

THE SZCZEBRA 14 SITE. A KEY TO UNDERSTANDING THE PALAEOOLITHIC IN THE NORTH-EASTERN PART OF EUROPE OR ANOTHER MYSTERY?

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The experts on Stone Age from north-eastern Poland, Baltic States, Belorussia and western Russia have been conscious of the presence of Ahrensburgian elements in this part of Europe. (Kempisty and Sulgostowska 1991; Rimantienė 1971; 1996; Siemaszko 1997; 1999 a; 1999 b; Szymczak 1995; Zagorska 1996; Zhilin 1996; Zaliznyak 1989). Nevertheless, some of them were too inhibited to express their opinion aloud. Apart from rare exceptions, the inventories with Ahrensburgian elements either contained individual items or were culturally mixed. Thus, the existence of Ahrensburgian culture in this region could be neither refused nor proved. Only a more representative homogenous unit would dispel numerous doubts of scholars. The author is convinced that such an inventory was discovered on the site Szczebra 14 in the north-eastern Poland.

THE OUTLINE OF RESEARCH

The site Szczebra 14 was discovered by Jerzy Brzozowski and the author of this article within the Polish Archaeological Record (PAR) research project (Brzozowski and Siemaszko 1997). The field survey of the section 21-85 was conducted in April 1997. The inventory collected from the surface of the ground turned out to be very interesting. Among the 22 flint artifacts, we recognised a double platform core and a tanged point with a truncation in the tip part that was formed with a semi-abrupt retouch. The dorsal side of the tang bears the traces of flat retouch. The worth of the site increases, as its scope has no more than 200 square metres. It seems to be the most representative settlement dated back to the Late Palaeolithic in north-eastern Poland. The continuation of the PAR research project conducted on the section 21-85 was the field survey of the section 21-84 carried out in spring 1998. Altogether, we investigated the area of

70 km² and identified 42 archaeological sites from the Late Palaeolithic (Brzozowski and Siemaszko 1997; 1998a). Some of them are very extensive and rich in artifacts (Fig. 1).

During fieldwalking we decided that rescue excavations of the site were indispensable, as a very deep industrial mine of aggregate is situated in the vicinity. We put in an application for the permission to conduct the rescue excavations. In 1999 we managed to receive finances from the Heritage Preservation Service in Białystok, which allowed us to explore the site. The investigation was held in September and October '99 by Suwałki Province Museum. The head of the excavation was the author of this article.

LOCATION AND PHYSIOGRAPHY OF THE SITE

According to J. Kondracki (1978) the site Szczebra 14 is situated on the area of the Lithuanian Lake District, in the mesoregion of the Augustów Plane (842.74). The terrain has an outwash cover and is slightly undulating. The maximal differences of relative height do not exceed 15 meters. The cover of outwash sands is very thin and intensely eroded. The tops of moraine elevations protrude over the surface. They were created during the Leszno phase of the Vistulian glaciation. Brownearth with the substrata of sands, gravels, clay and large amounts of stones is peculiar to moraine areas. The location of this Late Palaeolithic settlement in the region of Szczebra is not accidental (Fig. 1). First of all, the hydrography of the area is very diverse. Two small rivers, called Blizna and Szczeberka, have their estuaries in the vicinity. These are the two left tributaries of the Rospuda river that flows circa 2 kilometres south-west of Szczebra. A low and folded moraine ridge spreads in the north direction. South of the site, there is a flat outwash territory. A valley of

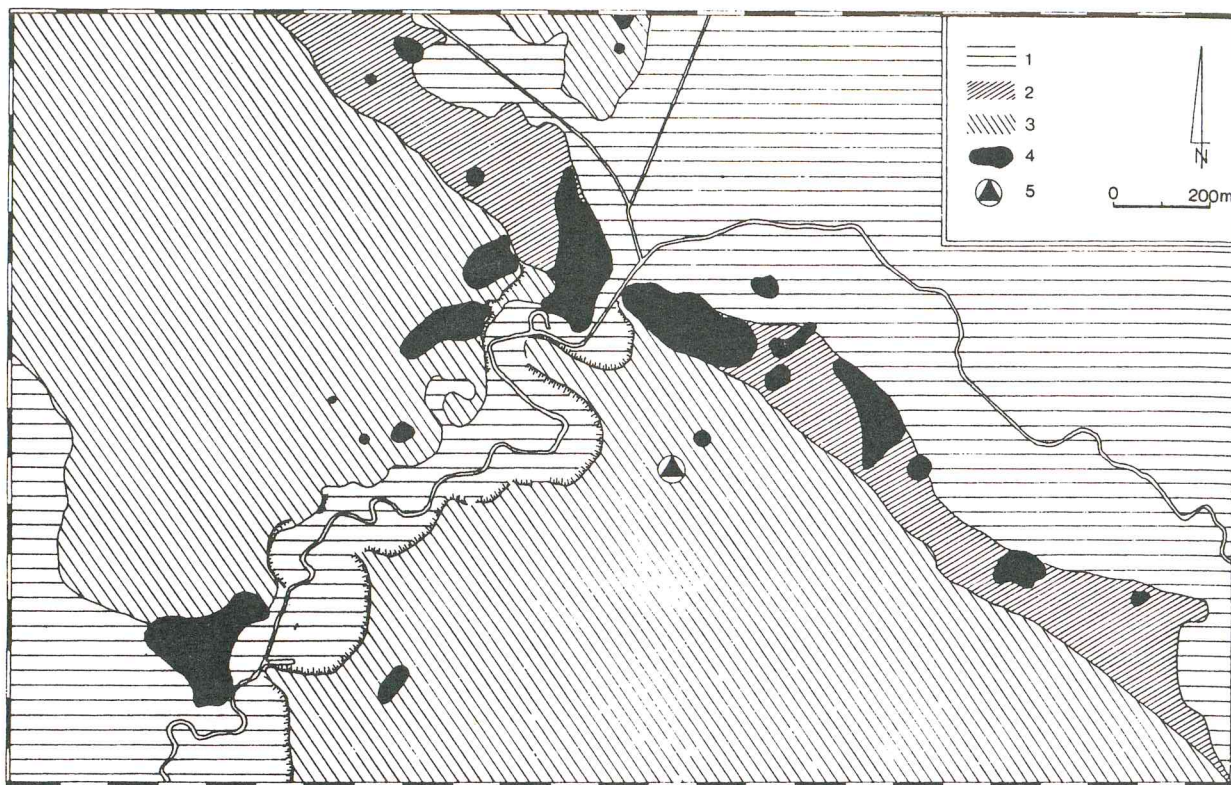


Fig. 1. Fragment of the Late Palaeolithic complex of sites in Szczebra. 1: peat bogs; 2: terraces of the former lake; moraine elevations covered by the outwash; 4: sites with Late Palaeolithic artifacts; 5: the site Szczebra 14. Drawn by R. Maskowicz after J. Siemaszko.

basal moraine lake is located on the north-east. In the past, this valley with a peatland extended on the area of 3 kilometres. On the western side, there is a vast and marshy valley where the Rospuda river runs at present. Originally this used to be a shallow north arm of the Rospuda Lake which does not exist contemporarily.

This area includes a large concentration of the sites dated back to the Late Pleistocene and Early Holocene. The reason for this phenomenon is not only the beneficial physiography and hydrography of the territory. The point is that the majority of flint artifacts indicates the presence of workshops situated nearby mines. Thus, the basets of north-eastern cretaceous flint must have been located nearby. This attracted here generations of hunters-fishers-gatherers. Unfortunately, we have not managed to discover this place so far.

SITE EXCAVATION

Rescue excavations were conducted in the end of September and in October '99. From the very begin-

ning it was obvious that we are dealing with a site located on the sands. Thus, from the methodological point of view, the most reasonable solution was to collect as much flint artifacts as possible and to identify the remains of the horizontal and vertical structure. The artifacts were collected from the 1m² sections, of course within the range of natural layers. The whole output was sieved on strainers. Having explored of the plough soil, we recognised horizontal structures and proceeded to their exploration as long as the artifacts occurred. Then, bed-rock was sieved 20 cm below the last find. Having encountered a structure of any type, we explored it completely, irrespective of the presence or absence of archaeological material.

