



JIRÍ HRALA, ZBYNĚK SEDLÁČEK, MILOŠ VÁVRA

## THE RESEARCH OF A BRONZE AGE HILL SETTLEMENT IN VELIM NEAR KOLÍN

**ABSTRACT** — A recent research of the northern slope of the Skalka hill resulted in the discovery of a fortification system on the north-eastern side. The system includes two shallow ditches, a groove-palisade and a stockade. The fortification system did not enclose the entire hill-top. Roughly at the centre of the excavated area the fortification system turns to the interior of the settlement. The chronological relations between the settlement and the fortification are not yet clear. So far we have been able to determine only that the groove-palisade (object 3) is older than the ditch (object 5) as proved by superposition. The filling of both ditches contained pottery, bronze artifacts, a profusion of animal bones, and also dislocated human bones. On the western side we discovered a further system of three fortification elements (two ditches and a stone well destroyed by fire (objects Nos. 44, 45, 45A). The double superposition yielded information concerning the chronological sequence (in the direction of numbering), the archaeological dating is proved by the ditch (object 44), proving at the same time that it belonged to the Tumulus culture, while structure No. 45A has been proved as belonging to the Late Tumulus or the Early Lusatian culture.

Inside the settlement, on the western side a number of irregular pits dug into the ground were discovered. It is believed that they are remains of cultic places (besides archaeological material they contained also large quantities of human bones). In connection with the cultic character of the settlement the authors have attached a list of finds of hoards (I—VII) discovered here, starting with the year 1885.

**KEY WORDS:** Bronze Age — Hill settlement — Fortification system — Late Tumulus culture — Early Lusatian culture — Cultic places — Cultic settlement.

The site is situated on the low hill called Skalka, on the eastern fringe of the village Velim in the Kolín District in Bohemia. The first discoveries were made in the 19th century during quarrying activities, disturbing the SE side of the locality. This and some other finds appeared in the specialized literature under the name of the Nová Ves site, a village to the cadastre of which Skalka belonged until recently.

The earliest finds are two troves of golden rolls of double wire, the first from the year 1885 contained about 36 rolls, the second deposit discovered in the year 1909 yielded six rolls alongside with bronze metal founder and chiseller's tools. The first excavation

was realized here in the nineteen-twenties by Dr. F. Dvořák, whose interpretation of the find and his ideas concerning the character of the Velim settlement are known only from a brief treatise in his book (Dvořák 1936).

F. Dvořák presumed that the original Late Únětice population pressed by the expansion of the Tumulus culture population, and feeling also the advance of the people of the Urnfield culture, retreated to places difficult of access. In such places we find graves with crouched skeletons, alongside with Late Únětice and Lusatian pottery. He regarded Skalka near Velim as one of the refuges of the Late Únětice people and he called the material assemblage found

there Velim-type material. He suspected that he had found traces of a densely populated and fortified "town" in Skalka. In the time of his excavation (1923–24) he found there burnt-down dwellings, mutilated human skeletons, traces of looting, destruction of inventory (Dvořák 1936, 49). It was Dvořák's tragical lot that after WW II he could not return to his excavation and to publish his views with full documentation (the latter was destroyed). Nevertheless the brief references concerning the Velim finds (besides Dvořák e.g. Filip 1936–37, 8–9; Böhm 1937, 60, 91) signalled that it was a remarkable locality, situated — at the time of the settlement — in a geographically exposed place, that might answer a number of questions connected with the beginning of the Urnfield culture period in Bohemia. For these reasons in the years 1948–49 a new research was launched in Skalka by V. Spurný. The results have not been fully published, the separate communications, however, present pottery similar to Dvořák's finds, but we can find among them also pottery reflecting traces of the influence of the Věteřov group (Spurný 1972, 1978, 508, Fig. 157).

The impulse to new excavations was given by the project of a housing development on the northern slope of Skalka. The research has started in the year 1984, it has a character of rescue excavations and is still under way.

The present situation of the latest research: In the eastern part of the excavated area is situated the so-called external ditch. Its mean width is 5 m and the depth is 150 cm (structure 1), along most of its length it has tub-shaped profile. 6 m behind it, to the centre of the settlement runs a groove, once forming the basement of the palisade; it is on the average 50 cm wide and 50 cm deep (structure 3). More inside the area runs a further line, the so-called internal ditch (structure 5); its distance from the

palisade-groove is first 150 cm, but farther to the north-west the two structures converge, finally they fuse. The profile of their contact has proved that the palisade is of earlier dating. The second ditch is of smaller dimensions than the first one — its width varies between 3–4.5 m, and the depth is  $\pm 150$  cm. The second ditch is followed — at the distance of 4.5–5.5 m. — by a double, at places triple line of post holes of a further palisade, or rather stockade. At places where there are three lines of post holes the distance reaches 6 m. The distance between holes in the line is  $\pm 50$  cm. It is quite possible that it was a combined timber-earth defence construction (Fig. 1).

