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Journal of the Lithic Research Roundtable
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Szerkesztők • Edited by
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TARTALOM • CONTENTS

Bifacial technology at the beginning of the Upper Paleolithic in Moravia	9
Bifaciális technológia Morvaországban a felső paleolitikum kezdete idején <i>Škrdlá, Petr</i>	
Leaf Point finds from Zemplín Hills Area, Eastern Slovakia	13
Levéleszközök a Zemplín-hegység területén (Kelet-Szlovákia) <i>Voľanská, Adriána</i>	
Taxonomy of the Early Middle Palaeolithic in Central Europe	23
A korai középső paleolitikum nevezéktana Közép-Európában <i>Kozłowski, Janusz K.</i>	
Hidasnémeti-Borház-dűlő Gravettien lelőhely kőpengéinek morfometriai elemzése	33
Morphometric analysis of blades from Hidasnémeti-Borház-dűlő Gravettian site <i>Eleki, Ferenc • Péntek, Attila</i>	
Feldebrő-Bakoldal 1. számú lelőhely kutatásának előzetes eredményei	49
Preliminary report of an Upper Palaeolithic site, Feldebrő-Bakoldal 1. <i>Gutay, Mónika • Bálint, Csaba • Péntek, Attila • Szegedi, Kristóf István • Tóth, Zoltán Henrik</i>	
Kőkor Kerekasztal 7. A kőkor kutatóinak éves konferenciája	57
Lithic research roundtable 7th Annual meeting <i>Király, Attila</i>	
Ez évben honlapunkon	66
This year on our website <i>Király, Attila</i>	



A SZERKESZTŐK ELŐSZAVA

Negyedik évfolyamunkban folytatjuk a 2014-ben Miskolcon megrendezésre került 11. *SKAM Lithic Workshop: the multifaceted biface - Bifacial technology in Prehistory* konferencia előadásainak közlését. Adriána Volánská és Petr Škrdl a egyaránt a korai felső paleolitikum levéleszközeiről írnak. Janusz Kozłowski nagyívű tanulmánya a korai középső paleolitikum kulturális sokszínűségét tárgyalja. Eleki Ferenc és Péntek Attila egészen szűk fókuszú választottak egy Gravettien kőegyüttes vizsgálatához, Gutay Mónika és munkatársai pedig izgalmas terepi hírekkel jelentkeznek Feldebrő ásatásáról.

Ez évtől kezdve rendre közölni fogjuk a Kőkor Kerekasztal éves gyűlésein elhangzott előadások kivonatait, és a honlapunkon megjelenő rövidebb beszámolók is helyet kapnak. A tartalmi újdonságok mellett kis mértékű formai igazítás is történt, mindezeket túl pedig örömmel adjuk hírül a Magyar Tudományos Akadémia Könyvtár és Információs Központtal való együttműködésünket. Ezentúl a nálunk megjelent tanulmányok digitális tárgyazonosítót (doi) kapnak, az MTA, illetve MTMT repozitóriumokban automatikusan elhelyezésre kerülnek, valamint a Crossref doi ügynökség adatbázisába is beépülnek. Ez által a Litikum tanulmányok könnyen hivatkozhatók lesznek, és tudományos hasznuk is mérhetővé válik. Izgalmas évek következnek!

EDITORIAL

This year we continue to publish studies presented at the 11th *SKAM Lithic Workshop: the multifaceted biface - Bifacial technology in Prehistory* in Miskolc, Hungary. Adriána Volánská and Petr Škrdl discuss EUP bifacial artifacts from Central Europe. Janusz Kozłowski present a comprehensive study about early Middle Palaeolithic taxonomy in the region, while Ferenc Eleki and Attila Péntek narrow their focus to one Gravettian assemblage from Hungary. Mónika Gutay and her associates share with us fieldwork news about an Epipalaeolithic site with ceramic artifacts in association lithics. Presentation abstracts of the 2016 Lithic Roundtable and several posts from our webpage close this volume.

We are happy to announce a cooperation between Litikum and the Library and Information Centre of the Hungarian Academy of Sciences (HAS). Beginning in this year all the Litikum articles will be equipped with a digital object identifier (doi), and will be archived in the HAS digital repository. The agreement extends to a Crossref database inclusion, through which our publications will be more easy to discover, to cite and to measure their impact.

