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SYMPOSIUM

Paleoanthropological research in Hungary

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ABSTRACT This essay offers a brief and selected review of the paleoanthropological research in Hungary by chronologically listed studies in which new trends, methods and observations are to be found. The studies mostly focused on the populations of the Carpathian Basin according to their origin, regional distribution and morpho-taxonomical characteristics with the help of statistical methods. Their way of life and nutrition, their paleopathological, paleodemographical, paleoserological, paleostomatological and paleosociographical features were also investigated. At the end of the review there is a brief report on the current state of the Hungarian anthropological collections, housed in the Anthropological Department of the Hungarian Natural History Museum, the Department of Anthropology, University of Szeged and in different county museums.
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KEY WORDS

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Surveying the twentieth century history of the Hungarian paleoanthropological research, two words are the most suitable for its description: tradition and modernity. This is present not only in the activity of the founding fathers: Lajos Bartucz, János Nemeskéri and Pál Lipták but also in their students' works and even in the works of succeeding researchers.

However, two other words can be added to this description: friendly relations. Collecting all the skeletons of excavated cemeteries could be carried out only with the mutual understanding of archeologists. Moreover, new research trends arose from the close connections of representatives of other scientific fields. Therefore, the characterisation of Hungarian paleoantropological research can be completed with the concept of teamwork. There was a good example of it in 1963 when in the analysis of a medieval series the whole staff of the Anthropological Department of the Hungarian Natural History Museum participated, namely Gyula Dezső, János Nemeskéri, Andor Thoma, Tibor Tóth, Sándor Wenger and Kinga Éry, with physicians László Harsányi and György Huszár and demographer Szilvia Nozdroviczky as outside contributors (Dezső et al. 1963).

The present review wishes to demonstrate all this by listing studies which were the first to offer new trends, methods, observations and solutions in paleoanthropology, paleodemography, paleopathology, paleostomatology and paleosociography. However, owing to the length-restrictions of this volume, we cannot give information about all the studies worth mentioning. It is beyond doubt that compiling a new anthropological bibliography can no longer be postponed.

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The history of the Hungarian paleoanthropological research dates back to 1834 when M. Jankovich published the first grave of a conquering Hungarian found at Benepuszta. He described not only the grave-goods but the characteristics of the skull, even depicting its lateral and frontal views since, as Jankovich put it, the find "... is the original example of the structure of our nation moved in from the Orient".

The beginning was followed by a long pause then a slow development till the end of the century, when, in 1895, paleoanthropology at last gained institutional background at the Ethnographical Department of the Hungarian National Museum. In 1905, the anatomist Zs. Tóth described the identification, preservation and storage of human bones found in archeological excavations. In 1909, L. Bartucz published his first paleoanthropological study, and in 1918, the physician M. Lenhossék published the first paleostomatological data about the frequency of caries in an Arpadian Age sample.

A new period of the Hungarian paleoanthropological research is marked by the year 1931, when L. Bartucz received the Baumgarten-prize, then the highest literary award in Hungary, for the stylistic art of his papers. In 1932, he published a study about the paleoanthropology and prehistory of Hungarians, in which he explained that the racial characteristics of peoples are much more permanent than any other phenomenon, that the traces of metisation survive for thousands of years, that complete disappearance of populations in an anthropological point of view is most unlikely etc. In 1938, L. Bartucz published his monography "The Hungarian", in which, besides giving excellent description of the subraces, he summarised the paleoanthropological characteristics of populations lived in the Carpathian Basin. A further sign of paleoanthropology being

appreciated in scientific circles was the fact that in 1943 J. Nemeskéri was invited to write a chapter on paleoanthropology in a collection of essays about Hungarian prehistory.

In 1950, a new era began in the Hungarian paleoanthropological research. It was the year of the first complete cemetery excavation in Kérpuszta, directed by the Anthropological Department of Hungarian Natural History Museum with the contribution of archeologists, demographers, geographers, historians and geologists. The activity of P. Lipták also started in the 50s. In 1951, he discussed the origin of the conquering Hungarians, in 1954 and 1955 he analysed the characteristics of the Uralian and Turanid race, respectively. In his candidate dissertation of 1957, he investigated the Avar and Early Hungarian population of the area between the Danube and the Tisza, and in 1959 he described the taxonomy of the Avar Period mongoloids. The paleodemographic researches started in 1952 with the contribution of J. Nemeskéri and Gy. Acsádi; in 1954, the paleopathologic researches were started by J. Nemeskéri and G. Gáspárdy, and in 1958 T. Tóth, in his candidate dissertation, published examinations of facial flatness.