But the chronological sequence of the construction of the individual fortification system still escapes final dating. The only secure point is the sequence of the groove-palisade and the internal ditch. For this reason we followed also further sections of this system in the south-eastern direction. It seems that the groove of the palisade maintains the same distance from the first ditch, as the stockade represented by the post-holes from the second ditch, with the exception of the somewhat confused situation around the recently excavated continuation in the south-east. If we accept the finds from the bottom of the ditch as dating materials, as artifacts brought there at a time when the ditch was functional, then the first large ditch (structure 1) belongs to the Tumulus culture. Its relation to the groove-palisade (structure 3), the same as the relation of the second ditch (structure 5) to the stockade has not been clarified. We can be sure only about the following relations: the second ditch is later than the palisade with the groove because at the point of contact it is in clear superposition; it seems that the two ditches are not contemporaries — for horizontally-stratigraphic reasons (at places they get near to each other).

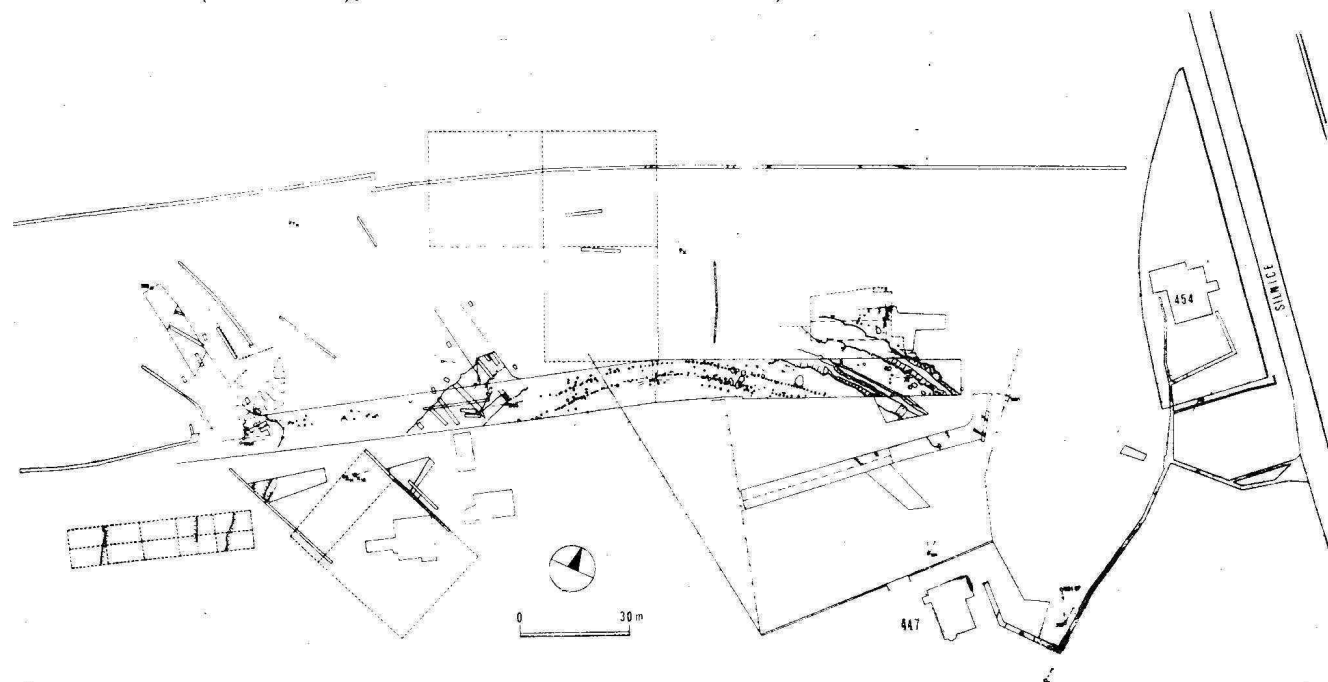


FIGURE 1. Velim, Kolín District. Plan of excavation.

