

Further Epigravettian evolution may be followed at the neighbouring Hungarian sites. In Austria and Moravia around 18 000 B.P., both larger camps (Grubgraben) and temporary hunting sites (Stránská skála IV) appear sporadically.

## THE FIRST SETTLEMENT UNIT (SQUARES A/18-22)

Preliminary description of the 1st settlement unit was published in context of the male burial DV XVI in its southern part (Svoboda 1989, 237-239, Fig. 2). During mechanical loess removal at the western slope it first appeared as large dark lens in the etage wall. Subsequent salvage excavation revealed a depression with maximal estimated length of 4,5 m and depth of 35 cm (Fig. 6). Filling of this depression may be divided in two levels, the lower one with no visible traces of movement, and the removed upper one, penetrating into the overlying loess. Margins are distinct at the NE side, bordering with the 2nd settlement unit, but gradual at the SE side. The western margins were destroyed. This unit includes central hearth, male burial, two depressions and other features.

The hearth. Hearth D is located in central part of the depression (Fig. 8). The shape is circular, with diameter of about 1 m. Base is bowl-shaped and shallow. The hearth layer is 35 cm thick and it is formed by alternating layers of charcoal and red-burned loess, with numerous limestone blocs (up to 15 cm). Across the hearth lied a large animal rib. Seditment of the hearth included 2 pointed backed microblades and 123 other artifacts, partly burnt in fire. Charcoal samples were dated at Groningen and Illinois with the following results:

GrN	15 277	25 740 + 210 B.P.
ISGS	1 744	26 390 + 270 B.P.

Burial. Male skeleton was placed in southern part of the depression, in crouched position on the right side, so that the knees were only placed 25 cm from the hearth and at the same level. Since the body lied horizontally, its trunk and head were sunk into pure loess in the sloping SE margin of the depression (Fig. 7). Lithic industry (123 pieces) and other objects found in immediate vicinity of the skeleton have already been published (Svoboda 1989a). Charcoal sample from this space has been dated in Groningen:

GrN	15 276	25 570 + 280 B.P.
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With respect to the deviation, the contemporaneity of the burial area and the hearth seems to be proved.

Depression A. Western part of this depression is destroyed and the preserved part (60 cm x 45 cm) is relatively shallow (5 - 10 cm). It contained charcoal, bones of smaller animals, two *Dentalia* shells inserted in each other and coloured by red ochre, and a small pellet of fired clay. Lithic industry is composed by 7 microliths (1 backed point, 1 microsaw, 5 microblades) and 241 other artifacts.

Depression E is the largest intentionally hollowed pit at DV II. It was cut at the western margin as well, but the original

shape may be reconstructed as an oval 90 cm wide, more than 1,20 m long and 40 - 50 cm deep. It contained bones of larger and smaller animals, limestone fragments, ochre, a polished bone spatula (Fig. 25:1), small pierced tooth (Fig. 24:3) and 6 *Dentalia* shells. The same pit yielded 6 pieces of fired clay: 5 small, 8-10 cm long pellets and a shaped and pierced fragment (Fig. 25:3). The lithic industry assemblage is very rich: 5 flint cores, 7 backed microblades (Fig. 9:14), 1 burin waste, 2 pointed blades (Fig. 9:16, 34), a partially retouched crest blade and 475 other artifacts.

Other features. Cleaning the bottom of the depression revealed circular fired area (F), 60-70 cm in diameter, located to NE of hearth D. Furthermore, a grinding plate with traces of ochre was found in eastern part (Fig. 21:3) and two clusters of lithics and bones (B, C) in other parts of the depression. Cluster B is composed of a backed microblade, a microblade, a massive irregular blade and a *Dentalium* fragment. Cluster C included a crest blade, edge blade and a *Dentalium* shell.

Lithic industry. Compared to other parts of the excavated area the total number of artifacts (2087) increased in result of systematic floating, especially of all material from depressions and from other features. The floated material brought numerous small chips and some microblades. Even without regard to the floated material, however, we would still conclude that density of artifacts within the 1st settlement unit is higher than elsewhere (Fig. 3).

