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A NEW FEDERMESSER CULTURE SITE IN THE GŁUBCZYCE PLATEAU ON THE BACKGROUND OF THE SETTLEMENT OF THE ARCHED BACKED BLADE COMPLEX IN SOUTHERN POLAND, MORAVIA AND BOHEMIA

Dariusz BOBAK – Marta POŁTOWICZ-BOBAK

The Late Palaeolithic is one of the periods of the early Stone Age during which very significant culture changes took place within the vast areas of Western and Central Europe. In this period, we can observe a variety of essential culture processes that led to the appearance of new taxonomic units in the territories of Western and Central Europe, spreading over huge regions. These units developed during the cool and warmer phases of the late Pleistocene. The next phases of the recolonisation of the European Plain took place during the warmer periods of the Bølling-Allerød interstadial (GI-1a-e, *Rasmussen 2006*). One of the most important taxonomic units that developed during the late Pleistocene is a complex with arched backed blades and short end-scrapers, called the Federmesser culture. The culture covered the Western and Central Europe. The complex stretches from the northern part of France through Belgium, Holland and Germany to Poland, Bohemia and Moravia (*Svoboda et al. 2002; Kozłowski 2004; Fridrich – Vencl 2007*).

This culture spread mainly over the Plain (for the further reading see *Schwabedissen 1954; Kobusiewicz et al. 1987; Kozłowski 1987*), but the sites with arched backed blades were identified also in the uplands and foothills within the territory of Poland as well as in the other areas of Central Europe (*Kozłowski 1987*). The new region in which the traces of the settlement of the culture with arched backed blades and short end-scrapers were registered is the Głubczyce Plateau (The Opole Silesia).

The Opole Silesia territory, including the Głubczyce Plateau, situated in a direct vicinity of the Moravian Gate is a very important region in which the routes leading from the south to the north and linking the Czech and Polish part of Silesia, or, more generally speaking, the territories of the present Southern Poland in the north and Silesian-Moravian regions in the south, crossed.

The late Palaeolithic settlement is not well identified within this areas. The previous synthetic publications regarding these territories reported about some single findings which may, with some probability, be linked with the settlement from this period (e.g. Cisek 6, Nysa, Pietrowice Wielkie 8, Bliszczyce, Śmicz, Pietraszyn – *fig. 1*) (*Kozłowski 1964; Ginter 1974*). Thereafter, the studies on the settlement in the final stage of the Palaeolithic in the northern part of the Moravian Gate foreground were not conducted. However, it seems that these areas are very important not only for the studies on this exceptionally interesting settlement micro-region, but for investigating the development of the settlement in Central Europe in the Palaeolithic as well. The territories surrounding the Moravian Gate are undoubtedly one of the regions playing the most important role in the development and spreading of the culture currents and the settlement in different periods of the prehistory and human history beginning from the Palaeolithic (see *Bobak – Połtowicz-Bobak – in press*) up till historic and modern times.

The systematic surface researches conducted by Z. Bagniewski, then by M. Gedl, and now, since 2007, by the authors of this study, has brought significant progress in the field of the studies on the early Stone Age in these territories. These researches led to the discovery of the first relatively rich site, which could be, with high probability, linked with the cultures with short end-scrapers and arched backed blades.

We do not know any materials coming from the research conducted in the beginning of the 1970s by Z. Bagniewski that could, with high probability, be classified as belonging to the Tarnowian technocomplex. His research reports (now in the archives of the Archaeological Monument Conservator in Opole) contain the

