



LADISLAV BÁNESZ

PROBLEMS OF THE UPPER PALAEOLITHIC IN THE NORTH-WESTERN PART OF THE CARPATHIAN BASIN

ABSTRACT — Recently the new investigations in the north-western part of the Carpathian Basin have stimulated further evaluations of the stone industries of the Lower, Middle and Upper Palaeolithic. The multilayered Palaeolithic station in Korolevo on the southern bank of the river Tisza between the Transcarpathian Ukraine and Transylvania has proved not only the oldest settlement, but also the Upper Palaeolithic finds stratified among the uppermost Middle Palaeolithic layers.

The finds in Eastern Slovakia, Northern Roumania and the Transcarpathian Ukraine may be considered to be the result of the local development of the Palaeolithic in the upper part of the river Tisza, where, as opposed to the Hornád group of the earliest Upper Palaeolithic industries (the Aurignacian), it is possible to find the so-called Upper Tisza Aurignacian probably based on the development of the local late Middle Palaeolithic.

KEY WORDS: Carpathian Basin — Eastern Slovakia — Middle/Upper Palaeolithic — Aurignacian.

The Soviet archaeologists' discoveries in the territory of the Transcarpathian Ukraine during the last decades have contributed, to a considerable degree, to solve the questions of the Palaeolithic settlement in the northwestern part of the Carpathian Basin.

In the past the known localities in that region were situated in the territory of Eastern Slovakia and Northern Transylvania in Roumania. However, they mostly belonged to the Upper Palaeolithic and their stratigraphic position was known only sporadically (for example Cejkov II, III, Remetea-Somoş I, II, Boinesti, Calineşti etc.).

Formerly the only proofs of the Lower Palaeolithic were sporadic finds and the Middle Palaeolithic, with the exception of the sites in Spiš and Northern Transylvania, was found very rarely. The continuity of the Middle Palaeolithic industries in the Upper Palaeolithic of this region has been stratigraphically proved only in the territory of Roumania.

It is this point of view that accentuates the relevancy of the unique multilayered site so far known in the region of the Upper Tisza in the Transcarpathian Ukraine, Korolevo I, II where the Soviet Palaeolithic expedition (Gladilin 1982, p. 96—97, 1982a) discovered a superposition of Low and Middle Palaeolithic layers. In their upper part covered by the denticulated Mousterian an Upper Palaeolithic layer was intercalated (Korolevo I, layer Ia) and it contained the finds made by prismatic technique and accompanied by the end-scrapers, which could be similar to the finds of the Upper Tisza Aurignacian group (according to L. Bănesz 1968) and the layer with the industry which is an intermediate link between the Mousterian and Upper Palaeolithic (Korolevo II, layer II). From a geochronological point of view they are dated to the Lower Würm. In Korolevo I they occur under the fossil soil of the Middle Würm, in Korolevo II the industry of transition belongs to the

group of layers between the first and second fossil soil.

The site of Beregovo in the same area is a place of the cultural horizon with Upper Palaeolithic finds (the Aurignacian) in the lower part of the group of layers over the second fossil soil, which is identified as Paudorf (?) fossil soil (Gladilin 1982, p. 97).

Besides these stratified finds in the Transcarpathian Ukraine a certain possibility of geochronological dating exists in the territory of Eastern Slovakia, where the multilayered Middle Palaeolithic occurs in the R—W Interglacial only in Spiš (Gánovce, Hôrka, Behárovce) without being continued by the early phase of the Upper Palaeolithic. In the Spiš localities there were small Mousteroid industries till the beginning of the Würm, some elements (side scrapers with flat retouch) resembling the Jankovichian finds in the western part of the Carpathian Basin (Gábori-Csánk 1986). The traditions of the Spiš "Gánovcian" are reflected, in a lesser degree, even in the Lower Aurignacian of the Hornád group in the form of quartz industry, which, together with pointed artefacts and side-scrapers, is represented, to a high degree, in the earliest Aurignacian industries of Eastern Slovakia.

