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AN OUTLINE OF THE RESEARCHES ON THE ANTHROPOLOGY OF THE BRONZE AGE IN MORAVIA

The territory of Moravia has concentrated the attention of anthropologists since the very beginnings of the science about man. It is so chiefly thanks to the Pleistocene finds from Šipka, Mladeč, Předmostí near Přerov and Brno in the eighteenthies and nineties, and subsequently thanks to the Ochoz, Dolní Věstonice, Pavlov, Svitávka and Kůlna finds. The anthropological finds of the later periods, including the Bronze Age, however, arose less attention and the wide public knew very little about them.

The anthropological part of the article of F. Koudelka on the Únětician graves near Němčany written by A. Weisbach in the *Mitteilungen der Anthropologischen Gesellschaft in Wien* in 1891 can be regarded as the oldest publication on Moravian anthropological materials; it contains an expert's account on an Únětice skeleton, including the basic dimensions. The publication of A. Rzehak from 1880 is older and contains also an anthropological part, but it is rather superficial, the dimensions were indicated only approximately, so that the find is of no practical use for us. Neither can we use the data concerning the Moravian materials in the publications of O. Reche and H. Schliz from 1909, since their finds cannot be exactly identified and the original archaeological dating has been lately defined with more precision or has been completely changed by later researches.

Relatively soon after Weisbach's paper appear the publications of J. Palliardi in 1894 and 1896. Though they deal chiefly with archaeological finds, the author evaluated also the unearthed human skeletons and his accounts are very good and can still be used, the more so because they are accompanied by archaeological finds, so that the reliability of their dating can easily be checked. In

his work from 1894 the author indicated the data of 8 Únětician skeletons from Oblekovice and of 12 skeletons from Vrbovec. The work from 1896 mentions one skeleton from Těšetice and 3 skeletons from Kyjovice. J. Wankel's paper on a female skull from Příkazy, published in 1889 contains only the basic indices.

J. Matiegka dealt with the Moravian anthropological material only marginally referring to an article by A. Prochazka reporting on an Únětice grave from Otnice in 1907. In Stocký's publication from 1931 is Moravia represented by a single Únětice locality — by Vranovice (2 skeletons). From the pre-World War II period let us mention also K. Schirmeisen. His work from 1933 contains the data on 5 male and 3 female skulls from Moravský Krumlov and our short list of earlier works can be concluded by Szombathy's work on Únětician skeletons found in Moravia and Austria; he mentions 1 male skull from Vrbovec, 1 female skull from Čejkovice and 6 finds from Skoronice, of which only 1 male and 2 female skulls could be measured.

After break of more than twenty years two important works by J. Jelínek on the anthropological finds in the Bronze Age appear within a short space of time, stressing as first the importance of anthropological materials originating from Moravia; the first of them, a separate volume published in 1959 contained the metric data on 48 Únětice skulls, and it is followed by a publication on the data of further 32 skulls in the *Časopis Moravského musea*, in the same year. These two publications were preceded by several articles written by Jelínek between 1950—1957, dealing especially with the problems of anthropophagy and burial rites in the Bronze Age. Finally in 1961 Jelí-

nek concludes this period of this research work with a critical analysis of our knowledge of the anthropology of the Bronze Age. Jelínek returned later several times to these problems in his publications dealing with isolated finds, namely in his complex work on the anthropology of Neolithic Age in Moravia. It is naturally impossible to draw a sharp dividing line between the Eneolithic Age and between the time of the Únětice culture; on processing the materials of the Bronze Age Jelínek was looking for their origin in the individual Eneolithic Groups, and on the contrary, on processing the Eneolithic finds he was looking for their continuation in the Bronze Age. The whole problem was very well expressed in Jelínek's paper at the Symposium on the Anthropology of the Neolithic Age in Mainz, read in 1965 and published in 1973.

Besides Jelínek's works we shall mention also the publications of other authors. A. Lorenková processed the finds from Újezd (1958) and from Znojmo (1964) and J. Pavelčík processed the skulls from Brno-Černá Pole (1949). The author of this very paper processed a series of isolated finds and small groups of Únětice skeletons from the territory of Moravia; they are indicated in the attached list of literature. There were in fact only two bigger Bronze Age groups I had a chance to process, but none of them contributed substantially to the solution of the anthropological problems. The Nitra group burial site from the Earliest Bronze Age unearthed in Holešov contained 385 graves, but the skeletons were in such a poor state of preservation that we managed to determine the basic paleodemographic data only in 224 of them and a metric analysis of the assemblage was out of question. The Moravičany burial site contained 1250 cremation graves from the Lusatian (and Plátenice) periods, but cremation burials represent a special problem and will be dealt with by a special paper at this symposium.