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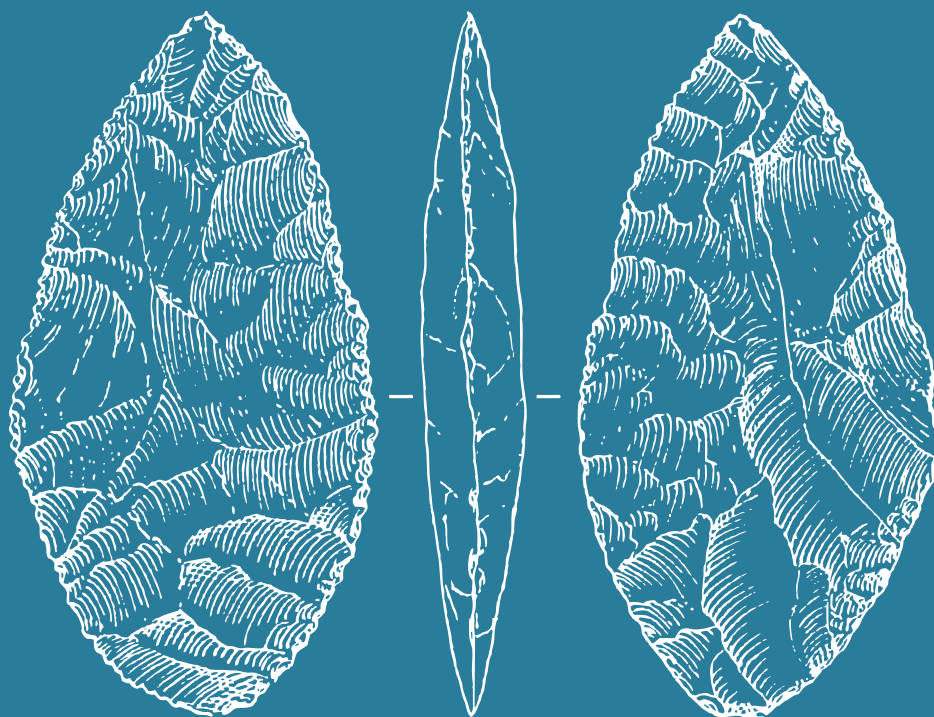
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Proceedings of the 11th SKAM Lithic Workshop

The multifaceted biface - Bifacial technology in Prehistory

20th-22nd of October, 2014, Miskolc, Hungary



Leaf Point finds from Zemplín Hills Area, Eastern Slovakia

Adriána Voľanská

Abstract

Dr. M. Il'ko was the first who paid attention to knapped stone industries on the Western edge of the Zemplín Hills (Slovakia). The collection of Palaeolithic artifacts come from the cadastres of the villages Čerhov and Veľká Trňa (Trebíšov district). Among these, five bifacial leaf points found at the archaeological sites Pod hečkou, Pod vinicami (Čerhov) and Hečka (Veľká Trňa) require special attention. Two points were made of flint (Hečka and Pod vinicami), one of limnosilicite (Pod hečkou) and of radiolarite (Pod hečkou). Collections of knapped stone industries from the above mentioned sites provide circumstantial evidence on Szeletian/Aurignacian settlements of this region.

Kivonat

Levéleszközök a Zemplín-hegység területén (Kelet-Szlovákia)

A Zemplín-hegység (Szlovákia) nyugati peremének patintott kőeszköz-együttseire először Dr. M. Il'ko figyelt fel. Čerhov és Veľká Trňa (Trebíšov körzet) falvak katasztere során paleolit korú kőeszközök váltak ismertté, melyek közül öt levéleszköz fokozott figyelmet érdemel. Lelőhelyeik: Pod hečkou, Pod vinicami (Čerhov) és Hečka (Veľká Trňa). Két hegy nyersanyaga kova (Hečka és Pod vinicami), egy hegyé limnoszilit (Pod hečkou), egy másiké pedig radiarit (Pod hečkou). E lelőhelyeken közvetett bizonyítékokat találunk tehát a régió Szeletai/Aurignacien megtelepedéseire.

Keywords

Late Middle Palaeolithic, upper palaeolithic, Aurignacian, Szeletian, leaf points

Kulcsszavak

Késői középső paleolitikum, felső paleolitikum, Aurignacien, Szeletai ipar, levéleszközök

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1. Introduction

The bifacial leaf point is widely known as a diagnostic type used especially in the transitional period of the Szeletian in Central Europe (Prošek 1953, Svoboda 2014: 341, Oliva 1991: 319). Despite this fact, the oldest leaf points are dated to the Middle Palaeolithic Micoquian industry in this region (Kozłowski 2003: 149). The bifacial technology for artifact production appeared not only in the Szeletian, but also in other cultures such as Altmuhlian, Streletskian, Lincombian-Ranisian-Jerzmanowician and Gravettian (Kozłowski 2003: 149, Flas 2015: 49, Svoboda 1994: 133, fig. 60: 10, Bárta 1988: 181, fig. 8, Jarošová et al. 1996: 200, Simán 1990: 18, Lengyel et al. in press). The function of leaf points in archaeological assemblages has not been uncovered yet. Whereas M. Oliva (1991: 319) considers the leaf point an artifact with high

social status (Oliva 1991: 319), J. Svoboda et al. (1994: 112) and Z. Nerudová et al. (2010: 149) believe that leaf points were rather multifunctional tools. Finds of leaf points on the Western edge of the Zemplín Hills in Southeast Slovakia near Čerhov and Veľká Trňa (Trebíšov district) may bring another viewpoint to this still contemporary and persisted issue.

