CONFRONTATION OF THE ARCHAEOLOGICAL AND ANTHROPOLOGICAL CONCLUSIONS OBTAINED FROM GRAVES BELONGING TO THE LUSATIAN CULTURE

ABSTRACT — A systematic research of a Lusatian culture cemetery in Moravský Šumperk District, Northern Moravia, has provided an extensive collection of remains of cremated bodies for anthropological analysis. Let me return to the question of the conclusive evidence of these finds for demographic calculations, if we take into account to what degree had we been able to discover the entire group of people buried here. It is pointed out in the paper that not all burials could have been researched, some were destroyed or ploughed away. There were also graves not yielding any remains, cremation graves and also graves of animals. It is mentioned that about 15% of the people were buried in pit burials and in cremation ash layers, i.e. these people may represent a special group of the population. It follows from the above that at demographic calculations it is necessary to take into account also many other factors, and that future research will have to use improved methods of co-operation between archaeologists and anthropologists.

KEY WORDS: Lusatian culture — Moravia — Moravský Šumperk burial site (Šumperk District) — Cremation graves — Demographic analysis.

The solution of archaeological problems through an attempt at a systematic excavation of a complete Lusatian culture cemetery in Moravský Šumperk District, inevitably resulted in co-operation with anthropologists. The extent of this paper does not allow us to try and solve directly some of the problems. I would like to point out only to some of the stumbling blocks of such a co-operation. Some archaeological conclusions of this research have been already published (Nekvavíl 1978, 1982a) and a catalogue of finds has also been published (Nekvavíl 1982b). The remaik of the buried were analysed by M. Šiloukal, his expertise has already been presented and some of his conclusions have also been published (Šiloukal 1990, 1974). Let us try now to find out whether the materials handed over to the anthropologists for expertise form a compact set that might serve as a basis for working out demographic data. I shall present here only some conclusions from the Old Lusatian part of the burial site, forming a good chronological and evolutionary sample from the middle and from the beginning of the Younger Bronze Age (BC—HA I). One of the interesting features of this period is that it represents the genesis of the Lusatian culture and the cementing of various development elements. The research put the number of graves, including the Hallstatt part of the cemetery, at 1260, and by the gradual determination of double or multiple burials their number reached 1310. 976 out of the above number belonged to Old Lusatian period. The anthropological analysis, however, covered only 788 graves containing the remains of 861 individuals. We have to explain this difference, and also to decide to what extent has been excavated the burial site in Moravský Šumperk.

First let me outline the state of remains of the cremated bodies from the viewpoint of archaeological practice. I am sure it would not present any serious problem for the contemporary natural sciences to calculate what remains after
individual cremations in the various age groups, including the variations caused by differences in the individual build of the body (Stekolnik 1968, 332). Perhaps the cremation table according to the degree of cremation heat determined by the amount of fuel, eventually combustibles for the individual, but these results could help us only if the anthropologist received all the cremated skeletal remains of the cremation. In general, the excavated bone preserved remains does not reach the expected values (Choebluk 1958, 560; Stekolnik 1968, 33). Several graves contained burned bone, but the plates and both vessels have remained intact. They document that only charred bone fragments were collected from them. In this type of grave, the remains of a 5-6 years old child with the volume of bones reaching 3000 cm. I cannot imagine any way of measuring or explaining the loss of bones. Neither is there any plausible way of explaining the small amount of bone fragments in the burials of some of the adults. It holds only for the burials of children that the smaller the child, the fewer the remains. During the excavations, however, it was sometimes quite a problem to perceive the graves of small children; the content of miniature urns looked as a rule as whitened clay. When appeared at least partial possibility of identifying individual it was then called "grave 769 with unidentifiable burial." It was a small jug placed in a dish-like depression in the floor of the grave. To the site it there was, bottom up and further aside the skull, another, typologically evidently younger jug. It is possible that the grave was even a three graves? In some graves containing double burials were found two small vessels placed on burn bones (25). It is possible that one of the two vessels outside the urn as part of sets of vessels (141, 3605, 696, 707, 723, 846, 850, 1044, 1094, 1221, 1357) contained a female and a newborn. (269); 219-2 children; 469-2 children; 710—woman and fetus— 891 adult and child. We assume that if other graves contained few vessels not containing complete bodies, but only one vessel, then it means that the graves are not double-burials, we can accept that there are non-identified remains of individuals. But this cannot be accepted as a guideline, as we know a number of double-burials without any accompanying vessels (511, 529, 577, 582, 1012, 729, 804). It is quite possible that a smaller number of the graves in which no remains of bones have been found, are in effect cremation graves. Thus in grave 379 in the burial pit there was a cup with its bottom uncovered, covered with a cup with a "soul-hole" at the bottom. Below them there was a large amount of a piece of clay, without any traces of bones. Such graves are known also from other regions of the Lusatia. In the cremation grave 790 in the Cetin (1961, 800), at some places they appear in quite considerable numbers (Hradová 1962, 61). The loss of bones evidently increased by grave robbers. In Moravicky we found well perceptible traces of interferences in the graves with storage vessels used as urns (Nekvapil 1982a). The charred bones were dispersed and mixed with the contents of the vessel, sometimes spilt also outside it. Grave robbery, however, might have affected also other urn burials, the finds do not arrive at such detailed conclusions as those of Moravicky.