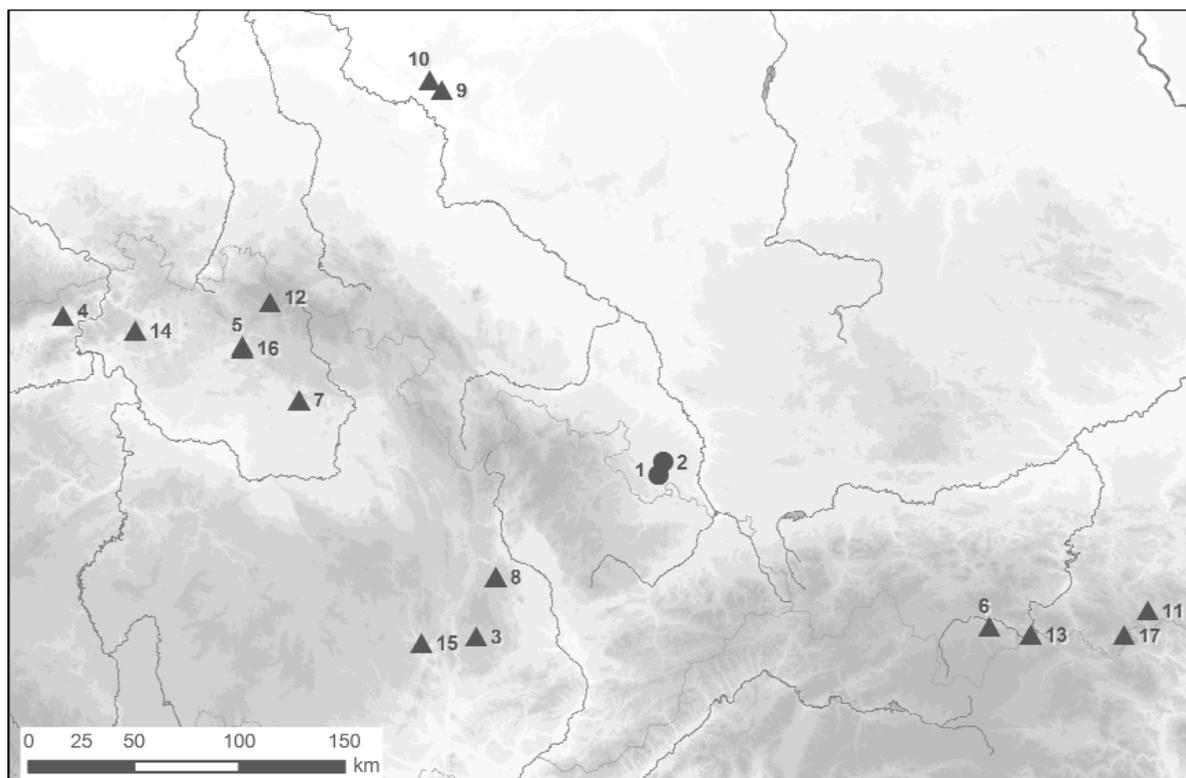


Fig. 1. Localisation of arch backed pieces sites mentioned in the paper. Legend: 1 – Kozłówki 36; 2 – Baborów 27; 3 – Balcarova cave; 4 – Chabařovice; 5 – Daliměřice; 6 – Nowa Biąła 1; 7 – Ostroměř; 8 – Průchodnice cave; 9 – Siciny; 10 – Siedlnica 17; 11 – Skwirtne; 12 – Souš; 13 – Sromowce Niżne; 14 – Stvolínky; 15 – Tišov; 16 – Turnov; 17 – Tylicz.

information regarding his findings of flints classified as late Palaeolithic but among them there are no forms that refer to the culture technocomplex being our point of interest (inter alia, findings from Dzielów and Baborów).

The most important discovery is site 36 in Kozłówki, commune Kietrz, Głubczyce District, found by M. Gedl in 2003, verified by us in spring 2006. The site provided us with numerous surface inventory of uniform character allowing us, based on typological and technological features, to regard it as belonging to the culture with arched backed blades without any bigger risk (fig. 2:1-4; 6-18). It seems that the inventory belongs in whole to that culture. It is suggested by technological and typological features of the inventory, including the presence of some characteristic forms such as a typical short end-scraper (fig. 2:12-13) and an arched backed blade (fig. 2:4).

The site is situated on the flat part of the gentle slope of the hill with the southern-western exposure direction, approx. 300 m away from the present Cyna River bed, 250 m above sea level, 30 m above the bottom of the valley. The site was located in the gravel outcrops area connected with the sediments of a glaciation origin, which can be associated with the Middle Polish glaciation. Between the gravel deposited on the surface, there are relatively numerous concretions of erratic chalk flint used to produce tools. Similar outcrops can be found in the direct vicinity of the site.

On the surface, a rich and very characteristic collection of flint artefacts (57 items) was identified. The collection includes all categories of artefacts: tools (20 items – fig. 2:1-4; 6-7; 10-13), cores (13 items plus 3 pieces with negatives) (fig. 2:14-18), flakes and blades (21 or 22 items) and 2-3 microburins (fig. 2:8-9).