2. Data and methods

The first finds of leaf points in rural areas of Čerhov and Veľká Trňa nearby appeared in early 2013. The first leaf point findings in the rural areas of Čerhov, Veľkej Trne and their vicinity appeared in early 2013. Experienced regional explorer Dr. M. Il'ko found another two leaf points until spring 2014 (artifacts are housed in the Institute of History of Faculty of Arts at Prešov University). The sites are located on



Figure 1. The location of the sites within Southeastern Slovakia. Sites are situated in the vicinity of the Hungarian border (yellow line) on the Western part of the Zemplín Hills. Source: Google Earth // **1. ábra.** A lelőhelyek helyzete délkelet-Szlovákiában. A lelőhelyek a magyarországi határhoz (sárga vonal) közel helyezkednek el, a Zemplén nyugati részén. Forrás: Google Earth.

the terrains of the Western edge of the Zemplín Hills in Southeast Slovakia. Two locations were found in the village of Čerhov, namely Pod vinicami and Pod hečkou (the site Pod vinicami is located in the cadastral map in the West from Hrachovisko and Pod hečkou is named Hečka) and one location is situated in the cadastre of Veľká Trňa at Hečka (name is identical with cadastral map). For better orientation we will use conventional local names. Hečka and Pod hečkou sites are located close to each other, the site called Pod vinicami by the locals lies on the Southern part of Čerhov rural area (Fig. 1).

Leaf points, together 5 pieces, are of a specific shape typical for Szeletian, but one of them reminds of Micoquian or Bábonyan (Fig. 3). Leaf points that have a flat surface retouch is typical for Szeletian, but this kind of retouch is also characteristic for sidescrapers and other tools. (Svoboda 2014: 341, Svoboda 1994: 111–112). Blade and flake debitage can be found there and from the typological point of view sidescrapers with Middle Palaeolithic character, as well as burins, retouched blades and notches are dominant (Svoboda 2014: 341). Carinated endscrapers occur sporadically (Oliva 1991: 318). Most of these characteristics can be found on our above mentioned locations. Triangular bifaces are typical for Bábonyan and beside them Bocksteinknives, leaf-shaped points and Bábony type knives are also characteristic (Ringer 1983, Ringer 2001: 216). Á. Ringer recognized Bábonyan-Szeletian complex, where Szeletian is the Upper Palaeolithic derivative of the Middle Palaeolithic Bábonyan (Ringer et al. 1995). Besides these five leaf points, another 380 artifacts of various types and products of simple technological production were collected.

Artifacts from field surveys are often understood as finds with less informative value than those from excavations. However, I agree with S. Vencľ's opinion that field survey is a permanent source of information for archaeology and we should stop disparagement or even denial of knowledge from field surveys for good (Vencľ 1995: 12).

We analysed macroscopically the raw material, which the artifacts are made of. Classification of finds was performed based on typology and all artifacts underwent technological analysis (Table 1.1–4, Table 2.1–4, Table 3.1–4).

3. Results

The artifacts were mostly made from obsidian coming from local sources from the Zemplín Hills in Slovakia, and other raw materials originated in Zemplén, Hungary, e.g. jasper and limnosilicite. Some tools were made of Polish flint and Slovakian radiolarite. Raw material has often low quality; debris is characterized by frost or other damage (probably as a result of ploughing).

In the collection from Čerhov and Veľká Trňa we could also identify finds of a knapped industry typical for Mesolithic or Neolithic-Eneolithic technology of knapping. The difference between Upper Palaeolithic and Late Palaeolithic- Mesolithic or later artifacts is in the technology. Primary technology used in Upper Palaeolithic artifacts is direct percussion with a hard hammerstone, whereas direct percussion with a soft hammer and indirect percussion are typical rather for Late Palaeolithic-Mesolithic periods (Inizan et al. 1992: 61). In the

Upper Palaeolithic, we can find blades and flakes. In Mesolithic technology we can find irregular cores with opposed striking platform and microlithic artifacts (Ginter, Kozłowski 1990: 64). Neolithic artifacts seem to have been produced usually by pressure technique, whereby the artifacts are smaller or bigger (Ginter, Kozłowski 1990: 64). Eneolithic finds usually tend to be enlarged blades, and standardization in the production can be observed, whereby bifacial points and spears were also used (Ginter, Kozłowski 1990: 64, 65). The artifacts from Mesolithic or Neolithic/Eneolithic period represent 25% of the total amount of finds. Technologically, the assemblage comprises core tablets, crested blades, burin spalls, core rejuvenation flakes, massive blades, flakes, blade and bladelet cores, Levallois cores and a Levallois flake (Table 1–3, Fig. 4). Upper Palaeolithic artifacts can be related to blade technology resembling Aurignacian and Szeletian, with massive blades. Bladelets and bladelet cores are typical for Mesolithic or Neolithic/Eneolithic finds. We may assume that they were produced by the means of pressure technique (Fig. 4: 2).

Typologically, the most significant types are leaf points. We may assume based on an analogy, to what cultural sphere the material belongs (Fig. 2). Smaller leaf points with an average size of 48.61 x 27.03 x 9.70 mm (Fig. 3: 1–4) are usually found on the sites. One artifact is broken (Fig. 3: 5). From the dimensional point of view, this piece is much bigger (135.79 x 98.58 x 36.19 mm) than others and seems like Szeletian (Mester 2010: 114, Fig. 3: 3, Prošek 1953: 158, Fig. 6: 8), Micoquian (Richter 2009: 107, Fig. 8; Hülle 1977: Pl. 1; Kozłowski 2014: 353, Fig. 13: 3; Cyrek 2002, Pl. XXIV), or Bábonyan (Ringer 1983: fig. 70). Smaller leaf points may be found analogously in the Szeletian collection (Ringer 2011: 10, Fig. 6: 4, Kozłowski et al. 2009: 434, Pl. 12: 2, 3). Leaf points are made of limnosilicite, radiolarite and flint; whereby all are bifacial. The assemblage contains tools such as carinated endscrapers with steep retouch, Aurignacian endscrapers made on blades, sidescrapers, burin busqué, splintered pieces, tools with denticulated retouch, double sidescraper on blade or retouched trapeze on bladelet (Fig. 4).

