

ON THE PROBLEMS OF HISTORICAL ANTHROPOLOGY (PALAEOANTHROPOLOGY)

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In the evolutionary history of the Universe the genesis of our Earth has witnessed three great stages:

1. from the beginning of its formation to the appearance on our Earth of living matter; during this long period only such phenomena took place on our planet as fall within the sphere of physical sciences taken in a wider sense;

2. the second stage lasts from the appearance of life to that of the *Hominidae*; here we must already take into consideration also phenomena which lie in the compass of biological sciences;

3. beginning with the appearance of the *Hominidae* there assert themselves, in addition to the physical and biological phenomena, also new ones of an entirely different character, namely the various manifestations of human cultures, which come under the social sciences.

Thus the phenomena of our world become increasingly complex, because these three great domains of science depend in their succession on, and comprise the results of those preceding them.

From the point of view of the Universe as a whole the physical scientists investigate basic phenomena, which are relatively more simple than the biological and social sciences, but which at the same time are the only exact sciences (astrophysics, physics, chemistry, etc.). Their result may be formulated also in the language of mathematics, a discipline belonging to a different branch of learning, viz. that of deductive sciences.

The latter does not apply to the biological and sociological sciences, because the number of relations is enormous, and — owing to their complexity — the ratio of their effects as manifested in the phenomena can, at least for the time being, not be laid down accurately; therefore the language of mathematics enables us to express at best only the quantitative aspects of certain basic biological or sociological phenomena.

The three groups of phenomena are marked by a complexity growing with time. It is moreover characteristic that the historic factor plays an ever greater role in them, which contributes to make the connexions even more intricate. Modern biology is bound into an organic whole by the process

and synthetic concept of evolution. All the phenomena of our present world may be understood only in the frame of an evolutionary (that is historical) conception.

In the evolution of the living world Man was the last to appear, and by his intellectual activity he has produced a new group of phenomena; consequently the complexity of Man and of the biological and sociological discipline bearing on him (anthropology) is more pronounced than that of the other biological sciences.

The provinces of the partial disciplines belonging to anthropology may be outlined in a narrower, in a wider and in widest sense. Anthropology in the narrower sense has a basic science part which is the basic science also of „applied anthropobiology”, that is medicine. From the outstanding practical significance and actual possibilities of medical science (scores of well-equipped medical university and research institutes) it follows that in their cultivation those who carry on research work in them and who often evince a predominantly medical attitude are more numerous than the anthropologists. The central problem of anthropology in a narrower sense, i. e. physical anthropology (anthropobiology), is the study of human variations within the single population and subsequently in space and time. At the same time these variations mark off appropriately from anthropological research that serving a more medical approach.

Here the classification of human variations is fundamental. As is generally known, man is a polymorphic and polytypic being. Polymorphism is due to environmental and genetic causes, polytypy is brought about by the microevolution differing from region to region. We are thus dealing here with the categories and relations of human forms: we must study thoroughly the former within the species of polytypic *Homo sapiens* (as species *collectiva*), above all the *subspecies* (geographical race), and that both under their vertical (phyletic evolution) and horizontal (taxonomic) aspects.

The question is, how to define the *subspecies* (geographical race). The opinion of the geneticists is well reflected in the definition given e. g. by DOBZHANSKY (1955): „races are ... populations which differ in the incidence of some genes or chromosome structures in their gene pools”. In a zootaxonomic work of recent date (MAYR, LINDSLEY, USINGER 1953) we find on the other hand the following definition: „*Subspecies* are geographically defined aggregates of local populations which differ taxonomically from other such subdivisions of a species.” The disagreement between these two definitions is striking. In our opinion the taxonomic race concept lends itself much better for constituting the theoretical basis of the anthropologist's work than the „genetic race concept”. In proof we adduce also the following circumstances:

a) The genetic race concept completely neglects the principle of spatiality which in this question is paramount.

b) The geneticists overlook the fundamental divergence between the taxonomically utilizable characteristics and the knowledge concerning their hereditability. The phenomena of pleiotropism, as well as the so-called polygenes, are responsible for the fact that almost without exception all the important racial characteristics fail to show the simple Mendelian heredity, or rather, that the mode of their heredity remains unsolved up to this day. In this respect the monomereously inherited characteristics are nowise, or only slightly,

utilizable. It will suffice to instance here the well founded criticism of OSCHINSKY (1959). Finally it is perhaps superfluous to emphasize that the PTC „taster” and „not taster” trait has nothing whatever to do with the racial characteristics.