Unfortunately, there are only very fragmentary geochronological data concerning the following period of the beginning of the Upper Palaeolithic in Eastern Slovakia. This fact mainly concerns the abundant finding-places of the Aurignacian, which are concentrated in the valley of the Hornád river and were dated by F. Prošek (1956) and the author to the Middle Würm Interstadial (WI—2) and the first half of Würm 2; the mentioned dating was based on the filling of dwellings in Barca II. The dating of the Aurignacian in the Hornád valley was enabled not only owing to Barca settlement sections, but also due to some localities, which became a source of important data on the stratigraphic position of the Palaeolithic. These sites in the Košice Basin also include Kechnec and Seňa (in the cadastral territory of the village of Hraničná) in the frontier of Hungary and Czechoslovakia. Here the Upper Palaeolithic finds come both from surface parts of the fossil soil and the overlying loess horizon, which developed over the remains of Interstadial Würm sediments in two layers divided in the Upper Würm by solifluction infiltrations or by the interruption of loess sedimentation.

From a point of view of the stratigraphy of the Palaeolithic settlement of Eastern Slovakia, an interesting situation exists east of the Slanské Hills and Zemplín Hills, where the environs of Cejkov can be considered the only stratigraphic place. Cejkov I, the most important site, is the place not only of a surface find of the Lower Palaeolithic flake split by the Levallois technique, but also of Middle Palaeolithic-like finds, which occurred in the greenish-yellow loess in a secondary position after the solifluction (found in the pit section from the year 1960, the depth of 310—320 cm). The mentioned finds were 4 small obsidian pebbles, an oval obsidian flake in the form of a semifinished end-scraper with a retouched arch-shaped front part and edge, a pointed

flake with a cortex, 2 core fragments and 2 small flakes (Fig. 1). All these obsidians were covered with very strong patina. As far as the other tools are concerned, let us mention a small flint triangular point with flat retouch on its ventral side, 2 obsidian pebbles and 1 quartz pebble and 1 limnoquartzite flake with patina.

The underlayer contains the remains of basal parts of red-brown fossil soil (probably R—W) with considerably developed vertical bands of pseudogley on the Riss loess. Under the surface of these remains it is possible to find strong wedges filled with pseudogley.

In the upper part of the greenish-yellow loess overlying these wedges there was a redeposited soil layer of a strong brown colour, 15—20 cm thick, found in the eastern part of the deep-pit section. This kind of soil was not registered in the other sections. Over this loess there is a complex of humic layers, whose light-brown coloured basal part was decalcified. In this fossil soil complex it was possible to register two layers of sheeny obsidian blade-shaped flakes without patina both in the upper part of the upper humic layer in the depth of 163 cm and in the lower humic layer roughly on the level of a fireplace found in this group of layers.

The age of the buried soil horizons of the Upper Würm has not been determined yet. The dating of the fireplace from this group of layers is based on unambiguous data C_{14} from two independent laboratories (Köln $19\,600 \pm 340$ and Berlin $19\,755 \pm 240$ years). This dating enables to define a time section in the north-eastern part of the Carpathian Basin; this section is the so-called Cejkov Interstadial and it is proved by the remains of fossil soil in loess and it belongs to the Upper Würm at the turning point of the 20th and 19th millennium B. C. with minimum deviations in absolute dating.

At the same time this mentioned section represents a certain boundary in further development of the Upper or Late Palaeolithic, as there are finds here (especially the fireplace remains, which can be found in the uppermost fossil soil), which were found in other sections of the Cejkov I locality both in the mentioned Interstadial and the loess sediments overlying this Cejkov Interstadial. The sediments in the upper part of the locality create a 250 m long, continuous, here and there partially denudated layer of loess sedimented over the uppermost remains of fossil soil.

In the positions of the uppermost loess sediments it is possible to find three other layers of finds, mostly with the obsidian industry; they occur both in the lower part of the youngest loess and in its central parts and in the surface parts immediately under the strongly developed layer of Holocene initial brown-earth.