4. Discussion

Leaf points from Čerhov and Veľká Trňa appear together with Upper Palaeolithic, but also Mesolithic or Neolithic/Eneolithic industries. In the neighbouring locations Neolithic and Eneolithic finds are recorded, but not yet published, however, at these very locations, there is no ceramic material. Regarding the finding of a trapeze artifact and several miniature bladelets and bladelet cores we incline to place the settlement in the Mesolithic Period. The nearest settlement from the Mesolithic Period in Eastern Slovakia that can be determined is situated in sand dunes (Báñez 1966: 47), in Streda nad Bodrogom (Kaminská 2014: 320) and in Košice-Barca I (Prošek 1959; Kaminská 2014: 320). More distant sites are known to be in Čičarovce (Kaminská 2014: 319) and Ružín-Medvedia jaskyňa (Bárta 1990; Kaminská 2014: 320–321). As the leaf points are registered only at Palaeolithic sites for now, their relation to later periods was excluded here.

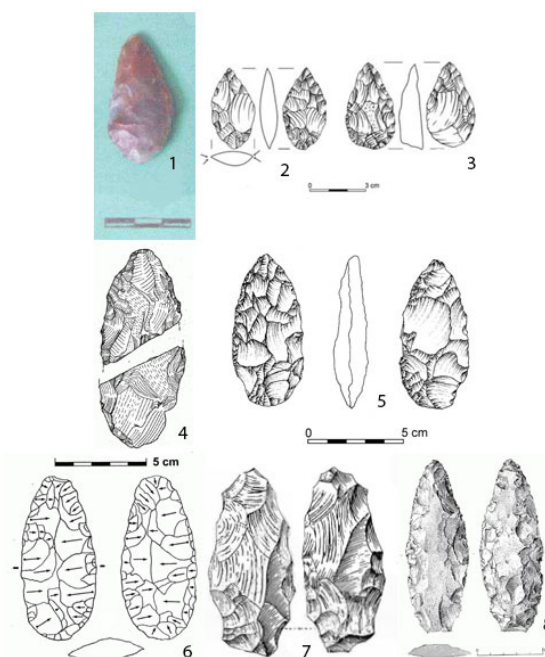


Figure 2. Analogous leaf points. 1: Szeleta cave, layer 6, Hungary (Ringer 2011: 10, Fig. 6: 4). 2, 3: Egerszalók-Kóvágó, Hungary (Kozłowski et al. 2009: 434, Pl. 12: 2, 3). 4: Miskolc – Kánástető, Hungary (Ringer 1983, Fig. 70). 5: Biśnik cave, Poland (Cyrek 2002: Pl. XXIV, Kozłowski 2014: 353, Fig. 13: 3). 6: Szeleta cave, group 1, Pb/86, Hungary (Mester 2010: 114, Fig. 3: 3). 7: Szeleta cave, lower layer, Hungary (Prošek 1953: 158, Fig. 6: 8). 8: Ranis 1, Ilsenhöhle, Germany (Hülle 1977: Pl. 1, Richter 2009: 107, Fig. 8). // **2. ábra.** Hasonló levélhegyek. 1: Szeleta-barlang, 6. réteg, Magyarország (Ringer 2011: 10, Fig. 6: 4). 2, 3: Egerszalók-Kóvágó, Magyarország (Kozłowski et al. 2009: 434, Pl. 12: 2, 3). 4: Miskolc – Kánástető, Magyarország (Ringer 1983, Fig. 70). 5: Biśnik-barlang, Lengyelország (Cyrek 2002: Pl. XXIV, Kozłowski 2014: 353, Fig. 13: 3). 6: Szeleta-barlang, 1. csoport, Pb/86, Magyarország (Mester 2010: 114, Fig. 3: 3). 7: Szeleta-barlang, alsó réteg, Magyarország (Prošek 1953: 158, Fig. 6: 8). 8: Ranis 1, Ilsenhöhle, Németország (Hülle 1977: Pl. 1, Richter 2009: 107, Fig. 8).

The Palaeolithic knapped stone industry could be related to Aurignacian (Fig. 4: 4, 7, 9) and Szeletian (Fig. 3: 1–5, Fig. 4: 3, 6, 8). Moreover, Levallois point and Levallois cores among the artifacts are most probably remnants from the Middle Palaeolithic. Regarding the uniqueness of the larger leaf point in comparison to others, which could be analogously associated with Szeletian, Micoquian or Bábonyan and due to plentiful other material referring to Szeletian and Aurignacian technology we may assume that these locations in Čerhov and Veľká Trňa were settled by Szeletian/Aurignacian culture.

