint artefacts	Burdukiewicz 1981; 1982; 1984; 1985; 1987
17	SIEDLNICA 16 Wschowa/ Poland	survey research	Single flint finds	Burdukiewicz 1987c
18	SIEDLNICA 33 Wschowa/ Poland	survey research	Single flint finds	Burdukiewicz 1987c
19	TRZEBICZ MŁYN 2 Strzelce-Drezdenko/ Poland	survey research and excavations	3 shouldered points	Bagniewski 2001; 2002

Number on the map	SITE district/ country	Type of investigation	Evidence category	References
20	MIRKOWICE 33 Wągrowiec/ Poland	excavations	About 2600 flint artefacts (Zinken-perforators, shouldered points, end-scrapers, burins, cores, <i>Mikroformen</i>), stone artefacts, animal remains	Chłodnicki, Kabaciński 1998; Kabaciński et al 1999
21	ROGÓW OPOLSKI 9 Krapkowice/ Poland	survey research	3 shouldered points	Kozłowski 1964; Kozłowski, Schild 1975
22	KRAĞOLA 25 Konin/ Poland	excavations	About 1100 flint artefacts (9 shouldered points, end-scrapers on blades, perforators, burins, cores, <i>Mikroformen</i>)	Kabaciński, Kobusiewicz 2007 (forthcoming)
23	CICHMIANA 2 Koło/ Poland	excavations	Single flint tools	Kabaciński, Bobrowski, Sobkowiak-Tabaka 2007 (in print)
24	RZUCHÓW 43 Koło/ Poland	excavations	Part of shouldered point, triangle	Kabaciński 2004
25	NOWY MŁYN (RYDNO) II Starachowice/ Poland	excavations	Shouldered point	Schild 1976
26	NOWY MŁYN (RYDNO) III Starachowice/ Poland	excavations	2 Zinken-perforators ?, shouldered point, retouched blade	Sawicki 1936; Kozłowski, Kozłowski 1977
27	RUSAJNY Bartoszyce/ Poland	stray finds	Fragment of reindeer antler with traces of incision	Okulicz 1973; Szymczak 1995
28	POPÓWKA MAŁA (LAKE) Giżycko/ Poland	stray finds	Fragment of reindeer antler with traces of incision	Gross 1939; Okulicz 1973; Schild 1976; Szymczak 1995
29	WOJSAK (LAKE) Giżycko/ Poland	stray finds	2 Fragments of reindeer antler with traces of incision	Okulicz 1973; Szymczak 1995
30	WYSOKOWA Polessk/ Russia	stray finds	Fragment of reindeer antler with traces of incision	Okulicz 1973; Szymczak 1995
31	ABSCHRUTTEN (OBSZRUTA) Dobrowolsk/ Russia	stray finds	Spearhead from aurochs bone (<i>Bos primigenius</i>)	Римантеене 1971; Okulicz 1973; Szymczak 1995
32	РАПАЛКА (Папялькяй) Labguwa (Лабгува)/ Russia	stray finds	Fragment of reindeer antler with traces of incision	Римантеене 1971
33	EŽERYNAI 8 Alytus/ Lithuania	excavations	Single artefacts among 23000 flint finds	Štavičius 2002
34	MAKSIMONYS 1 Varėna/ Lithuania	survey research	3 shouldered points	Szukiewicz 1901; Štavičius 2002
35	VARĖNĖ 2 Varėna/ Lithuania	excavations	Fragments of tanged or shouldered points ?, retouched flakes	Štavičius 2002
36	KAŠĖTOS Varėna/ Lithuania	survey research	13 artefacts with patina (2 shouldered points, 1 tanged point (Havelte-type), 5 Zinken-perforators, 3 scrapers, 1 borer, 1 broad double truncated blade)	Римантеене 1971; Szymczak 1995; Štavičius 2002
37	MARGIAI „ISLAND” Varėna/ Lithuania	survey research	10 artefacts with patina (3 tanged points (Havelte-type), 2 Zinken-perforators, 2 end scrapers, 1 burin, 2 blades)	Štavičius 2002
38	RUDNIA Varėna/ Lithuania	survey research	Shouldered point	Rimantienė 1994
39	GLYNAS (LAKE) 6 Varėna/ Lithuania	?	3 shouldered points	Rimantienė 1994