As far as the lower parts of the Upper Würm are concerned, it is possible to find the remains of an Upper Palaeolithic dwelling. These remains contain an abundant stone industry of a Gravettian type in the upper part of the site (Bánész, Pieta, 1961). It was found as early as in the first phase of the systematic research of this locality; later explorations

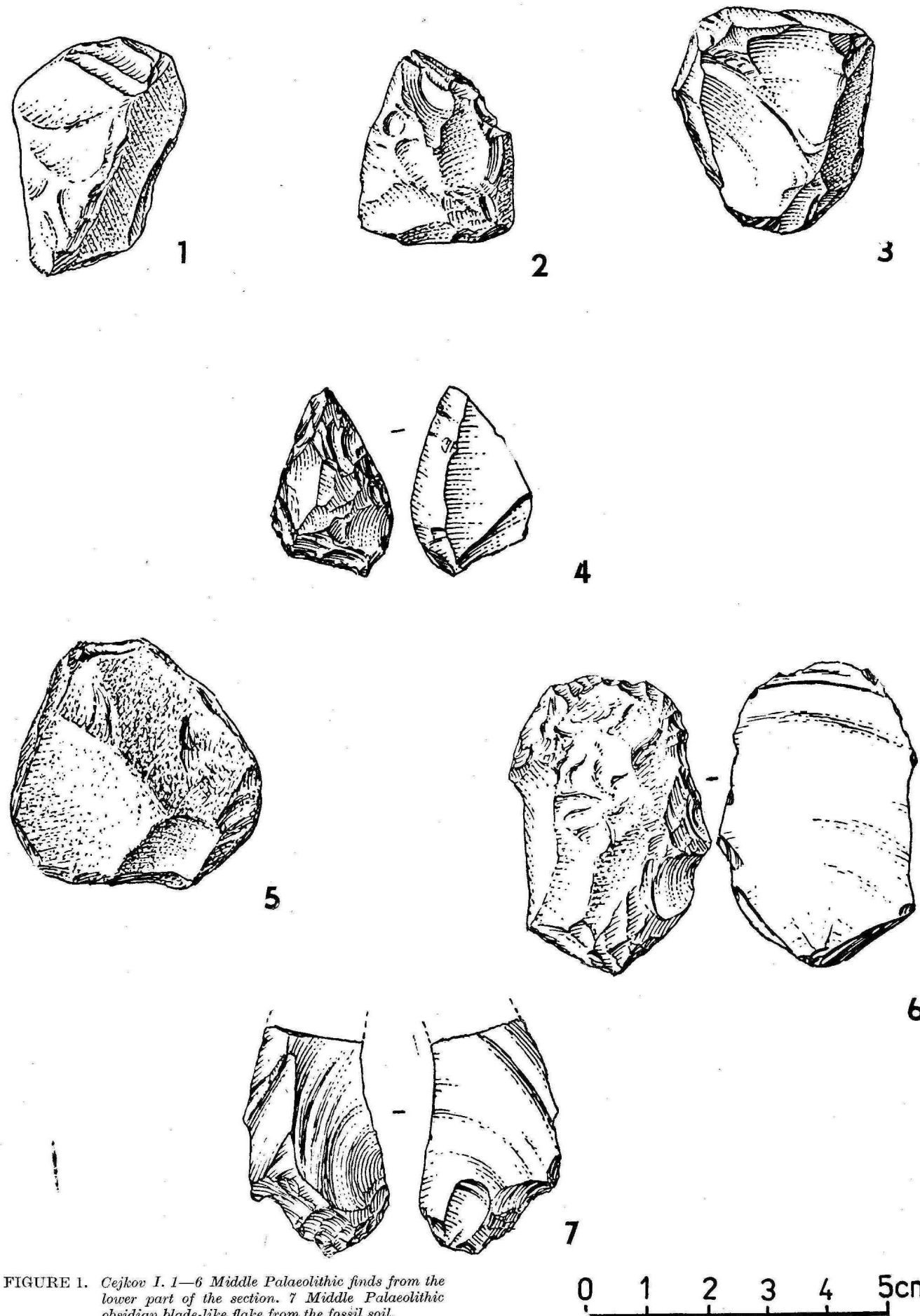


FIGURE 1. Cejkov I. 1—6 Middle Palaeolithic finds from the lower part of the section. 7 Middle Palaeolithic obsidian blade-like flake from the fossil soil.

revealed traces of fireplaces. The middle phase of settlement in the uppermost loess gave us only discontinuously spread Gravettian finds of an obsidian industry together with bone finds and fireplace traces at the top of the hill. (Excavations 1987). The uppermost loess also contained the deposited obsidian raw material, while the end of the sedimented layers under the initial brownearth was a place where an antler artefact and a mammoth tusk of a young animal occurred.

