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RESULTS OF THE EVALUATION OF PREHISTORIC FINDS FROM THE SOUTH OF THE GREAT HUNGARIAN PLAIN

The author, in his candidate's thesis evaluated prehistoric palaeoanthropological material excavated in the geographical area limited by the rivers Tisza, Körös, Maros and Aranka.

For this study he used published shorter series or single finds. Thus he used the anthropological data of the finds excavated from the neolithic age at Lengyel (Virchow 1890, Malán 1929), in the cave Búdöspöst (Bartucz 1916), at Vaskút (Nemeskéri 1944), at Békés-Povádzug (Lipták-Farkas 1967), on the hill at Vésztömágor (Farkas 1974), at Villánykövesd (K. Zoffmann 1971) and Zengővárkony (K. Zoffmann 1974); from the copper age those excavated at Hódmezővásárhely-Kotacpart (Apor-Nagy 1940), at Tiszapolgár-Basatanya (Nemeskéri 1944, B. Kutzián 1972), at Alsónémedi (Nemeskéri 1951); from the bronze age those excavated at Bag, Üllő, Kelebia (Lipták 1957), Pitvaros (Farkas 1971), Battonya (Farkas-Lipták 1968), Morkrin (Farkas-Lipták 1971a, Lengyel-Farkas 1972, Lengyel 1974), Tápé (Farkas-Lipták 1971b, 1971c, 1975), as well as the major comprehensive works and evaluations (Nemeskéri 1961, 1956, Bartucz 1938), and the publications comparing the material from Hungary to finds from abroad (Tóth 1968, 1969, 1971, 1972a, 1972b, 1973).

In the course of investigation the author evaluated sex, age at death, metric data (Martin-Saller 1957-1966), the results of taxonomical analysis (Lipták 1971, Farkas 1972), the

biochemical data of bones, anatomical variations and pathological cases (Farkas-Marcsik, 1975), biometric analysis and paleodemographical observations.

He investigated the material of 21 neolithic, 20 copper age and 38 bronze age sites, analyzing 53 skeletons from the neolithic age, 117 from the copper age and 1122 from the bronze age, altogether 1292 skeletons.

He established that the skeletal remains of 431 males, 415 females and 314 children can be distinguished, while the sex of other finds cannot be decided.

The age of death could be established for 1038 finds. The distribution is as follows: Infans I: 80, Infans II: 179, Juvenis: 36, Adultus: 426, Maturus: 207, Senilis: 88.

A relation between the mode of burying (burying on the right or left side) and sex was observed with 689 finds. The value of the correlation coefficient increased from the neolithic age up to the early bronze age; after that it decreased.

It is characteristic of all of the prehistoric phases that the cranium is medium long, narrow and medium high. The medium high and orthognathous splanchnocranium, the medium high upper face, medium high nasal cavity, the medium long and medium broad palate are also characteristic.

According to the indices in the neolithic and copper ages the upper face is narrow (lepten), in some periods of the bronze age it is medium broad (mesen). The orbit is high (hypsicnch) in the neo-

lithic age, in all the other ages it is medium high (mesoconch). The neurocranium is dolichocephalic, except for the middle bronze age, where it is mesocephalic. On the basis of arithmetic means, brachycranium is, therefore, not characteristic of any of the ages.

In the neolithic age the stature is medium high, after which it becomes smaller, although a medium high stature is characteristic of the early bronze age also.

The forehead of females was broad in all archaeological periods, their face being medium high, leptoprosopic, the orbit narrow, mesoconch, the nose chamaerhine the palate narrow. The cranium is high or large midsized, except for the middle bronze age.

354 finds were suitable for taxonomical analysis.

In the neolithic age there occurred males mostly Nordoid individuals, among females Mediterraneans. There were no brachycranic ones.

In the copper age, for males the proportion of Nordoid individuals, among females Mediterraneans and Cromagnoids increasing. For females there is no considerable difference. In that period (with males in the time of the Tiszapolgár culture, with females in that of the Bodrogkeresztúr culture) brachycranic individuals appear, their number being, however, insignificant, as compared to the other taxons.

In the bronze age, with both males and females, the Mediterranean complex of characters appears most frequently. But the ratio of Nordoid, Cromagnoid and brachycranic individuals is increasing.

In the prehistoric series investigated, a wide range of anatomical variations and congenital anomalies can be observed. There are only a few palaeopathological deformations but in several cemeteries a considerable number of trepanations occur (Szöreg, Mokrin).

From a palaeodemographical point of view, it is a remarkable observation that in the neolithic age the number of individuals reaching 60 years of age was very low, and infantile mortality very high. In the copper age infantile mortality decreased and people died mostly in the years from 25 to 40. In the bronze age the mortality rate between 0 and 14 years of age increased by 8 per cent as compared to the neolithic age. These observations refer of course to cemeteries not fully excavated and to skeletons in various states of preservation.

After taking into consideration the archaeological data, the author drew the conclusion that the peopling of the Carpathian Basin in the neolithic age from a southern or a south-eastern (and possibly from both) direction could be supported by anthropological data but the supposed migration from the east is not excluded. At the same time, the supposed immigration from the north-east (Nemeskéri 1944) requires further support. These findings are supported to a great extent by the results of Schwidetzki (Schwidetzki 1967) who has found the finds in Greece, Yugoslavia and Bulgaria to be very similar and supposed a homoge-

nous population in the southern part of Europe in the neolithic age.

The anthropological finds of the south of the Great Hungarian Plain unequivocally support the supposition that the copper age population was of southern origin. This is also supported by the approximately 49 per cent frequency of the Mediterraneans. The ratio of Cromagnoids (17 per cent) is unchanged as compared to the neolithic age. But the find at Csongrád-Kettőshalom (Marcsik 1974) shows the possibility that the people of that type could come to the Carpathian Basin from the east. In that period there are also appearing brachycranic elements, represented by the alpine race (Kotacpart, Kistöke). This supposes the existence of a contact between the Transdanubian populations (a part of Hungary that lies between the Danube, the Drava and the western frontier of the country) and between the south of the Great Hungarian Plain.

The archaeological observations concerning the colonisation of the Carpathian Basin from the south and the east in the early bronze age can be supported in the southern plain by anthropological data as well. At the same time it seems that arrival of some groups from the east may have had a higher significance. This is made probable by the increase in the proportion of Nordoids and Cromagnoids and the decrease in that of Mediterraneans.

In the middle bronze age the Balkan influence is also to be considered as proved.

The western origin of the barrow culture in the late bronze age seems, on the basis of the material at the cemetery at Tápé, not probable, as the percentage of Mediterraneans there is 60%. At the same time immigration from the West is confirmed by the observations in Slovakia, Austria and Poland. The contradiction between the western origin and the distribution of the taxonomical characters is explained by the fact that only about 10 per cent of the more than 600 finds at Tápé could be analysed by taxonomical methods. The percentage proportion is in this case misleading, as the dispersion of the relative frequency is large.

The author has studied and analysed all the Hungarian anthropological material as one geographical unit. The evaluation may serve as a comparative basis in the future when evaluating further new finds and at the same time it demonstrates the necessity to discover further anthropological material from the neolithic and copper ages to bring the picture outlined above a further support.

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