If the anthropologist is to make a demographic analysis of an excavation, he must know the amount of bone remains, and can presume that beyond the line connecting the cavities around the oldest burials there were no further cremations. The line of the boundary of the grave we not able to admit the outline, as part of the burial ground has been destroyed by construction activities or is situated below roads. Here we have at least to assess the number of graves. It is possible to count some 20 circular areas, places where the bones were originally heaped up, but only in 18 were there central pit-type graves, in one case there were even two. It should be presumed that the rest were destroyed on levelling the barrows and by tilling the burial ground. Of course we should count also with burning other dead in the heaped masses of cremated remains in the barrows that a few of them have been preserved, namely towards the fringe of the barrow, and those which were deeper. The possible number of charred remains realized (Páko 1963) and at their centres appeared extensive areas with increased reaction; the size of those areas mentioned, and containing a few charred bones, is towards the edge of the circular surface there are smaller active surfaces, marking the sites of possible, they regard as a drawing of periphery related probably with 5-6 graves per barrow. Thanks to the fact that most graves were situated in the depressions of the barrows, they were protected from other barrows by ploughing. Anyhow, a number of such disturbed burials have been also recorded, some of them almost completely destroyed, the new excavations of large group of 40 graves, marked as "dispersed." They are probably remains of graves disturbed in the course of later barrows, the destruction of which they are not described in the field to which we had to do with barometric characteristics. Altogether 184 graves have been excavated, this number is too small to draw any conclusions or the fact that besides missing, destroyed graves some pieces may be still hidden in the grave pits or that the graves are not isolated fired bones. The table includes also remains of 3 double burials.

<table>
<thead>
<tr>
<th>State of bones:</th>
<th>Age groups:</th>
<th>not identified</th>
<th>not found</th>
<th>small fragments</th>
<th>very small</th>
<th>small amount</th>
<th>medium amount</th>
<th>large amount</th>
<th>very large</th>
<th>total (out of 154)</th>
</tr>
</thead>
<tbody>
<tr>
<td>State of bones:</td>
<td>Child</td>
<td>adult</td>
<td>57 5%</td>
<td>10 6%</td>
<td>30 0%</td>
<td>13 10%</td>
<td>26 18%</td>
<td>26 18%</td>
<td>58 14%</td>
<td>56 14%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State of bones:</th>
<th>Animal bones:</th>
<th>small</th>
<th>very small</th>
<th>very small</th>
<th>small</th>
<th>very large</th>
<th>very large</th>
<th>total (out of 154)</th>
</tr>
</thead>
<tbody>
<tr>
<td>State of bones:</td>
<td>121 adult</td>
<td>31 children</td>
<td>56 14%</td>
<td>26 18%</td>
<td>26 18%</td>
<td>58 14%</td>
<td>56 14%</td>
<td></td>
</tr>
</tbody>
</table>

The similarity of small-pit graves and of cremation layers was evident already during the excavations and the cremation layers were regarded as remains of cremation graves put into the grave pit, and in the small-pit graves we may have to do with similar pyre remains. Now the question is, why it is that only small-pit graves were preserved, whereas other cases found outside the graves. The results of the anthropological analysis have shifted these ideas into another position. It shown that in such graves pit graves, nor in the cremation layers were found some clear-cut age or sexual groups of the population. The determinable remains found in

218
cremation layers showed that we have to do with remains definitely differing from those in the urns, that there prevails the adult-child relation, but in one case there are the remains of two children, and in other with two adults. We have to add that only grave 687 had a layer containing also fired clay, the rest contained charcoals. While small-pit graves are believed to be burials of isolated individuals, the case with cremation layers is not so explicit, only 4% of them contained human remains. Puzzling is also the small number of charred bones (if any). Evidently they were exposed more directly to adverse influences of the soil, climate, etc., and their decomposition, namely of the remains of children took place more rapidly than was the case with bones buried in urns. If we accept the view that both groups are burials of individuals, then we have to do with two different ways of cremation rites, differing namely in the way of collecting and burying the cremation remains. Did they belong to two different ethnic or social groups within the Lusatian society? We have to bear in mind that faulty anthropological conclusions could lead us in a wrong direction. Nevertheless this group of at least 134 graves excavated in the above ways may influence our demographic calculations.

The excavations in Moravskávy have brought about also a series of other observations that may influence only marginally the demographic calculations, and they are more concerned with the cultic sphere. Let us take e.g. the burial of non-cremated bodies (Moravskávy I case, Moravia 5 case) or burials of animals (Moravskávy I case). Another problem is the breaking of "soil-holes" into the bottom of the urns — similar "soil-holes" appear sometimes also in other vessels in the grave. The question is whether even these urns ever contained preserved remains, or whether they contained non-cremated parts of cremated bodies! At the present state of research of the Lusatian culture the archaeological observations are transferred to the entire Moravian branch of the Lusatian culture as a type model. The same attitude should be assumed also towards anthropological observations, of course if all this structure is not shaken by new results of the research. I cannot explain here in detail how the above phenomena can be regarded as common for the Lusatian culture as a whole — I can only recommend a large selection of the extensive literature (Gisler 1974; Hrabová 1962, 1975; Malinowski 1961; Pětil 1969; Rataj 1961; Velická 1983; Vokolek, Rataj 1964; Flekner et al 1978). We should bear in mind that elsewhere anthropological analyses may lead to different conclusions, e.g. Tornow, Kr. Calau in the GDR, where the small-pit graves yielded mainly charred animal bones (Brödlin 1978).

In conclusion I would like to stress that in the archaeological practice we have failed to reach such a perfection as to be able to offer exact data to the anthropologists. In the future we shall have to work out more detailed investigations of human and animal remains, and it seems that we shall have to invite the anthropologist to participate in the fieldwork, to make his observation already during the excavations.

REFERENCES


FLEKNER F. et al., 1978: Praktické dějiny Czech, Prague.