The system of stratigraphic data in the environs of Cejkov was completed by the finds of the Late Palaeolithic industry discovered in the locality of Cejkov II in 1987; in the mentioned place the Late Gravettian industry occurred in the lower part of the postglacial initial brownearth. Here there were backed bladelets and a small point of a Vachons type.

These stratigraphic data make us mention the position of the finds in Cejkov I and in the nearby locality found by L. Bánész at Hřečel in the year 1960, where the following research done by E. Kaminská also proved the position of the Late Gravettian industry in the lower parts of postglacial sediments contiguous with the uppermost Würm sediments.

The correlation of the finds from the area of Cejkov, Kysta, Velaty, Michalany and Kašov, which are situated in the surface part of loamy sediments immediately under forest humus, as well as the surface finds from the area of the Upper Tisza belong, at present, to the most exacting research programmes of various specialists from Quaternary and Holocene geology and pedology.

At present the stratigraphic position of the Upper Palaeolithic finds with flat retouch in Eastern Slovakia is based only on the oldest element of this technique in Barca II in connection with the Lower Aurignacian (in the Middle Würm Interstadial) and on the finds of the same Interstadial in Velký Šariš. A certain similarity can be seen in case of surface finds from Kechnec, Ččejevce, Spišské Podhradie and other localities. These finds have leaf-points with a bifacial, uni-facial or outlined technique of flat retouch, they occur in Eastern Slovakia in many sites and they belong to the Aurignacian or they are isolated finds.

Besides the Middle Palaeolithic finds in Spiš, which occur in a superposition there, there are also numerous Middle Palaeolithic finds existing in the rest of the territory of Eastern Slovakia and representing an important component of the oldest Upper Palaeolithic industries (the Aurignacian). They suggest a certain possibility of their local origin and certain contacts with the territory of the Transcarpathian Ukraine.

Recently a considerable attention has been also paid to the Middle Palaeolithic localities of Northern Hungary, where the finds resemble the Micoquian in Moravia and they can be related to the Middle Palaeolithic from the region of the Upper Tisza. In this region, in the basin of the lower stream of the river Sajó (Slaná), at the beginning of the Bükk Hills it is possible to consider the so-called "Bábonyien" group, which is, according to Á. Ringer's

view (1983), the Middle Palaeolithic industry with Micoquian elements and an archaic Acheulian component. The stone industry, which has not been dated yet (maybe the beginning of the Lower Würm and W 1), is, from M. Gábory's standpoint (1981), and industry similar to the Upper Danube Micoquian group. The "Bábonyien" inventory contains finds which are different from the Bükk Hills Mousterian: small hand-axelike forms, side-scrapers and bifacial flat points.

This industry also includes the Korlát finds, which are in the East-Slovakian Museum in Košice (old inventory number 1209—1265) and come from the Ravaszlyuk site (Skutil 1938). H. Breuil classes them as the industry ranging from the Upper Acheulian to the Micoquian. Such an industry is similar to South-Polish, Moravian and Austrian finds. The finds coming from the environs of Korlát and mentioned by J. Skutil can be also analogous with the Upper Palaeolithic find from the nearby locality of Hernád—Borházdülő (Simán 1986).

The Hungarian inland in the environs of the Bükk Hills and the northern part of the Carpathian Basin are the places of the best stratigraphic example from the beginning of the Upper Palaeolithic. These layers occur in the Istállóskő cave with Aurignacian finds from the Lower Würm Interstadial and being 36 000 years old — the lower layer containing bone points with a split base (Vértes, 1959) and $30\,710 \pm 600$ years old — the upper layer containing bone points with a base of a Mladeč type. This dating is probably in harmony with the older Aurignacian in the Hornád valley and maybe with Late Mousterian layers in Transylvania (Erdély). The Aurignacian layers in the Bükk Hills are not in a direct stratigraphic contact with the Middle Palaeolithic; a similar situation exists in Slovakia.