The works were conducted as long as the concentrations of material were completely explored (Fig. 2: 2). Additionally, sondage sections were opened on each side of the trench. As no concentration of artifacts was identified, the investigation was finished.

During the site excavation we investigated the area of 64 m² discovering 798 flint artifacts (table 1).

Table 1. The site Szczebra 14. Typological list of flint artifacts collected during fieldwalking investigation PAR and rescue excavation.

Typological category	PAR	Plough soil	Under plough soil	Entire number
Ahrensburgian tanged point		2	3	5
Swiderian tanged point	1		2	3
Dihedral burin with a tang (tanged point?)		1		1
Remnants of tanged point production		1	4	5
Microburin		1	4	5
Dihedral burin			2	2
Burin on the broken blade		3	1	4
Truncated blade + burin on the broken blade			1	1
Slender end-scraper + dihedral burin		1		1
Burin spall		4	5	9
Chunky end-scraper			1	1
Truncated blade			3	3
Retouched blade		1		1
Microretouched blade		2	1	3
Retouched flake	1			1
Flake with secondary retouch		3		3
Fragment of an implement			2	2
Core	1		1	3
Fragment of a core			2	2
Core preform			1	1
Crested blade		2	5	7
Subcrested blade		1	2	3
Blade rejuvenating the striking surface		1	1	2
Blade rejuvenating the striking surface – double platform cores			3	3
Core tablet	1	2	7	10
Platform rejuvenation flake			4	4
Blade with the traces of double platform technique		2	17	19
Blade without the traces of double platform technique	6	36	112	154
Flake/blade	3	3	37	43
Flake		35	107	142
Debris	2	41	67	110
Microblades, microflakes and splinters	4	117	144	265
Entire number	19	259	539	817

HORIZONTAL AND VERTICAL STRUCTURES WITHIN THE SITE

The distribution of the layers within the site

The stratigraphy of the site was not very complex. Sandy plough soil constituted the first 20–25 cm of the soil profile. The uppermost level (humus-accumulative) of the primordial brownearth, was completely

destroyed by ploughing on major part of the site. The small remains of this level could only be found in scarce hollows. Most often the plough soil was followed directly by illuvial level with the high content of iron. The bed-rock consists of Pleistocene yellow/grey sand having different size of granules and containing small pebbles. Besides, the sand was sorted out and often stratified.

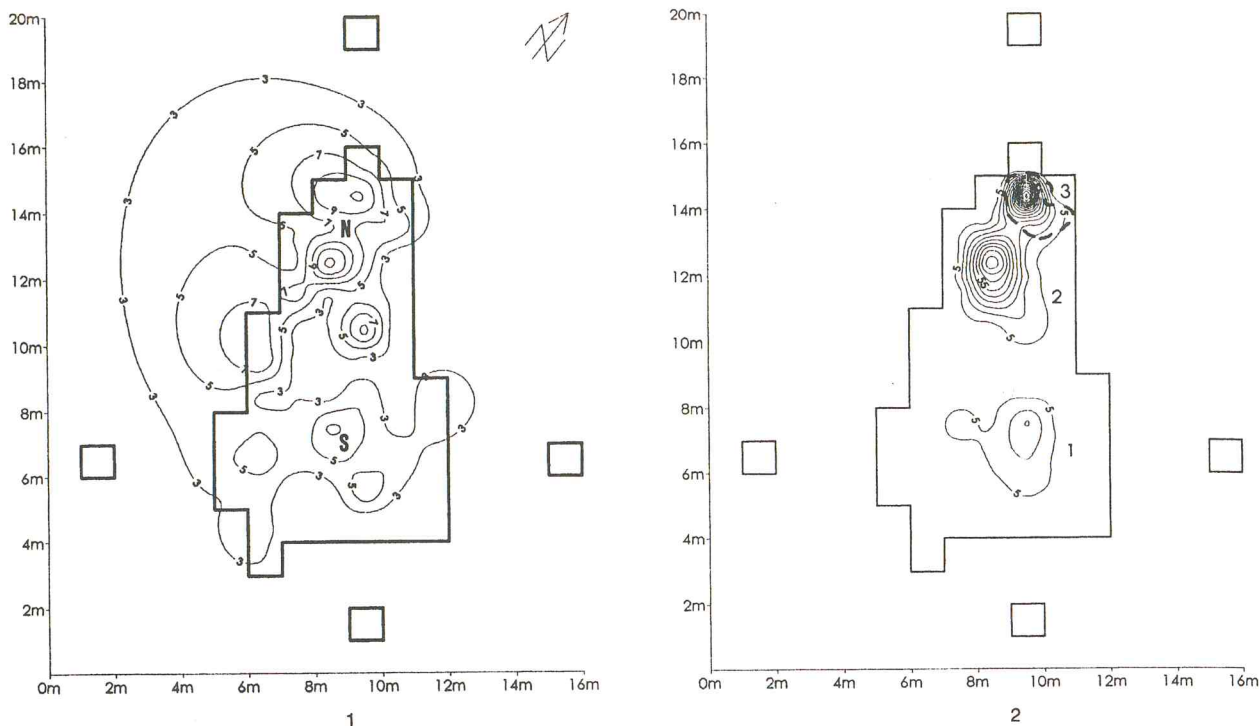


Fig. 2. The site Szczebra 14. Intra-site observations of flint artifacts. 1: Finds from the plough soil: N, S – concentrations. 2: concentrations (No. 1–3) of flint artifacts below plough soil; dashed line indicates the horizontal structure No. 3. Computer processed by J. Siemaszko.

Apart from the horizontal structures described below, from the archaeological point of view, humus was followed directly by virgin soil. The uppermost level of the soil was completely destroyed. As its consequence, cultural level was also devastated. Nevertheless, flint artifacts occurred in numerous places in illuvial layer (under the plough soil) which was void of any anthropogenic traces. In some cases, even the virgin soil contained certain finds. In general, archaeological material could be found at the depth of 30–40 cm, but sometimes we had to explore as deep as 70 cm from the contemporary ground level. It is very important to notice that the concentrations of archaeological material had a round shape and their diameters rarely reached 1 m. According to the author, the presence of artifacts within the virgin soil can be rationally explained only in one way. The roots of large trees penetrating the ground must have caused the displacement of artifacts and later their secondary deposition. This area had been covered by the thick primeval forest from the Boreal period until at least 16th century. Over the thousand of years, under the pressure of the trunks weighing several tons as well as the result of the biological penetration of the roots, numerous artifacts were pushed deeply into the ground. Other fell into the ditches created by decayed

roots. Contemporary processes of this type were observed by J. Brzozowski and J. Siemaszko (1998 b) during the study of the Mesolithic settlement in Miłuki.

Horizontal structures

Site excavation allowed us to identify 4 four horizontal structures. They were explored as objects No. 1–4. The first one was interpreted as a trace of a tree's pile root. The object No. 2, of anthropogenic nature, was dated back to Modern Age. The object No. 4 is considered to be a natural hollow, filled with humus-accumulative level of brownearth.