Smaller size of other leaf points can be explained by low quality of raw material that was obvious when analysing chipped stone industry, mentioned by Z. Nerudová (Nerudová 2010: 51, Kaminská 2014: 138) as well. The bigger bifacial artifact is broken to two pieces. This leaf point could be broken during production or later. One or more pieces are still missing for the reconstruction of the whole artifact (Fig. 3: 5). This issue could be solved either by another field survey or by traseological research.

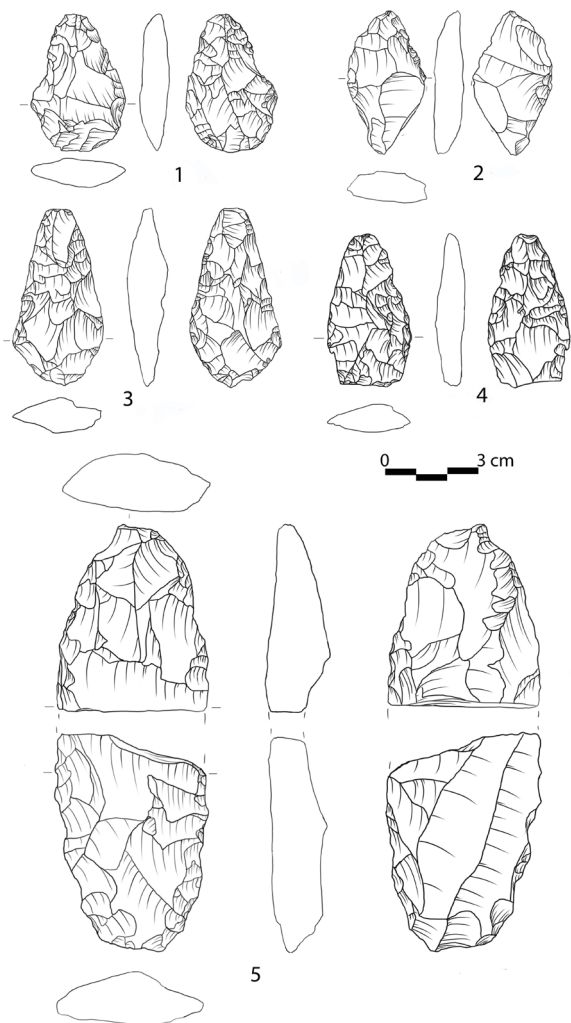


Figure 3. Leaf Points. 1: Čerhov, Pod hečkou, Trebišov district. Limnosilicite. 2: Čerhov, Pod vinicami, Trebišov district. Flint. 3: Čerhov, Pod hečkou, Trebišov district. Radiolarite. 4: Veľká Trňa, Hečka, Trebišov district. Flint. 5: Čerhov, Pod hečkou, Trebišov district. Radiolarite. //

3. ábra. Levélhegyek. 1: Čerhov, Pod hečkou, Trebišov körzet, limnoszilit. 2: Čerhov, Pod vinicami, Trebišov körzet, kova. 3: Čerhov, Pod hečkou, Trebišov körzet, radiarit. 4: Veľká Trňa, Hečka, Trebišov körzet, kova. 5: Čerhov, Pod hečkou, Trebišov körzet, radiarit.

Proofs for the existence of leaf points in Gravettian collections are also interesting. A familiar case was the discovery of leaf points in the Upper Gravettian in Trenčianske Bohuslavice (Bárta 1988: 181, fig. 8) or in Předmostí in Moravia (Svoboda 1994: 133, fig. 60:10). Nevertheless the leaf points are still considered as determining tools for the Szeletian (Kaminská 2014: 137).

The observed localities were inhabited by the Szeletian/Aurignacian culture and it seems that the theory of L. Bánesz on similar settlements is still topical. According to his opinion, the leaf points in Eastern Slovakia, where Aurignacian culture settlement is noticed the most, are connected by the Szeletian intervention (Bánesz 1965: 159, Bánesz 1980: 185). In contrast, E. Kaminská claims that leaf points belong to the Aurignacian culture in Eastern Slovakia, regardless of whether they were under the influence Bükk Szeletian, or not (Kaminská 2014:

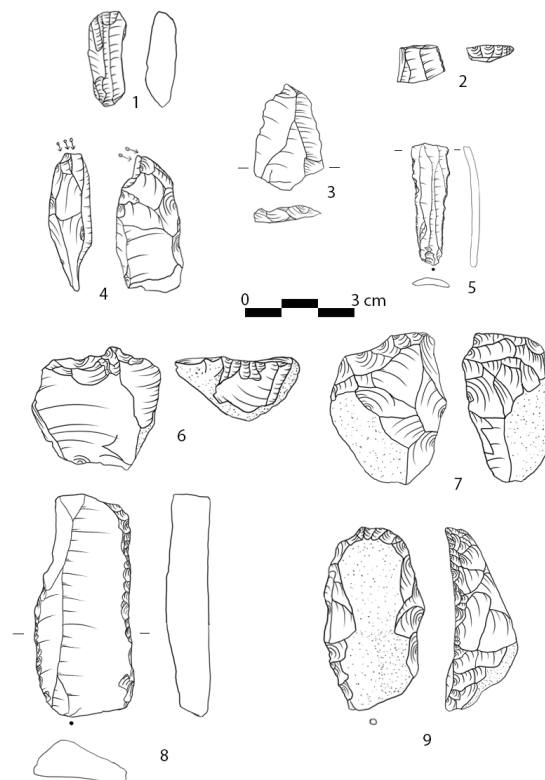


Figure 4. Various tools from Čerhov and Veľká Trňa, Trebišov district. 1: bladelet core, obsidian. 2: retouched trapeze, flint. 3: Levallois flake, obsidian. 4: *burin busqué*, limnosilicite. 5: bladelet detached by pressure technology, obsidian. 6: Levallois core, obsidian. 7: atypical carinated endscraper, limnosilicite. 8: double sidescraper, limnosilicite. 9: carinated endscraper, radiolarite. //

4. ábra. Eszközök, Čerhov és Veľká Trňa, Trebišov körzet. 1: mikropenge magkő, obszidián. 2: retusált trapéz, kova. 3: Levallois szilánk, obszidián. 4: *burin busqué*, limnoszilit. 5: nyomásos technikával leválasztott mikropenge, obszidián. 6: Levallois magkő, obszidián. 7: atipikus orros vakaró, limnoszilit. 8: kettős kaparó, limnoszilit. 9: orros vakaró, radiarit.

165). Localities that are similar to Čerhov and Veľká Trňa in Eastern Slovakia, are located, for instance in Veľký Šariš (Bánesz 1960) and in Petrovany (Kaminská 1985), where the accompanying industry of leaf points, despite their low amount, is being classified into the Aurignacian (Kaminská 1990: 7).

A stratigraphic position of leaf points in Eastern Slovakia is supported, unfortunately, only by older research and is based on the oldest element of this production in Košice- Barca II regarding the Early Aurignacian (interstadial lower Würm) and on findings from interstadial setting of lower Würm in Veľký Šariš (Bánesz 1990: 11).

L. Bánesz's theory becomes more current with the appearance of Aurignacian and Szeletian sites more closer together. It can be argued that Southeastern Slovakia is more or less the contact area between the Szeletian and the Aurignacian, which also appear in Northeastern Hungary. At this place, more than anywhere else, the Szeletian interventions to Aurignacian settlement could occur (or *vice versa*).

5. Conclusion

The newly discovered sites of five leaf points in Čerhov and Veľká Trňa in the district of Trebišov in Southeastern Slovakia provide further knowledge to the map of Palaeolithic settlement of Slovakia and Central Europe. Four smaller leaf point artifacts are probably associated with low quality raw material base and absence of suitable cleavable raw materials. One larger leaf point raises a clear conclusion regarding the classification (Szeletian), but at the same time also questions (similarity with Micoquian and Bábonyian). A dislocation on this artifact is also unclear and unexplained. More evidence would hopefully be provided by further surface exploration or traseological research. Along with Palaeolithic findings the inventory includes Mesolithic or Neolithic/Eneolithic cleaved industry. As leaf points have not been found in these periods so far, their association with them remains excluded.

As the accompanying industry could be classified in the Szeletian/Aurignacian culture, where leaf points, sidescrapers, carinated endscrapers and massive blades were found, it can be assumed that it was a settlement of one of these cultures by an intervention of the other culture. Similar situations (Aurignacian sites intervened by the Szeletian) occur in the vicinity of Eastern Slovakia.

It is unclear whether leaf points have significant social implications or they were created solely on pragmatic grounds. Leaf points, however, are nowadays still the main determining features of Szeletian culture, what we have to take into account.

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Čerhov, okr. Trebišov Pod Vinicami	Ob	L	F	R	J	M	LB	LF	N	%
Raw material	7	-	-	-	-	-	-	-	7	3,30
Cores	25	1	-	-	-	-	1	-	27	12,74
Fragments of cores	7	-	1	-	-	-	-	-	8	3,77
Tools	20	5	3	-	1	-	-	-	29	13,68
Blades and blade fragments	15	4	1	-	-	-	3	1	24	11,32
Bladelets and bladelet fragments	5	-	-	-	-	-	-	-	5	2,36
Flakes and flake fragments	56	8	1	1	1	-	1	1	69	32,54
Chips and debris	27	9	1	1		1	3	1	43	20,28
Number	162	27	7	2	2	1	8	3	212	
%	76,45	12,74	3,30	0,93	0,93	0,46	3,77	1,41		99,99

Table 1.1. Numerical and percentage representation of different groups of lithics by raw material. Ob: obsidian, L: limnosilicite, F: flint, R: radiolarite, J: jasper, M: mudstone, LB: limnosilicite, burnt, LF: limnosilicite, frost impact, N: number. //

1.1. táblázat. Pattintott kő osztályok számszerű és százalékos megoszlása a nyersanyag viszonylatában. Ob: obszidián, L: limnoszilicit, F: kova, R: radiolarit, J: jáspis, M: agyagkő, LB: égett limnoszilicit, LF: fagy által roncsolt limnoszilicit, N: darab.