The archaeological content of the two ditches in their upper layers (roughly to the depth of 40 cm) is identical. There is a profusion of animal bones and of dislocated human bones, a smaller number of bronze artifacts — mostly minor pieces, bands, fragments of pins, chisels, rarely also bigger artifacts, chisel with eye in two pieces and a hatchet in the first ditch, a Deinsdorf-type pin and an ornamental pendant in the second ditch. Exceptional are the finds of golden spirals from double wire in the first ditch; in the first case there are eight spirals clipped together, in the second there is a single spiral. In the large amount of pottery we can find items belonging to the Tumulus culture, but also pieces that might be regarded as pre-Lusatian or Early Lusatian. This situation suggests that when the function of the two ditches ceased, there remained isolated smaller open places along their course, the holes were later filled up — roughly simultaneously.

Our trench was directed generally from east to west, forming a secant crossing the area between the two ditches. After some 90 m we hit again the two ditches turning to south-west. The first (the external) ditch (structure 1) preserves its bath-tub section, but it loses depth and fades out towards the surface. The second (the internal) ditch (structure 5) gets narrower and also fades out towards the surface. The situation is rather complicated in the whole area; the area between the two ditches is covered with pits and hollows, some of them older than the internal ditch and interfering with the edges of the external ditch from both sides (one of them yielded a great deal of the bones of the pig and dog skeletons found here). It seems that in this maze of depressions there is another ditch running from the opposite side, that is from the south-west. The whole situation suggests that we are at the entrance to the fortified system. Unfortunately we have to do with an area where it is impossible to distinguish the sequence.

Completely on the western side of the studied northern segment of the hill a further fortification system was discovered: First appeared a shallow ditch of 300 by  $\pm 60$  cm dated by Tumulus pottery (structure 44). Its filling is covered with part of a rampart body belonging to the ditch (structure 45), 4 m aside. The dimensions of the ditch are 2 by 1 m. In the year 1987 we found in front of this ditch remains of a destroyed stone wall of a combined timber-earth construction destroyed by fire (structure 45A). A narrow excavation ditch has been opened to study the section and the hitherto conclusion is that the timber structure and the stone wall were probably up to three metres high. The traces of wood form black carbonaceous sedges, the clayey filling has been converted into red loose substance, at places baked into lumps of wattle and daub with imprints. This fills the area above the stones and also between them. Part of this baked earth covers a half-filled older ditch (structure 45). (Figs. 2 and 3).

We have obtained thus a multiple superposition of fortification systems; the oldest shallow ditch covered by the rampart body of a later ditch in front of it and the latest fortification with a stone