The most interesting horizontal structure registered in Szczebra was the object no. 3. Its layout was irregular (approximately oval) and size 2,10x1,4 m. The thickness of the object was circa 30 cm. The central part of the bottom was flat. The edges of the hollow smoothly raised upwards. The hollow was filled with orange/grey sand consisting of small granules and with the content of organic substances. Besides, a precipitation of iron oxides reappears under the bottom of the ditch. The central part of this object encloses a very distinct and rich in material concentration of flint artifacts (Fig. 2: 2). It has a size of circa 1 m². Around 250 flint artifacts were found in this structure. This constitutes one third of archaeological material from

this site. Outside this object, the artifacts occurred in scarce amount. There are grounds to speculate that this object was dug out by man. At the beginning, we suspected that this was the hollow after the wind fallen tree. Nevertheless, in case of this type of hollows, the outer walls should steeply subside downwards. Besides, the majority of artifacts should be located on the bottom of the ditch, in the vicinity of its edges, where the soil surrounding the hollow after the wind fallen tree subsided. The author encountered such an object in Puchówka (Siemaszko 1987) and decided that the object No. 3 in Szczebra had different nature. The majority of finds was accommodated in the ceiling part. Thus, we cannot exclude the possibility that this hollow was if dug intentionally, but in course of time, it became partially filled with the cultural layer (thus, the content of organic substances). The function of this object is not clear. Let us take a closer look at intra-site analysis of this part of the site (Fig. 2: 2). It is easy to observe, that the hollow constitutes a complex with a less rich in material, but more expanded accommodation of artifacts that is in the vicinity with the object no. 3 on the south. The two concentrations together have the length of over 4 m and the breadth of over 2 m. Maybe these are the remains of a dwelling structure (?), the part of which was immersed in the ground.

The concentrations of flint artifacts

Irrespective of the distribution of layers and the structures identified on this site, intra-site analysis yields some interesting data. Figure No. 2: 2 reveals that there were three concentrations of artifacts within the trench. In order to simplify the analysis, they were numbered as objects No. 1–3. As the works proceeded we noticed that only the concentration No. 3 is within the range of the object No. 3. In two other cases, no traces of hollows were recognised. The artifacts were found in the virgin soil which was their secondary location (see the remarks on stratigraphy). Nevertheless, the intra-site analysis of the artifacts in the plough soil (Fig. 2: 1) reveals that the degree of dislocation is negligible in reference to their original distribution. Regardless of dislocations and violations that are the result of ploughing, the distribution of artifacts in plough soil reflects the location of flint concentrations in strata under the humus. A dismembered zone occurs in the south-western part of the trench, over the concentrations no. 2 and 3, which are connected with each other. The second zone is over the concentration no. 1, in the distance of circa 2 m from concentration no. 2 and 3. The smallest amount of the artifacts was registered here. Thus, if plough soil, in which we can

find the original cultural level of the settlement, still reveals the zones of flint congestion occurring over the accommodations identified under the humus, with certain caution we can assume that the accommodations reflect the original arrangement of the settlement.

HOMOGENEITY OF THE DISCOVERY IN SZCZEBRA

Prior to detailed analysis of the inventory, it is necessary to decide whether flint material is homogeneous. The location, shape and size of the settlement, as well as the number of artifacts collected from the site confirm this speculation. As it was mentioned before, the topographic situation of the site is atypical for this type of settlement. Within the accommodation of the Palaeolithic sites in Szczebra, the majority of objects has lower location: on the lake or river terraces or often on the verge of the peatland (Fig. 1). They cover large area, which is the evidence of permanent returns to this territory over the thousands of years. The popularity of the region was due to flint bassets located in the vicinity of (a mine?). Three other sites are situated high above the verge of the valley. Site Szczebra 14, located 150 m from the place where the slope collapsed, belongs to this group. This situation of the camp was not very typical and favourable, which lowers the probability of overlapping subsequent phases of the settlement. Size is another factor confirming the homogeneity. The range of the site, even if measured on the basis of ploughing soil, where the material is spread on a larger area, hardly exceeds 2 acres (10x20 m). The basic part of the camp has the size of 10x4 m. Such small dimensions are peculiar to the Palaeolithic camps: Pincevent: 10x6 m, Deimern 10x10 m, Toskär 15x9 m (it includes two campsites), Witów 19x8 m, Całowanie 9x7 m (Kozłowski and Kozłowski 1975; 1977).

Another argument proving the homogenous character of the site is the small amount of artifacts. 798 items made of flint were found during excavations, whereas field survey provided 19 artifacts (table 1). Adding hypothetical 10% of the inventory remained in the plough soil the entire inventory comprises circa 900 items. Exactly the same number was recorded in Miłuki, where a seasonal Early Mesolithic settlement affiliated with Kunda culture was discovered (Brzozowski and Siemaszko 1998 b). With a high probability, it can be assumed that site Szczebra 14 functioned as a place of a sojourn and its character is homogenous.

Without any doubts, the hollow in the object no. 3, occupying circa 2 m² of the site, with the concentration of the flint in the centre, is void of any additions. Our study of the inventory will be referred to this object. The evidence is also grounded on the typological homogeneity of the inventory.

FLINT ARTIFACTS

798 flint artifacts were discovered during site excavation. The complete typological list is compiled in table 1 and figures 3–6 present the implements, remnants of their production, cores and the elements of preparation. In order to enable the reader to verify the author's opinion on the homogenous character of the flint inventory, the artifacts on the pictures are grouped according to the concentrations in which they were found. It is not difficult to notice that almost all the elements of the inventory reappear in every concentration. According to the author this is the most cogent argument proving the culturally and chronologically unified character of the inventory from Szczebra.

North-eastern cretaceous flint was the exclusive material used in the production of tools. On the basis of the cortex, that is well preserved, it can be speculated that at least a certain amount of the flint raw material came directly from the deposits.

Typological analysis of the finds (see also table No. 1)

1. Ahrensburgian tanged points (Fig. 3: 1–5). The inventory contains 5 items of his type. Their forms are evidently miniaturised (2,0–4,6 cm), which does not undermine the typological classification. Such miniaturised forms (1,6–4,1 cm) of tanged points are known from classic Ahrensburgian sites, like Deimern, Ketzendorf IV (Taute 1968: taf. 1, 39) or Alt Duvenstedt LA 121 (Clausen 1996: 106) and constitute the majority there! Tangs of the points from Szczebra were shaped with semi-abrupt or abrupt retouch. They were formed through retouching of two notches, usually in the bulb part of the blade, and then the fracture in the narrowest place. If the blow came from the side, the tang has deep negatives of microburin blow. In some cases these negatives resemble "Swiderian" retouch of dorsal side of the tang (Fig. 3: 4), however, they are considerably deeper and definitely do not have anything in common with flat retouch. Unfortunately, both for Polish and eastern European scholars, the incidence of any negatives on the dorsal side of the tang was a sufficient argument to classify such points as Swiderian. Besides, if figures in publications

are not precise enough it is difficult to discern forms made with the use of microburin blow technique. Two Ahrensburgian tanged points from Szczebra have classic retouched truncations in the tip part. In three cases the tips are broken, which makes it impossible to define whether they were retouched.

2. Swiderian tanged points (Fig. 3: 6–8). Including the tanged point found during the field survey, the settlement from Szczebra provided three examples of implements with distinct flat retouch on the dorsal side. No leaf-shaped points were identified; all of the tools are strongly miniaturised (2.1–4.6 cm). It is important to notice that apart from flat retouch on the dorsal side of the tang, other traits of these points are typically "Ahrensburgian": semi-abrupt or abrupt retouch of the tang which is made by means of fracture or microburin blow, and inclined or slightly arched truncation in the tip part. In fact, this is a transitional form between the Ahrensburgian and Swiderian tanged points.

3. Dihedral burin with a tang (tanged point?) – (Fig. 3: 9). This interesting tool has analogies in archaeological material from the site Burdyniszki 4 (Szymczak 1995: 37). The implement from Szczebra has a distinct tang shaped by means of transversal fracture. However, in the place of the point we find a multiple dihedral burin. It is difficult to comment on the function of this tool without traseological analysis.

4. Remnants of the tanged point production (Fig. 3: 10–14). The debris of this type can illustrate the process of Ahrensburgian tanged points production. Again, these forms are analogous to Early Ahrensburgian inventory from z Alt Duvenstedt LA 121 (Clausen 1996: 106). Almost in every case they stem from the bulb part of the blade. They often bear the traces of transversal fracture. Sometimes, the process did not succeed. In this case we find a destroyed point with distinct notches (Fig. 3: 11). The point must have cracked in an inappropriate place during the breaking of a tang. Debris after the production of the tang is often asymmetrical. The same asymmetry can be noticed on the tangs of the points. At least in one of the cases we can recognise a microburin blow (Fig. 3: 14). The use of this technique is the reason why this debris looks similar to "classic" microburins. The main difference is that the latter forms have only one notch, and the remnants of tang production possess two opposite notches. The method of Ahrensburgian points production was described exhaustively by W. Taute (1968: 177–178).