The following decade opened with an essential work: J. Nemeskéri, L. Harsányi and Gy. Acsádi published the complex method of determining age at death applying four age-characteristics in 1960. In the same year K. Éry and A. Kralovánszky carried out the first paleosociographical analyses. In 1961, J. Nemeskéri, K. Éry, A. Kralovánszky and L. Harsányi first published anthropological, archeological and pathological data together. In 1962, A. Thoma's candidate dissertation was published on the development of the Homo sapiens. In 1963, J. Nemeskéri and I. Lengyel gave new perspectives in osteochemistry. In the same year K. Éry, A. Kralovánszky and J. Nemeskéri investigated the problems of representation and introduced a new sexing method in paleoanthropology based on a five-degree evaluation of twenty-two sexual characteristics. In 1966, P. Lipták and A. Marcsik described the chamaekran (protomorph) subracial type in the avar period population, and T. Tóth discussed the period of transformation in the process of metisation. In 1967, O. Bottyán analysed different anthropometric classifications, while T. Tóth wrote about the significance of certain metric values in the europoid-mongoloid differential diagnostics, continuing that work in the two succeeding years. Also in the same year K. Éry first applied the Penrose-distance in search for analogies. In 1968, O. Bottyán wrote about palatal measurements; Gy. Farkas and P. Lipták summarised the anthropology of the Arpadian Age population of the South Plain, while J. Nemeskéri and L. Harsányi described the methods of studying cremated bone-finds. In 1969, O. Bottyán evaluated a more accurate measure of alveolar profile angle and K. Éry analysed the demographic values of inscriptions on Roman Period tombstones.

The beginning of the 70s was also marked by the publication of a standard work written by Gy. Acsádi and J. Nemeskéri about the history of human life span and mortality. In the same year, O. Bottyán examined the sexual characteristics of the palatum which she carried on in the following year, while K. Éry investigated paleoanthropological series using Penrose-distance and cluster analysis. Still in the same year, J. Nemeskéri interpreted the archeological and anthropological conditions of paleodemographic research and T. Tóth discussed the morphological modification of prehistoric series, continuing it in the following two years. In 1971, O. Bottyán examined the piriform aperture, and in 1972 the changes of the palate owing to age. In the same year P. Lipták, E. Lotterhof and A. Marcsik analysed the taxonomical characteristics between the 10th and 16th centuries from the region east of the Tisza. In 1973, O. Bottyán investigated the correlation of mandibular and cranial capacity, while T. Tóth wrote about the morphological modification of series in the Central Danubian Basin. In 1974, O. Bottyán discussed the sexual dimorphism of the mandible; E. Lotterhof interpreted the regional differences of the populations in the Arpadian Age and S. Wenger was concerned with the frequency of anatomical variations in osteoarcheological series. In 1975 O. Bottyán dealt with the changes of the mandible owing to age; Gy. Farkas in his candidate dissertation examined the prehistoric populations of the South Plain; Gy. Farkas and A. Marcsik analysed anatomical variations and paleopathological observations of prehistoric series; I. Lengyel presented blood group distributions in skeletal series in his candidate dissertation, while P. Lipták examined the anthropology of Finno-Ugrian peoples. In 1976, E. Lotterhof considered the problem of gracilization in prehistoric populations, carrying it on in the succeeding two years, while L. Szathmáry interpreted the methodological problems of the reconstruction of stature, he also studied the structure of historic populations. In 1977, Gy. Farkas outlined the anthropology of the South Plain and Northern Jugoslavia; P. Lipták discussed anthropological problems of Hungarian prehistory; L. Szathmáry investigated brachykephalisation and heterosis and T. Tóth's academic doctoral dissertation studied the paleoanthropology and somatology of the Hungarians. In 1978, K. Éry described regional differences in the anthropological material of the 10th century Hungarians; L. Szathmáry examined the bilateral symmetry of the femur and tibia, he also investigated the population-dynamic aspects of the origin of the populations in the period of the Hungarian Conquest and in the Arpadian Age. In 1979, M. Finnegan and A. Marcsik studied nonmetric characteristics between Avar Period populations, while I. Kiszely published a monography on the anthropology of the Lombards.

There was a plenitude of studies also in the 80s. In 1980, L. Szathmáry described the autochtonous and immigrated components in the Carpathian Basin during the Copper Age;