The list of works on the anthropology of the Bronze Age in Moravia is quite rich, the anthropological materials are relatively extensive, but in fact we are still short of them. The group of about 100 Únětice skulls whose metric data are at our disposal, is not very much, we are used to work with Old Slavic assemblages counting thousands of finds. Besides most finds, especially the older ones are not accurately dated. We must realize that the Únětician period represents some 400 years of development, but we often conceive it as a whole, considering sometimes certain geographical differences, but we are unable to distinguish its individual phases. It would be of extraordinary importance to follow the picture of this population in various chronological horizons, namely to separate the earliest phase, comprising the culturally very versatile Eneolithic environment, and the latest stages when a symbiosis proceeded and the various elements amalgamated into a new shape.

It is impossible to speak of the anthropology of the Early Bronze Age without giving a heed to the development of the preceding stage. In Moravia

we can find several independent cultural groups towards the end of the Eneolithic Age. The two best known groups are presumably of foreign origin (what is doubted by some researchers), the people of the Bell Beaker culture and the people of the Corded Pottery. Besides these two groups we know also the Jevišovice population, the Nitra group and the Eneolithic Proto-Únětician group. The Corded Pottery culture in the view of most researchers ceased before the end of the Eneolithic Age, and thus we could eliminate it from the groups directly preceding and influencing the Únětice culture; the matter is however not so simple. The theory of the hiatus between the end of the Corded Pottery culture and between the beginning of the Únětician period is not so unshakeable as it seems to be and the results achieved in the field of anthropology helped to establish these contacts. The archaeological research gives us almost univocal answer — there is a very striking connection between the Únětice culture and between the culture of the Bell Beakers. The results of the anthropological research, however, did not allow us for a long time to accept generally this view, since the people of the Bell Beakers had been regarded for a long time as a population of short-headed archers, without analogy in the cranial finds of the Únětice period. The recent three decades however have substantially changed this anthropological conception, but the achievements of the newest research do not get through against the force of tradition. The people of the Bell Beakers is a rather heterogenous population in central Europe, comprising also leptodolichomorphic elements, typical of the Únětice population. The existence of relations between these two groups cannot be ruled out, but at present it cannot be proved either. It is so because we have almost no anthropological materials concerning other two important populations from the end of the Eneolithic Age in Moravia, of the Jevišovice and Nitra groups. The proto-Únětician finds are very scarce, but they belonged to a surprisingly homogenous population, almost identical to the very Únětice people; as far as relations between the proto-Únětician culture and Únětician culture proper are concerned the views of the archaeologists diverge a great deal.

Let me return once more to the large Nitra group burial site researched by J. Ondráček in Holešov in the sixties. I have mentioned that it was possible to establish only the paleodemographic data of most of the finds coming from 385 graves; we were helped however by the fact that the various position of men (on the right side, with the head to west) and of women (on the left side, with the head to east) was strictly respected, according to our research. Thanks to the great quantity of material we were able to put together the oldest life table for an anthropological material found in the territory of Czechoslovakia. The table contains very interesting data, though it contains in emphasized form also the errors of tables from the later periods. The table tells us that the mean life expectancy of this population was 31 years, but we must add that the first or zero group contains only a single find

(only one skeleton of a child dying before reaching the age of one year, has been found). This absurd find (quite impossible even in the 19th century) distorts also the other results of the life table. The combined archaeological-anthropological research of the site has not been completed. Perhaps a detailed analysis of the findings will show that the 56 graves containing no anthropological material were graves of infants, but this explanation could not fill in all the data missing from the life table.

The analysis of the paleodemographic data represents in the anthropological research a large step forward, enabling us to learn more about the structure of the prehistoric and medieval populations, but it is of little help for learning about the biological relations among the individual groups. The large burial site in Holešov, however, can not yield us any material for understanding the degree of biological relationship between the Nitra and Únětice peoples.