It would furthermore be pertinent to compare the race concept taken up by the geneticists with, for instance, the „total morphological pattern” concept of LE GROS CLARK, as in our judgement the two are hard to reconcile. For all that the study of ancient populations, not excluding the communities of fossil man, fully supports the views of the author just mentioned.

It seems proper to observe at this point that in our opinion it is unacceptable to term human species or types „ethnic groups” (ASHLEY-MONTAGU 1951 : 292—295). These two categories are definitely differentiable, wherefore such a new denomination would inevitably lead to fatal confusions. Luckily this proposed nomenclatorial innovation has failed to catch on in anthropological literature.

We must point out, moreover, that there are also non-spatial categories (constitutional types; hormonal, occupational types, etc.) which must be taken into account in the course of the taxonomic analysis. They bear upon the polymorphism of human populations.

The historical aspect of anthropology appears to be of particular importance because today human society is intertwined with its own history to a much greater extent than, for instance, the animal kingdom. Human populations can never be „Mendelian populations”, since in reproduction the relations, far from being casual, are influenced also by ethnical, social, etc. barriers and rules. With respect to man we can, furthermore, speak of a more conscious „assortative mating” than in the animal world. Thus the same human population may be not only polymorphic, but also polytypic, which makes the taxonomic analysis within the populations not only possible, but altogether necessary. The necessity and further motivation of this fact have been pointed out by me already previously (LIPTÁK 1960). In consequence it is even less admissible to accept the „genetical race concept”.

We hold that taxonomic research is indeed the central problem of anthropology, and that it is particularly suitable for the analysis of ancient populations, as well as for a better founded study of their chronological and spatial relations. We do not deem this study static, since the vertical comparison of several „levels” of the horizontal classification drawn up for certain archeological epochs ultimately throws light on the mode and rapidity of „phyletic evolution”. Palaeoanthropology (or rather historical anthropology, in our opinion its synonym) deals with the problems of anthropogenesis (the evolution of the *Hominidae*); racial genesis (the microevolution of the races and subraces of *Homo sapiens*); and finally with those of ethnogenesis, that is the origin and alterations (differentiation and integration) of peoples and ethnic groups (OŠANIN 1957).

In the following we would like to deal somewhat more closely with certain problems of the historical research in anthropology (palaeoanthropology), concerning which I shall — preferably by instancing the respective results — adduce also concrete examples.

The main task of historical anthropology is to reconstruct — on the basis of existing materials — the anthropological make-up of the communities

under investigation. If we dispose only of the skeletal remains of a partially unearthed cemetery, we must content ourselves with the taxonomic analysis of the material. A careful intraserial taxonomic analysis enables a further comparison and valuation of our research material, and it yields more information than if we were to compare only the parameters. With completely unearthed cemeteries — unfortunately the rare exceptions — we are, moreover, able to reach also additional, e. g. palaeopathological, palaeodemographic, as well as other pertinent conclusions.

A successful settling of all these questions clears the way for ethnogenetic valuation. The process of the formation and transformation of tribes may be studied also on the basis of historical anthropological materials, which is to say that the latter may figure as historical sources. In some cases they are of conclusive importance, in others the limits determined by their materials are obvious. The scientific value of the authentic skeletal materials is beyond controversy, even if in this respect certain authors give proof of a baffling scepticism (BOYD 1950 : 26).

The correlation of palaeoanthropology and the historical sciences in general, as well as — within its scope — particularly that of palaeoanthropology and archaeology is, a fundamental issue.

Archaeology corroborates the authenticity of the historical anthropological material by establishing its absolute or relative chronology. An erroneous or loose archaeological dating hampers a correct anthropological valuation of the unearthed skeletal remains. It is desirable that the anthropologist should take part in the excavations of the cemeteries, the skeletal remains of which he intends to study at a later period. On the one hand he shall thus be able to secure more reliable information about the archaeological authenticity, while on the other such an excavation is an excellent opportunity for making oneself directly familiar with the problems of archaeology. The question of authenticity should be treated very strictly, particularly in the case of materials provenient from earlier excavations (close of the last, or beginning of the present, century), where it can often be settled only by consulting an expert archaeologist.