Number on the map	SITE district/ country	Type of investigation	Evidence category	References
40	SKROBICZE 107 Brest/ Byelorussia	survey research	Shouldered point	Sulgustowska 1989; Obuchowski 2003
41	ODRIŽIN (LAKE) Ivanowo/ Byelorussia	stray finds	Shouldered point	Szymczak 1995; Obuchowski 2003
42	PRIBOR 8 Narodič/ Byelorussia	?	Shouldered points ?	Залізняка 1999; Szymczak 1995; Obuchowski 2003
43	SAPANÓW (САПАНАЎ)- gn.1 Kremenec/ Ukraine	survey research	Shouldered point	Bryk 1928; Sulgustowska 1989

References

- Aaris-Sørensen, K. 2001. *The Danish fauna throughout 20,000 years from mammoth steppe to cultural steppe*. Copenhagen.
- Bagniewski, Z. 2001. Wielofazowe obozowisko Trzebic Młyn stan. 2, (Kotlina Gorzowska). In: *Śląskie Sprawozdania Archeologiczne*. Wrocław, t. 43, 35–48.
- Bagniewski, Z. 2002. Obozowisko Trzebic Młyn 2 (Kotlina Gorzowska) w świetle badań w roku 2001. In: *Śląskie Sprawozdania Archeologiczne*. Wrocław, t. 44, 97–110.
- Bryk, J. 1928. *Kultury epoki kamiennej na wydmach zachodniej części południowego Wołynia*. Lwów.
- Butrimas, A., Ostrauskas, T. 1999. Tanged Points Cultures in Lithuania. In: *Tanged Points Cultures in Europe*. Lublin, 267–271.
- Burdukiewicz, J.M. 1975. Z badań sondazowych stanowisk paleolitycznych i mezolitycznych w Dolinie Kopanicy (Rejon Olbrachcic i Siedlenicy, pow. Wschowski). In: *Śląskie Sprawozdania Archeologiczne*. Wrocław, t. XVII, 5–12.
- Burdukiewicz, J.M. 1976. Sprawozdanie z badań wykopaliskowych stanowisk kultury hamburskiej w Olbrachcicach koło Wschowy. In: *Śląskie Sprawozdania Archeologiczne*. Wrocław, t. XVIII, 5–8.
- Burdukiewicz, J.M. 1977. Stanowisko kultury hamburskiej w Olbrachcicach, gm. Wschowa. In: *Śląskie Sprawozdania Archeologiczne*. Wrocław, t. XIX, 5–8.
- Burdukiewicz, J. M. 1980. Wyniki badań stanowiska kultury hamburskiej w Olbrachcicach, gm. Wschowa, woj. Leszno. In: *Sprawozdania Archeologiczne*, t. XXXII, 9–27.
- Burdukiewicz, J.M. 1981. Stanowisko kultury hamburskiej Siedlnica 17a, gm. Wschowa. In: *Śląskie Sprawozdania Archeologiczne*. Wrocław, t. XXII, 5–9.
- Burdukiewicz, J.M. 1984. Stanowisko kultury hamburskiej Siedlnica 17a, gm. Wschowa (III sezon badań). In: *Śląskie Sprawozdania Archeologiczne*. Wrocław, t. XXIV, 5–8.
- Burdukiewicz, J.M. 1985. Stanowisko kultury hamburskiej Siedlnica 17a, gm. Wschowa (IV sezon badań). In: *Śląskie Sprawozdania Archeologiczne*. Wrocław, t. XXV, 5–9.
- Burdukiewicz, J.M. 1986. *The late pleistocene shouldered point assemblages in Western Europe*. Leiden.