Most of the artifacts are made of different varieties of flint, only 2,5 % are of red radiolarite and 6,4 % of green radiolarite. Green radiolarite was concentrated in square A-19 and it is not excluded that this area coincides with the neighbouring 2nd settlement unit, where green radiolarite use was frequent.

Assemblage of the 1st settlement unit included 13 cores, mostly of flint, and only 2 pieces are of red radiolarite. A large piece of initially worked radiolarite material and 2 pre-cores (with lateral crests, with upright preparation) appeared as well. There were 2 cores of the Upper Paleolithic type, with prepared dorsal crest and with basal crest; one core is of the unipolar prismatic type. Three cores underwent changes of orientation and one core the rejuvenation of flaking platform. The core assemblage is completed by 2 residuals and 1 fragment.

The share of cortical flakes and blades (1 series) is low (2 %). The non-cortical flakes and blades dominate markedly and especially the microblades and blades reach maximal values (I<sub>lam</sub> = 74.2 %). Some of the blades are pointed (Fig. 9:16, 34, 36), while the partially retouched blades are rare (Fig. 9:35). Different types of preparation and rejuvenation flakes and blades are numerous.

The share of tools (related to non-retouched artifacts excluding fragments and chips) reaches 11,3 %. All, with the

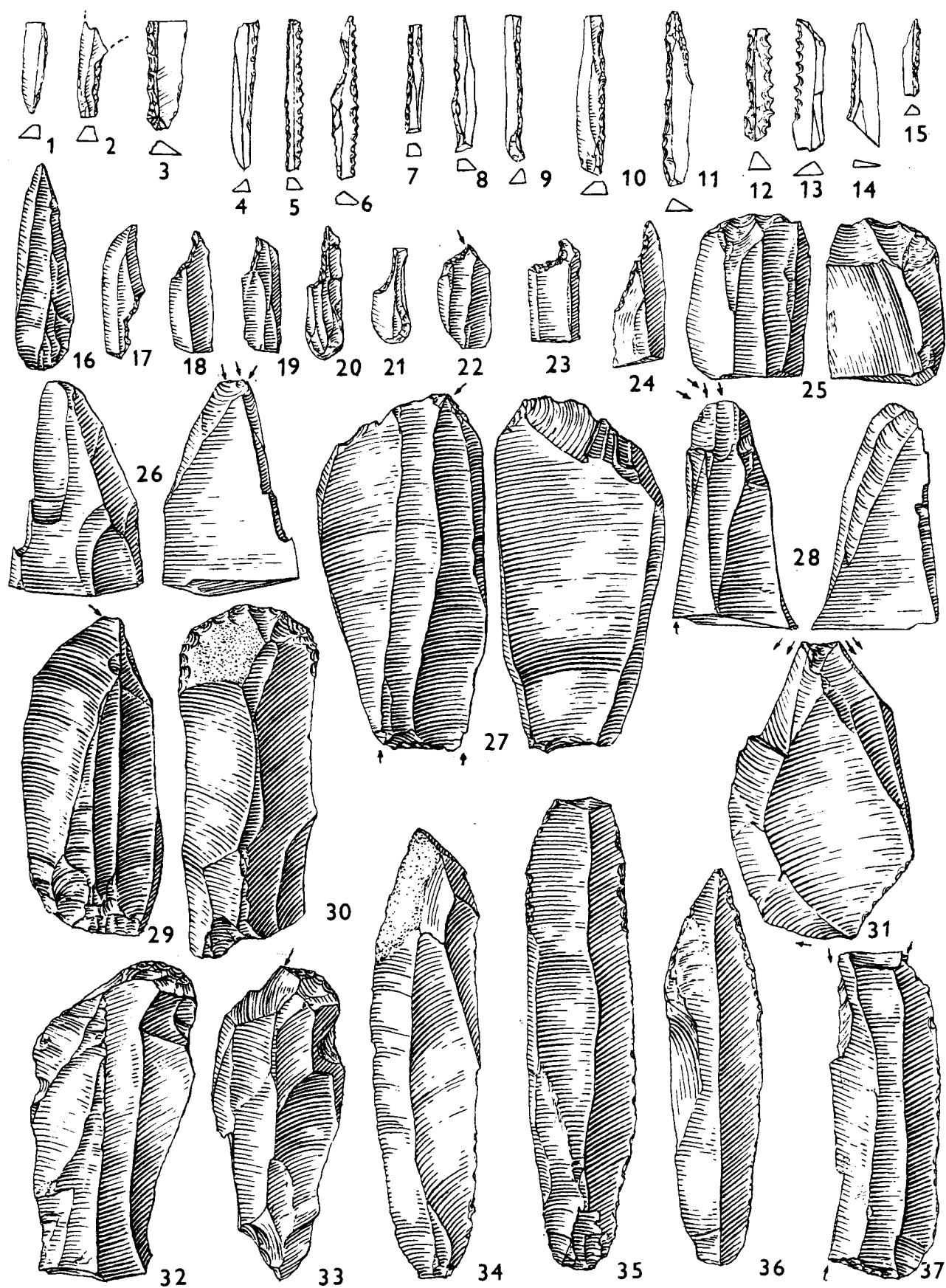


Fig. 9. 1st settlement unit, selected artefacts.

exception of 2 radiolarite backed microblades, are made of flint. Endscrapers, both typical and atypical, are mostly on blades (Fig. 9:30, 32). Of special interest is the combination of massive endscraper with burin blow at the head, opposite to oblique concave retouche (Fig. 9:33). Two burins are dihedral (Fig. 9:26, 31), both central and lateral, and further three burins are on non-retouched edge (Fig. 9:29). Relatively frequent are burins on concave truncations (Svoboda 1989a, Fig. 3:11), including a microburin (Fig. 9:22). The combinations of burins include the dihedral/truncated type (Fig. 9:27), dihedral/broken edge type (Fig. 9:28), truncated/broken edge type (Fig. 9:37) and further two combinations of dihedral burins.