The heretofore widely current method of partial unearthing, the extent of which was determined by the wealth or „interest” of the graves, as well as by other accessory circumstances, must be replaced henceforward by complete excavations, if we aim at giving a more realistic picture of former populations and cultures.

Anthropological materials often enable us to trace the continuity of the population of some given area to a more remote past than could the vestiges of material culture. The results of historical anthropology can be put to good use also in regard to the question of migrations, particularly where we get no answer from the archaeological finds (altered in the course of migration) of the ethnic group in question. — Of course, anthropological conclusions hold good only within certain limits. Thus a semblance of continuity may be suggested, for instance, by the fact that the change of population does not happen to involve the appearance of new racial elements; the anthropological materials are furthermore of no avail as proofs of migrations, if the racial structures of both the migrating and the autochthonous ethnic groups are of a similar nature.

A full and detailed analysis of some series may contingently lead to important results, but even a great number of such investigations merely provide as it were a mosaic of the anthropological make-up of the landscape or period under study. Only a synthesis of the already published detail studies can give a substantiated, overall view suggesting also the underlying correlations. Such a synthesis may be made in several ways.

If we emphasize the taxonomic aspect, we are founding our synthesis on the principle of spatiality. This procedure leads to the discernment of the similarity or divergence of human forms distributed in space. The morphological-taxonomic groups of the intraserial analysis may be interpreted by pointing out their regional relations.

If besides spatiality the taxonomic aspect enforces also the principle of temporality, we get an answer to the question of anthropogenesis and racial genesis, that is, to the evolution of human forms. The evolutionary approach preserves us from considering the taxonomic unities as rigid, unchanging categories. It follows therefore that historical anthropological analysis deals only with relatively constant categories, so that we must be extremely cautious in valuating ethnogenetic processes.

The examination of ethnogenesis is a complex problem; it must rely upon all the disciplines of anthropology taken in a wider sense, and in addition it must utilize also the results of certain other branches of knowledge (e. g. geography). Both the aspect of spatial and temporal relationship come into their own here. Within the frame of ethnogenetically slanted anthropological research and synthesis the following tasks await solution.

1. After completing the intraserial taxonomic analysis we must examine the relations between the chronological or ethnical groups, or rather social strata, we may come across within the cemeteries. The prerequisites of it are among others: that archaeologists shall have made, and recorded, systematical observations at the time of the excavations; that we dispose of an accurate plan of the cemeteries; and that the relation of skeletal remains and archaeological finds shall be known for each grave separately. Anthropological examination is facilitated furthermore if the archaeological analysis of the material has already been carried out. — In the earlier excavations most of these conditions unfortunately failed to materialize. Even comparatively recent anthropological papers often fail to dwell upon these circumstances; their want makes the publications less suited for further comparison.

In Hungary the „Avar Period” Üllő I cemetery was excavated at least roughly in compliance with present modern standards. Basing on the systematic communication by T. HORVÁTH (1935), GYULA LÁSZLÓ has carried out also the social analysis of the cemetery (1955). As here the aim had been to come up, during the excavations, to the standards already mentioned, I too was able, (1955), besides making the traditional anthropological analysis, to compare the two groups, which in the cemetery were also locationally segregated. It appeared that the two groups (clans?) with dissimilar archaeological finds differed also in their anthropological make-up. One of the clans showed a striking difference between the racial composition of the males and that of the females, inasmuch as 82% of the females were Mongoloid, while with the males the proportion of the Mongoloid types attained only 18% (1955 : 274—276). As far as I can judge from the literature of historical anthropology I was

able to consult, this kind of analysis of the plan of a cemetery is not often to be met with, although it would enable us to give a more realistic picture of the anthropological make-up of the populations in question. In the case of Üllő I, for instance, it proved possible to probabalize the newly adopted exogamous relationships of the clan referred to above.

2. The second main task is to set forth the spatial relations primarily for the materials we assume to be ethnically related.