The stratigraphic relation of the Upper Palaeolithic with Middle Palaeolithic layers in the northern part of the Carpathian Basin concerns, besides the already mentioned Korolevo finds, the finds in Northern Transylvania in Roumania.

There are some Aurignacian industries in a superimposition over the Late Mousterian dated back to the Interstadial (Boinesti, Remetea Șomoș I, Șomoș II). The Aurignacian in Calinești I represented a layer underlying the Gravettian or it was a single layer (Calinești II, Bitiri, 1972).

Besides the stratigraphic position, a certain contact with the Late Mousterian can be also seen in the stone industry, which contained not only Middle Palaeolithic artefacts, but also typical blades and cores of an Upper Palaeolithic type as well as end-scrapers similar to Aurignacian types.

However, the lower layers of the mentioned sites belong to the very late phases of the Mousterian with the finds of end-scrapers and points together with flat retouched artefacts. The industry seems to be developed and it could form, hand in hand with the finds of the Transcarpathian Ukraine, a real basis for the Upper Tisza group of the Aurignacian (Bánész 1968), within the framework of which it is possible to speak about the Upper Palaeolithic finds of the Transcarpathian Ukraine together with

the Aurignacian in Oași and in the localities in the territory of Eastern Slovakia east of the Zemplín—Tokaj Hills.

REFERENCES

- BÁNÉSZ L., 1986: Eine neue Aurignacien-Gruppe im oberen Theissgebiet. *Archeologické Rozhledy* 20: 47—55.
 BÁNÉSZ L., 1968a: Barca bei Košice — Paläolithische Fundstelle. Bratislava. 232 pp.
 BÁNÉSZ L., PIETA K., 1961: Výskum v Cejkove I roku 1960. *Štúdijské zvesti AÚ SAV* 6: 5—30.
 BITIRI M., 1972: *Paleolithicul în Țara Oașului*. București. 196 pp.
 BREUIL H., 1923: Notes du voyage paléolithique en Europe Centrale I. *L'Anthropologie* 33: 326—328.
 GÁBORY-ČSÁNK V., 1986: *Az őskőkori jankovich kultúra Nyugat-Magyarországon*. Doktori értekezés tézisei. Budapest.

- GÁBORI M., 1981: Az ősember korának kutatása Magyarországon. *Tabulmányok. M.T.A. II. Oszt. Közl.* 30: 1, 91—109. Budapest.
 GLADILIN V. N., 1982: Stratigrafiya paleolita Zakarpatya. *XI. Kongress INQUA. Tezisy dokladov III*: 96—97.
 GLADILIN V. N., 1982a: Doslidzheniya paleolitu na Ukraini ta ikh perspektivi. *Arheologiya* 40: 15—34.
 PROŠEK F., 1956: Paleolitická stanice Barca II. *Archeologické Rozhledy*, 8: 305—311.
 RINGER Á., 1983: *Bábonyien. Eine mittelpaläolithische Blattwerkzeugindustrie in Nordostungarn*. Dissertationes Archaeologicae. Ser. II, No. 11: 5—158.
 SIMÁN K., 1986: Előzetes jelentés Hidasnémeti-Bordülő felsőpaleolitikus telep ásatásáról. Manuscript: 1—8.
 SKUTIL J., 1938: *Paleolitikum Slovenska a Podkarpatskej Rusi*. Turčianský Svätý Martin. 251 pp.
 VALOCH K., 1984: Transition du Paléolithique moyen au Paléolithique supérieur dans l'Europe Centrale et Orientale. *Scripta Praehistorica*. Pp. 439—467. Francisco Jorda oblata. Salmanticae.
 VÉRTES L., 1959: Az Istállóskői barlang aurignacien II kultúrájának rádiokarbon kormeghatározása. *Archeológiai Értesítő* 86: 195.

Dr. L. Bánész
 Archaeological Institute
 Nitra — Hrad
 Nitra
 Czechoslovakia