Microlithic tools are very frequent, especially the backed microblades (Fig. 9:1, 3-4, 7-11, 14-15), sometimes pointed, and microsaws (Fig. 9:5-6, 12-13). Morphologically important is a microlithic shouldered point (Fig. 9:17), accompanied by blades with basal (Fig. 6:2) and terminal notches (Fig. 9:19-21) and fine borers (Fig. 9:18, 23-24). The tool assemblage is completed by a splintered piece (Fig. 9:25).

Other objects. The bone industry includes, besides the spatula mentioned from pit E, a bone awl (Fig. 24:4). Altogether 12 Dentalia shells were found, two of them with intensively worn surfaces. Among the decorative objects there were 5 pierced animal teeth, 4 of them attached to the male skeleton (Fig. 24:3; Svoboda 1989a, Fig. 3:3-6). 18 pieces of ochre were dispersed in the area, and ochreous powder covered the head and pelvis of the male skeleton. Four fragments of stone plates were found, one of which, found near the skeleton (square Aa-20) and still covered by red ochre, certainly served as grinding stone (Fig. 21:3). The 1st settlement unit is unique at the western slope for the only finds of fired clay pieces.

## THE SECOND SETTLEMENT UNIT (SQUARES AaD/16-19)

The space of the 2nd settlement unit has been delimited by a square of 4 x 4 m (Fig. 11) with central hearth and surrounding concentration of lithic industries. The real outlines - with exception of the part cut by the neighbouring 1st settlement unit - are invisible. The space is crossed by an oblique fissure filled with fine white sediment.

The hearth. The hearth is of irregular shape, measuring about 2,5 x 1 m (Fig. 10). It is formed by continuous, 5-15 cm thick layer of charcoal, burnt loess and thin sandy micro-layers, placed on flat surface of the loess. Few larger bones lied inside. Lithic industry was scarce and only a small part was burnt in fire. Charcoals from the hearth were dated in Groningen and Prague with the following results:

GrN	15 279	26 920 ± 250 B.P.
CU	748	22 570 ± 766 B.P.

The depressions. At the lower end of the hearth lied two bowl-shaped depressions. The first one (square Aa-18) was adjacent to the hearth; it is of circular shape with diameter