At the site, small concretions or their fragments were used, although one of the items indicates that some bigger pieces of raw material were occasionally exploited. The artefacts are fresh or covered with some light white-and-grey patina. The materials were scattered and did not form any clusters.

In the group of 13 cores residual form dominates, with bigger or lesser stage of reduction. We can distinguish 5 first cores and one core in the phase of full exploitation. There are cores mainly for blades or bladelets, prismatic or more often conical, irregular, more rarely lumpy. Three cores are considered to be flake-blade, one – flake. Their forms are irregular, careless. Their length is 20 to 50 mm. Only one flake core is shorter than 20 mm. One piece longer than 50 mm is a big crushed piece of a concretion, probably with negatives of inten-

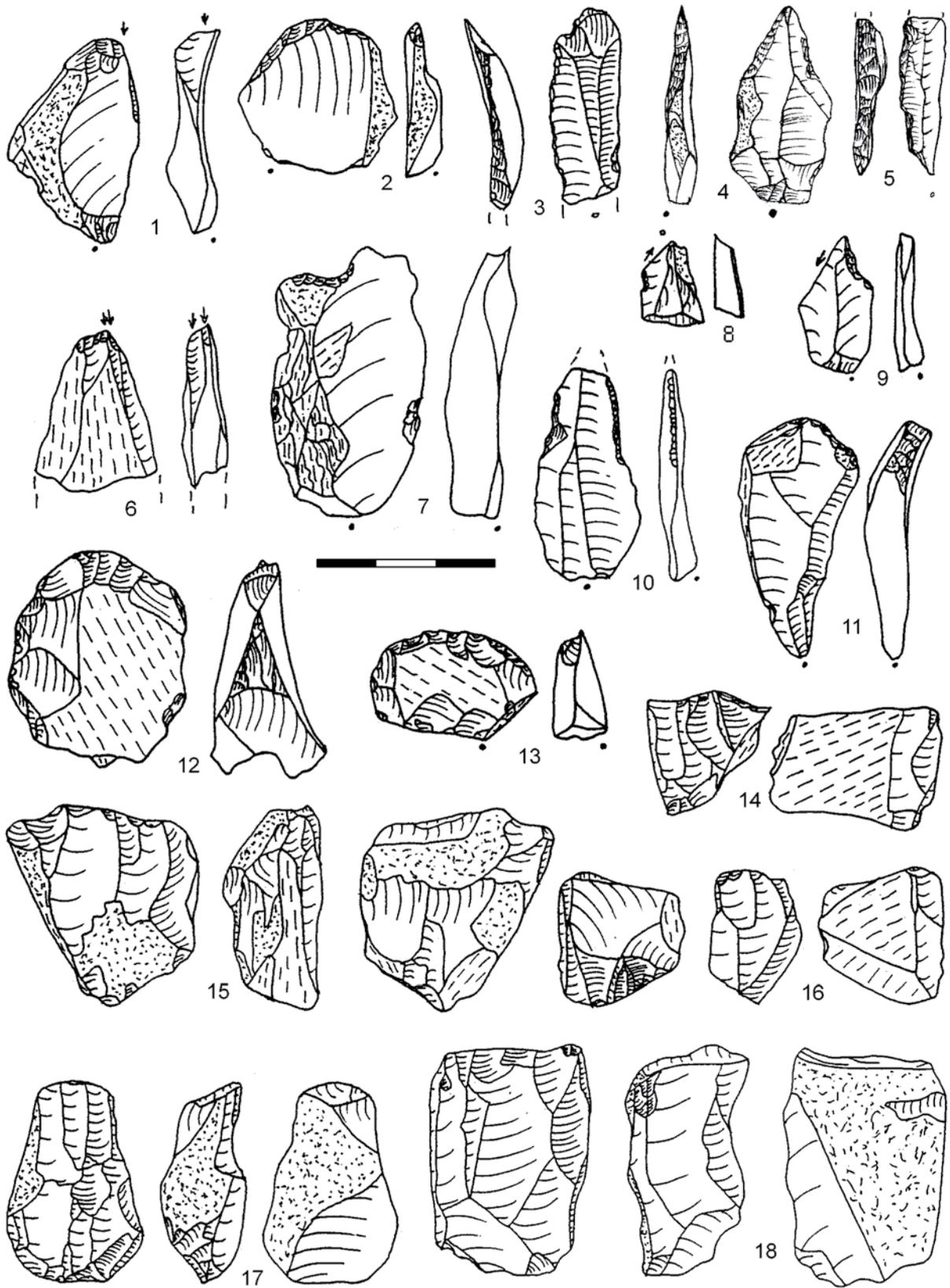


Fig. 2. Flint artefacts. 1-4; 6-18 – Kozłówki 36 site; 5 – Dzielów 27 site.