- Burdukiewicz, J.M. 1987a. *Późnoplejstoceny zespoły z jednozadziorcami w Europie Zachodniej*. Wrocław.
- Burdukiewicz, J.M. 1987b. A review of the Later Upper Palaeolithic in the Oder and Vistula Basins in the Light of Recent Research. In: *Oxford Journal of Archaeology*. Oxford, vol. 6, No. 1, 1–20.
- Burdukiewicz, J.M. 1987c. Late Paleolithic Settlements in the Kopanica Valley. In: *Late Glacial in Central Europe: Culture and Environment*. Wrocław, 183–213.
- Burdukiewicz, J.M. 1992. Struktury osadnicze w paleolicie schyłkowej Europy Środkowej. In: *Problemy badań nad osadnictwem pradziejowym*. Prace Komisji Archeologicznej PAN, Oddział we Wrocławiu. Wrocław, 1987, Nr 10, 97–110.
- Burdukiewicz, J.M., Herman, C.F., Vermeersch, P.M. 1996. Nowa krzemienica kultury hamburskiej z Siedlnicy 17, gm. Wschowa. In: *Śląskie Sprawozdania Archeologiczne*. Wrocław, t. 38, 35–52.
- Burdukiewicz, J.M., Herman, C.F., Vermeersch, P.M. 1997. Dalsze badania krzemienicy kultury hamburskiej z Siedlnicy 17, gm. Wschowa. In: *Śląskie Sprawozdania Archeologiczne*. Wrocław, t. 39, 21–37.
- Burdukiewicz, J.M., Herman, C.F., Vermeersch, P.M. 1998. Osadnictwo kultury hamburskiej na stanowisku Siedlnica 17, gm. Wschowa. In: *Śląskie Sprawozdania Archeologiczne*. Wrocław, t. 40, 9–29.
- Burdukiewicz, J.M. 1999. Trzecia krzemienica kultury hamburskiej z Siedlnicy, gm. Wschowa. In: *Śląskie Sprawozdania Archeologiczne*. Wrocław, 2002, t. 41, 39–52.
- Burdukiewicz, J.M. Szynekiewicz, A. 2002. Badania archeologiczne i paleogeograficzne stanowiska Łęgoń, pow. Wschowa. In: *Śląskie Sprawozdania Archeologiczne*. Wrocław, t. 44, 57–78.
- Burdukiewicz, J.M. Szynekiewicz, A., Malkiewicz, M. 2003. Dalsze badania osadnictwa schyłkowopaleolitycznego na tle warunków paleoekologicznych w Łęgoniu, pow. Wschowa. In: *Śląskie Sprawozdania Archeologiczne*. Wrocław, t. 45, 17–34.
- Chłodnicki, M., Kabaciński, J. 1998. Mirkowice – another settlement of Hamburgian Culture at the Polish Plain. In: *Przegląd Archeologiczny*, t. 45, 5–23.
- Cziesła, E. 2001. Zur Besiedlungsgeschichte von Berlin-Brandenburg: Die Anfänge. In: *Zeit- Räume. Gedenkschrift für Wolfgang Taut*. Bonn, 381–396.
- Galiński, T. 1983. Zagadnienie osadnictwa późnopleistoceny na terenie Pomorza. In: *Materiały Zachodniopomorskie*. Szczecin, t. XXIX, 23–49.
- Galiński, T. 1987. An Investigation into Late Paleolithic Settlement of Pomeranian Territories. In: *Late Glacial in Central Europe: Culture and Environment*. Wrocław, 143–163.
- Gramsch, B. 1987. The Late palaeolithic in the area lying between the River Oder and Elbe/ Havel. In: *Late Glacial*