Čerhov, okr. Trebišov Pod Vinicami Cores	Ob	L	LB	N	%
Flake cores	14	1	1	16	59,26
Blade cores	3	-	-	3	11,11
Bladelets cores	8	-	-	8	29,62
Number	25	1	1	27	
%	92,59	3,70	3,70		99,99

Table 1.2. Numerical and percentage representation of cores by raw material. Ob: obsidian, L: limnosilicite, LB: limnosilicite, burnt, N: number. //

1.2. táblázat. Magkövek számszerű és százalékos megoszlása a nyersanyag viszonylatában. Ob: obszidián, L: limnoszilicit, LB: égett limnoszilicit, N: darab.

Čerhov, okr. Trebišov Pod Vinicami Tools	Ob	L	F	J	LF	N	%
Endscrapers	1	-	-	-	-	1	3,45
Endscrapers-notches	1	-	-	-	-	1	3,45
Atypical carinated endscrapers	-	1	-	-	-	1	3,45
Carinated endscrapers	1	-	-	-	-	1	3,45
Leaf points	-	-	1	-	-	1	3,45
Sidescrapers	1	-	-	-	-	1	3,45
Splintered pieces	3	1	-	-	-	4	13,78
Burins	1	-	-	-	-	1	3,45
Borers	-	-	-	-	1	1	3,45
Retouched blades	6	1	1	-	-	8	27,59
Retouched bladelets	1	-	1	-	-	2	6,89
Retouched flakes	5	1	-	1	-	7	24,13
Number	20	4	3	1	1	29	
%	68,96	13,79	10,34	3,45	3,45		99,99

Table 1.3. Numerical and percentage representation of tools by raw material. Ob: obsidian, L: limnosilicite, F: flint, J: jasper, LF: limnosilicite, frost impact, N: number. //

1.3. táblázat. Eszközök számszerű és százalékos megoszlása a nyersanyag viszonylatában. Ob: obszidián, L: limnoszilicit, F: kova, J: jáspis, LF: fagy által roncsolt limnoszilicit, N: darab.

Čerhov, okr. Trebišov Pod Vinicami Tools, Blades/flakes	Blades	Bladelets	Flakes	Undefined	Number	%
Endscrapers	-	-	1	-	1	3,45
Endscrapers-notches	-	-	-	1	1	3,45
Atypical carinated endscrapers	1	-	-	-	1	3,45
Carinated endscrapers	-	-	-	1	1	3,45
Leaf points	-	-	-	1	1	3,45
Sidescrapers	-	-	-	1	1	3,45
Splintered pieces	-	-	2	2	4	13,78
Burins	1	-	-	-	1	3,45
Borers	-	-	-	1	1	3,45
Retouched blades	8	-	-	-	8	27,59
Retouched bladelets	-	2	-	-	2	6,89
Retouched flakes	-	-	7	-	7	24,13
Number	10	2	10	7	29	
%	34,48	6,89	34,48	24,13		99,99

Table 1.4. Numerical and percentage representation of different types of tools made on blades, bladelets or flakes. // **1.4. táblázat.** Eszközök számszerű és százalékos megoszlása a szupport viszonylatában (penge, mikropenge, szilánk).

Čerhov II, okr. Trebišov Pod Hečkou	Ob	L	F	R	J	Q	LB	LF	LBF	RF	S	N	%
Raw material	1	2	-	-	-	1	-	-	-	-	1	5	3,64
Cores	-	-	-	2	-	-	-	-	-	-	-	2	1,46
Fragments of cores	-	2	-	-	-	-	-	-	-	-	-	2	1,46
Tools	5	7	5	3	-	-	-	-	-	-	2	22	16,06
blades and blade fragments	3	8	2	-	-	-	-	-	-	1	-	14	10,21
Flakes and flake fragments	11	33	6	3	-	-	-	-	-	-	-	53	38,69
Chips and debris	3	15	4	1	2	-	2	9	1	1	1	39	28,47
Number	23	67	17	9	2	1	2	9	1	2	4	137	
%	16,78	48,91	12,41	6,57	1,46	0,73	1,46	6,57	0,73	1,46	2,91		99,99
%	76,45	12,74	3,30	0,93	0,93	0,46	3,77	1,41					99,99

Table 2.1. Numerical and percentage representation of different groups of lithics by raw material. Ob: obsidian, L: limnosilicite, F: flint, R: radiolarite, J: jasper, Q: quartzite, LB: limnosilicite, burnt, LF: limnosilicite, frost impact, LBF: limnosilicite with burn and frost impacts, RF: radiolarite, frost impact, S: silicite, N: number. //

2.1. táblázat. Pattintott kő osztályok számszerű és százalékos megoszlása a nyersanyag viszonylatában. Ob: obszidián, L: limnoszilicit, F: kova, R: radiolarit, J: jáspis, Q: kvarcit, LB: égett limnoszilicit, LF: fagy által roncsolt limnoszilicit, LBF: fagy és hó által roncsolt limnoszilicit, RF: fagy által roncsolt radiolarit, S: szilicit, N: darab.