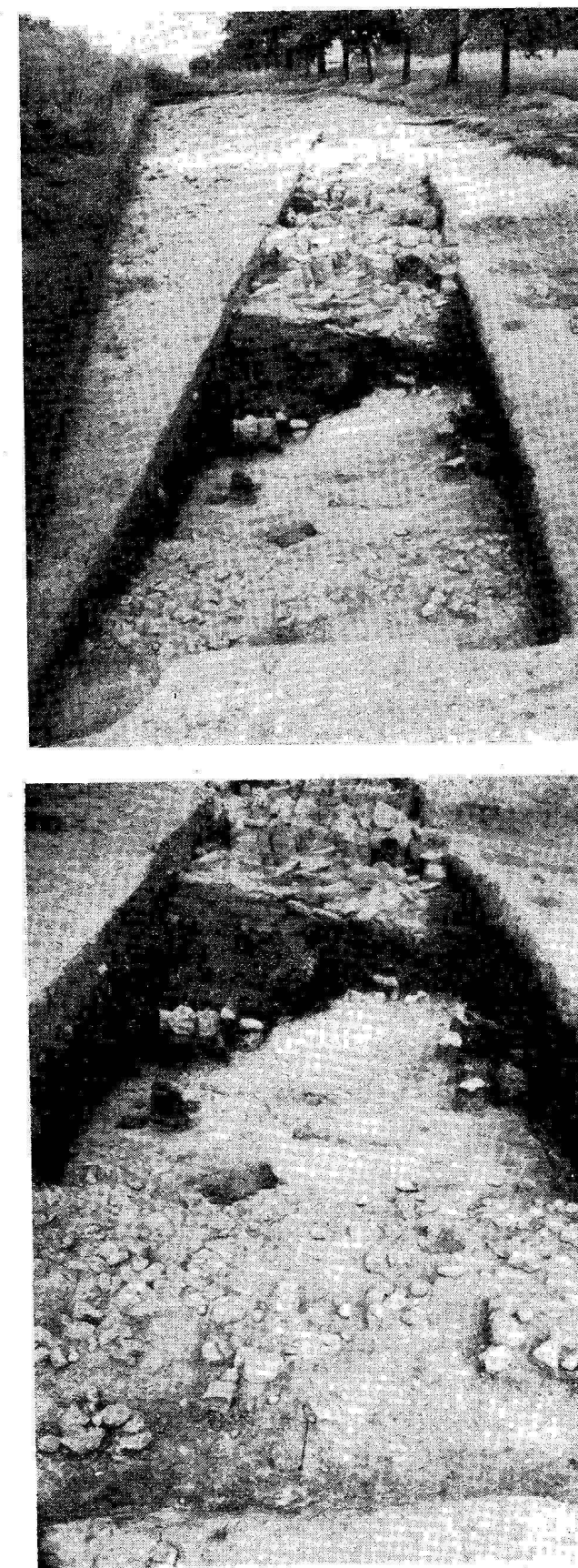


FIGURE 2. A section through the fortification on the western side; structures 45A, 45 and 44. — Lower at the bottom we can see a detailed view of the destroyed stone walls (structure 45A) with charred poles.





FIGURE 3. A child burial at the bottom of the ditch (structure 45A) on the NW side of the area.

wall, whose debris partially fill the previous older ditch. An identical situation was found also in other excavations in the north-western part of the studied segment of the fortified settlement. The last two fortifications are directed towards the northern foot of the hill. Evidently they spanned the settlement along the same contour line also on the eastern side, where the situation cannot be checked any more (there is an abandoned quarry, a house and a local road).

It follows from the above information concerning the fortification systems in Velim, that the continuing field research has considerably changed some of our former views (Hrala—Vávra—Sedláček 1986, Hrala—Sedláček—Vávra 1987a; 1987b). Firstly, we must say that the two ditches and the two palisades on the eastern side and their continuation in the central part of the area, do not represent the main fortification, they limit only part of the internal area of the fortified settlement. The fact remains that in none of the above ditches (structures 1 and 5) can we find any proof of the existence of a rampart or defensive wall; perhaps the double or triple stockade might be a trace of a timber-earth wall, but

this is not supported by the situation in the terrain (full absence of the vestige of an earthwork bank).

As far as the time sequence of these constructions is concerned, we can be sure only that the second (internal) ditch (structure 5) is superimposed over the groove palisade (structure 3). After some considerations we have arrived at several possible variants, and two of them are quite plausible: 1. The groove palisade — structure 3 — is the oldest simple fortification of the area, and it served till the moment when a more sophisticated system — i.e. the first external ditch (structure 1) was completed. The first ditch (structure 1) with its groove palisade (structure 3) forms a single system preceding the construction of the younger system, i.e. the second ditch (structure 5) with stockade (wall ?) — this variant is more plausible, as indicated by the following facts: a) it seems that both palisades follow unvariably at the same distance "their" ditches (the grooved palisade is following the first — external ditch, the stockade runs along the second — internal ditch); b) horizontally-stratigraphic reasons: the pit (structure 11) is situated on the external side of the stockade, thus the two structures cannot be contem-

poraries. Structure 11 is of the Tumulus-culture (ornamented foot of the vessel). We have no acceptable answer regarding the purpose of the enclosures in the given terrain situation. We have made only minimum excavations inside the enclosed area. In a probe (No. 11) we have discovered several post holes without any clear-cut ground plan and in structure in which a human skull and a charred mandible were found, and a complete egg-shaped vessel nearby (the cultural affiliation of the vessel is disputable, it may belong both to the Tumulus or Lusatian culture). Otherwise the relatively long trench was poor in finds.

Inside the area, near the described fortifications (structures 44, 45, 45A) a 550 cm large depression — so far of unknown length has been found. It cannot be excluded that it is a ditch. At its bottom appeared numerous animal bones, bones of at least 18 individuals of various age, including children. At the south-eastern edge the burial of a crouched man was found, oriented S—N. The pottery dates this depression No. 23 into the Tumulus culture (Fig. 4). Towards the north continue other similar depressions. No. 62 has e.g. oval ground plan and its dimensions are roughly 4 by 3 m (Fig. 5). Debris of big stones at their western side suggests that there was some construction on that side. Both depressions show some links with the known places of sacrifices in the

Alpine region, namely near Reichenhall in Upper Bavaria, especially with the find at the Eisenbichl site (Krämer 1966), quoted by E. Plesl as an example of south-eastern cultural influence (1974, 356—357). To this belongs to a certain extent also the somewhat older site Přítulky in Moravia (Trnáčková 1954).