I shall illustrate my point by the anthropological analysis of ancient Magyars (the conquering Hungarians). Quite naturally this complex of problems constitutes since several decades the centre of interest of Hungarian anthropological research. There existed, however, an earlier tendency, which wanted — in my opinion, unduly — to narrow down the problems to a thorough analysis of the 10th century Conquest Age material proper. This is, no doubt, by all means the first step, but the detailed taxonomic analysis, which had proved necessary, gave prominence to the comparison with the Ural region, as well as with the steppe zone between the Ural and the Altai mountains and the Central Asiatic territories south of them. After examining the crania of the Ostyaks, a people linguistically akin to the Hungarians, I was able to prove by further factual materials (1950) that also with the ancient Magyars one of the essential components was the Uralian type, primarily characteristic of the Ugrian people (1954). I managed to elucidate furthermore in the Conquest Age material the taxonomic position (1955) and importance of the Turanid type, chiefly characterizing the people of Turki origin. Finally, it has been possible to prove the existence, among the conquering Magyars, of the Pamirian type (LIPTÁK 1955), which is related to Iranian tribes or to Iranized Turks. The recent result set out here have given new slants on the very complicated ethnogenesis of the Hungarians. They confirm, moreover, the pertinence of the question of why the conquering Magyars are, — as regards anthropology, archaeology and the evidence of the historical sources — a people of more Turkish appearance, while their language is Ugrian. This is a fundamental problem, which also the further relevant anthropological material shall help to elucidate. A more accurate approach to it shall be possible if we resort to all the historical disciplines of anthropology taken in its wider sense, as well as to other specialized branches of investigation.

3. By utilizing as completely as possible the palaeoanthropological material of the period preceding the age in question, we may — with relation to local materials — answer the question of the continuity of populations, while in the case of a material provenient from more distant (though historically related) regions we may find an explanation for the problem of migrations.

A characteristic feature of the material of the Hungarian Migration Period (particularly its „Avar Period” phase) is the preponderance of the Europoid types, namely some 80%. As the Avars comprise by all accounts — at least partially — components of Central Asiatic ethnical origin, we should expect a greater proportion of Mongoloid types. A detailed taxonomic analysis of the Avar Mongoloids found in Hungary has come out a short time ago (LIPTÁK 1959). Within the „Avar Period” population the great proportion of Europoids is evidently due to the assimilation of the original local inhabitants. Here a detailed knowledge of the physical anthropology of the preceding population, particularly of the Sarmatian — or rather, in Pannonia, of the Roman — age

population would be of crucial importance. Except for the comparatively scanty publications dealing with the Roman age, we know next to nothing about the contemporaneous population of the Sarmatian age, although we dispose of a fairly large number of unearthed skeletal remains. Accordingly this serves as a negative example; however, we are confident that the otherwise so dynamic Hungarian historical anthropological research shall sooner or later fill also this gap. For the moment the lacuna in question greatly hinders the valuation of the migration period inhabitants of Europoid character, because we are not in the position to decide in what proportion they were autochthonous and in what proportion they came to the Carpathian basin as a result of migration. — For a smaller region it has been possible to probabalize — on the basis of the Üllő II cemetery — that its „Avar Period” population was, at least in part, autochthonous, and that it could be traced back as far as the Aeneolithic Age (LIPTÁK 1955 : 280—283).

4. Finally, I must observe that also the examination of the present-day population may furnish data bearing on the study of the ethnogenetic questions. In this respect I could quote numerous examples, particularly from Soviet anthropological literature, where the historical anthropological research is closely interlinked with the examination of the living. The scholars publish concurrently their results pertaining to both materials, and they strive to point out the relations between the anthropological make-up of the present-day population and that of the former ones, their explanations being sought in the racial genesis and ethnogenetic processes which have taken place in the meantime. In Hungarian literature no such recent, well established attempt has been made as yet. This is perhaps chiefly due to the circumstance that the ethnical anthropological examination of the living population has unquestionably fallen behind the great spurt made in the last decade by Hungarian research in historical anthropology. A considerable amount of such work has been done, though, but unfortunately almost nothing of it has been published.

On the preceding pages I have given only a very brief account of the complex problems bearing on anthropology, and within its frame particularly on historical anthropology. Considering their capital importance, a number of them would have required a more exhaustive discussion. The eventual response shall prove to what extent this short outline may furnish a basis for a more detailed exposition of the major problems confronting historical anthropology (palaeoanthropology).

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