THE BOHUNICIAN ON THE MIDDLE DANUBE: DATING, RAW MATERIAL PROCUREMENT, TECHNOLOGY, TYPOLOGY AND ITS RELATIONSHIP TO LOCAL CONTEMPORARY CULTURAL UNITS

The very beginning of the Upper Paleolithic on the Middle Danube is characterized by a behavioral shift. People avoided protected sites in caves and rock-shelters located in highlands, which were settled during the Middle Paleolithic (MP), and occupied the open landscape instead. Most Early Upper Paleolithic (EUP) sites are strategically located at elevated locations flanking big river valleys and basins.

During the MP/UP transitional period, i.e. 50–40 kya, two main cultural units were documented in Moravia: the Bohunician and the Szeletian. While the fully UP culture – the Aurignacian – is known from nearby Austria (Willendorf), in Moravia it was documented only in its middle phase dated to between 34–40 kya. In recent years, all three cultural units were the subject of new investigations, both artifact analyses and field research. New field surveys and excavations increased the number of stratified and absolutely dated sites and yielded new data used in debates about the MP/UP transitional period on the Middle Danube. The results relevant to the Bohunician are the subject of this paper.

The main Bohunician site-cluster is represented by a significant concentration of sites around the Stránská skála cliff (the outcrop of Stránská skála-type chert) in Brno basin. Other important site-clusters are located at Ondratice/Želeč, Bobrava river valley and the Mohelná area. Isolated implement complexes which show the use of evolved Levallois technology are known from many other sites; however, their relationship to the Bohunician is not clear. Only Bohunic (several units), Stránská skála (several units), Tvarožná and Liščí have been excavated. The remainder of the sites are surface collections lacking a stratified context.

The Bohunician has been dated by $^{14}$C, TL IRSL and OSL methods (Richter et al. 2009 with ref., Nejman et al. in press). While the (calibrated) radiocarbon dates have a relatively wide spread (between 40–48 kya), a TL weighted mean result of eleven artifacts from Bohunic 2002 excavation yielded a result of $48.2 \pm 1.9$ ka. Based on the radiocarbon record and comparing the Bohunician radiocarbon dates with Szeletian dates (Vedrovice V, Želešice) and Early Aurignacian (Willendorf) sites, the Bohunician may have been contemporaneous with both of the latter mentioned cultural units.

The Bohunician lithic economy is characterized by utilization of local cherts supplemented by infrequent imports (up to max. 10 %). The Stránská skála-type chert was utilized in the Brno basin, local quartzite and chert were utilized in Ondratice/Želeč and in Krumlovsky les area the local Krumlovsky les-type chert dominated. Radiolarite was imported from the White Carpathians and erratic flint from northern Moravia.

The Bohunician technology was originally defined as a mixture of Levallois technology and Upper Paleolithic blade core reduction. Later, based on the analysis of refitted cores from Stránská skála where both techniques were used on the same core, the definition was refined as a contextual fusion of Levallois and Upper Paleolithic technologies (Škrda, 2003). All reconstructed cores show the tendency towards production of Levallois points (or a series of points) as the target artifact. In this concept blades were removed in order to shape the frontal surface of the core and represent (technologically) a secondary product. However, the blade blanks were frequently used for tool production. Bifacial reduction plays a specific role in producing leaf-shaped points documented only at the Brno-Bohunic type site.

The Bohunician typological spectrum represents a mixture of MP tool types including points (Levallois, bifacially flat-retouched and leaf-shaped, Mousterian, etc.) and sidescrapers, with UP tool types represented mainly by endscrapers and infrequent burins. The UP tool types were made on Levallois points.

In recent years (2002–present) a new EUP project was established in cooperation between Institute of Archaeology in Brno and University of Minnesota in Minneapolis (with more participating universities, institutes and individuals). The main aim of the EUP project is a search for new EUP sites and undertaking excavations in order to refine the stratigraphic and chronological contexts of the Bohunician and to study the homogeneity of Bohunician collections.

References

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