5. Microburins (Fig. 3: 15–19). We can distinguish proximal and distal forms. It is generally accepted that the microburin blow technique was used in the

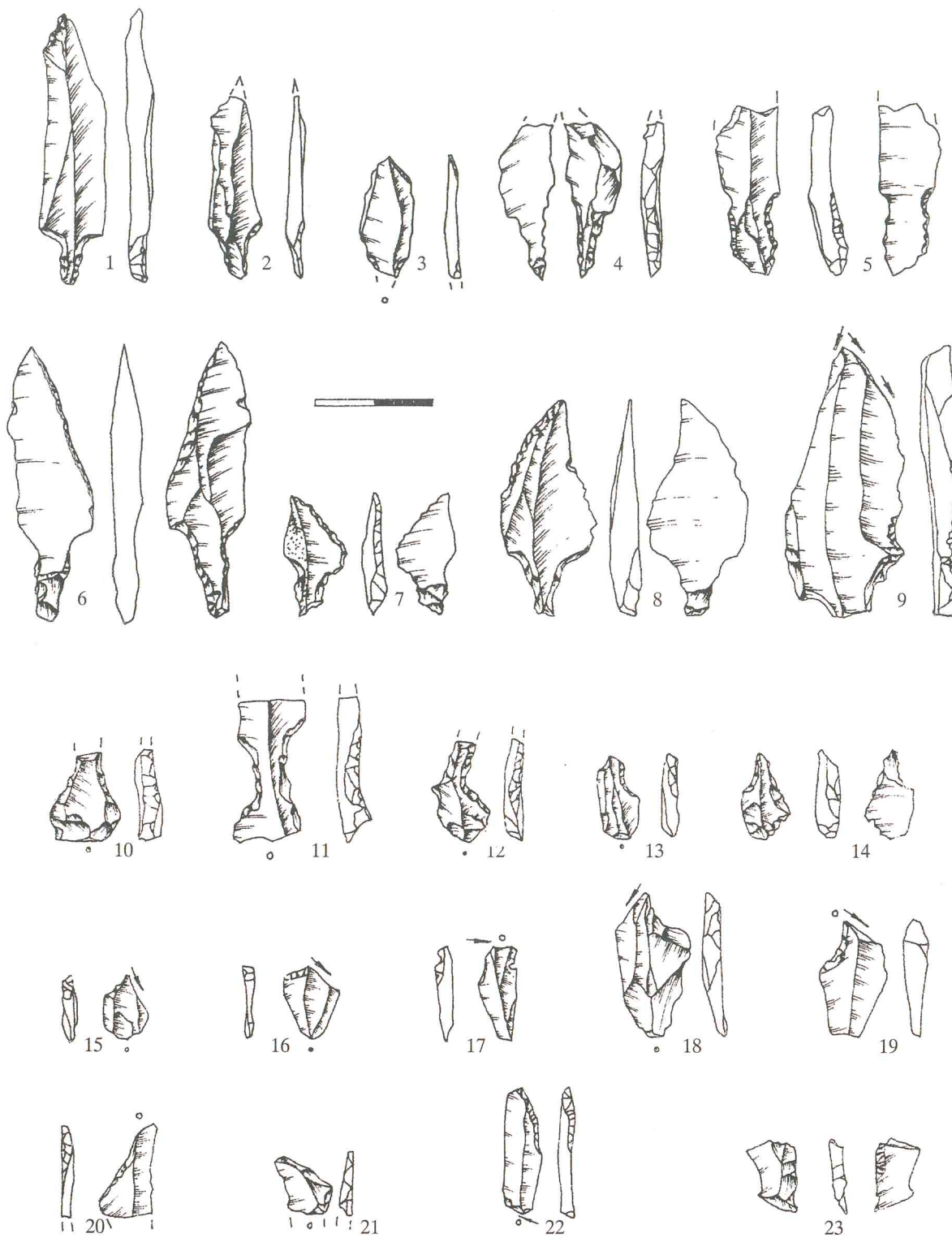


Fig. 3. The site Szczebra 14. Flint artifacts: 1-5: Ahrensburgian tanged points; 6-8: Swiderian tanged points; 9: dihedral burin with a tang; 10-14: remnants of tanged point production; 15-19: microburins; 20-22: microliths; 23: fragment of a microretouched subcrested blade. Localisation of finds: surface: 6; plough soil (N): 1-2, 9-10, 23; plough soil (S): 15; concentration No. 1: 16-18, 20-21; concentration No. 2: 3-4, 7, 11-14; concentration No. 3: 5, 8, 19, 22. Drawn by R. Maskowicz.