- in *Central Europe: Culture and Environment*. Wrocław, 107–119.
- Gross, H. 1939/1940. Die Renttjäger- Kulturen Ostpreussens. In: *Praehistorische Zeitschrift*, Band 30-31, 39–67.
- Hølm, J. 1996. The Earliest Settlement of Denmark. In: *Acta Archaeologica Lundensia*. Lund, Series 8^o, No 24, 43–58.
- Hølm, J., Rieck, F. 1983. Jels I- the First Danish Site of Hamburgian Culture. In: *Journal of Danish Archaeology*, vol. 2, 7–11.
- Jankowska, D. 1980. Z badań nad najstarszym osadnictwem w rejonie dolnej Odry. In: *Materiały Zachodniopomorskie*. Szczecin, t. XXVI, 19–38.
- Kabaciński, J. 2004. Osadnictwo mezolityczne na stanowisku Rzuchów 43, gm. Dąbie (AUT 431) (manuscript).
- Kabaciński, J., Krause, E., Szamałek, K., Winiarska-Kabacińska, M. 1998. Żółwin, st. 29. In: *Archeologiczne badania ratownicze wzdłuż trasy gazociągu tranzytowego*. Ziemia Lubuska, Poznań, t. I, 315–359.
- Kabaciński, J., Bratlund, B., Kubiak, L., Makowiecki, D., Schild, R., Tobolski, K. 1999. The Hamburgian Settlement at Mirkowice: Recent Results and Research Perspectives. In: *Folia Quaternaria*. Kraków, Nr 70, 211–238.
- Kabaciński, J., Bobrowski, P., Sobkowiak-Tabaka, I. 2007. Late Palaeolithic Settlement in Cichmiana, site 2. In: *Late Palaeolithic and Mesolithic Settlement in the Middle Warta River Basin*. Poznań, 2007 (forthcoming).
- Kabaciński, J., Kobusiewicz, M. 2007. Settlement of the Hamburgian culture at Kragola, Stare Miasto parish. In: *Studies in the Final Palaeolithic Settlement of the Great European Plain*. Poznań, 2007 (forthcoming).
- Kabailienė, M. 1998. Vegetation History and Climate Changes in Lithuania during the Late Glacial and Holocene, according to Pollen and Diatom Data. In: *PACT*. Belgium, t. 54, 13–30.
- Kabailienė, M., Raukas, A. 1987. Stratigraphy of lake and bog deposits and climatic changes in the late-glacial and Holocene in Soviet Baltic Republics: a review. In: *Boreas*. Oslo, vol. 16, 125–131.
- Калечыц, А.Г. 2001. *Старажытная Янаўшчына*. Брэст.
- Kierdorf, H. 1996. Saisonbestimmung anhand der Wurzelzementzonierung einiger Rentierzähne
- Karstein. In: *M. Baales Umwelt und Jagdökonomie der Ahrensburger Rentjäger in Mittelgebirge*. Mainz, 67–152.
- Kobusiewicz, M. 1975. Stanowisko kultury hamburskiej w Linach, pow. Wolsztyn. In: *Światowit*, t. 34, 213–237.
- Kobusiewicz, M. 1999. Ludy łowiecko – zbierackie północno – zachodniej Polski. Poznań.
- Kozarski, S., Nowaczyk, B. 1999. Paleogeografia Polski w vistulienie. In: *Geografia Polski. Środowisko Przyrodnicze*. Warsaw, 79–103.
- Kozłowski, J.K. 1964. *Paleolit na Górnym Śląsku*. Wrocław.
- Kozłowski, J.K., Kozłowski, S.K. 1977. *Epoka kamienia na ziemiach polskich*. Warsaw.
- Leroi-Gourhan, A. 1994. *Dictionnaire de la préhistoire*. Paris, 495–496, 885–886.
- Libera, J. 1995. *Późny paleolit i mezolit środkowowschodniej Polski. Część pierwsza. Analiza*. Lublin.
- Лисицин, С.Н. 2003. Колонизация Территории Великоговодораздела в финальном палеолите. In: *Terra Baltica* 2. Калининград, 14–29.
- Lindner, L. 1992. Plejstocen. In: *Czwartorzęd*. Warsaw, 466–612.
- Madeyska, T. 1995. Roślinność Polski u schyłku ostatniego zlodowacenia. In: *Przegląd Geologiczny*. Warsaw, vol. 43, Nr 7, 595–597.