tional strikes. A one-platform form prevails; the cores with changing orientation are more rare, and there are one or two are two-platform forms. Most of them do not show any traces of preparation. Only on single pieces the traces of little forming are preserved. On one or two sides, flaking surfaces are often present. The flaking surfaces are usually wide, mostly flat. The striking platforms are non-industrial or formed, in two cases – prepared. The external angles are acute or right, but there are no very acute angles. Generally, no regularization of striking platform edges was noticed. On most cores, the negatives destroying the flaking surface are visible, being the direct reason of deserting the item.

Thus, the cores found at the site suggest the use of a simple production technology of semi-products with a very restricted phase of initial processing based mainly on exploitation of natural forms of raw material pieces. It seems that only a direct strike with a hard hammer was applied.

The usage of this simple technology is confirmed by the features of the debitage collected at the site. It consists of only 20 items, mainly flakes, most often with pieces of a cortical surface, butts of different types (mainly formed and prepared) and obtuse angles. Right angles of the butts are very rare. The character of a proximal parts suggests the usage of a hard hammer. The debitage has distinctive features of waste coming from of different phases of a core processing. We should remember that only a small number of blades and flakes were present in the collection and therefore they are certainly not representative for the inventory.

The representation of tools is rather imposing (19 items), including two backed blades – one of them is a backed blade on a wide bladelet (or a small blade), with a backed edge made with abrupt one-series retouch. The retouch does not cover the whole length of the edge. In 2007, during a verification research one backed blade with an arched backed edge was found, constituting the most distinct feature of the culture discussed in this article, in addition to a very typical short end-scraper. The backed blade is slim; its backed edge is a bit convex and retouched with a multiseries retouch. The retouch covers only a piece of the edge.

End-scrappers are represented by four pieces. One of them, an example of a very correctly and carefully manufactured short end-scraper, deserves some special attention. Among the others, there is one unfinished(?) end-scraper of a fan type and two short flake end-scrappers with low but very carefully retouched end-scraper fronts.

Burins are represented by two items, both being the examples of lambdoid burins, not very typical, executed carelessly, with a short, poorly visible burin scar. One of them was made of a flake, and the second – of a non-industrial spall. The truncations are poorly retouched. Both forms seem to be accidental, made „*ad hoc*“, not paying attention to their quality. Actually, it can be also said about all tools belonging to the discussed collection.

One atypical flake perforator with a long and massive sting, with fine retouch situated asymmetrically towards the axis of a blank and one notched tool made of a flake, with two notches retouched with abrupt retouch.

The most numerous category includes the tools distinguished as flakes and retouched blades as well as scrapers (9 items in total). They were made of different kinds of blank materials (flakes, blades, non-industrial chips) and have amorphic forms with retouches covering different parts of the edges. The border between one and the second category is quite elusive so some doubts regarding their classification may arise. Generally, in case of the scrapers, the retouch is more intense and covers bigger parts of the edges, usually more than one edge.

The characteristic feature of the tools is their small size. Their lengths rarely exceeds 30 mm which corresponds to a general metric character of the inventory.

The site should be considered to be the first site so rich and consistent regarding its culture affiliation, and at the same time, a very important evidence of the presence of the human groups using arched backed blades and short end-scrappers in the southern part of the Opole Silesia, in the direct foreground of the Moravian Gate. The fact that these materials were found only in the surface makes any more advanced research concerning the spatial differentiation of the site, its natural context or more precise dating of the inventory impossible. On the other hand, its numerical force and the share of the individual monument categories allow us to assume that here we deal with the site of a base camp type with a high probability. It is suggested by a great number of tools and their typological composition as well as the fact that in such a big collection, residual forms predominate. Based on a small debitage, nothing can be concluded. We also should remember that the discovered materials do not make a full image of the inventory, so the interpretation of the site should be treated as an introductory only.