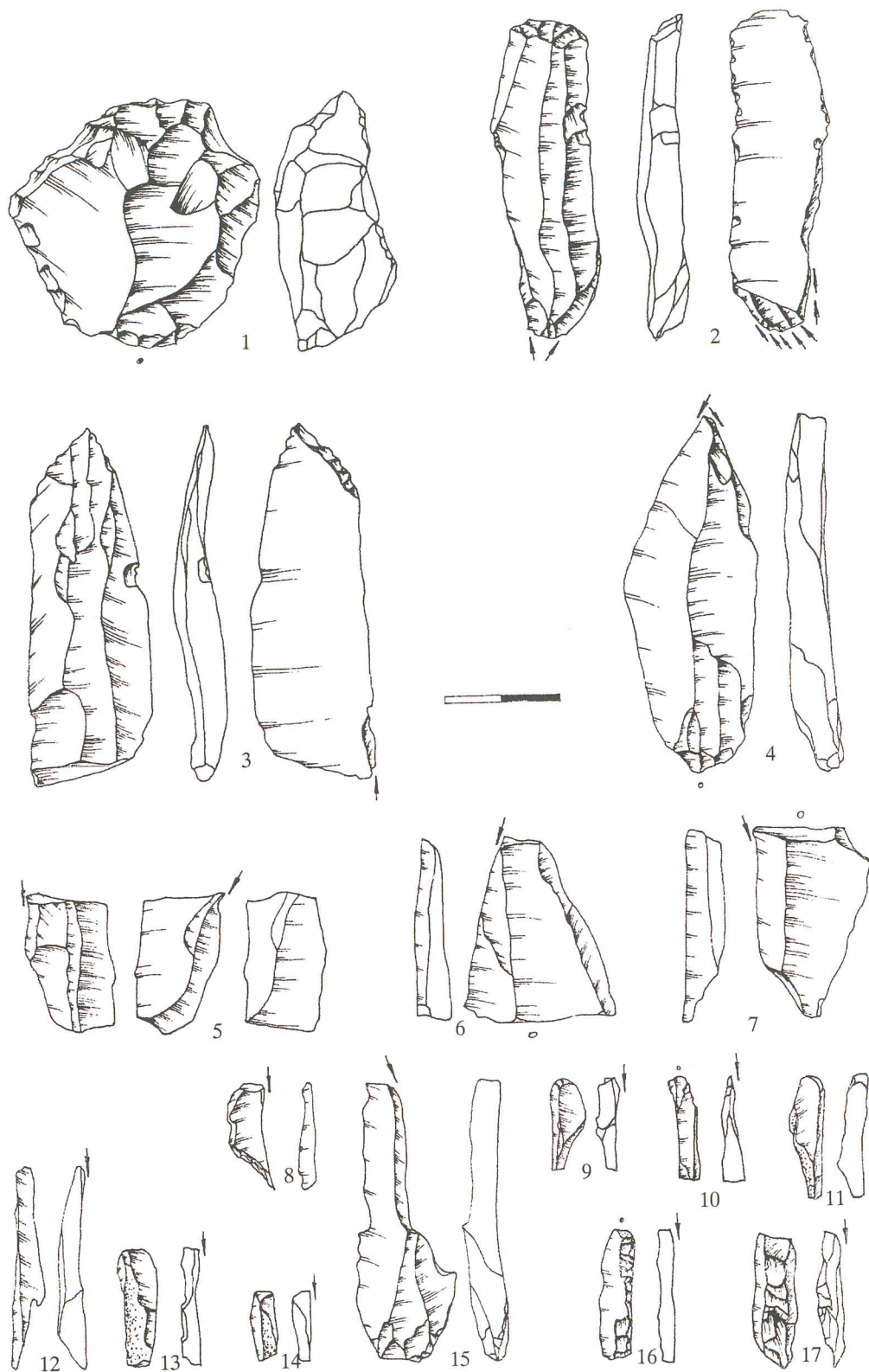


Fig. 4. The site Szczebra 14. Flint artifacts: 1: end-scaper; 2-3: combined tools; 4-7: burins; 8-17: burin spalls. Localisation of finds: surface: 2; plough soil (N): 6-8, 12-14; plough soil (S): 5; concentration No. 1: 1; concentration No. 2: 9-11, 15-16; concentration No. 3: 3-4, 17. Drawn by R. Maskowicz.

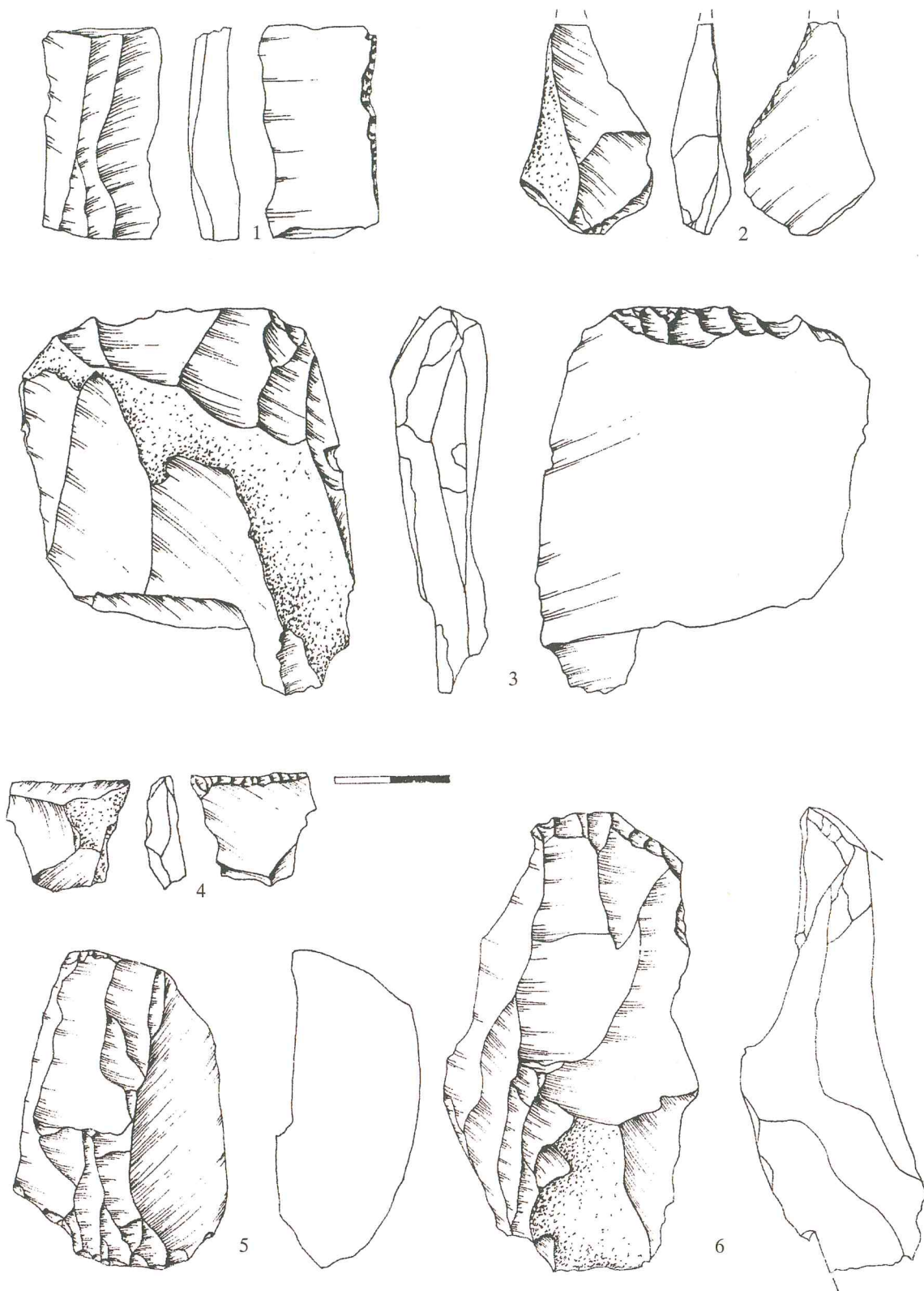


Fig. 5. The site Szczebra 14. Flint artifacts: 1: retouched blade; 2-4: flakes with secondary retouch; 6-5: double platform cores. Localisation of finds: surface: 5; plough soil (N): 2-4; plough soil (S): 1; concentration No. 2: 6. Drawn by R. Maskowicz.