Čerhov II, okr. Trebišov Pod Hečkou Cores	R	N	%
Blade cores	1	1	50,00
Bladelet cores	1	1	50,00
Number	2	2	
%	100,00		100,00

Table 2.2. Numerical and percentage representation of cores by raw material. R: radiolarite, N: number. // **2.2. táblázat.** Magkövek számszerű és százalékos megoszlása a nyersanyag viszonylatában. R: radiolarit, N: darab.

Čerhov II, okr. Trebišov Pod Hečkou Tools	Ob	L	F	R	S	N	%
Endscrapers	-	1	1	-	-	2	9,09
Knives	-	-	1	1	-	2	9,09
Leaf points	-	1	-	2	-	3	13,64
Sidescrapers	-	1	1	-	-	2	9,09
Burins	1	-	1	-	1	3	13,64
Retouched blades	3	2	1	-	-	6	27,27
Retouched flakes	1	2	-	-	1	4	18,19
Number	5	7	5	3	2	22	
%	22,72	31,82	22,72	13,64	9,09		99,99

Table 2.3. Numerical and percentage representation of tools by raw material. Ob: obsidian, L: limnosilicite, F: flint, R: radiolarite, S: silicite, N: number. //

2.3. táblázat. Eszközök számszerű és százalékos megoszlása a nyersanyag viszonylatában. Ob: obszidián, L: limnoszilicit, F: kova, R: radiolarit, S: szilicit, N: darab.

Čerhov II, okr. Trebišov Pod Hečkou Tools Blades/flakes	Blades	Flakes	Undefined	Number	%
Endscrapers	-	1	1	2	9,09
Knives	-	-	2	2	9,09
Leaf points	-	-	3	3	13,64
Sidescrapers	1	-	1	2	9,09
Burins	1	1	1	3	13,64
Retouched blades	6	-	-	6	27,27
Retouched flakes	-	4	-	4	18,19
Number	8	6	8	22	
%	36,36	27,27	36,36		99,99

Table 2.4. Numerical and percentage representation of different types of tools made on blades and flakes. //

2.4. táblázat. Eszközök számszerű és százalékos megoszlása a szupport viszonylatában (penge, szilánk).

Veľká Trňa, okr. Trebišov Hečka	O	L	F	R	LB	S	N	%
Cores	3	1	1	-	-	-	5	16,13
Fragments of cores	-	1	-	-	-	-	1	3,23
Tools	3	2	2	1	-	1	9	29,03
Blades and blade fragments	3	-	-	-	-	-	3	9,67
Flakes and flake fragments	1	6	-	-	-	-	7	22,58
Chips and debris	2	3	-	-	1	-	6	19,35
Number	12	13	3	1	1	1	31	
%	38,70	41,93	9,67	3,23	3,23	3,23		99,99

Table 3.1. Numerical and percentage representation of different groups of lithics by raw material. Ob: obsidian, L: limnosilicite, F: flint, R: radiolarite, LB: limnosilicite, burnt, N: number. //

3.1. táblázat. Pattintott kő osztályok számszerű és százalékos megoszlása a nyersanyag viszonylatában. Ob: obszidián, L: limnoszilicit, F: kova, R: radiolarit, LB: égett limnoszilicit, N: darab.

Veľká Trňa, okr. Trebišov Hečka Cores	Ob	L	F	N	%
Flake cores	2	1	1	4	80,00
Blade cores	1	-	-	1	20,00
Spolu	3	1	1	5	
%	60,00	20,00	20,00		100,00

Table 3.2. Numerical and percentage representation of cores by raw material. Ob: obsidian, L: limnosilicite, F: flint, N: number. //

3.2. táblázat. Magkövek számszerű és százalékos megoszlása a nyersanyag viszonylatában. Ob: obszidián, L: limnoszilicit, F: kova, N: darab.

Veľká Trňa, okr. Trebišov Hečka Tools	Ob	L	F	R	S	N	%
Aurignacian endscrapers	-	-	-	1	-	1	11,11
Leaf points	-	-	1	-	-	1	11,11
Retouched blades	-	-	1	-	-	1	11,11
Retouched flakes	4	1	-	-	1	6	66,66
Number	4	1	2	1	1	9	
%	44,44	11,11	22,22	11,11	11,11		99,99

Table 3.3. Numerical and percentage representation of tools by raw material. Ob: obsidian, L: limnosilicite, F: flint, R: radiolarite, S: silicite N: number. //

3.3. táblázat. Eszközök számszerű és százalékos megoszlása a nyersanyag viszonylatában. Ob: obszidián, L: limnoszilicit, F: kova, R: radiolarit, S: szilicit, N: darab.

Veľká Trňa, okr. Trebišov Hečka Tools Blades/flakes	Blades	Flakes	Undefined	Number	%
Aurignacian endscrapers	1	-	-	1	11,11
Leaf points	-	-	1	1	11,11
Retouched blades	1	-	-	1	11,11
Retouched flakes	-	4	2	6	66,66
Number	2	4	3	9	
%	22,22	44,44	33,33		

Table 3.4. Numerical and percentage representation of different types of tools made on blades and flakes. //

3.4. táblázat. Eszközök számszerű és százalékos megoszlása a szupport viszonylatában (penge, szilánk).