The hitherto available finds from the Skalka site, gathered over more than one hundred years, reveal the extraordinary character of the site. We have in mind seven mass finds of golden and bronze objects: deposit I with about 36 golden coils made of double wire (1885); deposit II — six similar coils with three two-part bronze moulds for casting axes, a bronze axe with an anvil (1908); deposit III — eight golden coils, find from the year 1927 (Hásek 1981 with earlier literature); deposit IV — eight golden coils of the same type as in the three previous deposits; find from the year 1984 (Hrala—Vávra—Sedláček 1986, Hrala—Sedláček—Vávra 1987a, 1987b); deposit V — an ornamental bronze pendant; small looped disk, four spiral tubelets made of wound spiral wire (Salta Leone), two crescent-shaped and a lyre-shaped pendants with orifices at the top, pins, find from the year 1984 (Hrala—Vávra—Sedláček 1986; Fig. 6); deposit VI — three axes (Absatzbeil), a sickle, a bronze accretion from the year 1985 (Hrala—Sedláček—Vávra 1987b, Fig. 8), deposit



FIGURE 4. Find situation in a structure of cultic character (structure 23).



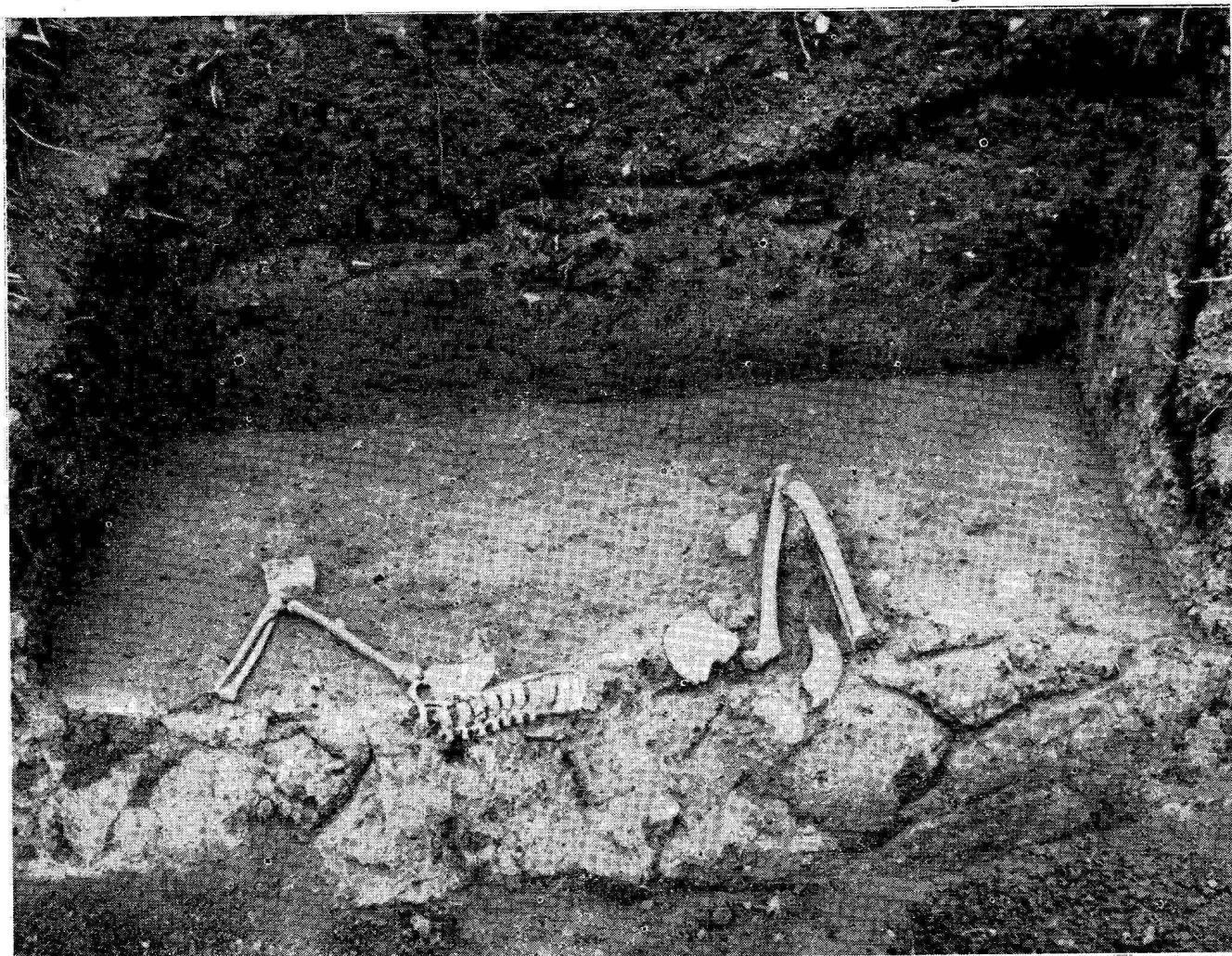


FIGURE 5. Structure 72 with part of human skeleton.

VII — two bronze bracelets, a chisel, a large amount of bronze tacks, find from the year 1988 (not yet published). We can add to them a group of golden artifacts from grave 14 (five coils of the usual type and the tubelets wound from twin golden wire), found in the year 1988 (not published). The singular feature about these finds is the presence of numerous golden artifacts, but noteworthy are also the bronze finds, signalling metal processing on the site: the axe moulds (deposit III) and accretions of bronze (deposit VI) suggest that there was a foundry, while the anvil (deposit II) and perhaps also the chisel (deposit VII), not to mention the small chisels occasionally found also in other structures, are signs of metalworking. Metal casting is often connected with extraordinary rites, sometimes even with a cult. Of special character are deposit IV (discovered in the ditch — structure 1), and deposit V (from the ditch — structure 5); they formed in fact single artifacts: eight mutually linked coils (deposit IV) and in case of deposit V according to the terrain situation we think that the pendant was originally connected with some organic material (thread, twine). They may be therefore regarded as votive gifts. The same holds

also for some of the artifacts thrown into both ditches (structures 1 and 5) — a single golden coil, a chisel with an eye, small chisels and other bronze artifacts. It seems that both structures, at least in the final phase of their function, were cultic structures.