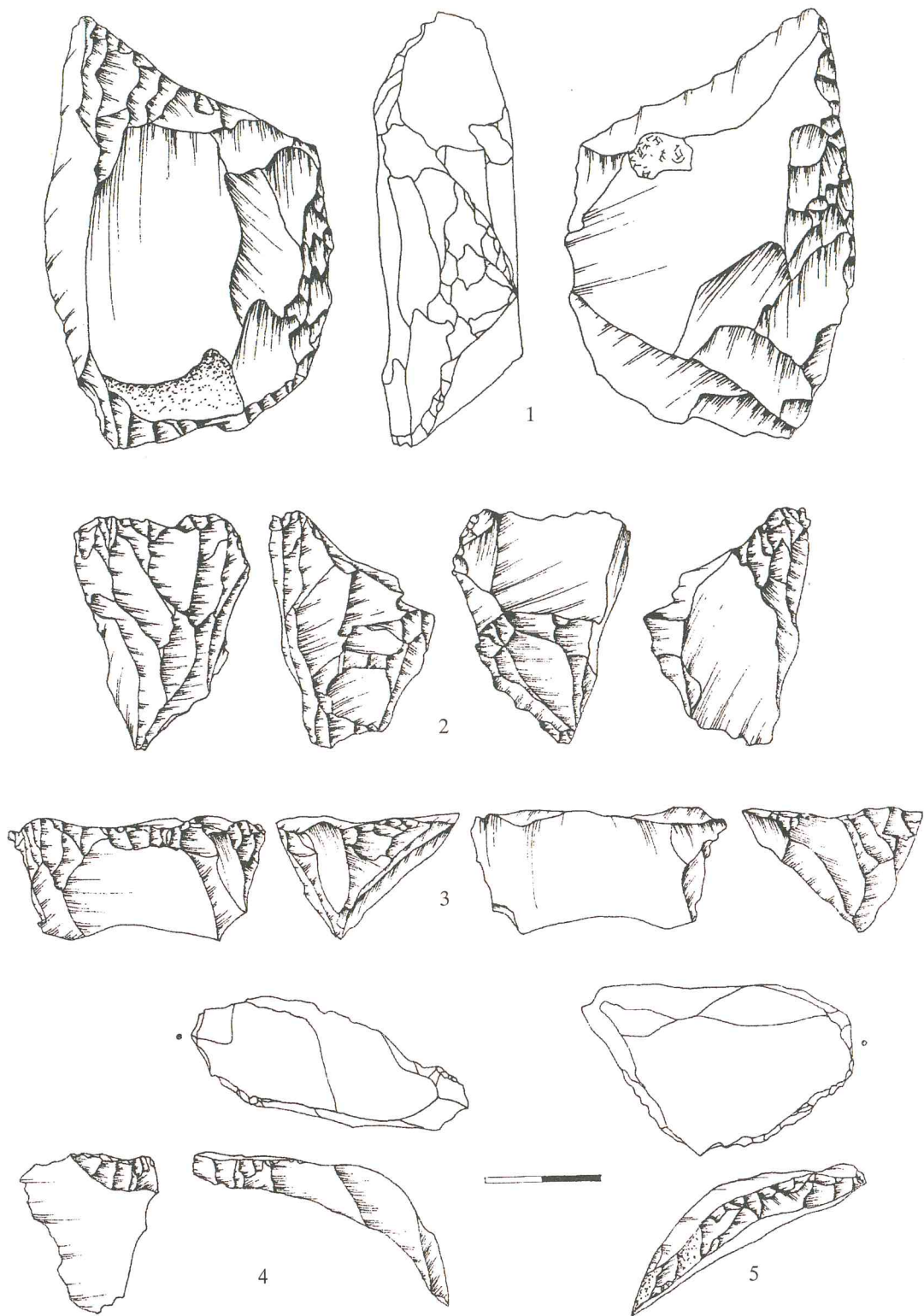


Fig. 6. The site Szczebra 14. Flint artifacts: 1: core preform; 2: pyramidal core; 3: fragment of the semi-pyramidal core; 4-5: double platform core tablets. Localisation of finds: concentration No. 1: 1-3; concentration No. 3: 4-5. Drawn by R. Maskowicz.

production of microliths. In fact this technique could be applied in the production of points, both in order to make tangs and truncated tips. Microburins are characteristic for Ahrensburgian inventories (Taute 1968; Kozłowski and Kozłowski 1977; Clausen 1996).

6. Microliths. Three microliths were identified in the inventory. One of them, unfortunately broken, is closely related to Zonhoven points (Fig. 3: 20), as truncation is placed in the bulb part. Another truncated blade, this time in the complete form (Fig. 3: 22), has a strongly inclined truncation. The base of this microlith was shaped with the use of microburin blow technique. The third implement is destroyed to such extent that it is difficult to decide whether it was a truncated blade or triangle (Fig. 3: 21). These forms of microliths are parallel to the ones from Germany (Taute 1968).

7. Combined tools. One of these implements (Fig. 4: 3) is a burin on the distal part of the broken blade. In the proximal part, on the dorsal side, there is a retouched truncation. The second implement (Fig. 4: 2) is a multiple dihedral burin in the bulb part. It is combined with a slender end-scraper in the tip part of the blade. Especially the latter form (end-scraper + burin) is peculiar to the Palaeolithic.

8. Burins and burin spalls (Fig. 4: 4–17). In this inventory burin on the broken blade dominate over dihedral burins. There is a lack of truncated burins. The majority of burin spalls comes from burins on the broken blade. This is a distinct element in comparison to Ahrensburgian inventories, in which truncated burins prevail over dihedral burins. However, in Deimern (Taute 1968) burins on the broken blade were common. The case was similar on the sites of Wojnowo type: Wojnowo „a” and Pomorsko 1 (Kobusiewicz, Nowaczyk and Okuniewska-Nowaczyk 1987). This form of the burin seems to be prevalent on the east.

9. End-scrappers. Two implements belonging to this category were found. They differ completely in form. A slender end-scraper on the blade combined with a burin has already been described above (Fig. 4: 2). The second one is a chunky implement shaped on the flake (Fig. 4: 1).

10. Cores. Two types of cores occurred in Szczebra: pyramidal (Fig. 6: 2–3) and double platform with single striking surface (Fig. 5: 5–6; Fig. 6: 1). Double platform core is a universal form in this area. They were present in inventories of Lyngby, Ahrensburgian and of course Swiderian culture. Besides they also turned up in the Early Holocene. Until recently, it has been believed that in the Ahrensburgian circle, the preparation of the dorsal side of the core was not very common and that the striking surface was more flat. The core found

during PAR investigation of the site fulfils these criteria (Fig. 5: 5). The one discovered during site excavation, with the destroyed reverse side is also similar (Fig. 5: 6). Another fully prepared, but yet not exploited core preform has “Swiderian” traits (Fig. 6: 1). Nevertheless, the core from Alt Duvenstedt LA 121 dated back to the Allerød period (Clausen 1996: 106) resembles a classic Swiderian form. Thus, scholars in north-eastern Europe should be cautious with cultural classification of double platform cores. It should be applied only in the context of a complete inventory. The case with the semi-pyramidal and pyramidal cores is different. The find from Szczebra (Fig. 6: 2) has parallels in numerous Ahrensburgian inventories. However, similar but more massive forms occur in Lyngby culture (Taute 1968; Kozłowski and Kozłowski 1975).

11. The elements of the core preparation. In this inventory, cores are scarce and strongly exploited. However, numerous elements of their preparation were found: core tablets (Fig. 6: 4–5), platform rejuvenation flakes, crested blades and subcrested blades. On this basis it can be claimed that both forms of cores: double platform and with one striking platform were of equal importance in the production of flint implements.

CHRONOLOGICAL AND CULTURAL AFFILIATION OF THE SETTLEMENT IN SZCZEBRA AND ITS FUNCTIONAL ASPECTS

The data presented in this article indicates that we are dealing with a homogeneous group of flint artifacts. The forms of tools, cores and the elements of their processing indicate the affiliation of this inventory with Ahrensburgian culture. Here are the bases for such a classification of the settlement in Szczebra:

1. The presence of Ahrensburgian tanged points. Their form and size is equal to the classic examples of this culture: the presence of truncation and unretouched tips, the lack of flat retouch on the dorsal side of the tang. In the majority of cases the tang bears the traces of fracture. The application of microburin blow in the production of the tang is relatively rare.

2. The use of a very characteristic technique to shape the tangs of the points. First, two notches on the opposite sides were retouched. Then, the unnecessary bulb part was fractured. In some cases, microburin blow technique was applied in order to remove this element.

3. The use of the microburin blow technique in the production of tanged points. This could be applied

both in the production of a tang and in the shaping of truncation at the tip of the point. It is very probable that this technique was used in the production of microliths.

4. The presence of microliths. In this case these are microlithic truncated blades. Such forms are analogous to the ones from almost all Ahrensburgian sites. At least one of them is closely related to Zonhoven points.

5. Double platform cores (with a characteristic plain striking surface) as well as pyramidal or semi-pyramidal cores were used in the production of blanks. This trait is very peculiar to Ahrensburgian culture.

However, it must be stressed that these artifacts differ in some respects from the classic Ahrensburgian material. Here are the basic differences:

1. The inventory contains tanged points with flat retouch of the dorsal part, which makes them similar to the Swiderian ones. Nevertheless, the form of the point with a distinct tang and a truncation in the tip part is closely related to Ahrensburgian culture. Thus, we are dealing here with hybrid forms. This is not a solitary exception. Such hybrids were discovered by M. Kobusiewicz in the central basin of the Oder river, e.g. sites Pomorsko 1 or Wojnowo „a” (Kobusiewicz and al. 1987). Nevertheless, inventories from the Oder basin have considerably more Swiderian elements than the inventory from Szczebra.

2. The typological group of burins is explicitly different in comparison to the classic Ahrensburgian inventory. In Germany, both truncated and dihedral burins are principal forms, whereas here, burins on broken blade dominate over dihedral burins. Thus, we are dealing with a local differentiation.

Nevertheless, the similarities to the Ahrensburgian inventory definitely dominate over the differences. Thus, such cultural classification of the site Szczebra 14 is correct. Nevertheless, one must bear in mind, that the site is situated far from the place that has been considered to be the range of Ahrensburgian culture (Kozłowski ed. 1981). The term used by M.M. Zhilin (1996) “eastern Ahrensburgian” seems to be very accurate. In this situation, the author suggests naming the Ahrensburgian groups from north-eastern Europe eastern Ahrensburgian culture in order to distinguish the materials from northern and western part of our continent.