So far, the inventory from Kozłówki is one of very few, and at the same time, the richest and the most unequivocal inventory coming from the Głubczyce Plateau, which can be linked with the culture discussed in this article. The site, the one in this region, provided us with a rich and typical inventory allowing its interpretation beyond any doubts. Except for that, the research conducted in this region by the authors of this article in 2007/2008 led to the discovery of much modest and less unequivocal materials which may, more or less, be associated with the settlement of the arched backed blade culture. The most unequivocal finding comes from the multi-culture site 27 in Baborów (*fig. 2:5*) discovered in 2007, belonging to the big complex of workshops exploiting the local erratic raw materials coming from moraines. Among very many flints, constituting undoubt-

edly a part of a few inventories differing culturally and chronologically, some artefacts were identified which can be linked with the Tarnowian technocomplex. One of them is a typical slim arched backed blade and the other – a short end-scraper. The other monuments coming from that site are less unequivocal, although there are also some artefacts among them (some cores? debitage?) belonging to that culture. Nevertheless, the identification of a backed blade and an end-scraper allows us to determine the presence of the culture in the Baborów area. The site is situated approx. 15 km away from the site in Kozłówki.

As it was mentioned above, the other sites in the territory described in this article can be classified as late Palaeolithic. It cannot be excluded that some of them belong to the culture being in our circle of interest. It refers mainly to the sites within Baborów and Dzielów areas, from which some small non-prepared cores for blades and flakes come from (unpublished surface research of the authors). However, since the culture interpretation of most of them is uncertain, they were not taken into account in this article. It should be acknowledged that the presence of the next sites of the group with backed blades within the southern part of the Głubczyce Plateau is highly probable.

Assuming that at least a part of sites mentioned by J. K. Kozłowski and B. Ginter can be linked with the short end-scraper and arched backed blade complex, the southern part of the Głubczyce Plateau may be the next important point of the late Palaeolithic settlement within the territory of South-Western Poland.

The settlement of the backed blade cultures is recognized within the vast upland areas of Southern Poland. The settlement of this culture is known from Lower Silesia (e.g. site Siedlnica 17 – *Burdukiewicz – Herman 2000*; Siciny – *Burdukiewicz – Szykiewicz 2004*) and Lesser Poland (e.g. Nowa Biała site 1 – *Valde-Nowak 1987*; *Valde-Nowak et al. 2003*; *Tylicz – Tunia 1978*; *Skwirtne – Valde-Nowak et al. 1996*). In addition to few sites which provided us with more numerous and characteristic inventories (Siedlnica, Siciny, Sromowce Niżne) there are sites from which scant, sometimes equivocal artefacts, most often short end-scrapers come from that can be linked with the arched backed blade complex only hypothetically.

The settlement spread over the territories of various morphology. The sites situated northernmost, in Lower Silesia, occupy the territories of the Plain (Siedlnica; Siciny). Most of the sites mentioned above are located in the uplands and mountains, typical for the south of Poland (Nowa Biała site 1; *Tylicz*; also some single findings in the pre-Sudeten zone – *Burdukiewicz 1999*).

Thus, the Głubczyce Plateau constitutes one of a few points of the backed blade settlement within Southern Poland. Similarly as in the other areas, the settlement is represented by few findings which can be identified. So far, the materials from Kozłówki form one of the most complete inventories coming from this region.

The Głubczyce Plateau constitutes an important point on the map of Southern Poland and belongs to the territories crossed by the most important communication routes linking the areas situated on the northern and the southern side of the Carpathians and the Sudeten (see *Bobak – Połtowicz-Bobak – in press*). So the question of the existence of potential connections between the late Palaeolithic inventories from the southern part of the Opole Silesia and the territories on the southern side of the Moravian Gate is so important.

Up till now, few findings from Moravia may suggest the presence of the group using short end-scrapers and arched backed blades, called Tišnovian (*Klíma 1963* – quoted after *Vencl 1966*, 319; *Kos 1971*; *Svoboda et al. 2002*). The most important and the best researched is an eponymic site in Tišnov. In the course of the excavations carried out by *O. Kos (1971)* a numerous and well-documented stratigraphically and planigraphically inventory was found, consisting of tiny one- and two-platform cores as well as of tools: blade and short flake end-scrapers or made from shortened blades, less numerous burins, delicate perforates and backed bladelets with a simple and arched backed edge. A few clusters were distinguished; however no residential objects or hearth were identified (*Svoboda et al. 2002*).