The period of the Únětice culture emerges from a fog still covering the anthropological structure of the final Eneolithic Age suddenly, as a clear-cut contour. The new researches bring about few new facts, in fact they only prove that our ideas concerning the anthropological picture of this population were correct. It forms a strikingly homogeneous group especially in Moravia and is characterized by the presence of robust leptodolichomorphic individuals. Out of the 100 Únětice skulls found in Moravia there are only 4 per cent brachymorphic ones. Though at present we know from the anthropological side only a small part of the Final Eneolithic population, there is no doubt at all that they were formed by a varied mixture of biological elements. After this period appears a surprising homogeneity (there is similar situation after all also in the archaeological material). It looks as if the symbiosis of various groups in the same territory led to the formation of a new group through evolutionary mechanisms. We are tempted to accept this explanation also by the nowadays prevailing general trend not to believe in migrations, but try to explain most phenomena by local development.

We periodically study the relation of changes in the archaeological material with changes in the population. Some periods or groups of scientists emphasize the importance of migrations in this respect, others explain everything through local development. Today prevails latter "school" but the truth is somewhere half-way. Those are quite exceptional cases when the whole population was replaced by newcomers, in most cases at least remnants of the original population remained in the area; on the other hand it is very probable in some cases that large masses of people moved into new settlement areas. For the territory of Moravia we cannot rule out that a certain amount of biological elements of the first farming population from the beginning of the Neolithic Age has persisted for thousands of years and still live in a small part of the present-day population of the area. On the other hand it is obvious that there were several mighty

migrations of new peoples to this territory and that the original biological element has been at least strongly influenced and superimposed by the influx of these new peoples. I do not doubt the possibilities of the archaeological research, but I think that the archaeological material cannot solve all these problems definitively, in this matter the archaeologists are thrown upon speculative conjectures. Anthropology could be of great help here but its chances are quite limited since the material we have at our disposal cannot match the rich archaeological finds — either quantitatively or qualitatively. It seems, however, that the appearance of the Bell Beaker people could be an example of migration, while the origin of the Únětice population can be explained by local development.

The question remains, however, why did one of the components of the Bell Beaker population, paradoxically enough the leptobrachymorphic one, once regarded as the most typical representative of this people, retreated to the background in the Bronze Age. In fact the brachymorphic skulls had completely disappeared. It was obviously due to a process whose analogy (under completely different circumstances, however) is known from medieval materials — somewhere between the 12th and 14th centuries occurs an brachycephalization process in Europe, eliminating almost completely the dolichomorphic skulls. There have been many explanations to this process; today prevails the view that it was due to some form of biological selection. I do not want to go to details, simply the medieval conditions somehow preferred the brachycranic component of the population and the result was that within some two hundred years the dolichomorphic skulls almost completely disappeared. A similar evolutionary mechanism could have led to an almost complete suppression of the brachymorphic individuals between the Eneolithic Age and Early Bronze Age.

From the later horizons of the Bronze Age in Moravia we have at our disposal substantially less finds. Though we have a comparatively extensive series of Velatice period finds from Cezavy near Blučina, but they are in very poor state of preservation. From the materials we have we can judge that the homogeneity of the anthropological composition of the Únětice period continued. But the finds of population of the Tumulus culture, very important for following the development, are missing.

Anthropology cannot bring about revolutionary and definite solutions for the complicated problems of the prehistoric archaeology, but it can contribute a great deal to their solution. It could contribute more, if it had at its disposal a larger number of exactly dated materials — but we must not cherish illusions that then everything would be clear. The small groups of finds make the completing of our work easier, mercifully schematizing the complexity of the whole problem. We have thousands of skeletons from the Early Middle Ages, often we have at our disposal even written reports, nevertheless the number of unsolved problems is constantly in-

creasing. If we take into account the influence of pure evolution, migrations and all the other factors changing the biological substance of the populations we shall have to conclude that the present period is not suitable for widely-based syntheses. The important thing is to learn in detail about the individual areas, to analyse all the available material and to co-ordinate closely the archaeological and anthropological research of the individual epochs.