The shortage of settlement objects has been caused by the present state of research; it must concentrate preferentially on the endangered places. Our finds, and also the earlier finds indicate that there were metallurgical and metal chiselling activities. This is suggested by finds of casting moulds, bronze accretions and working tools. Contacts with far-away regions are suggested by finds of amber (according to the analysis it is Baltic amber). The bronze pendants and crescent-shaped ornaments point to the east, to Silesia. The working tools and their fragments, relatively numerous finds of grain crushers and animal bones as food remains document that there was normal economic life in the settlement.

As regards the cultural affiliation of the finds, prevalently we have to do with Tumulus pottery, namely with utility vessels with digital impressions, barrel-shaped vessels, jugs, more rarely vessels with

a foot. Among the ornaments prevail horse-shoe elements, sometimes hatched triangles, and numerous vertical notches. The dilemma of this cultural milieu is represented by two basic shapes — by amphorae and by biconical vessels. From this viewpoint the Velim pottery seems to be closer to the proto-Lusatian horizon in Moravia, that knows both shapes, than to the pre-Lusatian culture, with the biconical vessel missing (Gedl 1975). Nevertheless the proto-Lusatian horizon with its shapes reveals its Middle-Danubian Tumulus culture origin, only a part of the ceramic inventory may be derived from Věteřov basis. In Velim the elements attributable to Věteřov legacy are few, evident cases are known only from the research by V. Spurný (1972, Fig. 3: 6). The biconical vessel is known already in the purely Tumulus culture. In Velim we can find also sporadically elements of the Bohemian-Palatine Tumulus culture. There is nothing new about it, this integration phenomenon was known already earlier (Plesl 1954, 237).

From a global look at the Velim pottery, prior to its analysis we can say that the principal settlement is in stage BC<sub>2</sub> with its beginning perhaps at the end of the previous stage, and that the development reached also the beginning of stage D. Such dating is supported also by the bronze inventory, further development of the settlement by the situation of the terrain.

It seems that culturally Velim appears as a solitary phenomenon on the border—line that was arising in Bohemia in the Middle Bronze Age, and is very well perceptible in the Early Urnfield period, as a watershed between the Knovíz and Lusatian cultures, or to use superior terms, by the south-western and eastern regions of the Urnfields.

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PhDr. Jiří Hrala, CSc.  
 PhDr. Miloš Vávra, CSc.  
 Archeologický ústav ČSAV  
 Letenská 4  
 118 01 Praha 1

PhDr. Zbyněk Sedláček  
 Regionální muzeum  
 Nám. Obránců míru 8  
 280 00 Kolín I.