The remaining few sites considered to be late Palaeolithic units with arched backed blades are very poor, usually surface collections containing the tools generally linked with the arched backed blades complex – there are mainly only backed blades and short end-scrapers. Almost all the sites are open, typical for the taxonomic unit in Central Europe discussed herein. The materials coming from the caves: Průchodnice and Balcarova in Morawski kras can be probably linked with the Federmesser complex (*Svoboda 2002*).

No traces of the settlement with arched backed blades within Czech Silesia have been found so far, which can, however, result from the state of the art in this regions.

The situation similar to the one known from Moravia can be observed within Bohemia. The settlement of the arched backed blades culture is represented by few, generally poorly equipped sites and known from surface collections only. Characteristic tools, mainly end-scrapers, were found within these sites. The most important sites include Chabařovice in the northern part of Bohemia, not existing now, known from the amateur researches in the beginning of the 20th century [*Vencl 1970*; *Vencl (ed.) – Fridrich 2007*]. The inventory encountered at this site consisted of 19 tools, including two typical backed blades of Federmesser type. The other important site with backed blades is Souš [*Vencl (ed.) – Fridrich 2007*, Fig. 61], also with typical backed blades

of Federmesser type. Few findings containing some Federmesser backed blades come from Česki Raj (Stvolínky, Turnov, Daliměřice – Šída – Prostředník 2007).

A series of typical short end-scrapers were founds at Ostroměř site, after which the Czech late Palaeolithic units with backed blades were named [Vencl 1966; 1970; 1987; Svoboda et al. 2002; Vencl (ed.) – Fridrich 2007].

According to the Czech researchers, the characteristic feature of the Ostroměř group is a small level of typological differentiation of the tool instrumentarium, lesser than within the Moravian Tišnovian group. Several findings linked by some researchers with arched backed blade units should rather be considered to be Mesolithic [see Vencl (ed.) – Fridrich 2007].

Most of the sites that can be more or less probably linked with the short end-scrapers and arched backed blade culture complex are generally scant surface collections from the previous investigations without geological data and possibility to perform absolute dating. It concerns Polish sites and Bohemian and Moravian as well. The adherence of some findings listed in the subject literature to the Allerød backed blade complex may be not so certain for many researchers. It is highly probable that some of them should be linked with the Mesolithic. The findings which adherence to the taxonomic unit discussed in the article may be well-grounded indication that the backed blade culture people settled in the areas situated far south of the European Plain considered to be the cradle and the centre of the settlement of the groups using this kind of a tool instrumentarium, called the Federmesser culture. These sites are situated outside the Plain, but they often occupy the upland areas and foots of the hills (Nowa Biała site 1, Tylicz).

There are no direct data allowing to determine chronology or internal differentiation of this taxonomic unit more precisely. There are also no grounds to carry out more detailed analyses within the particular territories basing on the data available or to look for similarities or interregional relationships. The territories discussed in this article constitute a few points isolated from each other with traces of few and apparently short stays of hunter-gatherer groups. It is hard to say whether the reason is the state of the art which is very insufficient regarding all regions mentioned herein or whether it is a reflection of the state of affairs resulting from undoubtedly peripheral character of the settlement of the people using that characteristic stone instrumentarium. It seems that here we deal with small „chips“ of settlement which covered the Plain within its main range.

What is the connection between the „upland“ and the „lowland“ settlements? Can they be linked with the Federmesser culture settlement? We can answer the first question with certainty. Without any doubt, here we deal with a „tradition“ which originated in the territories of the Plain a few hundred kilometres away from the areas being in our circle of interest. The places in Southern Poland, Moravia and Bohemia from which the materials come from constitute the southern border of the reach of this cultural tradition.

Can we nevertheless talk about the one and the same source of origin and simple relation with the Federmesser culture? Here we should be much more cautious. It cannot be excluded that in case of the inventory from Southern Poland, Moravia and Bohemia we can look for different ways on which the groups using a similar tool instrumentarium arrived to these regions or maybe they evolved at the spot on the background of the Epimagdalenian groups.

In case of Bohemia, we can talk about the relations with German territories (Vencl 1987), and the materials from Southern Poland should be linked with the Polish plains with high probability. The answer to the question regarding the origin of the Moravian traces is more complicated. Probably we should look for the relations with Poland in this case too, as in case of the other cultures from the different periods of the early Stone Age, such as e.g. the Magdalenian (see Vencl 1991; Połtowicz 2007), but it cannot be state with full certainty. The share of the Magdalenian groups from Moravia in forming the arched backed blade groups cannot be excluded either, as the backed blades with an arched blade edge are known from the Magdalenian sites in Moravia such as Žitného cave (Valoch 2001).