- Mey, W. 1960. Jungpaläolithikum und Mesolithikum in Brandenburg. In: *Quartär*. Bonn, z. 1–51.
- Миклев, А.М. 1994. Каменный – железный век в междуречье западной Двины и Ловати. In: *Петербургский археологический вестник* No. 9. Петербург, 7–39.
- Minta-Tworzowska, D. 1994. *Klasyfikacja w archeologii jako sposób wyrażania wyników badań, hipotez oraz teorii archeologicznych*. Poznań.
- Obuchowski, W. 2003. *Zabytki krzemienne i kamienne od paleolitu do wczesnej epoki żelaza z terenów Białorusi w zbiorach Państwowego Muzeum Archeologicznego w Warszawie*. Warsaw.
- Okulicz, J. 1973. *Pradzieje ziem pruskich od późnego paleolitu do VII w n. e.* Wrocław, Warsaw, Kraków, Gdańsk.
- Pawłowski, J. 1999. Przemiany fauny od pleniglacjału do czasów współczesnych. In: *Geografia Polski. Środowisko Przyrodnicze*. Warsaw, 159–175.
- Ralska-Jasiewiczowa, M. 1999. Ewolucja szaty roślinnej. In: *Geografia Polski. Środowisko Przyrodnicze*. Warsaw, 105–127.
- Римантеене, Р.К. 1971. *Палеолит и мезолит Литвы*. Вильнюс.
- Rimantienė, R. 1994. *Die Steinzeit in Litauen*. Mainz am Rhein.
- Rust, A. 1943. *Die alt- und mittelsteinzeitliche Funde von Stellmoor*. Neumünster.
- Sawicki, L. 1933–1936. Przemysł świderski I stanowiska wydmyowego Świdry Wielkie I. In: *Przegląd Archeologiczny*. Poznań, t. V, z. 1, 1–23.
- Schild, R. 1964. Paleolit końcowy i schyłkowy. In: *Materiały do prehistorii ziem polskich*. Warsaw, 129–239.
- Schild, R. 1973. Szkic paleogeografii Nizy Europejskiego w późnym glacie. Przegląd problemów. In: *Przegląd Archeologiczny*, t. 23, 9–63.
- Schild, R. 1975. Późny paleolit. In: *Prahistoria Ziem Polskich*. Wrocław, Warsaw, Kraków, Gdańsk, 159–338.
- Sulgostowska, Z. 1989. *Prahistoria międzyrzecza Wisły, Niemna i Dniestru u schyłku plejstocenu*. Warsaw.
- Sulgostowska, Z. 2000. The Achievements and Topics Worth Discussing the Palaeolithic and the Mesolithic of the South-Eastern Subbalticum. In: *Lietuvos archeologija*. Vilnius, t. 19, 267–273.
- Szukiewicz, W. 1901. Poszukiwania archeologiczne w powiatach Lidzkim i Trockim. In: *Światowit*. Warsaw, 3–29.
- Szymczak, K. 1995. *Epoka kamienia Polski północno-wschodniej na tle środkowoeuropejskim*. Warsaw.
- Štavičius, E. 2002. Hamburgo kultūros radiniai Lietuvoje. In: *Lietuvos archeologija*. Vilnius, t. 23, 163–186.
- Terberger, T., Lübke, H. 2004. *Hamburger Kultur in Mecklenburg-Vorpommern?* In: *Bodendenkmalpflege in Mecklenburg-Vorpommern*. Lübtorf, Bd. 52, 15–34.
- Tobolski, K. 1966. Późnoglacialna i holocenska historia roślinności na obszarze wydmyowym w dolinie środkowej Prosnny. In: *Pozn. TPN, Prace Komisji Biologicznej*. Poznań, ser. B 32.
- Winiarska-Kabacińska, M. 1993. Functional Analysis of Stone Tools from Maszycka Cave. In: *Jahrbuch des Römisch Germanischen Zentralmuseums Mainz*. Mainz, Bd. 40 Jahrgang 1993, Teil 1, 241–244.
- Winiarska-Kabacińska, M. 1996. Gospodarka społeczności młodszego dryasu na Nizy Polski w świetle analizy funkcjonalnej materiałów krzemienych. Poznań (manuscript).
- Залізник, Л. 1999. Фінальний палеоліт північного заходу Східної Європи. Київ.