T. Tóth wrote about the europoid populations of the postglacial and historic periods. In 1981, É. Susa and T. Varga investigated the variations of foramen transversarium. In 1982, L. Szathmáry studied the role of climatic factors in the development of the Homo sapiens and the effects of archaic environments on human settlements in the neolithic age in the Carpathian Basin. In 1983, K. Éry studied the physical anthropology of the population in and outside the Carpathian Basin between the 6th and 12th centuries; P. Lipták's academic doctoral dissertation summarised the anthropology of the Avars and the ancient Hungarians; A. Marcsik's candidate dissertation discussed the paleopathology of the Avar Period population lived between the Danube and the Tisza, and T. Tóth elaborated the question of areality in the early period of Hungarian prehistory. In 1984 Gy. Farkas and P. Hunya made comparisons by clustering series from the Avar Age; T. Tóth examined some anthropological problems of the mesolithic europoids, continuing his work in the following year, while Zs. Zoffmann published a study on the Southeastern connections of the Central European neolithic population. In 1985, L. Szathmáry analysed the population of mesolithic and early neolithic periods in the Northern Balkan and in the Carpathian Basin using the treatment of missing data method. In 1986 T. Tóth wrote about the spread of Homo sapiens' groups in the metallic age and about the anthropological problems of the ancient Hungarians in the North Caspian region. In 1987, J. Nemeskéri and L. Szathmáry, in addition to the Indo-European problem, discussed the anthropological and demographical transition of the Danube Basin; R. Sokal and coauthors published a study on spatial correlations of ABO serotypes as indicators of ethnic and familial structure in medieval cemeteries. Still in the same year, L. Szathmáry interpreted the role of genetic aspects in the metric comparison of craniological sample, while T. Tóth gave informations about the population and nutrition of the Carpathian postglacial millennia. In 1988, J. Csapó, I. Pap and L. Költő described archeological age determination of fossile bone samples based on amino acid racemization and epimerization; L. Szathmáry discussed the role of the peripheres in the mesolithic peopling of the Carpathian Basin. In 1989, T. Tóth investigated environmental causality in the flatness of splanchnocranium.

Dynamic work was in progress in the 90s as well. In 1990, E. Fóthi and I. Pap analysed the changes of way of life in 6th-12th century populations; L. Szathmáry described the reconstruction of stature in case of applying different methods. In 1991, E. Fóthi analysed the correlation of series from the Avar Age using different distance calculations and clustering methods; I. Pais and T. Tóth examined the nutrition of the Carpathian Basin population from the neolithic to medieval times based on osteochemical analysis. In 1992, E. Fóthi and Á. Fóthi interpreted different cluster analyses for the grouping of anthropological series; Zs. Zoffmann, in her candidate's dissertation outlined the anthropology of the East Carpathian Basin population in the neolithic and copper age, she also compared the populations of Central European and Alföld Linear Pottery cultures. In 1993, the computerised database of the published Avar age finds was opened for research under the direction of E. Fóthi, Á. Fóthi and I. Pap. In 1994 K. Éry outlined the anthropology of the Carpathian Basin population in the period of the Hungarian Conquest. In 1996, Á. Kustár and Gy. Skultéty presented the facial reconstruction of the Benepuszta man; L. Szathmáry published a study on the mesolithic Europe, as well as the structure of the population in the conquest period, while D. Ubelaker and I. Pap described the health profiles of a bronze age population in Hungary. In 1997, K. Éry and coauthors examined the age-group patterns of infant skeletons in cemeteries; Zs. Guba, L. Szathmáry and L. Almási analysed the craniology of the neolithic Hungary, they also interpreted the treatment of missing data in principal component analysis. In 1998, K. Éry's monography was published on the limb bones and stature of ancient populations in the Carpathian Basin, with a database attached on floppy disk, while D. Ubelaker and I. Pap discussed health and disease of the populations of Northeastern Hungary in the iron age. In 1998-99, Zs. Zoffmann studied the anthropology of the Transdanubian populations in the neolithic, the copper, the bronze and the iron ages.

Finally, a few words about the sources of the Hungarian paleoanthropological researches, namely about the collections. The Benepuszta skull saved by M. Jankovich in 1834 symbolises the beginning of paleoanthropological collection in the Hungarian National Museum. Although all cranial materials had been taken to the Ethnographical Department (Ostyak skulls from Siberia, Papuan skulls from New Guinea, skulls of aborigin peoples from Africa, a Maya skull from Mexico as well as skeletons taken out from Egyptian mummies), until 1940, the majority of the collection originated from archeological excavations in Hungary. In 1941, the anthropological collection was moved to the Archeological Department of the Hungarian National Museum, but from 1945 they belong to the Anthropological Department of the Hungarian Natural History Museum. Today the Department stores about 18,000 inventorised and nearly as many uninventorised finds and it also has 5,000 skulls from the earlier collection of the Anthropological Department, University of Budapest. In 1988, the Anthropological Department was moved in the new building of the Hungarian Natural History Museum where the conditions of storage, restoration and research are fully guaranteed.

The other world-wide known collection of similar size belongs to the Department of Anthropology, University of Szeged, but the conditions of storage are by no means satisfactory. The majority of the skeletons originate from archeological excavations of the South Plain of Hungary.

Several thousands of inventorised finds are in the museums of Pécs and Székesfehérvár, several hundreds more in the museums of Keszthely, Nyíregyháza, Szekszárd and Veszprém, and thousands of uninventorised finds are in the museums of other cities. However, the storage and recording of the skeletons in county museums, due to the lack of local anthropologists, are not at all satisfactory. An exception to this is the anthropological collection of the museum of Nyíregyháza since it is supervised by anthropologists of the University of Debrecen.

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