LITERATURE

- JELÍNEK, J. (1954): Antropologická pozorování z výzkumů na Cezavách u Blučiny, okr. Židlochovice. *Časopis Moravského muzea XXXIX*, 217–231.
- JELÍNEK, J. (1954): Antropologický materiál střední doby bronzové z Hradiska u Kroměříže. *Památky archeologické XLV*, 378–382.
- JELÍNEK, J. (1956): Les résultats anthropologiques des recherches dans l'époque de bronze en Moravie. *L'Anthropologie* 60, 462–470.
- JELÍNEK, J. (1957): Anthropofagie a pohřební ritus doby bronzové na podkladě nálezů z Moravy a z okolních území. *Časopis Moravského muzea XLII*, 85–134.
- JELÍNEK, J. (1958): Zwei Skelettfunde aus der älteren Bronzezeit. *Časopis Moravského muzea XLIII*, 175–180.
- JELÍNEK, J. (1959): Anthropologie der Bronzezeit in Mähren. *Anthropos* 10 (NS 2), Moravské muzeum, Brno, 191 stran.
- JELÍNEK, J. (1959): Weitere anthropologische Funde aus der älteren Bronzezeit. *Časopis Moravského muzea XLIV*, 171–202.
- JELÍNEK, J. (1961): Zur anthropologischen Problematik der Bronzezeit. *Časopis Moravského muzea XLVIII*, 235–262.
- JELÍNEK, J. (1964): Neues anthropologisches Material aus der mittleren Bronzezeit. *Časopis Moravského muzea XLIX*, 247–260.
- JELÍNEK, J. (1965): Ein Beitrag zur Problematik der mittleren Bronzezeit in Mitteleuropa. *Anthropologischer Anzeiger* 29, 108–116.
- JELÍNEK, J. (1968): Three trephined Early Bronze Age skulls from Bohemia. *Anthropologie* VI, 2, 25–32.
- JELÍNEK, J. (1968): Ein neuer Skelettfund der Věteřov-Kultur aus der mittleren Bronzezeit. *Anthropologie* VI, 1, 23–25.
- JELÍNEK, J. (1973): Die neolithische und bronzzeitliche Besiedlung der heutigen Tschechoslowakei. In: Die Anfänge des Neolithikums vom Orient bis Nordeuropa, Teil VIIIa. *Anthropologie*, 185–199, Böhlau Verlag Köln, Wien.
- KOUDELKA, F. (1891): Prähistorische Skelettgräber in Némčan und Umgebung in Mähren. *Mitteilungen der Anthropologischen Gesellschaft in Wien* 21, Sitzungsberichte 63–65. (*Anthropologický posudek* A. Weisbacha.)
- LORENCOVÁ, A. (1958): Antropologické zpracování koster-ného materiálu z únětických hrobů v Újezdě. *Sborník prací filos. fak. Brněnské university VII*, E 3, 22–26.
- LORENCOVÁ, A. (1964): Nález únětické kostry ze Znojma. *Sborník prací filos. fak. Brněnské university* 13, E 9, 47–52.
- MATIEGKA, J. (1918): Prähistorické trepanace a kauterisace v zemích českých. *Památky archeologické* 30, 74–85.
- PALLIARDI, J. (1894): Hroby se skrčenými kostrami na Znojmsku. *Časopis vlasteneckého muzejního spolku olomouckého* 11, 19–25, 47–56.
- PALLIARDI, J. (1896): Nové zprávy o hrobech se skrčenými kostrami. *Časopis vlasteneckého muzejního spolku olomouckého* 13, 16–24.
- PAVELČÍK, J. (1949): Kostry z jam na únětickém sídlišti v Černých Polích v Brně z r. 1948–1949. *Časopis Moravského muzea v Brně*, 34, 158–161.
- PROCHÁZKA, A. (1907): Nové archeologické objevy v okolí brněnském. *Časopis Moravského muzea v Brně* 7, 14–39. (*Anthropologický posudek* J. Matiegky.)
- RECHE, O. (1909): Zur Anthropologie der jüngeren Steinzeit in Schlesien und Böhmen. *Archiv für Anthropologie* VII, 220–237.
- RZEHAK, A. (1880): Neu entdeckte prähistorische Begräbnisstätten bei Mönitz in Mähren. *Mitteilungen der Anthropologischen Gesellschaft in Wien* IX, 1880, 202–214.
- SCHIRMEISEN, K. (1933): Einige Ausgrabungen und Funde aus Mähren. *Z. d. Deutschen Ver. Gesch. Mährens und Schlesiens* 35, 118–135.