Another issue to reflect on is the chronology of the material from Szczebra. There is no possibility of absolute dating of the site. Thus, it is necessary to draw a parallel with other sites belonging to this circle. The oldest groups could have existed already in Allerød (Clausen 1996). Nevertheless, we assume that

Ahrensburgian culture existed in the Younger Dryas. *Per analogiam* the artifacts from Szczebra should be dated to the same period. We cannot exclude the possibility that eastern Ahrensburgian culture existed also in the Early Holocene. Though, we must bear in mind that Postswiderian culture occurred in this region. Then, very early in the second half of the Preboreal period, Kunda culture appeared here (the dating of the campsite in Mituki is hardly younger than Pulli in Estonia – Brzozowski and Siemaszko 1998 b). The most reasonable solution is to date the site Szczebra 14 to Dryas III.

The last problem to solve is the function of the object discovered in Szczebra 14. The inventory contains all the basic forms of implements, remains of different stages of blanks’ obtaining as well as debris. Thus, the site seems to be a typical settlement. The scarce number of finds indicates that the place could not have been inhabited for a long period of time. Location of the camp almost at the top of the elevation meant excellent view, especially in the southwestern direction, where the Rospuda valley stretches (Fig. 1). This was a very beneficial location as far as tracking the reindeer migration was concerned. The route of the reindeer extended from the north direction where the Biebrza proglacial valley is situated (Siemaszko 1997; 1999 b). The game encountered on its way an extremely deep and broad valley of the Rospuda river. In order to overcome this obstacle, the animals had to head in the direction of the settlement, where they could be easily perceived. From the hunter’s point of view, such location of the place was excellent.

THE ROLE OF THE SITE SZCZEBRY 14 IN THE INVESTIGATIONS OF THE LATE PALAEOOLITHIC OF THE NORTH EASTERN EUROPE

The question posed in the title of the article, though very revolutionary, is fully justified. The evidence provided by the site in Szczebra is supported by the literature mentioned at the beginning of the article. On these bases we have to accept the existence of the eastern group of Ahrensburgian culture. This assumption will have serious consequences in the study of the Late Pleistocene settlement in this part of Europe. The cultural classification of numerous sites should be modified. This concerns mainly north-eastern Poland, where not knowing how to deal with these artifacts, they were either interpreted as a variant of Swiderian culture or considered to be the

effect of the evolution of the local Palaeolithic in the Holocene conditions. The archaeological material affiliated with the eastern Lyngby culture will have to be studied again. In Eastern Europe, the successor of Bromme culture is Ahrensburgian culture. In eastern Europe, we also have artifacts having the traits of Lyngby culture which is known here under various names: e.g. "Baltic madlen" (Rimantienė 1971; 1996), "Vilnius group", "Lyngby culture sensu largo" (Kozłowski and Kozłowski 1977; Kozłowski 1975; Sulgostowska 1989) or "Perstunian culture" (Szymczak 1987, 1995). In the eastern zone, Ahrensburgian culture was the successor of Lyngby groups. The case was the same on the west. It would be very naive to claim that this was the result of the convergence conditioned by environmental changes. Such similarity cannot be accidental and it clearly indicates that there must have been certain ties between eastern and western centres of Lyngby culture and between eastern and western groups of Ahrensburgian culture. This could not have been a singular migration (without return) of Lyngby societies on east. Over the several thousand of years they must have been aware that their kinsmen lived in the remote part of the world. Moreover, there must have been occasional contacts between them. The coast of the Baltic Sea was the natural route of their migrations. There is also a theory of seasonal and long-distance migrations of Ahrensburgian societies. The investigations conducted so far indicate the existence of such routes on the line south – north (Baales 1999). According to other scholars the Ahrensburgian popu-

lations seasonally exploited the seaside area where they could hunt the seals (Kindgren 1996). Under this assumption, even the several-hundred-kilometre long migrations along pre-Baltic Sea seem to be feasible. The problem is that in those times the coast of the sea spread 10-20 km (in some places even 70-100 km) further north. (Kozłowski and Kozłowski 1975; Björck 1996). Nowadays, the sites dated back to this period are submerged in the sea.

Acknowledgements

The result of the investigations in Szczebra is serious in consequences and it could not have taken place without the assistance of many people. First of all I want to thank my colleague Jerzy Brzozowski, who accompanied me during the discovery of the site, and later supported the organisation of the excavations as the head of the Suwałki Province Museum. I am also grateful to Janusz Mackiewicz from the Suwałki Branch of Heritage Preservation Service for the help in gathering the funds for the research and to Antoni Oleksicki from the Heritage Preservation Service in Białystok for financing of the excavation. Aneta Ejdulis and Renata Maskowicz assisted me not only during the field survey but also in the study of the materials. I also appreciate the input of the rest of the team who on many different ways helped during the excavation. I also want to thank Alicja and Tadeusz Rowiński not only for rendering the area accessible to investigation but also for their hospitality. I also want to thank Sabina Siemaszko for the translation of this article into English.

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ŠČEBROS 14-OJI GYVENVIETĖ. RAKTAS EUROPOS ŠIAURĖS RYTINĖS DALIES PALEOLITUI PAŽINTI AR DAR VIENA PASLAPTIS?

Jierzy Siemaszko

Santrauka

Ščebros 14-oji gyvenvietė yra Šiaurės Rytų Lietuvos ežeryno regione, Augustavo lygumos mezoregione, Rospudos upės krante. 1999 metais šioje gyvenvietėje buvo ištirtas 64 m² plotas. Titnago radiniai buvo aptinkami maždaug 10x20 m gyvenvietės plote, jos centrinė dalis apėmė 4x10 m plotą. Gyvenvietėje buvo aptikti 3 radinių koncentracijos bei 2,10x1,4 m dydžio ir apie 30 cm storio objektas, galbūt sietinas su gyvenamuoju būstu. 798 titnago radiniai buvo surinkti tyrimų metu. Palyginti nedidelis kiekis radinių, radinių tipų panašus pasiskirstymas skirtingose koncentracijose, kompaktiškas gyvenvietės dydis leidžia spėti, kad šios gyvenvietės radinių kompleksas yra homogeniškas. Titnago radiniai: Arensburgo ir Svidrų tipų įklotiniai antgaliai, dvigalviai skaldytiniai, viduriniai rėžtukai, rėžtukai, suformuoti nulaužtų skelčių kampuose, mikrorėžtukai, galiniai gremžtukai, mikrolitai, o taip pat taikyti

pirminio ir antrinio apdirbimo technikų metodai šią gyvenvietę leidžia sieti su Rytų Arensburgo kultūra. Pagal analogijas ir bendrą Šiaurės Rytų Lenkijos regiono kultūrinę situaciją Ščebros 14-oji gyvenvietė greičiausiai datuotina Vėlyvojo Driasio laikotarpiu.

Ši gyvenvietė įrodo, kad egzistuoja rytinė Arensburgo kultūros grupė, kuri kaip ir vakarinė šios kultūros grupė matyt kilo iš Liungbių kultūros. Panašumai ir ryšiai tarp rytinių ir vakarinių Liungbių ir Arensburgo kultūrų centrų negali būti paaiškinti tik Liungbių kultūros vienkartinė migracija į Rytų Europą. Greičiausiai tolimų sezoninių migracijų metu tarp šių kultūrų centrų buvo atsitiktiniai kontaktai. Migracijų kelias greičiausiai buvo Baltijos pakrantė, deja tuo metu buvusi 10–100 km šiauriau. Todėl šiuo metu nagrinėjamo laikotarpio gyvenvietės yra jūros dugne.

LENTELIŲ SĄRAŠAS

1 lentelė. Archeologinis paminklas Ščerba 14. Titnaginių įrankių, surinktų per PAR lauko tyrimus bei gelbėjimo kasinėjimus, tipologinis sąrašas.