Zaliznyak, L. 2000. R. Rimantienė as a Founder of the Periodization of the Final Palaeolithic of Northwest Eastern Poland. In: *Lietuvos archeologija*. Vilnius, t. 19, 31–45.

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KIEK TOLI Į RYTUS NUSITĖSĖ HAMBURGO KULTŪRA

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Santrauka

Hamburgo kultūra buvo išskirta 1931 m. Šiuo metu ji yra datuojama biolingo laikotarpiu, nors pasigirsta nuomonių, kad ji galėjo gyvuoti iki driaso II laikotarpio ar net aleriodo pradžios. Tipiškos Hamburgo kultūros stovyklavietės radinių komplekse vyrauja skeltiniai ruošiniai, nuskelti nuo vienagalių ir dvigalių skaldytinių. Tipiniai šios kultūros dirbiniai – tai specifiniai strėlių antgaliai ir Zinken tipo perforatoriai, dažniausiai dvigaliai. Pavienių panašių dirbinių – ir antgalių, ir Zinken perforatorių – yra aptinkama ir kitose kultūrose (Madleno, vėlyvojo graveto, federmeserio, Bromės). Todėl tik pasikartojantys ir gausūs būdingų dirbinių formų kompleksai leidžia tyrinėtojams nustatyti, kad tam tikroje teritorijoje gyvavo tam tikra kultūra. Taip pat reikia atkreipti dėmesį, kad įvairiausių aplinkybių kontekstas yra bene svarbiausias rekonstruojant praeities palikimą. Nuoseklus Hamburgo kultūros gyvenviečių paplitimas su būdingu dirbinių kompleksu ir tiksliai apibrėžtoje gamtinėje aplinkoje tyrinėtojų yra pripažintas tikrai Vakarų Europos lygumoje, daugiausia Šiaurės Vokietijoje ir Olandijoje. Šiame straipsnyje nagrinėjamas Hamburgo kultūros paplitimas į rytus nuo minėtos teritorijos.

Archeologinėje literatūroje su Hamburgo kultūra yra siejama nuo keliolikos iki keliasdešimties radimviečių į rytus nuo pagrindinio kultūros arealo. Tarp jų galima išskirti 3 grupes. Pirma, tai iširtos gyvenvietės su gausiais radinių kompleksais. Tarp jų yra radinių kompleksų su tiksliai geochronologiniu kontekstu. Šie kompleksai parodo ryčiausias Hamburgo kultūros gyvenvietes vakarinėje Lenkijos dalyje. Tai Siedlnica 17, Olbrachcice 8, Lengon 5, Liny 1, Mirkowice 33, Krongola 25. Antrą grupę sudaro įvairios chronologinės priklausomybės radimvietės ir gyvenvietės, ku-

riose aptikta pavienių dirbinių, panašių į Hamburgo kultūrai būdingus tipus. Šiai grupei priskirtini radiniai iš gyvenviečių Buchow-Karpzow, Dyrotz, Gramnitz ir kt. Rytų Vokietijoje; Olbrachcice 14, Siedlnica 33, Rogów-Opolski 9 ir kt. Lenkijoje; Kašetų, Margių Lietuvoje; Odrižin, Pribor 8 Baltarusijoje ir Sapanów Ukrainoje. Trečioji radinių kategorija – tai, manoma, su Hamburgo kultūra susiję atsitiktinai rasti pavieniai dirbiniai iš kaulo ir rago.

Hamburgo kultūros gyvenviečių arealas vakarinėje Lenkijos teritorijos dalyje yra nutolęs nuo pagrindinio Hamburgo kultūros arealo. Elbės ir Oderio aplinkoje yra tik pavienių neaiškios kultūrinės priklausomybės dirbinių. Gyvenviečių grupė Vakarų Lenkijoje neperžengia Notecės upės linijos į šiaurę ir Vyslos vidurupio į rytus. Kaip jau minėta, šios gyvenvietės, turinčios gausius tik Hamburgo kultūrai būdingų dirbinių kompleksus, yra tiksliai datuotos. Jose buvo aptikta faunos likučių ir gyvenimo pėdsakų. Vakarų Lenkijos Hamburgo kultūros areale taip pat yra pavienių neaiškios kultūrinės priklausomybės radinių.

Su Hamburgo kultūra siejami pavieniai radiniai teritorijose į rytus nuo Vyslos paprastai yra kituose kultūrinės ir chronologinės priklausomybės kompleksuose arba senuose atsitiktinių radinių rinkiniuose be aiškesnio archeologinio konteksto. Šių kompleksų neįmanoma datuoti gamtamoksliniais metodais. Dar vienas argumentas prieš Hamburgo kultūros paplitimą rytinėje Europos dalyje – skirtingos paleoklimatinės ir gamtinės aplinkos sąlygos, tuo pačiu metu buvusios Vakarų Europos lygumoje ir regione į rytus nuo Vyslos.

Turimais duomenimis, Hamburgo kultūros rytine paplitimo riba reikėtų laikyti Notecės ir Vyslos vidurupių teritoriją. O pavieniai radiniai, nesusieti su technokompleksais, negali būti laikomi reikšmingais. Ateityje technokompleksų tyrimai, paremti radiokarboniniu datavimu, pateiks daugiau įtikinamų argumentų Hamburgo kultūros paplitimui nustatyti.