- SCHLIZ, H. (1909): Die vorgeschichtlichen Schädeltypen der deutschen Länder in ihrer Beziehung zu den einzelnen Kulturkreisen der Urgeschichte. *Archiv f. Anthropologie* VII, 239–267.
- STLOUKAL, M. (1960): Antropologický posudek o kostrách z únětického pohřebiště v Suchohrdlech. *Přehled výzkumů 1959, AÚ ČSAV v Brně*, 149.
- STLOUKAL, M. (1960): Únětická kostra z Dambořic. *Přehled výzkumů 1959, AÚ ČSAV v Brně*, 150–151.
- STLOUKAL, M. (1960): Únětické kostry z Vyškova. *Sborník Archeologického ústavu ČSAV v Brně* 1, 33.
- STLOUKAL, M. (1960): Časné únětické kostry z Milovic. *Archeologické rozhledy* 12, 488–492.
- STLOUKAL, M. (1964): Antropologický posudek (Vyškov). *Památky archeologické* 52, 157–158.
- STLOUKAL, M. (1963): Antropologický rozbor koster z Blučiny. *Přehled výzkumů 1962, AÚ ČSAV v Brně*, 45–48.
- STLOUKAL, M. (1967): Únětické kostry z Čejče. *Archeologické rozhledy* 19, 311–313, 321–322.
- STLOUKAL, M. (1967): Ünětitzer Skelette aus Vyškov. *Acta F. R. N. Univ. Comen. Anthrop.* 12, 71–78.
- STLOUKAL, M. (1967): Antropologický posudek o kostrách z Příkaz. *Přehled výzkumů 1966, AÚ ČSAV v Brně*, 33–34.
- STLOUKAL, M. (1967): Einzelne vorgeschichtliche Schädel aus Mähren. *Anthropologie* V, 3, 39–45.
- STLOUKAL, M. (1968): Nové nálezy únětických koster z Moravy. *Archeologické rozhledy* 20, 238–244, 287–288.
- STLOUKAL, M. (1968): Únětická kostra z Brna-Králova Pole. *Přehled výzkumů 1967, AÚ ČSAV v Brně*, 32–34.
- STLOUKAL, M. (1969): Anthropological evaluation of the Velatic culture skeletons found on the Cezavy Hill near Blučina in 1957–1960. In: K. Tihelka, Velatic culture burials at Blučina. *Fontes Arch. Pragenses* 13, *Mus. Nationale Pragae*, 33–37.
- STLOUKAL, M. (1971): Antropologický posudek o kostře, nalezené ve věteřovské jámě v Újezdě v Brna. *Přehled výzkumů 1969, AÚ ČSAV v Brně*, 13.
- STLOUKAL, M. (1972): Antropologický posudek. In: G. Křivánek, J. Ondráček, M. Stloukal, Protoúnětické hroby z Vyškova na Moravě. *Archeologické rozhledy* XXIV, 514–519, 596.
- STLOUKAL, M. (1974): Erwägungen zur Anthropologie der mährischen Vorzeit vom Neolithikum bis zur Bronzezeit. In: *Bevölkerungsbiologie* 414–429, G. Fischer-Verlag Stuttgart.
- STLOUKAL, M. (1973): Únětická kostra z Újezda u Brna. *Přehled výzkumů 1972, AÚ ČSAV v Brně*, 24–26.
- STLOUKAL, M. (1974): Recherches paléodémographiques en Tchécoslovaquie. *Historická demografie* 7, 5–28.
- STLOUKAL, M. (1974): Palaeodemographical analysis of cremation cemeteries. *Anthrop. Közlemények* 18, 183–189.
- STLOUKAL, M. (1974): Poznatky o antropologii moravského pravěku. *Anthropologický archiv* 4, 158–164.
- STLOUKAL, M. (1975): Pravěké a raněstředověké populace. *Demografie* 17, 55–61.
- STLOUKAL, M. (1975): Únětická kostra z Příbic. *Přehled výzkumů 1974, AÚ ČSAV v Brně*, 19–20.
- STLOUKAL, M. (1975): Kostra z věteřovské jámy v Újezdě u Brna. *Přehled výzkumů 1974, AÚ ČSAV v Brně*, 21.

- STOCKÝ, A. (1931): Praveké obyvatelstvo Čech. *Anthropologie* 9, 225–275.
- SZOMBATHY, J. (1934): Bronzezeit-Skelette aus Niederösterreich und Mähren. *Mitteilungen der Anthropologischen Gesellschaft in Wien* 64, 1–101.
- WANKEL, J. (1889): Náklo a Příkazy na Moravě. *Čas. vlasteneckého spolku muzejního v Olomouci* VI, 97–105.

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