

Use of obsidian during the LGM in Hungary

Obsidian sources are known from the continental Europe only from the Carpathian basin. This volcanic rock was reported from several outcrops in the north-eastern part of Hungary, Eastern Slovakia and the westernmost part of Ukraine. The so-called Carpathian obsidian has three or four distinct variants easy to identify by a bare eye. The transparent - translucent type are found in the Slovakian sources, the homogenous black and grey (and exceptionnally reddish) variants are known from Hungary. The poor quality pieces from the Transcarpathian Ukraine were rarely used on the territories lying far from the source area, so in the following the occurrences of the Slovakian and Hungarian variants will be discussed.

During the Last Glacial Maximum two characteristic archaeological industries are known from Hungary: the Epigravettian and the Pebble Gravettian industry, both known from a number of recently excavated and relatively well dated localities.

The Epigravettian assemblages are characterised by the regular blade production. During the rescue excavations a number of localities were documented in the Danube bend around Pilismarót, north of Budapest. At the site of Pilismarót - Diós a nodule of Tolcsva-type obsidian was completely worked: the pieces from the first step of the core reduction until the exhausted core are present in the collection. Around 15% of the neighbouring Pilismarót-Bitóc assemblage was made of obsidian, dominantly of the Slovakian variant. Here the intense working of this raw material, imported to the site from a distance of more than 200 km is documented.

The most important site of the Pebble Gravettian industry is known from Mogyorósbánya, where three discrete settlement spots were excavated. The ratio of the obsidian artefacts are 2.5-7.5%. The pieces were introduced to the site as ready made tools, blades or prepared cores. The use of obsidian on this site is compared to the flint artefacts. This raw material was also imported from a large distance, from the territory lying north of the Carpathians.

Finally a new site was excavated in Pécel, east of Budapest. Here the large part of a woolly rhinoceros skeleton and four flint tools ("points") were found during the palaeontological rescue excavations. Later three obsidian artefacts were also documented.

In typological point of view the artefacts were compared to an early Gravettian assemblage known from the Carpathian basin, dated to around 30-29 thousand years. However, the not calibrated radiocarbon measurements of two bone samples yielded the ages of around 17 thousand years old dates, showing that the woolly rhino is one of the latest specimen of this species known from Central Europe and that the lithic industry belongs to the Epigravettian entity.

最終氷期ハンガリーにおける黒曜石の使用

ヨーロッパ大陸における黒曜石原産地としてカルパチア盆地だけが知られている。黒曜石露頭として、ハンガリー北東部、スロバキア東部およびウクライナ最西部が報告されている。いわゆるカルパチア黒曜石は肉眼で容易に3～4種に分けられる。透明一半透明型はスロバキア原産地、均質黒色、灰色（そして例外的に赤色）型はハンガリー原産地のものである。ウクライナトランスカルパチア州産のものは品質が低く、原産地から離れた地域ではほとんど使われていない。そこで、本講演ではスロバキア産とハンガリー産の黒曜石について講演する。

最終氷期の考古学的工房として、エピグラベティアン工房とペブルグラベティアン工房の二つがハンガリーで知られており、最近の多数の発掘事例で詳細が知られるようになってきた。