ILIUSTRACIJŲ SĄRAŠAS

1 pav. Vėlyvojo paleolito komplekso fragmentas Ščerbos archeologiniuose paminkluose. 1 – durpingos pelkės; 2 – buvusio ežero terasos; moreninė aukštuma, padengta nuoplovomis; 4: archeologiniai paminklai su vėlyvojo paleolito dirbiniais; 5: Ščerbos 14 archeologinis paminklas. Piešė R. Maskovič pagal J. Semaško medžiagą.

2 pav. Archeologinis paminklas Ščerba 14. Vidinis titnaginių dirbinių tyrimas. 1: Radiniai iš išartos dirvos: N, S – koncentracijos. 2: titnaginių dirbinių koncentracijos (Nr. 1–3) žemiau išartos dirvos; brūkšniuota linija rodo horizontalią struktūrą Nr. 3. J. Semaškos kompiuterinis apdorojimas.

3 pav. Archeologinis paminklas Ščerba 14. Titnaginiai dirbiniai: 1–5: Ahrensburgo ietigaliai su kotu; 6–8: svidrų ietigaliai su kotais; 9: dvibriaunis rėžiklis su kotu; 10–14: įvairių antgalių su kotais liekanos; 15–19: mikrorėžikliai; 20–22: mikrolitai; 23: mikroretušuotos skeltės fragmentas. Radinių lokalizacija: paviršius: 6; išarta dirva (N): 1–2, 9–10, 23; išarta dirva (S): 15; koncentracija Nr. 1: 16–18, 20–21; koncentracija Nr. 2:

3–4, 7, 11–14; koncentracija Nr. 3: 5, 8, 19, 22. R. Maskovič piešiniai.

4 pav. Archeologinis paminklas Ščerba 14. Titnaginiai dirbiniai: 1: gremžtukas galutiniam apdirbimui; 2–3 – kombinuoti įrankiai; 4–7 – rėžikliai; 8–17 – rėžiklių šukės. Radinių lokalizacija: paviršius: 2; išarta dirva (N): 6–8, 12–14; išarta dirva (S): 5; koncentracija Nr. 1: 1; koncentracija Nr. 2: 9–11, 15–16; koncentracija Nr. 3: 3–4, 17. R. Maskovič piešiniai.

5 pav. Archeologinis paminklas Ščerba 14. Titnaginiai dirbiniai: 1: retušuota skeltė; 2–4: sluoksniai su antriniu retušavimu; 6–5: dviejų platformų skaldytinis. Radinių lokalizacija: paviršius: 5; išarta dirva (N): 2–4; išarta dirva (S): 1; koncentracija Nr. 2: 6. R. Maskovič piešiniai.

6 pav. Archeologinis paminklas Ščerba 14. Titnaginiai dirbiniai. 1: skaldytinio ruošinys; 2 – piramidinis skaldytinis; 3 – pusiau piramidinio skaldytinio fragmentas; 4–5 – skaldytiniai su dviem plokštelėmis. Radinių lokalizacija: koncentracija Nr. 1: 1-3; koncentracija Nr. 3: 4–5. R. Maskovič piešiniai.

ПОСЕЛЕНИЕ ШЧЕБРА 14. КЛЮЧ К ПОЗНАНИЮ ПАЛЕОЛИТА СЕВЕРОВОСТОЧНОЙ ЧАСТИ ЕВРОПЫ ИЛИ ЕЩЕ ОДНА ЗАГАДКА?

Ежи Семашко

Резюме

Поселение Щебра 14 находится на берегу реки Роспуда, в мезорегионе Августовской равнины, в регионе Литовских озер в северо-восточной части Польши. В 1999 г. на поселении была исследована площадь 64 м². Кремневые находки были обнаружены на площади поселения размером около 10х20 м, а центральная часть поселения занимала площадь 4х10 м. На поселении были обнаружены 3 концентрации находок, а также объект размером 2,1х1,4 м и толщиной 0,3 м, может быть, связанный с жилищем. 798 кремневых находок были собраны во время исследований. Сравнительно небольшое

количество находок, почти одинаковое распределение их типов в различных концентрациях, небольшой размер поселения разрешают сделать вывод, что комплекс находок этого поселения гомогенный. Кремневые находки: черешковые наконечники свидерского и аренбургского типов, двухплощадочные нуклеусы, срединные и оформленные в углах сломанных пластин, микрорезцы, концевые скребки, микролиты, а также методы техники первичной и вторичной обработок разрешают связать это поселение с восточноаренбургской культурой. По аналогиям и по общекультурной

ситуации региона Северо-восточной Польши поселение Щерба 14 скорей всего может быть датировано периодом Позднего Дриасса.

Это поселение доказывает, что существовала восточно-аренсбургская культурная группа, происхождение которой, также как и западной группы этой культуры, связано с культурой Люнгбю.

Аналогии и связи между восточными и западными центрами культур Люнгбю и Аренсбург не мо-

гут быть объяснены только одиночной миграцией культуры Люнгбю в Восточную Европу. Скорей всего между этими культурами имели место случайные связи во время далеких сезонных миграций. Путем миграций скорей всего было побережье Балтийского моря, которое в это время, увы, было 10–100 км севернее. Потому теперь поселения исследуемого периода находятся на дне моря.

СПИСОК ТАБЛИЦ

Таблица 1. Археологический памятник Щерба 14. Типологический список кремнёвых изделий,

собранных во время полевых исследований PAR и спасательных раскопок.

СПИСОК ИЛЛЮСТРАЦИЙ

Рис. 1. Фрагмент комплекса позднего палеолита археологических памятников Щербы. 1 – торфяные болота; 2 – террасы бывшего озера; моренная возвышенность, покрытая смывами; 4: археологические памятники с изделиями позднего палеолита; 5: археологический памятник Щерба 14. Рисунки Р. Маскович по материалам И. Семашко.

Рис. 2. Археологический памятник Щерба 14. Внутреннее исследование кремнёвых изделий. 1: Находки из вспаханной почвы: N, S – концентрации. 2: концентрации кремнёвых изделий (№ 1–3) ниже вспаханной почвы; пунктирная линия показывает горизонтальную структуру № 3. Компьютерная обработка И. Семашко.

Рис. 3. Археологический памятник Щерба 14. Кремнёвые изделия: 1–5: Аренсбургские наконечники копий; 6–8: свидерские наконечники копий с рукоятками; 9: двухреберный резец с ручкой; 10–14: остатки наконечников с рукоятками; 15–19: микро-резцы; 20–22: микролиты; 23: фрагмент микроретушированного лезвия. Локализация находок: поверхность: 6; вспаханная почва (N): 1–2, 9–10, 23; вспаханная почва (S): 15; концентрация № 1: 16–18, 20–

21; концентрация № 2: 3–4, 7, 11–14; концентрация № 3: 5, 8, 19, 22. Рисунки Р. Маскович.

Рис. 4 Археологический памятник Щерба 14. Кремнёвые изделия: 1: скребок для окончательной обработки; 2–3 – комбинированные орудия труда; 4–7 – резцы; 8–17 – обломки резцов. Локализация находок: поверхность: 2; вспаханная почва (N): 6–8, 12–14; вспаханная почва (S): 5; концентрация No. 1: 1; концентрация № 2: 9–11, 15–16; концентрация No. 3: 3–4, 17. Рисунки Р. Маскович.

Рис. 5 Археологический памятник Щерба 14. Кремнёвые изделия: 1: ретушированное лезвие: слои со вторичным ретушированием; 6–5: двухплощадные нуклеусы. Локализация находок: поверхность: 5; вспаханная почва (N): 2–4; вспаханная почва (S): 1; концентрация № 2: 6. Рисунки Р. Маскович.

Рис. 6 Археологический памятник Щерба 14. Кремниевые изделия. 1: заготовка нуклеуса; 2 – пирамидальный нуклеус; 3 – фрагмент полупирамидального нуклеуса; 4–5 – двухплощадный нуклеус. Локализация находок: концентрация № 1: 1–3; концентрация No. 3: 4–5. Рисунки Р. Маскович.

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