The differentiation of the inventories coming from the particular regions may also be an evidence of a functional differentiation of the sites and also suggests the different traditions(?) of the gatherer-hunter groups. Therefore, it seems to be right to name the particular regional groups after the local names as it is done by the Moravian or Czech researchers. The insufficient sources make drawing any further reaching conclusions including the conclusions regarding the genesis and the directions of spreading the traditions connected with a broadly understood tradition of the Federmesser circle impossible.

Thus, the attempt to find some connections between the southern part of Poland and the regions in the southern part of the Sudeten and the Carpathians poses some difficulties. It results mainly from the state of the art that does not allow to investigate technological and typological connections or raw materials relations that are extremely useful in studies on interregional contacts. The fact that in the Polish and Czech parts of Silesia almost no sites with backed blades have been found so far should rather be explained by the state of the art than the actual state of affairs.

Therefore, the problem of the late Palaeolithic sites with arched backed blades and short end-scrapes in the uplands of Southern Poland, Silesia, Moravia and Bohemia should be treated at the moment as a subject of basic and intensive studies and posing questions rather than a problem which could be a subject matter of a synthesis.

Translated by Jadwiga Szczupak

SOUHRN

Pozdní paleolit je jedním z období doby kamenné, během něhož se odehrály významné kulturní změny v oblastech střední a západní Evropy. V této době zaznamenáváme rozmanitost základních kulturních procesů, které vedly ke vzniku nových kultur rozšířených v četných regionech západní a střední Evropy. Tyto kulturní jednotky vznikaly během chladných a teplých fází pozdního pleistocénu.

První fáze rekolonizace severoevropské nížiny nastala během teplého výkyvu Bølling-Allerød (GI-1a-e, *Rasmussen 2006*). Jednou z nejdůležitějších skupin z pozdního paleolitu je komplex kultury Federmesser, s obloukovitě otupenými hroty a krátkými škrabadly. Kultura obsadila západní a střední Evropu, oblast od severní části Francie přes Belgii, Nizozemí, Německo až po Polsko, Čechy a Moravu (*Svoboda et al. 2002; Kozłowski 2004; Fridrich – Vencl 2007*).

Její hlavní výskyt zaznamenáváme v oblasti severoevropské nížiny (blíže viz *Schwabedissen 1954; Kobusiewicz et al. 1987; Kozłowski 1987*), ale naleziště s obloukovitě otupenými hroty jsou zaznamenány také v nížinách i vrchovinách Polska, a také v dalších oblastech střední Evropy (*Kozłowski 1987*). Novým regionem s výskytem osídlení kultury s obloukovitě otupenými hroty a krátkými škrabadly je Glubčické Plateau (Głubczyce Plateau) v opolském Slezsku.

Opolské Slezsko, včetně Glubčického Plateau, se nachází v bezprostřední blízkosti Moravské brány a představuje tak velmi důležitý komunikační koridor severojižního směru, spojnici českého a polského Slezska, lépe řečeno dnešní jižní Polsko a Moravsko-slezský region.

Pozdněpaleolitické osídlení v této oblasti dosud není dostatečně poznáno. V dřívějších syntézách věnovaných tomuto regionu se setkáme s uveřejněním jednotlivých nálezů spojených s vysokou pravděpodobností s osídlením z tohoto období (e.g. Cisek 6, Nysa, Pietrowice Wielkie 8, Bliszczyce, Śmicz, Pietraszyn – obr. 1) (*Kozłowski 1964; Ginter 1974*). Poté se studie o osídlení severní oblasti Moravské brány v pozdní fázi paleolitu vytrácejí. Nicméně se zdá, že toto území představuje velmi důležitou oblast nejenom pro studium neobyčejně zajímavého osídlení mikroregionu, ale i pro zkoumání vývoje osídlení centrální Evropy v paleolitu.

Oblasti v okolí Moravské brány nepochybně patří k důležitým regionům, které hrály významnou roli ve vývoji a šíření kulturních prvků a osídlení v různých prehistorických dobách lidské historie počínajících, a to od paleolitu do současnosti (viz *Bobak – Połtowicz-Bobak – v tisku*).

Překlad Ivana Fridrichová-Sýkorová

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